

STEEL ROOF DECK CATALOG VR4



VERCO DECKING, INC.
a NUCOR company





VERCO DECKING, INC.

HONORING THE PAST | CELEBRATING THE PRESENT | EMBRACING THE FUTURE

1964 HONORING OUR PAST

Since our start in 1964, testing has been a key to the innovative products Verco has introduced to the market:

- ShearTranz® System
- System 80
- FORMILOK™ System
- ShearTranz® II System
- PunchLok® System

CELEBRATING THE PRESENT

Innovative high quality products combined with our teammates dedication to excellence and superior service are fundamental to Verco's success. We strive to be the deck supplier of choice by being the safest, most innovative and most productive steel deck company in the world.

2014 EMBRACING THE FUTURE

Verco is pleased to begin our second 50 years of service to the construction community with the introduction of the N3 roof and floor deck profiles and the PunchLok II System.



PLN3™/HSN3™/N3

The Verco N3 roof and floor deck profiles have a 32" cover width. This additional cover width results in fewer sheets to spread and less sidelaps to fasten. The N3 profile offers superb shear strength with fewer support and sidelap fasteners to install.



PUNCHLOK® II SYSTEM

Building on the success of the industry changing PunchLok System, the Verco PunchLok II System provides an even stronger sidelap connection with the same benefits of the original PunchLok System including simple visual inspection, consistency, and efficiency.

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COMMON VERCOR® PROFILES



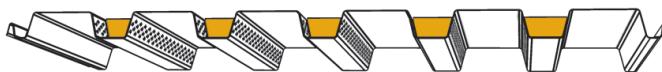
PLB™-36 and HSB®-36

1½" Deep, 36" Wide



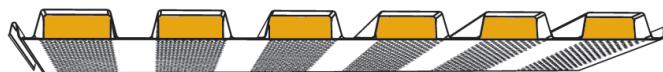
PLB™-CD and HSB®-CD

1½" Deep, 36" Wide



PLB™-36 AC and HSB®-36 AC

1½" Deep, 36" Wide



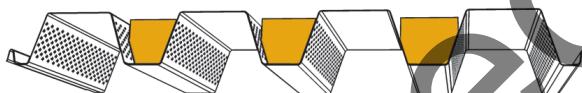
PLB™-CD AC and HSB®-CD AC

1½" Deep, 36" Wide



PLN3™ and HSN3™

3" Deep, 32" Wide



PLN3™ AC and HSN3™ AC

3" Deep, 32" Wide

PLN3™-CD and HSN3™-CD

3" Deep, 32" Wide

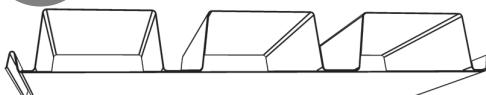
PLN3™-CD AC and HSN3™-CD AC

3" Deep, 32" Wide



PLN™-24 and N-24

3" Deep, 24" Wide



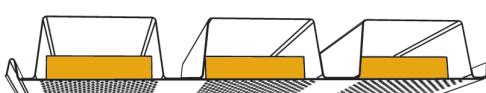
PLN™-24-CD and N-24-CD

3" Deep, 24" Wide



PLN™-24 AC and N-24 AC

3" Deep, 24" Wide



PLN™-24-CD AC and N-24-CD AC

3" Deep, 24" Wide



Shallow VERCOR™

9/16" Deep, 36" Wide



Deep VERCOR™

15/16" Deep, 36" Wide

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VERCO® ROOF DECK TECHNICAL GUIDELINES

Verco Decking, Inc. is noted for its innovative development of steel roof decks including the use of mechanical sidelap connections (the PunchLok Systems) and shear restraining elements (the ShearTranz Systems). In this catalog, Verco features a complete range of systems utilizing the PunchLok II System for sidelap connections: 1½" deep PLB-36, 3" deep PLN3 and 3" deep PLN-24 with welds and mechanical fasteners (power actuated fasteners and screws) to the supports, and PLB-36 deck with ShearTranz II-42. With the PunchLok II System, Verco continues its industry leading history of improvement and innovation to serve the construction community.

Profile Designations

Deck for PunchLok® II Systems:

- PLB-36, PLB-36 AC, PLB-CD, and PLB-CD AC
- PLN3, PLN3 AC, PLN3-CD, and PLN3-CD AC
- PLN-24, PLN-24 AC, PLN-24-CD, and PLN-24-CD AC

Deck for Button Punch and Top Seam Weld Sidelaps:

- HSB-36, HSB AC, HSB-CD, and HSB-CD AC
- HSN3, HSN3 AC, HSN3-CD, and HSN3-CD AC
- N-24, N-24 AC, N-24-CD, and N-24-CD AC

Deck for Screwed Sidelaps:

- HSB-36-SS and HSB-36-SS AC (Interlocking Screwed Sidelap)
- HSN3-SS and HSN3-SS AC (Interlocking Screwed Sidelap)
- HSN3-NS and HSN3-NS AC (Nestable Screwed Sidelap)
- N-24-SS and N-24-SS AC (Interlocking Screwed Sidelap)
- Shallow VERCOR (Nestable Screwed Sidelap)
- Deep VERCOR (Nestable Screwed Sidelap)

Material

Galvanized fluted roof deck panels are formed from either ASTM A 653 or A 1063 steel. Painted/painted or mill finished fluted roof deck panels are formed from either ASTM A 1008 or A 1039 steel.

Cellular roof deck sections are fabricated from galvanized steel conforming to ASTM A653 or A 1063. The fluted top and flat bottom sections are factory resistance-welded together.

Note: Weld marks will be visible on the exposed flat bottom.

Deep and Shallow VERCOR decks are fabricated from G90 galvanized steel conforming to ASTM A 653 or A 1063.

ROOF DECK VERTICAL LOADS

Uniform Load Tables

Allowable uniform load values are based on the allowable bending moment (stress) and limiting deflection to L/360, L/240 or L/180. Allowable uniform load values for cellular deck panels are also governed by the allowable vertical shear (governed by the horizontal shear strength of the resistance welds between the fluted top section and the flat bottom section). The symbol ♦♦♦ indicates that the allowable uniform load based on deflection exceeds the allowable load based on flexure (stress) or vertical shear (shear). Note that self-weight of the deck should be included when determining dead load.

The formulas used to determine the allowable uniform loads due to flexure (stress), shear and deflection are as follows:

Design Formulas

+M = Positive Bending Moment in ft-lb

-M = Negative Bending Moment in ft-lb

Δ = Deflection in inches

E = 29,500,000 psi

w = Allowable uniform live load in psf

L = Span length in feet. Span lengths shown in tables are center-to-center spans.

R_e = End reaction in lb/ft

R_i = Interior reaction in lb/ft

V_e = Vertical Shear adjacent to end support

V_i = Vertical Shear adjacent to interior support

Span	Bending Moment	Deflection	Bearing	Shear
Single	$+M = 0.125 \cdot w \cdot L^2$	$\Delta = \frac{0.013 \cdot w \cdot L^4 \cdot 1728}{E \cdot I}$	$R_e = 0.5 \cdot w \cdot L$	$V_e = 0.5 \cdot w \cdot L$
Double	$-M = 0.125 \cdot w \cdot L^2$	$\Delta = \frac{0.0054 \cdot w \cdot L^4 \cdot 1728}{E \cdot I}$	$R_e = 0.375 \cdot w \cdot L$ $R_i = 1.25 \cdot w \cdot L$	$V_e = 0.375 \cdot w \cdot L$ $V_i = 0.625 \cdot w \cdot L$
Triple	$-M = 0.1 \cdot w \cdot L^2$	$\Delta = \frac{0.0069 \cdot w \cdot L^4 \cdot 1728}{E \cdot I}$	$R_e = 0.4 \cdot w \cdot L$ $R_i = 1.1 \cdot w \cdot L$	$V_e = 0.4 \cdot w \cdot L$ $V_i = 0.6 \cdot w \cdot L$

Bearing

Verco recommends 2 inches minimum bearing on perpendicular supports. The required bearing should be verified based on specific load and span conditions. Adequate bearing at perpendicular supports is required to prevent web crippling of the deck and to allow for proper attachment. Sufficient bearing at parallel supports should be provided to make the specified connections.

The allowable reactions as well as allowable concentrated line loads based on web crippling (one and two flange loading) are shown in the section properties tables that follow in this catalog.

The following illustration (Figure 1) illustrates the difference between one flange and two flange loading for web crippling.

Web Crippling: One vs. Two Flange Loading

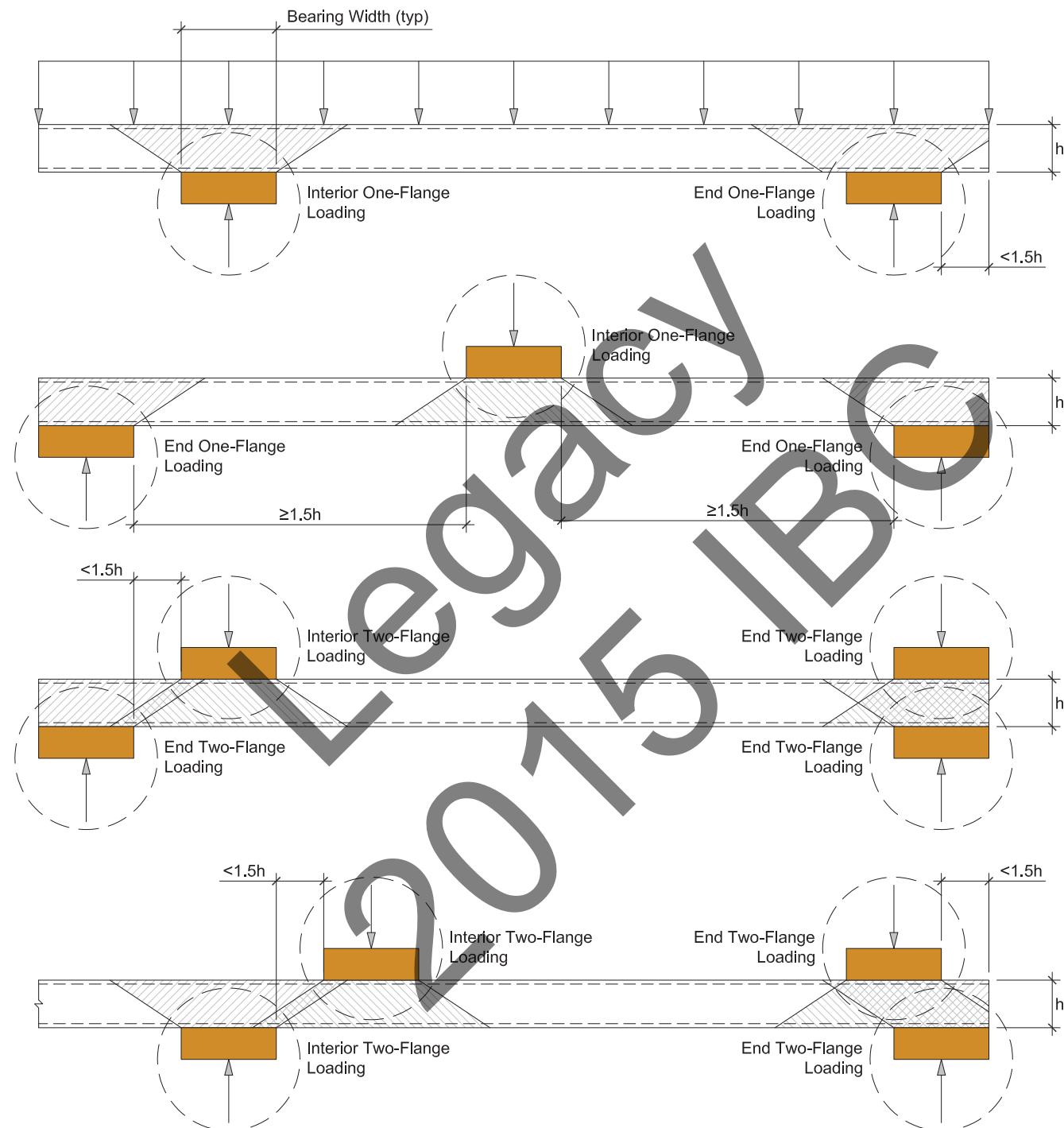


FIGURE 1

Suspended Loads

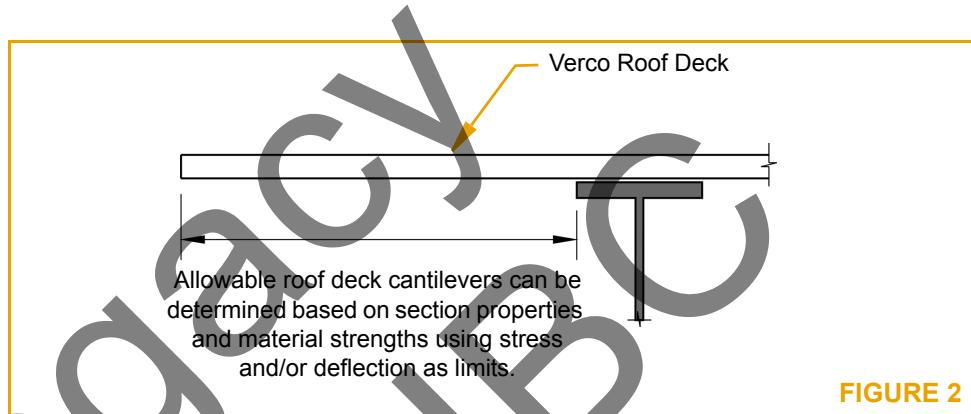
The engineer of record should evaluate suspended or hanging loads attached directly to the roof deck on the basis of the project conditions. The specific method of attachment will determine the load distribution or effective width of deck to be used in the evaluation.

Concentrated Loads

Concentrated loads, such as those due to construction or maintenance workers, should be evaluated based on the deck section properties, material strengths, and web crippling capacities.

Cantilevered Deck

The length of Verco roof deck cantilevers can be determined based on section properties and material strengths. Consider construction or maintenance workers and materials attached to the deck, particularly with regard to deflection. Attach cantilevers to supports prior to loading. See Figure 2.



Wind Uplift

Determine allowable spans to resist uplift forces based on the deck section properties and material strengths. Evaluation may be warranted on specific projects.

Allowable tension strengths of arc spot welds and #12 screws are determined in accordance with AISI's "S100: North American Specification for the Design of Cold-Formed Steel Structural Members." (AISI S100).

Allowable tension strengths of Hilti and Pneutek fasteners are based on the specific combination of fastener, substrate thickness, and deck gage.

Allowable tension loads for arc spot welds, Hilti fasteners and Pneutek fasteners subject to wind uplift are listed in Table 1. Allowable tension loads for #12 screws subject to wind uplift are listed in Table 2.

Table 1: Allowable Tension Loads (lbs/connection) for Arc Spot Welds, Hilti Fasteners and Pneutek Fasteners Subject to Wind Uplift Loads for Verco B and N Steel Deck Panels

Gage	Profile	BMT	Arc Spot Weld		Hilti X-EDNK22 or X-HSN 24	Hilti X-ENP-19		Pneutek SDK61, SKD63, K64 or K66	
		(in.)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
22	B & N	0.0299	505		493		525		297
20	B & N	0.0359	602		592		631		429
18	B & N	0.0478	790		788		840		760
16	B & N	0.0598	975		985		1050		1190

Table 2: Allowable Tension Loads (lbs/connection) for #12 Screws Subject to Wind Uplift Loads for Verco Deck Panels

Gage	Profile	BMT (in.)	Support Thickness (in.) and Strength, Fy / Fu (ksi)											
			33 mil (0.0346 in.)		43 mil (0.0451 in.)		54 mil (0.0566 in.)		68 mil (0.0713 in.)		97 mil (0.1017 in.)		1/8 in.	≥ 3/16 in.
			33/45	50/65	33/45	50/65	33/45	50/65	33/45	50/65	33/45	50/65	36/58	36/58
26	SV	0.0179	95	138	124	173	156	173	173	173	173	173	173	173
	DV	0.0195	95	138	124	179	156	189	189	189	189	189	189	189
24	SV	0.0239	95	138	124	179	156	225	196	232	232	232	232	232
	DV	0.0254	95	138	124	179	156	225	196	246	246	246	246	246
22	SV	0.0299	95	138	124	179	156	225	196	284	280	290	290	290
	B & N	0.0299	95	138	124	179	156	225	196	284	280	290	290	290
20	SV	0.0314	95	138	124	179	156	225	196	284	280	304	304	304
	DV	0.0314	95	138	124	179	156	225	196	284	280	362	362	362
18	B & N	0.0359	95	138	124	179	156	225	196	284	280	405	444	463
	DV	0.0374	95	138	124	179	156	225	196	284	280	405	444	579
16	B & N	0.0478	95	138	124	179	156	225	196	284	280	405	444	463
	DV	0.0598	95	138	124	179	156	225	196	284	280	405	444	579

Notes for Tables 1 and 2:

- The profile designations used in this table apply to the profile families as summarized below:
 "SV" - Shallow VERCOR
 "DV" - Deep VERCOR
 "B" – PLB & HSB roof deck (including web perforated acoustical deck)
 "N" – PLN3, HSN3, HSN3-NS, PLN24 & N24 roof deck (including web perforated acoustical deck)
- Base metal thickness (BMT) = specified minimum uncoated base metal thickness used in design. Deck subject to thickness tolerances as described in Section A2.4 of AISI S100.
- The minimum arc spot weld effective fusion diameter, d_e , is 1/2 inch. The values for arc spot welds may be applied to arc seam weld with minimum effective fusion width, d_e , of 3/8 inch and minimum length is 1 inch excluding circular ends.
- Details, workmanship, technique and qualification of welds must comply with AWS D1.3.
- The Hilti fasteners are applicable to the following substrate thicknesses:
 X-EDNK22: 1/8 in. ≤ substrate thickness ≤ 1/4 in.
 X-HSN 24: 1/8 in. ≤ substrate thickness ≤ 3/8 in.
 X-ENP-19: substrate thickness ≥ 1/4 in.
- The Pneutek fasteners are applicable to the following substrate thicknesses:
 SDK61 series: 0.113 in. ≤ substrate thickness ≤ 0.155 in.
 SDK63 series: 0.155 in. ≤ substrate thickness ≤ 0.250 in.
 K64 series: 0.187 in. ≤ substrate thickness ≤ 0.312 in.
 K66 series: substrate thickness ≥ 0.281 in.
- The #12 screws are self-drilling self-tapping screws with a minimum washer diameter of 5/16-in. and a minimum washer thickness of 0.05 in. The screws must be compliant with ASTM C1513.
- The allowable tensile strength of the individual screws, as published by their manufacturer, must meet or exceed the allowable screw connection tensile strengths listed above.
- The strength is the ASD allowable connection tensile strength, where Ω is 2.5 for welds and 3.0 for Screws, Hilti and Pneutek fasteners. Convert ASD tensile strengths to LRFD based on $\bar{\Omega} = 0.60$ for welds and $\bar{\Omega} = 0.50$ for Screws, Hilti or Pneutek fasteners.

ROOF DECK DIAPHRAGMS

The allowable diaphragm shear values in the tables for Verco roof decks are based on attachment of the deck to the perpendicular supports with welds or mechanical fasteners. The attachment patterns for each profile are shown in the illustrations included with the tables.

Diaphragm Load Tables

Designers should observe the following notes when working with these tables:

- The shear strength for roof decks without concrete fill listed in this catalog are based on a continuous 3-span condition for span lengths 4 feet and greater. For spans less than 4 feet, the allowable diaphragm shear values are based on a sheet length of 12 feet or a maximum of 7 spans. For spans less than 4 feet, deck panels longer than 12 feet or with more than 7 spans may be used with the tabulated values.
- The allowable stress increase permitted for load combinations in IBC Section 1605.3.2, including wind or seismic forces, shall not be used for allowable diaphragm shears.
- The flexibility factor (F) is the number of microinches a diaphragm web will deflect in a span of 1 ft under a shear load of 1 pound per ft. Refer to Verco's Evaluation Report for guidance in calculating anticipated deflections using the flexibility factor, F.
- R is the vertical load span (spacing between supports) (L_v) of the deck divided by the length (L_s) of the deck sheet: $R = L_v / L_s$.
- See "Sidelap Connections" on page 12 for information regarding connection spacing.
- Deck panels may be butted or lapped. When deck panels are lapped, the minimum end lap length is 2 inches. See page 66 for lapped and butted end joint requirements when using the ShearTranz II-42 System.
- See additional footnotes for Diaphragm Shear Strength and Flexibility Factors listed in the following sections of this catalog.

FORMLOK™ Deck Diaphragms

Refer to Verco's Evaluation Report or Verco's Floor Deck Catalog for diaphragm values for PLW2-36, W2-36, PLW3-36, and W3-36 FORM-LOK deck without concrete fill.

Axial Loads

Axial load strength of steel deck can be evaluated in accordance with AISI S100.

ATTACHMENT OF ROOF DECK

Support Fastening

The diaphragm shear tables of this catalog include two methods of attaching deck to the supports: welds and mechanical fasteners (power actuated fasteners or self-drilling, self-tapping screws).

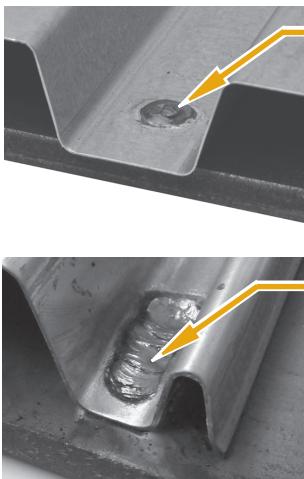


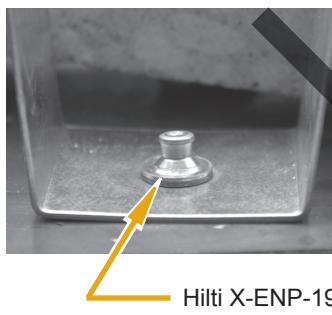
FIGURE 3

Welds: When Verco roof deck is to be welded to supports, the effective fusion area is to be at least $\frac{1}{2}$ in. diameter for arc spot (puddle) welds (Figure 3) or at least $\frac{3}{8}$ in. x 1 in. long for arc seam welds. Arc seam and arc spot welds are to be located and spaced as described in the tables.

Hilti Fasteners: Hilti X-EDNK22 THQ12, X-HSN 24, or X-ENP-19 L15 fasteners are to be installed as shown in Figure 4. Hilti X-HSN 24 fasteners have a dome style head, red guidance washer and a steel silver-colored top-hat washer. Hilti X-EDNK22 fasteners have a dome style head, a $\frac{15}{32}$ inch diameter steel flat washer, and a steel top hat washer. The Hilti X-ENP-19 fastener has a fully knurled tip and tapered shank fitted with two 0.590 inch diameter steel cupped washers. Contact Hilti for additional information on the fasteners.

Proper penetration of the Hilti fasteners into structural supports is shown in Figure 4. Fasteners shall be located not less than 1 in. from the end of the sheets.

Select the appropriate fastener based on the actual substrate thickness.



Hilti X-ENP-19 L15 Fastener

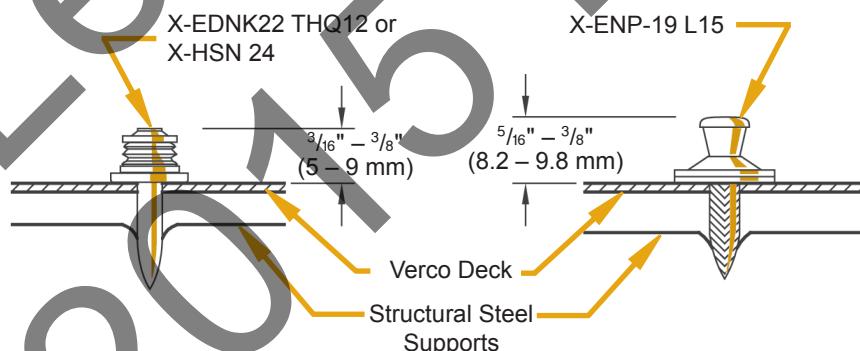


FIGURE 4

Pneutek Fasteners: Pneutek K66062, K66075, K64062, K64075, SDK63075, or SDK61075 fasteners are to be installed as shown in Figure 5. The Pneutek fasteners have $\frac{1}{2}$ inch diameter heads. Contact Pneutek for additional information on the fasteners.

Fasteners must be driven with the Pneutek Air/Safe fastening system to ensure tight contact between the fastener head and the attached deck as shown in Figure 5. Fasteners shall be located not less than 1 in. from the end of the sheets.

Select the appropriate fastener based on the actual substrate thickness. Note that K66075 or K64075 pins are to be used for attachment of four layers of 20 gage deck or three or four layers of 18 or 16 gage deck.

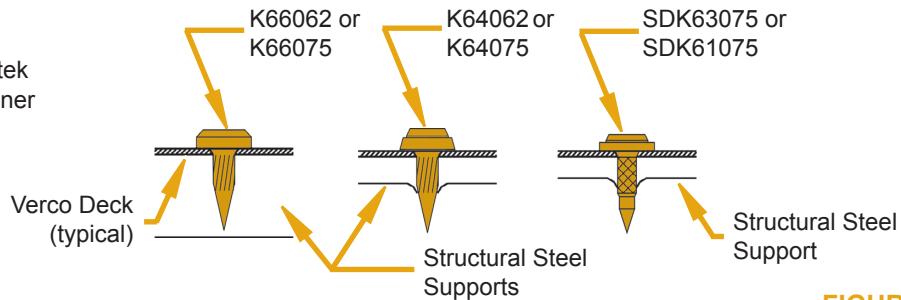


FIGURE 5



FIGURE 6

Screws: #12 self-drilling, self-tapping screws are to be installed as shown in Figure 6.

Diaphragm shear and flexibility values are based on SDI recognized #12 screws from Buildex, Elco, Hilti, and Simpson Strong-Tie when installed in supports at least 0.0385 inches thick. The tabulated shears and flexibility values may be modified in accordance with appropriate footnotes of the Diaphragm Shear Strength and Flexibility Tables for supports of different thicknesses or for screws ("generic") which are not recognized by SDI.

ShearTranz® II-42 System: Verco introduced the use of restraining elements, such as the ShearTranz II-42 System, to increase roof deck diaphragm rigidity.

The 14 gage ShearTranz II-42 elements are used with PLB-36 deck with sidelaps connected using the PunchLok II Tool.

The ShearTranz II-42 elements are used at shear collecting support elements perpendicular to the deck corrugations. When ShearTranz II-42 elements are used, the deck does not need to terminate at the support as it may be cantilevered.

Deck end laps of PLB-36 with the ShearTranz II-42 System must be at least 2 inches and fastened to supports with arc spot and arc seam welds. ShearTranz II elements are required if butted end joints are used. See installation details shown on page 66.

Sidelap Connections

Verco roof decks are to be fastened at the sidelaps by one of four methods: VSC2s made with the PunchLok II Tool, 1½ in. long top seam welds, button punches, or #10 x ¾ in. long screws. Spacing of sidelap connections shall be as specified in the tables.

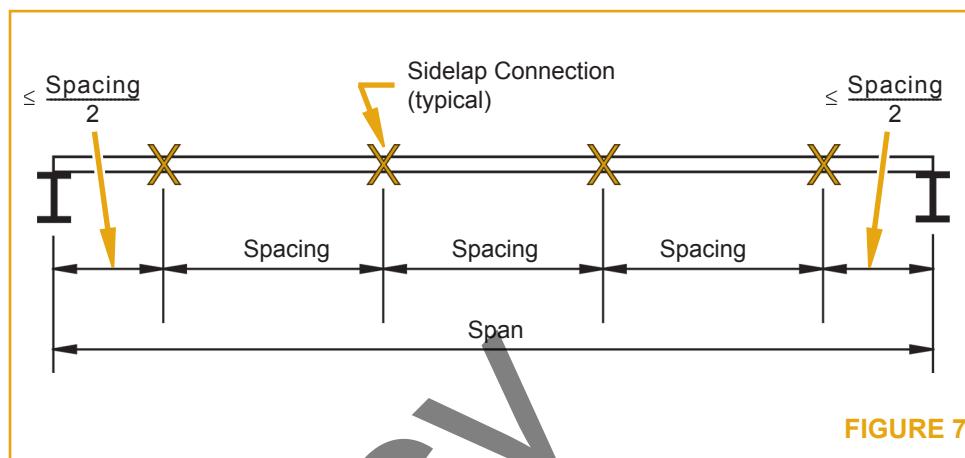


FIGURE 7

The dimension from the centerline of the supports to the first and last sidelap connection within each span is to be no more than one half the specified spacing as shown in Figure 7. The number of connections per span based on spacing are listed in Table 3.

Table 3: Number of Sidelap Connections per Span Based on Spacing

Spacing in inches	Span (ft-in.)																		
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'
24"	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
18"	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14
12"	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
8"	3	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27	29	30
6"	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
4"	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60

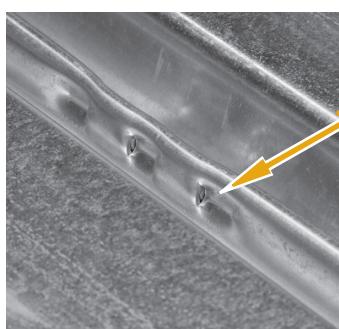


FIGURE 8

PunchLok® II System: The connection made by the PunchLok II Tool is referred to as a VSC2 (Verco Sidelap Connection 2). An acceptable VSC2 connection has been made when the sidelap material has been sheared and offset so the sheared surface of the male leg is visible in the cut (Figure 8).

The VSC2 connection may be made in either direction relative to the sidelap.

Top Seam Welds: When roof deck sidelaps are connected with top seam welds (TSW) (Figure 9, left), the 1½ in. long weld must engage the top of the inner (male) leg. Clinch the joint before welding to create contact between the lips.



FIGURE 9

Button Punches: When roof deck sidelaps are connected with button punches (Figure 9, right), an average-sized person should be able to stand (not jump) on the flute adjacent to the attachment without the joint coming apart.

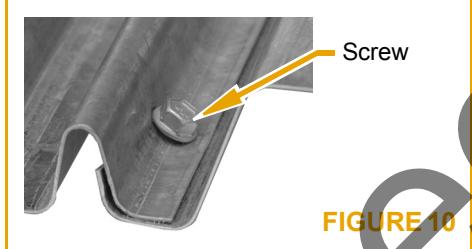


FIGURE 10

Screws: When self-drilling, self-tapping screws are used to connect the sidelaps of roof decks, they are installed as shown in Figure 10. The diaphragm shear values and flexibility factors shown in the tables of this catalog are based on minimum #10 self-drilling, self-tapping screws. The "SS" designation for roof deck indicates interlocking deck provided with extended female lip for screw fastening. The "NS" designation for HSN3 roof deck indicates deck provided with nested sidelap. Deep and Shallow VERCOR deck are provided with a nested sidelap.

Parallel Collectors

Spacing of the attachments at diaphragm chords, struts, ties or other collector elements that are parallel to the deck flutes is based on the actual shear to be transferred and shear capacity of the connections used. The spacing of the connections at these shear transfer elements parallel to the deck flutes should not be larger than that for the interior sidelap connections in order to maintain diaphragm rigidity. The maximum spacing of attachments at parallel collectors is 3 ft.

Allowable shear loads for Arc Spot Welds, Arc Seam Welds, Hilti Fasteners, Pneutek Fasteners, and SDI Recognized Screws are listed in Table 4. Allowable shear loads for #12 screws that do not meet the requirements of SDI Recognized Screws are listed in Table 5.

Fillet Welds: Spacing of fillet welds used at collectors parallel to the deck flutes should be based on the shear to be transferred. Allowable shear strength for fillet welds should be determined in accordance with AISI S100.

Table 4: Allowable Shear Strength (lbs/connection) for Arc Spot Welds, Arc Seam Welds, Hilti Fasteners, Pneutek Fasteners and SDI Recognized Screws for Verco Deck Panel Support Connections

Deck Gage	Profile	BMT	ARC SPOT WELD	ARC SEAM WELD	HILTI X-ENDK22 or X-HSN 24	HILTI X-ENP-19	PNEUTEK SDK61	PNEUTEK SDK63	PNEUTEK K64	PNEUTEK K66	SDI RECOGNIZED SCREWS
		(in.)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
22	B & N	0.0299	783	1231	603	650	618	691	694	736	561
20	B & N	0.0359	1091	1491	720	775	733	791	886	903	673
18	B & N	0.0478	1850	2017	947	1020	951	967	1204	1253	896
16	B & N	0.0598	2309	2564	1169	1259	1158	1125	1474	1630	1121

Table 5: Allowable Shear Strength (lbs/connection) for #12 Screws of Verco Deck Panel Support Connections

Gage	Profile	BMT (in.)	Support Thickness (in.) and Strength, Fy / Fu (ksi)									
			33 mil (0.0346 in.)		43 mil (0.0451 in.)		54 mil (0.0566 in.)		68 mil (0.0713 in.)		97 mil (0.1017 in.)	
			33/45	50/65	33/45	50/65	33/45	50/65	33/45	50/65	36/58	36/58
26	SV	0.0179	247	259	259	259	259	259	259	259	259	259
	DV	0.0195	255	282	282	282	282	282	282	282	282	282
24	SV	0.0239	262	332	342	346	346	346	346	346	346	346
	DV	0.0254	259	336	352	367	367	367	367	367	367	367
	SV	0.0299	240	338	369	432	432	432	432	432	432	432
22	B & N	0.0299	240	338	369	432	432	432	432	432	432	432
	DV	0.0314	235	335	371	454	454	454	454	454	454	454
20	B & N	0.0359	226	327	360	492	491	519	519	519	519	519
	DV	0.0374	226	327	355	494	496	541	541	541	541	541
18	B & N	0.0478	226	327	337	486	488	684	676	691	691	691
16	B & N	0.0598	226	327	337	486	473	683	679	865	865	865

Notes for Tables 4 and 5:

- The profile designations used in this table apply to the profile families as summarized below:
 "SV" - Shallow VERCOR
 "DV" - Deep VERCOR
 "B" – PLB & HSB roof deck (including web perforated acoustical deck)
 "N" – PLN3, HSN3, HSN3-NS, PLN24 & N24 roof deck (including web perforated acoustical deck)
- Base metal thickness (BMT) = specified minimum uncoated base metal thickness used in design. Deck subject to thickness tolerances as described in Section A2.4 of AISI S100.
- The minimum arc spot weld effective fusion diameter, d_e , is 1/2 inch. The values for arc spot welds may be applied to arc seam weld with minimum effective fusion width, d_e , of 3/8 inch and minimum length is 1 inch excluding circular ends.
- Details, workmanship, technique and qualification of welds must comply with AWS D1.3.
- The Hilti fasteners are applicable to the following substrate thicknesses:
 X-ENDK22: 1/8 in. ≤ substrate thickness ≤ 1/4 in.
 X-HSN 24: 1/8 in. ≤ substrate thickness ≤ 3/8 in.
 X-ENP-19: substrate thickness ≥ 1/4 in.
- The Pneutek fasteners are applicable to the following substrate thicknesses:
 SDK61 series: 0.113 in. ≤ substrate thickness ≤ 0.155 in. K64 series: 0.187 in. ≤ substrate thickness ≤ 0.312 in.
 SDK63 series: 0.155 in. ≤ substrate thickness ≤ 0.250 in. K66 series: substrate thickness ≥ 0.281 in.
- SDI recognized #12 or #14 screws to supports are limited to Buildex, Elco, Hilti, or Simpson Strong-Tie screws with a minimum substrate thickness of 0.0385 in.
- The #12 screws are self-drilling self-tapping screws with a minimum washer diameter of 5/16-in. and a minimum washer thickness of 0.05 in. The screws must be compliant with ASTM C1513.
- The allowable shear strength of the individual screws, as published by their manufacturer, must meet or exceed the allowable screw connection tensile strengths listed above.
- The strength is the ASD allowable connection shear strength, where Ω is 3.0 for welds and 2.5 for Screws, Hilti and Pneutek fasteners. Convert ASD shear strengths to LRFD based on $\bar{\Omega}$ = 0.55 for welds and $\bar{\Omega}$ = 0.65 for Screws, Hilti or Pneutek fasteners.
- Allowable values may not be increased one-third for earthquake loading.

VERCO ROOF DECK FINISHES

Verco roof decks are offered in various finishes:

Galvanized

Cold rolled zinc coated steel (ASTM A 653 or A 1063) with coating designation G60 is the standard zinc coated material of the deck industry. Coating designation G90 is a heavier, more costly, zinc coating often specified for exposed exterior applications or other project specific requirements. Other ASTM A 653 galvanized coatings may be available on special request – contact your Verco representative regarding availability.

Cold Rolled with Primer

Acrylic primer is applied to cold rolled steel (ASTM A 1008 or A 1039). The Verco acrylic primer is applied by a roller coat process and oven cured. Verco gray primer is approved by UL for use in direct applied fire-rated assemblies. Refer to page 158 for specific listings.

Due to varying job site conditions, application methods, coating manufacturers, environmental conditions and expectations, it is essential to conduct a field test to determine compatibility of the field applied top coat with the primer coat prior to full scale painting. Verco is not responsible for topcoat compatibility. Primer specifications are available from the Verco website (www.vercodeck.com).

Primer paint is intended to protect steel deck for a short period of exposure in ordinary atmospheric conditions. It should be considered as an impermanent and provisional coating.

Minor aesthetic irregularities and/or imperfections may appear in the paint coating as a result of the manufacturing process.

Galvanized with Primer

Galvanized roof deck is available with factory gray or white primer applied to the underside of the deck exposed to view. Primed galvanized deck is suitable for applications where the deck will be field-painted (may eliminate the need for field priming) or to meet other specific requirements.

Optionally, the primer paint may be left exposed in certain interior applications. Custom color primers are available. Contact your Verco representative regarding availability.

Exposed Product Appearance

Roof deck and cellular deck are structural products. Minor dents and scratches which do not affect the structural capacity of deck are not grounds for rejection. Note that lighter gage material is more susceptible to the appearance of oil canning and minor dents during the shipping, handling and installation process. For cellular deck, flat bottom pans are susceptible to the appearance of oil-canning, particularly when perforated. The appearance of oil canning does not affect the structural integrity of fluted and cellular roof decks and is not grounds for rejection.

ROOF DECK PRODUCT SELECTION

Spans

Span length is one of the key factors in determining an appropriate roof deck profile. Determine logical span lengths (three span is suggested whenever possible) based on the bay size. Contact your Verco representative regarding the availability of deck lengths greater than 40 ft. Consider handling the weight of the deck during installation when evaluating long deck lengths, especially in heavier gages and cellular decks. Also see the Roof Deck Design Example on page 17.

Roofing

Verco roof and cellular deck is a structural product resisting horizontal and vertical loads. Normally, insulation and roofing materials are applied over Verco roof deck to create a water tight roofing system. However, Verco deck can be used for walkways, canopies, sunshades, or other structures which do not require a watertight roof. Attachments for outside weather exposed applications should comply with building code requirements.

Vent Tabs

Verco roof deck is available with factory punched vent tabs to provide positive venting (see Figure 11). Determine venting requirements based on the specific materials installed over the deck. Some leakage during lightweight insulating concrete placement should be anticipated with vented deck. Vent tabs projecting upwards are staggered in interior low flutes at approximately 6 in. on center:

- 5 rows in PLB-36 and HSB-36.
- 3 rows in PLN3 and N3.
- 2 rows in PLN-24 and N-24.



FIGURE 11

ROOF DECK DESIGN EXAMPLE

This design example illustrates the basic issues involved in the design and selection of Verco roof deck. Various choices are outlined for each point to be considered. *This example illustrates the issues, not all of the possible options.* If you have additional questions, please contact the Verco Engineering Department.

Design Goals

The design goals for this example are as follows:

- Resist specified uniform vertical loads
- Resist specified horizontal diaphragm loads
- Select an economical roof deck system

Given: 48'-0" x 30'-0" bay size

Deck oriented parallel to 48 ft dimension

Perimeter walls provide lateral restraint

Fire rating not required

Loads:

Dead Load	30 psf
Live Load.....	50 psf
Total Vertical Load.....	80 psf
Maximum diaphragm shear	750 plf
Average flexibility factor required	30.0

Span Options

Spacing between the beams or joists will suggest the deck profile options. Refer to "Spans" on page 16 for more information. Based on the profile options, determine the minimum gages to meet vertical load requirements, assuming triple span sheets.

1. 12'-0" c-c spans
Choice: 20 gage PLN3 roof deck.
2. 8'-0" c-c spans
Choice: 20 gage PLB-36 roof deck.
3. 6'-0" c-c spans
Choice: 22 gage PLB-36 roof deck.

→ **Selection:** Option 1 is the most expensive deck choice, but minimizes the number of supports. Option 2 optimizes deck gage based on span. Option 3 minimizes the deck cost but requires the most supports.

Diaphragm Attachment Options

Determine the minimum deck gage and minimum attachments necessary to meet the specified requirements for maximum horizontal diaphragm strength (q). Verify that the horizontal deflection of the diaphragm is within acceptable limits. For purposes of this example, the average required F has been defined to allow a comparison of the options presented, all of which meet the average required F .

ROOF DECK DESIGN EXAMPLE (CONTINUED)

Verco's published allowable diaphragm shear strength tables utilize the ASD factors of safety for Earthquake loading from AISI S100, Table D5, excerpt below.

1. To convert from Earthquake loading to Wind loading, utilizing ASD, the published allowable diaphragm shear strength may be multiplied by Ω_d (Earthquake), and then divided by Ω_d (Wind):

As an example:

$$\text{Welds: } 3.00/2.35 = 1.27$$

$$\text{Mechanical Fasteners: } 2.5/2.35 = 1.06$$

2. To convert from ASD to LRFD for each connection type, the published allowable diaphragm shear values may be multiplied by the applicable conversion factor, $C = \Omega_d \times \Phi_d$

The following examples are for Earthquake loading:

$$\text{For welds: } C_{\text{WELD}} = 3.00 \times 0.55 = 1.65$$

$$\text{For mechanical fasteners: } C_{\text{MECHANICAL FASTENER}} = 2.5 \times 0.65 = 1.625$$

$$\text{For deck panel buckling*: } C_{\text{BUCKLING}} = 2.00 \times 0.80 = 1.60$$

*The shaded areas in the allowable diaphragm shear tables indicate where buckling is the limit state rather than the connections.

Safety Factors and Resistance Factors for Diaphragms

Load Type or Combinations Including	Connection Type ¹	Limit State			
		Ω_d (ASD)	Φ_d (LRFD)	Ω_d (ASD)	Φ_d (LRFD)
Earthquake	Welds	3.00	0.55		
	Screws	2.50	0.65		
Wind	Welds	2.35	0.70	2.00	0.80
	Screws				
All Others	Welds	2.65	0.60		
	Screws	2.50	0.65		

1. For mechanical fasteners - such as Power Actuated Fasteners or Forced Entry Fasteners, the factors of safety for screws may be used.
2. Panel buckling is considered out-of-plane deck buckling and not local buckling at fasteners.

ROOF DECK DESIGN EXAMPLE (CONTINUED)

In general, using a lighter gage deck with more attachments is more economical than using a heavier deck with fewer attachments. When selecting the attachment system, consider the use of mechanical fasteners (power-actuated fasteners or screws) in conjunction with the PunchLok II System to minimize both installation and inspection costs. Together these benefits offer an economical deck system which can be installed in a minimum amount of time.

1. 12'-0" c-c spans

Attachment Choices:

Deck	Supports		Sidelaps		q, Earthquake (plf)		F
	Type	Pattern	Type	Spacing	ASD	LRFD	
3" Deep Roof Deck							
20 ga PLN3	Hilti	32/5	VSC2	18" o.c.	754	1225	10.4 + 13R = 14.8
20 ga PLN3	Pneutek	32/5	VSC2	18" o.c.	794	1290	12.9 + 14R = 17.6
20 ga PLN3	Screw	32/5	VSC2	12" o.c.	891	1448	9.2 + 14R = 14.0
20 ga PLN3	Weld	32/5	VSC2	18" o.c.	752	1241	11.4 + 13R = 15.9

2. 8'-0" c-c spans

Attachment Choices:

Deck	Supports		Sidelaps		q, Earthquake (plf)		F
	Type	Pattern	Type	Spacing	ASD	LRFD	
1½" Deep Roof Deck							
20 ga PLB-36	Hilti	36/5	VSC2	18" o.c.	818	1433	4.8 + 59R = 24.9
20 ga PLB-36	Pneutek	36/5	VSC2	18" o.c.	882	1329	7.2 + 60R = 27.5
20 ga PLB-36	Screw	36/5	VSC2	18" o.c.	760	1235	5.9 + 59R = 26.0
20 ga PLB-36	Weld	36/5	VSC2	18" o.c.	887	1464	5.7 + 59R = 25.8

3. 6'-0" c-c spans

Attachment Choices:

Deck	Supports		Sidelaps		q, Earthquake (plf)		F
	Type	Pattern	Type	Spacing	ASD	LRFD	
1½" Deep Roof Deck							
22 ga PLB-36	Hilti	36/7/4	VSC2	12" o.c.	849	1379	8.0 + 18R = 14.1
22 ga PLB-36	Pneutek	36/7/4	VSC2	12" o.c.	895	1454	10.7 + 19R = 17.0
22 ga PLB-36	Screw	36/7/4	VSC2	12" o.c.	794	1290	9.2 + 18R = 15.3
22 ga PLB-36	Weld	36/7/4	VSC2	12" o.c.	846	1396	8.9 + 18R = 15.0

Notes:

- F is based on R = $\frac{1}{3}$ for 3 span sheets.
- Diaphragm shear and flexibility values listed for all mechanical fasteners assume minimum $\frac{1}{4}$ in. thick steel supports.

ROOF DECK DESIGN EXAMPLE (CONTINUED)

- Values shown are those necessary to meet the maximum shear (q) and average Flexibility Factor (F) specified. Maximum economy can be achieved by zoning the diaphragm, reducing deck gage and/or attachments as shear requirements diminish across the building.
- Attachment of deck to parallel shear collectors is required but not shown.

Finish Options

The total installed cost, including field painting, should be used to determine the deck finish choice. Choices include:

1. Cold rolled with primer.
2. Galvanized.
3. Galvanized with primer painted underside.

Fire Ratings

Hourly fire ratings, if required, may affect the maximum allowable deck span and/or minimum deck gage. Refer to the UL Fire Resistance Directory or Verco's Evaluation Report for further information. Note that only Verco cold rolled with Verco factory gray primer and Verco galvanized finishes are approved for use with spray applied fire proofing.

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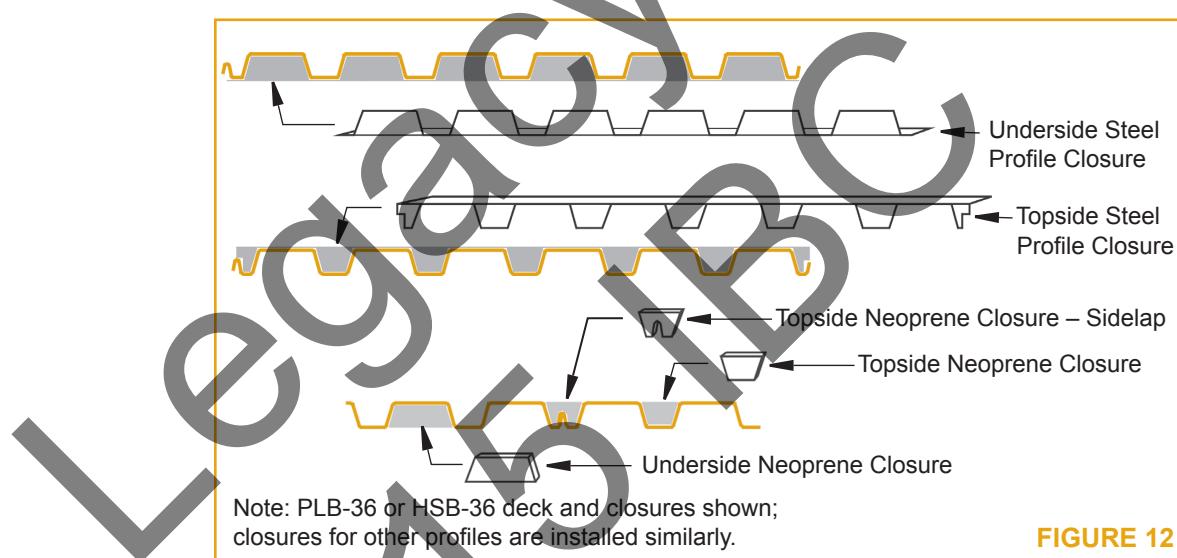
ROOF DECK ACCESSORIES

Profile Closures

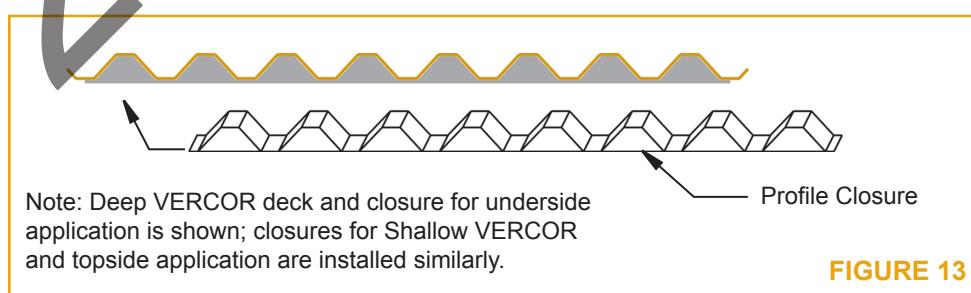
Profile closures made from steel or neoprene are designed to fit Verco's deck products. See Table 6 for availability of closures by deck profile. Steel closures are 22 gage with a 1 in. return lip for fastening to deck with screws or tack welds. Neoprene closures for PLB-36, HSB-36, PLN3, HSN3, PLN-24, and N-24 decks are 1 in. thick individual plugs. See Figure 12 for typical installation of closures.

Table 6: Availability of Profile Closures

Deck Profile	Steel Closures		Neoprene Closures	
	Underside	Topside	Underside	Topside
PLB-36 or HSB-36	✓	✓	✓	✓
PLN3 or HSN3	✓		✓	✓
PLN-24 or N-24	✓		✓	✓



Neoprene profile closures are available for both Deep and Shallow VERCOR decks. These closures are 1 in. thick, 36 in. long strips and are designed to fit into either the underside or topside of the profile. See Figure 13.



Sump Pan

- 14 gage
- Flat recessed

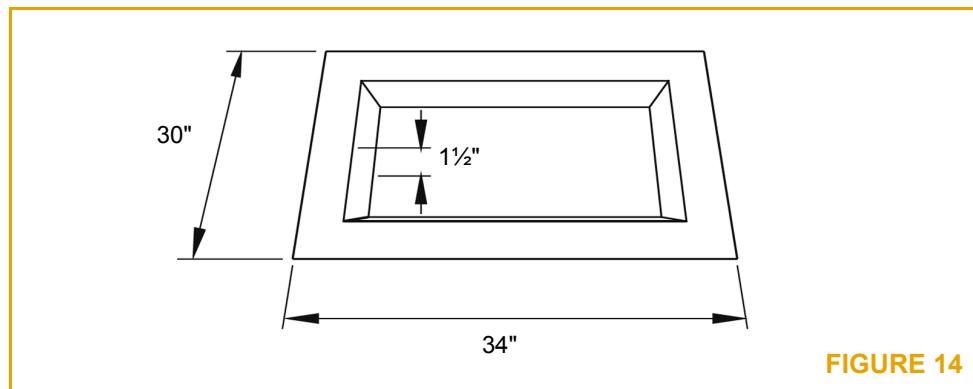


FIGURE 14

SPECIFICATION SECTION 05 31 23 - STEEL ROOF DECKING

Specifications utilizing VERCO roof deck formatted in accordance with MasterFormat 2012, Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC) are available for download from Verco's website (www.vercodeck.com).

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USING THE TABLES

These illustrations highlight important considerations for using the deck tables. The values in the tables were determined in standard US units.

Type PLB™-36 or HSB®-36



Allowable Uniform Loads (psf)

Uniform load which produces maximum **allowable stress** in deck

Uniform load which produces **L/240 deflection** in deck

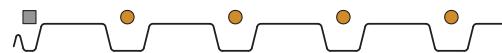
DECK SPAN GAGE	CRITERIA	SPAN (ft-in.)									
		2'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
22	Stress	300	300	220	141	116	98	83	72	63	55
	L/360	♦♦♦	287	121	62	47	36	28	23	18	15
	L/240	♦♦♦	♦♦♦	182	93	70	54	42	34	28	23
	L/180	♦♦♦	♦♦♦	♦♦♦	124	93	72	56	45	37	30
	Stress	300	300	288	184	152	128	109	94	82	72
	L/360	♦♦♦	♦♦♦	150	77	58	44	35	28	23	19
20	L/240	♦♦♦	♦♦♦	225	115	86	67	52	42	34	27

How to use the uniform load tables:

1. Using the total load, select the gage and the span with equal or greater value for stress.
2. Using the appropriate load combinations, select the gage and the span with equal or greater value for a selected deflection.
3. Select the gage and the span for the roof deck that meets the criteria of both steps 1 and 2.

Type PLB™-36

- 36/7 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

Diaphragm Shear Capacity (q) and Flexibility Factors (F)
based on sidelaps attached with VSC2s at 24" oc and
36/7 weld pattern at supports

Sidelap Attachment Type and Spacing
(VSC2 = Verco Sidelap Connection made with PunchLok II Tool)

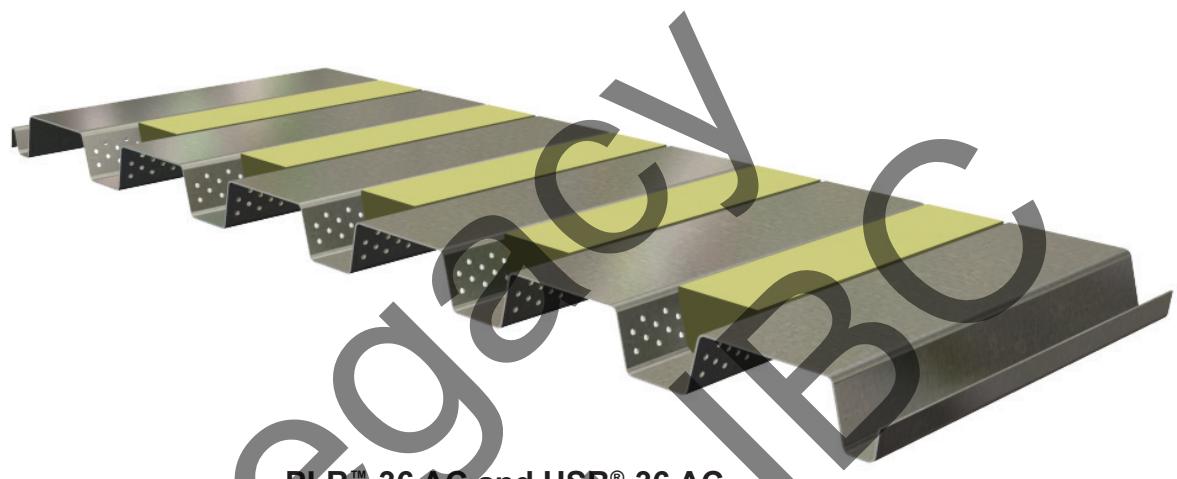
(Examples above were taken from the tables on pages 29 and 33.)

Notes:

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PLB™-36 and HSB®-36



PLB™-36 AC and HSB®-36 AC

PLB™ AND HSB® DECK CONTENTS

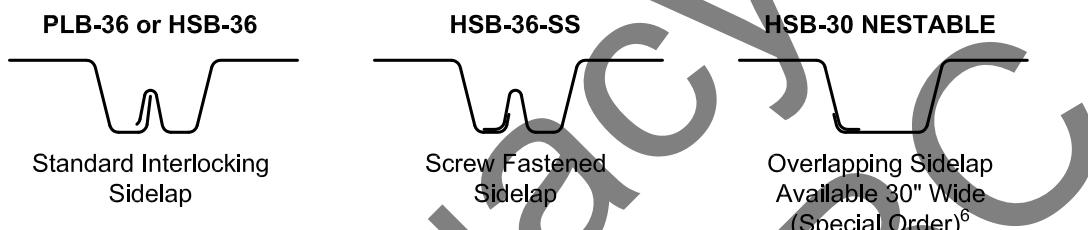
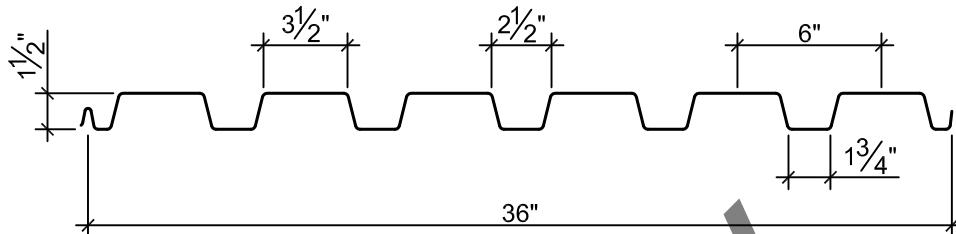
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Vertical Load Capacity	29
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PLB-36 with Welds	30-33
PLB-36 with Hilti fasteners	34-44
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HSB®-36 Allowable Diaphragm Shear Strength and Flexibility Tables	67-78
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HSB-36-SS with Screws	71-74
HSB-36-SS with Welds	75-78
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Type PLB™-36 or HSB®-36



- 1½" Deep Roof Deck
- Primer Painted or Galvanized
- PLB-36 Deck used with PunchLok II System
- HSB-36 Deck used with TSWs, BPs or Screws

Dimensions



Deck Weight and Section Properties

Gage	Weight		I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb) due to Web Crippling				Two Flange Loading							
							One Flange Loading		End Bearing Length		Interior Bearing Length		End Bearing Length		Interior Bearing Length			
	Galv (psf)	Painted (psf)	Single Span (in. ⁴ /ft)	Multi Span (in. ⁴ /ft)	+S _{eff} (in. ³ /ft)	-S _{eff} (in. ³ /ft)			2"	3"	4"	3"	4"	2"	3"	4"	3"	4"
22	1.9	1.8	0.177	0.192	0.176	0.188	935	1076	1163	1559	1671	962	1078	1150	1935	2084		
20	2.3	2.2	0.219	0.231	0.230	0.237	1301	1492	1609	2190	2340	1413	1576	1675	2744	2947		
18	2.9	2.8	0.302	0.306	0.314	0.331	2181	2484	2667	3714	3950	2551	2823	2987	4713	5038		
16	3.5	3.4	0.381	0.381	0.399	0.410	3265	3699	3955	5607	5938	4018	4422	4660	7168	7631		

Notes:

- Section properties are based on $F_y = 50,000$ psi.
- I_d is for deflection due to uniform loads.
- S_{eff} (+ or -) is the effective section modulus.
- Multiply tabulated deck values listed above by the following adjustment factors to obtain acoustical deck section properties:

Deck Type	I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb)			
	Single Span	Multi Span	+S _{eff}	-S _{eff}	One Flange Loading		Interior Bearing	
B - Acoustical	0.98	0.98	0.97	0.97	1.00		0.76	

5. Allowable (ASD) reactions are based on web crippling, per AISI S100 Section C3.4, where $\Omega_w = 1.70$ for end bearing and 1.75 for interior bearing. Nominal reactions may be determined by multiplying the table values by Ω_w . LRFD reactions may be determined by multiplying nominal reactions by $\Phi_w = 0.90$ for end reactions and 0.85 for interior reactions.

6. Diaphragm values for HSB-30 Nestable are outside the scope of Verco's Evaluation Report.

Type PLB™-36 or HSB®-36



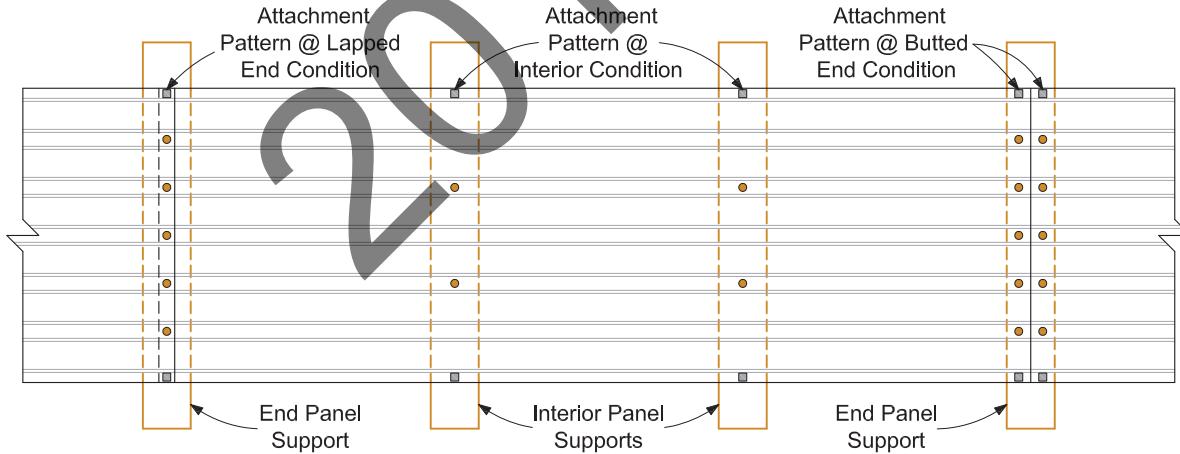
Attachment Patterns to Supports



Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
 □ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

36/7/4 Attachment Pattern

The 36/7/4 pattern requires a 36/7 attachment pattern at end panel supports and a 36/4 attachment pattern at interior panel supports.



Footnotes for Allowable Uniform Load Tables

1. Stress = Allowable uniform load based on maximum allowable flexural stress in deck.
2. L/360, L240 or L/180 = Uniform load which produces selected deflection in deck.
3. The symbol ♦♦ indicates allowable uniform load based on deflection exceeds allowable uniform load based on stress.
4. Nominal uniform loads governed by stress may be determined by multiplying the allowable values in the table by $\Omega_b = 1.67$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.95$.

Type PLB™-36 or HSB®-36



Footnotes for Diaphragm Shear Strength and Flexibility Factor Tables

General Notes

1. VSC2 = Verco Sidelap Connection 2; BP = Button Punch; TSW = Top Seam Weld; #10 = #10 Generic Screw. Sidelap connections are not required at support locations.
2. The dimension from the first and last sidelap connection within each span is to be no more than one-half of specified spacing.
3. R is the ratio of vertical span (L_V) of the deck to the length (L_S) of the deck sheet: $R = L_V / L_S$.
4. Interpolation of diaphragm shear strength between adjacent spans or sidelap spacings is permissible. For interpolation of the diaphragm flexibility factor between adjacent spans, use the flexibility factor for the closest adjacent span length.
5. Diaphragm shear values for side seam fasteners placed at spacings other than those in the table should be determined based on the number of fasteners in each span.
6. For web perforated acoustical deck profiles, modify tabulated q and F values using the following adjustment factors:

Deck Type	R_q	R_F
B - Acoustical	0.97	1.02

Note: Adjustment Factor, R_q must be applied only to allowable diaphragm shear strengths governed by panel buckling which are shown in the shaded areas of the diaphragm tables.

Notes Specific to Tables using Welds to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 3.0$ (limited by connections) with the exception of the gray shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. A 1" x 3/8" effective arc seam weld is required at supports adjacent to sidelap and 1/2" effective diameter arc spot welds are required at supports in interior flutes.

Notes Specific to Tables using Hilti or Pneutek Fasteners to Supports

1. Refer to Hilti's Evaluation Report ESR-2776 for additional fastening patterns utilizing Hilti fasteners with the PunchLok II System.
2. X-EDNK22 = Hilti EDNK22 THQ12 fastener; X-ENP-19 = Hilti X-ENP-19 L15 fastener; K66 = Pneutek K66062 or K66075 fasteners; K64 = Pneutek K64062 fastener; SDK63 = Pneutek SDK63075; SDK61 = Pneutek SDK61075
3. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).

Notes Specific to Tables using Screws to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. Deck is attached with minimum #12 Screws (self drilling, self tapping) to supports. Select appropriate screw based on actual substrate thickness. This table is provided as a guide, proper selection should be verified based on the specific fasteners used.

Support Thickness	Fastener Designation
33 mil (0.0346") to 3/16"	#3 Drill Point
1/8" to 1/4"	#4 Drill Point
1/8" to 1/2"	#5 Drill Point

3. All tabulated diaphragm values shown in this section are for a minimum 0.0385 in. thick support with SDI recognized screws produced by Buildex, Elco, Hilti or Simpson Strong-Tie. If the minimum support thickness can not be met or a screw that is not recognized by SDI is used, modify tabulated q and F values based on actual substrate and thickness using Adjustment Factors listed in this table.

Deck Gage	Factors	Substrate Thickness and Strength									
		20 ga		18 ga		16 ga		14 ga		≥ 12 ga	
		33 mil (0.0345 in)	50 ksi	33 mil (0.0451 in)	50 ksi	54 mil (0.0566 in)	50 ksi	68 mil (0.0713 in)	50 ksi	33 ksi	50 ksi
22	R_q	0.44	0.61	0.67	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	R_F	1.28	1.25	1.17	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20	R_q	0.34	0.49	0.54	0.74	0.74	0.78	0.78	0.78	0.78	0.78
	R_F	1.31	1.31	1.24	1.19	1.15	1.00	1.00	1.00	1.00	1.00
18	R_q	0.26	0.37	0.38	0.55	0.55	0.78	0.76	0.78	0.78	0.78
	R_F	1.34	1.39	1.30	1.31	1.26	1.18	1.19	1.00	1.00	1.00
16	R_q	0.20	0.30	0.30	0.44	0.43	0.65	0.61	0.78	0.78	0.78
	R_F	1.43	1.66	1.39	1.54	1.33	1.34	1.25	1.00	1.00	1.00

4. Adjustment factors are based on connection strengths determined in accordance with Section E4 of AISI S100. These self drilling, self tapping screws must be compliant with ASTM C1315.
5. Allowable Diaphragm Strength = $q \cdot R_q$; Flexibility Factor = $F \cdot R_F$.
6. These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns. To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.

Type PLB™-36 or HSB®-36



Allowable Uniform Loads (psf)

DECK			SPAN	SPAN (ft-in.)														
SPAN	GAGE	CRITERIA		2'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	11'-0"
SINGLE	22	Stress	300	300	220	141	116	98	83	72	63	55	49	43	39	35	29	24
		L/360	♦♦♦	287	121	62	47	36	28	23	18	15	13	11	9	8	6	4
		L/240	♦♦♦	♦♦♦	182	93	70	54	42	34	28	23	19	16	14	12	9	7
		L/180	♦♦♦	♦♦♦	♦♦♦	124	93	72	56	45	37	30	25	21	18	15	12	9
SINGLE	20	Stress	300	300	288	184	152	128	109	94	82	72	64	57	51	46	38	32
		L/360	♦♦♦	♦♦♦	150	77	58	44	35	28	23	19	16	13	11	10	7	6
		L/240	♦♦♦	♦♦♦	225	115	86	67	52	42	34	28	23	20	17	14	11	8
		L/180	♦♦♦	♦♦♦	♦♦♦	153	115	89	70	56	45	37	31	26	22	19	14	11
SINGLE	18	Stress	300	300	300	251	208	174	149	128	112	98	87	78	70	63	52	44
		L/360	♦♦♦	♦♦♦	207	106	79	61	48	39	31	26	22	18	15	13	10	8
		L/240	♦♦♦	♦♦♦	♦♦♦	159	119	92	72	58	47	39	32	27	23	20	15	11
		L/180	♦♦♦	♦♦♦	♦♦♦	212	159	122	96	77	63	52	43	36	31	26	20	15
SINGLE	16	Stress	300	300	300	300	264	222	189	163	142	125	110	99	88	80	66	55
		L/360	♦♦♦	♦♦♦	261	133	100	77	61	49	40	33	27	23	19	17	13	10
		L/240	♦♦♦	♦♦♦	♦♦♦	200	150	116	91	73	59	49	41	34	29	25	19	14
		L/180	♦♦♦	♦♦♦	♦♦♦	267	200	154	121	97	79	65	54	46	39	33	25	19
DOUBLE	22	Stress	300	300	235	150	124	104	89	77	67	59	52	46	42	38	31	26
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	122	94	74	59	48	40	33	28	24	20	15	12
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	49	42	35	30	23	18
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	30	23	
DOUBLE	20	Stress	300	300	296	190	157	132	112	97	84	74	66	59	53	47	39	33
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	146	113	89	71	58	48	40	33	28	24	18	14
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	71	59	50	43	37	27	21
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	37	28	
DOUBLE	18	Stress	300	300	300	265	219	184	157	135	118	103	92	82	73	66	55	46
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	258	194	149	117	94	76	63	53	44	38	32	24
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	115	94	79	66	56	48	36	28
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	48	37
DOUBLE	16	Stress	300	300	300	300	271	228	194	167	146	128	113	101	91	82	68	57
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	241	186	146	117	95	78	65	55	47	40	30	23
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	143	118	98	83	70	60	45	35
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	80	60	46
TRIPLE	22	Stress	300	300	294	188	155	131	111	96	84	73	65	58	52	47	39	33
		L/360	♦♦♦	♦♦♦	247	127	95	73	58	46	38	31	26	22	18	16	12	9
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	143	110	86	69	56	46	39	33	28	24	18	14
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	92	75	62	52	43	37	32	24	18
TRIPLE	20	Stress	300	300	300	237	196	165	140	121	105	93	82	73	66	59	49	41
		L/360	♦♦♦	♦♦♦	298	152	115	88	69	56	45	37	31	26	22	19	14	11
		L/240	♦♦♦	♦♦♦	♦♦♦	229	172	132	104	83	68	56	47	39	33	29	21	17
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	139	111	90	74	62	52	44	38	29	22
TRIPLE	18	Stress	300	300	300	300	274	230	196	169	147	129	115	102	92	83	68	57
		L/360	♦♦♦	♦♦♦	202	152	117	92	74	60	49	41	35	29	25	19	15	
		L/240	♦♦♦	♦♦♦	♦♦♦	228	175	138	110	90	74	62	52	44	38	28	22	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	184	147	120	99	82	69	59	50	38	29	
TRIPLE	16	Stress	300	300	300	300	285	243	209	182	160	142	127	114	103	85	71	
		L/360	♦♦♦	♦♦♦	251	189	145	114	92	74	61	51	43	37	31	24	18	
		L/240	♦♦♦	♦♦♦	♦♦♦	283	218	172	137	112	92	77	65	55	47	35	27	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	229	183	149	123	102	86	73	63	47	36	

See footnotes on page 27.

Type PLB™-36

- 36/4 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 567 F -5.1+269R	578 -1.4+215R	496 2.4+178R	515 4+153R	458 6.5+133R	478 7.3+118R	435 9.2+106R		
	VSC2 @ 18"	q 688 F -6.3+270R	675 -2.5+216R	585 1.1+179R	590 2.8+153R	594 4.1+134R	539 6.1+119R	548 6.9+107R		
	VSC2 @ 12"	q 789 F -7.2+270R	759 -3.4+216R	738 -0.7+180R	723 1.2+154R	711 2.6+135R	701 3.7+119R	694 4.7+107R		
	VSC2 @ 8"	q 943 F -8.4+271R	949 -5+217R	908 -2.3+180R	918 -0.7+155R	889 0.8+135R	899 1.7+120R	878 2.6+108R		
	VSC2 @ 6"	q 1048 F -9.2+271R	1034 -5.6+217R	1024 -3.3+181R	1017 -1.6+155R	1011 -0.3+135R	1007 0.7+120R	1001 1.5+108R		
	VSC2 @ 4"	q 1169 F -10.1+271R	1162 -6.6+217R	1157 -4.4+181R	1154 -2.7+155R	1151 -1.5+136R	1149 -0.5+121R	1001 0.3+108R		
20	VSC2 @ 24"	q 777 F -1+170R	792 1.3+136R	682 3.9+113R	708 4.8+96R	632 6.6+84R	658 7+75R	601 8.3+67R	625 8.4+61R	579 9.5+55R
	VSC2 @ 18"	q 936 F -2.1+171R	919 0.3+136R	801 2.7+113R	808 3.8+97R	813 4.6+85R	741 6+75R	752 6.4+67R	761 6.7+61R	709 7.7+56R
	VSC2 @ 12"	q 1066 F -2.9+171R	1028 -0.5+137R	1001 1.2+114R	981 2.4+97R	966 3.3+85R	953 4+76R	943 4.6+68R	935 5.1+62R	912 5.5+57R
	VSC2 @ 8"	q 1259 F -3.9+171R	1265 -1.8+137R	1216 -0.1+114R	1227 0.9+98R	1192 1.9+86R	1205 2.4+76R	1178 3+68R	1085 3.4+62R	912 3.8+57R
	VSC2 @ 6"	q 1385 F -4.6+172R	1368 -2.3+137R	1357 -0.8+114R	1348 0.2+98R	1341 1+86R	1336 1.7+76R	1313 2.2+69R	1085 2.6+62R	912 2.9+57R
	VSC2 @ 4"	q 1527 F -5.3+172R	1519 -3.1+137R	1513 -1.7+115R	1509 -0.6+98R	1506 0.2+86R	1504 0.8+76R	1313 1.2+69R	1085 1.6+62R	912 2+57R
18	VSC2 @ 24"	q 1238 F 1.4+83R	1253 2.3+66R	1084 3.8+55R	1118 4+47R	1000 5+41R	1038 5.1+37R	949 5.8+33R	985 5.7+30R	914 6.3+27R
	VSC2 @ 18"	q 1471 F 0.5+83R	1441 1.6+67R	1262 2.9+55R	1269 3.3+47R	1274 3.7+42R	1163 4.4+37R	1178 4.5+33R	1190 4.6+30R	1110 5.2+28R
	VSC2 @ 12"	q 1661 F -0.1+84R	1600 1.1+67R	1557 1.9+56R	1525 2.4+48R	1501 2.9+42R	1481 3.2+37R	1465 3.5+33R	1452 3.7+30R	1394 3.9+28R
	VSC2 @ 8"	q 1936 F -0.8+84R	1942 0.2+67R	1869 1.1+56R	1884 1.5+48R	1833 2+42R	1849 2.2+37R	1809 2.6+33R	1659 2.7+30R	1394 2.9+28R
	VSC2 @ 6"	q 2114 F -1.2+84R	2088 -0.1+67R	2070 0.6+56R	2057 1.1+48R	2047 1.5+42R	2038 1.8+37R	2007 2.1+34R	1659 2.3+31R	1394 2.4+28R
	VSC2 @ 4"	q 2311 F -1.6+84R	2299 -0.5+67R	2291 0.2+56R	2285 0.7+48R	2280 1+42R	2276 1.3+37R	2007 1.6+34R	1659 1.8+31R	1394 1.9+28R
16	VSC2 @ 24"	q 1606 F 2.6+47R	1635 3+38R	1418 4.1+31R	1469 4.1+27R	1317 4.9+23R	1370 4.8+21R	1254 5.4+19R	1304 5.2+17R	1211 5.7+15R
	VSC2 @ 18"	q 1912 F 1.7+47R	1880 2.4+38R	1654 3.3+31R	1667 3.5+27R	1677 3.7+24R	1534 4.2+21R	1557 4.3+19R	1575 4.3+17R	1472 4.7+16R
	VSC2 @ 12"	q 2156 F 1.2+48R	2085 1.9+38R	2035 2.4+32R	1998 2.7+27R	1969 3+24R	1946 3.2+21R	1928 3.4+19R	1912 3.5+17R	1899 3.6+16R
	VSC2 @ 8"	q 2501 F 0.7+48R	2512 1.2+38R	2426 1.7+32R	2446 2+27R	2384 2.3+24R	2406 2.4+21R	2358 2.6+19R	2310 2.7+17R	1941 2.8+16R
	VSC2 @ 6"	q 2716 F 0.3+48R	2689 0.9+38R	2669 1.4+32R	2654 1.7+27R	2643 1.9+24R	2634 2+21R	2627 2.2+19R	2310 2.3+17R	1941 2.4+16R
	VSC2 @ 4"	q 2948 F -0.1+48R	2936 0.6+38R	2927 1+32R	2921 1.2+27R	2916 1.5+24R	2912 1.6+21R	2795 1.8+19R	2310 1.9+17R	1941 2+16R

See footnotes on page 28.

Type PLB™-36

- 36/5 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



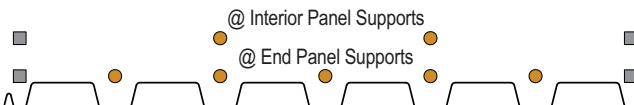
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 651 F -1.1+189R	649 1.7+151R	555 4.6+125R	568 5.9+107R	501 7.9+93R	520 8.6+82R	470 10.2+74R		
	VSC2 @ 18"	q 776 F -2.1+190R	751 0.8+151R	648 3.6+125R	647 4.9+107R	646 6+94R	584 7.6+83R	590 8.2+74R		
	VSC2 @ 12"	q 886 F -2.8+190R	842 0.1+152R	812 2.1+126R	789 3.5+108R	772 4.6+94R	758 5.5+84R	747 6.2+75R		
	VSC2 @ 8"	q 1060 F -3.8+190R	1059 -1.3+152R	1006 0.7+127R	1013 1.8+109R	976 3+95R	986 3.6+84R	958 4.4+76R		
	VSC2 @ 6"	q 1186 F -4.5+191R	1163 -1.9+152R	1147 -0.2+127R	1135 1.1+109R	1126 2+95R	1118 2.8+85R	1001 3.3+76R		
	VSC2 @ 4"	q 1344 F -5.3+191R	1332 -2.8+153R	1323 -1.1+127R	1317 0+109R	1312 0.9+95R	1236 1.6+85R	1001 2.2+76R		
20	VSC2 @ 24"	q 896 F 1.4+119R	893 3.1+95R	766 5.2+79R	784 5.9+67R	697 7.4+58R	719 7.7+52R	654 8.9+46R	677 9+42R	625 10+38R
	VSC2 @ 18"	q 1063 F 0.5+120R	1029 2.3+96R	892 4.3+79R	890 5.1+68R	889 5.7+59R	806 6.9+52R	814 7.2+47R	820 7.5+43R	762 8.3+39R
	VSC2 @ 12"	q 1207 F -0.2+120R	1150 1.7+96R	1110 3+80R	1080 3.9+68R	1057 4.6+60R	1039 5.2+53R	1025 5.6+48R	1012 6+43R	912 6.3+40R
	VSC2 @ 8"	q 1431 F -1+120R	1429 0.5+96R	1362 1.8+80R	1371 2.5+69R	1324 3.3+60R	1336 3.7+53R	1300 4.2+48R	1085 4.4+44R	912 4.8+40R
	VSC2 @ 6"	q 1589 F -1.6+121R	1560 0+96R	1540 1.1+80R	1525 1.9+69R	1514 2.5+60R	1504 3+54R	1313 3.3+48R	1085 3.6+44R	912 3.9+40R
	VSC2 @ 4"	q 1781 F -2.2+121R	1767 -0.7+97R	1756 0.4+81R	1749 1.1+69R	1743 1.7+60R	1621 2.1+54R	1313 2.5+48R	1085 2.7+44R	912 3+40R
18	VSC2 @ 24"	q 1443 F 2.6+58R	1429 3.3+46R	1229 4.5+38R	1250 4.6+33R	1114 5.5+29R	1144 5.5+25R	1042 6.2+23R	1074 6.1+21R	994 6.6+19R
	VSC2 @ 18"	q 1693 F 1.8+59R	1634 2.6+47R	1420 3.7+39R	1413 4+33R	1408 4.3+29R	1278 4.9+26R	1287 5+23R	1295 5.1+21R	1203 5.5+19R
	VSC2 @ 12"	q 1907 F 1.3+59R	1815 2.2+47R	1750 2.8+39R	1701 3.2+33R	1663 3.5+29R	1633 3.8+26R	1609 4+23R	1589 4.2+21R	1394 4.3+19R
	VSC2 @ 8"	q 2238 F 0.7+59R	2231 1.4+47R	2127 2+39R	2138 2.3+34R	2066 2.7+29R	2082 2.9+26R	2007 3.1+24R	1659 3.2+21R	1394 3.4+20R
	VSC2 @ 6"	q 2471 F 0.3+59R	2425 1.1+47R	2393 1.6+39R	2369 2+34R	2350 2.3+29R	2335 2.5+26R	2007 2.7+24R	1659 2.8+21R	1394 2.9+20R
	VSC2 @ 4"	q 2752 F -0.1+59R	2729 0.7+47R	2712 1.2+39R	2700 1.5+34R	2690 1.8+30R	2478 2+26R	2007 2.2+24R	1659 2.3+21R	1394 2.4+20R
16	VSC2 @ 24"	q 1864 F 3.1+33R	1859 3.5+26R	1603 4.4+22R	1638 4.4+19R	1462 5.1+16R	1506 5+14R	1374 5.5+13R	1420 5.4+12R	1315 5.8+11R
	VSC2 @ 18"	q 2196 F 2.4+33R	2130 2.9+27R	1856 3.7+22R	1854 3.9+19R	1852 4+16R	1684 4.5+14R	1700 4.5+13R	1713 4.5+12R	1594 4.9+11R
	VSC2 @ 12"	q 2474 F 2+33R	2365 2.5+27R	2288 2.9+22R	2230 3.2+19R	2185 3.4+17R	2150 3.5+15R	2121 3.6+13R	2097 3.8+12R	1941 3.8+11R
	VSC2 @ 8"	q 2895 F 1.5+34R	2892 1.9+27R	2768 2.3+22R	2785 2.4+19R	2697 2.7+17R	2720 2.7+15R	2653 2.9+13R	2310 3+12R	1941 3.1+11R
	VSC2 @ 6"	q 3182 F 1.1+34R	3131 1.6+27R	3095 1.9+22R	3068 2.1+19R	3047 2.3+17R	3030 2.4+15R	2795 2.5+13R	2310 2.6+12R	1941 2.7+11R
	VSC2 @ 4"	q 3518 F 0.8+34R	3493 1.2+27R	3475 1.5+22R	3462 1.7+19R	3452 1.9+17R	3444 2+15R	2795 2.1+13R	2310 2.2+12R	1941 2.3+11R

See footnotes on page 28.

Type PLB™-36

- 36/7/4 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 651 F 9.3+27R	653 10+21R	543 11.8+16R	561 12.1+14R	487 13.5+11R	510 13.5+10R	459 14.7+8R		
	VSC2 @ 18"	q 796 F 8.2+28R	770 9+22R	655 10.6+17R	657 11+14R	658 11.3+12R	587 12.4+10R	598 12.5+9R		
	VSC2 @ 12"	q 929 F 7.4+28R	880 8.3+22R	846 8.9+18R	821 9.5+15R	802 9.9+13R	788 10.2+11R	776 10.5+10R		
	VSC2 @ 8"	q 1159 F 6.3+29R	1161 6.8+23R	1091 7.5+19R	1103 7.7+16R	1056 8.1+14R	1069 8.2+12R	1001 8.5+11R		
	VSC2 @ 6"	q 1343 F 5.6+29R	1311 6.2+23R	1289 6.6+19R	1273 6.9+17R	1261 7.1+14R	1236 7.3+13R	1001 7.4+11R		
	VSC2 @ 4"	q 1601 F 4.7+30R	1581 5.2+24R	1568 5.5+20R	1558 5.7+17R	1550 5.9+15R	1236 6.1+13R	1001 6.2+12R		
20	VSC2 @ 24"	q 902 F 8.1+17R	906 8.5+13R	764 9.8+10R	789 9.9+8R	687 11+6R	715 10.9+6R	643 11.8+5R	673 11.6+4R	617 12.4+3R
	VSC2 @ 18"	q 1100 F 7+17R	1066 7.6+13R	908 8.8+10R	910 9+9R	911 9.1+8R	819 10+6R	829 10+6R	838 10+5R	774 10.7+4R
	VSC2 @ 12"	q 1281 F 6.3+18R	1214 6.9+14R	1168 7.3+11R	1135 7.7+10R	1109 7.9+8R	1089 8.1+7R	1073 8.3+6R	1059 8.4+6R	912 8.6+5R
	VSC2 @ 8"	q 1589 F 5.4+18R	1592 5.6+15R	1499 6.1+12R	1514 6.2+10R	1451 6.5+9R	1469 6.5+8R	1313 6.8+7R	1085 6.8+6R	912 6.9+6R
	VSC2 @ 6"	q 1831 F 4.8+19R	1790 5.1+15R	1761 5.4+12R	1740 5.6+10R	1724 5.7+9R	1621 5.8+8R	1313 5.9+7R	1085 6+7R	912 6+6R
	VSC2 @ 4"	q 2164 F 4.1+19R	2139 4.4+15R	2122 4.6+13R	2109 4.7+11R	2052 4.8+9R	1621 4.9+8R	1313 5+7R	1085 5+7R	912 5.1+6R
18	VSC2 @ 24"	q 1462 F 5.9+8R	1457 5.9+6R	1235 6.7+5R	1264 6.6+4R	1116 7.2+3R	1153 7+3R	1037 7.6+2R	1079 7.3+2R	989 7.8+2R
	VSC2 @ 18"	q 1768 F 5+8R	1704 5.2+7R	1454 5.9+5R	1451 5.9+4R	1449 5.9+4R	1303 6.4+3R	1317 6.3+3R	1328 6.3+3R	1226 6.7+2R
	VSC2 @ 12"	q 2047 F 4.5+9R	1934 4.7+7R	1857 4.9+6R	1800 5+5R	1757 5.1+4R	1723 5.2+4R	1695 5.3+3R	1659 5.3+3R	1394 5.4+3R
	VSC2 @ 8"	q 2522 F 3.8+9R	2519 3.9+7R	2370 4.1+6R	2390 4.1+5R	2289 4.3+4R	2314 4.3+4R	2007 4.4+4R	1659 4.4+3R	1394 4.4+3R
	VSC2 @ 6"	q 2896 F 3.4+9R	2826 3.6+7R	2777 3.7+6R	2741 3.8+5R	2713 3.8+5R	2478 3.9+4R	2007 3.9+4R	1659 3.9+3R	1394 4+3R
	VSC2 @ 4"	q 3411 F 3+9R	3369 3.1+7R	3339 3.2+6R	3318 3.3+5R	3136 3.3+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 1897 F 5+4R	1906 5+3R	1618 5.7+2R	1665 5.5+2R	1472 6.1+1R	1526 5.9+1R	1383 6.4+1R	1436 6.2+1R	1320 6.5+1R
	VSC2 @ 18"	q 2307 F 4.3+5R	2236 4.4+4R	1911 5+3R	1915 5+2R	1918 5+2R	1727 5.4+2R	1749 5.3+1R	1766 5.2+1R	1632 5.6+1R
	VSC2 @ 12"	q 2676 F 3.8+5R	2541 4+4R	2447 4.1+3R	2378 4.2+3R	2326 4.3+2R	2285 4.4+2R	2252 4.4+2R	2224 4.4+2R	1941 4.5+1R
	VSC2 @ 8"	q 3293 F 3.3+5R	3298 3.3+4R	3114 3.5+3R	3145 3.5+3R	3019 3.6+2R	3055 3.6+2R	2795 3.6+2R	2310 3.6+2R	1941 3.7+2R
	VSC2 @ 6"	q 3767 F 2.9+5R	3686 3+4R	3630 3.1+3R	3589 3.1+3R	3558 3.2+3R	3451 3.2+2R	2795 3.2+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 4398 F 2.6+5R	4352 2.6+4R	4319 2.7+4R	4296 2.7+3R	4278 2.8+3R	3451 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

See footnotes on page 28.

Type PLB™ -36

- 36/7 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 700 F 8+28R	693 8.9+22R	581 10.4+18R	594 10.8+15R	516 12+12R	535 12.2+11R	482 13.3+9R		
	VSC2 @ 18"	q 842 F 7.2+29R	808 8.1+23R	688 9.5+18R	685 10+15R	682 10.3+13R	613 11.3+11R	618 11.5+10R		
	VSC2 @ 12"	q 971 F 6.6+29R	914 7.6+23R	875 8.2+19R	847 8.8+16R	825 9.2+14R	808 9.5+12R	794 9.8+11R		
	VSC2 @ 8"	q 1193 F 5.8+30R	1188 6.4+24R	1116 7+19R	1123 7.3+17R	1074 7.7+14R	1085 7.8+13R	1001 8.2+11R		
	VSC2 @ 6"	q 1370 F 5.2+30R	1334 5.8+24R	1309 6.3+20R	1290 6.6+17R	1276 6.8+15R	1236 7+13R	1001 7.2+12R		
	VSC2 @ 4"	q 1617 F 4.5+30R	1595 5+24R	1579 5.4+20R	1568 5.6+17R	1559 5.8+15R	1236 5.9+13R	1001 6.1+12R		
20	VSC2 @ 24"	q 970 F 7.1+18R	960 7.6+14R	815 8.8+11R	830 9+9R	727 10+8R	751 10+7R	676 10.8+6R	703 10.7+5R	644 11.5+4R
	VSC2 @ 18"	q 1162 F 6.3+18R	1116 6.9+14R	953 8+11R	949 8.2+10R	945 8.5+8R	850 9.2+7R	857 9.3+6R	863 9.4+6R	797 10+5R
	VSC2 @ 12"	q 1337 F 5.8+18R	1261 6.4+14R	1208 6.8+12R	1170 7.2+10R	1140 7.5+9R	1117 7.7+8R	1098 7.9+7R	1082 8.1+6R	912 8.2+6R
	VSC2 @ 8"	q 1634 F 5+19R	1627 5.4+15R	1531 5.8+12R	1541 6+10R	1476 6.3+9R	1491 6.3+8R	1313 6.5+7R	1085 6.6+7R	912 6.7+6R
	VSC2 @ 6"	q 1866 F 4.6+19R	1819 4.9+15R	1786 5.2+12R	1762 5.4+11R	1743 5.6+9R	1621 5.7+8R	1313 5.8+7R	1085 5.9+7R	912 5.9+6R
	VSC2 @ 4"	q 2184 F 4+19R	2156 4.3+15R	2137 4.5+13R	2122 4.6+11R	2052 4.8+9R	1621 4.9+8R	1313 4.9+8R	1085 5+7R	912 5+6R
18	VSC2 @ 24"	q 1575 F 5.3+8R	1548 5.5+7R	1315 6.2+5R	1333 6.1+4R	1179 6.8+4R	1208 6.6+3R	1092 7.1+3R	1127 7+3R	1035 7.4+2R
	VSC2 @ 18"	q 1872 F 4.7+9R	1789 4.9+7R	1530 5.5+6R	1517 5.6+5R	1507 5.6+4R	1356 6.1+3R	1364 6.1+3R	1371 6+3R	1266 6.4+3R
	VSC2 @ 12"	q 2141 F 4.2+9R	2013 4.5+7R	1924 4.7+6R	1859 4.8+5R	1809 5+4R	1770 5.1+4R	1738 5.1+3R	1659 5.2+3R	1394 5.2+3R
	VSC2 @ 8"	q 2596 F 3.7+9R	2579 3.8+7R	2424 4+6R	2436 4+5R	2331 4.2+5R	2352 4.2+4R	2007 4.3+4R	1659 4.3+3R	1394 4.4+3R
	VSC2 @ 6"	q 2954 F 3.3+9R	2875 3.5+7R	2820 3.6+6R	2778 3.7+5R	2747 3.8+5R	2478 3.8+4R	2007 3.9+4R	1659 3.9+3R	1394 3.9+3R
	VSC2 @ 4"	q 3446 F 2.9+9R	3398 3.1+7R	3365 3.2+6R	3340 3.3+5R	3136 3.3+5R	2478 3.3+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 2037 F 4.6+5R	2018 4.7+4R	1717 5.3+3R	1749 5.2+2R	1548 5.7+2R	1593 5.6+2R	1445 6+1R	1492 5.9+1R	1376 6.2+1R
	VSC2 @ 18"	q 2434 F 4+5R	2340 4.2+4R	2005 4.7+3R	1996 4.7+3R	1989 4.7+2R	1792 5.1+2R	1807 5.1+2R	1819 5.1+1R	1682 5.4+1R
	VSC2 @ 12"	q 2789 F 3.6+5R	2635 3.8+4R	2529 4+3R	2450 4.1+3R	2390 4.2+2R	2342 4.2+2R	2304 4.3+2R	2272 4.3+2R	1941 4.4+2R
	VSC2 @ 8"	q 3381 F 3.1+5R	3369 3.2+4R	3178 3.4+3R	3199 3.4+3R	3069 3.5+3R	3098 3.5+2R	2795 3.6+2R	2310 3.6+2R	1941 3.6+2R
	VSC2 @ 6"	q 3833 F 2.9+5R	3743 3+4R	3679 3+3R	3632 3.1+3R	3596 3.1+3R	3451 3.2+2R	2795 3.2+2R	2310 3.2+2R	1941 3.2+2R
	VSC2 @ 4"	q 4436 F 2.5+5R	4384 2.6+4R	4347 2.7+4R	4320 2.7+3R	4300 2.8+3R	3451 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

See footnotes on page 28.

Type PLB™-36

- **36/4 Hilti Fastener Pattern at Supports**
X-EDNK22 or X-HSN 24 at supports equal to or greater than $\frac{1}{8}$ " and less than $\frac{3}{16}$ " thick
- **Sidelaps Connected with PunchLok II Tool**



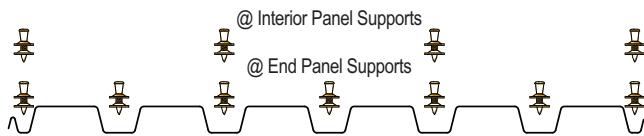
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 467	486	436	457	420	439	409		
		F -4.7+269R	-1.1+215R	2.8+178R	4.3+153R	6.9+133R	7.6+118R	9.6+106R		
	VSC2 @ 18"	q 543	544	498	506	512	481	489		
		F -6+270R	-2.3+216R	1.4+179R	3.1+153R	4.4+134R	6.4+119R	7.1+107R		
	VSC2 @ 12"	q 592	585	579	575	572	570	568		
		F -7+270R	-3.2+216R	-0.6+180R	1.3+154R	2.8+135R	3.9+120R	4.8+107R		
	VSC2 @ 8"	q 648	652	642	646	638	642	636		
		F -8.3+271R	-4.9+217R	-2.2+180R	-0.7+155R	0.8+135R	1.7+120R	2.7+108R		
	VSC2 @ 6"	q 675	673	672	671	670	670	669		
		F -9.1+271R	-5.6+217R	-3.2+181R	-1.5+155R	-0.2+135R	0.7+120R	1.5+108R		
20	VSC2 @ 4"	q 699	699	698	698	697	697	697		
		F -10+271R	-6.6+217R	-4.3+181R	-2.7+155R	-1.4+136R	-0.5+121R	0.3+109R		
	VSC2 @ 24"	q 612	639	577	604	558	583	546	568	538
		F -0.7+170R	1.5+136R	4.2+113R	5+96R	6.9+84R	7.2+75R	8.6+67R	8.6+61R	9.8+55R
	VSC2 @ 18"	q 707	710	655	666	674	636	646	654	626
		F -1.9+171R	0.4+136R	2.9+113R	3.9+97R	4.7+85R	6.1+75R	6.5+68R	6.8+61R	7.8+56R
	VSC2 @ 12"	q 766	758	753	749	745	743	741	739	737
		F -2.8+171R	-0.3+137R	1.3+114R	2.5+97R	3.4+85R	4.1+76R	4.7+68R	5.2+62R	5.6+57R
	VSC2 @ 8"	q 830	835	824	829	821	825	819	823	817
		F -3.9+171R	-1.7+137R	0+114R	0.9+98R	1.9+86R	2.4+76R	3.1+68R	3.4+62R	3.9+57R
18	VSC2 @ 6"	q 861	859	858	857	856	855	855	855	854
		F -4.5+172R	-2.3+137R	-0.8+114R	0.3+98R	1.1+86R	1.7+76R	2.2+69R	2.6+62R	2.9+57R
	VSC2 @ 4"	q 887	886	886	886	885	885	885	885	885
		F -5.3+172R	-3.1+137R	-1.6+115R	-0.6+98R	0.2+86R	0.8+76R	1.3+69R	1.7+62R	2+57R
	VSC2 @ 24"	q 759	791	734	764	720	747	711	735	705
		F 1.6+83R	2.4+66R	3.9+55R	4.1+47R	5.1+41R	5.1+37R	5.9+33R	5.8+30R	6.4+27R
	VSC2 @ 18"	q 849	854	809	821	829	797	807	815	791
		F 0.6+83R	1.7+67R	3+55R	3.4+47R	3.7+42R	4.5+37R	4.6+33R	4.7+30R	5.2+28R
	VSC2 @ 12"	q 898	894	890	888	887	885	884	883	882
		F 0+84R	1.1+67R	1.9+56R	2.5+48R	2.9+42R	3.2+37R	3.5+33R	3.7+30R	3.9+28R
16	VSC2 @ 8"	q 944	948	941	945	940	943	939	941	938
		F -0.7+84R	0.3+67R	1.1+56R	1.5+48R	2+42R	2.3+37R	2.6+34R	2.7+30R	2.9+28R
	VSC2 @ 6"	q 964	963	963	962	962	962	961	961	961
		F -1.1+84R	-0.1+67R	0.6+56R	1.2+48R	1.5+42R	1.8+37R	2.1+34R	2.3+31R	2.4+28R
	VSC2 @ 4"	q 980	980	980	979	979	979	979	979	979
		F -1.6+84R	-0.5+67R	0.2+56R	0.7+48R	1+42R	1.3+37R	1.6+34R	1.8+31R	1.9+28R
	VSC2 @ 24"	q 830	859	814	840	805	828	800	820	796
		F 2.7+47R	3.1+38R	4.2+31R	4.2+27R	4.9+23R	4.9+21R	5.4+19R	5.3+17R	5.8+15R
	VSC2 @ 18"	q 901	906	874	884	890	867	875	881	864
		F 1.8+47R	2.4+38R	3.4+31R	3.6+27R	3.7+24R	4.3+21R	4.3+19R	4.4+17R	4.8+16R
16	VSC2 @ 12"	q 935	933	932	930	930	929	928	928	928
		F 1.3+48R	2+38R	2.4+32R	2.8+27R	3+24R	3.2+21R	3.4+19R	3.5+17R	3.6+16R
	VSC2 @ 8"	q 965	968	964	966	963	965	963	964	962
		F 0.7+48R	1.2+38R	1.7+32R	2+27R	2.3+24R	2.4+21R	2.6+19R	2.7+17R	2.8+16R
16	VSC2 @ 6"	q 977	977	977	976	976	976	976	976	976
		F 0.3+48R	0.9+38R	1.4+32R	1.7+27R	1.9+24R	2.1+21R	2.2+19R	2.3+17R	2.4+16R
	VSC2 @ 4"	q 986	986	986	986	986	986	986	986	986
		F 0+48R	0.6+38R	1+32R	1.2+27R	1.5+24R	1.6+21R	1.8+19R	1.9+17R	2+16R

See footnotes on page 28.

Type PLB™-36

- **36/7/4 Hilti Fastener Pattern at Supports**
X-EDNK22 or X-HSN 24 at supports equal to or greater than $\frac{1}{8}$ " and less than $\frac{3}{16}$ " thick
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 579 F 9.6+27R	605 10.4+21R	523 12.2+16R	551 12.4+14R	493 13.9+11R	519 13.8+10R	475 15.1+8R		
	VSC2 @ 18"	q 712 F 8.4+28R	710 9.3+22R	622 10.9+17R	634 11.3+14R	642 11.5+12R	587 12.7+10R	599 12.8+9R		
	VSC2 @ 12"	q 818 F 7.6+28R	797 8.5+22R	782 9.1+18R	771 9.6+15R	763 10+13R	756 10.3+11R	751 10.6+10R		
	VSC2 @ 8"	q 965 F 6.4+29R	975 6.9+23R	943 7.6+19R	954 7.7+16R	932 8.2+14R	942 8.3+12R	924 8.6+11R		
	VSC2 @ 6"	q 1056 F 5.7+29R	1048 6.2+23R	1042 6.6+19R	1038 6.9+17R	1035 7.1+14R	1032 7.3+13R	1001 7.4+11R		
	VSC2 @ 4"	q 1150 F 4.7+30R	1147 5.2+24R	1145 5.5+20R	1143 5.8+17R	1141 5.9+15R	1140 6.1+13R	1001 6.2+12R		
20	VSC2 @ 24"	q 768 F 8.3+16R	807 8.7+13R	700 10.1+10R	740 10.1+8R	664 11.3+6R	700 11.1+6R	642 12.1+5R	674 11.8+4R	627 12.7+3R
	VSC2 @ 18"	q 943 F 7.2+17R	943 7.7+13R	832 9+10R	849 9.1+9R	862 9.3+8R	790 10.1+6R	807 10.1+6R	821 10.1+5R	769 10.8+4R
	VSC2 @ 12"	q 1078 F 6.4+18R	1054 7+14R	1037 7.5+11R	1025 7.8+10R	1015 8+8R	1008 8.2+7R	1002 8.4+6R	997 8.5+6R	912 8.6+5R
	VSC2 @ 8"	q 1259 F 5.4+18R	1273 5.7+15R	1236 6.2+12R	1249 6.3+10R	1223 6.6+9R	1236 6.6+8R	1215 6.8+7R	1085 6.8+6R	912 7+6R
	VSC2 @ 6"	q 1366 F 4.8+19R	1357 5.2+15R	1351 5.4+12R	1347 5.6+10R	1344 5.7+9R	1341 5.8+8R	1313 5.9+7R	1085 6+7R	912 6.1+6R
	VSC2 @ 4"	q 1473 F 4.1+19R	1469 4.4+15R	1467 4.6+13R	1465 4.7+11R	1464 4.8+9R	1463 4.9+8R	1313 5+8R	1085 5.1+7R	912 5.1+6R
18	VSC2 @ 24"	q 1004 F 6+8R	1066 6+6R	944 6.8+5R	1001 6.7+4R	912 7.3+3R	962 7.1+3R	892 7.7+2R	936 7.4+2R	879 7.9+2R
	VSC2 @ 18"	q 1211 F 5.1+8R	1221 5.3+7R	1104 6+5R	1129 6+4R	1148 6+4R	1070 6.4+3R	1093 6.4+3R	1110 6.3+3R	1053 6.7+2R
	VSC2 @ 12"	q 1351 F 4.5+9R	1334 4.8+7R	1323 4.9+6R	1314 5.1+5R	1308 5.2+4R	1303 5.2+4R	1299 5.3+3R	1295 5.4+3R	1292 5.4+3R
	VSC2 @ 8"	q 1512 F 3.8+9R	1526 3.9+7R	1499 4.1+6R	1511 4.1+5R	1492 4.3+4R	1503 4.3+4R	1487 4.4+4R	1497 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q 1594 F 3.4+9R	1590 3.6+7R	1587 3.7+6R	1585 3.8+5R	1583 3.8+5R	1582 3.9+4R	1581 3.9+4R	1580 3.9+3R	1394 4+3R
	VSC2 @ 4"	q 1667 F 3+9R	1665 3.1+7R	1664 3.2+6R	1664 3.3+5R	1663 3.3+5R	1663 3.4+4R	1662 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 1162 F 5.2+4R	1232 5.1+3R	1116 5.8+2R	1178 5.6+2R	1091 6.2+1R	1145 6+1R	1076 6.4+1R	1123 6.2+1R	1066 6.6+1R
	VSC2 @ 18"	q 1360 F 4.4+5R	1375 4.5+4R	1273 5.1+3R	1300 5+2R	1319 5+2R	1250 5.4+2R	1273 5.3+1R	1290 5.3+1R	1238 5.6+1R
	VSC2 @ 12"	q 1478 F 3.9+5R	1469 4+4R	1462 4.2+3R	1457 4.3+3R	1454 4.3+2R	1451 4.4+2R	1448 4.4+2R	1446 4.5+2R	1445 4.5+1R
	VSC2 @ 8"	q 1599 F 3.3+5R	1610 3.3+4R	1592 3.5+3R	1601 3.5+3R	1588 3.6+2R	1596 3.6+2R	1586 3.6+2R	1593 3.6+2R	1585 3.7+2R
	VSC2 @ 6"	q 1653 F 2.9+5R	1651 3+4R	1650 3.1+3R	1649 3.2+3R	1648 3.2+3R	1648 3.2+2R	1647 3.2+2R	1647 3.3+2R	1646 3.3+2R
	VSC2 @ 4"	q 1699 F 2.6+5R	1698 2.7+4R	1697 2.7+4R	1697 2.7+3R	1697 2.8+3R	1697 2.8+2R	1696 2.8+2R	1696 2.8+2R	1696 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Hilti Fastener Pattern at Supports**
X-EDNK22 or X-HSN 24 at supports equal to or greater than $\frac{1}{8}$ " and less than $\frac{3}{16}$ " thick
- Sidelaps Connected with PunchLok II Tool**



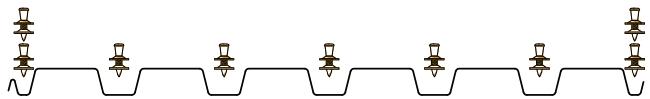
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 607 F 8.3+28R	627 9.2+22R	543 10.7+18R	568 11.1+15R	509 12.4+12R	533 12.5+11R	488 13.6+9R		
	VSC2 @ 18"	q 734 F 7.5+29R	728 8.4+23R	639 9.8+18R	648 10.2+15R	655 10.6+13R	599 11.6+11R	610 11.8+10R		
	VSC2 @ 12"	q 835 F 6.8+29R	811 7.7+23R	795 8.4+19R	782 8.9+16R	773 9.4+14R	765 9.7+12R	759 10+11R		
	VSC2 @ 8"	q 976 F 5.9+30R	983 6.5+24R	951 7.1+19R	961 7.4+17R	938 7.8+14R	947 7.9+13R	929 8.3+11R		
	VSC2 @ 6"	q 1062 F 5.3+30R	1053 5.9+24R	1047 6.3+20R	1042 6.7+17R	1039 6.9+15R	1036 7.1+13R	1001 7.2+12R		
	VSC2 @ 4"	q 1153 F 4.6+30R	1149 5.1+24R	1147 5.4+20R	1145 5.6+17R	1143 5.8+15R	1142 6+13R	1001 6.1+12R		
	VSC2 @ 24"	q 802 F 7.3+18R	833 7.8+14R	725 9.1+11R	760 9.2+9R	683 10.2+8R	717 10.2+7R	658 11.1+6R	688 11+5R	640 11.7+4R
	VSC2 @ 18"	q 969 F 6.5+18R	964 7.1+14R	853 8.2+11R	866 8.4+10R	877 8.6+8R	805 9.4+7R	820 9.5+6R	832 9.5+6R	780 10.2+5R
	VSC2 @ 12"	q 1098 F 5.9+18R	1071 6.5+14R	1052 7+12R	1038 7.3+10R	1027 7.6+9R	1018 7.8+8R	1011 8+7R	1006 8.2+6R	912 8.3+6R
	VSC2 @ 8"	q 1271 F 5.1+19R	1281 5.4+15R	1244 5.9+12R	1256 6+10R	1230 6.3+9R	1241 6.4+8R	1221 6.6+7R	1085 6.6+7R	912 6.8+6R
20	VSC2 @ 6"	q 1373 F 4.6+19R	1363 5+15R	1357 5.3+12R	1352 5.5+11R	1348 5.6+9R	1345 5.7+8R	1313 5.8+7R	1085 5.9+7R	912 6+6R
	VSC2 @ 4"	q 1476 F 4+19R	1472 4.3+15R	1469 4.5+13R	1467 4.7+11R	1466 4.8+9R	1464 4.9+8R	1313 4.9+8R	1085 5+7R	912 5.1+6R
	VSC2 @ 24"	q 1034 F 5.5+8R	1087 5.6+7R	966 6.3+5R	1018 6.3+4R	929 6.9+4R	976 6.7+3R	906 7.2+3R	948 7.1+3R	890 7.5+2R
	VSC2 @ 18"	q 1231 F 4.8+9R	1237 5+7R	1121 5.6+6R	1143 5.7+5R	1159 5.7+4R	1082 6.2+4R	1103 6.1+3R	1119 6.1+3R	1062 6.5+3R
	VSC2 @ 12"	q 1364 F 4.3+9R	1346 4.6+7R	1333 4.7+6R	1323 4.9+5R	1316 5+4R	1310 5.1+4R	1305 5.2+3R	1301 5.2+3R	1298 5.3+3R
	VSC2 @ 8"	q 1519 F 3.7+9R	1531 3.8+7R	1504 4+6R	1515 4.1+5R	1495 4.2+5R	1506 4.2+4R	1490 4.3+4R	1500 4.3+3R	1394 4.4+3R
	VSC2 @ 6"	q 1597 F 3.3+9R	1593 3.5+7R	1589 3.6+6R	1587 3.7+5R	1585 3.8+5R	1583 3.8+4R	1582 3.9+4R	1581 3.9+3R	1394 3.9+3R
	VSC2 @ 4"	q 1668 F 3+9R	1666 3.1+7R	1665 3.2+6R	1664 3.3+5R	1664 3.3+5R	1663 3.4+4R	1663 3.4+4R	1659 3.4+3R	1394 3.4+3R
	VSC2 @ 24"	q 1184 F 4.7+5R	1247 4.8+4R	1132 5.4+3R	1191 5.3+2R	1104 5.8+2R	1156 5.7+2R	1087 6.1+1R	1132 5.9+1R	1075 6.3+1R
	VSC2 @ 18"	q 1373 F 4.1+5R	1385 4.2+4R	1285 4.8+3R	1309 4.8+3R	1327 4.8+2R	1258 5.2+2R	1280 5.1+2R	1296 5.1+2R	1244 5.4+1R
	VSC2 @ 12"	q 1486 F 3.7+5R	1476 3.9+4R	1468 4+3R	1462 4.1+3R	1458 4.2+2R	1455 4.3+2R	1452 4.3+2R	1450 4.4+2R	1448 4.4+2R
16	VSC2 @ 8"	q 1602 F 3.2+5R	1612 3.2+4R	1594 3.4+3R	1603 3.4+3R	1590 3.5+3R	1598 3.5+2R	1588 3.6+2R	1594 3.6+2R	1586 3.6+2R
	VSC2 @ 6"	q 1655 F 2.9+5R	1653 3+4R	1651 3.1+3R	1650 3.1+3R	1649 3.1+3R	1648 3.2+2R	1648 3.2+2R	1647 3.2+2R	1647 3.2+2R
	VSC2 @ 4"	q 1699 F 2.5+5R	1698 2.6+4R	1698 2.7+4R	1697 2.7+3R	1697 2.8+3R	1697 2.8+2R	1697 2.8+2R	1697 2.8+2R	1696 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Hilti Fastener Pattern at Supports
X-EDNK22 or X-HSN 24 at supports equal to or greater than $\frac{1}{8}$ " and less than $\frac{3}{16}$ " thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 762 F 6.8+29R	759 7.7+23R	655 9+18R	668 9.5+15R	596 10.5+13R	614 10.8+11R	560 11.8+9R		
	VSC2 @ 18"	q 896 F 6.3+29R	868 7.2+23R	757 8.4+18R	755 8.9+16R	754 9.3+13R	686 10.2+11R	692 10.5+10R		
	VSC2 @ 12"	q 1007 F 5.9+29R	963 6.8+23R	931 7.5+19R	907 8+16R	889 8.5+14R	874 8.8+12R	862 9.2+11R		
	VSC2 @ 8"	q 1177 F 5.3+30R	1175 5.9+24R	1124 6.6+19R	1131 6.9+17R	1095 7.3+14R	1104 7.5+13R	1001 7.8+11R		
	VSC2 @ 6"	q *1292 F 4.9+30R	*1271 5.5+24R	*1256 6+20R	*1245 6.3+17R	*1237 6.6+15R	*1230 6.8+13R	1001 6.9+12R		
	VSC2 @ 4"	q *1427 F 4.3+30R	*1417 4.8+24R	*1409 5.2+20R	*1404 5.4+17R	*1400 5.7+15R	*1236 5.8+13R	1001 5.9+12R		
20	VSC2 @ 24"	q 999 F 6.1+18R	1002 6.7+14R	867 7.7+11R	890 8+9R	796 8.9+8R	823 9+7R	752 9.8+6R	778 9.8+5R	722 10.4+4R
	VSC2 @ 18"	q 1177 F 5.6+18R	1147 6.3+14R	1005 7.2+11R	1006 7.5+10R	1008 7.8+8R	919 8.5+7R	929 8.6+6R	937 8.7+6R	874 9.3+5R
	VSC2 @ 12"	q 1322 F 5.3+18R	1270 5.9+14R	1233 6.3+12R	1205 6.7+10R	1184 7+9R	1167 7.2+8R	1153 7.5+7R	1085 7.6+6R	912 7.8+5R
	VSC2 @ 8"	q *1536 F 4.7+19R	*1537 5.1+15R	1477 5.5+12R	1487 5.7+10R	1445 6+9R	1457 6.1+8R	1313 6.3+7R	1085 6.4+6R	912 6.5+6R
	VSC2 @ 6"	q *1676 F 4.3+19R	*1653 4.7+15R	*1637 5+12R	*1625 5.2+11R	*1616 5.4+9R	*1609 5.5+8R	1313 5.6+7R	1085 5.7+7R	912 5.8+6R
	VSC2 @ 4"	q *1834 F 3.8+19R	*1823 4.2+15R	*1816 4.4+13R	*1810 4.5+11R	*1806 4.7+9R	*1621 4.8+8R	1313 4.9+8R	1085 4.9+7R	912 5+6R
18	VSC2 @ 24"	q 1257 F 4.8+8R	1291 5+7R	1135 5.7+5R	1181 5.7+4R	1068 6.2+4R	1113 6.2+3R	1026 6.7+3R	1068 6.6+2R	998 7+2R
	VSC2 @ 18"	q 1481 F 4.3+9R	1468 4.6+7R	1313 5.2+5R	1328 5.3+5R	1339 5.3+4R	1238 5.8+3R	1257 5.8+3R	1273 5.8+3R	1198 6.1+2R
	VSC2 @ 12"	q 1647 F 4+9R	1607 4.3+7R	1579 4.5+6R	1558 4.6+5R	1542 4.8+4R	1529 4.9+4R	1518 5+3R	1510 5+3R	1394 5.1+3R
	VSC2 @ 8"	q *1860 F 3.5+9R	*1870 3.7+7R	*1823 3.9+6R	*1836 3.9+5R	*1802 4.1+4R	*1816 4.1+4R	*1789 4.2+4R	1659 4.2+3R	1394 4.3+3R
	VSC2 @ 6"	q *1981 F 3.2+9R	*1968 3.4+7R	*1959 3.5+6R	*1952 3.6+5R	*1947 3.7+5R	*1943 3.8+4R	*1940 3.8+4R	1659 3.8+3R	1394 3.9+3R
	VSC2 @ 4"	q *2100 F 2.9+9R	*2095 3+7R	*2091 3.1+6R	*2089 3.2+5R	*2087 3.3+5R	*2085 3.3+4R	*2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 1426 F 4.2+5R	1481 4.3+4R	1327 4.8+3R	1387 4.8+2R	1272 5.3+2R	1328 5.2+2R	1237 5.6+1R	1288 5.5+1R	1214 5.9+1R
	VSC2 @ 18"	q 1659 F 3.7+5R	1659 3.9+4R	1516 4.4+3R	1540 4.5+2R	1557 4.5+2R	1460 4.9+2R	1484 4.9+2R	1502 4.9+1R	1430 5.1+1R
	VSC2 @ 12"	q *1813 F 3.4+5R	*1787 3.6+4R	*1769 3.8+3R	*1756 3.9+3R	*1745 4+2R	*1737 4.1+2R	*1730 4.2+2R	*1724 4.2+2R	*1719 4.3+1R
	VSC2 @ 8"	q *1988 F 3+5R	*2000 3.1+4R	*1968 3.3+3R	*1980 3.3+3R	*1956 3.4+2R	*1968 3.4+2R	*1949 3.5+2R	*1960 3.5+2R	*1941 3.6+2R
	VSC2 @ 6"	q *2077 F 2.8+5R	*2070 2.9+4R	*2066 3+3R	*2063 3+3R	*2060 3.1+3R	*2058 3.1+2R	*2056 3.2+2R	*2055 3.2+2R	*1941 3.2+2R
	VSC2 @ 4"	q *2156 F 2.5+5R	*2154 2.6+4R	*2152 2.6+4R	*2151 2.7+3R	*2150 2.7+3R	*2149 2.8+2R	*2149 2.8+2R	*2148 2.8+2R	*1941 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1200 plf, 1500 plf, 1700 plf, or 1700 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 28.

Type PLB™-36

- 36/4 Hilti Fastener Pattern at Supports**
- X-EDNK22 at Supports $\frac{3}{16}$ " through $\frac{1}{4}$ " thick**
- X-HSN 24 at Supports $\frac{3}{16}$ " through $\frac{3}{8}$ " thick**
- Sidelaps Connected with PunchLok II Tool**



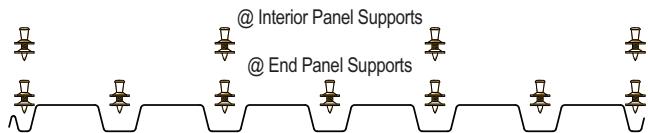
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 497 F -4.7+269R	516 -1.1+215R	460 2.8+178R	482 4.3+153R	440 6.9+133R	460 7.6+118R	428 9.6+106R		
	VSC2 @ 18"	q 582 F -6+270R	582 -2.3+216R	529 1.4+179R	537 3.1+153R	543 4.4+134R	508 6.4+119R	516 7.1+107R		
	VSC2 @ 12"	q 639 F -7+270R	629 -3.2+216R	622 -0.6+180R	617 1.3+154R	613 2.8+135R	610 3.9+120R	607 4.8+107R		
	VSC2 @ 8"	q 706 F -8.3+271R	710 -4.9+217R	698 -2.2+180R	702 -0.7+155R	693 0.8+135R	698 1.7+120R	690 2.7+108R		
	VSC2 @ 6"	q 740 F -9.1+271R	738 -5.6+217R	736 -3.2+181R	734 -1.5+155R	733 -0.2+135R	733 0.7+120R	732 1.5+108R		
	VSC2 @ 4"	q 772 F -10+271R	771 -6.6+217R	770 -4.3+181R	770 -2.7+155R	769 -1.4+136R	769 -0.5+121R	769 0.3+109R		
	VSC2 @ 24"	q 631 F -0.7+170R	658 1.5+136R	593 4.2+113R	620 5+96R	572 6.9+84R	597 7.2+75R	558 8.6+67R	581 8.6+61R	549 9.8+55R
	VSC2 @ 18"	q 732 F -1.9+171R	734 0.4+136R	675 2.9+113R	686 3.9+97R	694 4.7+85R	654 6.1+75R	664 6.5+68R	673 6.8+61R	642 7.8+56R
	VSC2 @ 12"	q 796 F -2.8+171R	787 -0.3+137R	780 1.3+114R	775 2.5+97R	771 3.4+85R	768 4.1+76R	766 4.7+68R	764 5.2+62R	762 5.6+57R
	VSC2 @ 8"	q 866 F -3.9+171R	871 -1.7+137R	859 0+114R	864 0.9+98R	855 1.9+86R	860 2.4+76R	853 3.1+68R	857 3.4+62R	851 3.9+57R
20	VSC2 @ 6"	q 900 F -4.5+172R	898 -2.3+137R	896 -0.8+114R	895 0.3+98R	894 1.1+86R	894 1.7+76R	893 2.2+69R	893 2.6+62R	892 2.9+57R
	VSC2 @ 4"	q 930 F -5.3+172R	929 -3.1+137R	929 -1.6+115R	928 -0.6+98R	928 0.2+86R	928 0.8+76R	928 1.3+69R	927 1.7+62R	912 2+57R
	VSC2 @ 24"	q 886 F 1.6+83R	925 2.4+66R	844 3.9+55R	882 4.1+47R	820 5.1+41R	855 5.1+37R	805 5.9+33R	836 5.8+30R	795 6.4+27R
	VSC2 @ 18"	q 1014 F 0.6+83R	1019 1.7+67R	949 3+55R	964 3.4+47R	975 3.7+42R	926 4.5+37R	940 4.6+33R	951 4.7+30R	915 5.2+28R
	VSC2 @ 12"	q 1089 F 0+84R	1081 1.1+67R	1074 1.9+56R	1070 2.5+48R	1066 2.9+42R	1063 3.2+37R	1061 3.5+33R	1059 3.7+30R	1057 3.9+28R
	VSC2 @ 8"	q 1167 F -0.7+84R	1173 0.3+67R	1161 1.1+56R	1167 1.5+48R	1158 2+42R	1163 2.3+37R	1155 2.6+34R	1160 2.7+30R	1154 2.9+28R
	VSC2 @ 6"	q 1203 F -1.1+84R	1201 -0.1+67R	1200 0.6+56R	1199 1.2+48R	1198 1.5+42R	1198 1.8+37R	1197 2.1+34R	1197 2.3+31R	1197 2.4+28R
	VSC2 @ 4"	q 1233 F -1.6+84R	1233 -0.5+67R	1232 0.2+56R	1232 0.7+48R	1232 1+42R	1232 1.3+37R	1231 1.6+34R	1231 1.8+31R	1231 1.9+28R
	VSC2 @ 24"	q 1134 F 2.7+47R	1184 3.1+38R	1087 4.2+31R	1135 4.2+27R	1061 4.9+23R	1104 4.9+21R	1044 5.4+19R	1083 5.3+17R	1033 5.8+15R
	VSC2 @ 18"	q 1286 F 1.8+47R	1293 2.4+38R	1213 3.4+31R	1232 3.6+27R	1245 3.7+24R	1189 4.3+21R	1206 4.3+19R	1219 4.4+17R	1176 4.8+16R
	VSC2 @ 12"	q 1373 F 1.3+48R	1364 2+38R	1357 2.4+32R	1353 2.8+27R	1349 3+24R	1346 3.2+21R	1344 3.4+19R	1342 3.5+17R	1340 3.6+16R
16	VSC2 @ 8"	q 1459 F 0.7+48R	1466 1.2+38R	1453 1.7+32R	1459 2+27R	1449 2.3+24R	1455 2.4+21R	1447 2.6+19R	1452 2.7+17R	1446 2.8+16R
	VSC2 @ 6"	q 1498 F 0.3+48R	1496 0.9+38R	1495 1.4+32R	1494 1.7+27R	1493 1.9+24R	1492 2.1+21R	1492 2.2+19R	1492 2.3+17R	1491 2.4+16R
	VSC2 @ 4"	q 1529 F 0+48R	1529 0.6+38R	1528 1+32R	1528 1.2+27R	1528 1.5+24R	1528 1.6+21R	1528 1.8+19R	1527 1.9+17R	1527 2+16R

See footnotes on page 28.

Type PLB™-36

- 36/7/4 Hilti Fastener Pattern at Supports**
X-EDNK22 at Supports $\frac{3}{16}$ " through $\frac{1}{4}$ " thick
X-HSN 24 at Supports $\frac{3}{16}$ " through $\frac{3}{8}$ " thick
- Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 610 F 9.6+27R	634 10.4+21R	545 12.2+16R	573 12.4+14R	511 13.9+11R	537 13.8+10R	490 15.1+8R		
	VSC2 @ 18"	q 750 F 8.4+28R	745 9.3+22R	649 10.9+17R	660 11.3+14R	668 11.5+12R	608 12.7+10R	620 12.8+9R		
	VSC2 @ 12"	q 865 F 7.6+28R	839 8.5+22R	821 9.1+18R	808 9.6+15R	798 10+13R	790 10.3+11R	783 10.6+10R		
	VSC2 @ 8"	q 1032 F 6.4+29R	1042 6.9+23R	1003 7.6+19R	1015 7.7+16R	988 8.2+14R	1000 8.3+12R	979 8.6+11R		
	VSC2 @ 6"	q 1139 F 5.7+29R	1128 6.2+23R	1120 6.6+19R	1115 6.9+17R	1111 7.1+14R	1107 7.3+13R	1001 7.4+11R		
	VSC2 @ 4"	q 1256 F 4.7+30R	1251 5.2+24R	1247 5.5+20R	1245 5.8+17R	1243 5.9+15R	1236 6.1+13R	1001 6.2+12R		
20	VSC2 @ 24"	q 787 F 8.3+16R	825 8.7+13R	714 10.1+10R	754 10.1+8R	676 11.3+6R	712 11.1+6R	652 12.1+5R	684 11.8+4R	636 12.7+3R
	VSC2 @ 18"	q 968 F 7.2+17R	966 7.7+13R	849 9+10R	866 9.1+9R	878 9.3+8R	804 10.1+6R	821 10.1+6R	835 10.1+5R	781 10.8+4R
	VSC2 @ 12"	q 1109 F 6.4+18R	1082 7+14R	1063 7.5+11R	1050 7.8+10R	1039 8+8R	1031 8.2+7R	1024 8.4+6R	1019 8.5+6R	912 8.6+5R
	VSC2 @ 8"	q 1302 F 5.4+18R	1316 5.7+15R	1275 6.2+12R	1290 6.3+10R	1261 6.6+9R	1274 6.6+8R	1252 6.8+7R	1085 6.8+6R	912 7+6R
	VSC2 @ 6"	q 1418 F 4.8+19R	1408 5.2+15R	1402 5.4+12R	1397 5.6+10R	1393 5.7+9R	1390 5.8+8R	1313 5.9+7R	1085 6+7R	912 6.1+6R
	VSC2 @ 4"	q 1537 F 4.1+19R	1533 4.4+15R	1530 4.6+13R	1528 4.7+11R	1527 4.8+9R	1526 4.9+8R	1313 5+8R	1085 5.1+7R	912 5.1+6R
18	VSC2 @ 24"	q 1130 F 6+8R	1193 6+6R	1041 6.8+5R	1103 6.7+4R	994 7.3+3R	1049 7.1+3R	965 7.7+2R	1014 7.4+2R	946 7.9+2R
	VSC2 @ 18"	q 1382 F 5.1+8R	1387 5.3+7R	1232 6+5R	1259 6+4R	1279 6+4R	1179 6.4+3R	1205 6.4+3R	1225 6.3+3R	1152 6.7+2R
	VSC2 @ 12"	q 1568 F 4.5+9R	1539 4.8+7R	1519 4.9+6R	1504 5.1+5R	1493 5.2+4R	1484 5.2+4R	1476 5.3+3R	1470 5.4+3R	1394 5.4+3R
	VSC2 @ 8"	q 1806 F 3.8+9R	1825 3.9+7R	1780 4.1+6R	1798 4.1+5R	1765 4.3+4R	1782 4.3+4R	1757 4.4+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q 1939 F 3.4+9R	1930 3.6+7R	1924 3.7+6R	1919 3.8+5R	1916 3.8+5R	1913 3.9+4R	1911 3.9+4R	1659 3.9+3R	1394 4+3R
	VSC2 @ 4"	q 2068 F 3+9R	2064 3.1+7R	2062 3.2+6R	2060 3.3+5R	2058 3.3+5R	2057 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 1467 F 5.2+4R	1553 5.1+3R	1363 5.8+2R	1445 5.6+2R	1308 6.2+1R	1381 6+1R	1274 6.4+1R	1338 6.2+1R	1251 6.6+1R
	VSC2 @ 18"	q 1785 F 4.4+5R	1796 4.5+4R	1607 5.1+3R	1643 5+2R	1670 5+2R	1546 5.4+2R	1580 5.3+1R	1606 5.3+1R	1515 5.6+1R
	VSC2 @ 12"	q 2013 F 3.9+5R	1981 4+4R	1959 4.2+3R	1943 4.3+3R	1931 4.3+2R	1921 4.4+2R	1913 4.4+2R	1906 4.5+2R	1901 4.5+1R
	VSC2 @ 8"	q 2292 F 3.3+5R	2315 3.3+4R	2264 3.5+3R	2286 3.5+3R	2249 3.6+2R	2269 3.6+2R	2240 3.6+2R	2258 3.6+2R	1941 3.7+2R
	VSC2 @ 6"	q 2441 F 2.9+5R	2432 3+4R	2426 3.1+3R	2421 3.2+3R	2418 3.2+3R	2415 3.2+2R	2413 3.2+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 2581 F 2.6+5R	2577 2.7+4R	2575 2.7+4R	2573 2.7+3R	2572 2.8+3R	2571 2.8+2R	2570 2.8+2R	2310 2.8+2R	1941 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Hilti Fastener Pattern at Supports**
- X-EDNK22 at Supports $\frac{3}{16}$ " through $\frac{1}{4}$ " thick
- X-HSN 24 at Supports $\frac{3}{16}$ " through $\frac{3}{8}$ " thick
- Sidelaps Connected with PunchLok II Tool**



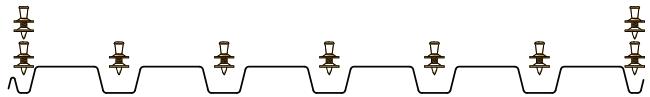
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 642 F 8.3+28R	659 9.2+22R	568 10.7+18R	592 11.1+15R	529 12.4+12R	552 12.5+11R	505 13.6+9R		
	VSC2 @ 18"	q 777 F 7.5+29R	766 8.4+23R	669 9.8+18R	677 10.2+15R	683 10.6+13R	622 11.6+11R	633 11.8+10R		
	VSC2 @ 12"	q 887 F 6.8+29R	857 7.7+23R	837 8.4+19R	822 8.9+16R	810 9.4+14R	801 9.7+12R	793 10+11R		
	VSC2 @ 8"	q 1045 F 5.9+30R	1052 6.5+24R	1014 7.1+19R	1024 7.4+17R	996 7.8+14R	1007 7.9+13R	985 8.3+11R		
	VSC2 @ 6"	q 1148 F 5.3+30R	1135 5.9+24R	1127 6.3+20R	1121 6.7+17R	1116 6.9+15R	1112 7.1+13R	1001 7.2+12R		
	VSC2 @ 4"	q 1260 F 4.6+30R	1254 5.1+24R	1250 5.4+20R	1247 5.6+17R	1245 5.8+15R	1236 6+13R	1001 6.1+12R		
	VSC2 @ 24"	q 823 F 7.3+18R	853 7.8+14R	740 9.1+11R	775 9.2+9R	696 10.2+8R	729 10.2+7R	669 11.1+6R	699 11+5R	650 11.7+4R
	VSC2 @ 18"	q 996 F 6.5+18R	989 7.1+14R	872 8.2+11R	885 8.4+10R	895 8.6+8R	820 9.4+7R	835 9.5+6R	847 9.5+6R	793 10.2+5R
	VSC2 @ 12"	q 1131 F 5.9+18R	1101 6.5+14R	1080 7+12R	1064 7.3+10R	1052 7.6+9R	1042 7.8+8R	1035 8+7R	1028 8.2+6R	912 8.3+6R
	VSC2 @ 8"	q 1315 F 5.1+19R	1326 5.4+15R	1285 5.9+12R	1298 6+10R	1268 6.3+9R	1281 6.4+8R	1258 6.6+7R	1085 6.6+7R	912 6.8+6R
20	VSC2 @ 6"	q 1426 F 4.6+19R	1415 5+15R	1408 5.3+12R	1402 5.5+11R	1398 5.6+9R	1394 5.7+8R	1313 5.8+7R	1085 5.9+7R	912 6+6R
	VSC2 @ 4"	q 1541 F 4+19R	1536 4.3+15R	1533 4.5+13R	1531 4.7+11R	1529 4.8+9R	1527 4.9+8R	1313 4.9+8R	1085 5+7R	912 5.1+6R
	VSC2 @ 24"	q 1174 F 5.5+8R	1226 5.6+7R	1073 6.3+5R	1128 6.3+4R	1019 6.9+4R	1070 6.7+3R	986 7.2+3R	1032 7.1+3R	963 7.5+2R
	VSC2 @ 18"	q 1414 F 4.8+9R	1413 5+7R	1259 5.6+6R	1281 5.7+5R	1298 5.7+4R	1198 6.2+4R	1221 6.1+3R	1240 6.1+3R	1166 6.5+3R
	VSC2 @ 12"	q 1592 F 4.3+9R	1560 4.6+7R	1537 4.7+6R	1520 4.9+5R	1507 5+4R	1496 5.1+4R	1488 5.2+3R	1481 5.2+3R	1394 5.3+3R
	VSC2 @ 8"	q 1820 F 3.7+9R	1835 3.8+7R	1789 4+6R	1806 4.1+5R	1773 4.2+5R	1788 4.2+4R	1763 4.3+4R	1659 4.3+3R	1394 4.4+3R
	VSC2 @ 6"	q 1947 F 3.3+9R	1937 3.5+7R	1929 3.6+6R	1924 3.7+5R	1920 3.8+5R	1917 3.8+4R	1914 3.9+4R	1659 3.9+3R	1394 3.9+3R
	VSC2 @ 4"	q 2071 F 3+9R	2067 3.1+7R	2064 3.2+6R	2062 3.3+5R	2060 3.3+5R	2059 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
	VSC2 @ 24"	q 1518 F 4.7+5R	1591 4.8+4R	1400 5.4+3R	1475 5.3+2R	1337 5.8+2R	1405 5.7+2R	1298 6.1+1R	1359 5.9+1R	1271 6.3+1R
	VSC2 @ 18"	q 1822 F 4.1+5R	1825 4.2+4R	1637 4.8+3R	1668 4.8+3R	1691 4.8+2R	1568 5.2+2R	1598 5.1+2R	1623 5.1+2R	1531 5.4+1R
16	VSC2 @ 12"	q 2039 F 3.7+5R	2004 3.9+4R	1979 4+3R	1960 4.1+3R	1946 4.2+2R	1935 4.3+2R	1925 4.3+2R	1918 4.4+2R	1911 4.4+2R
	VSC2 @ 8"	q 2305 F 3.2+5R	2325 3.2+4R	2274 3.4+3R	2294 3.4+3R	2257 3.5+3R	2275 3.5+2R	2247 3.6+2R	2263 3.6+2R	1941 3.6+2R
	VSC2 @ 6"	q 2449 F 2.9+5R	2439 3+4R	2431 3.1+3R	2426 3.1+3R	2422 3.1+3R	2419 3.2+2R	2416 3.2+2R	2310 3.2+2R	1941 3.2+2R
	VSC2 @ 4"	q 2584 F 2.5+5R	2580 2.6+4R	2577 2.7+4R	2575 2.7+3R	2574 2.8+3R	2572 2.8+2R	2571 2.8+2R	2310 2.8+2R	1941 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Hilti Fastener Pattern at Supports**
- X-EDNK22 at Supports $\frac{3}{16}$ " through $\frac{1}{4}$ " thick**
- X-HSN 24 at Supports $\frac{3}{16}$ " through $\frac{3}{8}$ " thick**
- Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 814 F 6.8+29R	804 7.7+23R	691 9+18R	701 9.5+15R	625 10.5+13R	641 10.8+11R	584 11.8+9R		
	VSC2 @ 18"	q 953 F 6.3+29R	918 7.2+23R	797 8.4+18R	792 8.9+16R	788 9.3+13R	715 10.2+11R	720 10.5+10R		
	VSC2 @ 12"	q 1073 F 5.9+29R	1019 6.8+23R	981 7.5+19R	953 8+16R	931 8.5+14R	914 8.8+12R	899 9.2+11R		
	VSC2 @ 8"	q 1259 F 5.3+30R	1253 5.9+24R	1193 6.6+19R	1199 6.9+17R	1157 7.3+14R	1166 7.5+13R	1001 7.8+11R		
	VSC2 @ 6"	q *1390 F 4.9+30R	*1363 5.5+24R	*1344 6+20R	*1330 6.3+17R	*1319 6.6+15R	1236 6.8+13R	1001 6.9+12R		
	VSC2 @ 4"	q *1551 F 4.3+30R	*1537 4.8+24R	*1527 5.2+20R	*1520 5.4+17R	*1514 5.7+15R	1236 5.8+13R	1001 5.9+12R		
20	VSC2 @ 24"	q 1030 F 6.1+18R	1030 6.7+14R	889 7.7+11R	910 8+9R	813 8.9+8R	839 9+7R	766 9.8+6R	792 9.8+5R	734 10.4+4R
	VSC2 @ 18"	q 1212 F 5.6+18R	1178 6.3+14R	1029 7.2+11R	1029 7.5+10R	1029 7.8+8R	937 8.5+7R	947 8.6+6R	954 8.7+6R	889 9.3+5R
	VSC2 @ 12"	q 1363 F 5.3+18R	1306 5.9+14R	1265 6.3+12R	1235 6.7+10R	1211 7+9R	1192 7.2+8R	1177 7.5+7R	1085 7.6+6R	912 7.8+5R
	VSC2 @ 8"	q 1587 F 4.7+19R	1587 5.1+15R	1522 5.5+12R	1532 5.7+10R	1486 6+9R	1498 6.1+8R	1313 6.3+7R	1085 6.4+6R	912 6.5+6R
	VSC2 @ 6"	q *1738 F 4.3+19R	*1712 4.7+15R	*1694 5+12R	*1680 5.2+11R	*1670 5.4+9R	*1621 5.5+8R	1313 5.6+7R	1085 5.7+7R	912 5.8+6R
	VSC2 @ 4"	q *1910 F 3.8+19R	*1898 4.2+15R	*1889 4.4+13R	*1883 4.5+11R	*1878 4.7+9R	*1621 4.8+8R	1313 4.9+8R	1085 4.9+7R	912 5+6R
18	VSC2 @ 24"	q 1448 F 4.8+8R	1466 5+7R	1275 5.7+5R	1315 5.7+4R	1180 6.2+4R	1224 6.2+3R	1121 6.7+3R	1163 6.6+2R	1081 7+2R
	VSC2 @ 18"	q 1709 F 4.3+9R	1676 4.6+7R	1478 5.2+5R	1486 5.3+5R	1492 5.3+4R	1366 5.8+3R	1384 5.8+3R	1399 5.8+3R	1308 6.1+2R
	VSC2 @ 12"	q 1916 F 4+9R	1851 4.3+7R	1805 4.5+6R	1771 4.6+5R	1744 4.8+4R	1723 4.9+4R	1705 5+3R	1659 5+3R	1394 5.1+3R
	VSC2 @ 8"	q *2207 F 3.5+9R	*2214 3.7+7R	*2139 3.9+6R	*2154 3.9+5R	*2101 4.1+4R	*2118 4.1+4R	2007 4.2+4R	1659 4.2+3R	1394 4.3+3R
	VSC2 @ 6"	q *2389 F 3.2+9R	*2364 3.4+7R	*2346 3.5+6R	*2332 3.6+5R	*2322 3.7+5R	*2314 3.8+4R	2007 3.8+4R	1659 3.8+3R	1394 3.9+3R
	VSC2 @ 4"	q *2585 F 2.9+9R	*2574 3+7R	*2566 3.1+6R	*2560 3.2+5R	*2555 3.3+5R	*2478 3.3+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
16	VSC2 @ 24"	q 1861 F 4.2+5R	1896 4.3+4R	1655 4.8+3R	1714 4.8+2R	1543 5.3+2R	1604 5.2+2R	1473 5.6+1R	1531 5.5+1R	1425 5.9+1R
	VSC2 @ 18"	q 2196 F 3.7+5R	2164 3.9+4R	1918 4.4+3R	1934 4.5+2R	1946 4.5+2R	1789 4.9+2R	1814 4.9+2R	1835 4.9+1R	1720 5.1+1R
	VSC2 @ 12"	q 2455 F 3.4+5R	2383 3.6+4R	2331 3.8+3R	2292 3.9+3R	2262 4+2R	2238 4.1+2R	2219 4.2+2R	2203 4.2+2R	1941 4.3+1R
	VSC2 @ 8"	q *2807 F 3+5R	*2819 3.1+4R	*2733 3.3+3R	*2754 3.3+3R	*2693 3.4+2R	*2715 3.4+2R	*2667 3.5+2R	2310 3.5+2R	1941 3.6+2R
	VSC2 @ 6"	q *3018 F 2.8+5R	*2992 2.9+4R	*2973 3+3R	*2960 3+3R	*2949 3.1+3R	*2940 3.1+2R	*2795 3.2+2R	2310 3.2+2R	1941 3.2+2R
	VSC2 @ 4"	q *3238 F 2.5+5R	*3226 2.6+4R	*3218 2.6+4R	*3213 2.7+3R	*3208 2.7+3R	*3205 2.8+2R	*2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1300 plf, 1600 plf, 2100 plf, or 2600 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 28.

Type PLB™-36

- **36/4 Hilti Fastener Pattern at Supports**
X-ENP19 at Supports $\frac{1}{4}$ " thick and thicker
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 519	538	478	499	455	475	440		
		F -6.9+270R	-3.1+215R	0.4+179R	2.2+153R	4.5+133R	5.5+118R	7.3+106R		
	VSC2 @ 18"	q 610	608	550	558	564	526	535		
		F -7.6+270R	-3.8+216R	-0.4+179R	1.4+153R	2.9+134R	4.7+119R	5.6+107R		
	VSC2 @ 12"	q 673	661	653	646	641	637	634		
		F -8.2+270R	-4.3+216R	-1.7+180R	0.3+154R	1.7+134R	2.9+119R	3.9+107R		
20	VSC2 @ 8"	q 749	753	738	744	733	738	729		
		F -9+271R	-5.5+216R	-2.9+180R	-1.2+154R	0.3+135R	1.2+120R	2.2+108R		
	VSC2 @ 6"	q 789	785	783	781	780	779	778		
		F -9.6+271R	-6+217R	-3.6+180R	-1.9+155R	-0.6+135R	0.4+120R	1.2+108R		
	VSC2 @ 4"	q 826	825	824	823	823	823	822		
		F -10.3+271R	-6.9+217R	-4.5+181R	-2.9+155R	-1.6+136R	-0.6+120R	0.1+108R		
18	VSC2 @ 24"	q 660	687	616	644	591	618	576	600	566
		F -2.4+170R	0.1+136R	2.5+113R	3.6+96R	5.2+84R	5.8+75R	7+67R	7.3+61R	8.3+55R
	VSC2 @ 18"	q 769	770	704	715	724	679	690	699	666
		F -3.1+171R	-0.6+136R	1.7+113R	2.9+97R	3.7+85R	5+75R	5.5+67R	5.9+61R	6.8+56R
	VSC2 @ 12"	q 840	829	821	815	811	807	804	801	799
		F -3.6+171R	-1.1+137R	0.6+114R	1.8+97R	2.8+85R	3.5+75R	4.1+68R	4.6+62R	5.1+56R
16	VSC2 @ 8"	q 921	927	912	918	907	912	904	909	902
		F -4.4+171R	-2.1+137R	-0.4+114R	0.6+98R	1.6+85R	2.1+76R	2.8+68R	3.1+62R	3.6+57R
	VSC2 @ 6"	q 961	958	956	955	954	953	952	952	912
		F -4.8+172R	-2.6+137R	-1.1+114R	0+98R	0.9+86R	1.5+76R	2+68R	2.4+62R	2.8+57R
	VSC2 @ 4"	q 997	996	995	995	994	994	994	994	912
		F -5.4+172R	-3.2+137R	-1.8+114R	-0.7+98R	0.1+86R	0.7+76R	1.2+69R	1.6+62R	1.9+57R
14	VSC2 @ 24"	q 928	969	878	919	851	888	834	867	822
		F 0.7+83R	1.8+66R	3.1+55R	3.5+47R	4.4+41R	4.6+36R	5.3+33R	5.3+30R	5.9+27R
	VSC2 @ 18"	q 1068	1073	993	1010	1021	967	982	994	953
		F 0.1+83R	1.2+67R	2.5+55R	3+47R	3.3+41R	4+37R	4.2+33R	4.4+30R	4.9+27R
	VSC2 @ 12"	q 1154	1143	1135	1129	1125	1121	1118	1116	1114
		F -0.4+84R	0.8+67R	1.6+56R	2.2+48R	2.7+42R	3+37R	3.3+33R	3.5+30R	3.7+28R
12	VSC2 @ 8"	q 1245	1251	1236	1243	1232	1238	1229	1235	1227
		F -0.9+84R	0.1+67R	0.9+56R	1.4+48R	1.9+42R	2.2+37R	2.5+33R	2.6+30R	2.9+28R
	VSC2 @ 6"	q 1287	1285	1283	1282	1281	1280	1280	1279	1279
		F -1.3+84R	-0.2+67R	0.6+56R	1.1+48R	1.5+42R	1.8+37R	2+34R	2.2+30R	2.4+28R
	VSC2 @ 4"	q 1324	1323	1322	1322	1322	1321	1321	1321	1321
		F -1.6+84R	-0.6+67R	0.1+56R	0.6+48R	1+42R	1.3+37R	1.5+34R	1.7+31R	1.9+28R
10	VSC2 @ 24"	q 1189	1242	1134	1185	1103	1149	1084	1125	1070
		F 2+47R	2.6+38R	3.5+31R	3.7+27R	4.4+23R	4.4+21R	4.9+18R	4.9+17R	5.3+15R
	VSC2 @ 18"	q 1357	1365	1273	1293	1308	1244	1263	1277	1229
		F 1.4+47R	2.1+38R	2.9+31R	3.2+27R	3.4+24R	3.9+21R	4+19R	4.1+17R	4.5+15R
	VSC2 @ 12"	q 1456	1445	1437	1431	1427	1423	1420	1418	1415
		F 1+48R	1.7+38R	2.2+32R	2.6+27R	2.8+24R	3.1+21R	3.2+19R	3.4+17R	3.5+16R
8	VSC2 @ 8"	q 1558	1566	1549	1557	1545	1552	1542	1548	1541
		F 0.5+48R	1.1+38R	1.6+32R	1.9+27R	2.2+24R	2.3+21R	2.5+19R	2.6+17R	2.8+16R
	VSC2 @ 6"	q 1604	1601	1600	1599	1598	1597	1596	1596	1595
		F 0.2+48R	0.9+38R	1.3+32R	1.6+27R	1.8+24R	2+21R	2.1+19R	2.3+17R	2.4+16R
	VSC2 @ 4"	q 1642	1642	1641	1641	1640	1640	1640	1640	1640
		F -0.1+48R	0.5+38R	0.9+32R	1.2+27R	1.4+24R	1.6+21R	1.7+19R	1.9+17R	2+16R

See footnotes on page 28.

Type PLB™-36

- 36/7/4 Hilti Fastener Pattern at Supports
- X-ENP19 at Supports $\frac{1}{4}$ " thick and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)×10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 633 F 7.5+28R	654 8.4+21R	561 9.8+17R	588 10.3+14R	524 11.4+11R	549 11.7+10R	501 12.7+8R		
	VSC2 @ 18"	q 778 F 6.8+28R	770 7.8+22R	668 9+17R	678 9.6+14R	685 10+12R	623 10.9+10R	634 11.2+9R		
	VSC2 @ 12"	q 899 F 6.4+29R	869 7.3+22R	849 8+18R	833 8.5+15R	822 8.9+13R	813 9.3+11R	805 9.6+10R		
	VSC2 @ 8"	q 1079 F 5.6+29R	1089 6.2+23R	1046 6.9+19R	1058 7.2+16R	1028 7.6+14R	1040 7.7+12R	1001 8.1+11R		
	VSC2 @ 6"	q 1198 F 5.1+29R	1185 5.7+23R	1176 6.2+19R	1169 6.5+16R	1164 6.8+14R	1160 7+13R	1001 7.1+11R		
	VSC2 @ 4"	q 1333 F 4.4+30R	1327 5+24R	1322 5.3+20R	1319 5.6+17R	1317 5.8+15R	1236 5.9+13R	1001 6+12R		
	VSC2 @ 24"	q 817 F 6.7+17R	852 7.3+13R	735 8.4+10R	774 8.6+8R	693 9.6+7R	729 9.6+6R	666 10.4+5R	699 10.4+4R	649 11.1+3R
	VSC2 @ 18"	q 1004 F 6.1+17R	1000 6.7+14R	875 7.7+11R	891 8+9R	903 8.2+8R	825 9+6R	842 9.1+5R	855 9.2+5R	798 9.8+4R
20	VSC2 @ 12"	q 1155 F 5.6+18R	1124 6.2+14R	1102 6.7+11R	1086 7+9R	1074 7.3+8R	1064 7.6+7R	1056 7.8+6R	1050 7.9+6R	912 8.1+5R
	VSC2 @ 8"	q 1366 F 4.9+18R	1380 5.3+14R	1334 5.7+12R	1349 5.9+10R	1316 6.2+9R	1331 6.3+8R	1306 6.5+7R	1085 6.5+6R	912 6.7+6R
	VSC2 @ 6"	q 1497 F 4.5+19R	1486 4.9+15R	1477 5.2+12R	1471 5.4+10R	1466 5.5+9R	1463 5.6+8R	1313 5.7+7R	1085 5.8+6R	912 5.9+6R
	VSC2 @ 4"	q 1636 F 3.9+19R	1631 4.2+15R	1628 4.5+12R	1625 4.6+11R	1623 4.7+9R	1621 4.8+8R	1313 4.9+7R	1085 5+7R	912 5+6R
	VSC2 @ 24"	q 1172 F 5.1+8R	1233 5.3+6R	1072 6+5R	1134 6+4R	1020 6.6+3R	1076 6.5+3R	988 7+2R	1037 6.9+2R	966 7.3+2R
	VSC2 @ 18"	q 1436 F 4.5+8R	1439 4.8+7R	1272 5.4+5R	1299 5.5+4R	1319 5.6+4R	1212 6+3R	1238 6+3R	1259 6+2R	1181 6.3+2R
	VSC2 @ 12"	q 1638 F 4.1+9R	1604 4.4+7R	1580 4.6+6R	1562 4.8+5R	1549 4.9+4R	1538 5+4R	1530 5.1+3R	1523 5.2+3R	1394 5.2+3R
	VSC2 @ 8"	q 1903 F 3.6+9R	1923 3.7+7R	1870 4+6R	1890 4+5R	1852 4.2+4R	1871 4.2+4R	1842 4.3+3R	1659 4.3+3R	1394 4.4+3R
18	VSC2 @ 6"	q 2055 F 3.3+9R	2044 3.5+7R	2036 3.6+6R	2030 3.7+5R	2026 3.8+4R	2022 3.8+4R	2007 3.8+4R	1659 3.9+3R	1394 3.9+3R
	VSC2 @ 4"	q 2207 F 2.9+9R	2202 3.1+7R	2199 3.2+6R	2196 3.2+5R	2195 3.3+5R	2193 3.3+4R	2007 3.4+4R	1659 3.4+3R	1394 3.4+3R
	VSC2 @ 24"	q 1521 F 4.4+4R	1607 4.5+3R	1405 5.1+2R	1488 5.1+2R	1343 5.6+1R	1417 5.5+1R	1305 5.9+1R	1371 5.8+1R	1279 6.1+1R
	VSC2 @ 18"	q 1858 F 3.9+5R	1866 4.1+3R	1661 4.6+3R	1698 4.6+2R	1725 4.7+2R	1592 5+1R	1626 5+1R	1654 5+1R	1556 5.3+1R
	VSC2 @ 12"	q 2106 F 3.6+5R	2069 3.8+4R	2043 3.9+3R	2023 4+2R	2008 4.1+2R	1997 4.2+2R	1987 4.3+2R	1979 4.3+1R	1941 4.3+1R
	VSC2 @ 8"	q 2419 F 3.1+5R	2444 3.2+4R	2385 3.4+3R	2409 3.4+3R	2367 3.5+2R	2389 3.5+2R	2355 3.6+2R	2310 3.6+2R	1941 3.6+2R
	VSC2 @ 6"	q 2592 F 2.8+5R	2581 3+4R	2573 3+3R	2567 3.1+3R	2562 3.1+2R	2559 3.2+2R	2556 3.2+2R	2310 3.2+2R	1941 3.2+2R
	VSC2 @ 4"	q 2758 F 2.5+5R	2753 2.6+4R	2750 2.7+3R	2748 2.7+3R	2746 2.7+3R	2745 2.8+2R	2744 2.8+2R	2310 2.8+2R	1941 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Hilti Fastener Pattern at Supports
- X-ENP19 at Supports $\frac{1}{4}$ " thick and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 668	682	587	609	544	567	517		
		F 6.4+29R	7.3+23R	8.5+18R	9.1+15R	10+13R	10.4+11R	11.2+10R		
	VSC2 @ 18"	q 808	794	691	697	702	639	649		
		F 6+29R	6.9+23R	8+18R	8.6+16R	9+13R	9.8+11R	10.1+10R		
	VSC2 @ 12"	q 924	890	867	849	836	825	817		
		F 5.7+29R	6.5+23R	7.2+19R	7.8+16R	8.2+14R	8.6+12R	8.9+11R		
	VSC2 @ 8"	q 1095	1102	1058	1068	1037	1048	1001		
		F 5.1+30R	5.8+24R	6.4+19R	6.7+17R	7.1+14R	7.3+13R	7.6+11R		
	VSC2 @ 6"	q 1209	1194	1184	1176	1170	1166	1001		
		F 4.7+30R	5.4+24R	5.8+20R	6.2+17R	6.4+15R	6.7+13R	6.8+12R		
20	VSC2 @ 4"	q 1338	1331	1326	1322	1320	1236	1001		
		F 4.2+30R	4.7+24R	5.1+20R	5.4+17R	5.6+15R	5.8+13R	5.9+12R		
	VSC2 @ 24"	q 857	883	764	798	715	748	685	715	664
		F 5.8+18R	6.4+14R	7.4+11R	7.7+9R	8.5+8R	8.7+7R	9.4+6R	9.5+5R	10.1+4R
	VSC2 @ 18"	q 1037	1026	900	913	922	842	857	869	812
		F 5.4+18R	6+14R	6.9+11R	7.2+10R	7.5+8R	8.2+7R	8.3+6R	8.5+6R	9+5R
	VSC2 @ 12"	q 1180	1145	1121	1103	1089	1078	1069	1061	912
		F 5.1+18R	5.7+14R	6.2+12R	6.5+10R	6.8+9R	7.1+8R	7.3+7R	7.5+6R	7.6+5R
	VSC2 @ 8"	q 1382	1392	1345	1359	1326	1339	1313	1085	912
		F 4.6+19R	5+15R	5.4+12R	5.6+10R	5.9+9R	6+8R	6.2+7R	6.3+6R	6.5+6R
18	VSC2 @ 6"	q 1507	1494	1484	1477	1472	1468	1313	1085	912
		F 4.2+19R	4.6+15R	4.9+12R	5.2+11R	5.3+9R	5.5+8R	5.6+7R	5.7+7R	5.7+6R
	VSC2 @ 4"	q 1641	1635	1631	1628	1625	1621	1313	1085	912
		F 3.8+19R	4.1+15R	4.3+13R	4.5+11R	4.6+9R	4.7+8R	4.8+8R	4.9+7R	5+6R
	VSC2 @ 24"	q 1220	1270	1108	1163	1048	1099	1010	1057	985
		F 4.6+9R	4.9+7R	5.5+5R	5.6+4R	6.1+4R	6+3R	6.5+3R	6.4+2R	6.8+2R
	VSC2 @ 18"	q 1474	1469	1302	1324	1340	1233	1257	1276	1197
		F 4.2+9R	4.5+7R	5+5R	5.1+5R	5.2+4R	5.6+3R	5.7+3R	5.7+3R	6+2R
	VSC2 @ 12"	q 1666	1628	1601	1581	1565	1553	1543	1535	1394
		F 3.9+9R	4.2+7R	4.4+6R	4.6+5R	4.7+4R	4.8+4R	4.9+3R	5+3R	5+3R
16	VSC2 @ 8"	q 1919	1935	1882	1900	1862	1879	1849	1659	1394
		F 3.5+9R	3.6+7R	3.8+6R	3.9+5R	4.1+4R	4.1+4R	4.2+4R	4.2+3R	4.3+3R
	VSC2 @ 6"	q 2065	2052	2043	2036	2031	2027	2007	1659	1394
		F 3.2+9R	3.4+7R	3.5+6R	3.6+5R	3.7+5R	3.7+4R	3.8+4R	3.8+3R	3.9+3R
	VSC2 @ 4"	q 2210	2205	2202	2199	2197	2195	2007	1659	1394
		F 2.9+9R	3+7R	3.1+6R	3.2+5R	3.3+5R	3.3+4R	3.3+4R	3.4+3R	3.4+3R
	VSC2 @ 24"	q 1579	1650	1446	1522	1376	1445	1331	1394	1301
		F 4+5R	4.2+4R	4.7+3R	4.7+2R	5.1+2R	5.1+2R	5.5+1R	5.4+1R	5.7+1R
	VSC2 @ 18"	q 1901	1900	1695	1727	1749	1616	1648	1673	1575
		F 3.6+5R	3.8+4R	4.3+3R	4.4+2R	4.4+2R	4.8+2R	4.8+2R	4.8+1R	5+1R
14	VSC2 @ 12"	q 2137	2095	2065	2043	2026	2013	2002	1993	1941
		F 3.3+5R	3.6+4R	3.7+3R	3.9+3R	4+2R	4+2R	4.1+2R	4.2+2R	4.2+1R
	VSC2 @ 8"	q 2436	2457	2397	2419	2376	2397	2363	2310	1941
		F 3+5R	3.1+4R	3.2+3R	3.3+3R	3.4+2R	3.4+2R	3.5+2R	3.5+2R	3.6+2R
12	VSC2 @ 6"	q 2602	2589	2580	2573	2568	2564	2561	2310	1941
		F 2.8+5R	2.9+4R	3+3R	3+3R	3.1+3R	3.1+2R	3.1+2R	3.2+2R	3.2+2R
10	VSC2 @ 4"	q 2762	2756	2753	2750	2748	2747	2746	2310	1941
		F 2.5+5R	2.6+4R	2.6+4R	2.7+3R	2.7+3R	2.7+2R	2.8+2R	2.8+2R	2.8+2R

See footnotes on page 28.

Type PLB™ -36

- 36/4 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



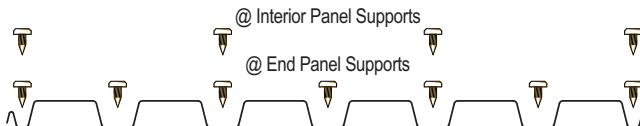
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 504 F -0.6+269R	524 2.1+215R	466 6.6+178R	487 7.4+153R	445 10.4+133R	465 10.4+119R	432 12.7+106R		
	VSC2 @ 18"	q 591 F -3.5+270R	590 -0.1+216R	536 3.9+179R	544 5.3+154R	550 6.3+135R	514 8.5+119R	522 8.9+107R		
	VSC2 @ 12"	q 650 F -5.3+271R	640 -1.6+216R	632 0.9+180R	627 2.6+154R	622 4+135R	619 5+120R	616 5.8+108R		
	VSC2 @ 8"	q 720 F -7.3+271R	725 -4.1+217R	711 -1.5+181R	716 0+155R	706 1.4+135R	711 2.2+120R	703 3.2+108R		
	VSC2 @ 6"	q 756 F -8.5+271R	753 -5.1+217R	751 -2.8+181R	750 -1.1+155R	749 0.1+136R	748 1.1+121R	747 1.8+108R		
	VSC2 @ 4"	q 790 F -9.8+272R	788 -6.4+217R	788 -4.1+181R	787 -2.5+155R	787 -1.3+136R	786 -0.3+121R	786 0.4+109R		
20	VSC2 @ 24"	q 638 F 2.1+170R	665 3.6+136R	598 6.7+113R	626 6.9+97R	576 9.1+84R	602 8.9+75R	563 10.5+67R	586 10.2+61R	553 11.5+56R
	VSC2 @ 18"	q 741 F -0.3+171R	743 1.8+137R	682 4.6+114R	693 5.3+97R	701 5.9+85R	660 7.4+76R	671 7.6+68R	679 7.8+62R	648 8.9+57R
	VSC2 @ 12"	q 807 F -1.7+171R	797 0.6+137R	790 2.2+114R	785 3.3+98R	781 4.1+86R	778 4.8+76R	775 5.3+68R	773 5.7+62R	771 6.1+57R
	VSC2 @ 8"	q 879 F -3.3+172R	884 -1.3+137R	872 0.4+114R	877 1.3+98R	868 2.3+86R	872 2.7+76R	865 3.4+69R	869 3.7+62R	863 4.1+57R
	VSC2 @ 6"	q 915 F -4.2+172R	912 -2+137R	911 -0.5+115R	910 0.5+98R	909 1.3+86R	908 1.9+76R	907 2.4+69R	907 2.8+62R	907 3.1+57R
	VSC2 @ 4"	q 946 F -5.1+172R	945 -3+138R	945 -1.5+115R	944 -0.5+98R	944 0.3+86R	944 0.9+76R	944 1.3+69R	943 1.7+63R	912 2+57R
18	VSC2 @ 24"	q 889 F 2.8+83R	928 3.2+67R	846 4.9+55R	884 4.8+48R	822 5.9+41R	857 5.7+37R	807 6.6+33R	838 6.4+30R	796 7+28R
	VSC2 @ 18"	q 1017 F 1.2+84R	1022 2.2+67R	951 3.6+56R	967 3.9+48R	978 4.1+42R	929 4.9+37R	943 5+33R	954 5+30R	917 5.6+28R
	VSC2 @ 12"	q 1093 F 0.4+84R	1084 1.5+67R	1078 2.2+56R	1073 2.7+48R	1070 3.1+42R	1067 3.4+37R	1064 3.7+34R	1062 3.9+30R	1061 4.1+28R
	VSC2 @ 8"	q 1172 F -0.5+84R	1178 0.4+67R	1166 1.2+56R	1171 1.6+48R	1162 2.1+42R	1167 2.3+37R	1160 2.7+34R	1164 2.8+31R	1158 3+28R
	VSC2 @ 6"	q 1208 F -1+84R	1206 0+67R	1205 0.7+56R	1204 1.2+48R	1203 1.6+42R	1203 1.9+37R	1202 2.1+34R	1202 2.3+31R	1202 2.5+28R
	VSC2 @ 4"	q 1239 F -1.5+84R	1238 -0.5+67R	1238 0.2+56R	1237 0.7+48R	1237 1.1+42R	1237 1.4+37R	1237 1.6+34R	1237 1.8+31R	1237 1.9+28R
16	VSC2 @ 24"	q 1127 F 3.6+47R	1176 3.7+38R	1081 4.9+31R	1128 4.8+27R	1055 5.6+24R	1098 5.3+21R	1039 6+19R	1077 5.7+17R	1028 6.3+16R
	VSC2 @ 18"	q 1277 F 2.3+48R	1284 2.8+38R	1205 3.8+32R	1224 3.9+27R	1237 4+24R	1182 4.6+21R	1199 4.6+19R	1212 4.6+17R	1170 5+16R
	VSC2 @ 12"	q 1362 F 1.6+48R	1353 2.2+38R	1347 2.7+32R	1343 3+27R	1339 3.2+24R	1336 3.4+21R	1334 3.5+19R	1332 3.7+17R	1330 3.8+16R
	VSC2 @ 8"	q 1447 F 0.8+48R	1453 1.3+38R	1441 1.9+32R	1447 2.1+27R	1437 2.4+24R	1443 2.5+21R	1435 2.7+19R	1440 2.7+17R	1434 2.9+16R
	VSC2 @ 6"	q 1484 F 0.4+48R	1483 1+38R	1481 1.4+32R	1480 1.7+27R	1480 1.9+24R	1479 2.1+21R	1478 2.2+19R	1478 2.3+17R	1478 2.4+16R
	VSC2 @ 4"	q 1515 F 0+48R	1515 0.6+38R	1514 1+32R	1514 1.3+27R	1514 1.5+24R	1514 1.7+21R	1514 1.8+19R	1513 1.9+17R	1513 2+16R

See footnotes on page 28.

Type PLB™-36

- **36/7/4 Pneutek Fastener Pattern at Supports**
- SDK61 at Supports 0.113 to 0.155" thick**
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 618 F 13.8+26R	640 13.7+21R	550 16.2+16R	578 15.6+14R	515 17.5+11R	541 16.9+10R	494 18.5+8R		
	VSC2 @ 18"	q 760 F 11.1+28R	753 11.6+22R	655 13.6+17R	666 13.6+15R	673 13.6+13R	613 15+11R	625 14.8+10R		
	VSC2 @ 12"	q 876 F 9.4+29R	849 10.1+23R	830 10.7+19R	816 11+16R	806 11.3+14R	797 11.5+12R	791 11.7+11R		
	VSC2 @ 8"	q 1047 F 7.4+29R	1057 7.7+24R	1018 8.4+19R	1030 8.4+17R	1002 8.8+15R	1013 8.8+13R	992 9.1+12R		
	VSC2 @ 6"	q 1158 F 6.3+30R	1147 6.8+24R	1139 7.1+20R	1133 7.3+17R	1129 7.5+15R	1125 7.6+13R	1001 7.8+12R		
	VSC2 @ 4"	q 1281 F 5.1+30R	1276 5.5+24R	1272 5.8+20R	1269 6+17R	1267 6.1+15R	1236 6.2+13R	1001 6.3+12R		
	VSC2 @ 24"	q 794 F 11.2+16R	832 10.9+13R	719 12.8+10R	759 12.2+9R	680 13.6+7R	716 13+6R	655 14.2+5R	688 13.6+5R	639 14.6+4R
	VSC2 @ 18"	q 977 F 9+17R	974 9.2+14R	855 10.7+11R	872 10.6+9R	884 10.5+8R	809 11.5+7R	826 11.3+6R	840 11.2+6R	785 12+5R
	VSC2 @ 12"	q 1120 F 7.6+18R	1092 8.1+14R	1073 8.4+12R	1059 8.6+10R	1048 8.8+9R	1039 8.9+8R	1032 9+7R	1026 9.1+6R	912 9.2+6R
	VSC2 @ 8"	q 1318 F 6.1+19R	1331 6.2+15R	1289 6.6+12R	1304 6.6+11R	1274 6.9+9R	1288 6.9+8R	1265 7.1+7R	1085 7.1+7R	912 7.2+6R
20	VSC2 @ 6"	q 1437 F 5.2+19R	1427 5.5+15R	1420 5.7+13R	1415 5.9+11R	1411 6+9R	1408 6+8R	1313 6.1+8R	1085 6.2+7R	912 6.2+6R
	VSC2 @ 4"	q 1561 F 4.3+19R	1557 4.6+15R	1554 4.7+13R	1552 4.9+11R	1550 5+10R	1549 5+8R	1313 5.1+8R	1085 5.1+7R	912 5.2+6R
	VSC2 @ 24"	q 1133 F 7.3+8R	1195 6.8+7R	1043 7.9+5R	1105 7.4+5R	996 8.2+4R	1051 7.8+3R	967 8.4+3R	1015 8+3R	947 8.5+2R
	VSC2 @ 18"	q 1385 F 5.8+9R	1390 5.8+7R	1235 6.6+6R	1262 6.5+5R	1282 6.4+4R	1182 6.9+4R	1207 6.8+3R	1228 6.7+3R	1154 7.1+3R
	VSC2 @ 12"	q 1573 F 4.9+9R	1543 5.1+7R	1523 5.3+6R	1508 5.4+5R	1496 5.4+4R	1487 5.5+4R	1480 5.5+4R	1474 5.6+3R	1394 5.6+3R
	VSC2 @ 8"	q 1812 F 4+9R	1831 4.1+7R	1785 4.3+6R	1804 4.3+5R	1771 4.4+5R	1788 4.4+4R	1762 4.5+4R	1659 4.5+3R	1394 4.5+3R
	VSC2 @ 6"	q 1946 F 3.6+9R	1937 3.7+7R	1931 3.8+6R	1926 3.8+5R	1923 3.9+5R	1920 3.9+4R	1917 4+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2076 F 3.1+9R	2072 3.2+8R	2070 3.3+6R	2068 3.3+5R	2067 3.4+5R	2066 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1460 F 6.2+4R	1546 5.8+4R	1358 6.6+3R	1440 6.2+2R	1304 6.9+2R	1376 6.5+2R	1270 7+1R	1334 6.7+1R	1247 7.1+1R
	VSC2 @ 18"	q 1776 F 4.9+5R	1787 4.9+4R	1600 5.6+3R	1636 5.4+3R	1663 5.3+2R	1540 5.8+2R	1574 5.7+2R	1600 5.6+2R	1510 5.9+1R
16	VSC2 @ 12"	q 2001 F 4.2+5R	1970 4.3+4R	1949 4.4+3R	1933 4.5+3R	1921 4.5+2R	1911 4.6+2R	1903 4.6+2R	1897 4.6+2R	1891 4.6+2R
	VSC2 @ 8"	q 2276 F 3.4+5R	2298 3.4+4R	2249 3.6+3R	2270 3.6+3R	2234 3.7+3R	2253 3.6+2R	2225 3.7+2R	2242 3.7+2R	1941 3.8+2R
	VSC2 @ 6"	q 2422 F 3+5R	2413 3.1+4R	2407 3.2+4R	2403 3.2+3R	2399 3.2+3R	2397 3.3+2R	2394 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 2559 F 2.6+5R	2555 2.7+4R	2553 2.7+4R	2551 2.8+3R	2550 2.8+3R	2549 2.8+2R	2548 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 651 F 12.3+28R	666 12.6+22R	574 14.8+17R	598 14.5+15R	534 16.3+12R	557 15.9+11R	509 17.3+10R		
	VSC2 @ 18"	q 787 F 10.2+29R	775 10.8+23R	677 12.7+18R	684 12.8+16R	689 12.9+14R	628 14.2+12R	638 14.1+11R		
	VSC2 @ 12"	q 899 F 8.8+29R	868 9.6+23R	847 10.2+19R	831 10.6+16R	819 10.9+14R	809 11.1+13R	801 11.3+11R		
	VSC2 @ 8"	q 1062 F 7.1+30R	1069 7.4+24R	1028 8.1+20R	1039 8.2+17R	1010 8.6+15R	1021 8.6+13R	999 8.9+12R		
	VSC2 @ 6"	q 1168 F 6.1+30R	1155 6.6+24R	1146 6.9+20R	1139 7.2+17R	1134 7.4+15R	1130 7.5+13R	1001 7.7+12R		
	VSC2 @ 4"	q 1285 F 5+30R	1279 5.4+24R	1275 5.7+20R	1272 5.9+17R	1270 6.1+15R	1236 6.2+13R	1001 6.3+12R		
	VSC2 @ 24"	q 831 F 10.2+17R	860 10.2+14R	746 11.9+11R	781 11.5+9R	701 12.8+8R	734 12.4+7R	672 13.5+6R	703 13+6R	653 13.9+5R
	VSC2 @ 18"	q 1006 F 8.4+18R	998 8.7+14R	879 10.1+11R	892 10.1+10R	901 10.1+9R	826 11.1+7R	841 10.9+7R	853 10.8+6R	798 11.6+5R
20	VSC2 @ 12"	q 1143 F 7.2+18R	1112 7.7+15R	1090 8.1+12R	1074 8.3+10R	1061 8.5+9R	1051 8.7+8R	1043 8.8+7R	1036 8.9+6R	912 9+6R
	VSC2 @ 8"	q 1331 F 5.9+19R	1342 6+15R	1300 6.5+12R	1313 6.5+11R	1282 6.8+9R	1295 6.8+8R	1271 7+7R	1085 7+7R	912 7.1+6R
	VSC2 @ 6"	q 1446 F 5.1+19R	1434 5.4+15R	1426 5.6+13R	1420 5.8+11R	1416 5.9+9R	1412 6+8R	1313 6.1+8R	1085 6.1+7R	912 6.2+6R
	VSC2 @ 4"	q 1565 F 4.2+19R	1560 4.5+15R	1556 4.7+13R	1554 4.8+11R	1552 4.9+10R	1550 5+9R	1313 5.1+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1176 F 6.8+8R	1228 6.6+7R	1075 7.5+5R	1131 7.2+5R	1021 7.9+4R	1072 7.5+4R	987 8.2+3R	1033 7.8+3R	964 8.3+3R
	VSC2 @ 18"	q 1418 F 5.6+9R	1416 5.6+7R	1261 6.4+6R	1284 6.3+5R	1301 6.2+4R	1200 6.8+4R	1224 6.7+3R	1242 6.6+3R	1168 7+3R
	VSC2 @ 12"	q 1597 F 4.8+9R	1564 5+7R	1541 5.2+6R	1524 5.3+5R	1510 5.3+4R	1500 5.4+4R	1491 5.4+4R	1484 5.5+3R	1394 5.5+3R
	VSC2 @ 8"	q 1826 F 4+9R	1841 4+7R	1795 4.2+6R	1812 4.2+5R	1778 4.4+5R	1794 4.3+4R	1768 4.5+4R	1659 4.4+3R	1394 4.5+3R
18	VSC2 @ 6"	q 1954 F 3.5+9R	1944 3.7+7R	1936 3.8+6R	1931 3.8+5R	1927 3.9+5R	1924 3.9+4R	1921 3.9+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2079 F 3+9R	2075 3.2+8R	2072 3.2+6R	2070 3.3+5R	2068 3.4+5R	2067 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1510 F 5.9+5R	1583 5.6+4R	1394 6.4+3R	1469 6+3R	1332 6.6+2R	1400 6.3+2R	1294 6.8+2R	1354 6.5+2R	1267 7+1R
	VSC2 @ 18"	q 1812 F 4.7+5R	1815 4.8+4R	1629 5.4+3R	1661 5.3+3R	1683 5.2+2R	1561 5.7+2R	1592 5.6+2R	1616 5.5+2R	1526 5.8+2R
	VSC2 @ 12"	q 2026 F 4.1+5R	1992 4.2+4R	1967 4.3+3R	1949 4.4+3R	1935 4.5+3R	1924 4.5+2R	1915 4.5+2R	1908 4.6+2R	1902 4.6+2R
	VSC2 @ 8"	q 2289 F 3.4+5R	2308 3.4+4R	2258 3.6+3R	2278 3.5+3R	2242 3.6+2R	2260 3.6+2R	2232 3.7+2R	2248 3.7+2R	1941 3.7+2R
	VSC2 @ 6"	q 2429 F 3+5R	2419 3.1+4R	2413 3.1+4R	2407 3.2+3R	2403 3.2+3R	2400 3.2+2R	2398 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 2561 F 2.6+5R	2558 2.7+4R	2555 2.7+4R	2553 2.8+3R	2551 2.8+3R	2550 2.8+2R	2549 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 827 F 10.4+28R	815 11+22R	700 13+17R	710 13.1+15R	632 14.6+12R	647 14.5+11R	589 15.8+9R		
	VSC2 @ 18"	q 968 F 9+29R	930 9.8+23R	807 11.4+18R	801 11.7+15R	796 11.9+13R	722 13.1+11R	726 13.2+10R		
	VSC2 @ 12"	q 1088 F 8+29R	1033 8.8+23R	993 9.4+19R	964 9.9+16R	941 10.3+14R	923 10.6+12R	908 10.8+11R		
	VSC2 @ 8"	q 1278 F 6.6+30R	1272 7+24R	1210 7.7+20R	1215 7.9+17R	1172 8.3+15R	1180 8.4+13R	1001 8.7+12R		
	VSC2 @ 6"	q *1414 F 5.8+30R	*1385 6.3+24R	*1365 6.7+20R	*1350 7+17R	*1338 7.2+15R	1236 7.4+13R	1001 7.5+12R		
	VSC2 @ 4"	q *1581 F 4.8+30R	*1566 5.3+24R	*1556 5.6+20R	*1548 5.8+17R	*1542 6+15R	1236 6.1+13R	1001 6.2+12R		
	VSC2 @ 24"	q 1041 F 8.9+17R	1040 9.2+14R	898 10.6+11R	918 10.5+9R	820 11.7+8R	845 11.5+7R	771 12.5+6R	797 12.2+5R	738 13+5R
	VSC2 @ 18"	q 1225 F 7.6+18R	1189 8+14R	1038 9.3+11R	1038 9.4+10R	1037 9.5+8R	944 10.4+7R	953 10.4+6R	961 10.3+6R	894 11+5R
	VSC2 @ 12"	q 1378 F 6.7+18R	1319 7.2+14R	1277 7.6+12R	1245 7.9+10R	1221 8.2+9R	1202 8.3+8R	1186 8.5+7R	1085 8.6+6R	912 8.7+6R
	VSC2 @ 8"	q *1606 F 5.6+19R	*1605 5.8+15R	1538 6.3+12R	1548 6.3+11R	1501 6.6+9R	1513 6.6+8R	1313 6.9+7R	1085 6.8+7R	912 7+6R
20	VSC2 @ 6"	q *1760 F 4.9+19R	*1734 5.2+15R	*1714 5.5+13R	*1700 5.7+11R	*1689 5.8+9R	*1621 5.9+8R	1313 6+8R	1085 6+7R	912 6.1+6R
	VSC2 @ 4"	q *1939 F 4.1+19R	*1926 4.4+15R	*1916 4.6+13R	*1910 4.8+11R	*1904 4.9+10R	*1621 4.9+8R	1313 5+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1452 F 6.3+8R	1470 6.2+7R	1277 7+5R	1317 6.8+5R	1183 7.5+4R	1226 7.2+3R	1123 7.8+3R	1165 7.5+3R	1083 8+2R
	VSC2 @ 18"	q 1714 F 5.2+9R	1680 5.4+7R	1481 6.1+6R	1489 6.1+5R	1495 6+4R	1369 6.5+4R	1387 6.5+3R	1401 6.4+3R	1310 6.8+3R
	VSC2 @ 12"	q 1921 F 4.6+9R	1856 4.8+7R	1810 5+6R	1775 5.1+5R	1748 5.2+4R	1726 5.3+4R	1709 5.3+4R	1659 5.4+3R	1394 5.4+3R
	VSC2 @ 8"	q *2214 F 3.9+9R	*2221 3.9+7R	*2145 4.2+6R	*2161 4.2+5R	*2106 4.3+5R	*2124 4.3+4R	2007 4.4+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q *2398 F 3.5+9R	*2372 3.6+7R	*2354 3.7+6R	*2340 3.8+5R	*2330 3.8+5R	*2321 3.9+4R	2007 3.9+4R	1659 3.9+3R	1394 4+3R
	VSC2 @ 4"	q *2595 F 3+9R	*2584 3.1+8R	*2576 3.2+6R	*2570 3.3+5R	*2565 3.3+5R	*2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1850 F 5.4+5R	1886 5.2+4R	1647 6+3R	1706 5.7+2R	1537 6.3+2R	1598 6.1+2R	1468 6.5+2R	1525 6.3+1R	1420 6.7+1R
	VSC2 @ 18"	q 2183 F 4.5+5R	2152 4.6+4R	1909 5.2+3R	1926 5.1+3R	1938 5.1+2R	1782 5.5+2R	1807 5.4+2R	1828 5.3+2R	1714 5.7+1R
	VSC2 @ 12"	q 2440 F 3.9+5R	2369 4.1+4R	2318 4.2+3R	2281 4.3+3R	2251 4.4+2R	2228 4.4+2R	2209 4.5+2R	2193 4.5+2R	1941 4.5+2R
16	VSC2 @ 8"	q *2788 F 3.3+5R	*2800 3.3+4R	*2716 3.5+3R	*2737 3.5+3R	*2676 3.6+3R	*2698 3.6+2R	*2651 3.7+2R	2310 3.6+2R	1941 3.7+2R
	VSC2 @ 6"	q *2995 F 3+5R	*2970 3.1+4R	*2952 3.1+4R	*2938 3.2+3R	*2928 3.2+3R	*2920 3.2+2R	*2795 3.2+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q *3211 F 2.6+5R	*3200 2.7+4R	*3192 2.7+4R	*3186 2.8+3R	*3182 2.8+3R	*3179 2.8+2R	*2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1300 plf, 1600 plf, 2100 plf, or 2600 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper fastener spacing and end distance.

2. See additional footnotes on page 28.

Type PLB™ -36

- 36/4 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



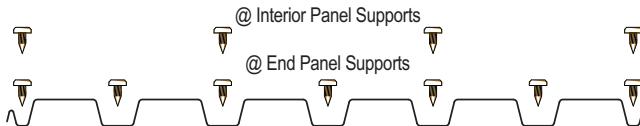
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 538 F -0.6+269R	557 2.1+215R	492 6.6+178R	514 7.4+153R	467 10.4+133R	488 10.4+119R	451 12.7+106R		
	VSC2 @ 18"	q 634 F -3.5+270R	631 -0.1+216R	568 3.9+179R	576 5.3+154R	582 6.3+135R	541 8.5+119R	550 8.9+107R		
	VSC2 @ 12"	q 702 F -5.3+271R	688 -1.6+216R	678 0.9+180R	671 2.6+154R	665 4+135R	661 5+120R	657 5.8+108R		
	VSC2 @ 8"	q 786 F -7.3+271R	791 -4.1+217R	773 -1.5+181R	779 0+155R	767 1.4+135R	772 2.2+120R	762 3.2+108R		
	VSC2 @ 6"	q 831 F -8.5+271R	827 -5.1+217R	824 -2.8+181R	822 -1.1+155R	821 0.1+136R	819 1.1+121R	818 1.8+108R		
	VSC2 @ 4"	q 874 F -9.8+272R	873 -6.4+217R	872 -4.1+181R	871 -2.5+155R	870 -1.3+136R	870 -0.3+121R	869 0.4+109R		
20	VSC2 @ 24"	q 668 F 2.1+170R	695 3.6+136R	622 6.7+113R	651 6.9+97R	597 9.1+84R	624 8.9+75R	581 10.5+67R	605 10.2+61R	570 11.5+56R
	VSC2 @ 18"	q 779 F -0.3+171R	780 1.8+137R	712 4.6+114R	723 5.3+97R	732 5.9+85R	686 7.4+76R	697 7.6+68R	706 7.8+62R	672 8.9+57R
	VSC2 @ 12"	q 852 F -1.7+171R	841 0.6+137R	832 2.2+114R	826 3.3+98R	821 4.1+86R	817 4.8+76R	814 5.3+68R	811 5.7+62R	809 6.1+57R
	VSC2 @ 8"	q 936 F -3.3+172R	942 -1.3+137R	926 0.4+114R	932 1.3+98R	921 2.3+86R	927 2.7+76R	918 3.4+69R	923 3.7+62R	912 4.1+57R
	VSC2 @ 6"	q 978 F -4.2+172R	975 -2+137R	973 -0.5+115R	971 0.5+98R	970 1.3+86R	969 1.9+76R	969 2.4+69R	968 2.8+62R	912 3.1+57R
	VSC2 @ 4"	q 1016 F -5.1+172R	1015 -3+138R	1014 -1.5+115R	1013 -0.5+98R	1013 0.3+86R	1013 0.9+76R	1012 1.3+69R	1012 1.7+63R	912 2+57R
18	VSC2 @ 24"	q 898 F 2.8+83R	938 3.2+67R	853 4.9+55R	892 4.8+48R	829 5.9+41R	864 5.7+37R	813 6.6+33R	845 6.4+30R	802 7+28R
	VSC2 @ 18"	q 1029 F 1.2+84R	1034 2.2+67R	961 3.6+56R	977 3.9+48R	988 4.1+42R	938 4.9+37R	952 5+33R	963 5+30R	925 5.6+28R
	VSC2 @ 12"	q 1108 F 0.4+84R	1098 1.5+67R	1091 2.2+56R	1086 2.7+48R	1083 3.1+42R	1079 3.4+37R	1077 3.7+34R	1075 3.9+30R	1073 4.1+28R
	VSC2 @ 8"	q 1189 F -0.5+84R	1195 0.4+67R	1182 1.2+56R	1188 1.6+48R	1178 2.1+42R	1184 2.3+37R	1176 2.7+34R	1181 2.8+31R	1174 3+28R
	VSC2 @ 6"	q 1227 F -1+84R	1225 0+67R	1223 0.7+56R	1222 1.2+48R	1221 1.6+42R	1221 1.9+37R	1220 2.1+34R	1220 2.3+31R	1219 2.5+28R
	VSC2 @ 4"	q 1259 F -1.5+84R	1258 -0.5+67R	1257 0.2+56R	1257 0.7+48R	1257 1.1+42R	1257 1.4+37R	1256 1.6+34R	1256 1.8+31R	1256 1.9+28R
16	VSC2 @ 24"	q 1106 F 3.6+47R	1154 3.7+38R	1063 4.9+31R	1108 4.8+27R	1039 5.6+24R	1080 5.3+21R	1023 6+19R	1060 5.7+17R	1013 6.3+16R
	VSC2 @ 18"	q 1249 F 2.3+48R	1257 2.8+38R	1182 3.8+32R	1200 3.9+27R	1213 4+24R	1160 4.6+21R	1176 4.6+19R	1189 4.6+17R	1149 5+16R
	VSC2 @ 12"	q 1330 F 1.6+48R	1322 2.2+38R	1316 2.7+32R	1312 3+27R	1309 3.2+24R	1306 3.4+21R	1304 3.5+19R	1303 3.7+17R	1301 3.8+16R
	VSC2 @ 8"	q 1409 F 0.8+48R	1416 1.3+38R	1404 1.9+32R	1410 2.1+27R	1401 2.4+24R	1406 2.5+21R	1399 2.7+19R	1404 2.7+17R	1398 2.9+16R
	VSC2 @ 6"	q 1444 F 0.4+48R	1443 1+38R	1442 1.4+32R	1441 1.7+27R	1440 1.9+24R	1440 2.1+21R	1440 2.2+19R	1439 2.3+17R	1439 2.4+16R
	VSC2 @ 4"	q 1473 F 0+48R	1473 0.6+38R	1472 1+32R	1472 1.3+27R	1472 1.5+24R	1472 1.7+21R	1472 1.8+19R	1471 1.9+17R	1471 2+16R

See footnotes on page 28.

Type PLB™-36

- **36/7/4 Pneutek Fastener Pattern at Supports**
- SDK63 at Supports 0.155 to 0.250" thick**
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 653 F 13.8+26R	672 13.7+21R	576 16.2+16R	601 15.6+14R	535 17.5+11R	560 16.9+10R	510 18.5+8R		
	VSC2 @ 18"	q 802 F 11.1+28R	791 11.6+22R	685 13.6+17R	693 13.6+15R	700 13.6+13R	635 15+11R	646 14.8+10R		
	VSC2 @ 12"	q 928 F 9.4+29R	895 10.1+23R	872 10.7+19R	855 11+16R	842 11.3+14R	832 11.5+12R	823 11.7+11R		
	VSC2 @ 8"	q 1119 F 7.4+29R	1128 7.7+24R	1081 8.4+19R	1094 8.4+17R	1060 8.8+15R	1073 8.8+13R	1001 9.1+12R		
	VSC2 @ 6"	q 1249 F 6.3+30R	1234 6.8+24R	1223 7.1+20R	1215 7.3+17R	1209 7.5+15R	1204 7.6+13R	1001 7.8+12R		
	VSC2 @ 4"	q 1399 F 5.1+30R	1392 5.5+24R	1387 5.8+20R	1383 6+17R	1380 6.1+15R	1236 6.2+13R	1001 6.3+12R		
20	VSC2 @ 24"	q 825 F 11.2+16R	859 10.9+13R	741 12.8+10R	780 12.2+9R	697 13.6+7R	734 13+6R	670 14.2+5R	703 13.6+5R	652 14.6+4R
	VSC2 @ 18"	q 1014 F 9+17R	1009 9.2+14R	882 10.7+11R	898 10.6+9R	910 10.5+8R	830 11.5+7R	847 11.3+6R	861 11.2+6R	803 12+5R
	VSC2 @ 12"	q 1167 F 7.6+18R	1135 8.1+14R	1112 8.4+12R	1096 8.6+10R	1083 8.8+9R	1073 8.9+8R	1065 9+7R	1058 9.1+6R	912 9.2+6R
	VSC2 @ 8"	q 1384 F 6.1+19R	1398 6.2+15R	1349 6.6+12R	1365 6.6+11R	1331 6.9+9R	1346 6.9+8R	1313 7.1+7R	1085 7.1+7R	912 7.2+6R
	VSC2 @ 6"	q 1519 F 5.2+19R	1506 5.5+15R	1498 5.7+13R	1491 5.9+11R	1486 6+9R	1482 6+8R	1313 6.1+8R	1085 6.2+7R	912 6.2+6R
	VSC2 @ 4"	q 1664 F 4.3+19R	1658 4.6+15R	1654 4.7+13R	1651 4.9+11R	1649 5+10R	1621 5+8R	1313 5.1+8R	1085 5.1+7R	912 5.2+6R
18	VSC2 @ 24"	q 1142 F 7.3+8R	1204 6.8+7R	1050 7.9+5R	1112 7.4+5R	1002 8.2+4R	1057 7.8+3R	972 8.4+3R	1021 8+3R	951 8.5+2R
	VSC2 @ 18"	q 1397 F 5.8+9R	1401 5.8+7R	1244 6.6+6R	1271 6.5+5R	1291 6.4+4R	1189 6.9+4R	1215 6.8+3R	1235 6.7+3R	1160 7.1+3R
	VSC2 @ 12"	q 1588 F 4.9+9R	1558 5.1+7R	1536 5.3+6R	1521 5.4+5R	1509 5.4+4R	1499 5.5+4R	1492 5.5+4R	1485 5.6+3R	1394 5.6+3R
	VSC2 @ 8"	q 1834 F 4+9R	1853 4.1+7R	1805 4.3+6R	1824 4.3+5R	1790 4.4+5R	1807 4.4+4R	1781 4.5+4R	1659 4.5+3R	1394 4.5+3R
	VSC2 @ 6"	q 1972 F 3.6+9R	1962 3.7+7R	1956 3.8+6R	1951 3.8+5R	1947 3.9+5R	1944 3.9+4R	1941 4+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2106 F 3.1+9R	2103 3.2+8R	2100 3.3+6R	2098 3.3+5R	2097 3.4+5R	2095 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
16	VSC2 @ 24"	q 1439 F 6.2+4R	1525 5.8+4R	1342 6.6+3R	1423 6.2+2R	1290 6.9+2R	1362 6.5+2R	1258 7+1R	1321 6.7+1R	1236 7.1+1R
	VSC2 @ 18"	q 1747 F 4.9+5R	1759 4.9+4R	1578 5.6+3R	1614 5.4+3R	1641 5.3+2R	1522 5.8+2R	1555 5.7+2R	1581 5.6+2R	1493 5.9+1R
	VSC2 @ 12"	q 1965 F 4.2+5R	1936 4.3+4R	1916 4.4+3R	1901 4.5+3R	1890 4.5+2R	1881 4.6+2R	1873 4.6+2R	1867 4.6+2R	1862 4.6+2R
	VSC2 @ 8"	q 2227 F 3.4+5R	2248 3.4+4R	2202 3.6+3R	2222 3.6+3R	2189 3.7+3R	2207 3.6+2R	2180 3.7+2R	2197 3.7+2R	1941 3.8+2R
	VSC2 @ 6"	q 2365 F 3+5R	2357 3.1+4R	2351 3.2+4R	2347 3.2+3R	2344 3.2+3R	2341 3.3+2R	2339 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 2492 F 2.6+5R	2489 2.7+4R	2487 2.7+4R	2485 2.8+3R	2484 2.8+3R	2483 2.8+2R	2482 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 692 F 12.3+28R	703 12.6+22R	603 14.8+17R	625 14.5+15R	556 16.3+12R	579 15.9+11R	527 17.3+10R		
	VSC2 @ 18"	q 835 F 10.2+29R	818 10.8+23R	710 12.7+18R	715 12.8+16R	719 12.9+14R	652 14.2+12R	662 14.1+11R		
	VSC2 @ 12"	q 955 F 8.8+29R	918 9.6+23R	892 10.2+19R	872 10.6+16R	858 10.9+14R	846 11.1+13R	836 11.3+11R		
	VSC2 @ 8"	q 1138 F 7.1+30R	1143 7.4+24R	1094 8.1+20R	1105 8.2+17R	1071 8.6+15R	1082 8.6+13R	1001 8.9+12R		
	VSC2 @ 6"	q 1262 F 6.1+30R	1244 6.6+24R	1232 6.9+20R	1223 7.2+17R	1216 7.4+15R	1211 7.5+13R	1001 7.7+12R		
	VSC2 @ 4"	q 1406 F 5+30R	1397 5.4+24R	1391 5.7+20R	1387 5.9+17R	1384 6.1+15R	1236 6.2+13R	1001 6.3+12R		
	VSC2 @ 24"	q 866 F 10.2+17R	891 10.2+14R	771 11.9+11R	805 11.5+9R	720 12.8+8R	754 12.4+7R	689 13.5+6R	720 13+6R	668 13.9+5R
20	VSC2 @ 18"	q 1048 F 8.4+18R	1036 8.7+14R	908 10.1+11R	920 10.1+10R	929 10.1+9R	848 11.1+7R	863 10.9+7R	875 10.8+6R	817 11.6+5R
	VSC2 @ 12"	q 1194 F 7.2+18R	1157 7.7+15R	1132 8.1+12R	1113 8.3+10R	1098 8.5+9R	1087 8.7+8R	1078 8.8+7R	1070 8.9+6R	912 9+6R
	VSC2 @ 8"	q 1400 F 5.9+19R	1410 6+15R	1362 6.5+12R	1376 6.5+11R	1341 6.8+9R	1355 6.8+8R	1313 7+7R	1085 7+7R	912 7.1+6R
	VSC2 @ 6"	q 1530 F 5.1+19R	1515 5.4+15R	1505 5.6+13R	1498 5.8+11R	1492 5.9+9R	1488 6+8R	1313 6.1+8R	1085 6.1+7R	912 6.2+6R
	VSC2 @ 4"	q 1668 F 4.2+19R	1662 4.5+15R	1657 4.7+13R	1654 4.8+11R	1652 4.9+10R	1621 5+9R	1313 5.1+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1187 F 6.8+8R	1238 6.6+7R	1083 7.5+5R	1138 7.2+5R	1027 7.9+4R	1079 7.5+4R	993 8.2+3R	1039 7.8+3R	969 8.3+3R
	VSC2 @ 18"	q 1431 F 5.6+9R	1429 5.6+7R	1271 6.4+6R	1294 6.3+5R	1310 6.2+4R	1208 6.8+4R	1232 6.7+3R	1250 6.6+3R	1175 7+3R
18	VSC2 @ 12"	q 1613 F 4.8+9R	1579 5+7R	1555 5.2+6R	1537 5.3+5R	1523 5.3+4R	1512 5.4+4R	1504 5.4+4R	1496 5.5+3R	1394 5.5+3R
	VSC2 @ 8"	q 1847 F 4+9R	1863 4+7R	1815 4.2+6R	1833 4.2+5R	1798 4.4+5R	1814 4.3+4R	1787 4.5+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q 1980 F 3.5+9R	1969 3.7+7R	1961 3.8+6R	1956 3.8+5R	1951 3.9+5R	1948 3.9+4R	1945 3.9+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2110 F 3+9R	2105 3.2+8R	2102 3.2+6R	2100 3.3+5R	2098 3.4+5R	2097 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1487 F 5.9+5R	1560 5.6+4R	1377 6.4+3R	1451 6+3R	1317 6.6+2R	1384 6.3+2R	1280 6.8+2R	1340 6.5+2R	1255 7+1R
	VSC2 @ 18"	q 1781 F 4.7+5R	1786 4.8+4R	1606 5.4+3R	1638 5.3+3R	1660 5.2+2R	1542 5.7+2R	1572 5.6+2R	1596 5.5+2R	1508 5.8+2R
	VSC2 @ 12"	q 1988 F 4.1+5R	1956 4.2+4R	1933 4.3+3R	1916 4.4+3R	1904 4.5+3R	1893 4.5+2R	1885 4.5+2R	1878 4.6+2R	1872 4.6+2R
16	VSC2 @ 8"	q 2239 F 3.4+5R	2257 3.4+4R	2211 3.6+3R	2229 3.5+3R	2196 3.6+3R	2213 3.6+2R	2186 3.7+2R	2201 3.7+2R	1941 3.7+2R
	VSC2 @ 6"	q 2371 F 3+5R	2362 3.1+4R	2356 3.1+4R	2351 3.2+3R	2348 3.2+3R	2345 3.2+2R	2342 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 2494 F 2.6+5R	2491 2.7+4R	2489 2.7+4R	2487 2.8+3R	2486 2.8+3R	2484 2.8+2R	2484 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 889 F 10.4+28R	867 11+22R	743 13+17R	748 13.1+15R	665 14.6+12R	678 14.5+11R	616 15.8+9R		
	VSC2 @ 18"	q 1034 F 9+29R	987 9.8+23R	853 11.4+18R	842 11.7+15R	834 11.9+13R	755 13.1+11R	757 13.2+10R		
	VSC2 @ 12"	q 1162 F 8+29R	1096 8.8+23R	1049 9.4+19R	1014 9.9+16R	986 10.3+14R	965 10.6+12R	947 10.8+11R		
	VSC2 @ 8"	q 1369 F 6.6+30R	1357 7+24R	1284 7.7+20R	1287 7.9+17R	1237 8.3+15R	1236 8.4+13R	1001 8.7+12R		
	VSC2 @ 6"	q *1523 F 5.8+30R	*1486 6.3+24R	*1460 6.7+20R	*1440 7+17R	*1425 7.2+15R	1236 7.4+13R	1001 7.5+12R		
	VSC2 @ 4"	q *1721 F 4.8+30R	*1700 5.3+24R	*1686 5.6+20R	*1675 5.8+17R	*1564 6+15R	1236 6.1+13R	1001 6.2+12R		
	VSC2 @ 24"	q 1092 F 8.9+17R	1083 9.2+14R	933 10.6+11R	950 10.5+9R	847 11.7+8R	871 11.5+7R	794 12.5+6R	819 12.2+5R	758 13+5R
	VSC2 @ 18"	q 1281 F 7.6+18R	1238 8+14R	1077 9.3+11R	1073 9.4+10R	1070 9.5+8R	972 10.4+7R	980 10.4+6R	987 10.3+6R	912 11+5R
	VSC2 @ 12"	q 1441 F 6.7+18R	1374 7.2+14R	1326 7.6+12R	1290 7.9+10R	1263 8.2+9R	1241 8.3+8R	1223 8.5+7R	1085 8.6+6R	912 8.7+6R
	VSC2 @ 8"	q 1687 F 5.6+19R	1683 5.8+15R	1607 6.3+12R	1615 6.3+11R	1562 6.6+9R	1575 6.6+8R	1313 6.9+7R	1085 6.8+7R	912 7+6R
20	VSC2 @ 6"	q *1857 F 4.9+19R	*1825 5.2+15R	*1801 5.5+13R	*1784 5.7+11R	*1771 5.8+9R	1621 5.9+8R	1313 6+8R	1085 6+7R	912 6.1+6R
	VSC2 @ 4"	q *2060 F 4.1+19R	*2044 4.4+15R	*2032 4.6+13R	*2024 4.8+11R	*2017 4.9+10R	1621 4.9+8R	1313 5+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1467 F 6.3+8R	1482 6.2+7R	1288 7+5R	1327 6.8+5R	1191 7.5+4R	1234 7.2+3R	1130 7.8+3R	1172 7.5+3R	1089 8+2R
	VSC2 @ 18"	q 1730 F 5.2+9R	1695 5.4+7R	1493 6.1+6R	1500 6.1+5R	1506 6+4R	1378 6.5+4R	1395 6.5+3R	1410 6.4+3R	1317 6.8+3R
	VSC2 @ 12"	q 1941 F 4.6+9R	1874 4.8+7R	1825 5+6R	1790 5.1+5R	1762 5.2+4R	1740 5.3+4R	1721 5.3+4R	1659 5.4+3R	1394 5.4+3R
	VSC2 @ 8"	q *2239 F 3.9+9R	*2246 3.9+7R	2167 4.2+6R	2183 4.2+5R	2127 4.3+5R	2145 4.3+4R	2007 4.4+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q *2428 F 3.5+9R	*2401 3.6+7R	*2382 3.7+6R	*2367 3.8+5R	*2356 3.8+5R	*2348 3.9+4R	2007 3.9+4R	1659 3.9+3R	1394 4+3R
	VSC2 @ 4"	q *2632 F 3+9R	*2620 3.1+8R	*2611 3.2+6R	*2605 3.3+5R	*2600 3.3+5R	*2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1819 F 5.4+5R	1857 5.2+4R	1624 6+3R	1684 5.7+2R	1518 6.3+2R	1579 6.1+2R	1452 6.5+2R	1510 6.3+1R	1407 6.7+1R
	VSC2 @ 18"	q 2146 F 4.5+5R	2118 4.6+4R	1882 5.2+3R	1899 5.1+3R	1912 5.1+2R	1760 5.5+2R	1786 5.4+2R	1807 5.3+2R	1696 5.7+1R
	VSC2 @ 12"	q 2395 F 3.9+5R	2329 4.1+4R	2281 4.2+3R	2245 4.3+3R	2218 4.4+2R	2195 4.4+2R	2177 4.5+2R	2162 4.5+2R	1941 4.5+2R
16	VSC2 @ 8"	q *2730 F 3.3+5R	*2743 3.3+4R	*2663 3.5+3R	*2684 3.5+3R	*2627 3.6+3R	*2648 3.6+2R	*2603 3.7+2R	2310 3.6+2R	1941 3.7+2R
	VSC2 @ 6"	q *2927 F 3+5R	*2904 3.1+4R	*2887 3.1+4R	*2875 3.2+3R	*2866 3.2+3R	*2858 3.2+2R	*2795 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q *3130 F 2.6+5R	*3120 2.7+4R	*3113 2.7+4R	*3108 2.8+3R	*3104 2.8+3R	*3101 2.8+2R	*2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1400 plf, 1700 plf, 2200 plf, or 2500 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper fastener spacing and end distance.

2. See additional footnotes on page 28.

Type PLB™ -36

- 36/4 Pneutek Fastener Pattern at Supports K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



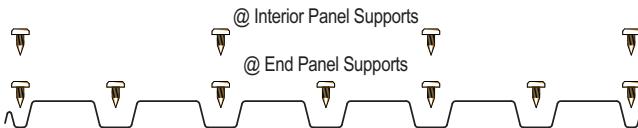
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 539 F -0.6+269R	558 2.1+215R	493 6.6+178R	515 7.4+153R	468 10.4+133R	488 10.4+119R	452 12.7+106R		
	VSC2 @ 18"	q 635 F -3.5+270R	633 -0.1+216R	569 3.9+179R	578 5.3+154R	583 6.3+135R	542 8.5+119R	551 8.9+107R		
	VSC2 @ 12"	q 704 F -5.3+271R	690 -1.6+216R	680 0.9+180R	672 2.6+154R	667 4+135R	662 5+120R	658 5.8+108R		
	VSC2 @ 8"	q 788 F -7.3+271R	793 -4.1+217R	775 -1.5+181R	781 0+155R	769 1.4+135R	774 2.2+120R	764 3.2+108R		
	VSC2 @ 6"	q 834 F -8.5+271R	830 -5.1+217R	827 -2.8+181R	825 -1.1+155R	823 0.1+136R	822 1.1+121R	821 1.8+108R		
	VSC2 @ 4"	q 877 F -9.8+272R	876 -6.4+217R	875 -4.1+181R	874 -2.5+155R	873 -1.3+136R	873 -0.3+121R	872 0.4+109R		
	VSC2 @ 24"	q 714 F 2.1+170R	741 3.6+136R	658 6.7+113R	688 6.9+97R	628 9.1+84R	656 8.9+75R	608 10.5+67R	634 10.2+61R	595 11.5+56R
	VSC2 @ 18"	q 838 F -0.3+171R	837 1.8+137R	758 4.6+114R	769 5.3+97R	778 5.9+85R	725 7.4+76R	737 7.6+68R	747 7.8+62R	708 8.9+57R
20	VSC2 @ 12"	q 924 F -1.7+171R	908 0.6+137R	897 2.2+114R	889 3.3+98R	882 4.1+86R	877 4.8+76R	873 5.3+68R	869 5.7+62R	866 6.1+57R
	VSC2 @ 8"	q 1026 F -3.3+172R	1032 -1.3+137R	1012 0.4+114R	1020 1.3+98R	1005 2.3+86R	1012 2.7+76R	1000 3.4+69R	1007 3.7+62R	912 4.1+57R
	VSC2 @ 6"	q 1079 F -4.2+172R	1075 -2+137R	1072 -0.5+115R	1070 0.5+98R	1068 1.3+86R	1067 1.9+76R	1066 2.4+69R	1065 2.8+62R	912 3.1+57R
	VSC2 @ 4"	q 1129 F -5.1+172R	1127 -3+138R	1126 -1.5+115R	1125 -0.5+98R	1125 0.3+86R	1124 0.9+76R	1124 1.3+69R	1124 1.7+63R	1085 2+57R
	VSC2 @ 24"	q 1027 F 2.8+83R	1069 3.2+67R	958 4.9+55R	1003 4.8+48R	920 5.9+41R	962 5.7+37R	897 6.6+33R	934 6.4+30R	880 7+28R
	VSC2 @ 18"	q 1195 F 1.2+84R	1197 2.2+67R	1095 3.6+56R	1113 3.9+48R	1126 4.1+42R	1057 4.9+37R	1074 5+33R	1088 5+30R	1036 5.6+28R
	VSC2 @ 12"	q 1306 F 0.4+84R	1289 1.5+67R	1276 2.2+56R	1267 2.7+48R	1260 3.1+42R	1255 3.4+37R	1250 3.7+34R	1246 3.9+30R	1243 4.1+28R
	VSC2 @ 8"	q 1431 F -0.5+84R	1439 0.4+67R	1417 1.2+56R	1426 1.6+48R	1409 2.1+42R	1418 2.3+37R	1405 2.7+34R	1412 2.8+31R	1394 3+28R
18	VSC2 @ 6"	q 1493 F -1+84R	1489 0+67R	1486 0.7+56R	1483 1.2+48R	1482 1.6+42R	1480 1.9+37R	1479 2.1+34R	1478 2.3+31R	1394 2.5+28R
	VSC2 @ 4"	q 1548 F -1.5+84R	1547 -0.5+67R	1546 0.2+56R	1545 0.7+48R	1544 1.1+42R	1544 1.4+37R	1543 1.6+34R	1543 1.8+31R	1394 1.9+28R
	VSC2 @ 24"	q 1312 F 3.6+47R	1368 3.7+38R	1235 4.9+31R	1293 4.8+27R	1193 5.6+24R	1246 5.3+21R	1167 6+19R	1214 5.7+17R	1148 6.3+16R
	VSC2 @ 18"	q 1516 F 2.3+48R	1521 2.8+38R	1403 3.8+32R	1426 3.9+27R	1442 4+24R	1361 4.6+21R	1383 4.6+19R	1400 4.6+17R	1339 5+16R
	VSC2 @ 12"	q 1645 F 1.6+48R	1627 2.2+38R	1614 2.7+32R	1605 3+27R	1598 3.2+24R	1592 3.4+21R	1587 3.5+19R	1583 3.7+17R	1580 3.8+16R
	VSC2 @ 8"	q 1784 F 0.8+48R	1794 1.3+38R	1770 1.9+32R	1780 2.1+27R	1763 2.4+24R	1772 2.5+21R	1758 2.7+19R	1767 2.7+17R	1755 2.9+16R
	VSC2 @ 6"	q 1851 F 0.4+48R	1847 1+38R	1844 1.4+32R	1842 1.7+27R	1840 1.9+24R	1839 2.1+21R	1838 2.2+19R	1837 2.3+17R	1836 2.4+16R
	VSC2 @ 4"	q 1909 F 0+48R	1907 0.6+38R	1906 1+32R	1906 1.3+27R	1905 1.5+24R	1905 1.7+21R	1904 1.8+19R	1904 1.9+17R	1904 2+16R

See footnotes on page 28.

Type PLB™-36

- **36/7/4 Pneutek Fastener Pattern at Supports**
- K64 at Supports 0.187 to 0.312" thick**
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 654 F 13.8+26R	673 13.7+21R	576 16.2+16R	602 15.6+14R	536 17.5+11R	561 16.9+10R	511 18.5+8R		
	VSC2 @ 18"	q 803 F 11.1+28R	792 11.6+22R	686 13.6+17R	694 13.6+15R	701 13.6+13R	636 15+11R	647 14.8+10R		
	VSC2 @ 12"	q 929 F 9.4+29R	896 10.1+23R	873 10.7+19R	856 11+16R	843 11.3+14R	833 11.5+12R	824 11.7+11R		
	VSC2 @ 8"	q 1121 F 7.4+29R	1131 7.7+24R	1083 8.4+19R	1096 8.4+17R	1062 8.8+15R	1075 8.8+13R	1001 9.1+12R		
	VSC2 @ 6"	q 1252 F 6.3+30R	1237 6.8+24R	1226 7.1+20R	1218 7.3+17R	1212 7.5+15R	1207 7.6+13R	1001 7.8+12R		
	VSC2 @ 4"	q 1403 F 5.1+30R	1396 5.5+24R	1391 5.8+20R	1387 6+17R	1384 6.1+15R	1236 6.2+13R	1001 6.3+12R		
20	VSC2 @ 24"	q 873 F 11.2+16R	903 10.9+13R	775 12.8+10R	813 12.2+9R	725 13.6+7R	760 13+6R	693 14.2+5R	726 13.6+5R	672 14.6+4R
	VSC2 @ 18"	q 1073 F 9+17R	1062 9.2+14R	923 10.7+11R	937 10.6+9R	947 10.5+8R	861 11.5+7R	878 11.3+6R	891 11.2+6R	829 12+5R
	VSC2 @ 12"	q 1239 F 7.6+18R	1199 8.1+14R	1171 8.4+12R	1151 8.6+10R	1135 8.8+9R	1123 8.9+8R	9+7R 9.1+6R	1113 9.1+6R	1085 9.2+6R
	VSC2 @ 8"	q 1484 F 6.1+19R	1498 6.2+15R	1440 6.6+12R	1457 6.6+11R	1416 6.9+9R	1433 6.9+8R	1313 7.1+7R	1085 7.1+7R	912 7.2+6R
	VSC2 @ 6"	q 1646 F 5.2+19R	1628 5.5+15R	1616 5.7+13R	1607 5.9+11R	1601 6+9R	1595 6+8R	1313 6.1+8R	1085 6.2+7R	912 6.2+6R
	VSC2 @ 4"	q 1826 F 4.3+19R	1818 4.6+15R	1812 4.7+13R	1808 4.9+11R	1805 5+10R	1621 5+8R	1313 5.1+8R	1085 5.1+7R	912 5.2+6R
18	VSC2 @ 24"	q 1271 F 7.3+8R	1326 6.8+7R	1145 7.9+5R	1206 7.4+5R	1079 8.2+4R	1135 7.8+3R	1038 8.4+3R	1089 8+3R	1010 8.5+2R
	VSC2 @ 18"	q 1563 F 5.8+9R	1556 5.8+7R	1362 6.6+6R	1387 6.5+5R	1406 6.4+4R	1284 6.9+4R	1310 6.8+3R	1332 6.7+3R	1243 7.1+3R
	VSC2 @ 12"	q 1796 F 4.9+9R	1748 5.1+7R	1715 5.3+6R	1690 5.4+5R	1671 5.4+4R	1657 5.5+4R	1644 5.5+4R	1634 5.6+3R	1394 5.6+3R
	VSC2 @ 8"	q 2124 F 4+9R	2146 4.1+7R	2074 4.3+6R	2099 4.3+5R	2047 4.4+5R	2070 4.4+4R	2007 4.5+4R	1659 4.5+3R	1394 4.5+3R
	VSC2 @ 6"	q 2328 F 3.6+9R	2309 3.7+7R	2296 3.8+6R	2287 3.8+5R	2280 3.9+5R	2274 3.9+4R	2007 4+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2542 F 3.1+9R	2534 3.2+8R	2529 3.3+6R	2525 3.3+5R	2521 3.4+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
16	VSC2 @ 24"	q 1643 F 6.2+4R	1724 5.8+4R	1495 6.6+3R	1580 6.2+2R	1418 6.9+2R	1494 6.5+2R	1370 7+1R	1438 6.7+1R	1337 7.1+1R
	VSC2 @ 18"	q 2017 F 4.9+5R	2017 4.9+4R	1776 5.6+3R	1813 5.4+3R	1839 5.3+2R	1686 5.8+2R	1722 5.7+2R	1751 5.6+2R	1639 5.9+1R
	VSC2 @ 12"	q 2308 F 4.2+5R	2255 4.3+4R	2218 4.4+3R	2191 4.5+3R	2170 4.5+2R	2154 4.6+2R	2141 4.6+2R	2130 4.6+2R	1941 4.6+2R
	VSC2 @ 8"	q 2699 F 3.4+5R	2728 3.4+4R	2647 3.6+3R	2677 3.6+3R	2619 3.7+3R	2646 3.6+2R	2602 3.7+2R	2310 3.7+2R	1941 3.8+2R
	VSC2 @ 6"	q 2931 F 3+5R	2912 3.1+4R	2899 3.2+4R	2890 3.2+3R	2883 3.2+3R	2877 3.3+2R	2795 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 3165 F 2.6+5R	3158 2.7+4R	3152 2.7+4R	3148 2.8+3R	3145 2.8+3R	3143 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Pneutek Fastener Pattern at Supports K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 693 F 12.3+28R	704 12.6+22R	604 14.8+17R	625 14.5+15R	557 16.3+12R	580 15.9+11R	528 17.3+10R		
	VSC2 @ 18"	q 836 F 10.2+29R	819 10.8+23R	711 12.7+18R	716 12.8+16R	720 12.9+14R	653 14.2+12R	663 14.1+11R		
	VSC2 @ 12"	q 957 F 8.8+29R	920 9.6+23R	893 10.2+19R	874 10.6+16R	859 10.9+14R	847 11.1+13R	837 11.3+11R		
	VSC2 @ 8"	q 1140 F 7.1+30R	1145 7.4+24R	1097 8.1+20R	1107 8.2+17R	1073 8.6+15R	1084 8.6+13R	1001 8.9+12R		
	VSC2 @ 6"	q 1265 F 6.1+30R	1247 6.6+24R	1235 6.9+20R	1226 7.2+17R	1219 7.4+15R	1214 7.5+13R	1001 7.7+12R		
	VSC2 @ 4"	q 1410 F 5+30R	1401 5.4+24R	1395 5.7+20R	1391 5.9+17R	1387 6.1+15R	1236 6.2+13R	1001 6.3+12R		
20	VSC2 @ 24"	q 921 F 10.2+17R	941 10.2+14R	810 11.9+11R	842 11.5+9R	751 12.8+8R	784 12.4+7R	715 13.5+6R	745 13+6R	690 13.9+5R
	VSC2 @ 18"	q 1113 F 8.4+18R	1095 8.7+14R	954 10.1+11R	963 10.1+10R	970 10.1+9R	883 11.1+7R	897 10.9+7R	909 10.8+6R	846 11.6+5R
	VSC2 @ 12"	q 1272 F 7.2+18R	1227 7.7+15R	1195 8.1+12R	1172 8.3+10R	1154 8.5+9R	1140 8.7+8R	1129 8.8+7R	1085 8.9+6R	912 9+6R
	VSC2 @ 8"	q 1506 F 5.9+19R	1515 6+15R	1456 6.5+12R	1470 6.5+11R	1429 6.8+9R	1444 6.8+8R	1313 7+7R	1085 7+7R	912 7.1+6R
	VSC2 @ 6"	q 1660 F 5.1+19R	1640 5.4+15R	1627 5.6+13R	1617 5.8+11R	1609 5.9+9R	1603 6+8R	1313 6.1+8R	1085 6.1+7R	912 6.2+6R
	VSC2 @ 4"	q 1832 F 4.2+19R	1823 4.5+15R	1817 4.7+13R	1812 4.8+11R	1809 4.9+10R	1621 5+9R	1313 5.1+8R	1085 5.1+7R	912 5.1+6R
18	VSC2 @ 24"	q 1333 F 6.8+8R	1374 6.6+7R	1190 7.5+5R	1243 7.2+5R	1113 7.9+4R	1165 7.5+4R	1066 8.2+3R	1114 7.8+3R	1034 8.3+3R
	VSC2 @ 18"	q 1613 F 5.6+9R	1596 5.6+7R	1401 6.4+6R	1420 6.3+5R	1435 6.2+4R	1312 6.8+4R	1335 6.7+3R	1354 6.6+3R	1265 7+3R
	VSC2 @ 12"	q 1836 F 4.8+9R	1782 5+7R	1744 5.2+6R	1716 5.3+5R	1694 5.3+4R	1677 5.4+4R	1663 5.4+4R	1652 5.5+3R	1394 5.5+3R
	VSC2 @ 8"	q 2149 F 4+9R	2165 4+7R	2092 4.2+6R	2113 4.2+5R	2062 4.4+5R	2082 4.3+4R	2007 4.5+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q 2343 F 3.5+9R	2322 3.7+7R	2307 3.8+6R	2297 3.8+5R	2288 3.9+5R	2282 3.9+4R	2007 3.9+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2549 F 3+9R	2540 3.2+8R	2533 3.2+6R	2529 3.3+5R	2525 3.4+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
16	VSC2 @ 24"	q 1716 F 5.9+5R	1780 5.6+4R	1548 6.4+3R	1623 6+3R	1458 6.6+2R	1529 6.3+2R	1403 6.8+2R	1468 6.5+2R	1365 7+1R
	VSC2 @ 18"	q 2074 F 4.7+5R	2062 4.8+4R	1822 5.4+3R	1851 5.3+3R	1872 5.2+2R	1718 5.7+2R	1750 5.6+2R	1776 5.5+2R	1664 5.8+2R
	VSC2 @ 12"	q 2351 F 4.1+5R	2292 4.2+4R	2250 4.3+3R	2219 4.4+3R	2196 4.5+3R	2177 4.5+2R	2161 4.5+2R	2149 4.6+2R	1941 4.6+2R
	VSC2 @ 8"	q 2725 F 3.4+5R	2747 3.4+4R	2666 3.6+3R	2692 3.5+3R	2634 3.6+3R	2659 3.6+2R	2614 3.7+2R	2310 3.7+2R	1941 3.7+2R
	VSC2 @ 6"	q 2946 F 3+5R	2925 3.1+4R	2910 3.1+4R	2900 3.2+3R	2891 3.2+3R	2885 3.2+2R	2795 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 3172 F 2.6+5R	3163 2.7+4R	3157 2.7+4R	3152 2.8+3R	3149 2.8+3R	3146 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Pneutek Fastener Pattern at Supports
- K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 891 F 10.4+28R	869 11+22R	744 13+17R	749 13.1+15R	666 14.6+12R	679 14.5+11R	617 15.8+9R		
	VSC2 @ 18"	q 1037 F 9+29R	989 9.8+23R	854 11.4+18R	844 11.7+15R	836 11.9+13R	756 13.1+11R	758 13.2+10R		
	VSC2 @ 12"	q 1165 F 8+29R	1098 8.8+23R	1050 9.4+19R	1015 9.9+16R	988 10.3+14R	966 10.6+12R	949 10.8+11R		
	VSC2 @ 8"	q 1372 F 6.6+30R	1360 7+24R	1286 7.7+20R	1289 7.9+17R	1239 8.3+15R	1236 8.4+13R	1001 8.7+12R		
	VSC2 @ 6"	q *1526 F 5.8+30R	*1489 6.3+24R	*1463 6.7+20R	*1443 7+17R	*1428 7.2+15R	1236 7.4+13R	1001 7.5+12R		
	VSC2 @ 4"	q *1725 F 4.8+30R	*1705 5.3+24R	*1690 5.6+20R	*1679 5.8+17R	*1564 6+15R	1236 6.1+13R	1001 6.2+12R		
	VSC2 @ 24"	q 1173 F 8.9+17R	1153 9.2+14R	990 10.6+11R	1002 10.5+9R	891 11.7+8R	912 11.5+7R	830 12.5+6R	853 12.2+5R	788 13+5R
	VSC2 @ 18"	q 1371 F 7.6+18R	1315 8+14R	1140 9.3+11R	1130 9.4+10R	1123 9.5+8R	1017 10.4+7R	1022 10.4+6R	1027 10.3+6R	912 11+5R
	VSC2 @ 12"	q 1542 F 6.7+18R	1460 7.2+14R	1403 7.6+12R	1360 7.9+10R	1327 8.2+9R	1300 8.3+8R	1279 8.5+7R	1085 8.6+6R	912 8.7+6R
	VSC2 @ 8"	q 1812 F 5.6+19R	1802 5.8+15R	1711 6.3+12R	1718 6.3+11R	1655 6.6+9R	1621 6.6+8R	1313 6.9+7R	1085 6.8+7R	912 7+6R
20	VSC2 @ 6"	q *2008 F 4.9+19R	*1965 5.2+15R	*1935 5.5+13R	*1912 5.7+11R	1895 5.8+9R	1621 5.9+8R	1313 6+8R	1085 6+7R	912 6.1+6R
	VSC2 @ 4"	q *2251 F 4.1+19R	*2229 4.4+15R	*2213 4.6+13R	*2201 4.8+11R	*2052 4.9+10R	1621 4.9+8R	1313 5+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1677 F 6.3+8R	1667 6.2+7R	1437 7+5R	1465 6.8+5R	1307 7.5+4R	1345 7.2+3R	1227 7.8+3R	1266 7.5+3R	1172 8+2R
	VSC2 @ 18"	q 1969 F 5.2+9R	1906 5.4+7R	1660 6.1+6R	1656 6.1+5R	1652 6+4R	1502 6.5+4R	1515 6.5+3R	1525 6.4+3R	1394 6.8+3R
	VSC2 @ 12"	q 2215 F 4.6+9R	2114 4.8+7R	2043 5+6R	1990 5.1+5R	1948 5.2+4R	1915 5.3+4R	1889 5.3+4R	1659 5.4+3R	1394 5.4+3R
	VSC2 @ 8"	q 2590 F 3.9+9R	2585 3.9+7R	2471 4.2+6R	2485 4.2+5R	2406 4.3+5R	2425 4.3+4R	2007 4.4+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q *2847 F 3.5+9R	*2799 3.6+7R	*2765 3.7+6R	*2740 3.8+5R	*2720 3.8+5R	2478 3.9+4R	2007 3.9+4R	1659 3.9+3R	1394 4+3R
	VSC2 @ 4"	q *3151 F 3+9R	*3127 3.1+8R	*3110 3.2+6R	*3098 3.3+5R	*3088 3.3+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 2139 F 5.4+5R	2144 5.2+4R	1855 6+3R	1901 5.7+2R	1701 6.3+2R	1756 6.1+2R	1605 6.5+2R	1661 6.3+1R	1540 6.7+1R
	VSC2 @ 18"	q 2519 F 4.5+5R	2453 4.6+4R	2148 5.2+3R	2150 5.1+3R	2152 5.1+2R	1962 5.5+2R	1983 5.4+2R	2001 5.3+2R	1865 5.7+1R
16	VSC2 @ 12"	q 2831 F 3.9+5R	2718 4.1+4R	2637 4.2+3R	2577 4.3+3R	2530 4.4+2R	2493 4.4+2R	2462 4.5+2R	2310 4.5+2R	1941 4.5+2R
	VSC2 @ 8"	q *3291 F 3.3+5R	*3294 3.3+4R	3163 3.5+3R	3185 3.5+3R	3093 3.6+3R	3118 3.6+2R	2795 3.7+2R	2310 3.6+2R	1941 3.7+2R
	VSC2 @ 6"	q *3595 F 3+5R	*3545 3.1+4R	*3510 3.1+4R	*3484 3.2+3R	*3463 3.2+3R	*3447 3.2+2R	2795 3.2+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q *3938 F 2.6+5R	*3915 2.7+4R	*3898 2.7+4R	*3886 2.7+3R	*3877 2.8+3R	*3451 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1400 plf, 1900 plf, 2600 plf, or 3200 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper fastener spacing and end distance.

2. See footnotes on page 28.

Type PLB™ -36

- 36/4 Pneutek Fastener Pattern at Supports K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



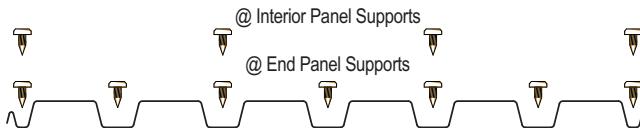
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 559 F -0.6+269R	576 2.1+215R	507 6.6+178R	529 7.4+153R	479 10.4+133R	500 10.4+119R	462 12.7+106R		
	VSC2 @ 18"	q 659 F -3.5+270R	655 -0.1+216R	587 3.9+179R	595 5.3+154R	601 6.3+135R	556 8.5+119R	565 8.9+107R		
	VSC2 @ 12"	q 732 F -5.3+271R	716 -1.6+216R	705 0.9+180R	696 2.6+154R	690 4+135R	685 5+120R	680 5.8+108R		
	VSC2 @ 8"	q 825 F -7.3+271R	830 -4.1+217R	810 -1.5+181R	816 0+155R	802 1.4+135R	808 2.2+120R	797 3.2+108R		
	VSC2 @ 6"	q 876 F -8.5+271R	871 -5.1+217R	868 -2.8+181R	865 -1.1+155R	863 0.1+136R	861 1.1+121R	860 1.8+108R		
	VSC2 @ 4"	q 926 F -9.8+272R	924 -6.4+217R	922 -4.1+181R	921 -2.5+155R	921 -1.3+136R	920 -0.3+121R	920 0.4+109R		
20	VSC2 @ 24"	q 722 F 2.1+170R	749 3.6+136R	664 6.7+113R	694 6.9+97R	633 9.1+84R	661 8.9+75R	613 10.5+67R	639 10.2+61R	599 11.5+56R
	VSC2 @ 18"	q 848 F -0.3+171R	846 1.8+137R	765 4.6+114R	777 5.3+97R	785 5.9+85R	732 7.4+76R	744 7.6+68R	754 7.8+62R	713 8.9+57R
	VSC2 @ 12"	q 936 F -1.7+171R	919 0.6+137R	908 2.2+114R	899 3.3+98R	892 4.1+86R	887 4.8+76R	882 5.3+68R	879 5.7+62R	876 6.1+57R
	VSC2 @ 8"	q 1041 F -3.3+172R	1048 -1.3+137R	1027 0.4+114R	1034 1.3+98R	1019 2.3+86R	1026 2.7+76R	1014 3.4+69R	1021 3.7+62R	912 4.1+57R
	VSC2 @ 6"	q 1097 F -4.2+172R	1092 -2+137R	1089 -0.5+115R	1087 0.5+98R	1085 1.3+86R	1083 1.9+76R	1082 2.4+69R	1081 2.8+62R	912 3.1+57R
	VSC2 @ 4"	q 1149 F -5.1+172R	1147 -3+138R	1146 -1.5+115R	1145 -0.5+98R	1144 0.3+86R	1144 0.9+76R	1143 1.3+69R	1085 1.7+63R	912 2+57R
18	VSC2 @ 24"	q 1051 F 2.8+83R	1094 3.2+67R	978 4.9+55R	1023 4.8+48R	937 5.9+41R	979 5.7+37R	912 6.6+33R	950 6.4+30R	894 7+28R
	VSC2 @ 18"	q 1227 F 1.2+84R	1228 2.2+67R	1120 3.6+56R	1138 3.9+48R	1151 4.1+42R	1078 4.9+37R	1096 5+33R	1110 5+30R	1056 5.6+28R
	VSC2 @ 12"	q 1344 F 0.4+84R	1325 1.5+67R	1311 2.2+56R	1301 2.7+48R	1293 3.1+42R	1287 3.4+37R	1282 3.7+34R	1278 3.9+30R	1274 4.1+28R
	VSC2 @ 8"	q 1478 F -0.5+84R	1487 0.4+67R	1463 1.2+56R	1472 1.6+48R	1454 2.1+42R	1463 2.3+37R	1449 2.7+34R	1457 2.8+31R	1394 3+28R
	VSC2 @ 6"	q 1546 F -1+84R	1541 0+67R	1538 0.7+56R	1535 1.2+48R	1533 1.6+42R	1532 1.9+37R	1531 2.1+34R	1530 2.3+31R	1394 2.5+28R
	VSC2 @ 4"	q 1607 F -1.5+84R	1605 -0.5+67R	1604 0.2+56R	1603 0.7+48R	1603 1.1+42R	1602 1.4+37R	1602 1.6+34R	1601 1.8+31R	1394 1.9+28R
16	VSC2 @ 24"	q 1393 F 3.6+47R	1451 3.7+38R	1301 4.9+31R	1362 4.8+27R	1250 5.6+24R	1306 5.3+21R	1218 6+19R	1269 5.7+17R	1196 6.3+16R
	VSC2 @ 18"	q 1622 F 2.3+48R	1625 2.8+38R	1487 3.8+32R	1511 3.9+27R	1528 4+24R	1435 4.6+21R	1459 4.6+19R	1478 4.6+17R	1407 5+16R
	VSC2 @ 12"	q 1772 F 1.6+48R	1748 2.2+38R	1732 2.7+32R	1720 3+27R	1710 3.2+24R	1702 3.4+21R	1696 3.5+19R	1691 3.7+17R	1687 3.8+16R
	VSC2 @ 8"	q 1940 F 0.8+48R	1952 1.3+38R	1921 1.9+32R	1933 2.1+27R	1911 2.4+24R	1922 2.5+21R	1905 2.7+19R	1915 2.7+17R	1901 2.9+16R
	VSC2 @ 6"	q 2024 F 0.4+48R	2018 1+38R	2014 1.4+32R	2011 1.7+27R	2009 1.9+24R	2007 2.1+21R	2005 2.2+19R	2004 2.3+17R	1941 2.4+16R
	VSC2 @ 4"	q 2098 F 0+48R	2096 0.6+38R	2095 1+32R	2093 1.3+27R	2093 1.5+24R	2092 1.7+21R	2091 1.8+19R	2091 1.9+17R	1941 2+16R

See footnotes on page 28.

Type PLB™-36

- 36/7/4 Pneutek Fastener Pattern at Supports
- K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 675 F 13.8+26R	691 13.7+21R	591 16.2+16R	615 15.6+14R	547 17.5+11R	571 16.9+10R	520 18.5+8R		
	VSC2 @ 18"	q 827 F 11.1+28R	813 11.6+22R	702 13.6+17R	710 13.6+15R	715 13.6+13R	648 15+11R	659 14.8+10R		
	VSC2 @ 12"	q 958 F 9.4+29R	921 10.1+23R	895 10.7+19R	876 11+16R	862 11.3+14R	851 11.5+12R	841 11.7+11R		
	VSC2 @ 8"	q 1160 F 7.4+29R	1169 7.7+24R	1116 8.4+19R	1129 8.4+17R	1093 8.8+15R	1106 8.8+13R	1001 9.1+12R		
	VSC2 @ 6"	q 1301 F 6.3+30R	1283 6.8+24R	1271 7.1+20R	1262 7.3+17R	1255 7.5+15R	1236 7.6+13R	1001 7.8+12R		
	VSC2 @ 4"	q 1469 F 5.1+30R	1460 5.5+24R	1454 5.8+20R	1449 6+17R	1446 6.1+15R	1236 6.2+13R	1001 6.3+12R		
20	VSC2 @ 24"	q 881 F 11.2+16R	910 10.9+13R	781 12.8+10R	818 12.2+9R	729 13.6+7R	765 13+6R	697 14.2+5R	730 13.6+5R	675 14.6+4R
	VSC2 @ 18"	q 1083 F 9+17R	1071 9.2+14R	930 10.7+11R	944 10.6+9R	954 10.5+8R	867 11.5+7R	883 11.3+6R	896 11.2+6R	834 12+5R
	VSC2 @ 12"	q 1251 F 7.6+18R	1210 8.1+14R	1181 8.4+12R	1160 8.6+10R	1144 8.8+9R	1131 8.9+8R	9+7R 9.1+6R	1121 9.1+6R	1085 9.2+6R
	VSC2 @ 8"	q 1501 F 6.1+19R	1515 6.2+15R	1455 6.6+12R	1472 6.6+11R	1430 6.9+9R	1447 6.9+8R	1313 7.1+7R	1085 7.1+7R	912 7.2+6R
	VSC2 @ 6"	q 1667 F 5.2+19R	1649 5.5+15R	1636 5.7+13R	1627 5.9+11R	1620 6+9R	1614 6+8R	1313 6.1+8R	1085 6.2+7R	912 6.2+6R
	VSC2 @ 4"	q 1853 F 4.3+19R	1845 4.6+15R	1839 4.7+13R	1835 4.9+11R	1831 5+10R	1621 5+8R	1313 5.1+8R	1085 5.1+7R	912 5.2+6R
18	VSC2 @ 24"	q 1296 F 7.3+8R	1349 6.8+7R	1163 7.9+5R	1223 7.4+5R	1093 8.2+4R	1150 7.8+3R	1050 8.4+3R	1101 8+3R	1021 8.5+2R
	VSC2 @ 18"	q 1594 F 5.8+9R	1585 5.8+7R	1384 6.6+6R	1409 6.5+5R	1427 6.4+4R	1301 6.9+4R	1327 6.8+3R	1349 6.7+3R	1258 7.1+3R
	VSC2 @ 12"	q 1835 F 4.9+9R	1783 5.1+7R	1747 5.3+6R	1721 5.4+5R	1700 5.4+4R	1684 5.5+4R	1671 5.5+4R	1659 5.6+3R	1394 5.6+3R
	VSC2 @ 8"	q 2179 F 4+9R	2201 4.1+7R	2124 4.3+6R	2149 4.3+5R	2094 4.4+5R	2118 4.4+4R	2007 4.5+4R	1659 4.5+3R	1394 4.5+3R
	VSC2 @ 6"	q 2396 F 3.6+9R	2375 3.7+7R	2361 3.8+6R	2350 3.8+5R	2342 3.9+5R	2335 3.9+4R	2007 4+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2628 F 3.1+9R	2619 3.2+8R	2613 3.3+6R	2608 3.3+5R	2604 3.4+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
16	VSC2 @ 24"	q 1726 F 6.2+4R	1802 5.8+4R	1556 6.6+3R	1639 6.2+2R	1466 6.9+2R	1543 6.5+2R	1411 7+1R	1480 6.7+1R	1374 7.1+1R
	VSC2 @ 18"	q 2122 F 4.9+5R	2114 4.9+4R	1851 5.6+3R	1885 5.4+3R	1911 5.3+2R	1745 5.8+2R	1781 5.7+2R	1810 5.6+2R	1690 5.9+1R
	VSC2 @ 12"	q 2439 F 4.2+5R	2374 4.3+4R	2329 4.4+3R	2296 4.5+3R	2271 4.5+2R	2251 4.6+2R	2234 4.6+2R	2221 4.6+2R	1941 4.6+2R
	VSC2 @ 8"	q 2883 F 3.4+5R	2913 3.4+4R	2816 3.6+3R	2849 3.6+3R	2780 3.7+3R	2811 3.6+2R	2757 3.7+2R	2310 3.7+2R	1941 3.8+2R
	VSC2 @ 6"	q 3157 F 3+5R	3133 3.1+4R	3115 3.2+4R	3103 3.2+3R	3093 3.2+3R	3085 3.3+2R	2795 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 3447 F 2.6+5R	3436 2.7+4R	3428 2.7+4R	3423 2.8+3R	3419 2.8+3R	3416 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/7 Pneutek Fastener Pattern at Supports
- K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 716 F 12.3+28R	724 12.6+22R	620 14.8+17R	641 14.5+15R	570 16.3+12R	592 15.9+11R	539 17.3+10R		
	VSC2 @ 18"	q 863 F 10.2+29R	842 10.8+23R	729 12.7+18R	733 12.8+16R	736 12.9+14R	667 14.2+12R	676 14.1+11R		
	VSC2 @ 12"	q 988 F 8.8+29R	947 9.6+23R	918 10.2+19R	896 10.6+16R	880 10.9+14R	866 11.1+13R	856 11.3+11R		
	VSC2 @ 8"	q 1182 F 7.1+30R	1186 7.4+24R	1132 8.1+20R	1143 8.2+17R	1105 8.6+15R	1117 8.6+13R	1001 8.9+12R		
	VSC2 @ 6"	q 1316 F 6.1+30R	1296 6.6+24R	1282 6.9+20R	1271 7.2+17R	1263 7.4+15R	1236 7.5+13R	1001 7.7+12R		
	VSC2 @ 4"	q 1477 F 5+30R	1467 5.4+24R	1459 5.7+20R	1454 5.9+17R	1450 6.1+15R	1236 6.2+13R	1001 6.3+12R		
	VSC2 @ 24"	q 930 F 10.2+17R	949 10.2+14R	817 11.9+11R	848 11.5+9R	757 12.8+8R	789 12.4+7R	719 13.5+6R	750 13+6R	694 13.9+5R
20	VSC2 @ 18"	q 1124 F 8.4+18R	1105 8.7+14R	962 10.1+11R	971 10.1+10R	977 10.1+9R	889 11.1+7R	903 10.9+7R	914 10.8+6R	851 11.6+5R
	VSC2 @ 12"	q 1285 F 7.2+18R	1239 7.7+15R	1206 8.1+12R	1182 8.3+10R	1163 8.5+9R	1149 8.7+8R	1137 8.8+7R	1085 8.9+6R	912 9+6R
	VSC2 @ 8"	q 1524 F 5.9+19R	1532 6+15R	1471 6.5+12R	1486 6.5+11R	1443 6.8+9R	1458 6.8+8R	1313 7+7R	1085 7+7R	912 7.1+6R
	VSC2 @ 6"	q 1682 F 5.1+19R	1661 5.4+15R	1647 5.6+13R	1636 5.8+11R	1628 5.9+9R	1621 6+8R	1313 6.1+8R	1085 6.1+7R	912 6.2+6R
	VSC2 @ 4"	q 1860 F 4.2+19R	1851 4.5+15R	1844 4.7+13R	1839 4.8+11R	1835 4.9+10R	1621 5+9R	1313 5.1+8R	1085 5.1+7R	912 5.1+6R
	VSC2 @ 24"	q 1361 F 6.8+8R	1400 6.6+7R	1210 7.5+5R	1263 7.2+5R	1130 7.9+4R	1181 7.5+4R	1080 8.2+3R	1128 7.8+3R	1046 8.3+3R
	VSC2 @ 18"	q 1647 F 5.6+9R	1628 5.6+7R	1426 6.4+6R	1444 6.3+5R	1457 6.2+4R	1330 6.8+4R	1353 6.7+3R	1372 6.6+3R	1281 7+3R
18	VSC2 @ 12"	q 1878 F 4.8+9R	1819 5+7R	1779 5.2+6R	1748 5.3+5R	1725 5.3+4R	1707 5.4+4R	1692 5.4+4R	1659 5.5+3R	1394 5.5+3R
	VSC2 @ 8"	q 2206 F 4+9R	2222 4+7R	2144 4.2+6R	2165 4.2+5R	2110 4.4+5R	2131 4.3+4R	2007 4.5+4R	1659 4.4+3R	1394 4.5+3R
	VSC2 @ 6"	q 2413 F 3.5+9R	2389 3.7+7R	2373 3.8+6R	2361 3.8+5R	2352 3.9+5R	2344 3.9+4R	2007 3.9+4R	1659 4+3R	1394 4+3R
	VSC2 @ 4"	q 2636 F 3+9R	2625 3.2+8R	2618 3.2+6R	2613 3.3+5R	2609 3.4+5R	2478 3.4+4R	2007 3.4+4R	1659 3.4+3R	1394 3.5+3R
	VSC2 @ 24"	q 1809 F 5.9+5R	1867 5.6+4R	1616 6.4+3R	1689 6+3R	1513 6.6+2R	1584 6.3+2R	1449 6.8+2R	1514 6.5+2R	1406 7+1R
	VSC2 @ 18"	q 2190 F 4.7+5R	2168 4.8+4R	1904 5.4+3R	1930 5.3+3R	1949 5.2+2R	1783 5.7+2R	1814 5.6+2R	1840 5.5+2R	1719 5.8+2R
	VSC2 @ 12"	q 2492 F 4.1+5R	2420 4.2+4R	2369 4.3+3R	2331 4.4+3R	2302 4.5+3R	2279 4.5+2R	2260 4.5+2R	2244 4.6+2R	1941 4.6+2R
16	VSC2 @ 8"	q 2916 F 3.4+5R	2938 3.4+4R	2840 3.6+3R	2869 3.5+3R	2799 3.6+3R	2827 3.6+2R	2773 3.7+2R	2310 3.7+2R	1941 3.7+2R
	VSC2 @ 6"	q 3178 F 3+5R	3150 3.1+4R	3130 3.1+4R	3116 3.2+3R	3105 3.2+3R	3096 3.2+2R	2795 3.3+2R	2310 3.3+2R	1941 3.3+2R
	VSC2 @ 4"	q 3456 F 2.6+5R	3443 2.7+4R	3435 2.7+4R	3429 2.8+3R	3424 2.8+3R	3420 2.8+2R	2795 2.8+2R	2310 2.8+2R	1941 2.9+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Pneutek Fastener Pattern at Supports
- K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 926	899	769	771	685	696	630		
		F 10.4+28R	11+22R	13+17R	13.1+15R	14.6+12R	14.5+11R	15.8+9R		
	VSC2 @ 18"	q 1075	1021	880	867	857	774	775		
		F 9+29R	9.8+23R	11.4+18R	11.7+15R	11.9+13R	13.1+11R	13.2+10R		
	VSC2 @ 12"	q 1206	1133	1081	1043	1013	989	970		
		F 8+29R	8.8+23R	9.4+19R	9.9+16R	10.3+14R	10.6+12R	10.8+11R		
20	VSC2 @ 8"	q 1423	1406	1327	1328	1274	1236	1001		
		F 6.6+30R	7+24R	7.7+20R	7.9+17R	8.3+15R	8.4+13R	8.7+12R		
	VSC2 @ 6"	q *1587	*1544	*1514	1492	1474	1236	1001		
		F 5.8+30R	6.3+24R	6.7+20R	7+17R	7.2+15R	7.4+13R	7.5+12R		
	VSC2 @ 4"	q *1803	*1779	*1762	*1749	*1564	1236	1001		
		F 4.8+30R	5.3+24R	5.6+20R	5.8+17R	6+15R	6.1+13R	6.2+12R		
18	VSC2 @ 24"	q 1187	1165	1000	1010	899	919	836	859	794
		F 8.9+17R	9.2+14R	10.6+11R	10.5+9R	11.7+8R	11.5+7R	12.5+6R	12.2+5R	13+5R
	VSC2 @ 18"	q 1386	1329	1150	1140	1131	1025	1030	1034	912
		F 7.6+18R	8+14R	9.3+11R	9.4+10R	9.5+8R	10.4+7R	10.4+6R	10.3+6R	11+5R
	VSC2 @ 12"	q 1559	1475	1416	1371	1337	1310	1288	1085	912
		F 6.7+18R	7.2+14R	7.6+12R	7.9+10R	8.2+9R	8.3+8R	8.5+7R	8.6+6R	8.7+6R
16	VSC2 @ 8"	q 1834	1821	1729	1735	1671	1621	1313	1085	912
		F 5.6+19R	5.8+15R	6.3+12R	6.3+11R	6.6+9R	6.6+8R	6.9+7R	6.8+7R	7+6R
	VSC2 @ 6"	q *2033	*1989	*1957	*1933	*1915	1621	1313	1085	912
		F 4.9+19R	5.2+15R	5.5+13R	5.7+11R	5.8+9R	5.9+8R	6+8R	6+7R	6.1+6R
	VSC2 @ 4"	q *2284	*2260	*2243	*2231	*2052	1621	1313	1085	912
		F 4.1+19R	4.4+15R	4.6+13R	4.8+11R	4.9+10R	4.9+8R	5+8R	5.1+7R	5.1+6R
14	VSC2 @ 24"	q 1719	1704	1466	1492	1330	1367	1246	1284	1188
		F 6.3+8R	6.2+7R	7+5R	6.8+5R	7.5+4R	7.2+3R	7.8+3R	7.5+3R	8+2R
	VSC2 @ 18"	q 2016	1947	1693	1686	1680	1526	1537	1547	1394
		F 5.2+9R	5.4+7R	6.1+6R	6.1+5R	6+4R	6.5+4R	6.5+3R	6.4+3R	6.8+3R
	VSC2 @ 12"	q 2268	2161	2084	2027	1983	1948	1919	1659	1394
		F 4.6+9R	4.8+7R	5+6R	5.1+5R	5.2+4R	5.3+4R	5.3+4R	5.4+3R	5.4+3R
12	VSC2 @ 8"	q 2657	2649	2528	2541	2456	2476	2007	1659	1394
		F 3.9+9R	3.9+7R	4.2+6R	4.2+5R	4.3+5R	4.3+4R	4.4+4R	4.4+3R	4.5+3R
	VSC2 @ 6"	q *2927	*2875	*2838	*2810	*2788	2478	2007	1659	1394
		F 3.5+9R	3.6+7R	3.7+6R	3.8+5R	3.8+5R	3.9+4R	3.9+4R	3.9+3R	4+3R
	VSC2 @ 4"	q *3252	*3226	*3207	*3193	*3136	2478	2007	1659	1394
		F 3+9R	3.1+8R	3.2+6R	3.3+5R	3.3+5R	3.4+4R	3.4+4R	3.4+3R	3.5+3R
10	VSC2 @ 24"	q 2276	2263	1951	1990	1776	1828	1667	1720	1593
		F 5.4+5R	5.2+4R	6+3R	5.7+2R	6.3+2R	6.1+2R	6.5+2R	6.3+1R	6.7+1R
	VSC2 @ 18"	q 2673	2588	2255	2249	2245	2041	2059	2073	1928
		F 4.5+5R	4.6+4R	5.2+3R	5.1+3R	5.1+2R	5.5+2R	5.4+2R	5.3+2R	5.7+1R
	VSC2 @ 12"	q 3007	2871	2775	2703	2647	2603	2566	2310	1941
		F 3.9+5R	4.1+4R	4.2+3R	4.3+3R	4.4+2R	4.4+2R	4.5+2R	4.5+2R	4.5+2R
8	VSC2 @ 8"	q *3515	*3509	3355	3374	3267	3293	2795	2310	1941
		F 3.3+5R	3.3+4R	3.5+3R	3.5+3R	3.6+3R	3.6+2R	3.7+2R	3.6+2R	3.7+2R
	VSC2 @ 6"	q *3862	*3798	*3753	*3719	*3692	3451	2795	2310	1941
		F 3+5R	3.1+4R	3.1+4R	3.2+3R	3.2+3R	3.2+2R	3.2+2R	3.3+2R	3.3+2R
	VSC2 @ 4"	q *4273	*4241	*4218	*4202	*4189	3451	2795	2310	1941
		F 2.6+5R	2.7+4R	2.7+4R	2.7+3R	2.8+3R	2.8+2R	2.8+2R	2.8+2R	2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors or other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1500 plf, 1900 plf, 2700 plf, or 3500 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 28.

Type PLB™-36

- **36/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with PunchLok II Tool**



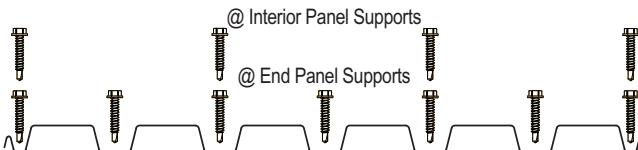
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	VSC2 @ 24"	q 535 F -24.1+542R	548 -12.1+360R	476 -4.5+269R	495 -0.9+215R	444 3+178R	464 4.5+153R	426 7.1+133R	445 7.8+118R	415 9.8+106R
	VSC2 @ 18"	q 632 F -25.2+542R	548 -12.1+360R	555 -5.9+270R	555 -2.2+216R	508 1.5+179R	516 3.2+153R	522 4.5+134R	489 6.5+119R	498 7.2+107R
	VSC2 @ 12"	q 632 F -25.2+542R	616 -13.2+361R	606 -6.9+270R	598 -3.1+216R	592 -0.5+180R	588 1.4+154R	585 2.8+135R	582 4+120R	580 4.9+108R
	VSC2 @ 8"	q 678 F -26+543R	681 -14.5+361R	665 -8.2+271R	669 -4.8+217R	658 -2.2+180R	663 -0.6+155R	655 0.9+135R	659 1.8+120R	653 2.7+108R
	VSC2 @ 6"	q 701 F -26.5+543R	697 -14.9+362R	694 -9.1+271R	692 -5.5+217R	691 -3.2+181R	690 -1.5+155R	689 -0.2+135R	688 0.8+120R	688 1.6+108R
	VSC2 @ 4"	q 723 F -27.1+543R	722 -15.7+362R	721 -10+271R	720 -6.6+217R	719 -4.3+181R	719 -2.7+155R	719 -1.4+136R	719 -0.5+121R	718 0.3+109R
20	VSC2 @ 24"	q 668 F -13.4+342R	689 -5.7+228R	606 -0.6+170R	632 1.6+136R	572 4.3+113R	599 5.1+96R	554 7+84R	578 7.3+75R	542 8.7+67R
	VSC2 @ 18"	q 781 F -14.4+343R	689 -5.7+228R	699 -1.9+171R	702 0.5+136R	648 3+113R	659 4+97R	667 4.8+85R	630 6.2+75R	640 6.6+68R
	VSC2 @ 12"	q 781 F -14.4+343R	765 -6.7+228R	757 -2.7+171R	749 -0.3+137R	743 1.4+114R	739 2.5+97R	736 3.4+85R	734 4.2+76R	732 4.7+68R
	VSC2 @ 8"	q 829 F -15.1+343R	833 -7.8+229R	818 -3.8+171R	823 -1.7+137R	812 0+114R	817 1+98R	809 1.9+86R	813 2.5+76R	807 3.1+68R
	VSC2 @ 6"	q 853 F -15.5+344R	850 -8.2+229R	848 -4.5+172R	846 -2.3+137R	845 -0.8+114R	844 0.3+98R	843 1.1+86R	842 1.7+76R	842 2.2+69R
	VSC2 @ 4"	q 875 F -16.1+344R	874 -8.9+229R	873 -5.3+172R	872 -3.1+137R	872 -1.6+115R	871 -0.6+98R	871 0.2+86R	871 0.8+76R	871 1.3+69R
18	VSC2 @ 24"	q 926 F -4.7+167R	960 -1.2+111R	856 1.6+83R	894 2.5+66R	818 4+55R	854 4.2+47R	797 5.2+41R	830 5.2+37R	784 5.9+33R
	VSC2 @ 18"	q 1068 F -5.7+168R	960 -1.2+111R	974 0.6+83R	980 1.7+67R	916 3+55R	930 3.4+47R	941 3.7+42R	897 4.5+37R	910 4.6+33R
	VSC2 @ 12"	q 1068 F -5.7+168R	1052 -1.9+112R	1043 0+84R	1036 1.2+67R	1030 1.9+56R	1026 2.5+48R	1023 2.9+42R	1021 3.2+37R	1019 3.5+33R
	VSC2 @ 8"	q 1123 F -6.2+168R	1129 -2.7+112R	1113 -0.7+84R	1118 0.3+67R	1107 1.1+56R	1112 1.5+48R	1104 2+42R	1109 2.3+37R	1103 2.6+34R
	VSC2 @ 6"	q 1149 F -6.5+168R	1146 -2.9+112R	1144 -1.1+84R	1143 -0.1+67R	1141 0.6+56R	1141 1.2+48R	1140 1.5+42R	1140 1.8+37R	1139 2.1+34R
	VSC2 @ 4"	q 1172 F -6.8+168R	1171 -3.3+112R	1170 -1.6+84R	1170 -0.5+67R	1169 0.2+56R	1169 0.7+48R	1169 1+42R	1169 1.3+37R	1169 1.6+34R
16	VSC2 @ 24"	q 1182 F -1.2+95R	1227 0.8+63R	1104 2.7+47R	1152 3.1+38R	1061 4.2+31R	1106 4.2+27R	1037 5+23R	1078 4.9+21R	1022 5.5+19R
	VSC2 @ 18"	q 1352 F -2+96R	1227 0.8+63R	1246 1.8+47R	1254 2.4+38R	1179 3.4+31R	1197 3.6+27R	1210 3.7+24R	1158 4.3+21R	1174 4.3+19R
	VSC2 @ 12"	q 1352 F -2+96R	1336 0.2+64R	1327 1.3+48R	1319 2+38R	1313 2.5+32R	1309 2.8+27R	1306 3+24R	1303 3.2+21R	1301 3.4+19R
	VSC2 @ 8"	q 1416 F -2.5+96R	1423 -0.5+64R	1405 0.7+48R	1412 1.2+38R	1400 1.7+32R	1406 2+27R	1397 2.3+24R	1402 2.4+21R	1395 2.6+19R
	VSC2 @ 6"	q 1445 F -2.8+96R	1442 -0.7+64R	1440 0.3+48R	1438 1+38R	1437 1.4+32R	1437 1.7+27R	1436 1.9+24R	1436 2.1+21R	1435 2.2+19R
	VSC2 @ 4"	q 1470 F -3.1+96R	1469 -1.1+64R	1469 0+48R	1468 0.6+38R	1468 1+32R	1467 1.2+27R	1467 1.5+24R	1467 1.6+21R	1467 1.8+19R

See footnotes on page 28.

Type PLB™-36

- 36/7/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	VSC2 @ 24"	q 687 F 5.1+59R	712 7.3+38R	588 9.8+27R	614 10.5+21R	529 12.4+16R	558 12.6+14R	499 14.1+11R	525 14+10R	479 15.3+8R
	VSC2 @ 18"	q 895 F 4.1+59R	712 7.3+38R	724 8.6+28R	832 9.4+22R	810 9.2+18R	794 9.7+15R	782 10.1+13R	773 10.4+12R	766 10.7+10R
	VSC2 @ 12"	q 895 F 4.1+59R	854 6.4+39R	832 7.7+28R	810 8.6+22R	794 9.2+18R	782 9.7+15R	773 10.1+13R	766 10.4+12R	761 10.7+10R
	VSC2 @ 8"	q 1024 F 3.5+60R	1034 5.2+39R	985 6.5+29R	995 6.9+23R	962 7.6+19R	973 7.8+16R	949 8.2+14R	960 8.3+12R	941 8.6+11R
	VSC2 @ 6"	q 1105 F 3.1+60R	1089 4.8+40R	1081 5.7+29R	1072 6.3+23R	1066 6.7+19R	1061 6.9+17R	1058 7.2+14R	1055 7.3+13R	1001 7.5+12R
	VSC2 @ 4"	q 1193 F 2.5+60R	1186 4+40R	1182 4.8+30R	1178 5.2+24R	1175 5.6+20R	1173 5.8+17R	1172 6+15R	1171 6.1+13R	1001 6.2+12R
	VSC2 @ 24"	q 873 F 5.1+37R	915 6.5+24R	762 8.5+16R	801 8.8+13R	696 10.2+10R	735 10.2+8R	661 11.4+6R	697 11.2+6R	639 12.2+5R
	VSC2 @ 18"	q 1132 F 4.2+37R	915 6.5+24R	935 7.3+17R	986 7.8+13R	826 9.1+10R	843 9.2+9R	856 9.3+8R	785 10.2+6R	802 10.2+6R
	VSC2 @ 12"	q 1132 F 4.2+37R	1091 5.6+24R	1068 6.5+18R	1045 7.1+14R	1028 7.5+11R	1016 7.8+10R	1007 8.1+8R	1000 8.3+7R	994 8.4+6R
	VSC2 @ 8"	q 1282 F 3.6+38R	1296 4.6+25R	1245 5.5+18R	1258 5.7+15R	1222 6.2+12R	1236 6.3+10R	1210 6.6+9R	1222 6.6+8R	1202 6.8+7R
20	VSC2 @ 6"	q 1370 F 3.2+38R	1356 4.3+25R	1348 4.8+19R	1340 5.2+15R	1334 5.4+12R	1330 5.6+11R	1327 5.8+9R	1325 5.9+8R	1313 5.9+7R
	VSC2 @ 4"	q 1461 F 2.7+38R	1454 3.6+25R	1451 4.1+19R	1448 4.4+15R	1446 4.6+13R	1444 4.7+11R	1443 4.9+9R	1442 4.9+8R	1313 5+8R
	VSC2 @ 24"	q 1235 F 4.3+18R	1308 4.8+11R	1100 6.1+8R	1163 6+6R	1019 6.9+5R	1079 6.7+4R	975 7.4+3R	1030 7.1+3R	949 7.7+2R
	VSC2 @ 18"	q 1588 F 3.4+18R	1308 4.8+11R	1342 5.1+8R	1349 5.3+7R	1203 6+5R	1230 6+4R	1250 6+4R	1155 6.5+3R	1180 6.4+3R
	VSC2 @ 12"	q 1588 F 3.4+18R	1542 4.1+12R	1517 4.5+9R	1492 4.8+7R	1474 5+6R	1461 5.1+5R	1451 5.2+4R	1443 5.3+4R	1436 5.3+3R
	VSC2 @ 8"	q 1775 F 3+18R	1795 3.4+12R	1737 3.8+9R	1754 3.9+7R	1714 4.1+6R	1731 4.2+5R	1701 4.3+4R	1717 4.3+4R	1694 4.4+4R
	VSC2 @ 6"	q 1878 F 2.7+19R	1864 3.2+12R	1856 3.4+9R	1848 3.6+7R	1843 3.7+6R	1839 3.8+5R	1836 3.8+5R	1834 3.9+4R	1832 3.9+4R
	VSC2 @ 4"	q 1978 F 2.3+19R	1972 2.8+12R	1969 3+9R	1966 3.1+7R	1964 3.2+6R	1963 3.3+5R	1962 3.3+5R	1961 3.4+4R	1960 3.4+4R
	VSC2 @ 24"	q 1597 F 3.9+10R	1698 4.2+6R	1437 5.2+4R	1522 5.1+3R	1340 5.9+2R	1421 5.7+2R	1288 6.2+1R	1360 6+1R	1257 6.5+1R
	VSC2 @ 18"	q 2040 F 3.1+10R	1698 4.2+6R	1744 4.4+5R	1756 4.5+4R	1576 5.1+3R	1612 5+2R	1638 5+2R	1520 5.4+2R	1553 5.4+1R
	VSC2 @ 12"	q 2040 F 3.1+10R	1988 3.6+7R	1961 3.9+5R	1932 4.1+4R	1912 4.2+3R	1897 4.3+3R	1886 4.3+2R	1877 4.4+2R	1870 4.4+2R
16	VSC2 @ 8"	q 2262 F 2.7+10R	2288 3+7R	2221 3.3+5R	2243 3.3+4R	2197 3.5+3R	2217 3.5+3R	2183 3.6+2R	2202 3.6+2R	2175 3.7+2R
	VSC2 @ 6"	q 2381 F 2.5+10R	2366 2.8+7R	2358 2.9+5R	2350 3+4R	2345 3.1+3R	2341 3.2+3R	2338 3.2+3R	2335 3.2+2R	2333 3.2+2R
	VSC2 @ 4"	q 2493 F 2.2+11R	2487 2.4+7R	2484 2.6+5R	2481 2.7+4R	2479 2.7+4R	2478 2.7+3R	2477 2.8+3R	2476 2.8+2R	2475 2.8+2R

See footnotes on page 28.

Type PLB™-36

- **36/7 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with PunchLok II Tool**



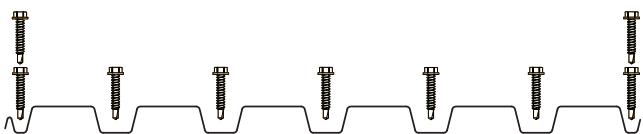
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	VSC2 @ 24"	q 747 F 4.1+60R	747 6.3+39R	617 8.5+28R	636 9.3+22R	550 10.9+18R	575 11.3+15R	515 12.6+12R	539 12.7+11R	493 13.8+9R
	VSC2 @ 18"	q 933 F 3.5+60R	747 6.3+39R	747 7.6+29R	739 8.5+23R	648 9.9+18R	657 10.4+15R	664 10.7+13R	606 11.8+11R	617 11.9+10R
	VSC2 @ 12"	q 933 F 3.5+60R	880 5.6+39R	851 6.9+29R	825 7.8+23R	808 8.5+19R	794 9+16R	784 9.4+14R	776 9.8+12R	770 10.1+11R
	VSC2 @ 8"	q 1048 F 3+60R	1048 4.7+40R	997 6+30R	1004 6.5+24R	970 7.2+19R	980 7.4+17R	956 7.9+14R	965 8+13R	947 8.3+11R
	VSC2 @ 6"	q 1120 F 2.7+60R	1100 4.4+40R	1088 5.4+30R	1078 6+24R	1071 6.4+20R	1066 6.7+17R	1062 6.9+15R	1059 7.1+13R	1001 7.3+12R
	VSC2 @ 4"	q 1200 F 2.2+61R	1190 3.8+40R	1185 4.6+30R	1181 5.1+24R	1178 5.4+20R	1175 5.7+17R	1174 5.8+15R	1172 6+13R	1001 6.1+12R
20	VSC2 @ 24"	q 940 F 4.3+37R	954 5.8+24R	795 7.5+17R	826 7.9+14R	719 9.2+11R	755 9.3+9R	679 10.4+8R	712 10.3+7R	654 11.2+6R
	VSC2 @ 18"	q 1171 F 3.7+38R	954 5.8+24R	960 6.6+18R	956 7.2+14R	846 8.3+11R	860 8.5+10R	870 8.7+8R	800 9.5+7R	815 9.6+6R
	VSC2 @ 12"	q 1171 F 3.7+38R	1117 5.1+25R	1087 6+18R	1061 6.6+14R	1043 7+12R	1029 7.4+10R	1018 7.6+9R	1010 7.9+8R	1003 8+7R
	VSC2 @ 8"	q 1305 F 3.2+38R	1309 4.3+25R	1256 5.2+19R	1266 5.5+15R	1230 5.9+12R	1242 6.1+11R	1216 6.4+9R	1228 6.4+8R	1208 6.6+7R
	VSC2 @ 6"	q 1384 F 2.9+38R	1365 4+25R	1354 4.6+19R	1345 5+15R	1339 5.3+12R	1385 5.5+11R	1331 5.6+9R	1328 5.7+8R	1313 5.8+7R
	VSC2 @ 4"	q 1467 F 2.5+38R	1458 3.5+25R	1454 4+19R	1450 4.3+15R	1448 4.5+13R	1446 4.7+11R	1444 4.8+9R	1443 4.9+8R	1313 4.9+8R
18	VSC2 @ 24"	q 1317 F 3.8+18R	1354 4.5+12R	1140 5.5+8R	1193 5.6+7R	1048 6.4+5R	1103 6.3+5R	998 6.9+4R	1049 6.8+3R	967 7.3+3R
	VSC2 @ 18"	q 1632 F 3.2+18R	1354 4.5+12R	1371 4.8+9R	1372 5+7R	1227 5.7+6R	1250 5.7+5R	1267 5.7+4R	1172 6.2+4R	1195 6.2+3R
	VSC2 @ 12"	q 1632 F 3.2+18R	1572 3.9+12R	1539 4.3+9R	1510 4.6+7R	1490 4.8+6R	1475 4.9+5R	1463 5+4R	1454 5.1+4R	1446 5.2+3R
	VSC2 @ 8"	q 1798 F 2.8+19R	1808 3.3+12R	1748 3.7+9R	1763 3.8+7R	1722 4+6R	1737 4.1+5R	1708 4.2+5R	1722 4.2+4R	1699 4.3+4R
	VSC2 @ 6"	q 1891 F 2.6+19R	1873 3.1+12R	1862 3.4+9R	1854 3.5+7R	1848 3.6+6R	1843 3.7+5R	1840 3.8+5R	1837 3.8+4R	1835 3.9+4R
	VSC2 @ 4"	q 1983 F 2.3+19R	1976 2.7+12R	1972 3+9R	1968 3.1+7R	1966 3.2+6R	1964 3.3+5R	1963 3.3+5R	1962 3.4+4R	1961 3.4+4R
16	VSC2 @ 24"	q 1694 F 3.5+10R	1751 3.9+7R	1484 4.8+5R	1558 4.8+4R	1375 5.4+3R	1449 5.3+2R	1316 5.9+2R	1383 5.7+2R	1279 6.1+1R
	VSC2 @ 18"	q 2088 F 2.9+10R	1751 3.9+7R	1778 4.1+5R	1783 4.3+4R	1603 4.8+3R	1635 4.8+3R	1658 4.8+2R	1540 5.2+2R	1570 5.2+2R
	VSC2 @ 12"	q 2088 F 2.9+10R	2021 3.4+7R	1984 3.7+5R	1952 3.9+4R	1929 4+3R	1913 4.1+3R	1900 4.2+2R	1890 4.3+2R	1881 4.3+2R
	VSC2 @ 8"	q 2287 F 2.6+11R	2301 2.9+7R	2233 3.2+5R	2252 3.2+4R	2205 3.4+3R	2224 3.4+3R	2190 3.5+3R	2207 3.5+2R	2181 3.6+2R
	VSC2 @ 6"	q 2395 F 2.4+11R	2375 2.7+7R	2365 2.9+5R	2356 3+4R	2349 3.1+3R	2345 3.1+3R	2341 3.2+3R	2339 3.2+2R	2336 3.2+2R
	VSC2 @ 4"	q 2499 F 2.1+11R	2491 2.4+7R	2487 2.5+5R	2484 2.6+4R	2481 2.7+4R	2479 2.7+3R	2478 2.8+3R	2477 2.8+2R	2476 2.8+2R

See footnotes on page 28.

Type PLB™-36

- 36/9 Screw Pattern at Supports
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	VSC2 @ 24"	q 987 F 3+60R	939 5.1+39R	778 6.9+29R	772 7.8+22R	665 9.1+18R	678 9.6+15R	605 10.7+13R	622 11+11R	567 11.9+9R
	VSC2 @ 18"	q 1174 F 2.7+60R	939 5.1+39R	913 6.4+29R	883 7.3+23R	769 8.5+18R	766 9+15R	764 9.5+13R	695 10.4+11R	701 10.6+10R
	VSC2 @ 12"	q 1174 F 2.7+60R	1081 4.7+40R	1027 6+29R	980 6.9+23R	946 7.6+19R	921 8.1+16R	902 8.6+14R	886 8.9+12R	874 9.3+11R
	VSC2 @ 8"	q *1303 F 2.4+60R	*1279 4.2+40R	*1201 5.4+30R	1199 6+24R	1145 6.6+19R	1152 6.9+17R	1114 7.4+14R	1123 7.5+13R	1001 7.8+11R
	VSC2 @ 6"	q *1392 F 2.2+60R	*1347 4+40R	*1321 4.9+30R	*1299 5.6+24R	*1283 6+20R	*1271 6.3+17R	*1262 6.6+15R	1236 6.8+13R	1001 7+12R
	VSC2 @ 4"	q *1500 F 1.9+61R	*1477 3.5+40R	*1464 4.3+30R	*1453 4.8+24R	*1445 5.2+20R	*1439 5.5+17R	*1434 5.7+15R	1236 5.8+13R	1001 6+12R
	VSC2 @ 24"	q 1227 F 3.4+38R	1186 4.8+25R	988 6.2+18R	993 6.8+14R	860 7.9+11R	883 8.2+9R	791 9+8R	817 9.1+7R	747 9.9+6R
	VSC2 @ 18"	q 1465 F 3+38R	1186 4.8+25R	1165 5.7+18R	1136 6.3+14R	996 7.3+11R	999 7.6+10R	1000 7.9+8R	913 8.6+7R	923 8.7+6R
	VSC2 @ 12"	q 1465 F 3+38R	1366 4.5+25R	1309 5.3+18R	1258 5.9+14R	1222 6.4+12R	1195 6.8+10R	1174 7.1+9R	1158 7.3+8R	1144 7.5+7R
	VSC2 @ 8"	q *1620 F 2.8+38R	*1603 3.9+25R	*1518 4.7+19R	*1520 5.1+15R	1462 5.6+12R	1472 5.7+10R	1431 6+9R	1443 6.1+8R	1313 6.3+7R
20	VSC2 @ 6"	q *1722 F 2.6+38R	*1679 3.7+25R	*1655 4.3+19R	*1633 4.8+15R	*1618 5+12R	*1607 5.2+11R	*1598 5.4+9R	*1591 5.5+8R	1313 5.7+7R
	VSC2 @ 4"	q *1840 F 2.3+38R	*1819 3.3+25R	*1808 3.8+19R	*1798 4.2+15R	*1791 4.4+13R	*1785 4.6+11R	*1781 4.7+9R	*1621 4.8+8R	1313 4.9+8R
	VSC2 @ 24"	q 1698 F 3.2+18R	1669 3.9+12R	1402 4.9+8R	1424 5.1+7R	1241 5.7+5R	1283 5.8+4R	1154 6.3+4R	1198 6.3+3R	1099 6.7+3R
	VSC2 @ 18"	q *2032 F 2.8+18R	1669 3.9+12R	1654 4.4+9R	1627 4.6+7R	1439 5.2+5R	1449 5.3+5R	1457 5.4+4R	1337 5.8+3R	1355 5.8+3R
	VSC2 @ 12"	q *2032 F 2.8+18R	1918 3.6+12R	1852 4+9R	1794 4.3+7R	1752 4.5+6R	1721 4.7+5R	1697 4.8+4R	1678 4.9+4R	1663 5+3R
	VSC2 @ 8"	q *2234 F 2.6+19R	*2223 3.1+12R	*2124 3.5+9R	*2133 3.7+7R	*2064 3.9+6R	*2080 4+5R	*2031 4.1+4R	*2048 4.1+4R	*2007 4.2+4R
	VSC2 @ 6"	q *2360 F 2.4+19R	*2316 3+12R	*2291 3.2+9R	*2269 3.4+7R	*2254 3.6+6R	*2242 3.6+5R	*2234 3.7+5R	*2227 3.8+4R	*2007 3.8+4R
	VSC2 @ 4"	q *2498 F 2.2+19R	*2478 2.7+12R	*2467 2.9+9R	*2457 3.1+7R	*2451 3.2+6R	*2446 3.2+5R	*2442 3.3+5R	*2439 3.3+4R	*2007 3.4+4R
	VSC2 @ 24"	q 2171 F 3+10R	2151 3.5+7R	1815 4.2+5R	1854 4.3+4R	1622 4.9+3R	1681 4.9+2R	1516 5.4+2R	1577 5.3+2R	1450 5.7+1R
	VSC2 @ 18"	q *2596 F 2.6+10R	2151 3.5+7R	2141 3.8+5R	2114 4+4R	1879 4.4+3R	1896 4.5+2R	1909 4.5+2R	1758 4.9+2R	1784 4.9+2R
	VSC2 @ 12"	q *2596 F 2.6+10R	2466 3.1+7R	2390 3.5+5R	2324 3.7+4R	2277 3.8+3R	2241 3.9+3R	2214 4+2R	2192 4.1+2R	2174 4.2+2R
16	VSC2 @ 8"	q *2844 F 2.4+11R	*2837 2.7+7R	*2723 3+5R	*2736 3.1+4R	*2657 3.3+3R	*2678 3.3+3R	*2621 3.4+2R	*2642 3.4+2R	*2598 3.5+2R
	VSC2 @ 6"	q *2994 F 2.3+11R	*2947 2.6+7R	*2920 2.8+5R	*2897 2.9+4R	*2880 3+3R	*2868 3.1+3R	*2859 3.1+3R	*2851 3.1+2R	*2795 3.2+2R
	VSC2 @ 4"	q *3153 F 2+11R	*3132 2.3+7R	*3121 2.5+5R	*3111 2.6+4R	*3104 2.7+4R	*3099 2.7+3R	*3095 2.7+3R	*3092 2.8+2R	*2795 2.8+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 36/14 pattern) or shall be limited to 1200 plf, 1500 plf, 2000 plf or 2500 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 28.

ShearTranz® II-42 with PLB™-36 Deck

- 36/7 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



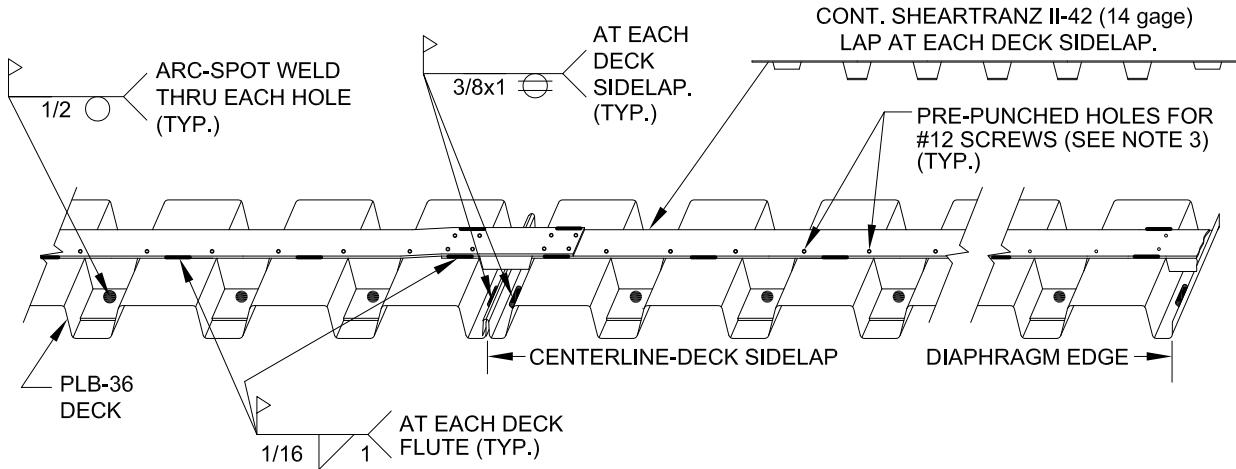
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	VSC2 @ 24"	q 700 F 9.9-2R	693 10.4-2R	581 11.6-3R	594 11.8-3R	516 12.9-3R	535 13-3R	482 14-3R		
	VSC2 @ 18"	q 842 F 9.1-2R	808 9.6-2R	688 10.7-2R	685 11-2R	682 11.3-2R	613 12.2-2R	618 12.3-2R		
	VSC2 @ 12"	q 971 F 8.5-1R	914 9.1-1R	875 9.5-2R	847 9.8-1R	825 10.1-1R	808 10.4-1R	794 10.6-1R		
	VSC2 @ 8"	q 1193 F 7.7-1R	1188 7.9-1R	1116 8.3-1R	1123 8.4-1R	1074 8.7-1R	1085 8.7-1R	1001 8.9-1R		
	VSC2 @ 6"	q 1370 F 7.1-1R	1334 7.3-1R	1309 7.5-1R	1290 7.7-1R	1276 7.8-1R	1236 7.9-1R	1001 7.9-1R		
	VSC2 @ 4"	q 1617 F 6.4+0R	1595 6.5+0R	1579 6.6+0R	1568 6.7+0R	1559 6.7+0R	1236 6.8+0R	1001 6.8+0R		
20	VSC2 @ 24"	q 970 F 8.3-2R	960 8.6-2R	815 9.6-2R	830 9.7-2R	727 10.5-2R	751 10.5-2R	676 11.3-2R	703 11.2-2R	644 11.9-2R
	VSC2 @ 18"	q 1162 F 7.5-1R	1116 7.9-1R	953 8.8-2R	949 8.9-1R	945 9.1-1R	850 9.8-2R	857 9.8-1R	863 9.8-1R	797 10.4-2R
	VSC2 @ 12"	q 1337 F 7-1R	1261 7.4-1R	1208 7.6-1R	1170 7.9-1R	1140 8.1-1R	1117 8.2-1R	1098 8.4-1R	1082 8.5-1R	912 8.6-1R
	VSC2 @ 8"	q 1634 F 6.2-1R	1627 6.3-1R	1531 6.6-1R	1541 6.6-1R	1476 6.9-1R	1491 6.9-1R	1313 7-1R	1085 7+0R	912 7.1+0R
	VSC2 @ 6"	q 1866 F 5.7-1R	1819 5.9+0R	1786 6+0R	1762 6.1+0R	1743 6.2+0R	1621 6.2+0R	1313 6.3+0R	1085 6.3+0R	912 6.3+0R
	VSC2 @ 4"	q 2184 F 5.1+0R	2156 5.2+0R	2137 5.3+0R	2122 5.3+0R	2052 5.4+0R	1621 5.4+0R	1313 5.4+0R	1085 5.4+0R	912 5.4+0R
18	VSC2 @ 24"	q 1575 F 5.9-1R	1548 5.9-1R	1315 6.6-1R	1333 6.5-1R	1179 7-1R	1208 6.9-1R	1092 7.4-1R	1127 7.2-1R	1035 7.6-1R
	VSC2 @ 18"	q 1872 F 5.2-1R	1789 5.4-1R	1530 5.9-1R	1517 5.9-1R	1507 5.9-1R	1356 6.3-1R	1364 6.3-1R	1371 6.3-1R	1266 6.6-1R
	VSC2 @ 12"	q 2141 F 4.8-1R	2013 5-1R	1924 5.1+0R	1859 5.2+0R	1809 5.3+0R	1770 5.3+0R	1738 5.4+0R	1659 5.4+0R	1394 5.4+0R
	VSC2 @ 8"	q 2596 F 4.2+0R	2579 4.2+0R	2424 4.4+0R	2436 4.4+0R	2331 4.5+0R	2352 4.5+0R	2007 4.5+0R	1659 4.5+0R	1394 4.6+0R
	VSC2 @ 6"	q 2954 F 3.9+0R	2875 4+0R	2820 4+0R	2778 4+0R	2747 4.1+0R	2478 4.1+0R	2007 4.1+0R	1659 4.1+0R	1394 4.1+0R
	VSC2 @ 4"	q 3446 F 3.5+0R	3398 3.6+0R	3365 3.6+0R	3340 3.6+0R	3136 3.6+0R	2478 3.6+0R	2007 3.6+0R	1659 3.6+0R	1394 3.6+0R
16	VSC2 @ 24"	q 2037 F 4.9-1R	2018 4.9-1R	1717 5.5-1R	1749 5.4-1R	1548 5.9-1R	1593 5.7-1R	1445 6.1-1R	1492 6-1R	1376 6.3-1R
	VSC2 @ 18"	q 2434 F 4.4-1R	2340 4.4-1R	2005 4.9-1R	1996 4.9-1R	1989 4.9-1R	1792 5.3-1R	1807 5.2-1R	1819 5.2+0R	1682 5.5-1R
	VSC2 @ 12"	q 2789 F 4+0R	2635 4.1+0R	2529 4.2+0R	2450 4.3+0R	2390 4.3+0R	2342 4.4+0R	2304 4.4+0R	2272 4.4+0R	1941 4.5+0R
	VSC2 @ 8"	q 3381 F 3.5+0R	3369 3.5+0R	3178 3.6+0R	3199 3.6+0R	3069 3.7+0R	3098 3.6+0R	2795 3.7+0R	2310 3.7+0R	1941 3.7+0R
	VSC2 @ 6"	q 3833 F 3.2+0R	3743 3.2+0R	3679 3.3+0R	3632 3.3+0R	3596 3.3+0R	3451 3.3+0R	2795 3.3+0R	2310 3.3+0R	1941 3.3+0R
	VSC2 @ 4"	q 4436 F 2.9+0R	4384 2.9+0R	4347 2.9+0R	4320 2.9+0R	4300 2.9+0R	3451 2.9+0R	2795 2.9+0R	2310 2.9+0R	1941 2.9+0R

1. See page 66 for ShearTranz II-42 element installation details.

2. See footnotes on page 28.

ShearTranz® II-42 Element Installation Instructions



NOTE: CONTINUOUS RIB IN TOP FLANGE OF SHEARTRANZ II-42 NOT SHOWN FOR CLARITY.

NOTES:

1) WELD BOTH SIDES ADJACENT TO DECK SIDELAP.

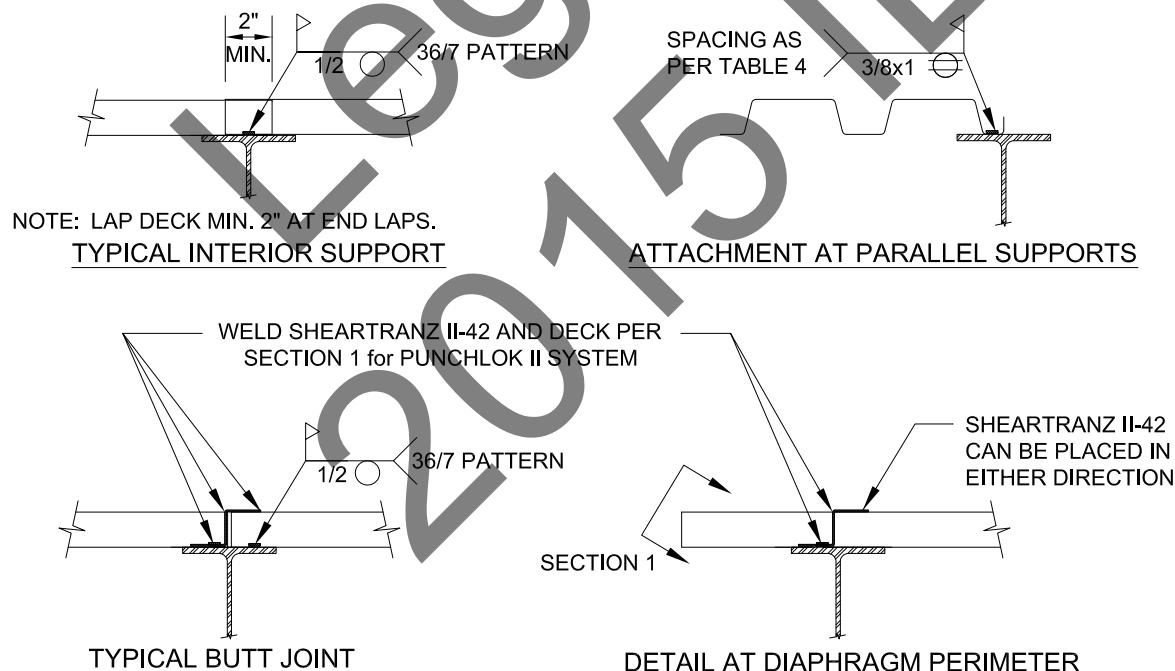
2) WELD BOTH SIDES AT EDGE OF DIAPHRAGM.

ALTERNATE ATTACHMENT:

3) #12 SCREWS THRU PRE-PUNCHED HOLES AT LOCATIONS SHOWN ARE PERMITTED TO REPLACE WELDS

SECTION 1: SHEARTRANZ II-42 FOR PLB-36 DECK with THE PUNCHLOK II SYSTEM with VSC2 SIDELAP CONNECTIONS MADE WITH THE PUNCHLOK II TOOL

ShearTranz® II-42 Details



SHEARTRANZ II-42 CONTINUOUS AT BUTT JOINTS.
WELD TOP FLANGE OF SHEARTRANZ II-42 TO BOTH PIECES OF DECK AT BUTT JOINTS.

Type HSB®-36

- 36/4 Weld Pattern at Supports
- Sidelaps connected with Button Punch or 1½" Top Seam Weld



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	BP @ 24"	q 282 F -1.3+267R	234 4.2+212R	190 9.1+174R	169 12.6+148R	144 16.3+127R	135 18.9+112R	121 22.1+98R		
	BP @ 12"	q 318 F -2.3+267R	262 3.1+212R	226 7.2+175R	199 10.5+149R	180 13.3+129R	167 15.7+114R	157 17.9+101R		
	TSW @ 24"	q 628 F -9.4+271R	649 -6.3+217R	562 -3.5+181R	588 -2.2+155R	526 -0.5+135R	552 0.1+120R	505 1.2+108R		
	TSW @ 18"	q 763 F -10.2+271R	756 -6.9+217R	663 -4.2+181R	673 -2.8+155R	681 1.7+136R	622 -0.4+121R	633 0.2+108R		
	TSW @ 12"	q 871 F -10.7+272R	846 -7.3+217R	828 -5.1+181R	815 -3.5+155R	805 -2.3+136R	798 -1.3+121R	791 -0.6+109R		
	TSW @ 6"	q 1117 F -11.6+272R	1107 -8.2+217R	1101 -6+181R	1096 -4.4+155R	1092 -3.2+136R	1089 -2.3+121R	1001 -1.5+109R		
	BP @ 24"	q 403 F 3.1+167R	336 7.2+132R	275 11.1+108R	246 13.8+91R	211 16.9+78R	195 19+68R	175 21.7+59R	169 23.4+53R	155 25.8+47R
	BP @ 12"	q 454 F 2.2+168R	378 6.2+133R	326 9.3+109R	290 11.9+93R	262 14.2+80R	241 16.1+70R	227 17.8+62R	216 19.4+55R	206 20.8+50R
	TSW @ 24"	q 824 F -4.2+171R	846 -2.3+137R	733 -0.4+114R	764 0.3+98R	685 1.5+86R	715 1.9+76R	654 2.7+68R	683 2.8+62R	634 3.4+57R
	TSW @ 18"	q 993 F -5+172R	981 -2.9+137R	861 -1.1+114R	872 -0.2+98R	879 0.5+86R	804 1.4+76R	818 1.8+69R	829 2.1+62R	774 2.6+57R
20	TSW @ 12"	q 1127 F -5.5+172R	1093 -3.3+137R	1069 -1.9+115R	1051 -0.8+98R	1037 0+86R	1026 0.6+76R	1018 1+69R	1010 1.4+62R	912 1.8+57R
	TSW @ 6"	q 1435 F -6.2+172R	1422 -4.1+138R	1412 -2.7+115R	1406 -1.7+98R	1400 -0.9+86R	1396 -0.3+76R	1313 0.1+69R	1085 0.5+63R	912 0.8+57R
	BP @ 24"	q 704 F 6.3+80R	592 9.1+63R	487 11.9+51R	438 13.9+42R	379 16.3+35R	353 17.8+30R	314 20+26R	300 21.3+22R	275 23.3+19R
	BP @ 12"	q 794 F 5.5+81R	666 8.2+63R	579 10.4+52R	517 12.2+43R	470 13.9+37R	434 15.3+32R	405 16.7+28R	383 17.9+24R	366 19+22R
	TSW @ 24"	q 1272 F 0+84R	1293 0.8+67R	1121 1.9+56R	1160 2.2+48R	1040 2.9+42R	1081 3+37R	989 3.5+33R	1028 3.5+30R	955 3.9+28R
	TSW @ 18"	q 1513 F -0.7+84R	1486 0.3+67R	1306 1.3+56R	1316 1.7+48R	1323 2+42R	1210 2.6+37R	1227 2.7+33R	1241 2.9+30R	1160 3.2+28R
	TSW @ 12"	q 1705 F -1.1+84R	1648 -0.1+67R	1607 0.7+56R	1577 1.2+48R	1554 1.6+42R	1535 1.9+37R	1520 2.1+34R	1508 2.3+30R	1394 2.5+28R
	TSW @ 6"	q 2150 F -1.8+84R	2127 -0.8+67R	2111 -0.1+56R	2099 0.4+48R	2090 0.8+42R	2083 1.1+37R	2007 1.3+34R	1659 1.5+31R	1394 1.7+28R
	BP @ 24"	q 912 F 7.1+44R	778 9.2+34R	641 11.5+27R	584 13.1+22R	506 15.1+18R	477 16.4+15R	425 18.3+12R	408 19.4+10R	371 21.2+8R
	BP @ 12"	q 1041 F 6.4+45R	893 8.4+35R	784 10.1+28R	707 11.6+23R	649 13+19R	604 14.2+16R	568 15.3+14R	538 16.3+12R	514 17.3+10R
16	TSW @ 24"	q 1643 F 1.4+48R	1679 1.8+38R	1460 2.6+32R	1515 2.7+27R	1361 3.2+24R	1417 3.2+21R	1299 3.6+19R	1352 3.5+17R	1257 3.8+16R
	TSW @ 18"	q 1957 F 0.8+48R	1929 1.3+38R	1702 2.1+32R	1718 2.3+27R	1731 2.4+24R	1586 2.8+21R	1610 2.9+19R	1630 2.9+17R	1525 3.2+16R
	TSW @ 12"	q 2203 F 0.4+48R	2136 1+38R	2088 1.5+32R	2053 1.8+27R	2026 2+24R	2004 2.2+21R	1986 2.3+19R	1971 2.4+17R	1941 2.5+16R
	TSW @ 6"	q 2753 F -0.2+48R	2727 0.4+38R	2710 0.8+32R	2696 1.1+27R	2686 1.3+24R	2678 1.5+21R	2671 1.6+19R	2310 1.7+17R	1941 1.8+16R

See footnotes on page 28.

Type HSB®-36

- 36/5 Weld Pattern at Supports
- Sidelaps connected with Button Punch or 1½" Top Seam Weld



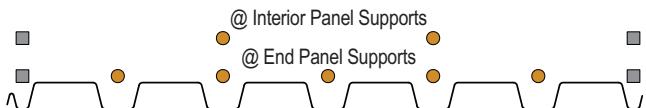
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	BP @ 24"	q 369 F 1.5+187R	303 5.7+148R	248 9.5+122R	218 12.3+103R	187 15.2+88R	174 17.3+77R	156 19.9+68R		
	BP @ 12"	q 405 F 0.8+188R	332 5+149R	284 8.2+123R	249 10.8+104R	223 13.1+90R	205 15.1+79R	192 16.9+70R		
	TSW @ 24"	q 714 F -4.6+191R	724 -2.5+153R	623 -0.4+127R	644 0.5+109R	575 1.8+95R	598 2.2+85R	545 3.1+76R		
	TSW @ 18"	q 857 F -5.4+191R	839 -3.1+153R	731 -1.1+127R	736 0+109R	739 0.8+95R	672 1.7+85R	682 2.2+76R		
	TSW @ 12"	q 977 F -5.9+191R	939 -3.5+153R	913 -1.8+127R	894 -0.7+109R	879 0.2+96R	867 0.9+85R	857 1.4+76R		
	TSW @ 6"	q 1275 F -6.7+191R	1258 -4.3+153R	1246 -2.7+128R	1237 -1.6+109R	1231 -0.8+96R	1225 -0.1+85R	1001 0.4+77R		
	BP @ 24"	q 524 F 4.3+117R	433 7.5+92R	356 10.5+75R	315 12.7+63R	271 15.2+54R	249 17+47R	224 19.2+40R	213 20.6+36R	195 22.7+31R
	BP @ 12"	q 576 F 3.7+118R	475 6.8+93R	407 9.3+76R	359 11.4+64R	323 13.3+55R	295 14.9+48R	275 16.4+42R	260 17.8+38R	247 19+34R
	TSW @ 24"	q 944 F -1.2+121R	951 0+96R	819 1.5+80R	843 2+69R	752 3+60R	779 3.2+53R	711 3.8+48R	737 3.9+44R	683 4.4+40R
	TSW @ 18"	q 1125 F -2+121R	1097 -0.5+97R	956 0.9+80R	959 1.5+69R	962 2+60R	874 2.7+54R	885 3+48R	894 3.2+44R	832 3.6+40R
20	TSW @ 12"	q 1276 F -2.4+121R	1224 -0.8+97R	1188 0.2+81R	1160 0.9+69R	1139 1.5+60R	1123 1.9+54R	1109 2.3+48R	1085 2.5+44R	912 2.8+40R
	TSW @ 6"	q 1655 F -3.1+121R	1631 -1.6+97R	1615 -0.6+81R	1602 0.1+69R	1593 0.6+61R	1585 1+54R	1313 1.4+48R	1085 1.7+44R	912 1.9+40R
	BP @ 24"	q 909 F 6.2+56R	757 8.4+44R	624 10.6+35R	556 12.2+29R	482 14.2+24R	444 15.6+20R	396 17.3+17R	375 18.5+14R	343 20.2+12R
	BP @ 12"	q 989 F 5.6+56R	830 7.8+44R	716 9.6+36R	634 11.1+29R	573 12.5+25R	525 13.8+21R	487 15+18R	458 16+16R	435 17+14R
	TSW @ 24"	q 1479 F 1.3+59R	1472 1.9+47R	1269 2.8+39R	1295 3+33R	1155 3.6+29R	1190 3.6+26R	1085 4+23R	1120 4+21R	1037 4.4+19R
	TSW @ 18"	q 1739 F 0.7+59R	1685 1.4+47R	1468 2.3+39R	1465 2.5+34R	1462 2.7+29R	1329 3.2+26R	1341 3.3+23R	1351 3.4+21R	1257 3.7+20R
	TSW @ 12"	q 1958 F 0.3+59R	1871 1.1+47R	1808 1.6+39R	1762 2+34R	1725 2.3+29R	1697 2.5+26R	1673 2.7+24R	1654 2.8+21R	1394 3+20R
	TSW @ 6"	q 2520 F -0.3+59R	2479 0.4+47R	2449 0.9+39R	2427 1.3+34R	2410 1.6+30R	2397 1.8+26R	2007 1.9+24R	1659 2.1+22R	1394 2.2+20R
	BP @ 24"	q 1161 F 6.4+31R	984 8.2+24R	812 10+18R	731 11.4+15R	634 13+12R	591 14.2+9R	527 15.7+7R	501 16.7+6R	457 18.2+4R
	BP @ 12"	q 1285 F 6+31R	1098 7.6+24R	955 9.1+19R	854 10.4+15R	777 11.5+13R	718 12.6+11R	670 13.6+9R	631 14.5+7R	600 15.4+6R
16	TSW @ 24"	q 1904 F 2.1+33R	1907 2.4+27R	1647 3.1+22R	1687 3.1+19R	1508 3.5+17R	1557 3.5+15R	1422 3.8+13R	1471 3.8+12R	1363 4+11R
	TSW @ 18"	q 2246 F 1.6+34R	2185 2+27R	1909 2.6+22R	1910 2.7+19R	1911 2.8+17R	1741 3.1+15R	1759 3.2+13R	1774 3.2+12R	1652 3.4+11R
	TSW @ 12"	q 2529 F 1.2+34R	2424 1.7+27R	2350 2+22R	2295 2.2+19R	2252 2.4+17R	2218 2.5+15R	2190 2.6+13R	2167 2.7+12R	1941 2.8+11R
	TSW @ 6"	q 3232 F 0.7+34R	3185 1.1+27R	3152 1.4+23R	3127 1.6+19R	3108 1.7+17R	3093 1.9+15R	2795 2+14R	2310 2+12R	1941 2.1+11R

See footnotes on page 28.

Type HSB®-36

- 36/7/4 Weld Pattern at Supports
- Sidelaps connected with Button Punch or 1½" Top Seam Weld



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	BP @ 24"	q 340 F 12.3+24R	280 14.7+17R	229 17.3+12R	202 19.3+8R	173 21.8+4R	161 23.4+2R	145 25.7-1R		
	BP @ 12"	q 376 F 11.5+25R	309 13.8+18R	264 15.8+13R	233 17.6+9R	209 19.3+6R	192 20.8+4R	180 22.3+2R		
	TSW @ 24"	q 722 F 5.4+30R	739 5.5+24R	627 6.3+19R	654 6.2+17R	572 6.8+15R	604 6.7+13R	543 7.1+12R		
	TSW @ 18"	q 894 F 4.6+30R	876 4.9+24R	750 5.6+20R	758 5.7+17R	764 5.7+15R	688 6.2+13R	700 6.2+12R		
	TSW @ 12"	q 1047 F 4.1+30R	1002 4.5+24R	971 4.8+20R	948 5+17R	931 5.2+15R	918 5.3+13R	907 5.4+12R		
	TSW @ 6"	q 1484 F 3.2+30R	1458 3.6+24R	1441 3.9+20R	1428 4.1+17R	1418 4.2+15R	1236 4.3+14R	1001 4.4+12R		
	BP @ 24"	q 484 F 11.4+14R	401 13.5+9R	329 15.8+5R	292 17.6+2R	251 19.8+0R	231 21.3-2R	208 23.4-4R	198 24.7-5R	182 26.7-7R
	BP @ 12"	q 535 F 10.7+14R	442 12.7+10R	380 14.5+6R	336 16.1+4R	303 17.5+2R	277 18.9+0R	259 20.2-1R	245 21.4-3R	233 22.5-4R
20	TSW @ 24"	q 958 F 5.1+18R	973 5.1+15R	826 5.8+12R	856 5.7+10R	754 6.2+9R	789 6+8R	710 6.4+7R	746 6.2+7R	684 6.6+6R
	TSW @ 18"	q 1177 F 4.4+19R	1149 4.6+15R	983 5.1+12R	989 5.2+11R	995 5.2+9R	896 5.5+8R	910 5.5+7R	921 5.5+7R	852 5.7+6R
	TSW @ 12"	q 1373 F 3.9+19R	1310 4.2+15R	1266 4.4+13R	1234 4.5+11R	1210 4.6+9R	1191 4.7+8R	1176 4.8+8R	1085 4.8+7R	912 4.9+6R
	TSW @ 6"	q 1940 F 3.1+19R	1904 3.4+15R	1879 3.6+13R	1861 3.7+11R	1847 3.8+10R	1621 3.8+9R	1313 3.9+8R	1085 3.9+7R	912 4+6R
	BP @ 24"	q 842 F 9.9+5R	702 11.7+2R	579 13.6-1R	517 15.1-2R	447 17-4R	414 18.2-5R	368 20-6R	350 21.1-7R	321 22.9-8R
	BP @ 12"	q 933 F 9.3+5R	775 11+2R	670 12.4+1R	595 13.8-1R	539 15-2R	495 16.2-3R	460 17.3-4R	433 18.3-5R	412 19.3-6R
	TSW @ 24"	q 1504 F 4.5+9R	1508 4.4+7R	1280 4.9+6R	1315 4.8+5R	1163 5.2+4R	1204 5+4R	1088 5.3+3R	1132 5.2+3R	1040 5.4+3R
	TSW @ 18"	q 1826 F 3.8+9R	1768 3.9+7R	1510 4.4+6R	1512 4.3+5R	1514 4.3+4R	1362 4.6+4R	1378 4.6+3R	1392 4.5+3R	1286 4.7+3R
18	TSW @ 12"	q 2117 F 3.4+9R	2008 3.6+7R	1932 3.7+6R	1877 3.8+5R	1835 3.8+5R	1802 3.9+4R	1775 3.9+4R	1659 4+3R	1394 4+3R
	TSW @ 6"	q 2981 F 2.8+9R	2916 2.9+7R	2870 3+6R	2837 3+5R	2811 3.1+5R	2478 3.1+4R	2007 3.2+4R	1659 3.2+3R	1394 3.2+3R
	BP @ 24"	q 1083 F 8.8+1R	915 10.3-1R	755 12.1-2R	682 13.4-4R	591 15-5R	553 16.2-6R	493 17.8-7R	470 18.7-8R	428 20.3-9R
	BP @ 12"	q 1227 F 8.3+2R	1030 9.7+0R	898 11-2R	805 12.2-3R	734 13.3-4R	680 14.3-4R	636 15.3-5R	600 16.2-5R	571 17.1-6R
	TSW @ 24"	q 1945 F 4+5R	1963 3.8+4R	1668 4.3+3R	1721 4.1+3R	1524 4.5+2R	1583 4.3+2R	1435 4.6+2R	1492 4.4+2R	1376 4.7+1R
	TSW @ 18"	q 2372 F 3.4+5R	2306 3.4+4R	1974 3.8+3R	1983 3.7+3R	1989 3.7+2R	1792 4+2R	1817 3.9+2R	1837 3.9+2R	1699 4.1+2R
	TSW @ 12"	q 2753 F 3+5R	2621 3.1+4R	2529 3.2+3R	2462 3.3+3R	2411 3.3+3R	2371 3.3+2R	2339 3.3+2R	2310 3.4+2R	1941 3.4+2R
	TSW @ 6"	q 3855 F 2.4+5R	3780 2.5+4R	3727 2.6+4R	3689 2.6+3R	3659 2.6+3R	3451 2.6+2R	2795 2.7+2R	2310 2.7+2R	1941 2.7+2R

See footnotes on page 28.

Type HSB®-36

- 36/7 Weld Pattern at Supports
- Sidelaps connected with Button Punch or 1½" Top Seam Weld



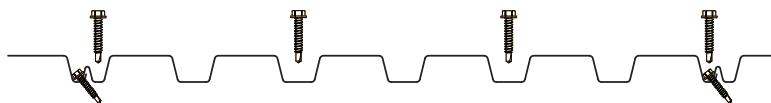
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	BP @ 24"	q 398 F 9.9+27R	327 11.9+20R	267 14+15R	235 15.7+12R	202 17.6+9R	186 19.1+7R	168 20.9+5R		
	BP @ 12"	q 434 F 9.5+27R	355 11.4+21R	303 13.1+16R	266 14.6+13R	238 16.1+10R	218 17.4+8R	204 18.7+6R		
	TSW @ 24"	q 770 F 5.1+30R	777 5.3+24R	661 6.1+20R	682 6.1+17R	601 6.6+15R	627 6.5+13R	566 7+12R		
	TSW @ 18"	q 937 F 4.4+30R	911 4.8+24R	781 5.4+20R	785 5.5+17R	787 5.6+15R	710 6+13R	720 6.1+12R		
	TSW @ 12"	q 1084 F 4+30R	1033 4.4+24R	998 4.7+20R	972 4.9+17R	952 5.1+15R	936 5.2+13R	924 5.3+12R		
	TSW @ 6"	q 1504 F 3.2+30R	1476 3.6+24R	1456 3.8+20R	1442 4+17R	1430 4.2+15R	1236 4.3+14R	1001 4.4+12R		
	BP @ 24"	q 564 F 9.3+16R	466 11+12R	383 12.8+8R	338 14.3+6R	292 16+4R	267 17.3+2R	240 19+1R	228 20.1+0R	209 21.7-1R
	BP @ 12"	q 616 F 8.8+16R	507 10.5+12R	434 12+9R	382 13.3+7R	343 14.6+5R	313 15.8+3R	292 16.9+2R	274 18+1R	260 19+0R
20	TSW @ 24"	q 1024 F 4.8+19R	1026 4.9+15R	873 5.6+12R	896 5.5+11R	793 6+9R	821 5.8+8R	742 6.2+7R	772 6.1+7R	711 6.4+6R
	TSW @ 18"	q 1236 F 4.2+19R	1197 4.4+15R	1026 5+13R	1027 5+11R	1028 5.1+9R	926 5.4+8R	937 5.4+7R	946 5.4+7R	875 5.7+6R
	TSW @ 12"	q 1425 F 3.8+19R	1354 4.1+15R	1304 4.3+13R	1267 4.5+11R	1239 4.6+10R	1217 4.7+8R	1200 4.7+8R	1085 4.8+7R	912 4.8+6R
	TSW @ 6"	q 1970 F 3.1+19R	1930 3.4+15R	1901 3.5+13R	1880 3.7+11R	1864 3.7+10R	1621 3.8+9R	1313 3.9+8R	1085 3.9+7R	912 4+6R
	BP @ 24"	q 979 F 8.1+7R	812 9.5+4R	670 11+2R	595 12.2+1R	516 13.7+0R	475 14.8-1R	423 16.2-2R	400 17.2-3R	366 18.6-4R
	BP @ 12"	q 1070 F 7.7+7R	885 9+5R	761 10.3+3R	673 11.4+2R	607 12.5+1R	556 13.5+0R	515 14.4-1R	483 15.3-2R	458 16.2-2R
	TSW @ 24"	q 1617 F 4.3+9R	1598 4.2+7R	1359 4.7+6R	1383 4.6+5R	1224 5+4R	1258 4.9+4R	1141 5.2+3R	1177 5+3R	1085 5.3+3R
	TSW @ 18"	q 1928 F 3.7+9R	1851 3.8+7R	1586 4.2+6R	1577 4.2+5R	1570 4.2+4R	1414 4.5+4R	1425 4.5+4R	1434 4.4+3R	1326 4.7+3R
18	TSW @ 12"	q 2208 F 3.4+9R	2084 3.5+7R	1998 3.6+6R	1935 3.7+5R	1886 3.8+5R	1848 3.8+4R	1817 3.9+4R	1659 3.9+3R	1394 3.9+3R
	TSW @ 6"	q 3036 F 2.7+9R	2962 2.9+8R	2910 3+6R	2872 3+5R	2842 3.1+5R	2478 3.1+4R	2007 3.1+4R	1659 3.2+3R	1394 3.2+3R
	BP @ 24"	q 1255 F 7.2+3R	1052 8.4+1R	869 9.7+0R	780 10.8-1R	677 12.1-2R	629 13.1-2R	561 14.3-3R	532 15.2-4R	485 16.4-4R
	BP @ 12"	q 1395 F 6.8+3R	1167 8+2R	1013 9.1+1R	902 10.1+0R	820 11-1R	756 11.9-2R	704 12.7-2R	662 13.5-3R	628 14.3-3R
	TSW @ 24"	q 2083 F 3.7+5R	2073 3.7+4R	1766 4.1+3R	1805 4+3R	1599 4.3+2R	1649 4.2+2R	1497 4.5+2R	1548 4.3+2R	1428 4.6+1R
	TSW @ 18"	q 2496 F 3.2+5R	2408 3.3+4R	2067 3.7+3R	2062 3.6+3R	2058 3.6+2R	1856 3.9+2R	1874 3.8+2R	1889 3.8+2R	1748 4+2R
	TSW @ 12"	q 2862 F 2.9+5R	2713 3.1+4R	2609 3.1+3R	2532 3.2+3R	2473 3.2+3R	2427 3.3+2R	2389 3.3+2R	2310 3.3+2R	1941 3.4+2R
	TSW @ 6"	q 3918 F 2.4+5R	3833 2.5+4R	3773 2.5+4R	3729 2.6+3R	3695 2.6+3R	3451 2.6+2R	2795 2.6+2R	2310 2.7+2R	1941 2.7+2R

See footnotes on page 28.

Type HSB®-36-SS

- 36/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws at Supports 0.0385" and thicker**
- Sidelaps Connected with #10 Screws**



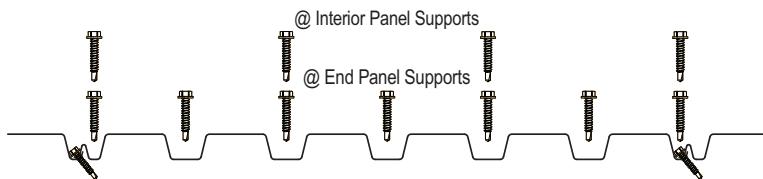
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	#10 @ 24"	q 394 F -24.9+542R	355 -13.3+361R	290 -6.2+270R	277 -2.9+216R	235 0.5+179R	233 1.8+154R	203 4.1+134R	206 4.6+119R	185 6.2+107R
	#10 @ 18"	q 458 F -26.1+543R	355 -13.3+361R	334 -7.5+271R	314 -4.1+216R	269 -0.8+180R	263 0.7+154R	258 1.9+135R	232 3.6+120R	231 4.2+108R
	#10 @ 12"	q 458 F -26.1+543R	405 -14.4+361R	374 -8.4+271R	348 -4.9+217R	329 -2.4+180R	315 -0.7+155R	305 0.6+135R	296 1.6+120R	289 2.4+108R
	#10 @ 8"	q 510 F -26.8+543R	485 -15.5+362R	443 -9.5+271R	434 -6.2+217R	406 3.7+181R	405 -2.2+155R	386 -0.8+136R	387 0+120R	373 0.9+108R
	#10 @ 6"	q 551 F -27.2+543R	517 -15.9+362R	498 -10.2+271R	481 -6.8+217R	468 -4.5+181R	459 -2.8+155R	452 -1.6+136R	447 -0.7+121R	442 0.1+109R
	#10 @ 4"	q 609 F -27.8+543R	588 -16.5+362R	575 -10.9+272R	565 -7.5+217R	557 -5.3+181R	552 -3.6+155R	547 -2.4+136R	544 -1.5+121R	541 -0.7+109R
	#10 @ 24"	q 481 F -13.7+343R	438 -6.3+228R	359 -1.3+170R	346 0.7+136R	295 3.3+113R	295 4+97R	258 5.7+84R	262 6+75R	236 7.2+67R
	#10 @ 18"	q 563 F -14.8+343R	438 -6.3+228R	415 -2.5+171R	393 -0.3+137R	337 2.1+114R	331 3+97R	326 3.7+85R	294 5+75R	294 5.4+68R
	#10 @ 12"	q 563 F -14.8+343R	502 -7.2+229R	466 -3.4+171R	436 -1+137R	414 0.6+114R	398 1.7+98R	386 2.6+85R	376 3.2+76R	368 3.8+68R
	#10 @ 8"	q 628 F -15.4+344R	602 -8.3+229R	552 -4.4+172R	544 -2.3+137R	511 -0.6+114R	511 0.3+98R	488 1.2+86R	491 1.8+76R	474 2.4+69R
20	#10 @ 6"	q 677 F -15.8+344R	640 -8.6+229R	619 -4.9+172R	600 -2.8+137R	587 -1.3+114R	577 -0.2+98R	569 0.5+86R	563 1.1+76R	558 1.6+69R
	#10 @ 4"	q 746 F -16.3+344R	724 -9.2+229R	711 -5.6+172R	699 -3.4+138R	691 -2+115R	685 -1+98R	681 -0.2+86R	677 0.4+76R	674 0.9+69R
	#10 @ 24"	q 659 F -4.3+167R	611 -0.5+111R	502 2.5+83R	490 3.4+66R	419 5.1+55R	422 5.4+47R	375 6.5+41R	383 6.5+36R	346 7.5+32R
	#10 @ 18"	q 779 F -5.2+167R	611 -0.5+111R	585 1.4+83R	559 2.5+66R	482 4+55R	476 4.5+47R	472 4.8+41R	427 5.7+36R	428 5.8+33R
	#10 @ 12"	q 779 F -5.2+167R	703 -1.3+111R	659 0.7+83R	621 1.9+67R	594 2.8+55R	574 3.4+48R	559 3.8+42R	547 4.2+37R	537 4.5+33R
	#10 @ 8"	q 868 F -5.8+168R	842 -2.2+112R	779 -0.2+84R	772 0.8+67R	730 1.7+56R	732 2.2+48R	703 2.7+42R	708 2.9+37R	686 3.3+33R
	#10 @ 6"	q 935 F -6.1+168R	893 -2.5+112R	869 -0.7+84R	847 0.4+67R	832 1.1+56R	821 1.7+48R	812 2.1+42R	805 2.4+37R	799 2.6+34R
	#10 @ 4"	q 1023 F -6.6+168R	999 -3+112R	985 -1.3+84R	973 -0.2+67R	965 0.5+56R	958 1+48R	953 1.4+42R	949 1.7+37R	946 1.9+34R
	#10 @ 24"	q 844 F -0.7+95R	793 1.5+63R	654 3.6+47R	644 4.2+37R	553 5.4+31R	561 5.5+26R	499 6.4+23R	511 6.3+20R	466 7.1+18R
	#10 @ 18"	q 1004 F -1.6+95R	793 1.5+63R	766 2.7+47R	737 3.4+38R	638 4.5+31R	634 4.7+27R	630 4.9+23R	571 5.6+21R	575 5.7+19R
	#10 @ 12"	q 1004 F -1.6+95R	915 0.8+63R	864 2+47R	819 2.8+38R	788 3.3+31R	764 3.7+27R	746 4+24R	732 4.2+21R	720 4.4+19R
16	#10 @ 8"	q 1119 F -2.1+96R	1092 0+64R	1018 1.3+48R	1013 1.8+38R	963 2.4+32R	967 2.6+27R	933 3+24R	940 3.1+21R	913 3.3+19R
	#10 @ 6"	q 1201 F -2.4+96R	1156 -0.3+64R	1129 0.8+48R	1106 1.5+38R	1090 1.9+32R	1077 2.2+27R	1068 2.4+24R	1060 2.6+21R	1054 2.8+19R
	#10 @ 4"	q 1306 F -2.8+96R	1281 -0.7+64R	1267 0.3+48R	1255 0.9+38R	1246 1.3+32R	1240 1.6+27R	1235 1.9+24R	1231 2+21R	1227 2.2+19R

See footnotes on page 28.

Type HSB®-36-SS

- 36/7/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws at Supports 0.0385" and thicker**
- Sidelaps Connected with #10 Screws**



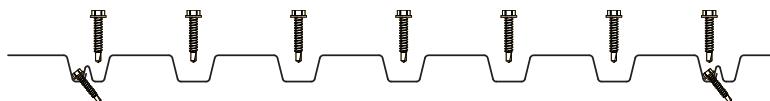
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	#10 @ 24"	q 471 F 4.5+59R	421 6.2+39R	343 8.4+28R	318 8.7+22R	263 10.2+18R	257 10.1+15R	223 11.3+13R	224 11+11R	202 12+10R
	#10 @ 18"	q 562 F 3.4+60R	421 6.2+39R	396 7.1+29R	364 7.7+23R	302 8.9+18R	291 9.1+16R	282 9.2+14R	250 10+12R	249 10+11R
	#10 @ 12"	q 562 F 3.4+60R	486 5.3+39R	445 6.3+29R	405 6.9+23R	377 7.4+19R	357 7.7+16R	341 8+14R	328 8.2+13R	319 8.3+11R
	#10 @ 8"	q 643 F 2.8+60R	603 4.2+40R	539 5.2+30R	520 5.6+24R	476 6.1+20R	471 6.2+17R	444 6.6+15R	443 6.6+13R	424 6.8+12R
	#10 @ 6"	q 717 F 2.4+60R	656 3.9+40R	623 4.6+30R	590 5.1+24R	567 5.4+20R	550 5.6+17R	537 5.8+15R	527 5.9+13R	519 6+12R
	#10 @ 4"	q 838 F 1.8+61R	791 3.2+40R	765 3.9+30R	739 4.3+24R	721 4.6+20R	707 4.8+17R	697 5+15R	689 5.1+13R	682 5.2+12R
	#10 @ 24"	q 576 F 4.8+37R	521 6+24R	425 7.8+17R	400 8+13R	331 9.3+10R	326 9.2+9R	283 10.2+7R	284 10+6R	256 10.8+5R
	#10 @ 18"	q 694 F 3.8+37R	521 6+24R	492 6.7+18R	456 7.1+14R	382 8.2+11R	370 8.3+9R	360 8.3+8R	319 9.1+7R	317 9+6R
	#10 @ 12"	q 694 F 3.8+37R	605 5.2+25R	557 5.9+18R	509 6.4+14R	477 6.7+12R	453 7+10R	435 7.2+9R	420 7.3+8R	409 7.5+7R
	#10 @ 8"	q 799 F 3.3+38R	755 4.2+25R	677 5+19R	657 5.2+15R	604 5.6+12R	600 5.7+10R	566 5.9+9R	567 5.9+8R	542 6.1+7R
20	#10 @ 6"	q 891 F 2.9+38R	821 3.9+25R	784 4.4+19R	746 4.7+15R	719 4.9+12R	700 5.1+11R	685 5.2+9R	673 5.3+8R	664 5.4+7R
	#10 @ 4"	q 1041 F 2.4+38R	989 3.3+25R	960 3.8+19R	931 4.1+15R	896 4.2+13R	884 4.4+11R	875 4.5+10R	875 4.5+8R	868 4.6+8R
	#10 @ 24"	q 792 F 4.7+17R	729 5.4+11R	594 6.8+7R	568 6.9+6R	475 8+4R	472 7.8+3R	411 8.7+3R	416 8.5+2R	373 9.2+2R
	#10 @ 18"	q 969 F 3.8+18R	729 5.4+11R	696 5.8+8R	651 6.1+6R	551 7+5R	538 7+4R	529 7+3R	469 7.7+3R	468 7.6+2R
	#10 @ 12"	q 969 F 3.8+18R	854 4.7+11R	793 5.2+8R	731 5.5+7R	688 5.8+5R	658 5.9+4R	634 6.1+4R	616 6.2+3R	601 6.3+3R
	#10 @ 8"	q 1122 F 3.3+18R	1074 3.8+12R	969 4.4+9R	949 4.5+7R	877 4.8+6R	875 4.8+5R	829 5+4R	833 4.9+4R	799 5.1+3R
	#10 @ 6"	q 1254 F 3+18R	1169 3.6+12R	1123 3.9+9R	1076 4.1+7R	1043 4.2+6R	1019 4.3+5R	1001 4.4+4R	986 4.4+4R	975 4.5+4R
	#10 @ 4"	q 1461 F 2.6+19R	1400 3.1+12R	1367 3.3+9R	1333 3.5+7R	1309 3.6+6R	1291 3.6+5R	1278 3.7+5R	1267 3.7+4R	1259 3.8+4R
	#10 @ 24"	q 1019 F 4.3+9R	950 4.9+6R	774 6.1+3R	748 6.1+3R	631 7+2R	633 6.9+1R	552 7.6+1R	562 7.4+1R	504 8+0R
	#10 @ 18"	q 1260 F 3.6+10R	950 4.9+6R	914 5.2+4R	862 5.4+3R	731 6.1+2R	719 6.1+2R	709 6.1+2R	635 6.7+1R	636 6.6+1R
16	#10 @ 12"	q 1260 F 3.6+10R	1121 4.2+6R	1046 4.6+4R	971 4.8+3R	920 5+3R	882 5.2+2R	853 5.3+2R	831 5.4+2R	813 5.4+1R
	#10 @ 8"	q 1466 F 3.1+10R	1416 3.4+7R	1284 3.8+5R	1265 3.9+4R	1175 4.1+3R	1176 4.1+3R	1117 4.3+2R	1124 4.3+2R	1081 4.4+2R
	#10 @ 6"	q 1639 F 2.8+10R	1540 3.2+7R	1486 3.4+5R	1431 3.5+4R	1393 3.6+3R	1366 3.7+3R	1344 3.7+2R	1327 3.8+2R	1314 3.8+2R
	#10 @ 4"	q 1901 F 2.5+11R	1833 2.8+7R	1796 2.9+5R	1758 3+4R	1732 3.1+3R	1712 3.1+3R	1697 3.2+3R	1686 3.2+2R	1676 3.2+2R

See footnotes on page 28.

Type HSB®-36-SS

- **36/7 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws at Supports 0.0385" and thicker**
- **Sidelaps Connected with #10 Screws**



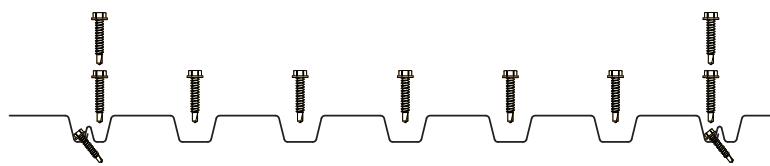
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	#10 @ 24"	q 551 F 3.7+60R	473 5.5+39R	381 7.4+29R	352 7.9+23R	291 9.3+19R	281 9.4+16R	244 10.4+13R	243 10.3+12R	218 11.2+10R
	#10 @ 18"	q 634 F 3+60R	473 5.5+39R	431 6.5+29R	393 7.1+23R	330 8.3+19R	314 8.5+16R	303 8.7+14R	269 9.5+12R	265 9.5+11R
	#10 @ 12"	q 634 F 3+60R	534 4.8+40R	479 5.8+30R	433 6.5+24R	401 7+20R	378 7.3+17R	360 7.6+14R	347 7.8+13R	335 8+12R
	#10 @ 8"	q 709 F 2.5+61R	645 3.9+40R	569 5+30R	545 5.4+24R	498 5.9+20R	491 6.1+17R	461 6.4+15R	459 6.5+13R	438 6.7+12R
	#10 @ 6"	q 774 F 2.2+61R	695 3.7+40R	651 4.5+30R	613 4.9+24R	587 5.3+20R	567 5.5+17R	553 5.7+15R	541 5.8+13R	531 5.9+12R
	#10 @ 4"	q 882 F 1.7+61R	821 3.1+40R	787 3.8+30R	757 4.3+24R	737 4.6+20R	721 4.8+17R	709 4.9+15R	700 5+13R	693 5.1+12R
20	#10 @ 24"	q 672 F 4.1+38R	582 5.4+25R	469 7+18R	437 7.3+14R	364 8.5+11R	354 8.5+10R	308 9.4+8R	306 9.3+7R	276 10.1+6R
	#10 @ 18"	q 780 F 3.4+38R	582 5.4+25R	534 6.1+18R	491 6.6+14R	415 7.6+12R	398 7.7+10R	385 7.9+9R	341 8.6+7R	337 8.6+7R
	#10 @ 12"	q 780 F 3.4+38R	662 4.8+25R	597 5.5+18R	543 6+15R	505 6.4+12R	478 6.7+10R	457 6.9+9R	440 7.1+8R	427 7.2+7R
	#10 @ 8"	q 874 F 3+38R	804 4+25R	713 4.7+19R	687 5+15R	630 5.4+12R	622 5.5+11R	586 5.8+9R	585 5.8+8R	559 6+7R
	#10 @ 6"	q 957 F 2.7+38R	866 3.7+25R	816 4.3+19R	772 4.6+15R	742 4.8+13R	720 5+11R	703 5.1+9R	689 5.2+8R	679 5.3+8R
	#10 @ 4"	q 1091 F 2.3+38R	1023 3.2+26R	984 3.7+19R	951 4+15R	928 4.2+13R	911 4.3+11R	898 4.4+10R	888 4.5+8R	879 4.6+8R
18	#10 @ 24"	q 918 F 4.1+18R	809 4.9+12R	651 6.1+8R	615 6.3+6R	519 7.2+5R	510 7.2+4R	444 8+3R	446 7.9+3R	400 8.5+2R
	#10 @ 18"	q 1079 F 3.5+18R	809 4.9+12R	751 5.4+8R	696 5.7+7R	590 6.5+5R	572 6.6+4R	559 6.6+4R	499 7.2+3R	494 7.2+3R
	#10 @ 12"	q 1079 F 3.5+18R	928 4.3+12R	844 4.8+9R	774 5.2+7R	725 5.5+6R	690 5.7+5R	663 5.8+4R	641 5.9+4R	624 6+3R
	#10 @ 8"	q 1217 F 3.1+18R	1135 3.6+12R	1014 4.2+9R	986 4.3+7R	910 4.6+6R	903 4.6+5R	854 4.8+4R	855 4.8+4R	820 5+3R
	#10 @ 6"	q 1335 F 2.8+19R	1224 3.4+12R	1162 3.7+9R	1109 4+7R	1072 4.1+6R	1044 4.2+5R	1023 4.3+5R	1006 4.3+4R	993 4.4+4R
	#10 @ 4"	q 1518 F 2.5+19R	1439 3+12R	1395 3.3+9R	1356 3.4+7R	1329 3.5+6R	1310 3.6+5R	1294 3.7+5R	1282 3.7+4R	1272 3.7+4R
16	#10 @ 24"	q 1174 F 3.8+10R	1048 4.4+6R	845 5.4+4R	806 5.6+3R	682 6.4+2R	676 6.3+2R	593 7+1R	599 6.9+1R	537 7.5+1R
	#10 @ 18"	q 1393 F 3.2+10R	1048 4.4+6R	982 4.7+5R	918 5+4R	779 5.7+3R	760 5.7+2R	746 5.8+2R	669 6.3+1R	666 6.3+1R
	#10 @ 12"	q 1393 F 3.2+10R	1210 3.9+7R	1109 4.3+5R	1024 4.6+4R	965 4.8+3R	921 4.9+3R	888 5+2R	862 5.1+2R	841 5.2+2R
	#10 @ 8"	q 1578 F 2.9+10R	1487 3.3+7R	1338 3.7+5R	1308 3.8+4R	1214 4+3R	1209 4+3R	1147 4.2+2R	1151 4.2+2R	1106 4.3+2R
	#10 @ 6"	q 1731 F 2.7+10R	1603 3.1+7R	1531 3.3+5R	1470 3.4+4R	1427 3.5+3R	1395 3.6+3R	1370 3.7+3R	1351 3.7+2R	1335 3.7+2R
	#10 @ 4"	q 1964 F 2.4+11R	1877 2.7+7R	1827 2.9+5R	1785 3+4R	1755 3+3R	1733 3.1+3R	1716 3.1+3R	1702 3.2+2R	1691 3.2+2R

See footnotes on page 28.

Type HSB®-36-SS

- 36/9 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws
at Supports 0.0385" and thicker
- Sidelaps Connected with #10 Screws**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
22	#10 @ 24"	q 805 F 2.8+60R	668 4.7+40R	544 6.3+29R	480 7+23R	395 8.1+19R	368 8.3+16R	319 9.2+13R	309 9.3+12R	278 10.1+10R
	#10 @ 18"	q 881 F 2.4+60R	668 4.7+40R	593 5.7+29R	526 6.4+23R	434 7.4+19R	402 7.7+16R	378 8+14R	335 8.7+12R	325 8.8+11R
	#10 @ 12"	q 881 F 2.4+60R	727 4.2+40R	640 5.3+30R	565 6+24R	512 6.5+19R	469 6.9+17R	436 7.2+14R	413 7.4+13R	395 7.6+11R
	#10 @ 8"	q 950 F 2.1+61R	835 3.6+40R	729 4.6+30R	678 5.1+24R	612 5.6+20R	590 5.8+17R	549 6.1+15R	538 6.2+13R	510 6.5+12R
	#10 @ 6"	q 1013 F 1.9+61R	885 3.4+40R	812 4.2+30R	748 4.7+24R	703 5.1+20R	670 5.3+17R	645 5.5+15R	625 5.7+13R	608 5.8+12R
	#10 @ 4"	q 1121 F 1.6+61R	1016 3+40R	956 3.7+30R	903 4.2+24R	865 4.5+20R	837 4.7+17R	816 4.8+15R	799 5+13R	785 5.1+12R
	#10 @ 24"	q 976 F 3.3+38R	816 4.6+25R	664 6+18R	595 6.4+14R	491 7.4+11R	460 7.6+10R	399 8.4+8R	386 8.4+7R	347 9.1+6R
	#10 @ 18"	q 1075 F 2.9+38R	816 4.6+25R	728 5.4+18R	650 5.9+14R	542 6.8+12R	505 7+10R	476 7.2+9R	420 7.8+7R	409 7.9+7R
	#10 @ 12"	q 1075 F 2.9+38R	892 4.2+25R	789 5+19R	701 5.5+15R	640 5.9+12R	593 6.2+10R	554 6.5+9R	523 6.7+8R	501 6.8+7R
	#10 @ 8"	q 1164 F 2.6+38R	1032 3.7+25R	905 4.4+19R	847 4.7+15R	767 5.1+12R	743 5.3+11R	693 5.5+9R	682 5.6+8R	647 5.8+7R
20	#10 @ 6"	q 1243 F 2.4+38R	1095 3.5+25R	1010 4.1+19R	936 4.4+15R	884 4.7+13R	846 4.8+11R	816 5+9R	792 5.1+8R	773 5.2+7R
	#10 @ 4"	q 1379 F 2.1+38R	1260 3.1+26R	1191 3.6+19R	1131 3.9+15R	1089 4.1+13R	1057 4.2+11R	1032 4.4+10R	1013 4.4+8R	997 4.5+8R
	#10 @ 24"	q 1321 F 3.4+18R	1118 4.2+12R	911 5.2+8R	827 5.6+6R	690 6.3+5R	655 6.4+4R	568 7.1+3R	554 7.1+3R	495 7.7+2R
	#10 @ 18"	q 1469 F 3+18R	1118 4.2+12R	1007 4.7+9R	908 5.1+7R	769 5.8+5R	722 6+4R	687 6.1+4R	607 6.6+3R	590 6.7+3R
	#10 @ 12"	q 1469 F 3+18R	1233 3.9+12R	1100 4.4+9R	985 4.8+7R	905 5+6R	847 5.3+5R	802 5.4+4R	765 5.6+4R	733 5.7+3R
	#10 @ 8"	q 1600 F 2.8+18R	1439 3.4+12R	1271 3.9+9R	1202 4.1+7R	1095 4.4+6R	1068 4.4+5R	1000 4.6+4R	988 4.7+4R	941 4.8+3R
	#10 @ 6"	q 1715 F 2.6+19R	1531 3.2+12R	1425 3.6+9R	1332 3.8+7R	1267 3.9+6R	1218 4.1+5R	1181 4.1+4R	1151 4.2+4R	1127 4.3+4R
	#10 @ 4"	q 1906 F 2.4+19R	1764 2.9+12R	1681 3.2+9R	1609 3.3+7R	1557 3.5+6R	1519 3.5+5R	1489 3.6+5R	1466 3.7+4R	1446 3.7+4R
	#10 @ 24"	q 1675 F 3.1+10R	1434 3.8+6R	1169 4.6+4R	1071 4.9+3R	903 5.5+2R	864 5.6+2R	751 6.2+1R	737 6.2+1R	659 6.7+1R
	#10 @ 18"	q 1878 F 2.8+10R	1434 3.8+6R	1302 4.2+5R	1182 4.5+4R	1004 5.1+3R	956 5.2+2R	917 5.3+2R	811 5.7+1R	792 5.8+1R
	#10 @ 12"	q 1878 F 2.8+10R	1592 3.5+7R	1429 3.9+5R	1289 4.2+4R	1191 4.4+3R	1119 4.6+2R	1064 4.7+2R	1020 4.8+2R	985 4.9+2R
16	#10 @ 8"	q 2055 F 2.6+10R	1870 3+7R	1661 3.4+5R	1583 3.6+4R	1449 3.8+3R	1419 3.8+3R	1334 4+2R	1323 4+2R	1262 4.1+2R
	#10 @ 6"	q 2208 F 2.5+10R	1991 2.9+7R	1866 3.1+5R	1756 3.3+4R	1679 3.4+3R	1621 3.5+3R	1577 3.6+2R	1541 3.6+2R	1513 3.7+2R
	#10 @ 4"	q 2455 F 2.2+11R	2293 2.6+7R	2199 2.8+5R	2117 2.9+4R	2058 3+3R	2014 3+3R	1980 3.1+3R	1953 3.1+2R	1931 3.1+2R

See footnotes on page 28.

Type HSB®-36-SS

- 36/4 Weld Pattern at Supports
- Sidelaps Connected with #10 Screws



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)×10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	#10 @ 24"	q 344	308	252	240	206	204	183		
		F -6.5+270R	-3.2+216R	0.2+179R	1.6+154R	3.8+134R	4.4+119R	6+107R		
	#10 @ 18"	q 393	347	285	268	255	226	223		
		F -7.8+271R	-4.3+216R	-1+180R	0.5+154R	1.7+135R	3.4+120R	4+108R		
	#10 @ 12"	q 442	386	350	323	304	291	281		
		F -8.6+271R	-5+217R	-2.6+180R	-0.8+155R	0.5+135R	1.5+120R	2.3+108R		
20	#10 @ 8"	q 524	496	448	435	402	399	379		
		F -9.6+271R	-6.3+217R	-3.8+181R	-2.3+155R	-0.9+136R	0+120R	0.9+108R		
	#10 @ 6"	q 597	557	529	508	492	480	470		
		F -10.2+271R	-6.8+217R	-4.5+181R	-2.9+155R	-1.6+136R	-0.7+121R	0.1+109R		
	#10 @ 4"	q 726	692	668	651	638	627	619		
		F -10.9+272R	-7.5+217R	-5.3+181R	-3.7+155R	-2.5+136R	-1.5+121R	-0.8+109R		
18	#10 @ 24"	q 480	429	352	334	288	281	252	253	232
		F -1.6+170R	0.5+136R	3+113R	3.8+97R	5.4+84R	5.7+75R	7+67R	7+61R	8+56R
	#10 @ 18"	q 544	480	395	371	352	309	304	300	275
		F -2.8+171R	-0.5+137R	1.8+113R	2.8+97R	3.6+85R	4.8+75R	5.2+68R	5.5+62R	6.4+56R
	#10 @ 12"	q 601	532	481	444	417	395	381	370	361
		F -3.5+171R	-1.1+137R	0.4+114R	1.6+98R	2.5+85R	3.1+76R	3.7+68R	4.1+62R	4.5+57R
16	#10 @ 8"	q 703	663	602	587	545	538	510	510	489
		F -4.4+172R	-2.3+137R	-0.7+114R	0.3+98R	1.2+86R	1.7+76R	2.3+69R	2.7+62R	3.1+57R
	#10 @ 6"	q 797	742	703	675	654	637	623	612	602
		F -5+172R	-2.8+137R	-1.3+114R	-0.3+98R	0.5+86R	1.1+76R	1.6+69R	2+62R	2.4+57R
	#10 @ 4"	q 960	914	883	859	841	827	815	806	798
		F -5.6+172R	-3.5+137R	-2+115R	-1+98R	-0.2+86R	0.4+76R	0.8+69R	1.2+62R	1.6+57R
14	#10 @ 24"	q 807	720	594	560	485	471	420	416	381
		F 2.2+83R	3.2+66R	4.8+55R	5.1+47R	6.3+41R	6.3+36R	7.3+32R	7.2+29R	7.9+27R
	#10 @ 18"	q 890	797	660	616	584	515	499	488	447
		F 1.2+83R	2.4+66R	3.9+55R	4.3+47R	4.7+41R	5.6+36R	5.7+33R	5.8+30R	6.5+27R
	#10 @ 12"	q 970	864	790	729	683	647	618	596	579
		F 0.6+83R	1.8+67R	2.7+55R	3.3+47R	3.7+42R	4.1+37R	4.4+33R	4.6+30R	4.8+28R
12	#10 @ 8"	q 1121	1053	954	927	866	854	810	806	773
		F -0.2+84R	0.8+67R	1.7+56R	2.1+48R	2.6+42R	2.9+37R	3.2+33R	3.4+30R	3.6+28R
	#10 @ 6"	q 1259	1169	1107	1060	1025	996	974	955	939
		F -0.7+84R	0.4+67R	1.1+56R	1.6+48R	2+42R	2.4+37R	2.6+33R	2.8+30R	3+28R
	#10 @ 4"	q 1497	1424	1372	1334	1304	1281	1262	1246	1233
		F -1.3+84R	-0.2+67R	0.5+56R	1+48R	1.4+42R	1.7+37R	1.9+34R	2.1+31R	2.3+28R
10	#10 @ 24"	q 1033	939	775	737	639	625	558	554	505
		F 3.4+47R	4+37R	5.2+31R	5.3+26R	6.2+23R	6.2+20R	6.9+18R	6.8+16R	7.4+15R
	#10 @ 18"	q 1149	1036	867	816	778	687	669	654	597
		F 2.5+47R	3.2+38R	4.3+31R	4.6+27R	4.8+23R	5.5+21R	5.5+18R	5.6+17R	6.1+15R
	#10 @ 12"	q 1259	1129	1038	971	916	871	835	805	782
		F 1.9+47R	2.7+38R	3.2+31R	3.6+27R	3.9+24R	4.2+21R	4.3+19R	4.5+17R	4.6+16R
8	#10 @ 8"	q 1466	1388	1264	1234	1156	1144	1088	1085	1043
		F 1.2+48R	1.8+38R	2.4+32R	2.6+27R	3+24R	3.1+21R	3.3+19R	3.4+17R	3.6+16R
	#10 @ 6"	q 1653	1545	1470	1414	1372	1338	1310	1287	1268
6	#10 @ 4"	q 1968	1883	1823	1778	1744	1716	1694	1675	1660
		F 0.3+48R	0.9+38R	1.3+32R	1.6+27R	1.8+24R	2+21R	2.2+19R	2.3+17R	2.4+16R

See footnotes on page 28.

Type HSB®-36-SS

- 36/5 Weld Pattern at Supports
- Sidelaps Connected with #10 Screws



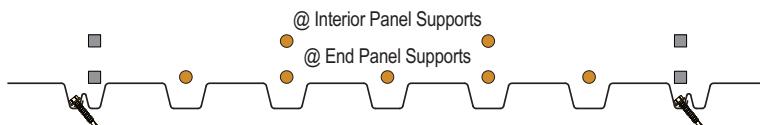
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	#10 @ 24"	q 431	378	310	289	249	242	218		
		F -2.3+190R	0.2+152R	2.9+126R	3.9+108R	5.6+94R	6.1+83R	7.4+75R		
	#10 @ 18"	q 480	417	343	317	298	264	257		
		F -3.3+190R	-0.7+152R	1.8+126R	3+108R	3.8+95R	5.2+84R	5.7+75R		
	#10 @ 12"	q 527	456	408	373	347	329	316		
		F -4+190R	-1.3+152R	0.5+127R	1.8+109R	2.8+95R	3.5+84R	4.1+76R		
20	#10 @ 8"	q 607	565	506	485	445	438	414		
		F -4.8+191R	-2.5+153R	-0.6+127R	0.4+109R	1.5+95R	2.1+85R	2.8+76R		
	#10 @ 6"	q 682	627	589	561	539	522	509		
		F -5.4+191R	-2.9+153R	-1.3+127R	-0.1+109R	0.8+95R	1.5+85R	2+76R		
	#10 @ 4"	q 817	769	736	712	693	678	666		
		F -6+191R	-3.6+153R	-2+127R	-0.9+109R	0+96R	0.7+85R	1.2+76R		
18	#10 @ 24"	q 601	526	433	403	349	335	301	297	272
		F 0.9+120R	2.5+95R	4.5+79R	5.1+68R	6.5+59R	6.7+52R	7.7+47R	7.8+43R	8.6+39R
	#10 @ 18"	q 662	577	476	440	413	363	352	344	315
		F 0+120R	1.7+96R	3.5+79R	4.3+68R	4.8+60R	5.9+53R	6.2+47R	6.4+43R	7.1+39R
	#10 @ 12"	q 716	629	561	513	477	449	430	414	401
		F -0.6+120R	1.1+96R	2.3+80R	3.2+68R	3.8+60R	4.3+53R	4.8+48R	5.1+43R	5.4+40R
16	#10 @ 8"	q 820	760	683	658	606	592	558	554	530
		F -1.5+121R	0+96R	1.3+80R	2+69R	2.7+60R	3+54R	3.5+48R	3.7+44R	4.1+40R
	#10 @ 6"	q 916	841	788	750	720	697	678	662	649
		F -2+121R	-0.4+97R	0.7+80R	1.4+69R	2+60R	2.5+54R	2.8+48R	3.1+44R	3.4+40R
	#10 @ 4"	q 1089	1024	979	945	920	899	883	869	857
		F -2.5+121R	-1+97R	0+81R	0.8+69R	1.3+60R	1.7+54R	2.1+48R	2.4+44R	2.6+40R
14	#10 @ 24"	q 1002	885	731	677	588	562	502	491	450
		F 3.2+58R	4+46R	5.4+38R	5.6+33R	6.6+28R	6.6+25R	7.4+22R	7.4+20R	8+18R
	#10 @ 18"	q 1085	956	797	734	687	606	581	563	516
		F 2.4+58R	3.3+46R	4.5+38R	4.9+33R	5.2+29R	6+25R	6.1+23R	6.2+21R	6.7+19R
	#10 @ 12"	q 1166	1024	925	847	786	738	700	670	647
		F 1.9+58R	2.8+47R	3.5+39R	4+33R	4.3+29R	4.6+26R	4.9+23R	5.1+21R	5.2+19R
12	#10 @ 8"	q 1321	1219	1094	1049	973	951	898	886	845
		F 1.1+59R	1.9+47R	2.6+39R	2.9+34R	3.3+29R	3.5+26R	3.8+23R	3.9+21R	4.1+19R
	#10 @ 6"	q 1465	1340	1253	1189	1139	1100	1068	1042	1020
		F 0.7+59R	1.5+47R	2.1+39R	2.5+34R	2.8+29R	3+26R	3.2+24R	3.3+21R	3.4+20R
	#10 @ 4"	q 1721	1615	1540	1484	1441	1407	1379	1356	1337
		F 0.2+59R	1+47R	1.5+39R	1.9+34R	2.1+30R	2.4+26R	2.5+24R	2.7+21R	2.8+20R
10	#10 @ 24"	q 1277	1139	946	884	768	739	661	647	590
		F 3.8+33R	4.3+26R	5.3+21R	5.4+18R	6.2+16R	6.2+14R	6.9+12R	6.8+11R	7.3+10R
	#10 @ 18"	q 1393	1235	1038	963	906	801	771	748	683
		F 3.1+33R	3.7+26R	4.6+22R	4.8+18R	5+16R	5.6+14R	5.7+13R	5.7+12R	6.2+10R
	#10 @ 12"	q 1505	1330	1208	1118	1044	985	937	899	867
		F 2.6+33R	3.2+26R	3.6+22R	4+19R	4.2+16R	4.4+15R	4.6+13R	4.7+12R	4.8+11R
8	#10 @ 8"	q 1717	1597	1440	1389	1292	1268	1200	1188	1138
		F 2+33R	2.4+27R	2.9+22R	3+19R	3.3+17R	3.4+15R	3.6+13R	3.6+12R	3.8+11R
	#10 @ 6"	q 1914	1763	1658	1580	1520	1472	1433	1402	1375
		F 1.6+34R	2.1+27R	2.4+22R	2.6+19R	2.8+17R	2.9+15R	3.1+13R	3.2+12R	3.2+11R
	#10 @ 4"	q 2258	2132	2043	1977	1926	1886	1853	1825	1802
		F 1.1+34R	1.6+27R	1.9+22R	2.1+19R	2.3+17R	2.4+15R	2.5+13R	2.6+12R	2.6+11R

See footnotes on page 28.

Type HSB®-36-SS

- 36/7/4 Weld Pattern at Supports
- Sidelaps Connected with #10 Screws



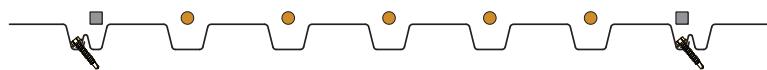
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	#10 @ 24"	q 402 F 8+28R	355 8.4+22R	291 9.8+18R	273 9.8+15R	235 10.9+12R	230 10.8+11R	207 11.7+10R		
	#10 @ 18"	q 451 F 6.9+29R	394 7.5+23R	323 8.7+18R	301 8.9+16R	284 9+14R	251 9.8+12R	246 9.8+10R		
	#10 @ 12"	q 500 F 6.1+29R	433 6.8+23R	388 7.2+19R	357 7.6+16R	333 7.8+14R	317 8.1+12R	304 8.2+11R		
	#10 @ 8"	q 597 F 5.1+30R	550 5.5+24R	486 6+20R	468 6.2+17R	431 6.5+15R	425 6.6+13R	402 6.8+12R		
	#10 @ 6"	q 686 F 4.6+30R	628 5+24R	584 5.4+20R	552 5.6+17R	528 5.8+15R	512 5.9+13R	500 6+12R		
	#10 @ 4"	q 845 F 3.9+30R	792 4.3+24R	756 4.6+20R	730 4.8+17R	710 5+15R	695 5.1+13R	682 5.2+12R		
	#10 @ 24"	q 561 F 7.5+17R	494 7.8+13R	406 9+10R	380 8.9+9R	328 9.9+7R	317 9.7+6R	285 10.6+5R	282 10.3+5R	259 11+4R
20	#10 @ 18"	q 625 F 6.5+18R	545 6.9+14R	449 7.9+11R	417 8.1+9R	393 8.2+8R	345 8.9+7R	336 8.9+6R	329 8.9+6R	302 9.4+5R
	#10 @ 12"	q 689 F 5.8+18R	596 6.3+14R	534 6.6+12R	490 6.9+10R	457 7.1+9R	431 7.3+8R	413 7.4+7R	399 7.5+6R	387 7.6+6R
	#10 @ 8"	q 814 F 4.9+19R	751 5.1+15R	663 5.5+12R	637 5.6+10R	586 5.9+9R	574 5.9+8R	542 6.1+7R	540 6.1+7R	516 6.2+6R
	#10 @ 6"	q 925 F 4.4+19R	846 4.7+15R	791 4.9+12R	748 5.1+11R	714 5.2+9R	689 5.3+8R	671 5.4+7R	657 5.4+7R	645 5.5+6R
	#10 @ 4"	q 1132 F 3.8+19R	1060 4+15R	1010 4.2+13R	974 4.4+11R	946 4.5+9R	924 4.5+8R	907 4.6+8R	892 4.7+7R	880 4.7+6R
	#10 @ 24"	q 948 F 6.5+7R	830 6.7+6R	685 7.7+4R	638 7.6+3R	554 8.4+3R	532 8.2+2R	475 8.9+2R	466 8.7+2R	427 9.3+1R
	#10 @ 18"	q 1047 F 5.7+8R	909 5.9+6R	751 6.8+5R	695 6.9+4R	652 6.9+3R	576 7.5+3R	554 7.5+2R	538 7.4+2R	493 7.9+2R
18	#10 @ 12"	q 1144 F 5.1+8R	988 5.4+6R	883 5.6+5R	808 5.8+4R	751 6+4R	707 6.1+3R	672 6.2+3R	645 6.3+3R	625 6.3+2R
	#10 @ 8"	q 1319 F 4.3+9R	1215 4.4+7R	1080 4.7+6R	1034 4.7+5R	949 4.9+4R	927 4.9+4R	870 5.1+3R	861 5+3R	822 5.1+3R
	#10 @ 6"	q 1488 F 3.8+9R	1354 4+7R	1262 4.2+6R	1195 4.3+5R	1145 4.3+4R	1103 4.4+4R	1068 4.4+4R	1041 4.5+3R	1020 4.5+3R
	#10 @ 4"	q 1804 F 3.3+9R	1681 3.5+7R	1597 3.6+6R	1535 3.6+5R	1489 3.7+5R	1452 3.7+4R	1422 3.8+4R	1398 3.8+3R	1377 3.8+3R
	#10 @ 24"	q 1217 F 5.8+4R	1076 5.9+3R	889 6.8+2R	835 6.7+1R	725 7.4+1R	701 7.2+1R	627 7.8+0R	616 7.6+0R	562 8.1+0R
	#10 @ 18"	q 1355 F 5+4R	1186 5.2+3R	981 6+2R	914 6+2R	863 6+1R	763 6.6+1R	737 6.5+1R	717 6.5+1R	654 6.9+1R
	#10 @ 12"	q 1482 F 4.5+4R	1297 4.7+3R	1166 4.9+3R	1072 5.1+2R	1002 5.2+2R	947 5.3+2R	903 5.4+1R	867 5.4+1R	839 5.5+1R
16	#10 @ 8"	q 1725 F 3.8+5R	1602 3.9+4R	1436 4.1+3R	1387 4.1+3R	1278 4.2+2R	1254 4.2+2R	1180 4.3+2R	1169 4.3+2R	1115 4.4+1R
	#10 @ 6"	q 1957 F 3.4+5R	1793 3.5+4R	1680 3.6+3R	1598 3.7+3R	1536 3.7+2R	1488 3.8+2R	1448 3.8+2R	1416 3.8+2R	1389 3.8+2R
	#10 @ 4"	q 2388 F 2.9+5R	2240 3+4R	2138 3.1+3R	2063 3.1+3R	2007 3.2+3R	1962 3.2+2R	1926 3.2+2R	1897 3.2+2R	1872 3.2+2R

See footnotes on page 28.

Type HSB®-36-SS

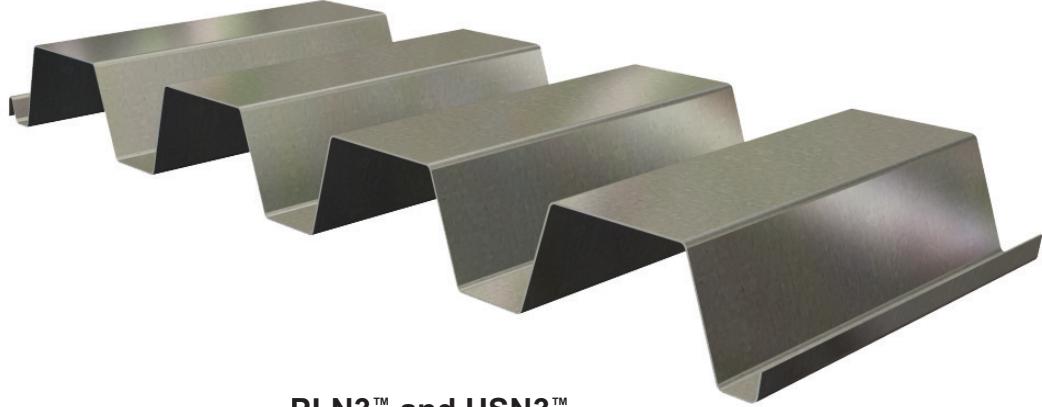
- 36/7 Weld Pattern at Supports
- Sidelaps Connected with #10 Screws



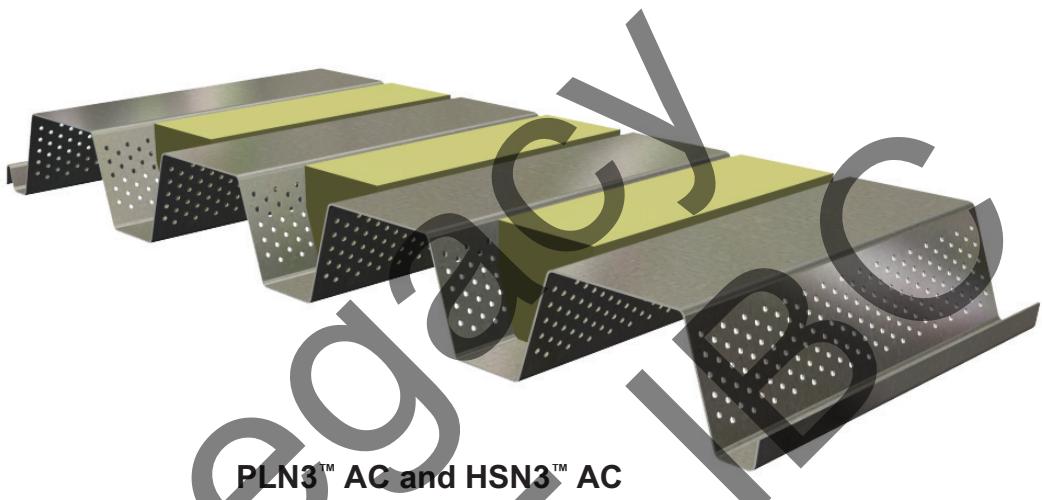
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
22	#10 @ 24"	q 460	401	329	306	264	255	230		
		F 7.1+29R	7.6+23R	8.9+19R	9.1+16R	10.1+13R	10+12R	10.9+10R		
	#10 @ 18"	q 509	440	362	334	313	277	269		
		F 6.3+29R	6.9+23R	8+19R	8.3+16R	8.5+14R	9.3+12R	9.3+11R		
	#10 @ 12"	q 558	479	427	390	362	342	328		
		F 5.7+30R	6.4+24R	6.8+19R	7.2+17R	7.5+14R	7.7+13R	7.9+11R		
20	#10 @ 8"	q 652	597	525	502	460	451	425		
		F 4.9+30R	5.3+24R	5.8+20R	6+17R	6.3+15R	6.4+13R	6.6+12R		
	#10 @ 6"	q 735	669	623	585	557	538	523		
		F 4.4+30R	4.9+24R	5.2+20R	5.5+17R	5.6+15R	5.8+13R	5.9+12R		
	#10 @ 4"	q 889	829	788	757	734	716	702		
		F 3.8+30R	4.2+24R	4.5+20R	4.7+17R	4.9+15R	5+13R	5.1+12R		
18	#10 @ 24"	q 642	558	460	426	369	353	317	312	286
		F 6.7+18R	7.1+14R	8.1+11R	8.2+10R	9.1+8R	9.1+7R	9.8+6R	9.7+6R	10.3+5R
	#10 @ 18"	q 706	610	503	463	433	381	369	358	329
		F 5.9+18R	6.4+14R	7.3+12R	7.5+10R	7.7+9R	8.4+7R	8.4+7R	8.4+6R	9+5R
	#10 @ 12"	q 770	661	588	536	497	467	446	429	414
		F 5.4+18R	5.9+15R	6.3+12R	6.6+10R	6.8+9R	7+8R	7.1+7R	7.2+6R	7.3+6R
16	#10 @ 8"	q 884	812	717	683	626	610	574	569	543
		F 4.7+19R	4.9+15R	5.3+12R	5.4+11R	5.7+9R	5.7+8R	5.9+7R	5.9+7R	6.1+6R
	#10 @ 6"	q 992	901	839	793	755	724	703	686	672
		F 4.2+19R	4.5+15R	4.8+13R	5+11R	5.1+9R	5.2+8R	5.3+8R	5.3+7R	5.4+6R
	#10 @ 4"	q 1193	1110	1053	1011	979	954	934	917	903
		F 3.7+19R	4+15R	4.2+13R	4.3+11R	4.4+10R	4.5+8R	4.6+8R	4.6+7R	4.7+6R
14	#10 @ 24"	q 1085	939	776	716	622	593	530	516	473
		F 5.8+8R	6.1+6R	7+5R	7+4R	7.7+3R	7.7+3R	8.3+2R	8.1+2R	8.7+2R
	#10 @ 18"	q 1178	1018	842	773	721	637	609	588	539
		F 5.2+8R	5.5+7R	6.3+5R	6.4+4R	6.5+4R	7+3R	7.1+3R	7.1+3R	7.5+2R
	#10 @ 12"	q 1266	1098	974	886	820	768	727	695	670
		F 4.7+9R	5.1+7R	5.3+6R	5.5+5R	5.7+4R	5.8+4R	5.9+3R	6+3R	6.1+3R
12	#10 @ 8"	q 1437	1312	1167	1112	1018	988	925	911	868
		F 4.1+9R	4.2+7R	4.5+6R	4.6+5R	4.8+4R	4.8+4R	4.9+3R	4.9+3R	5+3R
	#10 @ 6"	q 1600	1447	1342	1265	1206	1160	1123	1091	1066
		F 3.7+9R	3.9+7R	4+6R	4.2+5R	4.2+4R	4.3+4R	4.4+4R	4.4+3R	4.4+3R
	#10 @ 4"	q 1906	1767	1670	1599	1545	1503	1468	1440	1394
		F 3.2+9R	3.4+7R	3.5+6R	3.6+5R	3.6+5R	3.7+4R	3.7+4R	3.8+3R	3.8+3R
10	#10 @ 24"	q 1387	1212	1003	933	811	777	695	678	619
		F 5.2+4R	5.4+3R	6.1+2R	6.1+2R	6.8+1R	6.7+1R	7.2+1R	7.1+1R	7.6+1R
	#10 @ 18"	q 1511	1323	1095	1012	949	839	806	779	711
		F 4.6+5R	4.8+3R	5.5+3R	5.6+2R	5.6+2R	6.1+1R	6.1+1R	6.1+1R	6.5+1R
	#10 @ 12"	q 1633	1428	1280	1170	1087	1023	972	930	896
		F 4.2+5R	4.4+4R	4.7+3R	4.8+2R	4.9+2R	5.1+2R	5.1+2R	5.2+1R	5.3+1R
8	#10 @ 8"	q 1869	1721	1538	1475	1364	1330	1248	1231	1172
		F 3.6+5R	3.7+4R	3.9+3R	4+3R	4.1+2R	4.1+2R	4.2+2R	4.2+2R	4.3+2R
	#10 @ 6"	q 2095	1907	1778	1684	1612	1555	1510	1472	1441
		F 3.2+5R	3.4+4R	3.5+3R	3.6+3R	3.6+2R	3.7+2R	3.7+2R	3.8+2R	3.8+2R
	#10 @ 4"	q 2511	2343	2226	2141	2076	2024	1982	1948	1919
		F 2.8+5R	2.9+4R	3+3R	3.1+3R	3.1+3R	3.1+2R	3.2+2R	3.2+2R	3.2+2R

See footnotes on page 28.



PLN3™ and HSN3™



PLN3™ AC and HSN3™ AC

PLN3™ AND HSN3™ DECK CONTENTS

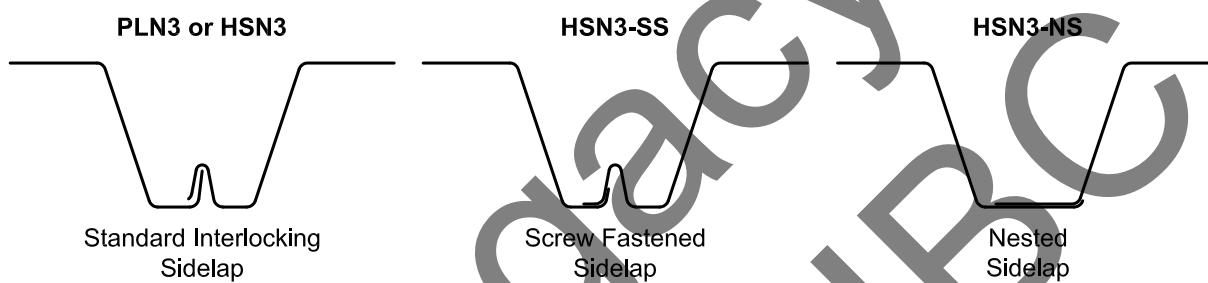
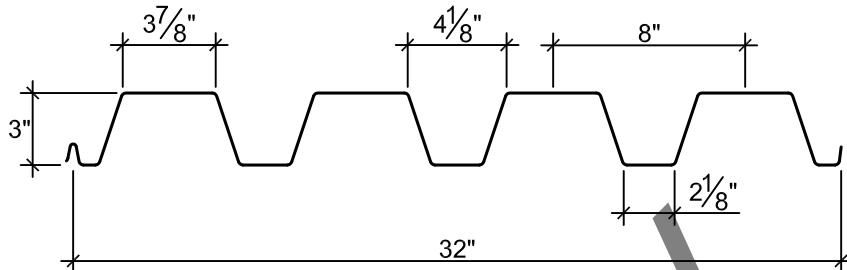
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Type PLN3™ or HSN3™



- 3" Deep Roof Deck
- Primer Painted or Galvanized
- PLN3 Deck used with PunchLok II System
- HSN3 Deck used with TSWs, BPs or Screws

Dimensions



Deck Weight and Section Properties

Gage	Weight		I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb)			
			Single Span		Multi Span		One Flange Loading		Two Flange Loading	
	Galv	Painted	(in. ⁴ /ft)	(in. ⁴ /ft)	+ S_{eff}	- S_{eff}	2"	3"	4"	8"
22	2.0	1.9	0.721	0.785	0.353	0.405	618	711	789	1240
20	2.4	2.3	0.889	0.953	0.452	0.509	870	997	1105	1738
18	3.1	3.1	1.229	1.273	0.671	0.722	1481	1687	1860	2941
16	3.9	3.8	1.571	1.587	0.883	0.932	2240	2538	2789	4430

Notes:

1. Section properties are based on $F_y = 50,000$ psi.
2. I_d is for deflection due to uniform loads.
3. S_{eff} (+ or -) is the effective section modulus.
4. Multiply tabulated deck values listed above by the following adjustment factors to obtain acoustical deck section properties:

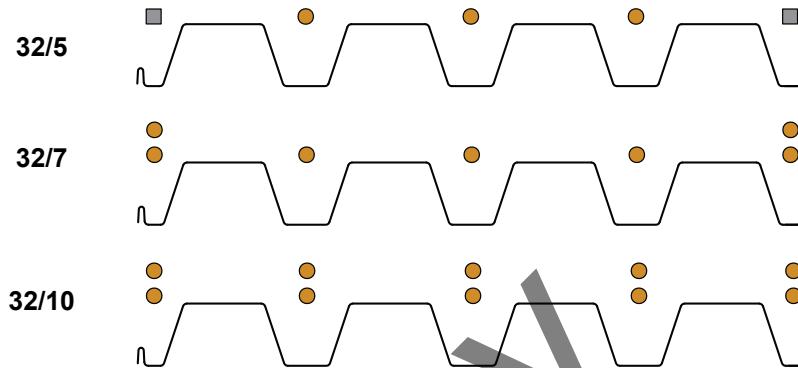
Deck Type	I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb) for One Flange Loading (lb)			
	Single Span	Multi Span	+ S_{eff}	- S_{eff}	End Bearing	Interior Bearing		
N3 - Acoustical	0.93	0.94	0.91	0.92	1.00	0.85		

5. Allowable (ASD) reactions are based on web crippling, per AISI S100 Section C3.4, where $\Omega_w = 1.70$ for end bearing and 1.75 for interior bearing. Nominal reactions may be determined by multiplying the table values by Ω_w . LRFD reactions may be determined by multiplying nominal reactions by $\Phi_w = 0.90$ for end reactions and 0.85 for interior reactions.

Type PLN3™ or HSN3™



Attachment Patterns to Supports



Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
■ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

Footnotes for Allowable Uniform Load Tables

1. Stress = Allowable uniform load based on maximum allowable flexural stress in deck.
2. L/360, L/240 or L/180 = Uniform load which produces selected deflection in deck.
3. The symbol ♦♦ indicates allowable uniform load based on deflection exceeds allowable uniform load based on stress.
4. Nominal uniform loads governed by stress may be determined by multiplying the allowable values in the table by $\Omega_b = 1.67$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.95$.

Type PLN3™ or HSN3™



Footnotes for Diaphragm Shear Strength and Flexibility Factor Tables

General Notes

1. VSC2 = Verco Sidelap Connection 2; BP = Button Punch; TSW = Top Seam Weld; #10 = #10 Generic Screw. Sidelap connections are not required at support locations.
2. The dimension from the first and last sidelap connection within each span is to be no more than one-half of specified spacing.
3. R is the ratio of vertical span (L_V) of the deck to the length (L_S) of the deck sheet: $R = L_V / L_S$.
4. Interpolation of diaphragm shear strength between adjacent spans or sidelap spacings is permissible. For interpolation of the diaphragm flexibility factor between adjacent spans, use the flexibility factor for the closest adjacent span length.
5. Diaphragm shear values for side seam fasteners placed at spacings other than those in the table should be determined based on the number of fasteners in each span.
6. For web perforated acoustical deck profiles, modify tabulated q and F values using the following adjustment factors:

Deck Type	R_q	R_F
N3 - Acoustical	0.93	1.07

Note: Adjustment Factor, R_q must be applied only to allowable diaphragm shear strengths governed by panel buckling which are shown in the shaded areas of the diaphragm tables.

Notes Specific to Tables using Welds to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 3.0$ (limited by connections) with the exception of the gray shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. A 1" x 3/8" effective arc seam weld is required at supports adjacent to sidelap and a 1/2" effective diameter arc spot welds are required at supports in interior flutes.

Notes Specific to Tables using Hilti or Pneutek Fasteners to Supports

1. X-EDNK22 = Hilti EDNK22 THQ12 fastener; X-ENP-19 = Hilti X-ENP-19 L15 fastener; K66 = Pneutek K66062 or K66075 fasteners; K64 = Pneutek K64062 fastener; SDK63 = Pneutek SDK63075; SDK61 = Pneutek SDK61075
2. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).

Notes Specific to Tables using Screws to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. Deck is attached with minimum #12 Screws (self drilling, self tapping) to supports. Select appropriate screw based on actual substrate thickness. This table is provided as a guide, proper selection should be verified based on the specific fasteners used.

Support Thickness	Fastener Designation
33 mil (0.0346") to 3/16"	#3 Drill Point
1/8" to 1/4"	#4 Drill Point
1/8" to 1/2"	#5 Drill Point

3. All tabulated diaphragm values shown in this section are for a minimum 0.0385 in. thick support with SDI recognized screws produced by Buildex, Elco, Hilti or Simpson Strong-Tie. If the minimum support thickness can not be met or a screw that is not recognized by SDI is used, modify tabulated q and F values based on actual substrate and thickness using Adjustment Factors listed in this table.

Deck Gage	Factors	Substrate Thickness and Strength									
		20 ga		18 ga		16 ga		14 ga		≥ 12 ga	
		33 mil (0.0345 in)	33 ksi	43 mil (0.0451 in)	50 ksi	54 mil (0.0566 in)	33 ksi	50 ksi	68 mil (0.0713 in)	33 ksi	50 ksi
22	R_q	0.44	0.61	0.67	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	R_F	1.28	1.25	1.17	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20	R_q	0.34	0.49	0.54	0.74	0.74	0.78	0.78	0.78	0.78	0.78
	R_F	1.31	1.31	1.24	1.19	1.15	1.00	1.00	1.00	1.00	1.00
18	R_q	0.26	0.37	0.38	0.55	0.55	0.78	0.76	0.78	0.78	0.78
	R_F	1.34	1.39	1.30	1.31	1.26	1.18	1.19	1.00	1.00	1.00
16	R_q	0.20	0.30	0.30	0.44	0.43	0.65	0.61	0.78	0.78	0.78
	R_F	1.43	1.66	1.39	1.54	1.33	1.34	1.25	1.00	1.00	1.00

4. Adjustment factors are based on connection strengths determined in accordance with Section E4 of AISI S100.

These self drilling, self tapping screws must be compliant with ASTM C1315.

5. Allowable Diaphragm Strength = $q \cdot R_q$; Flexibility Factor = $F \cdot R_F$.

6. These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns. To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.

Type PLN3™ or HSN3™



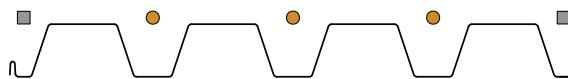
Allowable Uniform Loads (psf)

DECK			SPAN (ft-in.)																	
SPAN GAGE CRITERIA			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
SINGLE	22	Stress	300	282	196	144	110	87	71	58	49	42	36	31	28	24	22	20	18	
		L/360	♦♦♦	252	146	92	62	43	32	24	18	14	12	9	8	6	5	5	4	
		L/240	♦♦♦	♦♦♦	♦♦♦	138	92	65	47	36	27	22	17	14	12	10	8	7	6	
	20	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	87	63	47	37	29	23	19	15	13	11	9	8	
		Stress	300	300	251	184	141	112	90	75	63	53	46	40	35	31	28	25	23	
		L/360	♦♦♦	♦♦♦	180	113	76	53	39	29	23	18	14	12	10	8	7	6	5	
	18	L/240	♦♦♦	♦♦♦	♦♦♦	170	114	80	58	44	34	27	21	17	14	12	10	9	7	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	107	78	58	45	35	28	23	19	16	13	11	10	
		Stress	300	300	300	274	210	166	134	111	93	79	68	60	52	46	41	37	34	
DOUBLE	22	L/360	♦♦♦	♦♦♦	249	157	105	74	54	40	31	24	20	16	13	11	9	8	7	
		L/240	♦♦♦	♦♦♦	♦♦♦	235	158	111	81	61	47	37	29	24	20	16	14	12	10	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	148	108	81	62	49	39	32	26	22	18	16	13	
	20	Stress	300	300	300	300	276	218	177	146	123	104	90	78	69	61	55	49	44	
		L/360	♦♦♦	♦♦♦	♦♦♦	200	134	94	69	52	40	31	25	20	17	14	12	10	9	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	201	141	103	78	60	47	38	31	25	21	18	15	13	
	18	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	269	189	138	103	80	63	50	41	34	28	24	20	17	
		Stress	300	300	225	165	127	100	81	67	56	48	41	36	32	28	25	22	20	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	62	48	38	30	25	20	17	14	12	10	
TRIPLE	22	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
		Stress	300	300	283	208	159	126	102	84	71	60	52	45	40	35	31	28	25	
	20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	100	75	58	46	37	30	25	20	17	15	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	45	37	31	26	22	19
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	25	
	18	Stress	300	300	300	295	226	178	144	119	100	85	74	64	56	50	45	40	36	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	134	101	78	61	49	40	33	27	23	20	17	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	73	60	49	41	35	29	25		
	16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	39	34	
		Stress	300	300	300	300	291	230	186	154	129	110	95	83	73	64	58	52	47	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	229	167	126	97	76	61	50	41	34	29	21
TRIPLE	16	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	91	74	61	51	43	37	31	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	57	49	42		
		Stress	300	300	281	207	158	125	101	84	70	60	52	45	40	35	31	28	25	
	22	L/360	♦♦♦	♦♦♦	♦♦♦	189	126	89	65	49	37	29	24	19	16	13	11	9	8	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	97	73	56	44	35	29	24	20	17	14	12		
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	59	47	38	32	26	22	19	16			
TRIPLE	20	Stress	300	300	300	260	199	157	127	105	88	75	65	57	50	44	39	35	32	
		L/360	♦♦♦	♦♦♦	♦♦♦	229	154	108	79	59	45	36	29	23	19	16	13	11	10	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	118	89	68	54	43	35	29	24	20	17	15		
	18	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	72	57	47	38	32	27	23	20			
		Stress	300	300	300	300	282	223	181	149	125	107	92	80	71	62	56	50	45	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	205	144	105	79	61	48	38	31	26	21	18	15		
TRIPLE	16	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	216	157	118	91	72	57	47	38	32	27	23	20	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	122	96	77	62	51	43	36	31	26		
		Stress	300	300	300	300	300	288	233	193	162	138	119	104	91	81	72	65	58	
	16	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	256	180	131	98	76	60	48	39	32	27	22	19	16	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	269	196	148	114	89	72	58	48	40	34	29	25		
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	151	119	95	78	64	53	45	38	33			

See footnotes on page 81.

Type PLN3™

- 32/5 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 601 F 8.1+68R	516 11.6+44R	474 13.9+32R	449 15.5+25R	433 16.7+20R	421 17.6+17R	412 18.4+15R	405 19+13R	400 19.5+11R
	VSC2 @ 18"	q 758 F 6.9+68R	631 10.3+45R	636 11.4+33R	581 13+26R	543 14.3+21R	559 14.4+18R	534 15.3+16R	513 16+14R	528 15.9+12R
	VSC2 @ 12"	q 881 F 6+69R	810 8.4+45R	772 9.8+34R	749 10.7+27R	734 11.4+22R	722 11.8+19R	714 12.2+16R	665 12.5+15R	538 12.7+13R
	VSC2 @ 8"	q 1086 F 4.7+70R	1031 6.8+46R	1002 7.9+34R	984 8.6+27R	971 9+23R	963 9.4+20R	841 9.6+17R	665 9.8+15R	538 10+14R
	VSC2 @ 6"	q 1241 F 3.9+70R	1200 5.8+46R	1178 6.7+35R	1164 7.3+28R	1155 7.7+23R	1099 8+20R	841 8.2+17R	665 8.4+15R	538 8.5+14R
	VSC2 @ 4"	q 1444 F 3+70R	1421 4.6+47R	1409 5.5+35R	1401 6+28R	1396 6.3+23R	1099 6.5+20R	841 6.7+17R	665 6.9+16R	538 7+14R
20	VSC2 @ 24"	q 854 F 7.6+43R	726 10+27R	666 11.5+20R	630 12.6+16R	606 13.4+13R	589 14+11R	577 14.4+9R	566 14.8+8R	557 15.2+7R
	VSC2 @ 18"	q 1042 F 6.4+43R	871 8.8+28R	878 9.4+21R	803 10.5+16R	752 11.4+13R	774 11.3+11R	738 11.9+10R	711 12.4+9R	708 12.3+8R
	VSC2 @ 12"	q 1206 F 5.6+44R	1112 7.2+29R	1062 8.1+21R	1031 8.6+17R	1010 9+14R	994 9.3+12R	983 9.5+10R	874 9.7+9R	708 9.9+8R
	VSC2 @ 8"	q 1473 F 4.5+44R	1402 5.8+29R	1365 6.5+22R	1341 6.9+17R	1325 7.2+14R	1313 7.4+12R	1106 7.6+11R	874 7.7+10R	708 7.8+9R
	VSC2 @ 6"	q 1671 F 3.9+44R	1619 5+29R	1591 5.6+22R	1573 6+18R	1562 6.2+15R	1444 6.4+13R	1106 6.6+11R	874 6.7+10R	708 6.7+9R
	VSC2 @ 4"	q 1922 F 3.1+44R	1894 4.1+30R	1879 4.7+22R	1869 5+18R	1863 5.2+15R	1444 5.3+13R	1106 5.5+11R	874 5.5+10R	708 5.6+9R
18	VSC2 @ 24"	q 1379 F 5.8+21R	1179 7+13R	1075 7.7+10R	1011 8.1+8R	967 8.5+6R	936 8.7+5R	912 8.9+5R	894 9+4R	879 9.1+4R
	VSC2 @ 18"	q 1661 F 4.9+21R	1386 6.1+14R	1389 6.2+10R	1269 6.8+8R	1187 7.2+7R	1218 7.1+6R	1162 7.3+5R	1118 7.6+4R	1085 7.4+4R
	VSC2 @ 12"	q 1909 F 4.3+21R	1753 5+14R	1670 5.4+11R	1619 5.6+8R	1584 5.8+7R	1558 5.9+6R	1539 6+5R	1339 6+5R	1085 6.1+4R
	VSC2 @ 8"	q 2309 F 3.5+22R	2193 4.1+14R	2131 4.4+11R	2092 4.6+9R	2065 4.7+7R	2046 4.8+6R	1695 4.9+5R	1339 4.9+5R	1085 5+4R
	VSC2 @ 6"	q 2602 F 3.1+22R	2518 3.6+14R	2472 3.9+11R	2444 4.1+9R	2424 4.2+7R	2213 4.2+6R	1695 4.3+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 2973 F 2.6+22R	2928 3.1+14R	2903 3.4+11R	2888 3.5+9R	2878 3.6+7R	2213 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
16	VSC2 @ 24"	q 1790 F 5.2+11R	1545 6.1+7R	1417 6.6+5R	1338 6.9+4R	1284 7.1+3R	1246 7.3+3R	1217 7.5+2R	1194 7.6+2R	1176 7.7+2R
	VSC2 @ 18"	q 2165 F 4.4+12R	1821 5.3+8R	1836 5.3+6R	1684 5.7+4R	1578 6.1+4R	1623 5.9+3R	1551 6.2+3R	1494 6.3+2R	1514 6.2+2R
	VSC2 @ 12"	q 2490 F 3.8+12R	2305 4.3+8R	2206 4.6+6R	2144 4.7+5R	2102 4.8+4R	2072 4.9+3R	2048 5+3R	1869 5+3R	1514 5.1+2R
	VSC2 @ 8"	q 3004 F 3.2+12R	2870 3.6+8R	2798 3.8+6R	2753 3.9+5R	2722 4+4R	2699 4+3R	2365 4.1+3R	1869 4.1+3R	1514 4.1+2R
	VSC2 @ 6"	q 3369 F 2.8+12R	3274 3.2+8R	3223 3.3+6R	3191 3.4+5R	3169 3.5+4R	3089 3.6+4R	2365 3.6+3R	1869 3.6+3R	1514 3.6+2R
	VSC2 @ 4"	q 3817 F 2.4+12R	3768 2.7+8R	3741 2.9+6R	3725 3+5R	3714 3+4R	3089 3.1+4R	2365 3.1+3R	1869 3.1+3R	1514 3.1+2R

See footnotes on page 82.

Type PLN3™

- **32/5 Hilti Fastener Pattern at Supports**

X-EDNK22 at Supports $\frac{1}{8}$ " to $\frac{1}{4}$ " thick

X-HSN24 at Supports $\frac{1}{8}$ " to $\frac{3}{8}$ " thick

- **Sidelaps Connected with PunchLok II Tool**



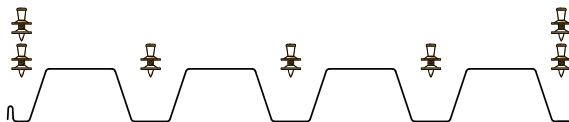
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 569 F 8.5+68R	515 12.1+44R	487 14.3+32R	469 15.9+25R	457 17.1+20R	448 18+17R	441 18.7+15R	436 19.3+13R	432 19.9+11R
	VSC2 @ 18"	q 689 F 7.2+68R	607 10.6+45R	625 11.7+33R	585 13.3+26R	557 14.6+21R	575 14.6+18R	555 15.5+16R	539 16.2+14R	538 16+12R
	VSC2 @ 12"	q 781 F 6.2+69R	749 8.6+45R	732 10+34R	721 10.9+27R	713 11.5+22R	708 12+19R	704 12.3+17R	665 12.6+15R	538 12.8+13R
	VSC2 @ 8"	q 903 F 4.9+70R	884 6.9+46R	875 8+34R	868 8.6+27R	864 9.1+23R	861 9.4+20R	841 9.7+17R	665 9.9+15R	538 10+14R
	VSC2 @ 6"	q 974 F 4+70R	963 5.9+46R	958 6.8+35R	954 7.4+28R	951 7.8+23R	950 8+20R	841 8.3+17R	665 8.4+15R	538 8.6+14R
	VSC2 @ 4"	q 1047 F 3+70R	1042 4.7+47R	1040 5.5+35R	1038 6+28R	1037 6.3+23R	1036 6.6+20R	841 6.7+17R	665 6.9+16R	538 7+14R
	VSC2 @ 24"	q 731 F 7.9+42R	672 10.3+27R	640 11.8+20R	621 12.9+16R	607 13.6+13R	597 14.2+11R	590 14.7+9R	584 15+8R	580 15.4+7R
	VSC2 @ 18"	q 881 F 6.6+43R	788 9+28R	814 9.6+21R	767 10.7+16R	734 11.5+13R	758 11.5+12R	734 12.1+10R	715 12.6+9R	708 12.4+8R
20	VSC2 @ 12"	q 989 F 5.7+44R	958 7.3+29R	941 8.2+21R	930 8.7+17R	923 9.1+14R	917 9.4+12R	913 9.6+10R	874 9.8+9R	708 9.9+8R
	VSC2 @ 8"	q 1126 F 4.6+44R	1109 5.9+29R	1100 6.6+22R	1094 7+17R	1090 7.3+14R	1087 7.5+12R	1085 7.6+11R	874 7.8+10R	708 7.9+9R
	VSC2 @ 6"	q 1200 F 3.9+44R	1191 5.1+29R	1186 5.7+22R	1183 6+18R	1180 6.3+15R	1179 6.4+13R	1106 6.6+11R	874 6.7+10R	708 6.8+9R
	VSC2 @ 4"	q 1272 F 3.1+44R	1268 4.2+30R	1266 4.7+22R	1265 5+18R	1264 5.2+15R	1263 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.6+9R
	VSC2 @ 24"	q 1042 F 6+21R	972 7.1+13R	935 7.8+10R	911 8.2+8R	895 8.5+6R	884 8.8+5R	875 9+5R	868 9.1+4R	862 9.2+4R
	VSC2 @ 18"	q 1244 F 5+21R	1130 6.2+14R	1170 6.3+10R	1112 6.8+8R	1070 7.2+7R	1104 7.1+6R	1073 7.4+5R	1048 7.6+4R	1075 7.5+4R
	VSC2 @ 12"	q 1381 F 4.3+21R	1348 5+14R	1331 5.4+11R	1320 5.6+8R	1312 5.8+7R	1307 5.9+6R	1303 6+5R	1299 6+5R	1085 6.1+4R
	VSC2 @ 8"	q 1542 F 3.5+22R	1526 4.1+14R	1517 4.4+11R	1512 4.6+9R	1508 4.7+7R	1506 4.8+6R	1504 4.9+5R	1339 4.9+5R	1085 5+4R
18	VSC2 @ 6"	q 1624 F 3.1+22R	1615 3.6+14R	1611 3.9+11R	1608 4.1+9R	1606 4.2+7R	1605 4.3+6R	1604 4.3+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 1699 F 2.6+22R	1695 3.1+14R	1694 3.4+11R	1693 3.5+9R	1692 3.6+7R	1691 3.7+6R	1691 3.7+5R	1339 3.8+5R	1085 3.8+4R
	VSC2 @ 24"	q 1346 F 5.3+11R	1266 6.2+7R	1223 6.7+5R	1196 7+4R	1178 7.2+3R	1164 7.4+3R	1154 7.5+3R	1146 7.6+2R	1140 7.7+2R
	VSC2 @ 18"	q 1595 F 4.5+12R	1463 5.4+8R	1514 5.4+6R	1446 5.8+5R	1396 6.1+4R	1439 6+3R	1402 6.2+3R	1372 6.4+2R	1405 6.2+2R
	VSC2 @ 12"	q 1759 F 3.9+12R	1724 4.4+8R	1706 4.6+6R	1694 4.8+5R	1686 4.9+4R	1680 4.9+3R	1676 5+3R	1672 5+3R	1514 5.1+2R
	VSC2 @ 8"	q 1943 F 3.2+12R	1926 3.6+8R	1918 3.8+6R	1913 3.9+5R	1909 4+4R	1906 4+3R	1904 4.1+3R	1869 4.1+3R	1514 4.1+2R
	VSC2 @ 6"	q 2033 F 2.9+12R	2025 3.2+8R	2020 3.3+6R	2018 3.4+5R	2016 3.5+4R	2014 3.6+4R	2013 3.6+3R	1869 3.6+3R	1514 3.6+2R
	VSC2 @ 4"	q 2113 F 2.5+12R	2110 2.7+8R	2108 2.9+6R	2108 3+5R	2107 3+4R	2106 3.1+4R	2106 3.1+3R	1869 3.1+3R	1514 3.1+2R

See footnotes on page 82.

Type PLN3™

- **32/7 Hilti Fastener Pattern at Supports**
X-EDNK22 at Supports $\frac{1}{8}$ " to $\frac{1}{4}$ " thick
X-HSN24 at Supports $\frac{1}{8}$ " to $\frac{3}{8}$ " thick
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 747	644	588	554	530	513	500	490	481
		F 6.1+68R	9.5+44R	11.6+32R	13.3+25R	14.5+20R	15.5+17R	16.4+14R	17.1+12R	17.7+11R
	VSC2 @ 18"	q 879	745	745	684	642	657	628	605	538
		F 5.4+69R	8.6+45R	10+33R	11.5+26R	12.8+21R	13.1+18R	14+15R	14.7+13R	14.8+12R
	VSC2 @ 12"	q 989	917	877	852	835	822	812	665	538
		F 4.8+69R	7.4+45R	8.8+34R	9.8+27R	10.5+22R	11.1+19R	11.5+16R	11.8+14R	12.1+13R
	VSC2 @ 8"	q *1155	*1106	1079	1062	1050	1041	841	665	538
		F 4+70R	6.2+46R	7.3+34R	8.1+27R	8.6+23R	9+19R	9.3+17R	9.5+15R	9.7+13R
	VSC2 @ 6"	q *1266	*1233	*1215	*1203	*1195	1099	841	665	538
		F 3.4+70R	5.4+46R	6.4+35R	7+28R	7.4+23R	7.8+20R	8+17R	8.2+15R	8.3+14R
20	VSC2 @ 4"	q *1395	*1379	*1370	*1365	*1361	1099	841	665	538
		F 2.7+70R	4.4+47R	5.3+35R	5.8+28R	6.2+23R	6.4+20R	6.6+17R	6.8+15R	6.9+14R
	VSC2 @ 24"	q 947	831	767	728	701	681	667	655	645
		F 6+43R	8.4+28R	9.9+20R	11.1+15R	11.9+13R	12.6+10R	13.2+9R	13.6+8R	14+7R
	VSC2 @ 18"	q 1118	963	971	899	849	871	836	807	708
		F 5.3+43R	7.6+28R	8.4+21R	9.5+16R	10.4+13R	10.5+11R	11.1+10R	11.6+8R	11.6+8R
	VSC2 @ 12"	q 1255	1179	1138	1111	1093	1079	1069	874	708
		F 4.8+44R	6.5+29R	7.4+21R	8.1+17R	8.5+14R	8.9+12R	9.1+10R	9.3+9R	9.5+8R
	VSC2 @ 8"	q *1451	*1403	*1377	*1360	*1348	*1340	1106	874	708
		F 4.1+44R	5.4+29R	6.2+22R	6.6+17R	7+14R	7.2+12R	7.4+11R	7.5+9R	7.6+9R
18	VSC2 @ 6"	q *1575	*1544	*1527	*1517	*1509	*1444	1106	874	708
		F 3.5+44R	4.8+29R	5.4+22R	5.8+17R	6.1+15R	6.3+12R	6.4+11R	6.5+10R	6.6+9R
	VSC2 @ 4"	q *1710	*1696	*1689	*1684	*1681	*1444	1106	874	708
		F 2.9+44R	4+30R	4.6+22R	4.9+18R	5.1+15R	5.3+13R	5.4+11R	5.5+10R	5.6+9R
	VSC2 @ 24"	q 1335	1192	1115	1066	1033	1009	990	976	964
		F 5+21R	6.2+13R	7+10R	7.5+8R	7.9+6R	8.2+5R	8.4+4R	8.6+4R	8.7+3R
	VSC2 @ 18"	q 1576	1382	1405	1312	1246	1281	1234	1196	1085
		F 4.4+21R	5.6+14R	5.8+10R	6.4+8R	6.8+7R	6.8+6R	7.1+5R	7.3+4R	7.2+4R
	VSC2 @ 12"	q *1761	1676	1630	1600	1580	1565	1554	1339	1085
		F 3.9+21R	4.7+14R	5.1+10R	5.4+8R	5.6+7R	5.7+6R	5.8+5R	5.9+5R	6+4R
16	VSC2 @ 8"	q *2008	*1959	*1932	*1915	*1903	*1894	1695	1339	1085
		F 3.3+21R	4+14R	4.3+11R	4.5+9R	4.6+7R	4.7+6R	4.8+5R	4.9+5R	4.9+4R
	VSC2 @ 6"	q *2154	*2124	*2108	*2098	*2091	*2086	1695	1339	1085
		F 3+22R	3.5+14R	3.8+11R	4+9R	4.1+7R	4.2+6R	4.3+5R	4.3+5R	4.4+4R
	VSC2 @ 4"	q *2304	*2291	*2285	*2280	*2278	*2213	1695	1339	1085
		F 2.6+22R	3.1+14R	3.3+11R	3.5+9R	3.6+7R	3.6+6R	3.7+5R	3.7+5R	3.8+4R
	VSC2 @ 24"	q 1717	1549	1458	1400	1361	1332	1310	1293	1279
		F 4.5+12R	5.4+7R	6+5R	6.4+4R	6.7+3R	6.9+3R	7.1+2R	7.2+2R	7.3+2R
	VSC2 @ 18"	q 2024	1793	1829	1716	1635	1682	1624	1578	1514
		F 4+12R	4.9+8R	5+6R	5.4+4R	5.8+4R	5.7+3R	5.9+3R	6.1+2R	6+2R
16	VSC2 @ 12"	q *2252	2159	2107	2075	2052	2036	2023	1869	1514
		F 3.6+12R	4.1+8R	4.4+6R	4.6+5R	4.7+4R	4.8+3R	4.9+3R	4.9+3R	5+2R
	VSC2 @ 8"	q *2545	*2494	*2466	*2448	*2436	*2427	*2365	1869	1514
		F 3.1+12R	3.5+8R	3.7+6R	3.8+5R	3.9+4R	4+3R	4+3R	4+3R	4.1+2R
16	VSC2 @ 6"	q *2713	*2683	*2666	*2656	*2649	*2644	*2365	1869	1514
		F 2.8+12R	3.1+8R	3.3+6R	3.4+5R	3.5+4R	3.6+3R	3.6+3R	3.6+3R	3.6+2R
16	VSC2 @ 4"	q *2878	*2866	*2860	*2856	*2853	*2851	*2365	1869	1514
		F 2.4+12R	2.7+8R	2.9+6R	2.9+5R	3+4R	3.1+4R	3.1+3R	3.1+3R	3.1+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1100 plf, 1300 plf, 1700 plf or 2200 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type PLN3™

- 32/5 Hilti Fastener Pattern at Supports
- X-ENP19 at Supports $\frac{1}{4}$ " and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 592 F 6.1+68R	532 9.4+44R	500 11.6+32R	480 13.2+25R	467 14.5+20R	457 15.5+17R	450 16.4+14R	444 17.1+12R	440 17.7+11R
	VSC2 @ 18"	q 717 F 5.4+69R	627 8.6+45R	644 10+33R	601 11.5+26R	570 12.8+21R	589 13.1+18R	568 14+15R	550 14.7+13R	538 14.7+12R
	VSC2 @ 12"	q 815 F 4.8+69R	778 7.4+45R	758 8.8+34R	745 9.8+27R	737 10.5+22R	731 11+19R	726 11.5+16R	665 11.8+14R	538 12.1+13R
	VSC2 @ 8"	q 950 F 4+70R	928 6.1+46R	916 7.3+34R	908 8.1+27R	903 8.6+23R	899 9+19R	841 9.3+17R	665 9.5+15R	538 9.7+13R
	VSC2 @ 6"	q 1031 F 3.4+70R	1018 5.4+46R	1010 6.4+35R	1006 7+28R	1003 7.4+23R	1000 7.8+20R	841 8+17R	665 8.2+15R	538 8.3+14R
	VSC2 @ 4"	q 1116 F 2.7+70R	1110 4.4+47R	1107 5.3+35R	1105 5.8+28R	1103 6.2+23R	1099 6.4+20R	841 6.6+17R	665 6.8+15R	538 6.9+14R
20	VSC2 @ 24"	q 760 F 6+43R	694 8.4+28R	658 9.9+20R	636 11.1+15R	621 11.9+13R	610 12.6+10R	602 13.1+9R	596 13.6+8R	590 14+7R
	VSC2 @ 18"	q 918 F 5.3+43R	815 7.6+28R	841 8.4+21R	790 9.5+16R	754 10.4+13R	779 10.5+11R	753 11.1+10R	732 11.6+8R	708 11.6+8R
	VSC2 @ 12"	q 1036 F 4.8+44R	999 6.5+29R	978 7.4+21R	966 8.1+17R	957 8.5+14R	951 8.8+12R	946 9.1+10R	874 9.3+9R	708 9.5+8R
	VSC2 @ 8"	q 1188 F 4+44R	1167 5.4+29R	1156 6.2+22R	1149 6.6+17R	1145 7+14R	1141 7.2+12R	1106 7.4+11R	874 7.5+9R	708 7.6+9R
	VSC2 @ 6"	q 1274 F 3.5+44R	1262 4.8+29R	1256 5.4+22R	1252 5.8+17R	1249 6.1+15R	1247 6.3+12R	1106 6.4+11R	874 6.5+10R	708 6.6+9R
	VSC2 @ 4"	q 1358 F 2.9+44R	1354 4+30R	1351 4.6+22R	1350 4.9+18R	1348 5.1+15R	1348 5.3+13R	1106 5.4+11R	874 5.5+10R	708 5.6+9R
18	VSC2 @ 24"	q 1084 F 5+21R	1005 6.2+13R	962 7+10R	936 7.5+8R	918 7.9+6R	905 8.2+5R	895 8.4+4R	887 8.6+4R	881 8.7+3R
	VSC2 @ 18"	q 1299 F 4.4+21R	1173 5.6+14R	1213 5.8+10R	1149 6.4+8R	1103 6.8+7R	1139 6.8+6R	1105 7.1+5R	1078 7.3+4R	1085 7.2+4R
	VSC2 @ 12"	q 1451 F 3.9+21R	1411 4.7+14R	1390 5.1+10R	1377 5.4+8R	1368 5.6+7R	1361 5.7+6R	1356 5.8+5R	1339 5.9+5R	1085 6+4R
	VSC2 @ 8"	q 1633 F 3.3+21R	1613 4+14R	1602 4.3+11R	1596 4.5+9R	1591 4.6+7R	1588 4.7+6R	1585 4.8+5R	1339 4.9+5R	1085 4.9+4R
	VSC2 @ 6"	q 1729 F 3+22R	1718 3.5+14R	1712 3.8+11R	1708 4+9R	1706 4.1+7R	1704 4.2+6R	1695 4.3+5R	1339 4.3+5R	1085 4.4+4R
	VSC2 @ 4"	q 1818 F 2.6+22R	1814 3.1+14R	1812 3.3+11R	1810 3.5+9R	1809 3.6+7R	1809 3.6+6R	1695 3.7+5R	1339 3.7+5R	1085 3.8+4R
16	VSC2 @ 24"	q 1401 F 4.5+12R	1310 5.4+7R	1261 6+5R	1230 6.4+4R	1209 6.7+3R	1194 6.9+3R	1183 7.1+2R	1174 7.2+2R	1166 7.3+2R
	VSC2 @ 18"	q 1670 F 4+12R	1521 4.8+8R	1574 5+6R	1498 5.4+4R	1442 5.8+4R	1488 5.7+3R	1447 5.9+3R	1414 6.1+2R	1450 6+2R
	VSC2 @ 12"	q 1851 F 3.6+12R	1809 4.1+8R	1787 4.4+6R	1773 4.6+5R	1763 4.7+4R	1756 4.8+3R	1750 4.9+3R	1746 4.9+3R	1514 5+2R
	VSC2 @ 8"	q 2061 F 3.1+12R	2041 3.5+8R	2030 3.7+6R	2023 3.8+5R	2019 3.9+4R	2015 4+3R	2013 4+3R	1869 4+3R	1514 4.1+2R
	VSC2 @ 6"	q 2168 F 2.8+12R	2157 3.1+8R	2151 3.3+6R	2148 3.4+5R	2145 3.5+4R	2143 3.5+3R	2142 3.6+3R	1869 3.6+3R	1514 3.6+2R
	VSC2 @ 4"	q 2264 F 2.4+12R	2260 2.7+8R	2258 2.9+6R	2256 2.9+5R	2255 3+4R	2255 3.1+4R	2254 3.1+3R	1869 3.1+3R	1514 3.1+2R

See footnotes on page 82.

Type PLN3™

- 32/5 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 577 F 13.1+67R	521 16.5+44R	491 18.4+32R	473 19.6+26R	460 20.5+21R	451 21.1+18R	444 21.6+16R	439 22+14R	435 22.4+12R
	VSC2 @ 18"	q 698 F 10.1+69R	614 13.7+45R	631 14+34R	590 15.5+27R	561 16.7+22R	580 16.4+19R	559 17.2+16R	543 17.8+15R	538 17.4+13R
	VSC2 @ 12"	q 792 F 8.2+69R	759 10.4+46R	740 11.5+34R	729 12.1+27R	721 12.6+23R	716 12.9+19R	711 13.2+17R	665 13.4+15R	538 13.5+14R
	VSC2 @ 8"	q 918 F 6+70R	899 7.8+46R	888 8.7+35R	882 9.3+28R	877 9.6+23R	874 9.9+20R	841 10.1+17R	665 10.3+15R	538 10.4+14R
	VSC2 @ 6"	q 993 F 4.7+70R	981 6.4+47R	975 7.2+35R	971 7.7+28R	968 8.1+23R	967 8.3+20R	841 8.5+17R	665 8.6+16R	538 8.8+14R
	VSC2 @ 4"	q 1069 F 3.4+70R	1064 4.9+47R	1062 5.7+35R	1060 6.2+28R	1059 6.5+23R	1058 6.7+20R	841 6.9+18R	665 7+16R	538 7.1+14R
	VSC2 @ 24"	q 738 F 11.1+42R	677 13.2+28R	645 14.4+21R	624 15.2+16R	611 15.7+13R	601 16.1+11R	593 16.4+10R	587 16.7+9R	582 16.8+8R
20	VSC2 @ 18"	q 890 F 8.6+43R	794 11+28R	820 11+21R	773 12.1+17R	739 12.9+14R	764 12.5+12R	739 13.1+10R	719 13.5+9R	708 13.2+8R
	VSC2 @ 12"	q 1001 F 7.1+44R	968 8.4+29R	950 9.1+22R	939 9.5+17R	931 9.8+14R	926 10+12R	922 10.1+11R	874 10.3+10R	708 10.3+9R
	VSC2 @ 8"	q 1141 F 5.3+44R	1123 6.4+29R	1114 7+22R	1108 7.4+18R	1104 7.6+15R	1101 7.8+13R	1098 7.9+11R	874 8+10R	708 8+9R
	VSC2 @ 6"	q 1218 F 4.4+44R	1208 5.4+30R	1203 5.9+22R	1199 6.2+18R	1197 6.5+15R	1195 6.6+13R	1106 6.7+11R	874 6.8+10R	708 6.9+9R
	VSC2 @ 4"	q 1293 F 3.3+45R	1289 4.3+30R	1286 4.8+22R	1285 5.1+18R	1284 5.3+15R	1284 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
	VSC2 @ 24"	q 1044 F 7.4+21R	974 8.3+14R	936 8.8+10R	913 9.1+8R	897 9.3+7R	885 9.4+6R	876 9.5+5R	869 9.6+4R	864 9.7+4R
	VSC2 @ 18"	q 1247 F 5.7+21R	1133 6.9+14R	1172 6.8+11R	1114 7.3+8R	1072 7.7+7R	1106 7.4+6R	1075 7.7+5R	1050 7.9+5R	1077 7.7+4R
18	VSC2 @ 12"	q 1385 F 4.8+22R	1352 5.4+14R	1334 5.7+11R	1323 5.9+9R	1316 6+7R	1310 6.1+6R	1306 6.1+5R	1303 6.2+5R	1085 6.2+4R
	VSC2 @ 8"	q 1547 F 3.8+22R	1531 4.3+14R	1522 4.6+11R	1517 4.7+9R	1513 4.8+7R	1511 4.9+6R	1509 5+5R	1339 5+5R	1085 5+4R
	VSC2 @ 6"	q 1630 F 3.3+22R	1622 3.7+14R	1617 4+11R	1614 4.1+9R	1612 4.2+7R	1611 4.3+6R	1610 4.4+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 1706 F 2.7+22R	1702 3.2+15R	1701 3.4+11R	1700 3.5+9R	1699 3.6+7R	1699 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
	VSC2 @ 24"	q 1339 F 6.5+12R	1260 7.1+8R	1218 7.5+6R	1191 7.7+5R	1173 7.8+4R	1160 7.9+3R	1150 8+3R	1143 8.1+2R	1136 8.1+2R
	VSC2 @ 18"	q 1586 F 5.1+12R	1456 5.9+8R	1507 5.7+6R	1439 6.1+5R	1390 6.4+4R	1432 6.2+3R	1396 6.4+3R	1366 6.6+3R	1399 6.5+2R
	VSC2 @ 12"	q 1747 F 4.3+12R	1714 4.7+8R	1695 4.8+6R	1684 5+5R	1676 5+4R	1670 5.1+3R	1666 5.1+3R	1663 5.2+3R	1514 5.2+2R
16	VSC2 @ 8"	q 1927 F 3.4+12R	1912 3.7+8R	1904 3.9+6R	1898 4+5R	1895 4.1+4R	1892 4.1+4R	1890 4.1+3R	1869 4.2+3R	1514 4.2+2R
	VSC2 @ 6"	q 2016 F 3+12R	2008 3.3+8R	2004 3.4+6R	2001 3.5+5R	1999 3.6+4R	1998 3.6+4R	1997 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q 2094 F 2.5+12R	2091 2.8+8R	2090 2.9+6R	2089 3+5R	2088 3+4R	2087 3.1+4R	1869 3.1+3R	1514 3.2+2R	

See footnotes on page 82.

Type PLN3™

- 32/7 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 759 F 10.4+67R	652 14+44R	595 16.2+32R	559 17.7+25R	534 18.7+21R	517 19.5+17R	503 20.2+15R	493 20.7+13R	484 21.1+12R
	VSC2 @ 18"	q 892 F 8.5+68R	754 12+45R	752 12.8+33R	691 14.4+26R	647 15.6+22R	662 15.5+18R	633 16.3+16R	609 17+14R	538 16.8+13R
	VSC2 @ 12"	q 1004 F 7.1+69R	928 9.5+46R	887 10.7+34R	861 11.5+27R	843 12.1+22R	829 12.5+19R	819 12.8+17R	665 13+15R	538 13.2+13R
	VSC2 @ 8"	q *1173 F 5.4+70R	*1122 7.3+46R	1093 8.3+35R	1075 9+28R	1063 9.4+23R	1053 9.7+20R	841 9.9+17R	665 10.1+15R	538 10.2+14R
	VSC2 @ 6"	q *1288 F 4.4+70R	*1253 6.1+47R	*1234 7+35R	*1222 7.6+28R	*1213 7.9+23R	1099 8.2+20R	841 8.4+17R	665 8.5+15R	538 8.7+14R
	VSC2 @ 4"	q *1423 F 3.2+70R	*1406 4.8+47R	*1396 5.6+35R	*1391 6.1+28R	*1386 6.4+23R	1099 6.6+20R	841 6.8+18R	665 6.9+16R	538 7.1+14R
	VSC2 @ 24"	q 958 F 9.3+42R	838 11.7+27R	773 13.1+20R	733 14+16R	705 14.7+13R	685 15.2+11R	670 15.5+9R	658 15.9+8R	648 16.1+7R
	VSC2 @ 18"	q 1130 F 7.5+43R	972 9.9+28R	979 10.3+21R	906 11.4+17R	854 12.2+14R	876 12+12R	840 12.6+10R	812 13.1+9R	708 12.8+8R
20	VSC2 @ 12"	q 1269 F 6.4+44R	1191 7.8+29R	1147 8.6+22R	1120 9.1+17R	1101 9.5+14R	1087 9.7+12R	1077 9.9+11R	874 10+9R	708 10.1+8R
	VSC2 @ 8"	q *1469 F 5+44R	*1419 6.2+29R	*1391 6.8+22R	*1374 7.2+18R	*1362 7.4+15R	*1353 7.6+12R	1106 7.8+11R	874 7.9+10R	708 8+9R
	VSC2 @ 6"	q *1596 F 4.1+44R	*1564 5.2+29R	*1546 5.8+22R	*1535 6.1+18R	*1528 6.4+15R	*1444 6.5+13R	1106 6.6+11R	874 6.7+10R	708 6.8+9R
	VSC2 @ 4"	q *1736 F 3.2+44R	*1722 4.2+30R	*1714 4.7+22R	*1709 5+18R	*1705 5.2+15R	*1444 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
	VSC2 @ 24"	q 1339 F 6.6+21R	1195 7.7+14R	1117 8.3+10R	1068 8.7+8R	1034 8.9+7R	1010 9.1+6R	991 9.3+5R	977 9.4+4R	965 9.5+4R
	VSC2 @ 18"	q 1581 F 5.3+21R	1385 6.5+14R	1408 6.5+10R	1314 7.1+8R	1248 7.5+7R	1283 7.3+6R	1236 7.6+5R	1198 7.8+5R	1085 7.6+4R
	VSC2 @ 12"	q 1766 F 4.6+21R	1681 5.2+14R	1634 5.5+11R	1604 5.8+8R	1584 5.9+7R	1569 6+6R	1557 6.1+5R	1339 6.1+5R	1085 6.2+4R
	VSC2 @ 8"	q *2014 F 3.7+22R	*1965 4.2+14R	*1938 4.5+11R	*1920 4.7+9R	*1908 4.8+7R	*1900 4.9+6R	1695 4.9+5R	1339 5+5R	1085 5+4R
18	VSC2 @ 6"	q *2162 F 3.2+22R	*2132 3.7+14R	*2116 3.9+11R	*2105 4.1+9R	*2098 4.2+7R	*2093 4.3+6R	1695 4.3+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q *2313 F 2.7+22R	*2300 3.1+15R	*2294 3.4+11R	*2289 3.5+9R	*2287 3.6+7R	*2213 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
	VSC2 @ 24"	q 1707 F 5.9+12R	1542 6.6+7R	1452 7.1+5R	1395 7.3+4R	1356 7.5+4R	1328 7.7+3R	1306 7.8+3R	1290 7.8+2R	1276 7.9+2R
	VSC2 @ 18"	q 2012 F 4.8+12R	1784 5.6+8R	1820 5.6+6R	1709 6+5R	1629 6.3+4R	1676 6.1+3R	1619 6.3+3R	1573 6.5+3R	1514 6.4+2R
	VSC2 @ 12"	q *2237 F 4.1+12R	*2146 4.5+8R	2096 4.7+6R	2064 4.9+5R	2042 5+4R	2026 5+3R	2014 5.1+3R	1869 5.1+3R	1514 5.1+2R
	VSC2 @ 8"	q *2527 F 3.3+12R	*2477 3.7+8R	*2450 3.8+6R	*2432 3.9+5R	*2420 4+4R	*2411 4.1+3R	*2365 4.1+3R	1869 4.1+3R	1514 4.2+2R
	VSC2 @ 6"	q *2692 F 2.9+12R	*2662 3.2+8R	*2647 3.4+6R	*2637 3.5+5R	*2630 3.5+4R	*2625 3.6+4R	*2365 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q *2854 F 2.5+12R	*2842 2.8+8R	*2836 2.9+6R	*2832 3+5R	*2829 3+4R	*2827 3.1+4R	*2365 3.1+3R	1869 3.1+3R	1514 3.2+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1100 plf, 1300 plf, 1800 plf or 2100 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type PLN3™

- 32/5 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 612 F 13.1+67R	546 16.5+44R	512 18.4+32R	490 19.6+26R	475 20.5+21R	465 21.1+18R	457 21.6+16R	451 22+14R	446 22.4+12R
	VSC2 @ 18"	q 741 F 10.1+69R	644 13.7+45R	660 14+34R	614 15.5+27R	582 16.7+22R	601 16.4+19R	578 17.2+16R	560 17.8+15R	538 17.4+13R
	VSC2 @ 12"	q 845 F 8.2+69R	803 10.4+46R	780 11.5+34R	766 12.1+27R	756 12.6+23R	749 12.9+19R	744 13.2+17R	665 13.4+15R	538 13.5+14R
	VSC2 @ 8"	q 990 F 6+70R	964 7.8+46R	950 8.7+35R	941 9.3+28R	935 9.6+23R	931 9.9+20R	841 10.1+17R	665 10.3+15R	538 10.4+14R
	VSC2 @ 6"	q 1080 F 4.7+70R	1064 6.4+47R	1055 7.2+35R	1050 7.7+28R	1046 8.1+23R	1043 8.3+20R	841 8.5+17R	665 8.6+16R	538 8.8+14R
	VSC2 @ 4"	q 1176 F 3.4+70R	1169 4.9+47R	1165 5.7+35R	1163 6.2+28R	1161 6.5+23R	1099 6.7+20R	841 6.9+18R	665 7+16R	538 7.1+14R
	VSC2 @ 24"	q 768 F 11.1+42R	700 13.2+28R	663 14.4+21R	640 15.2+16R	625 15.7+13R	614 16.1+11R	605 16.4+10R	599 16.7+9R	593 16.8+8R
20	VSC2 @ 18"	q 928 F 8.6+43R	822 11+28R	848 11+21R	796 12.1+17R	759 12.9+14R	785 12.5+12R	758 13.1+10R	737 13.5+9R	708 13.2+8R
	VSC2 @ 12"	q 1048 F 7.1+44R	1009 8.4+29R	988 9.1+22R	975 9.5+17R	966 9.8+14R	960 10+12R	955 10.1+11R	874 10.3+10R	708 10.3+9R
	VSC2 @ 8"	q 1205 F 5.3+44R	1183 6.4+29R	1171 7+22R	1164 7.4+18R	1159 7.6+15R	1155 7.8+13R	1106 7.9+11R	874 8+10R	708 8+9R
	VSC2 @ 6"	q 1294 F 4.4+44R	1281 5.4+30R	1275 5.9+22R	1270 6.2+18R	1268 6.5+15R	1265 6.6+13R	1106 6.7+11R	874 6.8+10R	708 6.9+9R
	VSC2 @ 4"	q 1382 F 3.3+45R	1377 4.3+30R	1375 4.8+22R	1373 5.1+18R	1372 5.3+15R	1371 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
	VSC2 @ 24"	q 1054 F 7.4+21R	981 8.3+14R	942 8.8+10R	918 9.1+8R	902 9.3+7R	890 9.4+6R	881 9.5+5R	874 9.6+4R	868 9.7+4R
	VSC2 @ 18"	q 1259 F 5.7+21R	1142 6.9+14R	1182 6.8+11R	1123 7.3+8R	1079 7.7+7R	1114 7.4+6R	1082 7.7+5R	1057 7.9+5R	1084 7.7+4R
18	VSC2 @ 12"	q 1401 F 4.8+22R	1366 5.4+14R	1348 5.7+11R	1336 5.9+9R	1328 6+7R	1322 6.1+6R	1318 6.1+5R	1314 6.2+5R	1085 6.2+4R
	VSC2 @ 8"	q 1567 F 3.8+22R	1550 4.3+14R	1541 4.6+11R	1535 4.7+9R	1532 4.8+7R	1529 4.9+6R	1527 5+5R	1339 5+5R	1085 5+4R
	VSC2 @ 6"	q 1653 F 3.3+22R	1644 3.7+14R	1639 4+11R	1636 4.1+9R	1634 4.2+7R	1633 4.3+6R	1632 4.4+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 1732 F 2.7+22R	1728 3.2+15R	1727 3.4+11R	1725 3.5+9R	1725 3.6+7R	1724 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
	VSC2 @ 24"	q 1318 F 6.5+12R	1243 7.1+8R	1203 7.5+6R	1178 7.7+5R	1161 7.8+4R	1148 7.9+3R	1139 8+3R	1131 8.1+2R	1125 8.1+2R
	VSC2 @ 18"	q 1557 F 5.1+12R	1433 5.9+8R	1483 5.7+6R	1418 6.1+5R	1371 6.4+4R	1412 6.2+3R	1377 6.4+3R	1349 6.6+3R	1381 6.5+2R
	VSC2 @ 12"	q 1712 F 4.3+12R	1680 4.7+8R	1664 4.8+6R	1653 5+5R	1646 5+4R	1641 5.1+3R	1637 5.1+3R	1634 5.2+3R	1514 5.2+2R
16	VSC2 @ 8"	q 1882 F 3.4+12R	1868 3.7+8R	1860 3.9+6R	1856 4+5R	1852 4.1+4R	1850 4.1+4R	1848 4.1+3R	1847 4.2+3R	1514 4.2+2R
	VSC2 @ 6"	q 1965 F 3+12R	1958 3.3+8R	1954 3.4+6R	1952 3.5+5R	1950 3.6+4R	1949 3.6+4R	1948 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q 2038 F 2.5+12R	2035 2.8+8R	2034 2.9+6R	2033 3+5R	2032 3+4R	2032 3.1+4R	1869 3.1+3R	1869 3.2+2R	1514 3.2+2R

See footnotes on page 82.

Type PLN3™

- 32/7 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

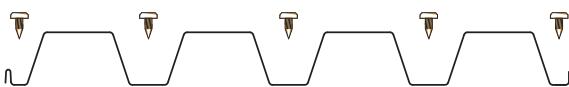
DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 813	690	624	583	555	535	520	508	498
		F 10.4+67R	14+44R	16.2+32R	17.7+25R	18.7+21R	19.5+17R	20.2+15R	20.7+13R	21.1+12R
	VSC2 @ 18"	q 953	797	788	720	672	685	653	627	538
		F 8.5+68R	12+45R	12.8+33R	14.4+26R	15.6+22R	15.5+18R	16.3+16R	17+14R	16.8+13R
	VSC2 @ 12"	q 1073	981	931	899	878	862	841	665	538
		F 7.1+69R	9.5+46R	10.7+34R	11.5+27R	12.1+22R	12.5+19R	12.8+17R	13+15R	13.2+13R
20	VSC2 @ 8"	q *1260	1194	1158	1135	1120	1099	841	665	538
		F 5.4+70R	7.3+46R	8.3+35R	9+28R	9.4+23R	9.7+20R	9.9+17R	10.1+15R	10.2+14R
	VSC2 @ 6"	q *1392	*1346	*1320	*1304	*1293	1099	841	665	538
		F 4.4+70R	6.1+47R	7+35R	7.6+28R	7.9+23R	8.2+20R	8.4+17R	8.5+15R	8.7+14R
	VSC2 @ 4"	q *1554	*1530	*1517	*1509	*1496	1099	841	665	538
		F 3.2+70R	4.8+47R	5.6+35R	6.1+28R	6.4+23R	6.6+20R	6.8+18R	6.9+16R	7.1+14R
18	VSC2 @ 24"	q 1003	870	798	754	723	701	684	671	661
		F 9.3+42R	11.7+27R	13.1+20R	14+16R	14.7+13R	15.2+11R	15.5+9R	15.9+8R	16.1+7R
	VSC2 @ 18"	q 1182	1008	1011	932	876	898	859	829	708
		F 7.5+43R	9.9+28R	10.3+21R	11.4+17R	12.2+14R	12+12R	12.6+10R	13.1+9R	12.8+8R
	VSC2 @ 12"	q 1329	1238	1189	1157	1135	1120	1106	874	708
		F 6.4+44R	7.8+29R	8.6+22R	9.1+17R	9.5+14R	9.7+12R	9.9+11R	10+9R	10.1+8R
16	VSC2 @ 8"	q *1545	*1486	*1453	*1432	*1418	*1407	1106	874	708
		F 5+44R	6.2+29R	6.8+22R	7.2+18R	7.4+15R	7.6+12R	7.8+11R	7.9+10R	8+9R
	VSC2 @ 6"	q *1688	*1648	*1627	*1613	*1604	*1444	1106	874	708
		F 4.1+44R	5.2+29R	5.8+22R	6.1+18R	6.4+15R	6.5+13R	6.6+11R	6.7+10R	6.8+9R
	VSC2 @ 4"	q *1849	*1831	*1820	*1814	*1810	*1444	1106	874	708
		F 3.2+44R	4.2+30R	4.7+22R	5+18R	5.2+15R	5.4+13R	5.5+11R	5.6+10R	5.7+9R
18	VSC2 @ 24"	q 1352	1205	1125	1074	1040	1015	996	981	969
		F 6.6+21R	7.7+14R	8.3+10R	8.7+8R	8.9+7R	9.1+6R	9.3+5R	9.4+4R	9.5+4R
	VSC2 @ 18"	q 1596	1397	1418	1323	1255	1290	1243	1204	1085
		F 5.3+21R	6.5+14R	6.5+10R	7.1+8R	7.5+7R	7.3+6R	7.6+5R	7.8+5R	7.6+4R
	VSC2 @ 12"	q 1784	1696	1648	1617	1596	1580	1568	1339	1085
		F 4.6+21R	5.2+14R	5.5+11R	5.8+8R	5.9+7R	6+6R	6.1+5R	6.1+5R	6.2+4R
16	VSC2 @ 8"	q *2038	*1987	*1958	*1940	*1928	*1919	1695	1339	1085
		F 3.7+22R	4.2+14R	4.5+11R	4.7+9R	4.8+7R	4.9+6R	4.9+5R	5+5R	5+4R
	VSC2 @ 6"	q *2190	*2159	*2141	*2131	*2123	*2118	1695	1339	1085
		F 3.2+22R	3.7+14R	3.9+11R	4.1+9R	4.2+7R	4.3+6R	4.3+5R	4.4+5R	4.4+4R
	VSC2 @ 4"	q *2346	*2333	*2326	*2322	*2319	*2213	1695	1339	1085
		F 2.7+22R	3.1+15R	3.4+11R	3.5+9R	3.6+7R	3.7+6R	3.7+5R	3.8+5R	3.8+4R
16	VSC2 @ 24"	q 1678	1520	1434	1380	1343	1316	1295	1279	1266
		F 5.9+12R	6.6+7R	7.1+5R	7.3+4R	7.5+4R	7.7+3R	7.8+3R	7.8+2R	7.9+2R
	VSC2 @ 18"	q 1976	1758	1795	1688	1610	1657	1602	1557	1514
		F 4.8+12R	5.6+8R	5.6+6R	6+5R	6.3+4R	6.1+3R	6.3+3R	6.5+3R	6.4+2R
	VSC2 @ 12"	q *2195	*2110	2062	2033	2012	1997	1986	1869	1514
		F 4.1+12R	4.5+8R	4.7+6R	4.9+5R	5+4R	5+3R	5.1+3R	5.1+3R	5.1+2R
16	VSC2 @ 8"	q *2473	*2426	*2401	*2385	*2374	*2366	*2360	1869	1514
		F 3.3+12R	3.7+8R	3.8+6R	3.9+5R	4+4R	4.1+3R	4.1+3R	4.1+3R	4.2+2R
	VSC2 @ 6"	q *2628	*2601	*2587	*2578	*2572	*2567	*2365	1869	1514
		F 2.9+12R	3.2+8R	3.4+6R	3.5+5R	3.5+4R	3.6+4R	3.6+3R	3.6+3R	3.7+2R
	VSC2 @ 4"	q *2780	*2769	*2764	*2760	*2758	*2756	*2365	1869	1514
		F 2.5+12R	2.8+8R	2.9+6R	3+5R	3+4R	3.1+4R	3.1+3R	3.1+3R	3.2+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1200 plf, 1400 plf, 1800 plf or 2100 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type PLN3™

- 32/5 Pneutek Fastener Pattern at Supports
- K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 613 F 13.1+67R	547 16.5+44R	512 18.4+32R	491 19.6+26R	476 20.5+21R	465 21.1+18R	457 21.6+16R	451 22+14R	446 22.4+12R
	VSC2 @ 18"	q 743 F 10.1+69R	645 13.7+45R	661 14+34R	615 15.5+27R	582 16.7+22R	601 16.4+19R	579 17.2+16R	560 17.8+15R	538 17.4+13R
	VSC2 @ 12"	q 846 F 8.2+69R	804 10.4+46R	781 11.5+34R	767 12.1+27R	757 12.6+23R	750 12.9+19R	745 13.2+17R	665 13.4+15R	538 13.5+14R
	VSC2 @ 8"	q 992 F 6+70R	966 7.8+46R	952 8.7+35R	943 9.3+28R	937 9.6+23R	933 9.9+20R	841 10.1+17R	665 10.3+15R	538 10.4+14R
	VSC2 @ 6"	q 1083 F 4.7+70R	1066 6.4+47R	1058 7.2+35R	1052 7.7+28R	1048 8.1+23R	1046 8.3+20R	841 8.5+17R	665 8.6+16R	538 8.8+14R
	VSC2 @ 4"	q 1179 F 3.4+70R	1172 4.9+47R	1168 5.7+35R	1166 6.2+28R	1164 6.5+23R	1099 6.7+20R	841 6.9+18R	665 7+16R	538 7.1+14R
20	VSC2 @ 24"	q 815 F 11.1+42R	734 13.2+28R	691 14.4+21R	665 15.2+16R	646 15.7+13R	633 16.1+11R	623 16.4+10R	616 16.7+9R	609 16.8+8R
	VSC2 @ 18"	q 988 F 8.6+43R	865 11+28R	889 11+21R	831 12.1+17R	789 12.9+14R	815 12.5+12R	786 13.1+10R	762 13.5+9R	708 13.2+8R
	VSC2 @ 12"	q 1122 F 7.1+44R	1072 8.4+29R	1046 9.1+22R	1029 9.5+17R	1017 9.8+14R	1009 10+12R	1003 10.1+11R	874 10.3+10R	708 10.3+9R
	VSC2 @ 8"	q 1304 F 5.3+44R	1275 6.4+29R	1259 7+22R	1249 7.4+18R	1243 7.6+15R	1238 7.8+13R	1106 7.9+11R	874 8+10R	708 8+9R
	VSC2 @ 6"	q 1414 F 4.4+44R	1396 5.4+30R	1386 5.9+22R	1381 6.2+18R	1376 6.5+15R	1373 6.6+13R	1106 6.7+11R	874 6.8+10R	708 6.9+9R
	VSC2 @ 4"	q 1526 F 3.3+45R	1519 4.3+30R	1515 4.8+22R	1512 5.1+18R	1511 5.3+15R	1444 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
18	VSC2 @ 24"	q 1183 F 7.4+21R	1080 8.3+14R	1025 8.8+10R	991 9.1+8R	967 9.3+7R	950 9.4+6R	938 9.5+5R	928 9.6+4R	920 9.7+4R
	VSC2 @ 18"	q 1428 F 5.7+21R	1268 6.9+14R	1308 6.8+11R	1230 7.3+8R	1174 7.7+7R	1213 7.4+6R	1173 7.7+5R	1140 7.9+5R	1085 7.7+4R
	VSC2 @ 12"	q 1611 F 4.8+22R	1553 5.4+14R	1522 5.7+11R	1503 5.9+9R	1489 6+7R	1480 6.1+6R	1472 6.1+5R	1339 6.2+5R	1085 6.2+4R
	VSC2 @ 8"	q 1846 F 3.8+22R	1815 4.3+14R	1798 4.6+11R	1787 4.7+9R	1780 4.8+7R	1774 4.9+6R	1695 5+5R	1339 5+5R	1085 5+4R
	VSC2 @ 6"	q 1980 F 3.3+22R	1961 3.7+14R	1951 4+11R	1945 4.1+9R	1941 4.2+7R	1938 4.3+6R	1695 4.4+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 2110 F 2.7+22R	2102 3.2+15R	2099 3.4+11R	2096 3.5+9R	2095 3.6+7R	2093 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
16	VSC2 @ 24"	q 1523 F 6.5+12R	1405 7.1+8R	1341 7.5+6R	1301 7.7+5R	1275 7.8+4R	1255 7.9+3R	1240 8+3R	1229 8.1+2R	1219 8.1+2R
	VSC2 @ 18"	q 1832 F 5.1+12R	1644 5.9+8R	1699 5.7+6R	1605 6.1+5R	1538 6.4+4R	1588 6.2+3R	1539 6.4+3R	1500 6.6+3R	1514 6.5+2R
	VSC2 @ 12"	q 2054 F 4.3+12R	1992 4.7+8R	1959 4.8+6R	1938 5+5R	1923 5+4R	1913 5.1+3R	1905 5.1+3R	1869 5.2+3R	1514 5.2+2R
	VSC2 @ 8"	q 2327 F 3.4+12R	2295 3.7+8R	2277 3.9+6R	2267 4+5R	2259 4.1+4R	2254 4.1+4R	2250 4.1+3R	1869 4.2+3R	1514 4.2+2R
	VSC2 @ 6"	q 2475 F 3+12R	2457 3.3+8R	2447 3.4+6R	2441 3.5+5R	2437 3.6+4R	2434 3.6+4R	2365 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q 2614 F 2.5+12R	2607 2.8+8R	2604 2.9+6R	2601 3+5R	2600 3+4R	2599 3.1+4R	2365 3.1+3R	1869 3.1+3R	1514 3.2+2R

See footnotes on page 82.

Type PLN3™

- 32/7 Pneutek Fastener Pattern at Supports K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 815 F 10.4+67R	692 14+44R	625 16.2+32R	584 17.7+25R	556 18.7+21R	536 19.5+17R	520 20.2+15R	508 20.7+13R	498 21.1+12R
	VSC2 @ 18"	q 955 F 8.5+68R	798 12+45R	789 12.8+33R	720 14.4+26R	673 15.6+22R	686 15.5+18R	654 16.3+16R	628 17+14R	538 16.8+13R
	VSC2 @ 12"	q 1075 F 7.1+69R	983 9.5+46R	932 10.7+34R	901 11.5+27R	879 12.1+22R	863 12.5+19R	841 12.8+17R	665 13+15R	538 13.2+13R
	VSC2 @ 8"	q *1262 F 5.4+70R	1197 7.3+46R	1160 8.3+35R	1137 9+28R	1121 9.4+23R	1099 9.7+20R	841 9.9+17R	665 10.1+15R	538 10.2+14R
	VSC2 @ 6"	q *1395 F 4.4+70R	*1349 6.1+47R	*1323 7+35R	*1307 7.6+28R	*1295 7.9+23R	1099 8.2+20R	841 8.4+17R	665 8.5+15R	538 8.7+14R
	VSC2 @ 4"	q *1558 F 3.2+70R	*1534 4.8+47R	*1521 5.6+35R	*1513 6.1+28R	*1496 6.4+23R	1099 6.6+20R	841 6.8+18R	665 6.9+16R	538 7.1+14R
20	VSC2 @ 24"	q 1076 F 9.3+42R	922 11.7+27R	839 13.1+20R	787 14+16R	752 14.7+13R	726 15.2+11R	707 15.5+9R	692 15.9+8R	679 16.1+7R
	VSC2 @ 18"	q 1264 F 7.5+43R	1065 9.9+28R	1060 10.3+21R	972 11.4+17R	910 12.2+14R	930 12+12R	888 12.6+10R	855 13.1+9R	708 12.8+8R
	VSC2 @ 12"	q 1423 F 6.4+44R	1312 7.8+29R	1251 8.6+22R	1213 9.1+17R	1186 9.5+14R	1167 9.7+12R	1106 9.9+11R	874 10+9R	708 10.1+8R
	VSC2 @ 8"	q *1665 F 5+44R	1588 6.2+29R	1546 6.8+22R	1519 7.2+18R	1501 7.4+15R	1444 7.6+12R	1106 7.8+11R	874 7.9+10R	708 8+9R
	VSC2 @ 6"	q *1831 F 4.1+44R	*1778 5.2+29R	*1749 5.8+22R	*1731 6.1+18R	*1718 6.4+15R	1444 6.5+13R	1106 6.6+11R	874 6.7+10R	708 6.8+9R
	VSC2 @ 4"	q *2028 F 3.2+44R	*2002 4.2+30R	*1988 4.7+22R	*1979 5+18R	*1965 5.2+15R	1444 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
18	VSC2 @ 24"	q 1541 F 6.6+21R	1341 7.7+14R	1232 8.3+10R	1165 8.7+8R	1119 8.9+7R	1085 9.1+6R	1060 9.3+5R	1040 9.4+4R	1024 9.5+4R
	VSC2 @ 18"	q 1817 F 5.3+21R	1554 6.5+14R	1560 6.5+10R	1440 7.1+8R	1355 7.5+7R	1389 7.3+6R	1331 7.6+5R	1284 7.8+5R	1085 7.6+4R
	VSC2 @ 12"	q 2042 F 4.6+21R	1907 5.2+14R	1833 5.5+11R	1786 5.8+8R	1753 5.9+7R	1730 6+6R	1695 6.1+5R	1339 6.1+5R	1085 6.2+4R
	VSC2 @ 8"	q *2371 F 3.7+22R	*2283 4.2+14R	*2235 4.5+11R	*2204 4.7+9R	*2198 4.8+7R	2183 4.9+6R	2167 4.9+5R	1695 5+5R	1339 5+4R
	VSC2 @ 6"	q *2586 F 3.2+22R	*2528 3.7+14R	*2496 3.9+11R	*2476 4.1+9R	*2463 4.2+7R	*2213 4.3+6R	1695 4.3+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q *2826 F 2.7+22R	*2799 3.1+15R	*2785 3.4+11R	*2776 3.5+9R	*2769 3.6+7R	*2213 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
16	VSC2 @ 24"	q 1969 F 5.9+12R	1733 6.6+7R	1605 7.1+5R	1525 7.3+4R	1471 7.5+4R	1431 7.7+3R	1401 7.8+3R	1377 7.8+2R	1358 7.9+2R
	VSC2 @ 18"	q 2325 F 4.8+12R	2010 5.6+8R	2030 5.6+6R	1884 6+5R	1779 6.3+4R	1827 6.1+3R	1755 6.3+3R	1697 6.5+3R	1514 6.4+2R
	VSC2 @ 12"	q 2608 F 4.1+12R	2457 4.5+8R	2374 4.7+6R	2321 4.9+5R	2285 5+4R	2259 5+3R	2239 5.1+3R	1869 5.1+3R	1514 5.1+2R
	VSC2 @ 8"	q *3006 F 3.3+12R	*2912 3.7+8R	*2861 3.8+6R	*2828 3.9+5R	*2806 4+4R	*2789 4.1+3R	2365 4.1+3R	1869 4.1+3R	1514 4.2+2R
	VSC2 @ 6"	q *3254 F 2.9+12R	*3195 3.2+8R	*3163 3.4+6R	*3143 3.5+5R	*3129 3.5+4R	*3089 3.6+4R	2365 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q *3522 F 2.5+12R	*3496 2.8+8R	*3482 2.9+6R	*3473 3+5R	*3467 3+4R	*3089 3.1+4R	2365 3.1+3R	1869 3.1+3R	1514 3.2+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1200 plf, 1600 plf, 2200 plf or 2700 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type PLN3™

- **3/2/5 Pneutek Fastener Pattern at Supports**
- K66 at Supports 0.281" and thicker**
- **Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 633 F 13.1+67R	561 16.5+44R	523 18.4+32R	500 19.6+26R	484 20.5+21R	473 21.1+18R	464 21.6+16R	457 22+14R	452 22.4+12R
	VSC2 @ 18"	q 766 F 10.1+69R	662 13.7+45R	676 14+34R	627 15.5+27R	593 16.7+22R	612 16.4+19R	588 17.2+16R	569 17.8+15R	538 17.4+13R
	VSC2 @ 12"	q 875 F 8.2+69R	828 10.4+46R	802 11.5+34R	786 12.1+27R	775 12.6+23R	767 12.9+19R	761 13.2+17R	665 13.4+15R	538 13.5+14R
	VSC2 @ 8"	q 1031 F 6+70R	1001 7.8+46R	985 8.7+35R	975 9.3+28R	968 9.6+23R	963 9.9+20R	841 10.1+17R	665 10.3+15R	538 10.4+14R
	VSC2 @ 6"	q 1131 F 4.7+70R	1112 6.4+47R	1101 7.2+35R	1095 7.7+28R	1090 8.1+23R	1087 8.3+20R	841 8.5+17R	665 8.6+16R	538 8.8+14R
	VSC2 @ 4"	q 1239 F 3.4+70R	1231 4.9+47R	1226 5.7+35R	1223 6.2+28R	1221 6.5+23R	1099 6.7+20R	841 6.9+18R	665 7+16R	538 7.1+14R
	VSC2 @ 24"	q 824 F 11.1+42R	740 13.2+28R	696 14.4+21R	669 15.2+16R	650 15.7+13R	637 16.1+11R	626 16.4+10R	618 16.7+9R	612 16.8+8R
	VSC2 @ 18"	q 998 F 8.6+43R	873 11+28R	896 11+21R	836 12.1+17R	794 12.9+14R	820 12.5+12R	790 13.1+10R	766 13.5+9R	708 13.2+8R
	VSC2 @ 12"	q 1134 F 7.1+44R	1083 8.4+29R	1055 9.1+22R	1037 9.5+17R	1026 9.8+14R	1017 10+12R	1010 10.1+11R	874 10.3+10R	708 10.3+9R
	VSC2 @ 8"	q 1321 F 5.3+44R	1290 6.4+29R	1274 7+22R	1263 7.4+18R	1256 7.6+15R	1251 7.8+13R	1106 7.9+11R	874 8+10R	708 8+9R
20	VSC2 @ 6"	q 1434 F 4.4+44R	1415 5.4+30R	1405 5.9+22R	1399 6.2+18R	1395 6.5+15R	1391 6.6+13R	1106 6.7+11R	874 6.8+10R	708 6.9+9R
	VSC2 @ 4"	q 1551 F 3.3+45R	1543 4.3+30R	1539 4.8+22R	1536 5.1+18R	1535 5.3+15R	1444 5.4+13R	1106 5.5+11R	874 5.6+10R	708 5.7+9R
	VSC2 @ 24"	q 1208 F 7.4+21R	1098 8.3+14R	1040 8.8+10R	1004 9.1+8R	979 9.3+7R	961 9.4+6R	948 9.5+5R	937 9.6+4R	929 9.7+4R
	VSC2 @ 18"	q 1460 F 5.7+21R	1292 6.9+14R	1331 6.8+11R	1249 7.3+8R	1191 7.7+7R	1230 7.4+6R	1188 7.7+5R	1155 7.9+5R	1085 7.7+4R
	VSC2 @ 12"	q 1650 F 4.8+22R	1588 5.4+14R	1554 5.7+11R	1532 5.9+9R	1518 6+7R	1507 6.1+6R	1499 6.1+5R	1339 6.2+5R	1085 6.2+4R
	VSC2 @ 8"	q 1900 F 3.8+22R	1865 4.3+14R	1845 4.6+11R	1834 4.7+9R	1825 4.8+7R	1819 4.9+6R	1695 5+5R	1339 5+5R	1085 5+4R
	VSC2 @ 6"	q 2043 F 3.3+22R	2022 3.7+14R	2011 4+11R	2004 4.1+9R	2000 4.2+7R	1996 4.3+6R	1695 4.4+5R	1339 4.4+5R	1085 4.4+4R
	VSC2 @ 4"	q 2186 F 2.7+22R	2177 3.2+15R	2173 3.4+11R	2170 3.5+9R	2168 3.6+7R	2167 3.7+6R	1695 3.7+5R	1339 3.8+5R	1085 3.8+4R
	VSC2 @ 24"	q 1606 F 6.5+12R	1467 7.1+8R	1393 7.5+6R	1347 7.7+5R	1315 7.8+4R	1292 7.9+3R	1275 8+3R	1262 8.1+2R	1251 8.1+2R
	VSC2 @ 18"	q 1939 F 5.1+12R	1723 5.9+8R	1778 5.7+6R	1672 6.1+5R	1596 6.4+4R	1649 6.2+3R	1594 6.4+3R	1550 6.6+3R	1514 6.5+2R
	VSC2 @ 12"	q 2187 F 4.3+12R	2109 4.7+8R	2067 4.8+6R	2041 5+5R	2023 5+4R	2010 5.1+3R	2000 5.1+3R	1869 5.2+3R	1514 5.2+2R
16	VSC2 @ 8"	q 2505 F 3.4+12R	2462 3.7+8R	2439 3.9+6R	2425 4+5R	2415 4.1+4R	2408 4.1+4R	2365 4.1+3R	1869 4.2+3R	1514 4.2+2R
	VSC2 @ 6"	q 2684 F 3+12R	2660 3.3+8R	2647 3.4+6R	2638 3.5+5R	2633 3.6+4R	2629 3.6+4R	2365 3.6+3R	1869 3.6+3R	1514 3.7+2R
	VSC2 @ 4"	q 2860 F 2.5+12R	2850 2.8+8R	2845 2.9+6R	2841 3+5R	2839 3+4R	2838 3.1+4R	2365 3.1+3R	1869 3.1+3R	1514 3.2+2R

See footnotes on page 82.

Type PLN3™

- 32/7 Pneutek Fastener Pattern at Supports
- K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 847	714	642	598	568	546	529	516	506
		F 10.4+67R	14+44R	16.2+32R	17.7+25R	18.7+21R	19.5+17R	20.2+15R	20.7+13R	21.1+12R
	VSC2 @ 18"	q 989	822	809	736	686	698	665	638	538
		F 8.5+68R	12+45R	12.8+33R	14.4+26R	15.6+22R	15.5+18R	16.3+16R	17+14R	16.8+13R
	VSC2 @ 12"	q 1113	1012	956	922	898	880	841	665	538
		F 7.1+69R	9.5+46R	10.7+34R	11.5+27R	12.1+22R	12.5+19R	12.8+17R	13+15R	13.2+13R
20	VSC2 @ 8"	q *1310	1236	1195	1169	1151	1099	841	665	538
		F 5.4+70R	7.3+46R	8.3+35R	9+28R	9.4+23R	9.7+20R	9.9+17R	10.1+15R	10.2+14R
	VSC2 @ 6"	q *1453	*1399	*1369	*1351	*1338	1099	841	665	538
		F 4.4+70R	6.1+47R	7+35R	7.6+28R	7.9+23R	8.2+20R	8.4+17R	8.5+15R	8.7+14R
	VSC2 @ 4"	q *1631	*1603	*1587	*1577	*1496	1099	841	665	538
		F 3.2+70R	4.8+47R	5.6+35R	6.1+28R	6.4+23R	6.6+20R	6.8+18R	6.9+16R	7.1+14R
18	VSC2 @ 24"	q 1088	930	845	792	756	730	711	695	683
		F 9.3+42R	11.7+27R	13.1+20R	14+16R	14.7+13R	15.2+11R	15.5+9R	15.9+8R	16.1+7R
	VSC2 @ 18"	q 1278	1075	1069	979	916	936	893	859	708
		F 7.5+43R	9.9+28R	10.3+21R	11.4+17R	12.2+14R	12+12R	12.6+10R	13.1+9R	12.8+8R
	VSC2 @ 12"	q 1439	1324	1261	1222	1194	1175	1106	874	708
		F 6.4+44R	7.8+29R	8.6+22R	9.1+17R	9.5+14R	9.7+12R	9.9+11R	10+9R	10.1+8R
16	VSC2 @ 8"	q *1685	*1605	1561	1533	1514	1444	1106	874	708
		F 5+44R	6.2+29R	6.8+22R	7.2+18R	7.4+15R	7.6+12R	7.8+11R	7.9+10R	8+9R
	VSC2 @ 6"	q *1855	*1800	*1770	*1750	*1737	1444	1106	874	708
		F 4.1+44R	5.2+29R	5.8+22R	6.1+18R	6.4+15R	6.5+13R	6.6+11R	6.7+10R	6.8+9R
	VSC2 @ 4"	q *2058	*2031	*2016	*2006	*1965	1444	1106	874	708
		F 3.2+44R	4.2+30R	4.7+22R	5+18R	5.2+15R	5.4+13R	5.5+11R	5.6+10R	5.7+9R
18	VSC2 @ 24"	q 1579	1368	1253	1182	1134	1099	1072	1051	1034
		F 6.6+21R	7.7+14R	8.3+10R	8.7+8R	8.9+7R	9.1+6R	9.3+5R	9.4+4R	9.5+4R
	VSC2 @ 18"	q 1860	1584	1587	1462	1373	1407	1346	1298	1085
		F 5.3+21R	6.5+14R	6.5+10R	7.1+8R	7.5+7R	7.3+6R	7.6+5R	7.8+5R	7.6+4R
	VSC2 @ 12"	q 2092	1947	1867	1816	1781	1756	1695	1339	1085
		F 4.6+21R	5.2+14R	5.5+11R	5.8+8R	5.9+7R	6+6R	6.1+5R	6.1+5R	6.2+4R
16	VSC2 @ 8"	q *2435	*2339	*2286	*2252	*2229	*2212	1695	1339	1085
		F 3.7+22R	4.2+14R	4.5+11R	4.7+9R	4.8+7R	4.9+6R	4.9+5R	5+5R	5+4R
	VSC2 @ 6"	q *2662	*2598	*2563	*2541	*2525	*2213	1695	1339	1085
		F 3.2+22R	3.7+14R	3.9+11R	4.1+9R	4.2+7R	4.3+6R	4.3+5R	4.4+5R	4.4+4R
	VSC2 @ 4"	q *2921	*2890	*2874	*2864	*2856	*2213	1695	1339	1085
		F 2.7+22R	3.1+15R	3.4+11R	3.5+9R	3.6+7R	3.7+6R	3.7+5R	3.8+5R	3.8+4R
16	VSC2 @ 24"	q 2092	1821	1674	1583	1521	1475	1441	1414	1393
		F 5.9+12R	6.6+7R	7.1+5R	7.3+4R	7.5+4R	7.7+3R	7.8+3R	7.8+2R	7.9+2R
	VSC2 @ 18"	q 2466	2110	2120	1957	1842	1888	1809	1746	1514
		F 4.8+12R	5.6+8R	5.6+6R	6+5R	6.3+4R	6.1+3R	6.3+3R	6.5+3R	6.4+2R
	VSC2 @ 12"	q 2772	2590	2490	2426	2383	2351	2327	1869	1514
		F 4.1+12R	4.5+8R	4.7+6R	4.9+5R	5+4R	5+3R	5.1+3R	5.1+3R	5.1+2R
16	VSC2 @ 8"	q *3218	*3100	*3034	*2993	*2964	*2943	2365	1869	1514
		F 3.3+12R	3.7+8R	3.8+6R	3.9+5R	4+4R	4.1+3R	4.1+3R	4.1+3R	4.2+2R
	VSC2 @ 6"	q *3508	*3430	*3388	*3361	*3342	*3089	2365	1869	1514
		F 2.9+12R	3.2+8R	3.4+6R	3.5+5R	3.5+4R	3.6+4R	3.6+3R	3.6+3R	3.7+2R
	VSC2 @ 4"	q *3832	*3796	*3776	*3764	*3756	*3089	2365	1869	1514
		F 2.5+12R	2.8+8R	2.9+6R	3+5R	3+4R	3.1+4R	3.1+3R	3.1+3R	3.2+2R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1300 plf, 1600 plf, 2200 plf or 2600 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type PLN3™

- **3/2/5 Screw Pattern at Supports**
- **#12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with PunchLok II Tool**



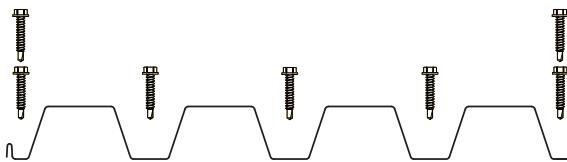
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	VSC2 @ 24"	q 641 F 1.2+139R	548 8.7+68R	500 12.3+44R	474 14.5+32R	458 16.1+25R	447 17.3+20R	439 18.2+17R	433 18.9+15R	428 19.5+13R
	VSC2 @ 18"	q 799 F 0.1+140R	662 7.3+68R	587 10.8+45R	605 11.8+33R	569 13.4+26R	543 14.7+21R	561 14.7+18R	542 15.6+16R	527 16.3+14R
	VSC2 @ 12"	q 799 F 0.1+140R	747 6.3+69R	720 8.7+45R	705 10.1+34R	696 11+27R	690 11.6+22R	685 12+19R	681 12.4+17R	665 12.6+15R
	VSC2 @ 8"	q 886 F -0.6+140R	857 4.9+70R	842 7+46R	834 8+34R	829 8.7+27R	825 9.1+23R	823 9.5+20R	821 9.7+17R	665 9.9+15R
	VSC2 @ 6"	q 937 F -1.1+140R	920 4.1+70R	911 5.9+46R	906 6.8+35R	904 7.4+28R	902 7.8+23R	900 8.1+20R	841 8.3+17R	665 8.4+15R
	VSC2 @ 4"	q 989 F -1.8+141R	981 3+70R	978 4.7+47R	976 5.5+35R	975 6+28R	974 6.3+23R	974 6.6+20R	841 6.8+17R	665 6.9+16R
	VSC2 @ 24"	q 808 F 2.8+88R	706 8+42R	653 10.5+27R	624 12+20R	606 13+16R	594 13.7+13R	585 14.3+11R	579 14.8+9R	574 15.1+8R
	VSC2 @ 18"	q 999 F 1.8+88R	847 6.7+43R	763 9.1+28R	789 9.7+21R	746 10.8+16R	715 11.6+13R	739 11.5+12R	717 12.1+10R	699 12.6+9R
	VSC2 @ 12"	q 999 F 1.8+88R	948 5.8+44R	921 7.4+29R	906 8.2+21R	897 8.8+17R	891 9.2+14R	887 9.4+12R	883 9.7+11R	874 9.8+9R
	VSC2 @ 8"	q 1097 F 1.1+89R	1070 4.7+44R	1057 5.9+29R	1049 6.6+22R	1044 7+17R	1041 7.3+14R	1039 7.5+12R	1037 7.6+11R	874 7.8+10R
20	VSC2 @ 6"	q 1151 F 0.7+89R	1136 4+44R	1128 5.1+29R	1124 5.7+22R	1122 6+18R	1120 6.3+15R	1119 6.5+13R	1106 6.6+11R	874 6.7+10R
	VSC2 @ 4"	q 1203 F 0.1+89R	1197 3.1+44R	1194 4.2+30R	1193 4.7+22R	1192 5+18R	1191 5.2+15R	1190 5.4+13R	1106 5.5+11R	874 5.6+10R
	VSC2 @ 24"	q 1133 F 3.4+43R	1012 6+21R	948 7.2+13R	914 7.9+10R	893 8.3+8R	878 8.6+6R	868 8.8+5R	860 9+5R	853 9.1+4R
	VSC2 @ 18"	q 1385 F 2.4+43R	1203 5+21R	1099 6.2+14R	1137 6.3+10R	1084 6.8+8R	1045 7.3+7R	1077 7.1+6R	1049 7.4+5R	1026 7.6+4R
	VSC2 @ 12"	q 1385 F 2.4+43R	1331 4.3+21R	1302 5+14R	1287 5.4+11R	1277 5.6+8R	1271 5.8+7R	1266 5.9+6R	1262 6+5R	1259 6.1+5R
	VSC2 @ 8"	q 1503 F 1.9+43R	1476 3.6+22R	1463 4.1+14R	1456 4.4+11R	1451 4.6+9R	1448 4.7+7R	1446 4.8+6R	1444 4.9+5R	1339 4.9+5R
	VSC2 @ 6"	q 1564 F 1.6+43R	1549 3.1+22R	1542 3.6+14R	1538 3.9+11R	1536 4.1+9R	1535 4.2+7R	1533 4.3+6R	1533 4.3+5R	1339 4.4+5R
	VSC2 @ 4"	q 1620 F 1.2+44R	1615 2.6+22R	1612 3.1+15R	1611 3.4+11R	1610 3.5+9R	1609 3.6+7R	1609 3.7+6R	1609 3.7+5R	1339 3.8+5R
	VSC2 @ 24"	q 1456 F 3.5+24R	1315 5.4+11R	1241 6.2+7R	1201 6.7+5R	1176 7+4R	1159 7.3+3R	1147 7.4+3R	1138 7.6+3R	1130 7.7+2R
	VSC2 @ 18"	q 1767 F 2.7+24R	1554 4.5+12R	1430 5.4+8R	1480 5.4+6R	1416 5.8+5R	1369 6.1+4R	1410 6+3R	1375 6.2+3R	1347 6.4+2R
	VSC2 @ 12"	q 1767 F 2.7+24R	1708 3.9+12R	1677 4.4+8R	1660 4.6+6R	1650 4.8+5R	1642 4.9+4R	1637 5+3R	1633 5+3R	1630 5.1+3R
16	VSC2 @ 8"	q 1905 F 2.2+25R	1877 3.3+12R	1863 3.6+8R	1856 3.8+6R	1851 3.9+5R	1848 4+4R	1845 4+3R	1844 4.1+3R	1842 4.1+3R
	VSC2 @ 6"	q 1974 F 1.9+25R	1960 2.9+12R	1952 3.2+8R	1948 3.4+6R	1946 3.5+4R	1944 3.6+4R	1943 3.6+3R	1942 3.6+3R	1869 3.6+3R
	VSC2 @ 4"	q 2037 F 1.6+25R	2032 2.5+12R	2029 2.7+8R	2028 2.9+6R	2027 3+5R	2026 3+4R	2026 3.1+4R	2025 3.1+3R	1869 3.1+3R

See footnotes on page 82.

Type PLN3™

- 32/7 Screw Pattern at Supports
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	VSC2 @ 24"	q 889 F -0.6+140R	714 6.3+68R	621 9.6+44R	570 11.9+32R	539 13.5+25R	517 14.7+20R	501 15.7+17R	490 16.6+14R	480 17.3+12R
	VSC2 @ 18"	q 1062 F -1.1+140R	842 5.5+69R	719 8.8+45R	722 10.1+33R	666 11.7+26R	626 12.9+21R	642 13.2+18R	615 14.1+15R	593 14.8+13R
	VSC2 @ 12"	q 1062 F -1.1+140R	947 4.9+69R	883 7.5+45R	848 8.9+34R	826 9.9+27R	811 10.6+22R	800 11.1+19R	792 11.5+16R	665 11.9+14R
	VSC2 @ 8"	q *1176 F -1.5+140R	*1100 4.1+70R	*1059 6.2+46R	*1036 7.4+34R	*1021 8.1+27R	*1011 8.6+23R	*1004 9+19R	841 9.3+17R	665 9.5+15R
	VSC2 @ 6"	q *1251 F -1.8+140R	*1201 3.5+70R	*1173 5.4+46R	*1158 6.4+35R	*1149 7+28R	*1142 7.5+23R	*1099 7.8+20R	841 8+17R	665 8.2+15R
	VSC2 @ 4"	q *1338 F -2.2+141R	*1314 2.7+70R	*1301 4.4+47R	*1294 5.3+35R	*1290 5.8+28R	*1287 6.2+23R	*1099 6.4+20R	841 6.6+17R	665 6.8+15R
	VSC2 @ 24"	q 1107 F 1.4+88R	910 6.2+43R	804 8.6+28R	746 10.1+20R	710 11.2+15R	12.1+13R 12.7+10R	1050 13.3+9R	654 13.7+8R	643
	VSC2 @ 18"	q *1325 F 0.9+88R	1075 5.4+43R	932 7.7+28R	943 8.5+21R	876 9.6+16R	829 10.5+13R	851 10.6+11R	818 11.2+10R	792 11.7+8R
	VSC2 @ 12"	q *1325 F 0.9+88R	*1205 4.9+44R	1138 6.5+29R	1101 7.5+21R	1078 8.1+17R	1062 8.6+14R	1050 8.9+12R	1041 9.2+10R	874 9.4+9R
	VSC2 @ 8"	q *1459 F 0.5+89R	*1385 4.1+44R	*1345 5.5+29R	*1322 6.2+22R	*1308 6.7+17R	1298 7+14R	1291 7.2+12R	1106 7.4+11R	874 7.6+9R
20	VSC2 @ 6"	q *1544 F 0.2+89R	*1497 3.6+44R	*1471 4.8+29R	*1457 5.4+22R	*1449 5.8+17R	*1443 6.1+15R	*1438 6.3+12R	1106 6.4+11R	874 6.6+10R
	VSC2 @ 4"	q *1637 F -0.2+89R	*1615 2.9+44R	*1604 4+30R	*1598 4.6+22R	*1594 4.9+18R	*1592 5.1+15R	*1444 5.3+13R	1106 5.4+11R	874 5.5+10R
	VSC2 @ 24"	q 1534 F 2.5+43R	1293 5.1+21R	1161 6.3+13R	1090 7.1+10R	1045 7.6+8R	1014 7.9+6R	991 8.2+5R	974 8.4+4R	961 8.6+4R
	VSC2 @ 18"	q *1836 F 1.9+43R	1525 4.4+21R	1345 5.6+14R	1370 5.9+10R	1283 6.4+8R	1220 6.8+7R	1255 6.8+6R	1211 7.1+5R	1175 7.3+4R
	VSC2 @ 12"	q *1836 F 1.9+43R	1700 3.9+21R	1625 4.7+14R	1584 5.1+10R	1557 5.4+8R	1539 5.6+7R	1526 5.7+6R	1516 5.8+5R	1339 5.9+5R
	VSC2 @ 8"	q *2007 F 1.6+43R	*1929 3.3+21R	*1887 4+14R	*1864 4.3+11R	*1849 4.5+9R	*1839 4.6+7R	*1831 4.7+6R	1695 4.8+5R	1339 4.9+5R
	VSC2 @ 6"	q *2109 F 1.4+43R	*2062 3+22R	*2037 3.5+14R	*2023 3.8+11R	*2015 4+9R	*2009 4.1+7R	*2004 4.2+6R	1695 4.3+5R	1339 4.3+5R
	VSC2 @ 4"	q *2215 F 1.1+44R	*2195 2.6+22R	*2185 3.1+14R	*2179 3.3+11R	*2176 3.5+9R	*2174 3.6+7R	*2172 3.7+6R	1695 3.7+5R	1339 3.7+5R
	VSC2 @ 24"	q 1962 F 2.8+24R	1675 4.6+12R	1518 5.5+7R	1432 6.1+5R	1378 6.5+4R	1341 6.7+3R	1314 6.9+3R	1294 7.1+2R	1278 7.3+2R
	VSC2 @ 18"	q *2344 F 2.3+24R	1972 4+12R	1755 4.9+8R	1792 5+6R	1686 5.5+4R	1608 5.8+4R	1655 5.7+3R	1600 6+3R	1555 6.1+2R
	VSC2 @ 12"	q *2344 F 2.3+24R	*2190 3.6+12R	*2105 4.1+8R	*2059 4.4+6R	2029 4.6+5R	2009 4.7+4R	1994 4.8+3R	1982 4.9+3R	1869 4.9+3R
16	VSC2 @ 8"	q *2551 F 2+25R	*2466 3.1+12R	*2421 3.5+8R	*2395 3.7+6R	*2379 3.8+5R	*2368 3.9+4R	*2361 4+3R	*2354 4+3R	1869 4.1+3R
	VSC2 @ 6"	q *2671 F 1.8+25R	*2621 2.8+12R	*2595 3.1+8R	*2580 3.3+6R	*2571 3.4+5R	*2565 3.5+4R	*2561 3.5+3R	*2365 3.6+3R	1869 3.6+3R
	VSC2 @ 4"	q *2793 F 1.5+25R	*2772 2.4+12R	*2761 2.7+8R	*2756 2.9+6R	*2752 2.9+5R	*2750 3+4R	*2748 3.1+4R	*2365 3.1+3R	1869 3.1+3R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 32/10 pattern) or shall be limited to 1000 plf, 1200 plf, 1700 plf or 2100 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See additional footnotes on page 82.

Type HSN3™

- 32/5 Weld Pattern at Supports
- Sidelaps Connected with Button Punch or 1½" Top Seam Weld



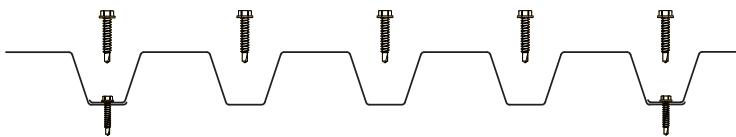
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	BP @ 24"	q 287 F 11.6+66R	201 18+40R	160 23.4+26R	135 28.1+18R	119 32.3+12R	107 36.2+7R	98 39.8+3R	91 43.1+0R	85 46.2-2R
	BP @ 12"	q 322 F 10.7+66R	237 16.3+41R	196 20.5+28R	171 24.1+20R	154 27.1+15R	143 29.7+11R	134 32+8R	127 34.1+6R	121 35.9+4R
	TSW @ 24"	q 685 F 3.7+70R	600 5.5+46R	559 6.5+35R	534 7+28R	515 7.4+23R	502 7.7+20R	493 7.9+17R	485 8.1+15R	479 8.2+14R
	TSW @ 18"	q 849 F 2.8+70R	721 4.7+47R	736 5.3+35R	679 5.9+28R	638 6.4+23R	660 6.5+20R	632 6.8+17R	610 7+16R	538 7+14R
	TSW @ 12"	q 987 F 2.3+70R	924 3.8+47R	891 4.6+35R	870 5.1+28R	856 5.4+23R	846 5.6+20R	838 5.8+18R	665 5.9+16R	538 6+14R
	TSW @ 6"	q 1354 F 1.3+71R	1323 2.8+47R	1306 3.5+35R	1296 4+28R	1289 4.3+24R	1099 4.5+20R	841 4.6+18R	665 4.8+16R	538 4.9+14R
	BP @ 24"	q 418 F 11.4+40R	290 16.9+23R	230 21.6+14R	195 25.7+8R	171 29.5+4R	154 33+1R	141 36.2-2R	131 39.2-4R	123 42-6R
	BP @ 12"	q 470 F 10.6+41R	341 15.3+24R	282 19+16R	246 22.1+11R	222 24.8+7R	205 27.1+4R	193 29.2+2R	183 31+1R	175 32.6+0R
	TSW @ 24"	q 909 F 4.3+44R	792 5.5+29R	732 6.2+22R	694 6.6+17R	669 6.8+15R	651 7+12R	637 7.2+11R	626 7.3+10R	618 7.4+9R
	TSW @ 18"	q 1112 F 3.4+44R	941 4.8+29R	956 5+22R	879 5.6+18R	826 5.9+15R	852 5.9+13R	816 6.1+11R	786 6.3+10R	708 6.2+9R
20	TSW @ 12"	q 1287 F 2.9+44R	1200 3.9+30R	1153 4.4+22R	1124 4.8+18R	1105 5+15R	1090 5.1+13R	1080 5.2+11R	874 5.3+10R	708 5.4+9R
	TSW @ 6"	q 1756 F 2.1+45R	1712 3+30R	1688 3.5+22R	1674 3.8+18R	1664 3.9+15R	1444 4.1+13R	1106 4.2+11R	874 4.3+10R	708 4.3+9R
	BP @ 24"	q 748 F 10.5+18R	513 14.9+9R	407 18.8+4R	344 22.3+0R	302 25.5-2R	272 28.5-4R	249 31.2-6R	232 33.8-7R	218 36.2-8R
	BP @ 12"	q 839 F 9.8+18R	604 13.5+10R	499 16.5+5R	436 19.1+2R	394 21.4+0R	363 23.3-1R	341 25.1-2R	323 26.7-3R	309 28.1-4R
	TSW @ 24"	q 1419 F 4.3+21R	1222 5+14R	1119 5.4+11R	1055 5.7+8R	1012 5.8+7R	981 5.9+6R	958 6+5R	940 6.1+5R	925 6.2+4R
	TSW @ 18"	q 1713 F 3.6+22R	1439 4.4+14R	1448 4.5+11R	1327 4.8+9R	1244 5+7R	1278 5+6R	1221 5.1+5R	1176 5.3+5R	1085 5.2+4R
	TSW @ 12"	q 1970 F 3.1+22R	1820 3.7+14R	1740 3.9+11R	1690 4.1+9R	1656 4.2+7R	1632 4.3+6R	1613 4.3+5R	1339 4.4+5R	1085 4.4+4R
	TSW @ 6"	q 2666 F 2.4+22R	2589 2.9+15R	2547 3.1+11R	2521 3.2+9R	2503 3.3+7R	2213 3.4+6R	1695 3.4+5R	1339 3.5+5R	1085 3.5+4R
	BP @ 24"	q 970 F 9.6+9R	667 13.3+3R	536 16.7+0R	458 19.8-3R	405 22.7-4R	368 25.3-6R	340 27.8-7R	318 30.8R	300 32.2-9R
	BP @ 12"	q 1113 F 8.9+9R	810 12.1+4R	679 14.7+1R	601 17-1R	548 19-2R	511 20.7-3R	483 22.3-4R	461 23.7-4R	443 24.9-5R
16	TSW @ 24"	q 1834 F 4+12R	1593 4.5+8R	1466 4.8+6R	1388 5+5R	1335 5.1+4R	1297 5.2+3R	1268 5.2+3R	1245 5.3+3R	1227 5.3+2R
	TSW @ 18"	q 2223 F 3.3+12R	1879 3.9+8R	1901 3.9+6R	1748 4.2+5R	1641 4.4+4R	1690 4.3+3R	1616 4.4+3R	1558 4.5+3R	1514 4.5+2R
	TSW @ 12"	q 2556 F 3+12R	2377 3.3+8R	2281 3.5+6R	2221 3.6+5R	2181 3.6+4R	2151 3.7+3R	2129 3.7+3R	1869 3.8+3R	1514 3.8+2R
	TSW @ 6"	q 3435 F 2.3+12R	3347 2.6+8R	3299 2.7+6R	3270 2.8+5R	3249 2.8+4R	3089 2.9+4R	2365 2.9+3R	1869 2.9+3R	1514 3+2R

See footnotes on page 82.

Type HSN3™ -NS

- **32/5 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with #10 Screws**



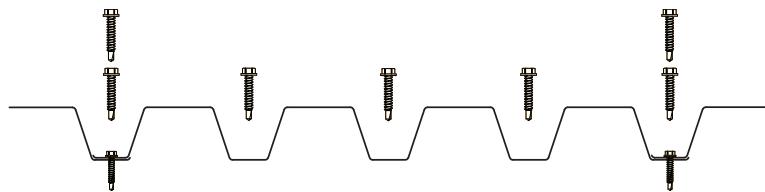
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	#10 @ 24"	q 434 F 0.5+140R	312 7.1+69R	247 9.8+45R	214 11.4+33R	195 12.4+26R	182 13.2+22R	173 13.7+19R	166 14.1+16R	160 14.5+14R
	#10 @ 18"	q 501 F -0.7+140R	360 5.6+69R	286 8.4+46R	272 9.1+34R	242 10.2+27R	221 11.1+22R	223 11.1+19R	210 11.6+17R	200 12.1+15R
	#10 @ 12"	q 501 F -0.7+140R	401 4.7+70R	348 6.7+46R	320 7.7+35R	302 8.3+28R	290 8.8+23R	281 9.1+20R	274 9.3+17R	269 9.5+15R
	#10 @ 8"	q 556 F -1.4+141R	474 3.6+70R	430 5.3+47R	406 6.2+35R	391 6.7+28R	380 7.1+23R	373 7.3+20R	367 7.5+17R	362 7.7+15R
	#10 @ 6"	q 601 F -1.9+141R	534 2.9+70R	498 4.5+47R	478 5.3+35R	465 5.8+28R	456 6.1+23R	450 6.4+20R	445 6.5+18R	442 6.7+16R
	#10 @ 4"	q 666 F -2.5+141R	623 2.1+70R	599 3.6+47R	585 4.4+35R	577 4.9+28R	571 5.2+23R	567 5.4+20R	564 5.6+18R	561 5.7+16R
	#10 @ 24"	q 529 F 2.5+88R	389 7.3+43R	310 9.4+28R	271 10.6+21R	248 11.5+16R	232 12.1+13R	221 12.5+11R	213 12.8+10R	206 13.1+9R
	#10 @ 18"	q 615 F 1.4+88R	447 6+43R	359 8.1+28R	343 8.5+21R	308 9.5+17R	283 10.2+14R	285 10.1+12R	269 10.6+10R	256 11+9R
	#10 @ 12"	q 615 F 1.4+88R	500 5.1+44R	438 6.5+29R	405 7.3+22R	384 7.7+17R	370 8.1+14R	360 8.3+12R	352 8.5+11R	346 8.6+10R
	#10 @ 8"	q 684 F 0.8+89R	592 4.1+44R	541 5.3+29R	514 5.9+22R	496 6.2+18R	484 6.5+15R	476 6.7+13R	469 6.8+11R	464 6.9+10R
20	#10 @ 6"	q 739 F 0.3+89R	665 3.5+44R	625 4.5+30R	603 5.1+22R	589 5.4+18R	579 5.6+15R	572 5.8+13R	566 5.9+11R	562 6+10R
	#10 @ 4"	q 818 F -0.2+89R	771 2.8+45R	745 3.8+30R	731 4.3+22R	722 4.6+18R	716 4.8+15R	711 4.9+13R	708 5+11R	705 5.1+10R
	#10 @ 24"	q 724 F 3.8+42R	542 6.9+20R	444 8.4+13R	392 9.3+9R	361 9.9+7R	341 10.4+6R	326 10.7+5R	315 11+4R	306 11.2+4R
	#10 @ 18"	q 849 F 2.9+43R	628 5.8+21R	511 7.3+13R	496 7.5+10R	447 8.2+8R	414 8.7+6R	418 8.6+5R	397 9+5R	379 9.3+4R
	#10 @ 12"	q 849 F 2.9+43R	706 5.1+21R	629 5.9+14R	587 6.4+10R	560 6.7+8R	542 6.9+7R	529 7+6R	519 7.1+5R	512 7.2+4R
	#10 @ 8"	q 947 F 2.3+43R	836 4.2+21R	775 4.8+14R	742 5.2+11R	721 5.4+8R	706 5.5+7R	696 5.6+6R	688 5.7+5R	682 5.8+5R
	#10 @ 6"	q 1021 F 1.9+43R	936 3.6+22R	889 4.2+14R	863 4.5+11R	847 4.7+9R	836 4.8+7R	828 4.9+6R	821 4.9+5R	817 5+5R
	#10 @ 4"	q 1123 F 1.5+43R	1072 3+22R	1045 3.5+14R	1030 3.8+11R	1020 3.9+9R	1013 4+7R	1008 4.1+6R	1005 4.2+5R	1002 4.2+5R
	#10 @ 24"	q 926 F 4+24R	705 6.3+11R	588 7.5+7R	526 8.3+5R	487 8.8+4R	461 9.1+3R	443 9.4+2R	428 9.6+2R	417 9.8+2R
	#10 @ 18"	q 1094 F 3.2+24R	822 5.4+12R	676 6.5+7R	662 6.6+5R	600 7.2+4R	557 7.7+3R	566 7.5+3R	538 7.9+2R	515 8.1+2R
16	#10 @ 12"	q 1094 F 3.2+24R	925 4.7+12R	834 5.3+8R	784 5.7+6R	753 5.9+5R	731 6+4R	716 6.1+3R	704 6.2+3R	695 6.3+2R
	#10 @ 8"	q 1220 F 2.7+24R	1094 3.9+12R	1025 4.3+8R	986 4.6+6R	962 4.7+5R	946 4.8+4R	934 4.9+3R	925 4.9+3R	917 5+3R
	#10 @ 6"	q 1314 F 2.3+25R	1220 3.4+12R	1168 3.8+8R	1140 4+6R	1122 4.1+5R	1109 4.2+4R	1100 4.2+3R	1093 4.3+3R	1088 4.3+3R
	#10 @ 4"	q 1438 F 1.9+25R	1384 2.8+12R	1355 3.2+8R	1339 3.3+6R	1329 3.4+5R	1322 3.5+4R	1317 3.5+4R	1313 3.6+3R	1310 3.6+3R

See footnotes on page 82.

Type HSN3™ -NS

- **32/7 Screw Pattern at Supports**
- **#12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with #10 Screws**



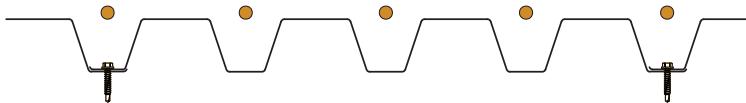
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	VSC2 @ 24"	q 643 F -0.9+140R	461 5.4+69R	345 8.2+45R	288 9.8+33R	254 11+26R	231 11.8+21R	215 12.5+18R	203 13+16R	193 13.4+14R
	VSC2 @ 18"	q 697 F -1.5+140R	503 4.5+69R	384 7.2+46R	347 8.2+34R	301 9.4+27R	270 10.2+22R	265 10.4+19R	247 10.9+16R	232 11.4+14R
	VSC2 @ 12"	q 697 F -1.5+140R	542 3.9+70R	451 6+46R	401 7.1+34R	369 7.8+27R	347 8.3+23R	331 8.7+19R	318 9+17R	309 9.2+15R
	VSC2 @ 8"	q 742 F -2+141R	610 3.1+70R	532 4.9+46R	488 5.9+35R	460 6.4+28R	440 6.8+23R	426 7.1+20R	415 7.3+17R	406 7.5+15R
	VSC2 @ 6"	q 780 F -2.3+141R	669 2.6+70R	602 4.3+47R	564 5.1+35R	539 5.6+28R	522 6+23R	510 6.3+20R	500 6.4+17R	493 6.6+15R
	VSC2 @ 4"	q 841 F -2.7+141R	761 1.9+70R	713 3.5+47R	685 4.3+35R	667 4.8+28R	655 5.1+23R	645 5.3+20R	638 5.5+18R	633 5.6+16R
20	VSC2 @ 24"	q 779 F 1.2+88R	565 5.8+43R	428 7.9+28R	359 9.2+20R	318 10.1+16R	291 10.8+13R	272 11.4+11R	257 11.8+9R	246 12.1+8R
	VSC2 @ 18"	q 848 F 0.7+89R	618 5+43R	479 7.1+28R	437 7.7+21R	380 8.7+17R	343 9.4+14R	338 9.4+12R	315 9.9+10R	297 10.3+9R
	VSC2 @ 12"	q 848 F 0.7+89R	667 4.4+44R	562 5.9+29R	502 6.8+21R	465 7.3+17R	439 7.6+14R	420 7.9+12R	405 8.1+11R	394 8.3+9R
	VSC2 @ 8"	q 905 F 0.3+89R	754 3.7+44R	664 4.9+29R	613 5.6+22R	581 6+17R	558 6.3+15R	542 6.5+12R	529 6.6+11R	519 6.8+10R
	VSC2 @ 6"	q 953 F 0+89R	827 3.2+44R	752 4.3+29R	709 4.9+22R	681 5.3+18R	662 5.5+15R	647 5.7+13R	636 5.8+11R	628 5.9+10R
	VSC2 @ 4"	q 1026 F -0.4+89R	939 2.6+44R	886 3.7+30R	856 4.2+22R	837 4.5+18R	823 4.7+15R	813 4.9+13R	805 5+11R	799 5.1+10R
18	VSC2 @ 24"	q 1052 F 2.7+43R	774 5.6+20R	601 7.1+13R	510 8.1+9R	456 8.8+7R	419 9.3+6R	393 9.7+5R	374 10+4R	359 10.3+3R
	VSC2 @ 18"	q 1154 F 2.2+43R	854 4.9+21R	677 6.4+13R	625 6.8+10R	550 7.5+8R	498 8+6R	495 8+5R	463 8.4+4R	438 8.8+4R
	VSC2 @ 12"	q 1154 F 2.2+43R	926 4.4+21R	792 5.4+14R	717 5.9+10R	669 6.3+8R	635 6.5+7R	611 6.7+6R	593 6.9+5R	578 7+4R
	VSC2 @ 8"	q 1236 F 1.9+43R	1051 3.8+21R	941 4.5+14R	878 4.9+10R	837 5.2+8R	809 5.4+7R	789 5.5+6R	773 5.6+5R	761 5.6+5R
	VSC2 @ 6"	q 1302 F 1.6+43R	1153 3.4+21R	1063 4+14R	1012 4.3+11R	978 4.6+9R	955 4.7+7R	938 4.8+6R	925 4.9+5R	915 4.9+5R
	VSC2 @ 4"	q 1401 F 1.3+43R	1302 2.9+22R	1243 3.4+14R	1209 3.7+11R	1187 3.9+9R	1172 4+7R	1161 4.1+6R	1152 4.1+5R	1145 4.2+5R
16	VSC2 @ 24"	q 1333 F 3+24R	993 5.2+11R	787 6.4+7R	673 7.2+5R	605 7.7+4R	560 8.2+3R	527 8.5+2R	503 8.8+2R	484 9+1R
	VSC2 @ 18"	q 1470 F 2.6+24R	1101 4.6+12R	883 5.7+7R	824 6+5R	734 6.6+4R	670 7.1+3R	665 7+3R	626 7.4+2R	594 7.7+2R
	VSC2 @ 12"	q 1470 F 2.6+24R	1199 4.1+12R	1038 4.8+8R	948 5.3+6R	890 5.5+4R	850 5.7+4R	820 5.9+3R	798 6+3R	781 6.1+2R
	VSC2 @ 8"	q 1578 F 2.3+24R	1363 3.6+12R	1235 4.1+8R	1161 4.4+6R	1114 4.5+5R	1081 4.7+4R	1057 4.7+3R	1039 4.8+3R	1024 4.9+3R
	VSC2 @ 6"	q 1663 F 2.1+25R	1494 3.2+12R	1392 3.6+8R	1334 3.8+6R	1296 4+5R	1270 4.1+4R	1250 4.1+3R	1235 4.2+3R	1224 4.2+3R
	VSC2 @ 4"	q 1786 F 1.8+25R	1678 2.7+12R	1615 3.1+8R	1578 3.3+6R	1555 3.4+5R	1538 3.4+4R	1526 3.5+3R	1517 3.5+3R	1509 3.6+3R

See footnotes on page 82.

Type HSN3™ -NS

- 32/5 Weld Pattern at Supports
- Sidelaps Connected with #10 Screws



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	#10 @ 24"	q 349 F 6.6+69R	264 9.4+45R	222 11+33R	197 12.1+26R	181 12.9+22R	169 13.4+18R	160 13.9+16R	153 14.2+14R	148 14.5+13R
	#10 @ 18"	q 398 F 5.4+69R	296 8.1+46R	271 8.9+34R	236 10+27R	213 10.9+22R	211 10.9+19R	197 11.5+17R	186 12+15R	187 11.8+13R
	#10 @ 12"	q 446 F 4.5+70R	361 6.5+46R	320 7.6+34R	295 8.2+28R	278 8.7+23R	267 9+20R	258 9.3+17R	251 9.4+15R	245 9.6+14R
	#10 @ 8"	q 544 F 3.5+70R	459 5.2+47R	418 6.1+35R	393 6.6+28R	376 7+23R	364 7.3+20R	356 7.5+17R	349 7.6+15R	343 7.7+14R
	#10 @ 6"	q 622 F 2.8+70R	546 4.4+47R	506 5.3+35R	481 5.8+28R	464 6.1+23R	452 6.3+20R	443 6.5+17R	435 6.7+16R	429 6.8+14R
	#10 @ 4"	q 746 F 2.1+70R	683 3.6+47R	649 4.4+35R	628 4.8+28R	614 5.2+23R	603 5.4+20R	595 5.5+18R	589 5.7+16R	538 5.8+14R
20	#10 @ 24"	q 495 F 6.9+43R	367 9+28R	307 10.3+20R	272 11.2+16R	248 11.8+13R	231 12.3+11R	218 12.6+10R	208 12.9+9R	200 13.2+8R
	#10 @ 18"	q 560 F 5.8+43R	410 7.9+28R	372 8.4+21R	323 9.3+17R	291 10+14R	286 9.9+12R	266 10.4+10R	251 10.8+9R	252 10.7+8R
	#10 @ 12"	q 624 F 5+44R	496 6.4+29R	436 7.2+22R	400 7.6+17R	377 8+14R	360 8.2+12R	347 8.4+11R	337 8.5+9R	329 8.6+9R
	#10 @ 8"	q 744 F 4+44R	624 5.2+29R	565 5.8+22R	529 6.2+18R	505 6.4+15R	488 6.6+12R	475 6.8+11R	465 6.9+10R	457 7+9R
	#10 @ 6"	q 837 F 3.4+44R	732 4.5+30R	676 5.1+22R	642 5.4+18R	618 5.6+15R	601 5.8+13R	588 5.9+11R	578 6+10R	570 6.1+9R
	#10 @ 4"	q 998 F 2.7+45R	912 3.7+30R	865 4.2+22R	835 4.5+18R	815 4.7+15R	801 4.9+13R	789 5+11R	781 5.1+10R	708 5.2+9R
18	#10 @ 24"	q 854 F 6.6+20R	619 8.1+13R	514 9+9R	451 9.7+7R	408 10.1+6R	378 10.5+5R	356 10.8+4R	338 11+4R	324 11.2+3R
	#10 @ 18"	q 953 F 5.6+21R	685 7.1+13R	613 7.3+10R	530 8+8R	474 8.6+6R	463 8.5+5R	430 8.9+5R	404 9.2+4R	403 9+4R
	#10 @ 12"	q 1049 F 4.9+21R	817 5.8+14R	712 6.3+10R	648 6.6+8R	606 6.8+7R	576 7+6R	553 7.1+5R	536 7.2+4R	522 7.3+4R
	#10 @ 8"	q 1201 F 4.1+21R	1011 4.8+14R	909 5.1+11R	846 5.3+8R	803 5.5+7R	772 5.6+6R	749 5.7+5R	731 5.7+5R	716 5.8+4R
	#10 @ 6"	q 1343 F 3.6+22R	1166 4.2+14R	1072 4.5+11R	1013 4.6+9R	972 4.8+7R	943 4.9+6R	921 4.9+5R	904 5+5R	890 5+4R
	#10 @ 4"	q 1590 F 3+22R	1442 3.5+14R	1362 3.8+11R	1312 3.9+9R	1277 4+7R	1252 4.1+6R	1233 4.2+5R	1218 4.2+5R	1085 4.2+4R
16	#10 @ 24"	q 1104 F 6.1+11R	801 7.3+7R	670 8+5R	591 8.5+4R	539 8.9+3R	501 9.2+2R	473 9.5+2R	451 9.6+2R	434 9.8+1R
	#10 @ 18"	q 1242 F 5.2+11R	893 6.4+7R	808 6.5+5R	702 7.1+4R	631 7.5+3R	620 7.4+3R	577 7.8+2R	544 8+2R	545 7.9+2R
	#10 @ 12"	q 1357 F 4.6+12R	1078 5.2+8R	947 5.6+6R	868 5.8+4R	815 6+4R	778 6.1+3R	750 6.2+3R	728 6.3+2R	711 6.3+2R
	#10 @ 8"	q 1567 F 3.8+12R	1335 4.3+8R	1211 4.5+6R	1134 4.7+5R	1081 4.8+4R	1043 4.9+3R	1015 4.9+3R	992 5+3R	974 5+2R
	#10 @ 6"	q 1758 F 3.3+12R	1546 3.7+8R	1432 3.9+6R	1361 4.1+5R	1312 4.1+4R	1277 4.2+3R	1250 4.2+3R	1229 4.3+3R	1212 4.3+2R
	#10 @ 4"	q 2086 F 2.8+12R	1914 3.1+8R	1820 3.3+6R	1761 3.4+5R	1720 3.5+4R	1691 3.5+4R	1668 3.6+3R	1651 3.6+3R	1514 3.6+2R

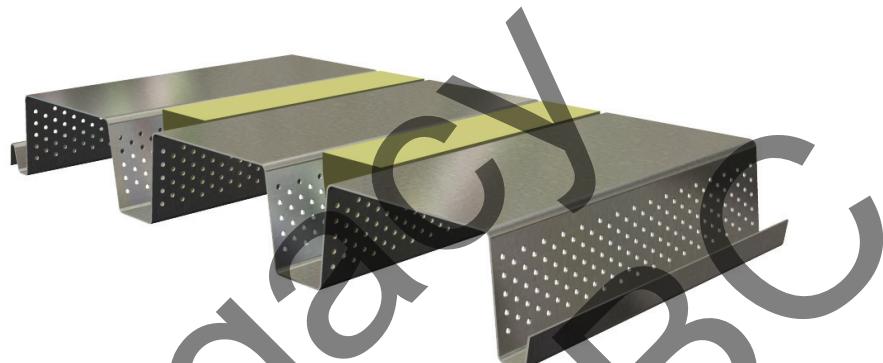
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Notes:

Legacy
2015 IBC



PLN™-24 and N-24



PLN™-24 AND N-24 DECK CONTENTS

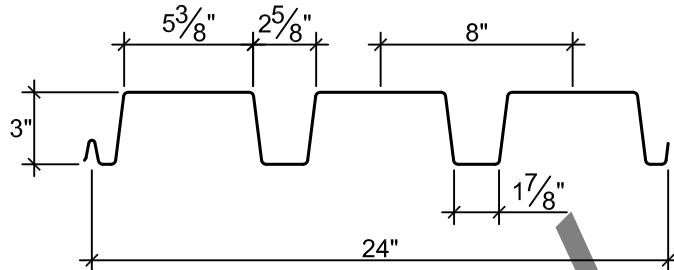
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Type PLN™-24 or N-24

- 3" Deep Roof Deck
- Primer Painted or Galvanized
- PLN-24 Deck used with PunchLok II System
- N-24 Deck used with TSWs, BPs or Screws



Dimensions



PLN-24 or N-24

N-24-SS

Standard Interlocking
Sidelap

Screw Fastened
Sidelap
(Special Order)

Deck Weight and Section Properties

Gage	Weight		I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb)									
							One Flange Loading				Two Flange Loading					
	(psf)	(psf)	Single Span	Multi Span	$+S_{eff}$	$-S_{eff}$	2"	3"	4"	4"	8"	2"	3"	4"	4"	8"
22	2.2	2.1	0.733	0.857	0.344	0.429	654	753	836	1300	1518	620	694	757	1530	1804
20	2.6	2.5	0.908	1.032	0.443	0.531	921	1056	1169	1823	2259	931	1038	1128	2182	2742
18	3.5	3.4	1.267	1.369	0.652	0.735	1566	1783	1967	3085	3860	1730	1915	2070	3771	4794
16	4.2	4.1	1.642	1.706	0.837	0.914	2367	2681	2946	4648	5758	2776	3055	3290	5756	7249

Notes:

1. Section properties are based on $F_y = 50,000$ psi.
2. I_d is for deflection due to uniform loads.
3. S_{eff} (+ or -) is the effective section modulus.
4. Multiply tabulated deck values listed above by the following adjustment factors to obtain acoustical deck section properties:

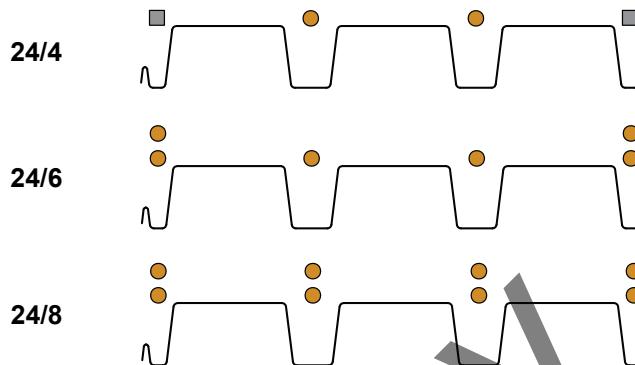
Deck Type	I_d for Deflection		Moment		Allowable Reactions per ft of Width (lb)			
	Single Span	Multi Span	$+S_{eff}$	$-S_{eff}$	End Bearing	Interior Bearing	One Flange Loading	
N-24 - Acoustical	0.94	0.95	0.92	0.94	1.00	0.84		

5. Allowable (ASD) reactions are based on web crippling, per AISI S100 Section C3.4, where $\Omega_w = 1.70$ for end bearing and 1.75 for interior bearing. Nominal reactions may be determined by multiplying the table values by Ω_w . LRFD reactions may be determined by multiplying nominal reactions by $\Phi_w = 0.90$ for end reactions and 0.85 for interior reactions.

Type PLN™-24 or N-24



Attachment Patterns to Supports



Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
■ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

Footnotes for Allowable Uniform Load Tables

1. Stress = Allowable uniform load based on maximum allowable flexural stress in deck.
2. L/360, L240 or L/180 = Uniform load which produces selected deflection in deck.
3. The symbol ♦♦ indicates allowable uniform load based on deflection exceeds allowable uniform load based on stress.
4. Nominal uniform loads governed by stress may be determined by multiplying the allowable values in the table by $\Omega_b = 1.67$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.95$.

Type PLN™-24 or N-24



Footnotes for Diaphragm Shear Strength and Flexibility Factor Tables

General Notes

1. VSC2 = Verco Sidelap Connection 2; BP = Button Punch; TSW = Top Seam Weld.
2. The dimension from the first and last sidelap connection within each span is to be no more than one-half of specified spacing.
3. R is the ratio of vertical span (L_V) of the deck to the length (L_S) of the deck sheet: $R = L_V / L_S$.
4. Interpolation of diaphragm shear strength between adjacent spans or sidelap spacings is permissible. For interpolation of the diaphragm flexibility factor between adjacent spans, use the flexibility factor for the closest adjacent span length.
5. Diaphragm shear values for side seam fasteners placed at spacings other than those in the table should be determined based on the number of fasteners in each span.
6. For acoustical deck profiles, modify tabulated q and F values using the following adjustment factors:

Deck Type	R_q	R_F
N-24 - Acoustical	0.94	1.05

Note: Adjustment Factor, R_q must be applied only to allowable diaphragm shear strengths governed by panel buckling which are shown in the shaded areas of the diaphragm tables.

7. N-24-SS and N-24-SS AC are available upon special order. To calculate diaphragm shear strength and flexibility factors for these profiles, refer to the design equations listed at the end of Verco's Evaluation Report No. 0217.

Notes Specific to Tables using Welds to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 3.0$ (limited by connections) with the exception of the gray shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. A 1" x 3/8" effective arc seam weld is required at supports adjacent to sidelap and a 1/2" effective diameter arc spot welds are required at supports in interior flutes.

Notes Specific to Tables using Hilti or Pneutek Fasteners to Supports

1. X-EDNK22 = Hilti EDNK22 THQ12 fastener; X-ENP-19 = Hilti X-ENP-19 L15 fastener; K66 = Pneutek K66062 or K66075 fasteners; K64 = Pneutek K64062 fastener; SDK63 = Pneutek SDK63075; SDK61 = Pneutek SDK61075
2. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).

Notes Specific to Tables using Screws to Supports

1. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
2. Deck is attached with minimum #12 Screws (self drilling, self tapping) to supports. Select appropriate screw based on actual substrate thickness. This table is provided as a guide, proper selection should be verified based on the specific fasteners used.

Support Thickness	Fastener Designation
33 mil (0.0346") to 3/16"	#3 Drill Point
1/8" to 1/4"	#4 Drill Point
1/8" to 1/2"	#5 Drill Point

3. All tabulated diaphragm values shown in this section are for a minimum 0.0385 in. thick support with SDI recognized screws produced by Buildex, Elco, Hilti or Simpson Strong-Tie. If the minimum support thickness can not be met or a screw that is not recognized by SDI is used, modify tabulated q and F values based on actual substrate and thickness using Adjustment Factors listed in this table.

Deck Gage	Factors	Substrate Thickness and Strength									
		20 ga		18 ga		16 ga		14 ga		≥ 12 ga	
		33 mil (0.0345 in)	33 ksi	43 mil (0.0451 in)	50 ksi	54 mil (0.0566 in)	33 ksi	68 mil (0.0713 in)	50 ksi	≥ 97 mil (0.1017 in)	33 ksi
22	R_q	0.44	0.61	0.67	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	R_F	1.28	1.25	1.17	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20	R_q	0.34	0.49	0.54	0.74	0.74	0.78	0.78	0.78	0.78	0.78
	R_F	1.31	1.31	1.24	1.19	1.15	1.00	1.00	1.00	1.00	1.00
18	R_q	0.26	0.37	0.38	0.55	0.55	0.78	0.76	0.78	0.78	0.78
	R_F	1.34	1.39	1.30	1.31	1.26	1.18	1.19	1.00	1.00	1.00
16	R_q	0.20	0.30	0.30	0.44	0.43	0.65	0.61	0.78	0.78	0.78
	R_F	1.43	1.66	1.39	1.54	1.33	1.34	1.25	1.00	1.00	1.00

4. Adjustment factors are based on connection strengths determined in accordance with Section E4 of AISI S100.

These self drilling, self tapping screws must be compliant with ASTM C1315.

5. Allowable Diaphragm Strength = $q \cdot R_q$; Flexibility Factor = $F \cdot R_F$.

6. These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns. To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.

Type PLN™-24 or N-24



Allowable Uniform Loads (psf)

		DECK SPAN GAGE CRITERIA	SPAN (ft-in.)																	
			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
SINGLE	22	Stress	300	275	191	140	108	85	69	57	48	41	35	31	27	24	21	19	17	
		L/360	♦♦♦	257	149	94	63	44	32	24	19	15	12	10	8	7	6	5	4	
		L/240	♦♦♦	♦♦♦	♦♦♦	140	94	66	48	36	28	22	18	14	12	10	8	7	6	
	20	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	48	37	29	23	19	16	13	11	9	8	
		Stress	300	300	246	181	138	109	89	73	62	52	45	39	35	31	27	25	22	
		L/360	♦♦♦	♦♦♦	184	116	78	55	40	30	23	18	14	12	10	8	7	6	5	
	18	L/240	♦♦♦	♦♦♦	♦♦♦	174	116	82	60	45	35	27	22	18	15	12	10	9	7	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	109	79	60	46	36	29	24	19	16	14	12	10	
		Stress	300	300	300	266	204	161	130	108	91	77	67	58	51	45	40	36	33	
DOUBLE	22	L/360	♦♦♦	♦♦♦	257	162	108	76	55	42	32	25	20	16	14	11	10	8	7	
		L/240	♦♦♦	♦♦♦	♦♦♦	243	162	114	83	63	48	38	30	25	20	17	14	12	10	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	152	111	83	64	50	40	33	27	23	19	16	14	
	20	Stress	300	300	300	300	262	207	167	138	116	99	85	74	65	58	52	46	42	
		L/360	♦♦♦	♦♦♦	♦♦♦	210	140	99	72	54	42	33	26	21	18	15	12	10	9	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	211	148	108	81	62	49	39	32	26	22	18	16	13	
	18	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	197	144	108	83	65	52	43	35	29	25	21	18	
		Stress	300	300	300	300	238	175	134	106	86	71	60	51	44	38	34	30	26	24
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	68	52	41	33	27	22	18	15	13	11	
TRIPLE	22	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	33	28	23	20	17
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
		Stress	300	300	295	217	166	131	106	88	74	63	54	47	41	37	33	29	27	
	20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	82	63	50	40	32	27	22	19	16	14	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	40	33	28	24	20	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	18	Stress	300	300	300	300	230	181	147	121	102	87	75	65	57	51	45	41	37	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	144	108	83	66	53	43	35	29	25	21	18
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	53	44	37	32	27	
	16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	36	
		Stress	300	300	300	300	286	226	183	151	127	108	93	81	71	63	56	51	46	
		L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	180	135	104	82	66	53	44	37	31	26	22
TRIPLE	22	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	80	66	55	46	39	34
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	45	
		Stress	300	300	298	219	168	132	107	89	74	63	55	48	42	37	33	30	27	
	20	L/360	♦♦♦	♦♦♦	♦♦♦	206	138	97	71	53	41	32	26	21	17	14	12	10	9	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	106	80	61	48	39	31	26	22	18	15	13	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	52	42	35	29	24	21	18	
	18	Stress	300	300	300	271	207	164	133	110	92	79	68	59	52	46	41	37	33	
		L/360	♦♦♦	♦♦♦	♦♦♦	248	166	117	85	64	49	39	31	25	21	17	15	12	11	
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	128	96	74	58	47	38	31	26	22	19	16	
	16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	77	62	50	42	35	29	25	21	20	
		Stress	300	300	300	287	227	184	152	128	109	94	82	72	64	57	51	46		
		L/360	♦♦♦	♦♦♦	♦♦♦	221	155	113	85	65	51	41	33	28	23	19	16	14		
	18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	169	127	98	77	62	50	41	34	29	25	21	
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	103	82	67	55	46	39	33	28	25	21		
		Stress	300	300	300	300	300	282	229	189	159	135	117	102	89	79	71	63	57	
16	16	L/360	♦♦♦	♦♦♦	♦♦♦	275	193	141	106	81	64	51	42	34	29	24	21	18		
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	211	159	122	96	77	63	52	43	36	31	26		
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	128	103	83	69	57	48	41	35	31			

See footnotes on page 105.

Type PLN™-24

- 24/4 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 559 F 4.3+191R	488 11.2+125R	453 15.2+93R	433 17.9+73R	419 19.9+61R	409 21.4+51R	402 22.5+45R	396 23.5+39R	391 24.3+35R
	VSC2 @ 18"	q 734 F 2.4+192R	604 9.1+126R	626 11.5+95R	573 14.3+75R	535 16.4+62R	554 16.7+53R	529 18.1+46R	509 19.2+41R	525 19.1+37R
	VSC2 @ 12"	q 873 F 1.1+193R	805 6.4+128R	771 9.2+95R	749 11+76R	735 12.2+63R	724 13.1+54R	717 13.8+47R	690 14.3+42R	559 14.8+38R
	VSC2 @ 8"	q 1103 F -0.8+193R	1049 4+129R	1021 6.5+96R	1003 8+77R	991 9+64R	983 9.7+55R	873 10.2+48R	690 10.7+43R	559 11+38R
	VSC2 @ 6"	q 1285 F -1.9+194R	1242 2.6+129R	1220 4.9+97R	1207 6.2+77R	1197 7.2+64R	1140 7.8+55R	873 8.3+48R	690 8.7+43R	559 9+39R
	VSC2 @ 4"	q 1534 F -3.3+194R	1509 1+129R	1496 3.1+97R	1488 4.4+78R	1482 5.2+65R	1140 5.8+55R	873 6.3+48R	690 6.7+43R	559 7+39R
20	VSC2 @ 24"	q 796 F 5.8+120R	687 10.4+79R	637 13.1+58R	607 14.8+46R	587 16.1+38R	573 17+32R	562 17.8+28R	554 18.4+25R	547 18.9+22R
	VSC2 @ 18"	q 1016 F 4.1+121R	849 8.6+80R	865 10+60R	792 11.8+47R	742 13.2+39R	767 13.3+34R	732 14.2+29R	705 15+26R	726 14.8+23R
	VSC2 @ 12"	q 1195 F 2.9+122R	1106 6.3+81R	1059 8.1+60R	1031 9.2+48R	1011 10+40R	997 10.5+34R	987 10.9+30R	906 11.3+27R	734 11.5+24R
	VSC2 @ 8"	q 1496 F 1.3+122R	1426 4.4+81R	1390 5.9+61R	1367 6.8+49R	1352 7.5+41R	1341 7.9+35R	1146 8.3+30R	906 8.5+27R	734 8.7+24R
	VSC2 @ 6"	q 1727 F 0.4+123R	1674 3.2+82R	1646 4.7+61R	1628 5.5+49R	1617 6.1+41R	1497 6.5+35R	1146 6.8+31R	906 7.1+27R	734 7.3+24R
	VSC2 @ 4"	q 2033 F -0.7+123R	2002 2+82R	1986 3.3+61R	1977 4.1+49R	1970 4.7+41R	1497 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
18	VSC2 @ 24"	q 1312 F 5.4+59R	1116 7.6+39R	1027 8.8+29R	973 9.6+23R	938 10.1+19R	912 10.5+16R	893 10.8+14R	877 11+12R	864 11.2+11R
	VSC2 @ 18"	q 1613 F 4+59R	1347 6.3+39R	1364 6.7+29R	1247 7.6+23R	1168 8.3+19R	1204 8.2+17R	1149 8.7+14R	1106 9+13R	1124 8.9+12R
	VSC2 @ 12"	q 1882 F 3.2+60R	1736 4.7+40R	1659 5.5+30R	1612 6+24R	1580 6.4+20R	1557 6.6+17R	1540 6.8+15R	1387 6.9+13R	1124 7+12R
	VSC2 @ 8"	q 2327 F 2.1+60R	2215 3.5+40R	2156 4.2+30R	2119 4.7+24R	2094 5+20R	2076 5.2+17R	1756 5.3+15R	1387 5.4+13R	1124 5.5+12R
	VSC2 @ 6"	q 2664 F 1.5+60R	2580 2.9+40R	2535 3.5+30R	2507 3.9+24R	2488 4.2+20R	2294 4.4+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 3102 F 0.9+60R	3055 2.2+40R	3030 2.8+30R	3015 3.2+24R	3004 3.4+20R	2294 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1711 F 5.6+33R	1477 7+22R	1367 7.8+16R	1300 8.4+13R	1255 8.7+11R	1221 9+9R	1195 9.2+8R	1175 9.4+7R	1159 9.5+6R
	VSC2 @ 18"	q 2113 F 4.3+34R	1777 5.9+22R	1809 6.1+17R	1660 6.7+13R	1557 7.2+11R	1609 7.1+9R	1538 7.4+8R	1482 7.7+7R	1526 7.6+7R
	VSC2 @ 12"	q 2468 F 3.6+34R	2292 4.5+22R	2200 5+17R	2143 5.4+13R	2105 5.6+11R	2077 5.7+10R	2056 5.8+8R	1936 5.9+7R	1568 6+7R
	VSC2 @ 8"	q 3043 F 2.7+34R	2912 3.5+23R	2843 3.9+17R	2800 4.2+14R	2771 4.4+11R	2750 4.5+10R	2450 4.6+8R	1936 4.7+8R	1568 4.7+7R
	VSC2 @ 6"	q 3466 F 2.2+34R	3371 2.9+23R	3320 3.3+17R	3288 3.6+14R	3267 3.7+11R	3200 3.9+10R	2450 3.9+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 4000 F 1.6+34R	3948 2.4+23R	3921 2.7+17R	3904 2.9+14R	3893 3.1+11R	3200 3.2+10R	2450 3.3+9R	1936 3.3+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/4 Hilti Fastener Pattern at Supports**

X-EDNK22 at Supports $\frac{1}{8}$ " to $\frac{1}{4}$ " thick

X-HSN24 at Supports $\frac{1}{8}$ " to $\frac{3}{8}$ " thick

- Sidelaps Connected with PunchLok II Tool**



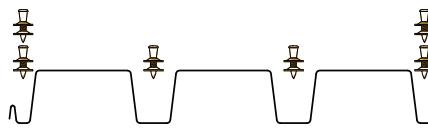
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 556 F 4.9+191R	506 11.8+125R	480 15.8+93R	464 18.4+73R	453 20.4+61R	445 21.8+52R	439 23+45R	435 23.9+40R	431 24.7+35R
	VSC2 @ 18"	q 688 F 2.8+192R	604 9.5+126R	627 11.9+95R	586 14.7+75R	558 16.7+62R	578 17+53R	558 18.4+46R	541 19.5+41R	558 19.4+37R
	VSC2 @ 12"	q 791 F 1.4+193R	760 6.6+128R	743 9.5+95R	733 11.2+76R	726 12.4+63R	721 13.3+54R	717 13.9+47R	690 14.5+42R	559 14.9+38R
	VSC2 @ 8"	q 932 F -0.6+193R	913 4.1+129R	903 6.6+96R	897 8.1+77R	893 9.1+64R	890 9.8+55R	873 10.3+48R	690 10.7+43R	559 11.1+38R
	VSC2 @ 6"	q 1016 F -1.8+194R	1005 2.7+129R	999 4.9+97R	996 6.3+77R	993 7.2+64R	991 7.9+55R	873 8.4+48R	690 8.8+43R	559 9.1+39R
	VSC2 @ 4"	q 1103 F -3.2+194R	1099 1+129R	1096 3.1+97R	1095 4.4+78R	1094 5.3+65R	1093 5.9+55R	873 6.3+48R	690 6.7+43R	559 7+39R
20	VSC2 @ 24"	q 720 F 6.3+120R	665 10.8+79R	635 13.4+59R	617 15.2+46R	605 16.4+38R	596 17.3+33R	590 18.1+28R	585 18.6+25R	580 19.1+22R
	VSC2 @ 18"	q 886 F 4.4+121R	790 8.9+80R	822 10.2+60R	774 12.1+47R	740 13.5+39R	767 13.5+34R	742 14.4+29R	722 15.2+26R	734 15+23R
	VSC2 @ 12"	q 1010 F 3.1+122R	979 6.5+81R	962 8.2+60R	952 9.3+48R	945 10.1+40R	940 10.6+34R	936 11+30R	906 11.3+27R	734 11.6+24R
	VSC2 @ 8"	q 1169 F 1.5+122R	1152 4.4+81R	1143 6+61R	1137 6.9+49R	1133 7.5+41R	1130 8+35R	1128 8.3+30R	906 8.6+27R	734 8.8+24R
	VSC2 @ 6"	q 1258 F 0.5+123R	1248 3.3+82R	1243 4.7+61R	1240 5.6+49R	1238 6.1+41R	1236 6.6+35R	1146 6.9+31R	906 7.1+27R	734 7.3+24R
	VSC2 @ 4"	q 1344 F -0.7+123R	1340 2+82R	1338 3.3+61R	1337 4.2+49R	1336 4.7+41R	1336 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
18	VSC2 @ 24"	q 1035 F 5.6+59R	969 7.8+39R	934 9+29R	913 9.7+23R	898 10.2+19R	887 10.6+16R	879 10.9+14R	873 11.1+13R	868 11.3+11R
	VSC2 @ 18"	q 1262 F 4.2+59R	1142 6.4+39R	1190 6.8+29R	1129 7.7+23R	1085 8.4+19R	1123 8.3+17R	1091 8.7+15R	1065 9.1+13R	1095 8.9+12R
	VSC2 @ 12"	q 1420 F 3.2+60R	1388 4.8+40R	1370 5.6+30R	1360 6.1+24R	1352 6.4+20R	1347 6.6+17R	1343 6.8+15R	1340 7+13R	1124 7.1+12R
	VSC2 @ 8"	q 1610 F 2.2+60R	1594 3.6+40R	1585 4.3+30R	1580 4.7+24R	1576 5+20R	1573 5.2+17R	1571 5.3+15R	1387 5.4+13R	1124 5.5+12R
	VSC2 @ 6"	q 1709 F 1.5+60R	1700 2.9+40R	1696 3.6+30R	1693 4+24R	1691 4.2+20R	1689 4.4+17R	1688 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 1800 F 0.9+60R	1796 2.2+40R	1795 2.8+30R	1794 3.2+24R	1793 3.4+20R	1792 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1344 F 5.7+33R	1268 7.2+22R	1228 8+16R	1203 8.5+13R	1186 8.8+11R	1173 9.1+9R	1164 9.3+8R	1157 9.5+7R	1151 9.6+6R
	VSC2 @ 18"	q 1627 F 4.4+34R	1485 6+22R	1547 6.1+17R	1474 6.8+13R	1421 7.3+11R	1469 7.1+9R	1430 7.5+8R	1398 7.7+7R	1436 7.6+7R
	VSC2 @ 12"	q 1817 F 3.6+34R	1782 4.6+23R	1763 5.1+17R	1752 5.4+13R	1744 5.6+11R	1738 5.7+10R	1734 5.8+8R	1730 5.9+7R	1568 6+7R
	VSC2 @ 8"	q 2035 F 2.7+34R	2018 3.5+23R	2009 4+17R	2004 4.2+14R	2000 4.4+11R	1997 4.5+10R	1995 4.6+9R	1936 4.7+8R	1568 4.7+7R
	VSC2 @ 6"	q 2144 F 2.2+34R	2135 3+23R	2131 3.4+17R	2128 3.6+14R	2126 3.8+11R	2125 3.9+10R	2124 3.9+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 2242 F 1.6+34R	2238 2.4+23R	2237 2.7+17R	2236 3+14R	2235 3.1+11R	2234 3.2+10R	2234 3.3+9R	1936 3.3+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/6 Hilti Fastener Pattern at Supports**
- X-EDNK22 at Supports $\frac{1}{8}$ " to $\frac{1}{4}$ " thick
- X-HSN24 at Supports $\frac{1}{8}$ " to $\frac{3}{8}$ " thick
- Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

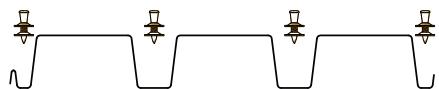
DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 740 F 1.3+192R	637 7.9+126R	583 11.8+93R	549 14.6+73R	527 16.7+60R	510 18.4+51R	498 19.7+44R	488 20.8+39R	480 21.7+35R
	VSC2 @ 18"	q 890 F 0.2+192R	748 6.6+127R	751 9.5+94R	688 12.2+75R	645 14.2+62R	662 14.9+53R	633 16.3+46R	609 17.4+40R	559 17.6+36R
	VSC2 @ 12"	q 1018 F -0.6+193R	940 4.8+128R	899 7.8+95R	873 9.7+76R	855 11+63R	842 12+54R	832 12.8+47R	690 13.4+42R	559 13.9+37R
	VSC2 @ 8"	q *1220 F -1.8+193R	*1164 3.1+128R	*1134 5.7+96R	*1115 7.3+77R	*1102 8.4+64R	1093 9.1+55R	873 9.8+48R	690 10.2+42R	559 10.6+38R
	VSC2 @ 6"	q *1363 F -2.6+194R	*1324 2+129R	*1302 4.4+96R	*1289 5.8+77R	*1280 6.8+64R	1140 7.5+55R	873 8+48R	690 8.5+43R	559 8.8+38R
	VSC2 @ 4"	q *1537 F -3.7+194R	*1517 0.6+129R	*1506 2.8+97R	*1499 4.2+77R	*1494 5.1+65R	1140 5.7+55R	873 6.2+48R	690 6.5+43R	559 6.8+39R
	VSC2 @ 24"	q 946 F 3.5+121R	828 8+79R	765 10.8+59R	727 12.6+46R	700 14+38R	682 15.1+32R	667 16+28R	656 16.7+24R	647 17.2+22R
	VSC2 @ 18"	q 1141 F 2.5+121R	974 6.9+80R	988 8.6+60R	912 10.5+47R	858 11.9+39R	884 12.2+33R	847 13.1+29R	818 13.9+25R	734 13.9+23R
	VSC2 @ 12"	q 1304 F 1.7+122R	1221 5.3+81R	1177 7.2+60R	1149 8.4+48R	1129 9.2+40R	1116 9.9+34R	1105 10.3+30R	906 10.7+26R	734 11+24R
	VSC2 @ 8"	q *1549 F 0.7+122R	*1493 3.8+81R	*1463 5.4+61R	*1444 6.4+49R	*1443 7.1+40R	*1431 7.6+35R	*1421 8+30R	906 8.3+27R	734 8.5+24R
20	VSC2 @ 6"	q *1712 F -0.1+123R	*1674 2.9+82R	*1654 4.4+61R	*1641 5.3+49R	*1633 5.9+41R	*1497 6.3+35R	1146 6.7+30R	906 6.9+27R	734 7.1+24R
	VSC2 @ 4"	q *1898 F -0.9+123R	*1880 1.8+82R	*1871 3.2+61R	*1865 4+49R	*1861 4.6+41R	*1497 5+35R	1146 5.3+31R	906 5.5+27R	734 5.7+25R
	VSC2 @ 24"	q 1345 F 4.3+59R	1198 6.5+39R	1120 7.8+29R	1072 8.7+23R	1039 9.3+19R	1015 9.8+16R	998 10.1+14R	983 10.4+12R	972 10.7+11R
	VSC2 @ 18"	q 1626 F 3.3+59R	1411 5.5+39R	1443 6.2+29R	1342 7.1+23R	1270 7.8+19R	1311 7.8+16R	1261 8.3+14R	1221 8.7+13R	1124 8.6+11R
	VSC2 @ 12"	q *1850 F 2.7+59R	1756 4.3+39R	1704 5.2+29R	1672 5.7+24R	1651 6.1+20R	1635 6.4+17R	1623 6.6+15R	1387 6.7+13R	1124 6.9+12R
	VSC2 @ 8"	q *2166 F 1.9+60R	*2108 3.3+40R	*2076 4.1+30R	*2056 4.5+24R	*2043 4.8+20R	*2033 5.1+17R	1756 5.2+15R	1387 5.4+13R	1124 5.5+12R
	VSC2 @ 6"	q *2363 F 1.4+60R	*2327 2.7+40R	*2307 3.4+30R	*2294 3.9+24R	*2286 4.1+20R	*2280 4.3+17R	1756 4.5+15R	1387 4.6+13R	1124 4.7+12R
	VSC2 @ 4"	q *2574 F 0.8+60R	*2557 2.1+40R	*2549 2.8+30R	*2543 3.1+24R	*2540 3.4+20R	*2294 3.6+17R	1756 3.7+15R	1387 3.9+13R	1124 3.9+12R
	VSC2 @ 24"	q 1738 F 4.6+33R	1564 6.1+22R	1472 7+16R	1414 7.7+13R	1375 8.1+10R	1347 8.4+9R	1325 8.7+8R	1309 8.9+7R	1295 9.1+6R
	VSC2 @ 18"	q 2100 F 3.7+34R	1840 5.3+22R	1889 5.6+16R	1765 6.3+13R	1677 6.8+11R	1731 6.8+9R	1669 7.1+8R	1618 7.4+7R	1568 7.3+6R
	VSC2 @ 12"	q 2381 F 3.2+34R	2275 4.2+22R	2218 4.8+17R	2182 5.1+13R	2158 5.4+11R	2140 5.5+9R	2126 5.7+8R	1936 5.8+7R	1568 5.9+7R
16	VSC2 @ 8"	q *2763 F 2.5+34R	*2701 3.3+23R	*2667 3.8+17R	*2646 4.1+14R	*2631 4.3+11R	*2621 4.4+10R	*2450 4.5+8R	1936 4.6+7R	1568 4.7+7R
	VSC2 @ 6"	q *2991 F 2+34R	*2954 2.8+23R	*2933 3.3+17R	*2920 3.5+14R	*2912 3.7+11R	*2905 3.8+10R	*2450 3.9+9R	1936 4+8R	1568 4+7R
	VSC2 @ 4"	q *3226 F 1.5+34R	*3210 2.3+23R	*3202 2.7+17R	*3196 2.9+14R	*3193 3.1+11R	*3190 3.2+10R	*2450 3.3+9R	1936 3.3+8R	1568 3.4+7R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1100 plf, 1400 plf, 1800 plf or 2300 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type PLN™ -24

- 24/4 Hilti Fastener Pattern at Supports
- X-ENP19 at Supports $\frac{1}{4}$ " and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 576 F 1.6+192R	521 8.2+126R	492 12.2+93R	474 14.9+73R	462 17+60R	453 18.7+51R	447 20+44R	441 21+39R	437 22+35R
	VSC2 @ 18"	q 713 F 0.4+192R	622 6.9+127R	644 9.7+94R	600 12.4+75R	570 14.5+62R	591 15.1+53R	569 16.5+46R	552 17.6+40R	559 17.7+36R
	VSC2 @ 12"	q 823 F -0.4+193R	787 5+128R	767 7.9+95R	756 9.8+76R	748 11.2+63R	742 12.1+54R	737 12.9+47R	690 13.5+42R	559 14+37R
	VSC2 @ 8"	q 977 F -1.7+193R	955 3.2+128R	943 5.8+96R	936 7.3+77R	931 8.4+64R	927 9.2+55R	873 9.8+48R	690 10.3+42R	559 10.7+38R
	VSC2 @ 6"	q 1073 F -2.6+194R	1059 2+129R	1052 4.4+96R	1047 5.9+77R	1044 6.8+64R	1042 7.5+55R	873 8.1+48R	690 8.5+43R	559 8.8+38R
	VSC2 @ 4"	q 1174 F -3.7+194R	1168 0.7+129R	1165 2.9+97R	1163 4.2+77R	1162 5.1+65R	1140 5.7+55R	873 6.2+48R	690 6.6+43R	559 6.9+39R
20	VSC2 @ 24"	q 746 F 3.8+121R	684 8.3+79R	651 11+58R	631 12.8+46R	618 14.2+38R	608 15.3+32R	600 16.1+28R	595 16.8+24R	590 17.4+22R
	VSC2 @ 18"	q 920 F 2.7+121R	814 7+80R	846 8.7+60R	794 10.6+47R	758 12+39R	786 12.3+33R	759 13.2+29R	738 14+25R	734 14+23R
	VSC2 @ 12"	q 1053 F 1.8+122R	1017 5.4+81R	997 7.3+60R	985 8.5+48R	977 9.3+40R	971 9.9+34R	966 10.4+30R	906 10.8+26R	734 11.1+24R
	VSC2 @ 8"	q 1230 F 0.7+122R	1209 3.8+81R	1198 5.5+61R	1191 6.5+49R	1186 7.1+40R	1183 7.6+35R	1146 8+30R	906 8.3+27R	734 8.5+24R
	VSC2 @ 6"	q 1332 F 0+123R	1320 2.9+82R	1314 4.4+61R	1309 5.3+49R	1307 5.9+41R	1305 6.4+35R	1146 6.7+30R	906 6.9+27R	734 7.2+24R
	VSC2 @ 4"	q 1434 F -0.9+123R	1429 1.8+82R	1427 3.2+61R	1425 4+49R	1424 4.6+41R	1423 5+35R	1146 5.3+31R	906 5.5+27R	734 5.7+25R
18	VSC2 @ 24"	q 1073 F 4.4+59R	998 6.6+39R	959 7.9+29R	935 8.8+23R	918 9.4+19R	906 9.8+16R	897 10.2+14R	890 10.5+12R	885 10.7+11R
	VSC2 @ 18"	q 1314 F 3.4+59R	1181 5.6+39R	1230 6.2+29R	1163 7.2+23R	1115 7.9+19R	1156 7.9+16R	1120 8.3+14R	1092 8.7+13R	1124 8.6+11R
	VSC2 @ 12"	q 1487 F 2.7+59R	1448 4.4+39R	1427 5.2+30R	1414 5.8+24R	1406 6.1+20R	1399 6.4+17R	1394 6.6+15R	1387 6.8+13R	1124 6.9+12R
	VSC2 @ 8"	q 1701 F 1.9+60R	1681 3.3+40R	1670 4.1+30R	1663 4.5+24R	1659 4.8+20R	1655 5.1+17R	1653 5.2+15R	1387 5.4+13R	1124 5.5+12R
	VSC2 @ 6"	q 1816 F 1.4+60R	1805 2.8+40R	1799 3.4+30R	1795 3.9+24R	1793 4.2+20R	1791 4.4+17R	1756 4.5+15R	1387 4.6+13R	1124 4.7+12R
	VSC2 @ 4"	q 1924 F 0.8+60R	1920 2.1+40R	1918 2.8+30R	1916 3.2+24R	1915 3.4+20R	1915 3.6+17R	1756 3.7+15R	1387 3.9+13R	1124 3.9+12R
16	VSC2 @ 24"	q 1394 F 4.7+33R	1307 6.2+22R	1262 7.1+16R	1233 7.7+13R	1214 8.2+10R	1200 8.5+9R	1190 8.7+8R	1181 9+7R	1175 9.1+6R
	VSC2 @ 18"	q 1696 F 3.8+34R	1539 5.3+22R	1603 5.7+16R	1522 6.4+13R	1464 6.9+11R	1515 6.8+9R	1473 7.2+8R	1438 7.4+7R	1478 7.3+6R
	VSC2 @ 12"	q 1906 F 3.2+34R	1864 4.3+22R	1842 4.8+17R	1828 5.2+13R	1818 5.4+11R	1811 5.6+9R	1806 5.7+8R	1802 5.8+7R	1568 5.9+7R
	VSC2 @ 8"	q 2154 F 2.5+34R	2133 3.4+23R	2122 3.8+17R	2116 4.1+14R	2111 4.3+11R	2107 4.4+10R	2105 4.5+8R	1936 4.6+8R	1568 4.7+7R
	VSC2 @ 6"	q 2283 F 2+34R	2271 2.9+23R	2265 3.3+17R	2262 3.5+14R	2259 3.7+11R	2258 3.8+10R	2256 3.9+9R	1936 4+8R	1568 4+7R
	VSC2 @ 4"	q 2399 F 1.5+34R	2395 2.3+23R	2393 2.7+17R	2392 2.9+14R	2391 3.1+11R	2390 3.2+10R	2390 3.3+9R	1936 3.3+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/4 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



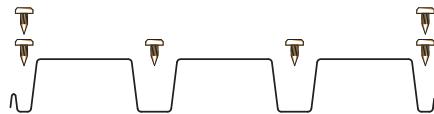
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 563 F 11+190R	511 17.4+126R	484 20.9+94R	467 23.1+75R	456 24.6+62R	448 25.7+53R	442 26.5+46R	437 27.2+41R	433 27.7+37R
	VSC2 @ 18"	q 696 F 6.6+192R	610 13.4+127R	632 14.7+95R	591 17.4+76R	562 19.4+63R	583 19.1+54R	562 20.4+47R	545 21.5+42R	559 21+38R
	VSC2 @ 12"	q 801 F 3.9+193R	769 8.8+128R	751 11.2+96R	740 12.7+77R	733 13.7+64R	728 14.5+55R	724 15+48R	690 15.4+43R	559 15.8+38R
	VSC2 @ 8"	q 947 F 0.8+194R	927 5.2+129R	917 7.5+97R	910 8.8+77R	906 9.7+64R	903 10.3+55R	873 10.8+48R	690 11.2+43R	559 11.5+39R
	VSC2 @ 6"	q 1035 F -0.9+194R	1023 3.3+129R	1017 5.5+97R	1013 6.7+78R	1010 7.6+65R	1008 8.2+55R	873 8.7+48R	690 9+43R	559 9.3+39R
	VSC2 @ 4"	q 1127 F -2.8+195R	1122 1.3+130R	1119 3.4+97R	1117 4.6+78R	1116 5.4+65R	1115 6+56R	873 6.5+49R	690 6.8+43R	559 7.1+39R
20	VSC2 @ 24"	q 726 F 10.5+120R	669 14.5+80R	639 16.7+59R	621 18.1+47R	608 19+39R	599 19.7+34R	592 20.2+29R	587 20.6+26R	583 20.9+23R
	VSC2 @ 18"	q 894 F 6.8+122R	796 11.4+80R	828 11.9+60R	779 13.7+48R	744 15.1+40R	771 14.8+34R	746 15.6+30R	726 16.3+27R	734 16+24R
	VSC2 @ 12"	q 1020 F 4.7+122R	988 7.8+81R	971 9.3+61R	960 10.2+49R	953 10.8+41R	947 11.3+35R	943 11.6+30R	906 11.9+27R	734 12.1+24R
	VSC2 @ 8"	q 1184 F 2.3+123R	1166 5.1+82R	1156 6.5+61R	1150 7.3+49R	1146 7.9+41R	1143 8.3+35R	1141 8.6+31R	906 8.8+27R	734 9+25R
	VSC2 @ 6"	q 1276 F 1+123R	1266 3.7+82R	1260 5+61R	1257 5.8+49R	1254 6.4+41R	1253 6.7+35R	1146 7+31R	906 7.3+27R	734 7.4+25R
	VSC2 @ 4"	q 1366 F -0.4+123R	1362 2.2+82R	1360 3.5+62R	1358 4.3+49R	1357 4.8+41R	1357 5.2+35R	1146 5.4+31R	906 5.7+27R	734 5.8+25R
18	VSC2 @ 24"	q 1038 F 7.4+59R	971 9.2+39R	936 10.2+29R	914 10.7+23R	899 11.1+19R	889 11.4+17R	880 11.6+15R	874 11.8+13R	869 11.9+12R
	VSC2 @ 18"	q 1265 F 5.1+60R	1145 7.3+40R	1193 7.4+30R	1131 8.3+24R	1087 8.9+20R	1125 8.7+17R	1093 9.1+15R	1067 9.5+13R	1096 9.2+12R
	VSC2 @ 12"	q 1425 F 3.8+60R	1392 5.2+40R	1374 5.9+30R	1363 6.4+24R	1356 6.7+20R	1350 6.9+17R	1346 7+15R	1343 7.1+13R	1124 7.2+12R
	VSC2 @ 8"	q 1616 F 2.5+60R	1599 3.8+40R	1590 4.4+30R	1585 4.8+24R	1581 5.1+20R	1578 5.3+17R	1576 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q 1716 F 1.7+60R	1707 3+40R	1702 3.6+30R	1699 4+24R	1697 4.3+20R	1695 4.5+17R	1694 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 1807 F 1+60R	1804 2.2+40R	1802 2.9+30R	1801 3.2+24R	1800 3.5+20R	1800 3.7+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1338 F 7.2+33R	1263 8.3+22R	1223 8.9+17R	1199 9.3+13R	1182 9.5+11R	1170 9.7+9R	1161 9.9+8R	1153 10+7R	1148 10.1+7R
	VSC2 @ 18"	q 1618 F 5.2+34R	1478 6.7+22R	1540 6.6+17R	1468 7.2+13R	1415 7.7+11R	1463 7.5+10R	1425 7.8+8R	1393 8+7R	1430 7.8+7R
	VSC2 @ 12"	q 1805 F 4.1+34R	1771 4.9+23R	1753 5.4+17R	1742 5.6+14R	1734 5.8+11R	1729 5.9+10R	1724 6+9R	1721 6.1+8R	1568 6.1+7R
	VSC2 @ 8"	q 2019 F 2.9+34R	2003 3.7+23R	1995 4.1+17R	1989 4.3+14R	1986 4.5+11R	1983 4.6+10R	1981 4.7+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q 2127 F 2.3+34R	2118 3.1+23R	2114 3.4+17R	2111 3.7+14R	2109 3.8+11R	2108 3.9+10R	2107 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 2222 F 1.7+34R	2219 2.4+23R	2217 2.8+17R	2216 3+14R	2215 3.1+11R	2215 3.2+10R	2215 3.3+9R	1936 3.4+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/6 Pneutek Fastener Pattern at Supports
- SDK61 at Supports 0.113 to 0.155" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 751 F 7.2+190R	645 14+125R	589 17.9+93R	554 20.4+74R	531 22.2+61R	514 23.5+52R	501 24.5+45R	491 25.4+40R	483 26+36R
	VSC2 @ 18"	q 901 F 4.3+192R	756 11.1+127R	758 13.1+95R	694 15.8+75R	650 17.9+62R	667 18+54R	636 19.3+47R	613 20.4+41R	559 20.1+37R
	VSC2 @ 12"	q 1032 F 2.4+193R	951 7.5+128R	907 10.2+96R	880 11.9+76R	862 13+64R	849 13.8+54R	838 14.4+48R	690 14.9+42R	559 15.3+38R
	VSC2 @ 8"	q *1237 F 0+194R	1179 4.6+129R	1147 7+96R	1128 8.4+77R	1114 9.3+64R	1104 10+55R	873 10.5+48R	690 11+43R	559 11.3+38R
	VSC2 @ 6"	q *1385 F -1.4+194R	*1343 3+129R	*1321 5.2+97R	*1306 6.5+77R	*1297 7.4+65R	1140 8+55R	873 8.5+48R	690 8.9+43R	559 9.2+39R
	VSC2 @ 4"	q *1566 F -3+194R	*1544 1.1+130R	*1533 3.2+97R	*1525 4.5+78R	*1520 5.3+65R	1140 5.9+55R	873 6.4+49R	690 6.7+43R	559 7+39R
20	VSC2 @ 24"	q 955 F 7.9+120R	835 12.3+79R	771 14.8+59R	731 16.4+47R	704 17.5+39R	685 18.4+33R	670 19+29R	659 19.5+25R	650 19.9+23R
	VSC2 @ 18"	q 1152 F 5.4+121R	982 9.9+80R	995 10.9+60R	917 12.8+48R	863 14.2+39R	888 14.1+34R	851 15+30R	821 15.7+26R	734 15.4+24R
	VSC2 @ 12"	q 1317 F 3.8+122R	1232 7+81R	1185 8.7+61R	1157 9.7+48R	1137 10.4+40R	1123 10.9+34R	1112 11.3+30R	906 11.6+27R	734 11.8+24R
	VSC2 @ 8"	q *1566 F 1.8+122R	*1508 4.7+82R	*1476 6.2+61R	*1457 7.1+49R	*1443 7.7+41R	*1433 8.1+35R	1146 8.4+31R	906 8.7+27R	734 8.9+24R
	VSC2 @ 6"	q *1733 F 0.7+123R	*1694 3.5+82R	*1673 4.8+61R	*1660 5.7+49R	*1651 6.2+41R	*1497 6.6+35R	1146 6.9+31R	906 7.2+27R	734 7.4+25R
	VSC2 @ 4"	q *1925 F -0.5+123R	*1907 2.1+82R	*1897 3.4+62R	*1890 4.2+49R	*1886 4.7+41R	*1497 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
18	VSC2 @ 24"	q 1348 F 6.4+59R	1201 8.4+39R	1122 9.5+29R	1074 10.2+23R	1041 10.6+19R	1017 11+16R	999 11.2+14R	985 11.4+13R	973 11.6+11R
	VSC2 @ 18"	q 1630 F 4.6+59R	1414 6.8+39R	1445 7.1+30R	1344 8+24R	1272 8.6+20R	1313 8.5+17R	1263 8.9+15R	1222 9.3+13R	1124 9.1+12R
	VSC2 @ 12"	q 1855 F 3.5+60R	1760 5+40R	1708 5.7+30R	1676 6.2+24R	1654 6.5+20R	1638 6.7+17R	1625 6.9+15R	1387 7+13R	1124 7.1+12R
	VSC2 @ 8"	q *2173 F 2.3+60R	*2114 3.7+40R	*2082 4.3+30R	*2062 4.7+24R	*2048 5+20R	*2038 5.2+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q *2371 F 1.6+60R	*2334 2.9+40R	*2314 3.6+30R	*2302 4+24R	*2293 4.3+20R	*2287 4.4+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q *2584 F 0.9+60R	*2567 2.2+40R	*2558 2.8+30R	*2553 3.2+24R	*2549 3.5+20R	*2294 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1729 F 6.3+33R	1558 7.7+22R	1466 8.4+16R	1410 8.8+13R	1371 9.2+11R	1343 9.4+9R	1322 9.6+8R	1305 9.7+7R	1292 9.8+6R
	VSC2 @ 18"	q 2089 F 4.8+34R	1832 6.3+22R	1882 6.3+17R	1759 7+13R	1671 7.5+11R	1726 7.3+9R	1664 7.6+8R	1614 7.9+7R	1568 7.7+7R
	VSC2 @ 12"	q *2368 F 3.8+34R	2264 4.7+23R	2208 5.2+17R	2173 5.5+14R	2149 5.7+11R	2131 5.8+10R	2118 5.9+8R	1936 6+7R	1568 6.1+7R
	VSC2 @ 8"	q *2745 F 2.8+34R	*2684 3.6+23R	*2651 4+17R	*2630 4.3+14R	*2616 4.4+11R	*2606 4.5+10R	*2450 4.6+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q *2969 F 2.2+34R	*2933 3+23R	*2913 3.4+17R	*2900 3.6+14R	*2892 3.8+11R	*2886 3.9+10R	*2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q *3199 F 1.6+34R	*3184 2.4+23R	*3176 2.7+17R	*3171 3+14R	*3167 3.1+11R	*3165 3.2+10R	*2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1200 plf, 1400 plf, 1900 plf or 2300 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type PLN™-24

- 24/4 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



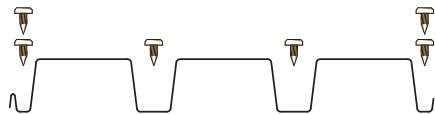
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 593 F 11+190R	533 17.4+126R	502 20.9+94R	482 23.1+75R	469 24.6+62R	460 25.7+53R	453 26.5+46R	447 27.2+41R	443 27.7+37R
	VSC2 @ 18"	q 734 F 6.6+192R	637 13.4+127R	658 14.7+95R	612 17.4+76R	580 19.4+63R	601 19.1+54R	578 20.4+47R	560 21.5+42R	559 21+38R
	VSC2 @ 12"	q 850 F 3.9+193R	809 8.8+128R	788 11.2+96R	774 12.7+77R	765 13.7+64R	759 14.5+55R	754 15+48R	690 15.4+43R	559 15.8+38R
	VSC2 @ 8"	q 1016 F 0.8+194R	990 5.2+129R	976 7.5+97R	967 8.8+77R	962 9.7+64R	957 10.3+55R	873 10.8+48R	690 11.2+43R	559 11.5+39R
	VSC2 @ 6"	q 1121 F -0.9+194R	1105 3.3+129R	1096 5.5+97R	1091 6.7+78R	1087 7.6+65R	1084 8.2+55R	873 8.7+48R	690 9+43R	559 9.3+39R
	VSC2 @ 4"	q 1236 F -2.8+195R	1228 1.3+130R	1225 3.4+97R	1222 4.6+78R	1221 5.4+65R	1140 6+56R	873 6.5+49R	690 6.8+43R	559 7.1+39R
20	VSC2 @ 24"	q 753 F 10.5+120R	689 14.5+80R	656 16.7+59R	635 18.1+47R	621 19+39R	611 19.7+34R	603 20.2+29R	597 20.6+26R	592 20.9+23R
	VSC2 @ 18"	q 929 F 6.8+122R	821 11.4+80R	853 11.9+60R	800 13.7+48R	762 15.1+40R	791 14.8+34R	763 15.6+30R	742 16.3+27R	734 16+24R
	VSC2 @ 12"	q 1065 F 4.7+122R	1027 7.8+81R	1007 9.3+61R	994 10.2+49R	985 10.8+41R	979 11.3+35R	974 11.6+30R	906 11.9+27R	734 12.1+24R
	VSC2 @ 8"	q 1247 F 2.3+123R	1225 5.1+82R	1213 6.5+61R	1206 7.3+49R	1201 7.9+41R	1197 8.3+35R	1146 8.6+31R	906 8.8+27R	734 9+25R
	VSC2 @ 6"	q 1353 F 1+123R	1340 3.7+82R	1333 5+61R	1328 5.8+49R	1325 6.4+41R	1323 6.7+35R	1146 7+31R	906 7.3+27R	734 7.4+25R
	VSC2 @ 4"	q 1459 F -0.4+123R	1454 2.2+82R	1451 3.5+62R	1449 4.3+49R	1448 4.8+41R	1447 5.2+35R	1146 5.4+31R	906 5.7+27R	734 5.8+25R
18	VSC2 @ 24"	q 1046 F 7.4+59R	978 9.2+39R	941 10.2+29R	919 10.7+23R	904 11.1+19R	893 11.4+17R	885 11.6+15R	878 11.8+13R	873 11.9+12R
	VSC2 @ 18"	q 1277 F 5.1+60R	1153 7.3+40R	1202 7.4+30R	1139 8.3+24R	1094 8.9+20R	1133 8.7+17R	1100 9.1+15R	1073 9.5+13R	1103 9.2+12R
	VSC2 @ 12"	q 1439 F 3.8+60R	1405 5.2+40R	1387 5.9+30R	1375 6.4+24R	1367 6.7+20R	1362 6.9+17R	1358 7+15R	1354 7.1+13R	1124 7.2+12R
	VSC2 @ 8"	q 1636 F 2.5+60R	1618 3.8+40R	1609 4.4+30R	1603 4.8+24R	1599 5.1+20R	1597 5.3+17R	1594 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q 1739 F 1.7+60R	1730 3+40R	1725 3.6+30R	1722 4+24R	1719 4.3+20R	1718 4.5+17R	1717 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 1835 F 1+60R	1831 2.2+40R	1829 2.9+30R	1828 3.2+24R	1827 3.5+20R	1827 3.7+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1319 F 7.2+33R	1247 8.3+22R	1210 8.9+17R	1186 9.3+13R	1170 9.5+11R	1159 9.7+9R	1150 9.9+8R	1143 10+7R	1138 10.1+7R
	VSC2 @ 18"	q 1590 F 5.2+34R	1457 6.7+22R	1517 6.6+17R	1448 7.2+13R	1398 7.7+11R	1444 7.5+10R	1407 7.8+8R	1377 8+7R	1413 7.8+7R
	VSC2 @ 12"	q 1770 F 4.1+34R	1739 4.9+23R	1722 5.4+17R	1712 5.6+14R	1705 5.8+11R	1699 5.9+10R	1696 6+9R	1693 6.1+8R	1568 6.1+7R
	VSC2 @ 8"	q 1974 F 2.9+34R	1959 3.7+23R	1951 4.1+17R	1946 4.3+14R	1943 4.5+11R	1941 4.6+10R	1939 4.7+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q 2074 F 2.3+34R	2066 3.1+23R	2062 3.4+17R	2060 3.7+14R	2058 3.8+11R	2057 3.9+10R	2056 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 2163 F 1.7+34R	2160 2.4+23R	2158 2.8+17R	2157 3+14R	2157 3.1+11R	2156 3.2+10R	2156 3.3+9R	1936 3.4+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/6 Pneutek Fastener Pattern at Supports
- SDK63 at Supports 0.155 to 0.250" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 801 F 7.2+190R	673 14+125R	610 17.9+93R	572 20.4+74R	546 22.2+61R	528 23.5+52R	515 24.5+45R	504 25.4+40R	495 26+36R
	VSC2 @ 18"	q 957 F 4.3+192R	794 11.1+127R	790 13.1+95R	720 15.8+75R	671 17.9+62R	687 18+54R	654 19.3+47R	628 20.4+41R	559 20.1+37R
	VSC2 @ 12"	q 1094 F 2.4+193R	998 7.5+128R	947 10.2+96R	915 11.9+76R	893 13+64R	877 13.8+54R	865 14.4+48R	690 14.9+42R	559 15.3+38R
	VSC2 @ 8"	q *1319 F 0+194R	1246 4.6+129R	1207 7+96R	1182 8.4+77R	1165 9.3+64R	1140 10+55R	873 10.5+48R	690 11+43R	559 11.3+38R
	VSC2 @ 6"	q *1485 F -1.4+194R	*1432 3+129R	*1402 5.2+97R	*1384 6.5+77R	*1372 7.4+65R	1140 8+55R	873 8.5+48R	690 8.9+43R	559 9.2+39R
	VSC2 @ 4"	q *1700 F -3+194R	*1670 1.1+130R	*1654 3.2+97R	*1644 4.5+78R	*1552 5.3+65R	1140 5.9+55R	873 6.4+49R	690 6.7+43R	559 7+39R
20	VSC2 @ 24"	q 997 F 7.9+120R	863 12.3+79R	793 14.8+59R	750 16.4+47R	720 17.5+39R	699 18.4+33R	683 19+29R	670 19.5+25R	660 19.9+23R
	VSC2 @ 18"	q 1200 F 5.4+121R	1014 9.9+80R	1023 10.9+60R	940 12.8+48R	882 14.2+39R	907 14.1+34R	868 15+30R	836 15.7+26R	734 15.4+24R
	VSC2 @ 12"	q 1373 F 3.8+122R	1275 7+81R	1222 8.7+61R	1189 9.7+48R	1167 10.4+40R	1151 10.9+34R	1139 11.3+30R	906 11.6+27R	734 11.8+24R
	VSC2 @ 8"	q *1639 F 1.8+122R	*1571 4.7+82R	*1534 6.2+61R	*1511 7.1+49R	1495 7.7+41R	1483 8.1+35R	1146 8.4+31R	906 8.7+27R	734 8.9+24R
	VSC2 @ 6"	q *1824 F 0.7+123R	*1777 3.5+82R	*1751 4.8+61R	*1735 5.7+49R	*1724 6.2+41R	1497 6.6+35R	1146 6.9+31R	906 7.2+27R	734 7.4+25R
	VSC2 @ 4"	q *2043 F -0.5+123R	*2020 2.1+82R	*2007 3.4+62R	*1999 4.2+49R	*1994 4.7+41R	1497 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
18	VSC2 @ 24"	q 1360 F 6.4+59R	1209 8.4+39R	1129 9.5+29R	1079 10.2+23R	1046 10.6+19R	1021 11+16R	1003 11.2+14R	988 11.4+13R	977 11.6+11R
	VSC2 @ 18"	q 1644 F 4.6+59R	1424 6.8+39R	1455 7.1+30R	1352 8+24R	1279 8.6+20R	1320 8.5+17R	1269 8.9+15R	1228 9.3+13R	1124 9.1+12R
	VSC2 @ 12"	q 1872 F 3.5+60R	1774 5+40R	1721 5.7+30R	1687 6.2+24R	1665 6.5+20R	1648 6.7+17R	1636 6.9+15R	1387 7+13R	1124 7.1+12R
	VSC2 @ 8"	q *2196 F 2.3+60R	*2135 3.7+40R	*2102 4.3+30R	*2081 4.7+24R	*2066 5+20R	*2056 5.2+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q *2400 F 1.6+60R	*2361 2.9+40R	*2340 3.6+30R	*2327 4+24R	*2318 4.3+20R	*2294 4.4+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q *2619 F 0.9+60R	*2602 2.2+40R	*2593 2.8+30R	*2587 3.2+24R	*2583 3.5+20R	*2294 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1703 F 6.3+33R	1538 7.7+22R	1451 8.4+16R	1396 8.8+13R	1359 9.2+11R	1332 9.4+9R	1312 9.6+8R	1296 9.7+7R	1283 9.8+6R
	VSC2 @ 18"	q 2056 F 4.8+34R	1809 6.3+22R	1859 6.3+17R	1740 7+13R	1655 7.5+11R	1709 7.3+9R	1649 7.6+8R	1600 7.9+7R	1568 7.7+7R
	VSC2 @ 12"	q *2327 F 3.8+34R	*2230 4.7+23R	*2144 5.2+17R	*2121 5.5+14R	2121 5.7+11R	2104 5.8+10R	2092 5.9+8R	1936 6+7R	1568 6.1+7R
	VSC2 @ 8"	q *2690 F 2.8+34R	*2634 3.6+23R	*2603 4+17R	*2584 4.3+14R	*2571 4.4+11R	*2561 4.5+10R	*2450 4.6+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q *2904 F 2.2+34R	*2870 3+23R	*2852 3.4+17R	*2840 3.6+14R	*2832 3.8+11R	*2827 3.9+10R	*2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q *3120 F 1.6+34R	*3106 2.4+23R	*3098 2.7+17R	*3094 3+14R	*3091 3.1+11R	*3088 3.2+10R	*2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1300 plf, 1500 plf, 1900 plf or 2200 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type PLN™-24

- 24/4 Pneutek Fastener Pattern at Supports
- K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



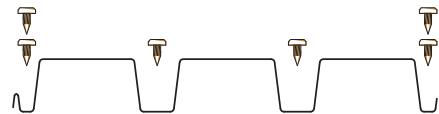
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 594 F 11+190R	534 17.4+126R	502 20.9+94R	483 23.1+75R	470 24.6+62R	460 25.7+53R	453 26.5+46R	447 27.2+41R	443 27.7+37R
	VSC2 @ 18"	q 736 F 6.6+192R	638 13.4+127R	659 14.7+95R	613 17.4+76R	580 19.4+63R	602 19.1+54R	579 20.4+47R	560 21.5+42R	559 21+38R
	VSC2 @ 12"	q 851 F 3.9+193R	810 8.8+128R	789 11.2+96R	775 12.7+77R	766 13.7+64R	760 14.5+55R	755 15+48R	690 15.4+43R	559 15.8+38R
	VSC2 @ 8"	q 1018 F 0.8+194R	992 5.2+129R	978 7.5+97R	969 8.8+77R	963 9.7+64R	959 10.3+55R	873 10.8+48R	690 11.2+43R	559 11.5+39R
	VSC2 @ 6"	q 1124 F -0.9+194R	1107 3.3+129R	1099 5.5+97R	1093 6.7+78R	1089 7.6+65R	1087 8.2+55R	873 8.7+48R	690 9+43R	559 9.3+39R
	VSC2 @ 4"	q 1239 F -2.8+195R	1232 1.3+130R	1228 3.4+97R	1226 4.6+78R	1224 5.4+65R	1140 6+56R	873 6.5+49R	690 6.8+43R	559 7.1+39R
20	VSC2 @ 24"	q 795 F 10.5+120R	720 14.5+80R	680 16.7+59R	656 18.1+47R	640 19+39R	628 19.7+34R	619 20.2+29R	612 20.6+26R	607 20.9+23R
	VSC2 @ 18"	q 983 F 6.8+122R	859 11.4+80R	890 11.9+60R	831 13.7+48R	789 15.1+40R	818 14.8+34R	788 15.6+30R	764 16.3+27R	734 16+24R
	VSC2 @ 12"	q 1133 F 4.7+122R	1085 7.8+81R	1059 9.3+61R	1044 10.2+49R	1033 10.8+41R	1025 11.3+35R	1019 11.6+30R	906 11.9+27R	734 12.1+24R
	VSC2 @ 8"	q 1343 F 2.3+123R	1314 5.1+82R	1298 6.5+61R	1288 7.3+49R	1282 7.9+41R	1277 8.3+35R	1146 8.6+31R	906 8.8+27R	734 9+25R
	VSC2 @ 6"	q 1472 F 1+123R	1454 3.7+82R	1444 5+61R	1438 5.8+49R	1434 6.4+41R	1431 6.7+35R	1146 7+31R	906 7.3+27R	734 7.4+25R
	VSC2 @ 4"	q 1608 F -0.4+123R	1600 2.2+82R	1596 3.5+62R	1593 4.3+49R	1591 4.8+41R	1497 5.2+35R	1146 5.4+31R	906 5.7+27R	734 5.8+25R
18	VSC2 @ 24"	q 1161 F 7.4+59R	1065 9.2+39R	1014 10.2+29R	983 10.7+23R	962 11.1+19R	947 11.4+17R	935 11.6+15R	926 11.8+13R	919 11.9+12R
	VSC2 @ 18"	q 1432 F 5.1+60R	1268 7.3+40R	1317 7.4+30R	1237 8.3+24R	1180 8.9+20R	1223 8.7+17R	1182 9.1+15R	1149 9.5+13R	1124 9.2+12R
	VSC2 @ 12"	q 1638 F 3.8+60R	1582 5.2+40R	1552 5.9+30R	1533 6.4+24R	1520 6.7+20R	1511 6.9+17R	1504 7+15R	1387 7.1+13R	1124 7.2+12R
	VSC2 @ 8"	q 1912 F 2.5+60R	1880 3.8+40R	1863 4.4+30R	1852 4.8+24R	1845 5.1+20R	1840 5.3+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q 2071 F 1.7+60R	2052 3+40R	2041 3.6+30R	2035 4+24R	2031 4.3+20R	2028 4.5+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 2228 F 1+60R	2220 2.2+40R	2216 2.9+30R	2214 3.2+24R	2212 3.5+20R	2211 3.7+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1503 F 7.2+33R	1392 8.3+22R	1333 8.9+17R	1297 9.3+13R	1272 9.5+11R	1254 9.7+9R	1241 9.9+8R	1230 10+7R	1222 10.1+7R
	VSC2 @ 18"	q 1847 F 5.2+34R	1651 6.7+22R	1719 6.6+17R	1621 7.2+13R	1551 7.7+11R	1608 7.5+10R	1557 7.8+8R	1516 8+7R	1561 7.8+7R
	VSC2 @ 12"	q 2099 F 4.1+34R	2038 4.9+23R	2006 5.4+17R	1986 5.6+14R	1972 5.8+11R	1962 5.9+10R	1954 6+9R	1936 6.1+8R	1568 6.1+7R
	VSC2 @ 8"	q 2419 F 2.9+34R	2386 3.7+23R	2369 4.1+17R	2358 4.3+14R	2351 4.5+11R	2345 4.6+10R	2341 4.7+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q 2596 F 2.3+34R	2577 3.1+23R	2567 3.4+17R	2561 3.7+14R	2557 3.8+11R	2554 3.9+10R	2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 2765 F 1.7+34R	2758 2.4+23R	2754 2.8+17R	2752 3+14R	2750 3.1+11R	2749 3.2+10R	2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™ -24

- 24/6 Pneutek Fastener Pattern at Supports K64 at Supports 0.187 to 0.312" thick
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 803 F 7.2+190R	674 14+125R	610 17.9+93R	572 20.4+74R	547 22.2+61R	529 23.5+52R	515 24.5+45R	504 25.4+40R	495 26+36R
	VSC2 @ 18"	q 959 F 4.3+192R	795 11.1+127R	791 13.1+95R	720 15.8+75R	672 17.9+62R	688 18+54R	655 19.3+47R	629 20.4+41R	559 20.1+37R
	VSC2 @ 12"	q 1097 F 2.4+193R	1000 7.5+128R	948 10.2+96R	916 11.9+76R	894 13+64R	878 13.8+54R	866 14.4+48R	690 14.9+42R	559 15.3+38R
	VSC2 @ 8"	q *1321 F 0+194R	1248 4.6+129R	1209 7+96R	1184 8.4+77R	1167 9.3+64R	1140 10+55R	873 10.5+48R	690 11+43R	559 11.3+38R
	VSC2 @ 6"	q *1489 F -1.4+194R	*1434 3+129R	*1405 5.2+97R	*1387 6.5+77R	*1374 7.4+65R	1140 8+55R	873 8.5+48R	690 8.9+43R	559 9.2+39R
	VSC2 @ 4"	q *1704 F -3+194R	*1674 1.1+130R	*1658 3.2+97R	*1648 4.5+78R	*1552 5.3+65R	1140 5.9+55R	873 6.4+49R	690 6.7+43R	559 7+39R
20	VSC2 @ 24"	q 1063 F 7.9+120R	909 12.3+79R	828 14.8+59R	779 16.4+47R	745 17.5+39R	721 18.4+33R	703 19+29R	688 19.5+25R	677 19.9+23R
	VSC2 @ 18"	q 1275 F 5.4+121R	1066 9.9+80R	1067 10.9+60R	976 12.8+48R	912 14.2+39R	936 14.1+34R	893 15+30R	859 15.7+26R	734 15.4+24R
	VSC2 @ 12"	q 1459 F 3.8+122R	1341 7+81R	1278 8.7+61R	1239 9.7+48R	1212 10.4+40R	1192 10.9+34R	1146 11.3+30R	906 11.6+27R	734 11.8+24R
	VSC2 @ 8"	q *1752 F 1.8+122R	*1666 4.7+82R	*1619 6.2+61R	*1590 7.1+49R	*1570 7.7+41R	1497 8.1+35R	1146 8.4+31R	906 8.7+27R	734 8.9+24R
	VSC2 @ 6"	q *1964 F 0.7+123R	*1902 3.5+82R	*1869 4.8+61R	*1848 5.7+49R	*1833 6.2+41R	1497 6.6+35R	1146 6.9+31R	906 7.2+27R	734 7.4+25R
	VSC2 @ 4"	q *2228 F -0.5+123R	*2196 2.1+82R	*2178 3.4+62R	*2167 4.2+49R	*2038 4.7+41R	1497 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
18	VSC2 @ 24"	q 1533 F 6.4+59R	1332 8.4+39R	1225 9.5+29R	1159 10.2+23R	1115 10.6+19R	1083 11+16R	1058 11.2+14R	1039 11.4+13R	1024 11.6+11R
	VSC2 @ 18"	q 1847 F 4.6+59R	1565 6.8+39R	1581 7.1+30R	1454 8+24R	1366 8.6+20R	1405 8.5+17R	1345 8.9+15R	1297 9.3+13R	1124 9.1+12R
	VSC2 @ 12"	q 2113 F 3.5+60R	1966 5+40R	1888 5.7+30R	1838 6.2+24R	1805 6.5+20R	1781 6.7+17R	1756 6.9+15R	1387 7+13R	1124 7.1+12R
	VSC2 @ 8"	q *2519 F 2.3+60R	*2418 3.7+40R	*2363 4.3+30R	*2329 4.7+24R	*2305 5+20R	2288 5.2+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q *2798 F 1.6+60R	*2729 2.9+40R	*2691 3.6+30R	*2668 4+24R	*2652 4.3+20R	2294 4.4+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q *3127 F 0.9+60R	*3092 2.2+40R	*3074 2.8+30R	*3063 3.2+24R	*3055 3.5+20R	2294 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
16	VSC2 @ 24"	q 1969 F 6.3+33R	1730 7.7+22R	1603 8.4+16R	1525 8.8+13R	1472 9.2+11R	1433 9.4+9R	1404 9.6+8R	1382 9.7+7R	1363 9.8+6R
	VSC2 @ 18"	q 2378 F 4.8+34R	2036 6.3+22R	2069 6.3+17R	1913 7+13R	1803 7.5+11R	1858 7.3+9R	1782 7.6+8R	1721 7.9+7R	1568 7.7+7R
	VSC2 @ 12"	q 2716 F 3.8+34R	2550 4.7+23R	2461 5.2+17R	2405 5.5+14R	2367 5.7+11R	2340 5.8+10R	2318 5.9+8R	1936 6+7R	1568 6.1+7R
	VSC2 @ 8"	q *3215 F 2.8+34R	*3106 3.6+23R	*3047 4+17R	*3010 4.3+14R	*2985 4.4+11R	*2966 4.5+10R	2450 4.6+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q *3544 F 2.2+34R	*3472 3+23R	*3433 3.4+17R	*3409 3.6+14R	*3392 3.8+11R	*3200 3.9+10R	2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q *3915 F 1.6+34R	*3881 2.4+23R	*3863 2.7+17R	*3852 3+14R	*3844 3.1+11R	*3200 3.2+10R	2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1300 plf, 1600 plf, 2300 plf or 2600 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type PLN™-24

- 24/4 Pneutek Fastener Pattern at Supports
- K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



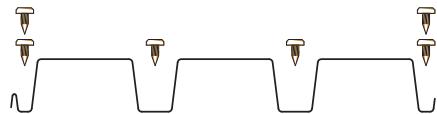
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 612 F 11+190R	546 17.4+126R	512 20.9+94R	491 23.1+75R	477 24.6+62R	467 25.7+53R	459 26.5+46R	453 27.2+41R	448 27.7+37R
	VSC2 @ 18"	q 757 F 6.6+192R	653 13.4+127R	673 14.7+95R	624 17.4+76R	590 19.4+63R	611 19.1+54R	587 20.4+47R	568 21.5+42R	559 21+38R
	VSC2 @ 12"	q 877 F 3.9+193R	832 8.8+128R	808 11.2+96R	793 12.7+77R	783 13.7+64R	775 14.5+55R	770 15+48R	690 15.4+43R	559 15.8+38R
	VSC2 @ 8"	q 1055 F 0.8+194R	1025 5.2+129R	1009 7.5+97R	999 8.8+77R	993 9.7+64R	988 10.3+55R	873 10.8+48R	690 11.2+43R	559 11.5+39R
	VSC2 @ 6"	q 1171 F -0.9+194R	1152 3.3+129R	1141 5.5+97R	1135 6.7+78R	1130 7.6+65R	1127 8.2+55R	873 8.7+48R	690 9+43R	559 9.3+39R
	VSC2 @ 4"	q 1301 F -2.8+195R	1292 1.3+130R	1287 3.4+97R	1284 4.6+78R	1282 5.4+65R	1140 6+56R	873 6.5+49R	690 6.8+43R	559 7.1+39R
	VSC2 @ 24"	q 802 F 10.5+120R	725 14.5+80R	684 16.7+59R	660 18.1+47R	643 19+39R	631 19.7+34R	622 20.2+29R	615 20.6+26R	609 20.9+23R
20	VSC2 @ 18"	q 992 F 6.8+122R	866 11.4+80R	896 11.9+60R	836 13.7+48R	793 15.1+40R	822 14.8+34R	792 15.6+30R	768 16.3+27R	734 16+24R
	VSC2 @ 12"	q 1145 F 4.7+122R	1095 7.8+81R	1068 9.3+61R	1052 10.2+49R	1040 10.8+41R	1032 11.3+35R	1026 11.6+30R	906 11.9+27R	734 12.1+24R
	VSC2 @ 8"	q 1359 F 2.3+123R	1329 5.1+82R	1312 6.5+61R	1302 7.3+49R	1295 7.9+41R	1290 8.3+35R	1146 8.6+31R	906 8.8+27R	734 9+25R
	VSC2 @ 6"	q 1492 F 1+123R	1473 3.7+82R	1463 5+61R	1457 5.8+49R	1452 6.4+41R	1449 6.7+35R	1146 7+31R	906 7.3+27R	734 7.4+25R
	VSC2 @ 4"	q 1633 F -0.4+123R	1625 2.2+82R	1620 3.5+62R	1617 4.3+49R	1616 4.8+41R	1497 5.2+35R	1146 5.4+31R	906 5.7+27R	734 5.8+25R
	VSC2 @ 24"	q 1183 F 7.4+59R	1081 9.2+39R	1028 10.2+29R	995 10.7+23R	972 11.1+19R	956 11.4+17R	944 11.6+15R	935 11.8+13R	927 11.9+12R
	VSC2 @ 18"	q 1460 F 5.1+60R	1288 7.3+40R	1338 7.4+30R	1254 8.3+24R	1195 8.9+20R	1239 8.7+17R	1196 9.1+15R	1162 9.5+13R	1124 9.2+12R
18	VSC2 @ 12"	q 1675 F 3.8+60R	1614 5.2+40R	1581 5.9+30R	1561 6.4+24R	1547 6.7+20R	1537 6.9+17R	1529 7+15R	1387 7.1+13R	1124 7.2+12R
	VSC2 @ 8"	q 1964 F 2.5+60R	1929 3.8+40R	1910 4.4+30R	1898 4.8+24R	1890 5.1+20R	1884 5.3+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
	VSC2 @ 6"	q 2134 F 1.7+60R	2113 3+40R	2102 3.6+30R	2095 4+24R	2090 4.3+20R	2087 4.5+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q 2306 F 1+60R	2297 2.2+40R	2293 2.9+30R	2290 3.2+24R	2288 3.5+20R	2286 3.7+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
	VSC2 @ 24"	q 1577 F 7.2+33R	1447 8.3+22R	1379 8.9+17R	1337 9.3+13R	1308 9.5+11R	1288 9.7+9R	1272 9.9+8R	1260 10+7R	1250 10.1+7R
	VSC2 @ 18"	q 1944 F 5.2+34R	1722 6.7+22R	1790 6.6+17R	1681 7.2+13R	1604 7.7+11R	1663 7.5+10R	1607 7.8+8R	1562 8+7R	1568 7.8+7R
	VSC2 @ 12"	q 2224 F 4.1+34R	2148 4.9+23R	2108 5.4+17R	2083 5.6+14R	2066 5.8+11R	2053 5.9+10R	2044 6+9R	1936 6.1+8R	1568 6.1+7R
16	VSC2 @ 8"	q 2595 F 2.9+34R	2551 3.7+23R	2528 4.1+17R	2514 4.3+14R	2504 4.5+11R	2497 4.6+10R	2450 4.7+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q 2808 F 2.3+34R	2783 3.1+23R	2769 3.4+17R	2761 3.7+14R	2755 3.8+11R	2751 3.9+10R	2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q 3020 F 1.7+34R	3010 2.4+23R	3004 2.8+17R	3001 3+14R	2999 3.1+11R	2997 3.2+10R	2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

See footnotes on page 106.

Type PLN™-24

- 24/6 Pneutek Fastener Pattern at Supports K66 at Supports 0.281" and thicker
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

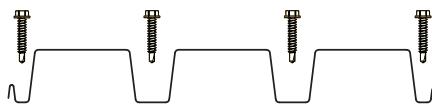
DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	VSC2 @ 24"	q 827 F 7.2+190R	689 14+125R	622 17.9+93R	582 20.4+74R	555 22.2+61R	535 23.5+52R	521 24.5+45R	510 25.4+40R	501 26+36R
	VSC2 @ 18"	q 990 F 4.3+192R	816 11.1+127R	808 13.1+95R	735 15.8+75R	684 17.9+62R	699 18+54R	664 19.3+47R	638 20.4+41R	559 20.1+37R
	VSC2 @ 12"	q 1132 F 2.4+193R	1026 7.5+128R	969 10.2+96R	934 11.9+76R	910 13+64R	893 13.8+54R	873 14.4+48R	690 14.9+42R	559 15.3+38R
	VSC2 @ 8"	q *1366 F 0+194R	1284 4.6+129R	1240 7+96R	1213 8.4+77R	1194 9.3+64R	1140 10+55R	873 10.5+48R	690 11+43R	559 11.3+38R
	VSC2 @ 6"	q *1544 F -1.4+194R	*1482 3+129R	*1448 5.2+97R	*1428 6.5+77R	*1413 7.4+65R	1140 8+55R	873 8.5+48R	690 8.9+43R	559 9.2+39R
	VSC2 @ 4"	q *1778 F -3+194R	*1743 1.1+130R	*1724 3.2+97R	*1712 4.5+78R	*1552 5.3+65R	1140 5.9+55R	873 6.4+49R	690 6.7+43R	559 7+39R
	VSC2 @ 24"	q 1075 F 7.9+120R	915 12.3+79R	833 14.8+59R	783 16.4+47R	750 17.5+39R	725 18.4+33R	706 19+29R	691 19.5+25R	680 19.9+23R
	VSC2 @ 18"	q 1288 F 5.4+121R	1075 9.9+80R	1074 10.9+60R	982 12.8+48R	917 14.2+39R	940 14.1+34R	897 15+30R	863 15.7+26R	734 15.4+24R
20	VSC2 @ 12"	q 1474 F 3.8+122R	1352 7+81R	1287 8.7+61R	1247 9.7+48R	1219 10.4+40R	1199 10.9+34R	1146 11.3+30R	906 11.6+27R	734 11.8+24R
	VSC2 @ 8"	q *1771 F 1.8+122R	1682 4.7+82R	1633 6.2+61R	1603 7.1+49R	1582 7.7+41R	1497 8.1+35R	1146 8.4+31R	906 8.7+27R	734 8.9+24R
	VSC2 @ 6"	q *1988 F 0.7+123R	*1923 3.5+82R	*1888 4.8+61R	*1866 5.7+49R	*1851 6.2+41R	1497 6.6+35R	1146 6.9+31R	906 7.2+27R	734 7.4+25R
	VSC2 @ 4"	q *2260 F -0.5+123R	*2225 2.1+82R	*2206 3.4+62R	*2195 4.2+49R	*2038 4.7+41R	1497 5.1+35R	1146 5.4+31R	906 5.6+27R	734 5.8+25R
	VSC2 @ 24"	q 1568 F 6.4+59R	1356 8.4+39R	1244 9.5+29R	1175 10.2+23R	1128 10.6+19R	1095 11+16R	1069 11.2+14R	1049 11.4+13R	1033 11.6+11R
	VSC2 @ 18"	q 1886 F 4.6+59R	1592 6.8+39R	1604 7.1+30R	1474 8+24R	1383 8.6+20R	1421 8.5+17R	1358 8.9+15R	1309 9.3+13R	1124 9.1+12R
	VSC2 @ 12"	q 2158 F 3.5+60R	2002 5+40R	1918 5.7+30R	1865 6.2+24R	1830 6.5+20R	1804 6.7+17R	1756 6.9+15R	1387 7+13R	1124 7.1+12R
	VSC2 @ 8"	q *2580 F 2.3+60R	*2470 3.7+40R	*2410 4.3+30R	*2373 4.7+24R	*2348 5+20R	2294 5.2+17R	1756 5.4+15R	1387 5.5+13R	1124 5.6+12R
18	VSC2 @ 6"	q *2874 F 1.6+60R	*2797 2.9+40R	*2756 3.6+30R	*2730 4+24R	*2712 4.3+20R	2294 4.4+17R	1756 4.6+15R	1387 4.7+13R	1124 4.8+12R
	VSC2 @ 4"	q *3225 F 0.9+60R	*3187 2.2+40R	*3166 2.8+30R	*3153 3.2+24R	*3122 3.5+20R	2294 3.6+17R	1756 3.8+15R	1387 3.9+13R	1124 4+12R
	VSC2 @ 24"	q 2081 F 6.3+33R	1809 7.7+22R	1665 8.4+16R	1576 8.8+13R	1516 9.2+11R	1472 9.4+9R	1439 9.6+8R	1414 9.7+7R	1393 9.8+6R
	VSC2 @ 18"	q 2508 F 4.8+34R	2126 6.3+22R	2148 6.3+17R	1977 7+13R	1858 7.5+11R	1911 7.3+9R	1829 7.6+8R	1763 7.9+7R	1568 7.7+7R
	VSC2 @ 12"	q 2869 F 3.8+34R	2671 4.7+23R	2565 5.2+17R	2499 5.5+14R	2453 5.7+11R	2420 5.8+10R	2396 5.9+8R	1936 6+7R	1568 6.1+7R
	VSC2 @ 8"	q *3420 F 2.8+34R	*3283 3.6+23R	*3210 4+17R	*3163 4.3+14R	*3132 4.4+11R	*3109 4.5+10R	2450 4.6+9R	1936 4.7+8R	1568 4.8+7R
	VSC2 @ 6"	q *3797 F 2.2+34R	*3704 3+23R	*3653 3.4+17R	*3622 3.6+14R	*3600 3.8+11R	*3200 3.9+10R	2450 4+9R	1936 4+8R	1568 4.1+7R
	VSC2 @ 4"	q *4240 F 1.6+34R	*4194 2.4+23R	*4170 2.7+17R	*4154 3+14R	*4144 3.1+11R	*3200 3.2+10R	2450 3.3+9R	1936 3.4+8R	1568 3.4+7R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1300 plf, 1700 plf, 2300 plf or 3100 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type PLN™-24

- 24/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- Sidelaps Connected with PunchLok II Tool**



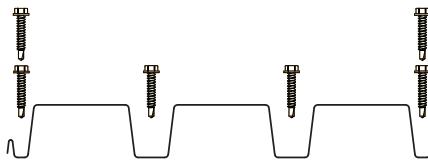
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	VSC2 @ 24"	q 627 F -11.3+387R	537 5.2+191R	492 12+125R	469 16+93R	454 18.7+74R	444 20.6+61R	437 22.1+52R	432 23.2+45R	428 24.1+40R
	VSC2 @ 18"	q 812 F -12.9+388R	663 3+192R	586 9.7+126R	609 12+95R	572 14.8+75R	545 16.9+62R	565 17.1+53R	546 18.5+46R	531 19.6+41R
	VSC2 @ 12"	q 812 F -12.9+388R	759 1.5+193R	733 6.8+128R	718 9.6+95R	710 11.3+76R	704 12.5+63R	699 13.3+54R	696 14+47R	690 14.5+42R
	VSC2 @ 8"	q 917 F -14+388R	887 -0.5+193R	872 4.2+129R	864 6.6+96R	859 8.1+77R	855 9.1+64R	853 9.8+55R	851 10.4+48R	690 10.8+43R
	VSC2 @ 6"	q 980 F -14.8+389R	962 -1.7+194R	953 2.7+129R	948 5+97R	945 6.3+77R	943 7.2+64R	942 7.9+55R	873 8.4+48R	690 8.8+43R
	VSC2 @ 4"	q 1044 F -15.8+389R	1036 -3.2+194R	1032 1+129R	1031 3.1+97R	1029 4.4+78R	1028 5.3+65R	1028 5.9+55R	873 6.3+49R	690 6.7+43R
20	VSC2 @ 24"	q 797 F -4.5+244R	698 6.5+120R	648 11+79R	621 13.6+59R	605 15.3+46R	594 16.6+38R	586 17.5+33R	580 18.2+28R	575 18.8+25R
	VSC2 @ 18"	q 1023 F -6.1+245R	856 4.5+121R	767 9+80R	799 10.3+60R	754 12.2+47R	723 13.6+39R	749 13.6+34R	726 14.5+29R	707 15.2+26R
	VSC2 @ 12"	q 1023 F -6.1+245R	971 3.2+122R	944 6.5+81R	929 8.3+60R	921 9.4+48R	915 10.1+40R	910 10.7+34R	907 11.1+30R	904 11.4+27R
	VSC2 @ 8"	q 1142 F -7.1+246R	1114 1.5+122R	1100 4.5+81R	1092 6+61R	1088 6.9+49R	1085 7.5+41R	1082 8+35R	1081 8.3+30R	906 8.6+27R
	VSC2 @ 6"	q 1209 F -7.7+246R	1193 0.5+123R	1185 3.3+82R	1180 4.7+61R	1178 5.6+49R	1176 6.2+41R	1175 6.6+35R	1146 6.9+31R	906 7.1+27R
	VSC2 @ 4"	q 1273 F -8.6+246R	1267 -0.6+123R	1264 2+82R	1262 3.4+61R	1261 4.2+49R	1260 4.7+41R	1260 5.1+35R	1146 5.4+31R	906 5.6+27R
18	VSC2 @ 24"	q 1127 F 0.3+119R	1008 5.7+59R	948 7.9+39R	916 9+29R	896 9.8+23R	883 10.3+19R	873 10.7+16R	866 10.9+14R	860 11.2+13R
	VSC2 @ 18"	q 1428 F -1.2+120R	1224 4.2+59R	1113 6.5+39R	1160 6.8+29R	1103 7.8+23R	1062 8.4+19R	1099 8.3+17R	1068 8.8+15R	1044 9.1+13R
	VSC2 @ 12"	q 1428 F -1.2+120R	1372 3.3+60R	1343 4.8+40R	1328 5.6+30R	1319 6.1+24R	1312 6.4+20R	1307 6.7+17R	1304 6.8+15R	1301 7+13R
	VSC2 @ 8"	q 1572 F -1.9+120R	1544 2.2+60R	1531 3.6+40R	1523 4.3+30R	1519 4.7+24R	1515 5+20R	1513 5.2+17R	1512 5.3+15R	1387 5.5+13R
	VSC2 @ 6"	q 1648 F -2.4+120R	1633 1.6+60R	1625 2.9+40R	1621 3.6+30R	1619 4+24R	1617 4.2+20R	1616 4.4+17R	1615 4.6+15R	1387 4.7+13R
	VSC2 @ 4"	q 1718 F -2.9+120R	1712 0.9+60R	1709 2.2+40R	1708 2.8+30R	1707 3.2+24R	1706 3.5+20R	1706 3.6+17R	1706 3.8+15R	1387 3.9+13R
16	VSC2 @ 24"	q 1456 F 2.2+68R	1317 5.8+33R	1246 7.2+22R	1208 8+16R	1185 8.5+13R	1169 8.9+11R	1158 9.1+9R	1149 9.3+8R	1142 9.5+7R
	VSC2 @ 18"	q 1828 F 0.9+68R	1587 4.5+34R	1455 6+22R	1515 6.2+17R	1446 6.8+13R	1396 7.3+11R	1442 7.2+9R	1405 7.5+8R	1375 7.8+7R
	VSC2 @ 12"	q 1828 F 0.9+68R	1767 3.7+34R	1735 4.6+23R	1719 5.1+17R	1708 5.4+13R	1701 5.6+11R	1696 5.7+10R	1692 5.9+8R	1689 5.9+7R
	VSC2 @ 8"	q 1998 F 0.3+68R	1968 2.7+34R	1954 3.5+23R	1946 4+17R	1941 4.2+14R	1938 4.4+11R	1936 4.5+10R	1934 4.6+9R	1933 4.7+8R
	VSC2 @ 6"	q 2084 F -0.1+69R	2068 2.2+34R	2061 3+23R	2057 3.4+17R	2054 3.6+14R	2052 3.8+11R	2051 3.9+10R	2050 4+9R	1936 4+8R
	VSC2 @ 4"	q 2162 F -0.6+69R	2156 1.6+34R	2153 2.4+23R	2152 2.7+17R	2151 3+14R	2150 3.1+11R	2150 3.2+10R	2150 3.3+9R	1936 3.4+8R

See footnotes on page 106.

Type PLN™-24

- 24/6 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with PunchLok II Tool**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

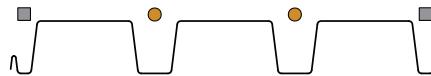
DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
22	VSC2 @ 24"	q 895 F -14+387R	710 1.5+192R	616 8.1+126R	567 12.1+93R	536 14.9+73R	515 17+60R	500 18.6+51R	489 19.9+44R	480 21+39R
	VSC2 @ 18"	q *1110 F -14.7+388R	856 0.4+192R	724 6.8+127R	731 9.6+94R	672 12.4+75R	631 14.4+62R	649 15.1+53R	621 16.4+46R	599 17.6+40R
	VSC2 @ 12"	q *1110 F -14.7+388R	979 -0.5+193R	910 5+128R	873 7.9+95R	850 9.8+76R	834 11.2+63R	823 12.1+54R	814 12.9+47R	690 13.5+42R
	VSC2 @ 8"	q *1258 F -15.3+388R	*1168 -1.7+193R	*1120 3.2+128R	1094 5.7+96R	1078 7.3+77R	1067 8.4+64R	1059 9.2+55R	873 9.8+48R	690 10.3+42R
	VSC2 @ 6"	q *1361 F -15.7+389R	*1299 -2.6+194R	*1266 2+129R	*1248 4.4+96R	*1237 5.9+77R	*1229 6.8+64R	*1140 7.5+55R	873 8.1+48R	690 8.5+43R
	VSC2 @ 4"	q *1484 F -16.4+389R	*1453 -3.7+194R	*1436 0.7+129R	*1428 2.9+97R	*1422 4.2+77R	*1418 5.1+65R	*1140 5.7+55R	873 6.2+48R	690 6.6+43R
	VSC2 @ 24"	q 1122 F -6.7+245R	912 3.7+121R	804 8.2+79R	746 10.9+58R	711 12.8+46R	687 14.2+38R	669 15.3+32R	656 16.1+28R	646 16.8+24R
	VSC2 @ 18"	q *1397 F -7.5+245R	1101 2.6+121R	946 7+80R	963 8.7+60R	891 10.6+47R	841 12+39R	867 12.3+33R	832 13.2+29R	804 14+25R
	VSC2 @ 12"	q *1397 F -7.5+245R	1257 1.8+122R	1184 5.4+81R	1144 7.3+60R	1119 8.5+48R	1102 9.3+40R	1090 9.9+34R	1080 10.4+30R	906 10.8+26R
	VSC2 @ 8"	q *1576 F -8+246R	*1485 0.7+122R	*1437 3.8+81R	*1411 5.5+61R	*1395 6.5+49R	*1384 7.1+40R	*1376 7.6+35R	1146 8+30R	906 8.3+27R
20	VSC2 @ 6"	q *1693 F -8.4+246R	*1633 0+123R	*1602 2.9+82R	*1585 4.4+61R	*1574 5.3+49R	*1567 5.9+41R	*1497 6.4+35R	1146 6.7+30R	906 6.9+27R
	VSC2 @ 4"	q *1826 F -9+246R	*1798 -0.9+123R	*1783 1.8+82R	*1775 3.2+61R	*1771 4+49R	*1767 4.6+41R	*1497 5+35R	1146 5.3+31R	906 5.5+27R
	VSC2 @ 24"	q 1568 F -1+119R	1306 4.4+59R	1170 6.6+39R	1098 7.9+29R	1053 8.8+23R	1023 9.4+19R	1001 9.8+16R	984 10.2+14R	971 10.5+12R
	VSC2 @ 18"	q *1953 F -1.8+120R	1578 3.4+59R	1377 5.6+39R	1412 6.2+29R	1316 7.2+23R	1248 7.9+19R	1289 7.9+16R	1241 8.3+14R	1203 8.7+13R
	VSC2 @ 12"	q *1953 F -1.8+120R	1793 2.7+59R	1708 4.4+39R	1662 5.2+30R	1633 5.8+24R	1614 6.1+20R	1599 6.4+17R	1589 6.6+15R	1387 6.8+13R
	VSC2 @ 8"	q *2186 F -2.3+120R	*2089 1.9+60R	*2038 3.3+40R	*2010 4.1+30R	*1993 4.5+24R	*1981 4.8+20R	*1972 5.1+17R	1756 5.2+15R	1387 5.4+13R
	VSC2 @ 6"	q *2330 F -2.7+120R	*2269 1.4+60R	*2237 2.8+40R	*2221 3.4+30R	*2210 3.9+24R	*2203 4.1+20R	*2197 4.4+17R	1756 4.5+15R	1387 4.6+13R
	VSC2 @ 4"	q *2484 F -3.1+120R	*2457 0.8+60R	*2444 2.1+40R	*2436 2.8+30R	*2432 3.2+24R	*2429 3.4+20R	*2294 3.6+17R	1756 3.7+15R	1387 3.9+13R
	VSC2 @ 24"	q 2015 F 1.1+68R	1700 4.6+33R	1536 6.2+22R	1449 7.1+16R	1395 7.7+13R	1358 8.2+10R	1331 8.5+9R	1311 8.7+8R	1295 8.9+7R
	VSC2 @ 18"	q *2506 F 0.4+68R	2052 3.8+34R	1806 5.3+22R	1857 5.7+16R	1738 6.3+13R	1653 6.9+11R	1707 6.8+9R	1647 7.2+8R	1599 7.4+7R
	VSC2 @ 12"	q *2506 F 0.4+68R	*2323 3.2+34R	*2226 4.2+22R	2173 4.8+17R	2140 5.1+13R	2118 5.4+11R	2101 5.6+9R	2089 5.7+8R	1936 5.8+7R
16	VSC2 @ 8"	q *2791 F -0.1+68R	*2684 2.5+34R	*2628 3.4+23R	*2598 3.8+17R	*2579 4.1+14R	*2566 4.3+11R	*2556 4.4+10R	*2450 4.5+8R	1936 4.6+8R
	VSC2 @ 6"	q *2961 F -0.4+69R	*2896 2+34R	*2863 2.9+23R	*2845 3.3+17R	*2833 3.5+14R	*2826 3.7+11R	*2820 3.8+10R	*2450 3.9+9R	1936 4+8R
	VSC2 @ 4"	q *3139 F -0.7+69R	*3111 1.5+34R	*3097 2.3+23R	*3090 2.7+17R	*3085 2.9+14R	*3082 3.1+11R	*3080 3.2+10R	*2450 3.3+9R	1936 3.3+8R

1. For diaphragm shear strengths in bold and marked with *, the fastening pattern shall be increased at the building perimeter, chords, collectors to other shear transfer elements to two fasteners per rib (i.e. 24/8 pattern) or shall be limited to 1100 plf, 1300 plf, 1800 plf or 2200 plf for 22, 20, 18 or 16 gage steel deck, respectively. Bearing at supports shall allow for proper end distance and fastener spacing.

2. See footnotes on page 106.

Type N-24

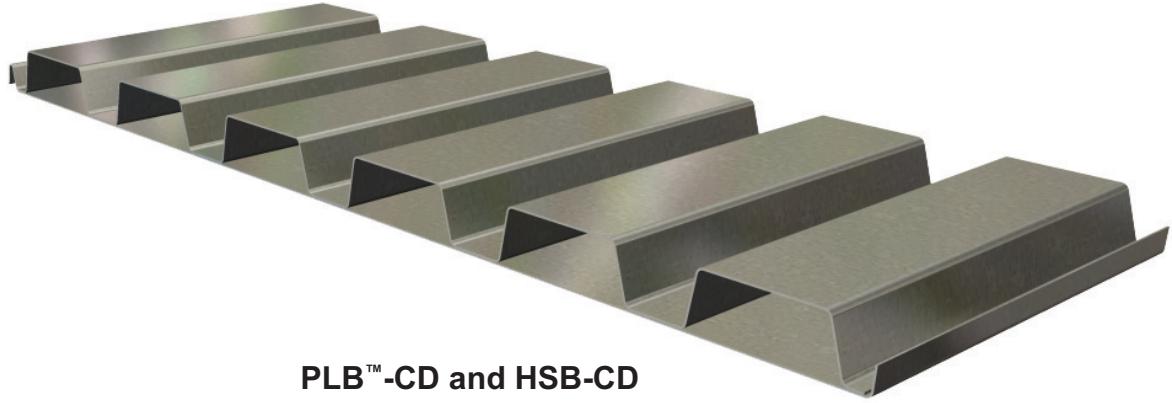
- 24/4 Weld Pattern at Supports
- Sidelaps Connected with Button Punch or 1½" Top Seam Weld



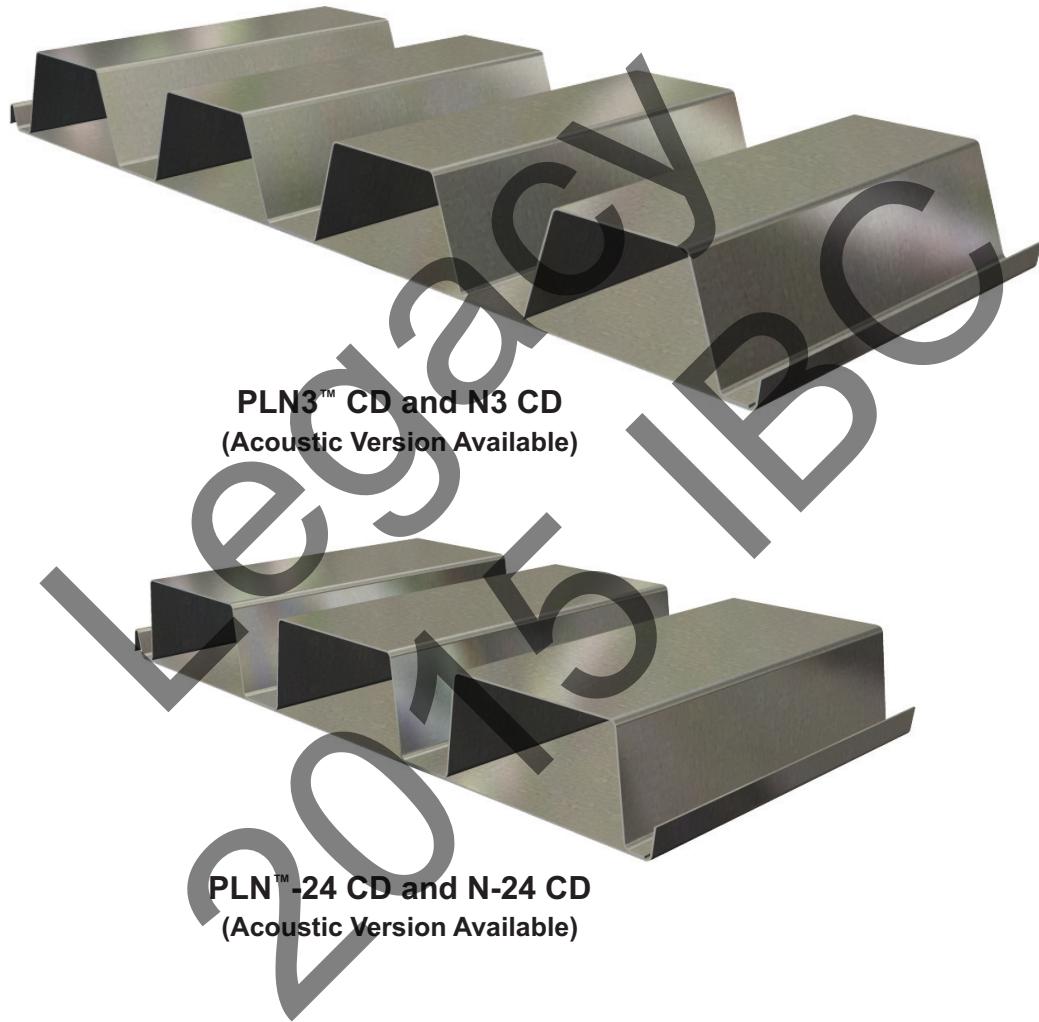
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
22	BP @ 24"	q 245	174	139	119	105	95	88	82	77
		F 10+187R	21.4+119R	30.1+84R	37.4+62R	43.9+48R	49.7+37R	55+28R	59.8+22R	64.3+16R
	BP @ 12"	q 281	210	175	154	141	131	123	118	113
		F 8.5+188R	18.4+121R	25.5+87R	31+67R	35.6+53R	39.4+43R	42.8+35R	45.7+30R	48.3+25R
	TSW @ 24"	q 644	572	538	517	503	494	486	480	474
		F -2.2+194R	2.2+129R	4.5+97R	5.9+77R	6.8+64R	7.4+55R	7.9+48R	8.3+43R	8.6+39R
20	TSW @ 18"	q 837	710	732	674	635	659	631	609	559
		F -3.5+194R	1.1+129R	2.8+97R	4.4+78R	5.4+65R	5.7+55R	6.4+48R	6.9+43R	6.9+39R
	TSW @ 12"	q 990	930	898	879	865	856	849	690	559
		F -4.3+194R	-0.2+130R	1.9+97R	3.2+78R	4+65R	4.6+56R	5+49R	5.4+43R	5.6+39R
	TSW @ 6"	q 1422	1389	1371	1361	1353	1140	873	690	559
		F -5.6+195R	-1.5+130R	0.5+97R	1.7+78R	2.5+65R	3.1+56R	3.5+49R	3.8+43R	4.1+39R
18	BP @ 24"	q 360	251	201	171	151	137	126	118	112
		F 12.1+116R	21.3+73R	28.7+50R	35.1+35R	40.8+25R	45.9+18R	50.6+12R	54.9+8R	58.9+4R
	BP @ 12"	q 412	303	253	223	203	189	178	170	163
		F 10.7+117R	18.7+74R	24.5+52R	29.2+39R	33.2+30R	36.6+24R	39.5+19R	42.1+15R	44.4+12R
	TSW @ 24"	q 863	754	704	674	654	640	628	619	611
		F 1+122R	3.9+82R	5.4+61R	6.3+49R	6.9+41R	7.3+35R	7.7+30R	7.9+27R	8.1+24R
16	TSW @ 18"	q 1092	923	947	871	819	849	812	783	734
		F -0.3+123R	2.8+82R	3.9+61R	4.9+49R	5.7+41R	5.8+35R	6.3+31R	6.6+27R	6.6+24R
	TSW @ 12"	q 1286	1202	1158	1131	1112	1099	1089	906	734
		F -1+123R	1.7+82R	3+61R	3.8+49R	4.4+41R	4.7+35R	5+31R	5.3+27R	5.4+25R
	TSW @ 6"	q 1829	1783	1759	1744	1734	1497	1146	906	734
		F -2.1+123R	0.4+82R	1.7+62R	2.5+49R	3+41R	3.4+35R	3.6+31R	3.8+27R	4+25R
14	BP @ 24"	q 650	447	358	305	269	244	225	210	198
		F 12.9+54R	19.9+32R	25.9+20R	31.1+12R	35.8+6R	40.2+2R	44.1-1R	47.8-4R	51.2-6R
	BP @ 12"	q 741	539	450	396	361	335	316	301	290
		F 11.7+55R	17.6+33R	22.2+22R	26+15R	29.2+10R	32+7R	34.5+5R	36.6+3R	38.6+1R
	TSW @ 24"	q 1354	1167	1078	1024	988	961	940	924	911
		F 3.2+60R	4.8+40R	5.6+30R	6.1+24R	6.5+20R	6.7+17R	6.9+15R	7+13R	7.1+12R
12	TSW @ 18"	q 1670	1402	1426	1307	1226	1266	1210	1165	1124
		F 2.2+60R	3.9+40R	4.3+30R	4.9+24R	5.4+20R	5.4+17R	5.7+15R	5.9+13R	5.8+12R
	TSW @ 12"	q 1949	1808	1733	1688	1657	1634	1617	1387	1124
		F 1.6+60R	2.9+40R	3.6+30R	4+24R	4.3+20R	4.5+17R	4.6+15R	4.7+13R	4.8+12R
	TSW @ 6"	q 2738	2661	2620	2594	2576	2294	1756	1387	1124
		F 0.5+60R	1.8+40R	2.4+30R	2.8+24R	3.1+20R	3.3+17R	3.4+15R	3.5+13R	3.6+12R
10	BP @ 24"	q 848	586	475	409	364	333	309	291	276
		F 12.4+29R	18.3+15R	23.4+8R	28+3R	32.2-1R	36-4R	39.5-6R	42.7-8R	45.7-9R
	BP @ 12"	q 991	729	618	552	507	476	452	434	419
		F 11.4+30R	16.2+17R	20.2+10R	23.4+6R	26.2+3R	28.7+1R	30.8-1R	32.7-2R	34.4-3R
	TSW @ 24"	q 1758	1535	1423	1354	1307	1273	1247	1227	1211
		F 3.8+34R	4.8+22R	5.3+17R	5.7+13R	5.9+11R	6+10R	6.2+8R	6.3+7R	6.3+7R
8	TSW @ 18"	q 2175	1838	1877	1726	1622	1677	1605	1548	1568
		F 2.8+34R	4+23R	4.2+17R	4.6+14R	4.9+11R	4.9+10R	5.1+8R	5.2+7R	5.2+7R
	TSW @ 12"	q 2540	2370	2280	2225	2188	2161	2140	1936	1568
		F 2.3+34R	3.1+23R	3.5+17R	3.8+14R	3.9+11R	4+10R	4.1+9R	4.2+8R	4.2+7R
	TSW @ 6"	q 3543	3454	3407	3378	3358	3200	2450	1936	1568
		F 1.4+34R	2.1+23R	2.5+17R	2.7+14R	2.9+11R	3+10R	3+9R	3.1+8R	3.2+7R

See footnotes on page 106.



PLB™-CD and HSB-CD
(Acoustic Version Available)



PLN3™ CD and N3 CD
(Acoustic Version Available)

PLN™-24 CD and N-24 CD
(Acoustic Version Available)

CELLULAR ROOF DECK CONTENTS

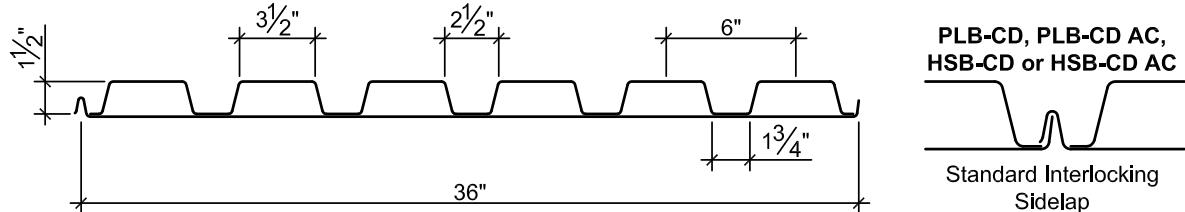
Section Properties	125-127
Vertical Load Capacity.....	128-136
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PLN3™ CD Allowable Diaphragm Shear Strength and Flexibility Tables	139-140
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Acoustical Properties	155

PLB™-CD or HSB®-CD



- 1½" Deep Cellular Roof Deck
- Galvanized
- PLB-CD used with PunchLok II System
- HSB-CD used with Top Seam Welds

Dimensions



Deck Weight and Section Properties

Gage	Weight	I _d for Deflections		Positive Moment		Negative Moment		Vertical Shear	
	(psf)	Single Span (in. ⁴)	Multiple Spans (in. ⁴)	+S _{eff} (in. ³)	+M (in.-kips)	-S _{eff} (in. ³)	-M (in.-kips)	End (lb)	Interior (lb)
20/20	3.6	0.416	0.416	0.279	8.4	0.382	11.4	340	510
20/18	4.1	0.454	0.454	0.287	8.6	0.428	12.8	318	369
18/20	4.1	0.535	0.535	0.417	12.5	0.453	13.6	369	612
18/18	4.6	0.587	0.587	0.428	12.8	0.552	16.5	517	667
18/16	5.1	0.631	0.631	0.437	13.1	0.575	17.2	491	524
16/18	5.3	0.704	0.704	0.587	17.6	0.629	18.8	549	757
16/16	5.8	0.759	0.759	0.599	17.9	0.700	20.9	718	821

Notes:

1. Section properties are based on $F_y = 50,000$ psi.
2. Section properties have been computed in accordance with AISI's "S100: Specification for the Design of Cold-Formed Steel Structural Members."
3. The gage "xx/yy" of cellular decks is defined as: First Number (xx) is the gage of the fluted top section. Second Number (yy) is the gage of the flat bottom section.
4. I_d is the effective moment of inertia for deflection of simple or multiple span conditions due to uniform loads.
5. S_{eff} (+ or -) is the effective section modulus. M (+ or -) is the ASD allowable moment, $M = M_n/\Omega_b$, where $\Omega_b = 1.67$ and M_n is the nominal flexural strength. Nominal moments may be determined by multiplying the table values by Ω_b . LRFD moments may be determined by multiplying nominal moments by $\Phi_b = 0.95$.
6. Vertical Shear is the ASD allowable vertical shear strength based on the horizontal shear strength of the resistance welds, where $V = V_n/\Omega$, with $\Omega = 2.35$. "END" shear strength values are applicable adjacent to supports where deck is not continuous and "INTERIOR" shear strength values are applicable adjacent to supports where deck is continuous.
7. End and interior reactions shall be compared to the allowable reactions due to web crippling for fluted (non-cellular) deck of the same gage as the fluted top section of the cellular deck.
8. Multiply tabulated cellular deck values by the following factors to obtain acoustical cellular deck section properties:

Deck Type	I _d for Deflection		Allowable Moment		Vertical Shear	
	Single Span	Multi Span	Positive	Negative	End	Interior
BCD Acoustical	0.97	0.97	0.99	1.00	1.00	1.00

Attachment Patterns to Supports



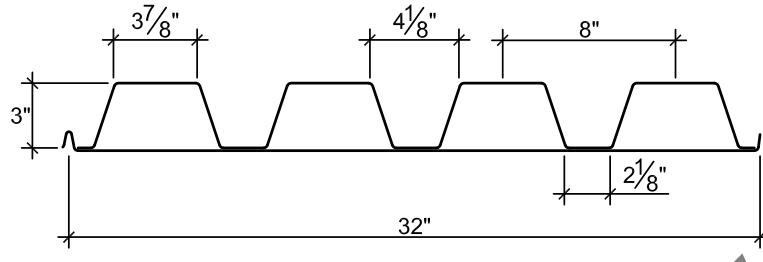
Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
■ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

PLN3™-CD or HSN3™-CD

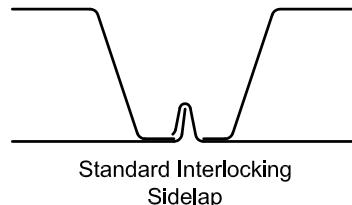
- 3" Deep Cellular Roof Deck
- Galvanized
- PLN3-CD used with PunchLok II System
- HSN3-CD used with Top Seam Welds



Dimensions



PLN3-CD, PLN3-CD AC,
HSN3-CD or HSN3-CD AC



Standard Interlocking
Sidelap

Deck Weight and Section Properties

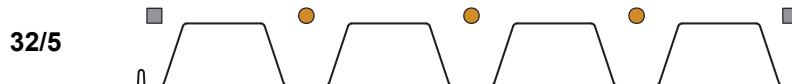
Gage	Weight	I _d for Deflections		Positive Moment		Negative Moment		Vertical Shear	
	(psf)	Single Span (in. ⁴)	Multiple Spans (in. ⁴)	+S _{eff} (in. ³)	+M (in.-kips)	-S _{eff} (in. ³)	-M (in.-kips)	End (lb)	Interior (lb)
20/20	3.9	1.579	1.579	0.505	15.1	0.709	21.2	528	1,186
20/18	4.4	1.716	1.716	0.503	15.1	0.801	24.0	489	747
18/20	4.6	2.017	2.017	0.804	24.1	0.869	26.0	579	1,438
18/18	5.1	2.194	2.194	0.824	24.7	1.030	30.8	803	1,426
18/16	5.7	2.346	2.346	0.829	24.8	1.077	32.2	756	1,106
16/18	5.9	2.652	2.652	1.107	33.1	1.210	36.2	862	1,684
16/16	6.4	2.838	2.838	1.129	33.8	1.314	39.3	1,115	1,734

Notes:

1. Section properties are based on $F_y = 50,000$ psi.
2. Section properties have been computed in accordance with AISI's "S100: Specification for the Design of Cold-Formed Steel Structural Members."
3. The gage "xx/yy" of cellular decks is defined as: First Number (xx) is the gage of the fluted top section. Second Number (yy) is the gage of the flat bottom section.
4. I_d is the effective moment of inertia for deflection of simple or multiple span conditions due to uniform loads.
5. S_{eff} (+ or -) is the effective section modulus. M (+ or -) is the ASD allowable moment, $M = M_n/\Omega_b$, where $\Omega_b = 1.67$ and M_n is the nominal flexural strength. Nominal moments may be determined by multiplying the table values by Ω_b . LRFD moments may be determined by multiplying nominal moments by $\Phi_b = 0.95$.
6. Vertical Shear is the ASD allowable vertical shear strength based on the horizontal shear strength of the resistance welds, where $V = V_n/\Omega$, with $\Omega = 2.35$. "END" shear strength values are applicable adjacent to supports where deck is not continuous and "INTERIOR" shear strength values are applicable adjacent to supports where deck is continuous.
7. End and interior reactions shall be compared to the allowable reactions due to web crippling for fluted (non-cellular) deck of the same gage as the fluted top section of the cellular deck.
8. Multiply tabulated cellular deck values by the following factors to obtain acoustical cellular deck section properties:

Deck Type	I _d for Deflection		Allowable Moment		Vertical Shear	
	Single Span	Multi Span	Positive	Negative	End	Interior
N3CD Acoustical	0.97	0.99	0.99	1.00	1.00	1.00

Attachment Patterns to Supports



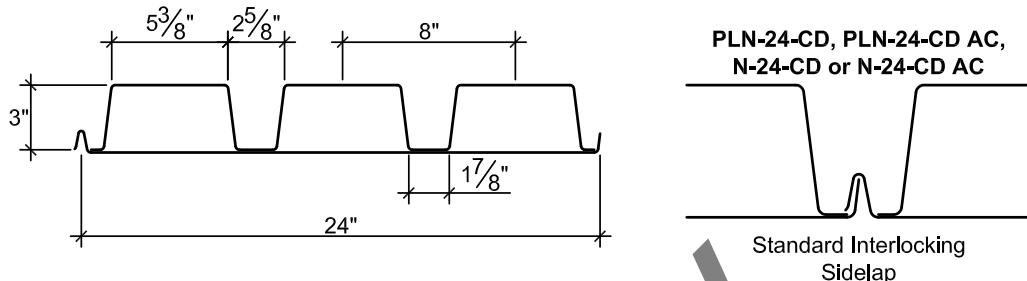
Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
■ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

PLN™-24-CD or N-24-CD

- 1½" Deep Cellular Roof Deck
- Galvanized
- PLN-24-CD used with PunchLok II System
- N-24-CD used with Top Seam Welds



Dimensions



Deck Weight and Section Properties

Gage	Weight	I_d for Deflections		Positive Moment		Negative Moment		Vertical Shear	
	(psf)	Single Span (in. ⁴)	Multiple Spans (in. ⁴)	+S _{eff} (in. ³)	+M (in.-kips)	-S _{eff} (in. ³)	-M (in.-kips)	End (lb)	Interior (lb)
20/20	4.1	1.681	1.681	0.518	15.5	0.706	21.2	559	1039
20/18	4.6	1.841	1.841	0.515	15.4	0.909	27.2	522	718
18/20	4.8	2.159	2.159	0.805	24.1	0.852	25.5	608	1,253
18/18	5.3	2.369	2.369	0.826	24.7	1.055	31.6	850	1,275
18/16	5.8	2.544	2.544	0.843	25.2	1.318	39.5	805	966
16/18	6.1	2.881	2.881	1.121	33.6	1.199	35.9	906	1,455
16/16	6.6	3.106	3.106	1.144	34.3	1.475	44.2	1,181	1,498

Notes:

1. Section properties are based on $F_y = 50,000$ psi.
2. Section properties have been computed in accordance with AISI's "S100: Specification for the Design of Cold-Formed Steel Structural Members."
3. The gage "xx/yy" of cellular decks is defined as: First Number (xx) is the gage of the fluted top section. Second Number (yy) is the gage of the flat bottom section.
4. I_d is the effective moment of inertia for deflection of simple or multiple span conditions due to uniform loads.
5. S_{eff} (+ or -) is the effective section modulus. M (+ or -) is the ASD allowable moment, $M = M_n/\Omega_b$, where $\Omega_b = 1.67$ and M_n is the nominal flexural strength. Nominal moments may be determined by multiplying the table values by Ω_b . LRFD moments may be determined by multiplying nominal moments by $\Phi_b = 0.95$.
6. Vertical Shear is the ASD allowable vertical shear strength based on the horizontal shear strength of the resistance welds, where $V = V_n/\Omega$, with $\Omega = 2.35$. "END" shear strength values are applicable adjacent to supports where deck is not continuous and "INTERIOR" shear strength values are applicable adjacent to supports where deck is continuous.
7. End and interior reactions shall be compared to the allowable reactions due to web crippling for fluted (non-cellular) deck of the same gage as the fluted top section of the cellular deck.
8. Multiply tabulated cellular deck values by the following factors to obtain acoustical cellular deck section properties:

Deck Type	I_d for Deflection		Allowable Moment		Vertical Shear	
	Single Span	Multi Span	Positive	Negative	End	Interior
N24CD Acoustical	0.97	0.97	0.99	1.00	1.00	1.00

Attachment Patterns to Supports



Note: ● indicates location of arc spot weld, power actuated fastener, or screw as indicated in the load tables.
■ indicates location of arc seam weld, power actuated fastener, or screw as indicated in the load tables.

Footnotes for Allowable Uniform Load Tables

1. Stress = Allowable uniform load based on maximum allowable flexural stress in deck.
2. Shear = Allowable uniform load governed by vertical shear strength based on horizontal shear strength of the resistance welds.
3. L/360, L240 or L/180 = Uniform load which produces selected deflection in deck.
4. The symbol $\clubsuit\clubsuit\clubsuit$ indicates allowable uniform load based on deflection exceeds allowable uniform load based on stress or shear.
5. Nominal uniform loads based on flexural stress may be determined by multiplying the allowable values in the table by $\Omega_b = 1.67$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.95$.
6. Nominal uniform loads based on vertical shear may be determined by multiplying the allowable values in the table by $\Omega_b = 2.35$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.65$.

Footnotes for Diaphragm Shear Strength and Flexibility Factor Tables

General Notes

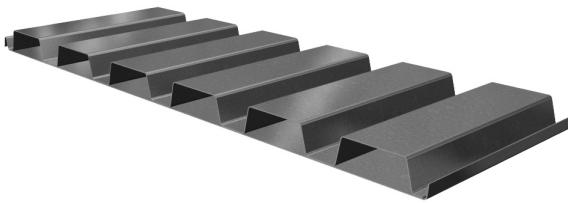
1. VSC2 = Verco Sidelap Connection 2
2. The dimension from the first and last sidelap connection within each span is to be no more than one-half of specified spacing.
3. R is the ratio of vertical span (L_V) of the deck to the length (L_S) of the deck sheet: $R = L_V / L_S$.
4. Interpolation of diaphragm shear strength between adjacent spans or sidelap spacings is permissible. For interpolation of the diaphragm flexibility factor between adjacent spans, use the flexibility factor for the closest adjacent span length.
5. Diaphragm shear values for side seam fasteners placed at spacings other than those in the table should be determined based on the number of fasteners in each span.
6. For acoustical deck profiles, modify tabulated q and F values using the following adjustment factors:

Deck Type	R_q	R_F
BCD - Acoustical	0.98	1.09
N3CD - Acoustical	0.98	1.11
N24CD - Acoustical	0.97	1.10

Note: Adjustment Factor, R_q must be applied only to allowable diaphragm shear strengths governed by panel buckling which are shown in the shaded areas of the diaphragm tables.

7. The allowable diaphragm shear values in the table utilize a factor of safety, $\Omega = 3.0$ (limited by connections) with the exception of the gray shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
8. A 1" x 3/8" effective arc seam weld is required at supports adjacent to sidelap and 1/2" effective diameter arc spot welds are required at supports in interior flutes.
9. Diaphragm shear strength and flexibility factors for fluted decks attached at the sidelap with either VSC2 or Top-Seam Welds may be applicable to cellular sections with a fluted top section of the same profile but with the gage of the flat bottom sheet. This applies with or without acoustical perforations in the flat bottom section of the cellular deck.

Type PLB™-CD or HSB®-CD



Allowable Uniform Loads (psf)

DECK			SPAN (ft-in.)																
SPAN	GAGE	CRITERIA	2'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	11'-0"	12'-0"	
20/20	Stress	300	300	300	223	184	155	132	114	99	87	77	69	62	56	46	39		
	Shear	300	227	170	136	124	113	105	97	91	85	80	76	72	68	62	57		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	109	84	66	53	43	36	30	25	21	18	14	11		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	99	80	65	53	44	37	32	27	21	16	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	86	71	59	50	42	36	27	21		
	Stress	300	300	300	230	190	159	136	117	102	90	79	71	64	57	47	40		
20/18	Shear	300	212	159	127	116	106	98	91	85	80	75	71	67	64	58	53		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	92	72	58	47	39	32	27	23	20	15	11
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	87	71	58	49	41	35	30	22	17	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	78	65	55	46	40	30	23		
	Stress	300	300	300	300	276	232	197	170	148	130	115	103	92	83	69	58		
	Shear	300	246	184	147	134	123	113	105	98	92	87	82	78	74	67	61		
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	108	85	68	56	46	38	32	27	23	18	14
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	102	83	69	57	48	41	35	26	20	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	92	76	64	55	47	35	27		
	Stress	300	300	300	300	283	238	203	175	152	134	118	106	95	86	71	59		
	Shear	300	300	258	207	188	172	159	148	138	129	122	115	109	103	94	86		
	L/360	♦♦♦	♦♦♦	♦♦♦	205	154	119	94	75	61	50	42	35	30	26	19	15		
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	140	112	91	75	63	53	45	39	29	22	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	122	100	84	70	60	51	39	30		
	Stress	300	300	300	300	289	243	207	178	155	137	121	108	97	87	72	61		
	Shear	300	300	245	196	179	164	151	140	131	123	116	109	103	98	89	82		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	166	128	101	80	65	54	45	38	32	28	21	16		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	151	121	98	81	67	57	48	41	31	24	
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	131	108	90	76	64	55	41	32		
	Stress	300	300	300	300	300	300	278	240	209	183	162	145	130	117	97	82		
	Shear	300	300	275	220	200	183	169	157	146	137	129	122	116	110	100	92		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	185	143	112	90	73	60	50	42	36	31	23	18		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	168	135	110	90	75	63	54	46	35	27			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	146	120	100	85	72	62	46	36			
16/18	Stress	300	300	300	300	300	300	284	244	213	187	166	148	133	120	99	83		
	Shear	300	300	300	287	261	239	221	205	191	179	169	159	151	143	130	120		
	L/360	♦♦♦	♦♦♦	♦♦♦	266	200	154	121	97	79	65	54	46	39	33	25	19		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	231	181	145	118	97	81	68	58	50	37	29			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	194	157	130	108	91	77	66	50	38				

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

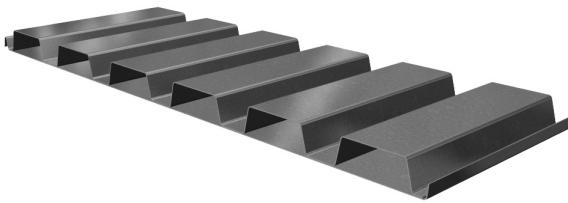
Type PLB™-CD or HSB®-CD



Allowable Uniform Loads (psf)

DECK SPAN	GAGE	CRITERIA	SPAN (ft-in.)															
			2'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	11'-0"	12'-0"
20/20	Stress	300	300	300	300	253	212	181	156	136	119	106	94	85	76	63	53	
	Shear	300	273	204	164	149	136	126	117	109	102	96	91	86	82	74	68	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	104	86	71	60	51	44	33
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	90	77	66	49	38	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	51	
	Stress	300	300	300	300	283	238	203	175	152	134	119	106	95	86	71	59	
20/18	Shear	295	197	148	118	107	98	91	84	79	74	70	66	62	59	54	49	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	66	56	48	36	28
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	42	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	299	252	214	185	161	142	125	112	100	91	75	63	
	Shear	300	300	245	196	178	163	151	140	131	122	115	109	103	98	89	82	
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	110	92	77	66	56	42	33
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	99	85	64	49	42	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	300	300	261	225	196	172	153	136	122	110	91	77	
	Shear	300	300	267	213	194	178	164	152	142	133	126	119	112	107	97	89	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	121	101	85	72	62	46	36	
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	108	93	70	54	42	33	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	72	
	Stress	300	300	300	300	300	300	272	235	204	180	159	142	127	115	95	80	
	Shear	300	279	210	168	152	140	129	120	112	105	99	93	88	84	76	70	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	91	78	66	50	38	33	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	75	58	42	
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	300	300	298	257	224	197	174	155	139	126	104	87	
	Shear	300	300	300	242	220	202	186	173	162	151	143	135	128	121	110	101	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	145	121	102	87	74	56	43	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	111	84	64	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	86	
16/18	Stress	300	300	300	300	300	300	300	286	249	219	194	173	155	140	116	97	
	Shear	300	300	300	262	239	219	202	187	175	164	154	146	138	131	119	109	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	156	130	110	93	80	60	46	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	120	90	69	46	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	93	
	Notes:																	
1. Governing Values are in Bold Font. 2. See additional footnotes on page 127.																		

Type PLB™-CD or HSB®-CD



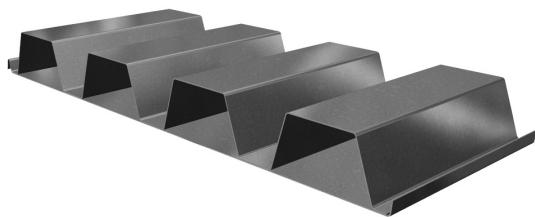
Allowable Uniform Loads (psf)

DECK			SPAN (ft-in.)															
SPAN	GAGE	CRITERIA	2'-0"	3'-0"	4'-0"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	11'-0"	12'-0"
20/20	Stress	300	300	300	300	300	265	226	195	170	149	132	118	106	96	79	66	
	Shear	300	283	212	170	155	142	131	121	113	106	100	94	89	85	77	71	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	125	100	81	67	56	47	40	34	26	20	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	101	84	71	60	51	39	30	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	94	80	69	52	40		
	Stress	300	300	300	300	300	297	253	218	190	167	148	132	119	107	88	74	
20/18	Shear	300	205	154	123	112	103	95	88	82	77	72	68	65	62	56	51	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	73	61	51	44	37	28	22	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	56	42	32	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	43		
	Stress	300	300	300	300	300	300	268	231	201	177	157	140	125	113	94	79	
	Shear	300	300	230	184	168	154	142	132	123	115	108	102	97	92	84	77	
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	129	105	86	72	61	51	44	33	26	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	108	91	77	66	50	38		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	88	66	51	
	Stress	300	300	300	300	300	300	300	282	245	216	191	170	153	138	114	96	
	Shear	300	300	278	222	202	185	171	159	148	139	131	123	117	111	101	93	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	141	115	95	79	66	56	48	36	28	
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	118	100	85	73	55	42			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	113	97	73	56				
	Stress	300	300	300	300	300	300	300	293	256	225	199	177	159	144	119	100	
	Shear	300	291	218	175	159	146	134	125	116	109	103	97	92	87	79	73	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	102	85	71	61	52	39	30		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	118	100	85	73	55	42		
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	78	60		
	Stress	300	300	300	300	300	300	300	300	280	246	218	194	174	157	130	109	
	Shear	300	300	300	252	229	210	194	180	168	158	148	140	133	126	115	105	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	169	138	113	95	80	68	58	44	34	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	142	119	102	87	65	50			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	116	87	67	
16/18	Stress	300	300	300	300	300	300	300	300	273	242	216	194	175	145	121		
	Shear	300	300	300	273	248	228	210	195	182	171	161	152	144	137	124	114	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	182	148	122	102	86	73	63	47	36	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	153	129	109	94	71	54			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	125	94	72	

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

Type PLN3™-CD or HSN3™-CD



Allowable Uniform Loads (psf)

DECK		SPAN GAGE	CRITERIA	SPAN (ft-in.)																	
4'-0"	5'-0"			300	300	281	206	158	125	101	83	70	60	52	45	39	35	31	28	25	
		Stress		300	300	281	206	158	125	101	83	70	60	52	45	39	35	31	28	25	
		Shear		264	211	176	151	132	117	106	96	88	81	75	70	66	62	59	56	53	
20/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	95	69	52	40	31	25	20	17	14	12	10	9	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	78	60	47	38	31	25	21	18	15	13	13	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	50	41	34	28	24	20	17		
	Stress	300	300	279	205	157	124	101	83	70	60	51	45	39	35	31	28	25			
	Shear	245	196	163	140	122	109	98	89	82	75	70	65	61	58	54	51	49			
20/18	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	103	75	56	43	34	27	22	18	15	13	11	9	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	65	51	41	33	28	23	19	16	14			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	45	37	31	26	22	19			
	Stress	300	300	300	300	251	199	161	133	112	95	82	71	63	56	50	45	40			
	Shear	290	232	193	165	145	129	116	105	97	89	83	77	72	68	64	61	58			
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	121	88	66	51	40	32	26	22	18	15	13	11	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	100	77	60	48	39	32	27	23	19	17		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	80	64	52	43	36	30	26	22	
SINGLE	Stress	300	300	300	300	258	203	165	136	114	98	84	73	64	57	51	46	41			
	Shear	300	300	268	229	201	178	161	146	134	124	115	107	100	94	89	85	80			
18/18	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	188	132	96	72	56	44	35	28	23	20	16	14	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	144	108	83	66	52	43	35	29	25	21	18		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	111	87	70	57	47	39	33	28	24			
	Stress	300	300	300	300	259	205	166	137	115	98	85	74	65	57	51	46	41			
	Shear	300	300	252	216	189	168	151	137	126	116	108	101	95	89	84	80	76			
18/16	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	141	103	77	59	47	37	30	25	21	18	15	13	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	116	89	70	56	46	38	31	26	22	19		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	93	75	61	50	42	35	30	26			
	Stress	300	300	300	300	300	273	221	183	154	131	113	98	86	77	68	61	55			
	Shear	300	300	287	246	216	192	172	157	144	133	123	115	108	101	96	91	86			
16/18	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	159	116	87	67	53	42	34	28	24	20	17	15	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	131	101	79	63	52	43	35	30	25	22		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	134	106	85	69	57	47	40	34	29			
	Stress	300	300	300	300	300	279	226	187	157	134	115	100	88	78	70	63	56			
	Shear	300	300	300	300	279	248	223	203	186	172	159	149	139	131	124	117	112			
16/16	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	243	170	124	93	72	57	45	37	30	25	21	18	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	186	140	108	85	68	55	45	38	32	27	23		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	144	113	91	74	61	51	43	36	31			

Notes:

- Governing Values are in Bold Font.
- See additional footnotes on page 127.

Type PLN3™-CD or HSN3™-CD



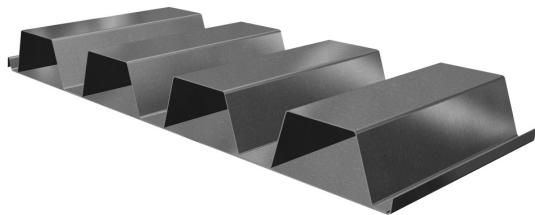
Allowable Uniform Loads (psf)

DECK		CRITERIA	SPAN (ft-in.)																
SPAN	GAGE		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"
20/20	Stress	300	300	300	289	222	175	142	117	98	84	72	63	55	49	44	39	35	
	Shear	300	282	235	201	176	156	141	128	117	108	101	94	88	83	78	74	70	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	96	76	61	49	41	34	29	24	21	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	43	36	31	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	250	198	160	132	111	95	82	71	63	55	49	44	40	
	Shear	299	239	199	171	149	133	120	109	100	92	85	80	75	70	66	63	60	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	82	66	54	44	37	31	26	23	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	55	47	40	34		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
18/20	Stress	300	300	300	300	272	215	174	144	121	103	89	77	68	60	54	48	43	
	Shear	300	300	257	221	193	172	154	140	129	119	110	103	97	91	86	81	77	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	97	77	63	52	43	36	31	27		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	46	40			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	300	254	206	170	143	122	105	92	80	71	64	57	52	
	Shear	300	300	300	300	268	238	214	195	178	165	153	143	134	126	119	113	107	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	134	105	84	69	56	47	40	34	29	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	71	59	51	43		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
18/18	Stress	300	300	300	300	300	266	215	178	150	127	110	96	84	75	66	60	54	
	Shear	300	300	295	253	221	197	177	161	147	136	126	118	111	104	98	93	88	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	143	113	90	73	60	50	42	36	31	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	54	46		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	300	299	242	200	168	143	123	108	95	84	75	67	61	
	Shear	300	300	300	300	287	255	230	209	192	177	164	153	144	135	128	121	115	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	162	127	102	83	68	57	48	41	35	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	72	61	52		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
16/18	Stress	300	300	300	300	300	263	217	183	156	134	117	103	91	81	73	66		
	Shear	300	300	300	300	300	277	252	231	213	198	185	173	163	154	146	139		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	173	136	109	89	73	61	51	44	37		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	77	65	56			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	
	Stress	300	300	300	300	300	263	217	183	156	134	117	103	91	81	73	66		
	Shear	300	300	300	300	300	277	252	231	213	198	185	173	163	154	146	139		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	173	136	109	89	73	61	51	44	37		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	77	65	56			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

Type PLN3™-CD or HSN3™-CD



Allowable Uniform Loads (psf)

DECK SPAN GAGE	CRITERIA	SPAN (ft-in.)																	
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
20/20	Stress	300	300	300	289	222	175	142	117	98	84	72	63	55	49	44	39	44	
	Shear	300	282	235	201	176	156	141	128	117	108	101	94	88	83	78	74	66	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	96	76	61	49	41	34	29	24	16	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	43	36	24
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	33	
	Stress	300	300	300	300	250	198	160	132	111	95	82	71	63	55	49	44	50	
20/18	Shear	299	239	199	171	149	133	120	109	100	92	85	80	75	70	66	63	61	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	82	66	54	44	37	31	26	18	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	55	47	40	27	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	35		
18/20	Stress	300	300	300	300	272	215	174	144	121	103	89	77	68	60	54	48	54	
	Shear	300	300	257	221	193	172	154	140	129	119	110	103	97	91	86	81	72	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	97	77	63	52	43	36	31	21	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	46	31			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	42			
	Stress	300	300	300	300	300	254	206	170	143	122	105	92	80	71	64	57	64	
18/18	Shear	300	300	300	300	268	238	214	195	178	165	153	143	134	126	119	113	100	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	134	105	84	69	56	47	40	34	23	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	71	59	51	34		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	45			
18/16	Stress	300	300	300	300	300	266	215	178	150	127	110	96	84	75	66	60	67	
	Shear	300	300	295	253	221	197	177	161	147	136	126	118	111	104	98	93	92	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	143	113	90	73	60	50	42	36	24		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	54	36			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	48			
	Stress	300	300	300	300	300	299	242	200	168	143	123	108	95	84	75	67	76	
16/18	Shear	300	300	300	300	287	255	230	209	192	177	164	153	144	135	128	121	108	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	162	127	102	83	68	57	48	41	27		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	72	61	41			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	55			
16/16	Stress	300	300	300	300	300	300	263	217	183	156	134	117	103	91	81	73	82	
	Shear	300	300	300	300	300	300	277	252	231	213	198	185	173	163	154	146	139	
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	173	136	109	89	73	61	51	44	29		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	77	65	44			
16/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	59		

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

Type PLN™-24-CD or N-24-CD



Allowable Uniform Loads (psf)

DECK		SPAN GAGE	SPAN (ft-in.)																	
			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
20/20	Stress	300	300	288	211	162	128	104	86	72	61	53	46	40	36	32	29	35		
	Shear	279	223	186	160	140	124	112	102	93	86	80	74	70	66	62	59	74		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	101	74	55	43	33	27	22	18	15	13	11	22		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	83	64	50	40	33	27	22	19	16	33		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	44	36	30	25	21	♦♦♦		
	Stress	300	300	286	210	161	127	103	85	72	61	53	46	40	36	32	29	45		
20/18	Shear	261	209	174	149	130	116	104	95	87	80	75	70	65	61	58	55	57		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	111	81	61	47	37	29	24	20	16	14	12	24		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	70	55	44	36	30	25	21	18	36			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	39	33	28	24	♦♦♦			
	Stress	300	300	300	300	252	199	161	133	112	95	82	72	63	56	50	45	43		
	Shear	300	243	203	174	152	135	122	110	101	93	87	81	76	71	68	64	81		
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	130	95	71	55	43	34	28	23	19	16	14	28		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	107	82	65	52	42	35	29	24	21	♦♦♦		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	86	69	56	46	38	32	28	♦♦♦			
	Stress	300	300	300	300	258	204	165	137	115	98	84	73	65	57	51	46	53		
	Shear	300	300	283	243	213	189	170	155	142	131	121	113	106	100	94	89	102		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	203	142	104	78	60	47	38	31	25	21	18	15	31		
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	156	117	90	71	57	46	38	32	27	23	47		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	94	76	61	51	42	36	30	♦♦♦			
	Stress	300	300	300	300	263	208	169	139	117	100	86	75	66	58	52	47	66		
	Shear	300	300	268	230	201	179	161	146	134	124	115	107	101	95	89	85	77		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	153	111	84	64	51	41	33	27	23	19	16	34			
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	126	97	76	61	49	41	34	29	24	50			
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	81	66	54	45	38	32	30	♦♦♦			
	Stress	300	300	300	300	300	277	224	185	156	133	114	100	88	78	69	62	60		
	Shear	300	300	300	259	226	201	181	165	151	139	129	121	113	107	101	95	116		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	173	126	95	73	57	46	37	31	26	22	18	38		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	142	109	86	69	56	46	39	32	28	57			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	146	115	92	75	62	51	43	37	♦♦♦				
16/18	Stress	300	300	300	300	300	282	229	189	159	135	117	102	89	79	71	63	74		
	Shear	300	300	300	300	295	262	236	215	197	182	169	157	148	139	131	124	120		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	266	186	136	102	79	62	50	40	33	28	23	20	41		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	204	153	118	93	74	60	50	42	35	30	61			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	157	124	99	81	66	55	47	40	♦♦♦				

Notes:

- Governing Values are in Bold Font.
- See additional footnotes on page 127.

Type PLN™-24-CD or N-24-CD



Allowable Uniform Loads (psf)

DECK SPAN	GAGE	CRITERIA	SPAN (ft-in.)																	
			4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
20/20	Stress	300	300	300	288	221	174	141	117	98	84	72	63	55	49	44	39	35		
	Shear	300	298	248	213	186	166	149	135	124	115	106	99	93	88	83	78	74		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	81	65	52	43	36	30	26	22	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	39	33		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	Stress	300	300	300	300	284	225	182	150	126	108	93	81	71	63	56	50	45		
20/18	Shear	287	230	192	164	144	128	115	104	96	88	82	77	72	68	64	60	57		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	88	71	57	47	39	33	28	24	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	59	50	42	36	
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	Stress	300	300	300	300	266	210	170	141	118	101	87	76	67	59	53	47	43		
	Shear	300	300	270	231	203	180	162	147	135	125	116	108	101	95	90	85	81		
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	83	67	56	46	39	33	28	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	Stress	300	300	300	300	300	261	211	174	147	125	108	94	82	73	65	58	53		
	Shear	300	300	300	291	255	227	204	185	170	157	146	136	127	120	113	107	102		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	144	114	91	74	61	51	43	36	31		
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	64	55	47		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	Stress	300	300	300	300	300	264	218	183	156	134	117	103	91	81	73	66			
	Shear	300	300	258	221	193	172	155	141	129	119	110	103	97	91	86	81	77		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	98	79	65	55	46	39	34			
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	82	69	59	50		
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
	Stress	300	300	300	300	300	296	240	198	167	142	122	107	94	83	74	66	60		
	Shear	300	300	300	300	291	259	233	212	194	179	166	155	146	137	129	123	116		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	138	111	90	74	62	52	44	38		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	66	57			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		
16/18	Stress	300	300	300	300	300	295	244	205	175	151	131	115	102	91	82	74			
	Shear	300	300	300	300	291	259	233	212	194	179	166	155	146	137	129	123	116		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	138	111	90	74	62	52	44	38		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	66	57			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦			
	Stress	300	300	300	300	300	295	244	205	175	151	131	115	102	91	82	74			
16/16	Shear	300	300	300	300	300	266	240	218	200	184	171	160	150	141	133	126	120		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	189	149	119	97	80	67	56	48	41		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	100	84	72	61		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦		

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

Type PLN™-24-CD or N-24-CD



Allowable Uniform Loads (psf)

DECK			SPAN (ft-in.)																	
SPAN	GAGE	CRITERIA	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	
20/20	Stress	300	300	300	300	276	218	177	146	123	105	90	78	69	61	55	49	44		
	Shear	300	279	233	200	175	155	140	127	116	107	100	93	87	82	78	74	70		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	139	104	80	63	51	41	34	28	24	20	17		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	95	76	62	51	42	36	30	26		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	68	56	48	40	35		
	Stress	300	300	300	300	300	281	227	188	158	135	116	101	89	79	70	63	57		
20/18	Shear	299	239	200	171	150	133	120	109	100	92	86	80	75	70	67	63	60		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	88	69	55	45	37	31	26	22	19	
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	83	67	56	46	39	33	28		
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	74	62	52	44	38				
	Stress	300	300	300	300	300	263	213	176	148	126	109	95	83	74	66	59	53		
	Shear	300	300	253	217	190	169	152	138	127	117	108	101	95	89	84	80	76		
18/20	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	134	103	81	65	53	43	36	31	26	22		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	97	79	65	54	46	39	33			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	72	61	52	45					
	Stress	300	300	300	300	300	300	264	218	183	156	135	117	103	91	81	73	66		
	Shear	300	300	300	300	266	236	212	193	177	163	152	142	133	125	118	112	106		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	195	147	113	89	71	58	48	40	33	28	24		
18/18	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	170	133	107	87	72	60	50	43	37			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	116	95	80	67	57	49				
	Stress	300	300	300	300	300	300	300	272	229	195	168	146	129	114	102	91	82		
	Shear	300	300	268	230	201	179	161	146	134	124	115	107	101	95	89	85	81		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	121	95	76	62	51	43	36	31	26			
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	115	93	77	64	54	46	39				
18/16	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	85	72	61	52			
	Stress	300	300	300	300	300	300	300	248	208	177	153	133	117	104	93	83	75		
	Shear	300	300	300	300	283	252	226	206	189	174	162	151	142	133	126	119	113		
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	179	138	108	87	70	58	48	41	35	30		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	162	130	106	87	73	61	52	45			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	116	97	81	69	59					
16/18	Stress	300	300	300	300	300	300	300	300	256	218	188	164	144	128	114	102	92		
	Shear	300	300	300	300	277	250	227	208	192	178	166	156	147	139	131	125			
	L/360	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	192	148	117	93	76	63	52	44	37	32		
	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	175	140	114	94	78	66	56	48			
	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	152	125	104	88	75	64				

Notes:

1. Governing Values are in Bold Font.
2. See additional footnotes on page 127.

Type PLB™ -CD

- 36/7 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
20/20	VSC2 @ 24"	q 1759	1607	1356	1301	1138	1116	1004	1002	918
		F 6.3-2R	6.6-2R	7.6-2R	7.7-2R	8.6-2R	8.5-2R	9.3-2R	9.2-2R	9.9-2R
	VSC2 @ 18"	q 1963	1775	1503	1428	1371	1225	1199	1178	1081
		F 5.5-1R	5.9-1R	6.8-2R	6.9-1R	7.1-1R	7.8-2R	7.8-1R	7.8-1R	8.4-2R
	VSC2 @ 12"	q 2158	1938	1786	1674	1589	1522	1467	1356	1139
		F 5-1R	5.4-1R	5.7-1R	5.9-1R	6.1-1R	6.2-1R	6.4-1R	6.5-1R	6.6-1R
	VSC2 @ 8"	q 2520	2394	2182	2135	2001	1983	1641	1356	1139
		F 4.2-1R	4.3-1R	4.6-1R	4.7-1R	4.9-1R	4.9-1R	5-1R	5+0R	5.2+0R
	VSC2 @ 6"	q 2847	2668	2543	2450	2379	2026	1641	1356	1139
		F 3.8-1R	3.9+0R	4+0R	4.1+0R	4.2+0R	4.2+0R	4.3+0R	4.3+0R	4.3+0R
20/18	VSC2 @ 4"	q 3394	3254	3155	3081	2564	2026	1641	1356	1139
		F 3.2+0R	3.2+0R	3.3+0R	3.3+0R	3.4+0R	3.4+0R	3.4+0R	3.4+0R	3.4+0R
	VSC2 @ 24"	q 2103	1983	1678	1650	1455	1458	1311	1328	1217
		F 4.8-1R	4.7-1R	5.5-1R	5.3-1R	5.9-1R	5.7-1R	6.2-1R	6-1R	6.4-1R
	VSC2 @ 18"	q 2411	2236	1901	1842	1797	1612	1598	1450	1219
		F 4-1R	4.1-1R	4.7-1R	4.7-1R	4.7-1R	5.1-1R	5-1R	5-1R	5.3-1R
	VSC2 @ 12"	q 2700	2477	2323	2209	2122	2054	1755	1450	1219
		F 3.5-1R	3.7+0R	3.8+0R	3.9+0R	4+0R	4+0R	4.1+0R	4.1+0R	4.1+0R
	VSC2 @ 8"	q 3218	3126	2892	2870	2717	2166	1755	1450	1219
		F 2.9+0R	2.9+0R	3.1+0R	3+0R	3.2+0R	3.1+0R	3.2+0R	3.2+0R	3.2+0R
18/20	VSC2 @ 6"	q 3659	3497	3382	3298	2742	2166	1755	1450	1219
		F 2.6+0R	2.6+0R	2.7+0R	2.7+0R	2.7+0R	2.7+0R	2.7+0R	2.8+0R	2.8+0R
	VSC2 @ 4"	q 4341	4228	4147	3581	2742	2166	1755	1450	1219
		F 2.2+0R	2.2+0R	2.2+0R	2.2+0R	2.2+0R	2.2+0R	2.3+0R	2.3+0R	2.3+0R
	VSC2 @ 24"	q 1861	1690	1426	1361	1191	1163	1047	1040	954
		F 5.7-2R	6-2R	6.9-2R	7.1-2R	7.9-2R	7.9-2R	8.7-2R	8.6-2R	9.3-2R
	VSC2 @ 18"	q 2065	1859	1573	1488	1424	1272	1242	1217	1116
		F 5-1R	5.4-1R	6.2-2R	6.4-1R	6.6-1R	7.3-2R	7.3-2R	7.4-1R	7.9-2R
	VSC2 @ 12"	q 2261	2023	1857	1736	1643	1571	1512	1463	1422
		F 4.6-1R	5-1R	5.3-1R	5.5-1R	5.7-1R	5.9-1R	6-1R	6.1-1R	6.3-1R
18/18	VSC2 @ 8"	q 2628	2484	2258	2202	2060	2037	1937	1930	1647
		F 3.9-1R	4-1R	4.3-1R	4.4-1R	4.6-1R	4.6-1R	4.8-1R	4.7-1R	4.9-1R
	VSC2 @ 6"	q 2961	2764	2625	2523	2444	2382	2332	1960	1647
		F 3.5-1R	3.6+0R	3.8+0R	3.8+0R	3.9+0R	4+0R	4+0R	4.1+0R	4.1+0R
	VSC2 @ 4"	q 3526	3368	3257	3174	3111	2928	2372	1960	1647
		F 2.9+0R	3+0R	3.1+0R	3.1+0R	3.2+0R	3.2+0R	3.2+0R	3.2+0R	3.3+0R
	VSC2 @ 24"	q 2103	1983	1678	1650	1455	1458	1311	1328	1217
		F 4.4-1R	4.4-1R	5.1-1R	5-1R	5.6-1R	5.4-1R	5.9-1R	5.7-1R	6.1-1R
	VSC2 @ 18"	q 2411	2236	1901	1842	1797	1612	1598	1587	1462
		F 3.8-1R	3.9-1R	4.4-1R	4.4-1R	4.4-1R	4.9-1R	4.8-1R	4.8-1R	5.1-1R
18/18	VSC2 @ 12"	q 2700	2477	2323	2209	2122	2054	1998	1953	1765
		F 3.3-1R	3.5-1R	3.6+0R	3.7+0R	3.8+0R	3.8+0R	3.9+0R	3.9+0R	4+0R
	VSC2 @ 8"	q 3218	3126	2892	2870	2717	2718	2541	2100	1765
		F 2.8+0R	2.8+0R	2.9+0R	2.9+0R	3+0R	3+0R	3+0R	3+0R	3.1+0R
	VSC2 @ 6"	q 3659	3497	3382	3298	3232	3138	2541	2100	1765
18/18		F 2.4+0R	2.5+0R	2.5+0R	2.5+0R	2.6+0R	2.6+0R	2.6+0R	2.6+0R	2.6+0R
	VSC2 @ 4"	q 4341	4228	4147	4087	3971	3138	2541	2100	1765
		F 2+0R	2.1+0R							

See footnotes on page 127.

Type PLB™-CD

- 36/7 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



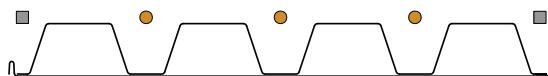
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
18/16	VSC2 @ 24"	q 2345 F 4.1R	2273 3.9-1R	1929 4.5-1R	1936 4.4-1R	1711 4.9-1R	1741 4.7-1R	1577 5.1-1R	1614 5-1R	1483 5.3-1R
	VSC2 @ 18"	q 2751 F 3.3-1R	2605 3.4-1R	2224 3.9-1R	2189 3.9-1R	2163 3.9+0R	1945 4.2-1R	1948 4.2+0R	1950 4.1+0R	1800 4.4+0R
	VSC2 @ 12"	q 3123 F 2.9+0R	2916 3+0R	2771 3.1+0R	2665 3.2+0R	2583 3.3+0R	2519 3.3+0R	2467 2.2+0R	2219 3.4+0R	1865 3.4+0R
	VSC2 @ 8"	q 3765 F 2.4+0R	3715 2.4+0R	3477 2.5+0R	3481 2.5+0R	3322 2.6+0R	3315 2.5+0R	2685 2.6+0R	2219 2.6+0R	1865 2.6+0R
	VSC2 @ 6"	q 4280 F 2.1+0R	4145 2.1+0R	4050 2.2+0R	3979 2.2+0R	3925 2.2+0R	3315 2.2+0R	2685 2.2+0R	2219 2.2+0R	1865 2.2+0R
	VSC2 @ 4"	q 5014 F 1.8+0R	4929 1.8+0R	4869 1.8+0R	4825 1.8+0R	4196 1.8+0R	3315 1.8+0R	2685 1.8+0R	2219 1.8+0R	1865 1.8+0R
16/18	VSC2 @ 24"	q 2103 F 4.1-1R	1983 4.2-1R	1678 4.8-1R	1650 4.7-1R	1455 5.3-1R	1458 5.1-1R	1311 5.6-1R	1328 5.5-1R	1217 5.9-1R
	VSC2 @ 18"	q 2411 F 3.5-1R	2236 3.7-1R	1901 4.2-1R	1842 4.2-1R	1797 4.2-1R	1612 4.6-1R	1598 4.6-1R	1587 4.6-1R	1462 4.9-1R
	VSC2 @ 12"	q 2700 F 3.1-1R	2477 3.3-1R	2328 3.4+0R	2209 3.5+0R	2122 3.6+0R	2054 3.7+0R	1998 3.7+0R	1953 3.8+0R	1914 3.8+0R
	VSC2 @ 8"	q 3218 F 2.6+0R	3126 2.6+0R	2892 2.8+0R	2870 2.7+0R	2717 2.9+0R	2718 2.8+0R	2607 2.9+0R	2619 2.9+0R	2355 3+0R
	VSC2 @ 6"	q 3659 F 2.3+0R	3497 2.3+0R	3382 2.4+0R	3298 2.4+0R	3232 2.4+0R	3181 2.5+0R	3138 2.5+0R	2802 2.5+0R	2355 2.5+0R
	VSC2 @ 4"	q 4341 F 1.9+0R	4228 1.9+0R	4147 2+0R	4087 2+0R	4041 2+0R	4004 2+0R	3391 2+0R	2802 2+0R	2355 2+0R
16/16	VSC2 @ 24"	q 2345 F 3.7-1R	2273 3.7-1R	1929 4.3-1R	1936 4.2-1R	1711 4.7-1R	1741 4.5-1R	1577 4.9-1R	1614 4.8-1R	1483 5.1-1R
	VSC2 @ 18"	q 2751 F 3.2-1R	2605 3.2-1R	2224 3.7-1R	2189 3.7-1R	2163 3.7-1R	1945 4.1-1R	1948 4-1R	1950 4+0R	1800 4.3-1R
	VSC2 @ 12"	q 3123 F 2.8+0R	2916 2.9+0R	2771 3+0R	2665 3.1+0R	2583 3.1+0R	2519 3.2+0R	2467 3.2+0R	2424 3.3+0R	2388 3.3+0R
	VSC2 @ 8"	q 3765 F 2.3+0R	3715 2.3+0R	3477 2.4+0R	3481 2.4+0R	3322 2.5+0R	3343 2.4+0R	3225 2.5+0R	2964 2.5+0R	2491 2.6+0R
	VSC2 @ 6"	q 4280 F 2+0R	4145 2+0R	4050 2.1+0R	3979 2.1+0R	3925 2.1+0R	3882 2.1+0R	3587 2.1+0R	2964 2.1+0R	2491 2.2+0R
	VSC2 @ 4"	q 5014 F 1.7+0R	4929 1.7+0R	4869 1.7+0R	4825 1.7+0R	4791 1.7+0R	4428 1.7+0R	3587 1.7+0R	2964 1.7+0R	2491 1.7+0R

See footnotes on page 127.

Type PLN3™-CD

- 32/5 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



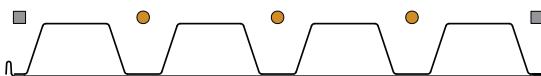
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
20/20	VSC2 @ 24"	q 1470 F 8-2R	1159 9.5-2R	991 10.6-2R	891 11.4-2R	823 12.2R	775 12.5-2R	739 12.8-2R	711 13.2-2R	689 13.4-2R
	VSC2 @ 18"	q 1665 F 6.9-2R	1304 8.3-2R	1217 8.5-2R	1078 9.3-2R	982 10-2R	978 9.8-1R	918 10.3-1R	871 10.7-1R	879 10.5-1R
	VSC2 @ 12"	q 1847 F 6-1R	1573 6.7-1R	1426 7.2-1R	1334 7.5-1R	1272 7.7-1R	1228 7.8-1R	1194 7.9-1R	1167 8-1R	1094 8.1-1R
	VSC2 @ 8"	q 2175 F 5-1R	1937 5.4-1R	1807 5.6-1R	1727 5.8-1R	1672 5.9+0R	1632 5.9+0R	1601 6+0R	1350 6+0R	1094 6.1+0R
	VSC2 @ 6"	q 2457 F 4.3-1R	2253 4.6+0R	2141 4.7+0R	2071 4.8+0R	2023 4.9+0R	1988 4.9+0R	1709 4.9+0R	1350 5+0R	1094 5+0R
	VSC2 @ 4"	q 2897 F 3.5+0R	2751 3.7+0R	2671 3.7+0R	2620 3.8+0R	2586 3.8+0R	2232 3.8+0R	1709 3.9+0R	1350 3.9+0R	1094 3.9+0R
20/18	VSC2 @ 24"	q 1789 F 5.8-1R	1465 6.5-1R	1293 7-1R	1186 7.3-1R	1115 7.5-1R	1064 7.6-1R	1026 7.7-1R	997 7.8-1R	973 7.9-1R
	VSC2 @ 18"	q 2081 F 4.8-1R	1679 5.5-1R	1623 5.4-1R	1459 5.8-1R	1346 6.1-1R	1361 5.9+0R	1288 6.2+0R	1230 6.4+0R	1164 6.2+0R
	VSC2 @ 12"	q 2347 F 4.1-1R	2074 4.4+0R	1928 4.5+0R	1837 4.6+0R	1775 4.6+0R	1730 4.7+0R	1696 4.7+0R	1437 4.8+0R	1164 4.8+0R
	VSC2 @ 8"	q 2805 F 3.3+0R	2583 3.4+0R	2462 3.5+0R	2387 3.6+0R	2335 3.6+0R	2298 3.6+0R	1819 3.6+0R	1437 3.6+0R	1164 3.6+0R
	VSC2 @ 6"	q 3171 F 2.9+0R	2994 2.9+0R	2897 3+0R	2836 3+0R	2795 3+0R	2376 3+0R	1819 3.1+0R	1437 3.1+0R	1164 3.1+0R
	VSC2 @ 4"	q 3690 F 2.4+0R	3579 2.4+0R	3519 2.4+0R	3481 2.4+0R	3234 2.5+0R	2376 2.5+0R	1819 2.5+0R	1437 2.5+0R	1164 2.5+0R
18/20	VSC2 @ 24"	q 1550 F 7.3-2R	1215 8.8-2R	1033 9.9-2R	924 10.7-2R	851 11.4-2R	799 11.9-2R	760 12.3-2R	730 12.6-2R	706 12.9-2R
	VSC2 @ 18"	q 1744 F 6.3-2R	1359 7.8-2R	1260 8-2R	1112 8.8-2R	1011 9.5-2R	1003 9.4-1R	940 9.9-1R	890 10.3-1R	897 10.2-1R
	VSC2 @ 12"	q 1928 F 5.6-1R	1630 6.3-1R	1470 6.8-1R	1371 7.1-1R	1303 7.3-1R	1254 7.5-1R	1217 7.6-1R	1189 7.7-1R	1165 7.8-1R
	VSC2 @ 8"	q 2261 F 4.7-1R	1999 5.1-1R	1857 5.3-1R	1768 5.5-1R	1708 5.6+0R	1664 5.7+0R	1630 5.8+0R	1604 5.8+0R	1582 5.9+0R
	VSC2 @ 6"	q 2549 F 4.1-1R	2322 4.3+0R	2199 4.5+0R	2121 4.6+0R	2068 4.6+0R	2029 4.7+0R	2000 4.7+0R	1953 4.8+0R	1582 4.8+0R
	VSC2 @ 4"	q 3006 F 3.3+0R	2841 3.5+0R	2750 3.5+0R	2693 3.6+0R	2653 3.6+0R	2624 3.6+0R	2471 3.7+0R	1953 3.7+0R	1582 3.7+0R
18/18	VSC2 @ 24"	q 1789 F 5.4-1R	1465 6.2-1R	1293 6.6-1R	1186 6.9-1R	1115 7.2-1R	1064 7.4-1R	1026 7.5-1R	997 7.6-1R	973 7.7-1R
	VSC2 @ 18"	q 2081 F 4.5-1R	1679 5.3-1R	1623 5.2-1R	1459 5.6-1R	1346 5.9-1R	1361 5.7+0R	1288 6+0R	1230 6.2+0R	1253 6+0R
	VSC2 @ 12"	q 2347 F 3.9-1R	2074 4.1+0R	1928 4.3+0R	1837 4.4+0R	1775 4.5+0R	1730 4.5+0R	1696 4.6+0R	1669 4.6+0R	1648 4.6+0R
	VSC2 @ 8"	q 2805 F 3.1+0R	2583 3.3+0R	2462 3.4+0R	2387 3.4+0R	2335 3.4+0R	2298 3.5+0R	2269 3.5+0R	2083 3.5+0R	1687 3.5+0R
	VSC2 @ 6"	q 3171 F 2.7+0R	2994 2.8+0R	2897 2.8+0R	2836 2.9+0R	2795 2.9+0R	2764 2.9+0R	2636 2.9+0R	2083 2.9+0R	1687 2.9+0R
	VSC2 @ 4"	q 3690 F 2.2+0R	3579 2.3+0R	3519 2.3+0R	3481 2.3+0R	3455 2.3+0R	3436 2.3+0R	2636 2.3+0R	2083 2.3+0R	1687 2.3+0R

See footnotes on page 127.

Type PLN3™ -CD

- 32/5 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
18/16	VSC2 @ 24"	q 2029	1713	1546	1443	1374	1324	1286	1256	1232
		F 4.9-1R	5.4-1R	5.8-1R	6-1R	6.2-1R	6.3-1R	6.4-1R	6.5-1R	6.6-1R
	VSC2 @ 18"	q 2413	1995	1977	1799	1675	1712	1629	1564	1601
		F 3.9-1R	4.6-1R	4.5+0R	4.8+0R	5.1+0R	4.9+0R	5.1+0R	5.3+0R	5.1+0R
	VSC2 @ 12"	q 2753	2501	2366	2282	2225	2184	2152	2128	1773
		F 3.4+0R	3.6+0R	3.7+0R	3.8+0R	3.8+0R	3.9+0R	3.9+0R	3.9+0R	3.9+0R
16/18	VSC2 @ 8"	q 3310	3118	3015	2950	2906	2873	2771	2189	1773
		F 2.7+0R	2.8+0R	2.9+0R	2.9+0R	2.9+0R	3+0R	3+0R	3+0R	3+0R
	VSC2 @ 6"	q 3727	3584	3507	3458	3425	3401	2771	2189	1773
		F 2.3+0R	2.4+0R	2.4+0R	2.5+0R	2.5+0R	2.5+0R	2.5+0R	2.5+0R	2.5+0R
	VSC2 @ 4"	q 4270	4190	4147	4120	4101	3619	2771	2189	1773
		F 1.9+0R	2+0R							
16/16	VSC2 @ 24"	q 1789	1465	1293	1186	1115	1064	1026	997	973
		F 5.1-1R	5.9-1R	6.4-1R	6.7-1R	6.9-1R	7.1-1R	7.3-1R	7.4-1R	7.5-1R
	VSC2 @ 18"	q 2081	1679	1623	1459	1346	1361	1288	1230	1253
		F 4.3-1R	5-1R	5-1R	5.4-1R	5.7-1R	5.6-1R	5.8-1R	6-1R	5.8+0R
	VSC2 @ 12"	q 2347	2074	1928	1837	1775	1730	1696	1669	1648
		F 3.7-1R	4+0R	4.1+0R	4.3+0R	4.3+0R	4.4+0R	4.4+0R	4.5+0R	4.5+0R
16/16	VSC2 @ 8"	q 2805	2583	2462	2387	2335	2298	2269	2247	2229
		F 3+0R	3.1+0R	3.2+0R	3.3+0R	3.3+0R	3.3+0R	3.4+0R	3.4+0R	3.4+0R
	VSC2 @ 6"	q 3171	2994	2897	2836	2795	2764	2741	2723	2251
		F 2.6+0R	2.7+0R	2.7+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R
	VSC2 @ 4"	q 3690	3579	3519	3481	3455	3436	3421	2779	2251
		F 2.1+0R	2.2+0R							
16/16	VSC2 @ 24"	q 2029	1713	1546	1443	1374	1324	1286	1256	1232
		F 4.6-1R	5.2-1R	5.6-1R	5.8-1R	6-1R	6.2-1R	6.3-1R	6.4-1R	6.4-1R
	VSC2 @ 18"	q 2413	1995	1977	1799	1675	1712	1629	1564	1601
		F 3.8-1R	4.4-1R	4.3-1R	4.7-1R	4.9+0R	4.8+0R	5+0R	5.1+0R	5+0R
	VSC2 @ 12"	q 2753	2501	2366	2282	2225	2184	2152	2128	2108
		F 3.2+0R	3.5+0R	3.6+0R	3.7+0R	3.7+0R	3.8+0R	3.8+0R	3.8+0R	3.8+0R
16/16	VSC2 @ 8"	q 3310	3118	3015	2950	2906	2873	2849	2830	2369
		F 2.6+0R	2.7+0R	2.8+0R	2.8+0R	2.8+0R	2.9+0R	2.9+0R	2.9+0R	2.9+0R
	VSC2 @ 6"	q 3727	3584	3507	3458	3425	3401	3382	2925	2369
		F 2.2+0R	2.3+0R	2.3+0R	2.4+0R	2.4+0R	2.4+0R	2.4+0R	2.4+0R	2.4+0R
	VSC2 @ 4"	q 4270	4190	4147	4120	4101	4088	3702	2925	2369
		F 1.8+0R	1.9+0R							

See footnotes on page 127.

Type PLN™-24-CD

- 24/4 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



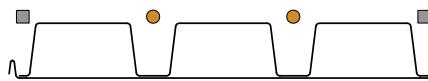
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)									
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	
20/20	VSC2 @ 24"	q 1350	1063	919	833	775	734	703	679	660	
		F 10.9-3R	12.9-3R	14.3-3R	15.3-3R	16.1-3R	16.7-3R	17.1-3R	17.5-2R	17.8-2R	
	VSC2 @ 18"	q 1552	1221	1154	1026	937	940	884	841	852	
		F 9.1-2R	11.1-2R	11.2-2R	12.3-2R	13.2-2R	12.9-2R	13.6-2R	14.1-2R	13.8-1R	
	VSC2 @ 12"	q 1742	1496	1366	1286	1231	1192	1162	1139	1120	
		F 7.9-2R	8.8-1R	9.3-1R	9.7-1R	9.9-1R	10.1-1R	10.3-1R	10.4-1R	10.5-1R	
	VSC2 @ 8"	q 2086	1871	1756	1685	1636	1601	1574	1466	1187	
		F 6.4-1R	6.9-1R	7.1-1R	7.3-1R	7.4-1R	7.5+0R	7.6+0R	7.7+0R	7.7+0R	
	VSC2 @ 6"	q 2383	2198	2098	2036	1994	1963	1855	1466	1187	
		F 5.4-1R	5.7-1R	5.9+0R	6+0R	6.1+0R	6.1+0R	6.2+0R	6.2+0R	6.2+0R	
20/18	VSC2 @ 4"	q 2850	2717	2645	2600	2569	2423	1855	1466	1187	
		F 4.3+0R	4.5+0R	4.6+0R	4.6+0R	4.7+0R	4.7+0R	4.7+0R	4.7+0R	4.7+0R	
	VSC2 @ 24"	q 1668	1366	1215	1124	1063	1020	987	962	942	
		F 7.7-2R	8.6-1R	9.1-1R	9.5-1R	9.7-1R	9.9-1R	10.1-1R	10.2-1R	10.3-1R	
	VSC2 @ 18"	q 1973	1597	1561	1408	1303	1324	1255	1201	1227	
		F 6.1-1R	7.2-1R	6.9-1R	7.5-1R	7.9-1R	7.6-1R	7.9-1R	8.2-1R	7.9+0R	
	VSC2 @ 12"	q 2254	2006	1875	1794	1739	1699	1669	1573	1274	
		F 5.2-1R	5.5-1R	5.7+0R	5.8+0R	5.9+0R	5.9+0R	6+0R	6+0R	6+0R	
	VSC2 @ 8"	q 2742	2538	2428	2361	2314	2281	1990	1573	1274	
		F 4.1+0R	4.3+0R	4.3+0R	4.4+0R	4.4+0R	4.4+0R	4.5+0R	4.5+0R	4.5+0R	
18/20	VSC2 @ 6"	q 3138	2973	2884	2829	2791	2599	1990	1573	1274	
		F 3.5+0R	3.6+0R	3.6+0R	3.6+0R	3.7+0R	3.7+0R	3.7+0R	3.7+0R	3.7+0R	
	VSC2 @ 4"	q 3705	3601	3544	3509	3485	2599	1990	1573	1274	
		F 2.8+0R	2.8+0R	2.9+0R							
	VSC2 @ 24"	q 1419	1111	955	862	799	755	721	695	674	
		F 10-3R	12-3R	13.5-3R	14.5-3R	15.3-3R	15.9-3R	16.4-3R	16.9-3R	17.2-3R	
	VSC2 @ 18"	q 1621	1268	1191	1055	962	961	903	858	867	
		F 8.5-2R	10.4-2R	10.7-2R	11.8-2R	12.7-2R	12.5-2R	13.1-2R	13.7-2R	13.4-2R	
	VSC2 @ 12"	q 1812	1545	1404	1317	1258	1215	1183	1158	1137	
		F 7.4-2R	8.3-2R	8.9-1R	9.3-1R	9.6-1R	9.8-1R	10-1R	10.1-1R	10.2-1R	
18/18	VSC2 @ 8"	q 2160	1924	1798	1720	1667	1628	1599	1576	1558	
		F 6-1R	6.5-1R	6.8-1R	7-1R	7.2-1R	7.3-1R	7.4-1R	7.4+0R	7.5+0R	
	VSC2 @ 6"	q 2462	2258	2148	2079	2032	1998	1972	1952	1702	
		F 5.1-1R	5.5-1R	5.7+0R	5.8+0R	5.9+0R	5.9+0R	6+0R	6+0R	6+0R	
	VSC2 @ 4"	q 2943	2794	2713	2662	2627	2602	2582	2101	1702	
		F 4.1+0R	4.3+0R	4.4+0R	4.4+0R	4.5+0R	4.5+0R	4.5+0R	4.5+0R	4.5+0R	
	VSC2 @ 24"	q 1668	1366	1215	1124	1063	1020	987	962	942	
		F 7.2-2R	8.2-2R	8.7-1R	9.1-1R	9.4-1R	9.6-1R	9.8-1R	9.9-1R	10.1-1R	
	VSC2 @ 18"	q 1973	1597	1561	1408	1303	1324	1255	1201	1227	
		F 5.8-1R	6.8-1R	6.7-1R	7.2-1R	7.6-1R	7.4-1R	7.7-1R	8-1R	7.7+0R	
18/18	VSC2 @ 12"	q 2254	2006	1875	1794	1739	1699	1669	1645	1627	
		F 4.9-1R	5.3-1R	5.5-1R	5.6+0R	5.7+0R	5.8+0R	5.8+0R	5.8+0R	5.9+0R	
	VSC2 @ 8"	q 2742	2538	2428	2361	2314	2281	2255	2235	1831	
		F 3.9+0R	4.1+0R	4.2+0R	4.2+0R	4.3+0R	4.3+0R	4.3+0R	4.4+0R	4.4+0R	
	VSC2 @ 6"	q 3138	2973	2884	2829	2791	2764	2743	2260	1831	
18/18		F 3.3+0R	3.4+0R	3.5+0R	3.5+0R	3.6+0R	3.6+0R	3.6+0R	3.6+0R	3.6+0R	
	VSC2 @ 4"	q 3705	3601	3544	3509	3485	3468	2860	2260	1831	
		F 2.7+0R	2.7+0R	2.7+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R	2.8+0R	

See footnotes on page 127.

Type PLN™-24-CD

- 24/4 Weld Pattern at Supports
- Sidelaps Connected with PunchLok II Tool



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)								
		4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"
18/16	VSC2 @ 24"	q 1917 F 6.4-1R	1623 7.2-1R	1476 7.6-1R	1388 7.9-1R	1329 8.1-1R	1287 8.3-1R	1254 8.4-1R	1228 8.5-1R	1207 8.6-1R
	VSC2 @ 18"	q 2324 F 5.1-1R	1924 6-1R	1927 5.7-1R	1756 6.2-1R	1639 6.6-1R	1682 6.3+0R	1603 6.6+0R	1540 6.8+0R	1581 6.6+0R
	VSC2 @ 12"	q 2688 F 4.3-1R	2456 4.6+0R	2332 4.7+0R	2257 4.8+0R	2205 4.9+0R	2168 4.9+0R	2140 4.9+0R	2118 5+0R	1937 5+0R
	VSC2 @ 8"	q 3297 F 3.4+0R	3116 3.5+0R	3019 3.6+0R	2959 3.6+0R	2918 3.7+0R	2889 3.7+0R	2866 3.7+0R	2391 3.7+0R	1937 3.7+0R
	VSC2 @ 6"	q 3762 F 2.8+0R	3624 2.9+0R	3551 3+0R	3505 3+0R	3474 3+0R	3451 3+0R	3026 3+0R	2391 3+0R	1937 3+0R
	VSC2 @ 4"	q 4380 F 2.3+0R	4301 2.3+0R	4259 2.3+0R	4233 2.4+0R	4215 2.4+0R	4202 2.4+0R	4018 2.4+0R	3174 2.4+0R	1937 2.4+0R
16/18	VSC2 @ 24"	q 1668 F 6.9-2R	1366 7.8-2R	1215 8.4-1R	1124 8.9-1R	1063 9.2-1R	1020 9.4-1R	987 9.6-1R	962 9.7-1R	942 9.8-1R
	VSC2 @ 18"	q 1973 F 5.6-1R	1597 6.6-1R	1561 6.5-1R	1408 7-1R	1303 7.4-1R	1324 7.2-1R	1255 7.5-1R	1201 7.8-1R	1227 7.6-1R
	VSC2 @ 12"	q 2254 F 4.7-1R	2006 5.1-1R	1875 5.3-1R	1794 5.4+0R	1739 5.5+0R	1699 5.6+0R	1669 5.7+0R	1645 5.7+0R	1627 5.7+0R
	VSC2 @ 8"	q 2742 F 3.8+0R	2538 3.9+0R	2428 4+0R	2361 4.1+0R	2314 4.2+0R	2281 4.2+0R	2255 4.2+0R	2235 4.2+0R	2219 4.2+0R
	VSC2 @ 6"	q 3138 F 3.2+0R	2973 3.3+0R	2884 3.4+0R	2829 3.4+0R	2791 3.4+0R	2764 3.4+0R	2743 3.5+0R	2727 3.5+0R	2427 3.5+0R
	VSC2 @ 4"	q 3705 F 2.5+0R	3601 2.6+0R	3544 2.6+0R	3509 2.6+0R	3485 2.7+0R	3468 2.7+0R	3454 2.7+0R	2996 2.7+0R	2427 2.7+0R
16/16	VSC2 @ 24"	q 1917 F 6.1-1R	1623 6.9-1R	1476 7.4-1R	1388 7.7-1R	1329 7.9-1R	1287 8.1-1R	1254 8.2-1R	1228 8.3-1R	1207 8.4-1R
	VSC2 @ 18"	q 2324 F 4.9-1R	1924 5.8-1R	1927 5.6-1R	1756 6-1R	1639 6.4-1R	1682 6.2+0R	1603 6.4+0R	1540 6.6+0R	1581 6.4+0R
	VSC2 @ 12"	q 2688 F 4.1-1R	2456 4.4+0R	2332 4.6+0R	2257 4.7+0R	2205 4.7+0R	2168 4.8+0R	2140 4.8+0R	2118 4.9+0R	2100 4.9+0R
	VSC2 @ 8"	q 3297 F 3.3+0R	3116 3.4+0R	3019 3.5+0R	2959 3.5+0R	2918 3.6+0R	2889 3.6+0R	2866 3.6+0R	2849 3.6+0R	2571 3.6+0R
	VSC2 @ 6"	q 3762 F 2.7+0R	3624 2.8+0R	3551 2.9+0R	3505 2.9+0R	3474 2.9+0R	3451 2.9+0R	3434 2.9+0R	3174 3+0R	2571 3+0R
	VSC2 @ 4"	q 4380 F 2.2+0R	4301 2.2+0R	4259 2.3+0R	4233 2.3+0R	4215 2.3+0R	4202 2.3+0R	4018 2.3+0R	3174 2.3+0R	2571 2.3+0R

See footnotes on page 127.



Shallow VERCOR™ Deck



VERCOR™ DECK CONTENTS

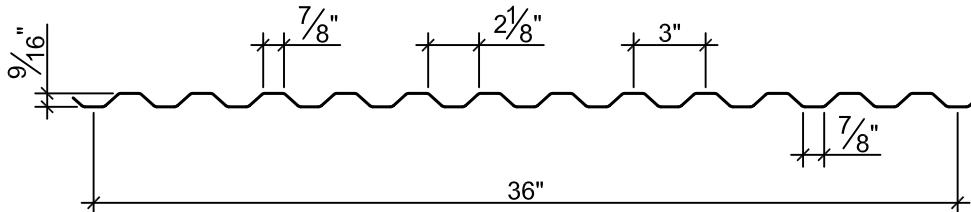
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Shallow VERCOR™ Deck

- **9/16"** Deep Deck
- Galvanized



Dimensions



Deck Weight and Section Properties

Gage	Weight (psf)	I _d for Deflection		Moment		Allowable Reactions per ft of Width (lb)							
		One Flange Loading		Two Flange Loading									
		Galv	Single Span (in. ⁴ /ft)	Multi Span (in. ⁴ /ft)	+S _{eff} (in. ³ /ft)	-S _{eff} (in. ³ /ft)	End Bearing Length	Interior Bearing Length	End Bearing Length	Interior Bearing Length			
26	1.0	0.013	0.013	0.041	0.043	581	644	788	862	536	582	963	1061
24	1.3	0.018	0.018	0.059	0.059	980	1081	1375	1497	999	1080	1709	1875
22	1.6	0.022	0.022	0.073	0.073	1466	1611	2105	2283	1598	1721	2645	2889

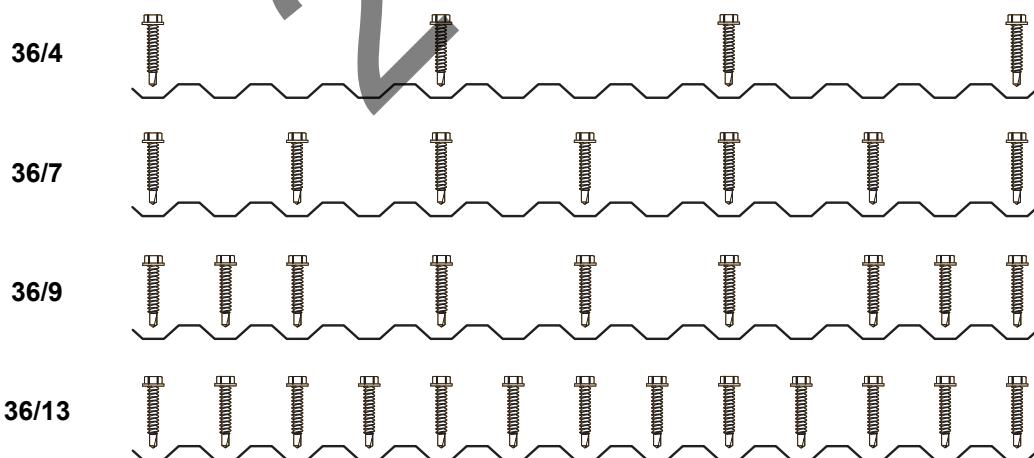
1. Section properties are based on $F_y = 60,000$ psi (specified minimum $F_y = 80,000$ psi).

2. I_d is for deflection due to uniform loads.

3. S_{eff} (+ or -) is the effective section modulus.

4. Allowable (ASD) reactions are based on web crippling, per AISI S100 Section C3.4, where $\Omega_w = 1.70$ for end bearing and 1.75 for interior bearing. Nominal reactions may be determined by multiplying the table values by Ω_w . LRFD reactions may be determined by multiplying nominal reactions by $\Phi_w = 0.90$ for end reactions and 0.85 for interior reactions.

Attachment Patterns to Supports

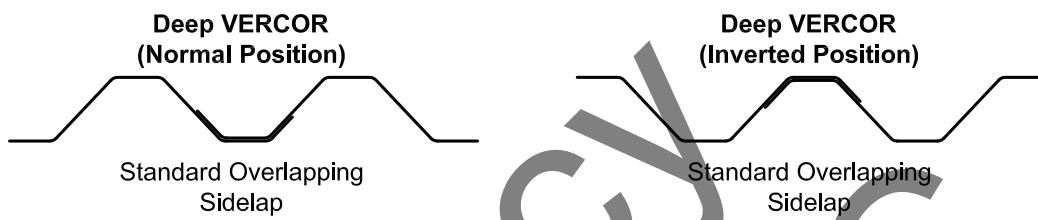
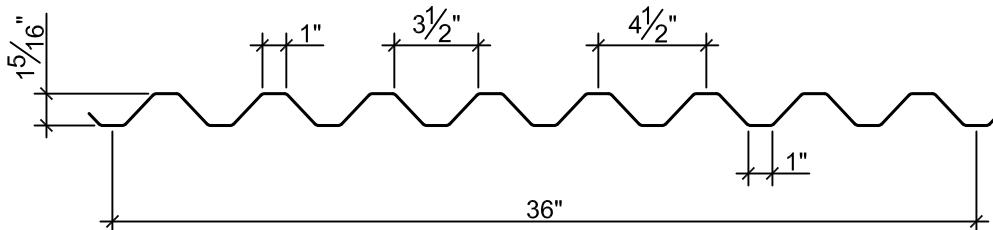


Deep VERCOR™ Deck

- 1 $\frac{5}{16}$ " Deep Deck
- Galvanized



Dimensions



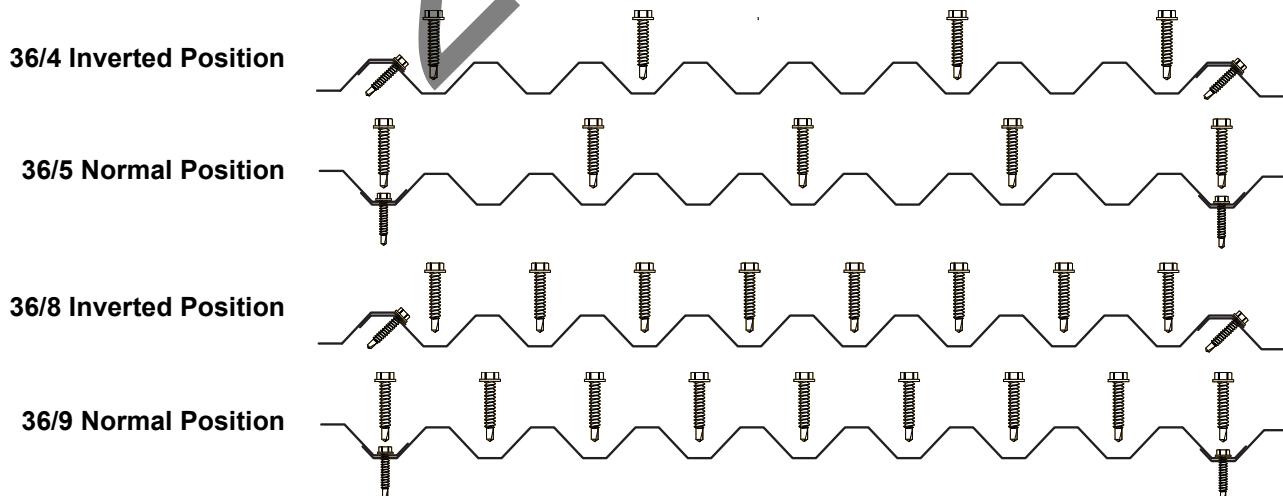
Deck Weight and Section Properties

Gage	Weight (psf)	I _d for Deflection		Moment		Allowable Reactions per ft of Width (lb)										
		One Flange Loading		Two Flange Loading												
		Galv	Single Span (in. ⁴ /ft)	Multi Span (in. ⁴ /ft)	+S _{eff}	-S _{eff}	End Bearing Length	Interior Bearing Length	End Bearing Length	Interior Bearing Length						
26	1.1	0.075	0.075	0.099	0.103		492	572	639	829	916	421	477	524	973	1082
24	1.4	0.097	0.097	0.137	0.138		802	927	1032	1366	1503	762	857	937	1642	1819
22	1.7	0.120	0.120	0.172	0.171		1184	1361	1510	2029	2225	1208	1351	1472	2479	2737
20	2.1	0.143	0.143	0.204	0.204		1628	1864	2064	2807	3069	1751	1950	2118	3467	3817

Notes:

1. Section properties are based on F_y = 60,000 psi (specified minimum F_y = 80,000 psi).
2. I_d is for deflection due to uniform loads.
3. S_{eff} (+ or -) is the effective section modulus.
4. Allowable (ASD) reactions are based on web crippling, per AISI S100 Section C3.4, where Ω_w = 1.70 for end bearing and 1.75 for interior bearing. Nominal reactions may be determined by multiplying the table values by Ω_w. LRFD reactions may be determined by multiplying nominal reactions by Φ_w = 0.90 for end reactions and 0.85 for interior reactions.

Attachment Patterns to Supports



Footnotes for Allowable Uniform Load Tables

1. Stress = Allowable uniform load based on maximum allowable flexural stress in deck.
2. L/360, L/240 or L/180 = Uniform load which produces selected deflection in deck.
3. The symbol $\diamond\diamond$ indicates allowable uniform load based on deflection exceeds allowable uniform load based on stress.
4. Nominal uniform loads governed by stress may be determined by multiplying the allowable values in the table by $\Omega_b = 1.67$. LRFD loads may be determined by multiplying nominal loads by $\Phi_b = 0.95$.

Footnotes for Diaphragm Shear Strength and Flexibility Factor Tables

General Notes

1. #10 = #10 Generic Screw. Sidelap connections are not required at support locations.
2. The dimension from the first and last sidelap connection within each span is to be no more than one-half of specified spacing.
3. R is the ratio of vertical span (L_V) of the deck to the length (L_S) of the deck sheet: $R = L_V / L_S$.
4. Interpolation of diaphragm shear strength between adjacent spans or sidelap spacings is permissible. For interpolation of the diaphragm flexibility factor between adjacent spans, use the flexibility factor for the closest adjacent span length.
5. Diaphragm shear values for side seam fasteners placed at spacings other than those in the table should be determined based on the number of fasteners in each span.
6. The allowable diaphragm shear values in the tables utilize a factor of safety, $\Omega = 2.5$ (limited by connections) with the exception of the gray shaded table values, which utilize a factor of safety of $\Omega = 2.0$ (limited by panel buckling).
7. Deck is attached with minimum #12 Screws (self drilling, self tapping) to supports. Select appropriate screw based on actual substrate thickness. This table is provided as a guide, proper selection should be verified based on the specific fasteners used.

Support Thickness	Fastener Designation
33 mil (0.0346") to 3/16"	#3 Drill Point
1/8" to 1/4"	#4 Drill Point
1/8" to 1/2"	#5 Drill Point

8. All tabulated diaphragm values shown in this section are for a minimum 0.0385 in. thick support with SDI recognized screws produced by Buildex, Elco, Hilti or Simpson Strong-Tie. If the minimum support thickness can not be met or a screw that is not recognized by SDI is used, modify tabulated q and F values based on actual substrate and thickness using Adjustment Factors listed in the following tables.

For 9/16" (Shallow) VERCOR:

Deck Gage	Factors	Substrate Thickness and Strength										
		20 ga		18 ga		16 ga		14 ga		≥ 12 ga		
		33 mil (0.0345 in)	43 mil (0.0451 in)	54 mil (0.0566 in)	68 mil (0.0713 in)	97 mil (0.1017 in)	33 ksi	50 ksi	33 ksi	50 ksi	33 ksi	50 ksi
26	R_q	0.66	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	R_F	1.26	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
24	R_q	0.52	0.66	0.68	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	R_F	1.51	1.38	1.27	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
22	R_q	0.38	0.54	0.59	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	R_F	1.69	1.58	1.36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

For 1-5/16" (Deep) VERCOR:

Deck Gage	Factors	Substrate Thickness and Strength										
		20 ga		18 ga		16 ga		14 ga		≥ 12 ga		
		33 mil (0.0345 in)	43 mil (0.0451 in)	54 mil (0.0566 in)	68 mil (0.0713 in)	97 mil (0.1017 in)	33 ksi	50 ksi	33 ksi	50 ksi	33 ksi	50 ksi
26	R_q	0.69	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
	R_F	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
24	R_q	0.58	0.70	0.73	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	R_F	1.21	1.17	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
22	R_q	0.48	0.61	0.65	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	R_F	1.27	1.24	1.16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20	R_q	0.39	0.53	0.57	0.71	0.71	0.76	0.76	0.76	0.76	0.76	0.76
	R_F	1.32	1.33	1.25	1.21	1.16	1.00	1.00	1.00	1.00	1.00	1.00

9. Adjustment factors are based on connection strengths determined in accordance with Section E4 of AISI S100. These self drilling, self tapping screws must be compliant with ASTM C1315.

10. Allowable Diaphragm Strength = $q \cdot R_q$; Flexibility Factor = $F \cdot R_F$.

11. These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns. To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.

Shallow VERCOR™



Allowable Uniform Loads (psf)

		DECK SPAN GAGE	SPAN (ft-in.)										
			CRITERIA	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"
SINGLE	26	Stress	300	300	246	157	109	80	62	49	39	33	27
		L/360	♦♦♦	169	71	36	21	13	9	6	5	3	3
		L/240	♦♦♦	253	107	55	32	20	13	9	7	5	4
		L/180	♦♦♦	♦♦♦	142	73	42	27	18	12	9	7	5
DOUBLE	24	Stress	300	300	300	227	157	116	89	70	57	47	39
		L/360	♦♦♦	233	98	50	29	18	12	9	6	5	4
		L/240	♦♦♦	♦♦♦	148	76	44	28	18	13	9	7	5
		L/180	♦♦♦	♦♦♦	197	101	58	37	25	17	13	9	7
TRIPLE	22	Stress	300	300	300	280	195	143	110	87	70	58	49
		L/360	♦♦♦	285	120	62	36	22	15	11	8	6	4
		L/240	♦♦♦	♦♦♦	181	92	54	34	23	16	12	9	7
		L/180	♦♦♦	♦♦♦	241	123	71	45	30	21	15	12	9
SINGLE	26	Stress	300	300	258	165	115	84	65	51	41	34	29
		L/360	♦♦♦	♦♦♦	171	88	51	32	21	15	11	8	6
		L/240	♦♦♦	♦♦♦	257	132	76	48	32	28	16	12	10
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	101	64	43	30	22	16	13
DOUBLE	24	Stress	300	300	300	227	157	116	89	70	57	47	39
		L/360	♦♦♦	♦♦♦	237	121	70	44	30	21	15	11	9
		L/240	♦♦♦	♦♦♦	♦♦♦	182	105	66	44	31	23	17	13
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	141	88	59	42	30	23	18
TRIPLE	22	Stress	300	300	300	280	195	143	110	87	70	58	49
		L/360	♦♦♦	♦♦♦	290	148	86	54	36	25	19	14	11
		L/240	♦♦♦	♦♦♦	♦♦♦	223	129	81	54	38	28	21	16
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	172	108	72	51	37	28	21
SINGLE	26	Stress	300	300	300	206	143	105	81	64	52	43	36
		L/360	♦♦♦	♦♦♦	134	69	40	25	17	12	9	6	5
		L/240	♦♦♦	♦♦♦	201	103	60	38	25	18	13	10	7
		L/180	♦♦♦	♦♦♦	268	137	79	50	34	24	17	13	10
DOUBLE	24	Stress	300	300	300	283	197	144	111	87	71	59	49
		L/360	♦♦♦	♦♦♦	186	95	55	35	23	16	12	9	7
		L/240	♦♦♦	♦♦♦	278	143	82	52	35	24	18	13	10
		L/180	♦♦♦	♦♦♦	♦♦♦	190	110	69	46	33	24	18	14
TRIPLE	22	Stress	300	300	300	300	243	179	137	108	88	72	61
		L/360	♦♦♦	♦♦♦	227	116	67	42	28	20	15	11	8
		L/240	♦♦♦	♦♦♦	♦♦♦	174	101	63	43	30	22	16	13
		L/180	♦♦♦	♦♦♦	♦♦♦	232	134	85	57	40	29	22	17

See footnotes on page 146.

Deep VERCOR™



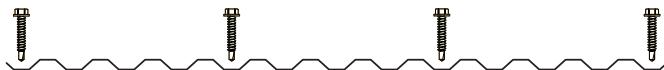
Allowable Uniform Loads (psf)

		DECK GAGE	CRITERIA	SPAN (ft-in.)													
SPAN	3'-0"			3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
SINGLE	26	Stress	264	194	149	117	95	79	66	56	48	42	37	33	29	26	24
		L/360	122	77	51	36	26	20	15	12	10	8	6	5	5	4	3
		L/240	182	115	77	54	39	30	23	18	14	12	10	8	7	6	5
	24	L/180	243	153	103	72	53	39	30	24	19	16	13	11	9	8	7
		Stress	300	268	206	162	132	109	91	78	67	58	51	46	41	36	33
		L/360	157	99	66	47	34	26	20	15	12	10	8	7	6	5	4
	22	L/240	236	149	100	70	51	38	29	23	19	15	12	10	9	7	6
		L/180	♦♦♦	198	133	93	68	51	39	31	25	20	17	14	12	10	8
		Stress	300	300	258	204	165	136	115	98	84	73	65	57	51	46	41
DOUBLE	20	L/360	195	123	82	58	42	32	24	19	15	12	10	9	7	6	5
		L/240	292	184	123	86	63	47	36	29	23	19	15	13	11	9	8
		L/180	♦♦♦	245	164	115	84	63	49	38	31	25	21	17	14	12	11
	26	Stress	300	300	300	242	196	162	136	116	100	87	77	68	60	54	49
		L/360	232	146	98	69	50	38	29	23	18	15	12	10	9	7	6
		L/240	♦♦♦	219	147	103	75	56	43	34	27	22	18	15	13	11	9
	24	L/180	♦♦♦	292	196	137	100	75	58	46	36	30	24	20	17	15	13
		Stress	275	202	155	122	99	82	69	59	50	44	39	34	31	27	25
		L/360	♦♦♦	184	123	87	63	48	37	29	23	19	15	13	11	9	8
TRIPLE	26	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	95	71	55	43	35	28	23	19	16	14	12
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	58	46	37	31	26	22	18	16
		Stress	300	270	207	164	132	109	92	78	68	59	52	46	41	37	33
	24	L/360	♦♦♦	238	160	112	82	61	47	37	30	24	20	17	14	12	10
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	123	92	71	56	45	36	30	25	21	18	15
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	74	60	48	40	33	28	24	20
	22	Stress	300	300	257	203	164	136	114	97	84	73	64	57	51	45	41
		L/360	♦♦♦	295	198	139	101	76	59	46	37	30	25	21	17	15	13
		L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	152	114	88	69	55	45	37	31	26	22	19
	20	L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	92	74	60	49	41	35	29	25
		Stress	300	300	300	242	196	162	136	116	100	87	77	68	60	54	49
		L/360	♦♦♦	♦♦♦	235	165	121	91	70	55	44	36	29	25	21	18	15
TRIPLE	26	L/240	♦♦♦	♦♦♦	♦♦♦	♦♦♦	181	136	105	82	66	54	44	37	31	26	23
		L/180	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	♦♦♦	110	88	71	59	49	41	35	30	30
		Stress	300	252	193	153	124	102	86	73	63	55	48	43	38	34	31
	24	L/360	229	144	97	68	49	37	29	23	18	15	12	10	8	7	6
		L/240	♦♦♦	216	145	102	74	56	43	34	27	22	18	15	13	11	9
		L/180	♦♦♦	♦♦♦	♦♦♦	136	99	74	57	45	36	29	24	20	17	14	12
	22	Stress	300	300	259	204	166	137	115	98	84	74	65	57	51	46	41
		L/360	296	187	125	88	64	48	37	29	23	19	16	13	11	9	8
		L/240	♦♦♦	280	187	132	96	72	56	44	35	28	23	20	16	14	12
	20	L/180	♦♦♦	♦♦♦	250	176	128	96	74	58	47	38	31	26	22	19	16
		Stress	300	300	300	253	205	170	143	121	105	91	80	71	63	57	51
		L/360	♦♦♦	231	155	109	79	59	46	36	29	23	19	16	14	12	10
TRIPLE	22	L/240	♦♦♦	232	163	119	89	69	54	43	35	29	24	20	17	15	13
		L/180	♦♦♦	♦♦♦	217	158	119	92	72	58	47	39	32	27	23	20	18
		Stress	300	300	300	300	245	202	170	145	125	109	96	85	76	68	61
	20	L/360	♦♦♦	275	184	129	94	71	55	43	34	28	23	19	16	14	12
		L/240	♦♦♦	276	194	142	106	82	64	52	42	35	29	24	21	18	16
		L/180	♦♦♦	♦♦♦	259	189	142	109	86	69	56	46	38	32	28	24	20

See footnotes on page 146.

Shallow VERCOR™

- **36/4 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker**
- **Sidelaps Connected with #10 Screws**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP FASTENER SPACING	SPAN (ft-in.)						
		1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	
26	(none)	q 295 F -53.8+1038R	243 -30.3+690R	204 -17.4+516R	178 -8.8+411R	158 -2.3+340R	-	-
	#10 @ 12"	q 316 F -55.4+1039R	292 -33.9+692R	257 -22.2+519R	249 -15.9+415R	226 -10.8+345R	223 -8+296R	207 -5+259R
	#10 @ 8"	q 331 F -56.2+1039R	308 -34.5+693R	276 -23.1+519R	266 -16.6+415R	258 -12.3+346R	252 -9.2+296R	236 -6.4+259R
	#10 @ 6"	q 331 F -56.2+1039R	308 -34.5+693R	291 -23.6+519R	280 -17.1+415R	271 -12.7+346R	264 -9.6+297R	259 -7.2+260R
	#10 @ 4"	q 340 F -56.6+1039R	329 -35.3+693R	314 -24.3+520R	310 -18+416R	301 -13.5+346R	299 -10.5+297R	292 -8.1+260R
	(none)	q 394 F -22.9+503R	324 -10.7+334R	273 -3.6+249R	237 1.4+197R	211 5.4+163R	-	-
24	#10 @ 12"	q 426 F -24.3+504R	397 -13.8+336R	352 -7.7+251R	343 -4.7+201R	313 -1.9+167R	311 -0.6+143R	289 1.1+125R
	#10 @ 8"	q 446 F -25+504R	419 -14.4+336R	379 -8.5+252R	367 -5.3+201R	358 -3.2+168R	352 -1.7+144R	330 -0.1+126R
	#10 @ 6"	q 446 F -25+504R	419 -14.4+336R	400 -9+252R	386 -5.7+201R	376 -3.6+168R	368 -2+144R	362 -0.8+126R
	#10 @ 4"	q 459 F -25.4+504R	447 -15+336R	429 -9.6+252R	426 -6.5+202R	415 -4.3+168R	414 -2.8+144R	406 -1.6+126R
	(none)	q 493 F -10.9+287R	406 -3.3+190R	342 1.4+141R	297 4.9+111R	264 7.8+91R	-	-
	#10 @ 12"	q 536 F -12.2+288R	504 -6+192R	449 -2.3+143R	441 -0.6+115R	403 1.2+95R	403 1.9+82R	375 3.1+71R
22	#10 @ 8"	q 563 F -12.7+288R	532 -6.6+192R	484 -3+144R	471 -1.1+115R	462 0.1+96R	454 1+82R	428 2+72R
	#10 @ 6"	q 563 F -12.7+288R	532 -6.6+192R	510 -3.4+144R	495 -1.5+115R	484 -0.2+96R	475 0.7+82R	468 1.4+72R
	#10 @ 4"	q 579 F -13.1+288R	567 -7.1+192R	547 -4+144R	544 -2.2+115R	531 -0.9+96R	531 -0.1+82R	522 0.6+72R

See footnotes on page 146.

Shallow VERCOR™

- **36/7 Screw Pattern at Supports**
- #12 or #14 SDI Recognized Screws**
- to Supports 0.0385" and thicker**
- **Sidelaps Connected with #10 Screws**



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)					
		1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"
26	(none)	q 499 F -10+301R	383 -2.3+200R	311 2.3+148R	272 5.6+117R	232 8.3+97R	- -
	#10 @ 12"	q 540 F -10.8+302R	464 -4.2+201R	386 -0.3+150R	369 1.6+120R	319 3.6+100R	315 4.4+85R
	#10 @ 8"	q 573 F -11.3+302R	497 -4.7+201R	419 -0.9+150R	396 1.1+120R	370 2.5+100R	359 3.4+86R
	#10 @ 6"	q 573 F -11.3+302R	497 -4.7+201R	448 -1.3+151R	422 0.7+120R	393 2.1+100R	380 3.1+86R
	#10 @ 4"	q 600 F -11.6+302R	550 -5.2+201R	499 -1.9+151R	487 0+121R	454 1.4+100R	451 2.3+86R
	(none)	q 667 F -2.2+146R	512 2.1+96R	415 4.8+71R	364 7+56R	309 8.9+45R	- -
24	#10 @ 12"	q 729 F -2.9+146R	634 0.4+97R	529 2.6+72R	510 3.6+58R	443 4.8+48R	440 5.2+41R
	#10 @ 8"	q 777 F -3.4+146R	682 0+97R	578 2.1+73R	551 3.1+58R	518 3.8+48R	505 4.3+41R
	#10 @ 6"	q 777 F -3.4+146R	682 0+97R	621 1.7+73R	588 2.8+58R	552 3.5+48R	535 4+41R
	#10 @ 4"	q 815 F -3.6+146R	757 -0.5+98R	693 1.2+73R	681 2.2+58R	639 2.9+49R	637 3.3+42R
	(none)	q 834 F 0.5+83R	640 3.4+54R	519 5.4+40R	455 7+31R	387 8.5+25R	- -
	#10 @ 12"	q 920 F -0.1+83R	809 1.9+55R	677 3.4+41R	656 4+33R	571 4.8+27R	570 5+23R
22	#10 @ 8"	q 984 F -0.5+83R	873 1.5+55R	743 2.9+41R	712 3.6+33R	674 4+27R	659 4.3+23R
	#10 @ 6"	q 984 F -0.5+83R	873 1.5+55R	801 2.6+41R	762 3.3+33R	719 3.7+28R	699 4.1+24R
	#10 @ 4"	q 1034 F -0.7+84R	970 1.1+56R	894 2.2+42R	882 2.7+33R	832 3.2+28R	832 3.4+24R
							796 3.7+21R

See footnotes on page 146.

Shallow VERCOR™

- 36/9 Screw Pattern at Supports
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with #10 Screws



Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)						
		1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"
26	(none)	q 696 F -4.9+205R	542 0.3+136R	443 3.5+101R	390 5.8+80R	332 7.7+66R	-	-
	#10 @ 12"	q 733 F -5.4+205R	620 -0.8+137R	516 2+102R	484 3.5+81R	419 4.9+68R	408 5.5+58R	364 6.5+50R
	#10 @ 8"	q 765 F -5.7+205R	654 -1.1+137R	549 1.6+102R	513 3.1+82R	471 4.1+68R	454 4.8+58R	407 5.6+51R
	#10 @ 6"	q 765 F -5.7+205R	654 -1.1+137R	580 1.3+102R	540 2.8+82R	495 3.8+68R	475 4.5+58R	447 5.1+51R
	#10 @ 4"	q 792 F -5.9+206R	710 -1.5+137R	634 0.9+103R	611 2.2+82R	562 3.2+68R	554 3.8+59R	520 4.4+51R
	(none)	q 929 F -0.1+99R	724 2.8+65R	591 4.8+48R	520 6.3+38R	444 7.6+31R	-	-
24	#10 @ 12"	q 986 F -0.5+99R	842 1.9+66R	703 3.5+49R	665 4.3+39R	576 5.2+32R	564 5.5+28R	504 6.1+24R
	#10 @ 8"	q 1033 F -0.7+100R	892 1.6+66R	753 3.1+49R	707 3.9+39R	654 4.5+33R	633 4.9+28R	569 5.4+24R
	#10 @ 6"	q 1033 F -0.7+100R	892 1.6+66R	798 2.9+49R	747 3.7+39R	690 4.2+33R	665 4.6+28R	629 4.9+24R
	#10 @ 4"	q 1073 F -0.9+100R	974 1.3+66R	877 2.5+50R	850 3.2+40R	787 3.7+33R	779 4+28R	735 4.4+25R
	(none)	q 1162 F 1.5+56R	905 3.5+37R	739 4.9+27R	651 6+21R	555 7.1+17R	-	-
	#10 @ 12"	q 1241 F 1.1+57R	1069 2.6+37R	895 3.7+28R	851 4.2+22R	739 4.9+18R	727 5.1+16R	650 5.6+13R
22	#10 @ 8"	q 1305 F 0.9+57R	1136 2.4+38R	962 3.4+28R	909 3.9+22R	846 4.3+18R	820 4.5+16R	739 4.9+14R
	#10 @ 6"	q 1305 F 0.9+57R	1136 2.4+38R	1024 3.2+28R	962 3.7+22R	894 4+19R	863 4.3+16R	820 4.5+14R
	#10 @ 4"	q 1357 F 0.8+57R	1244 2.1+38R	1129 2.8+28R	1099 3.2+23R	1023 3.6+19R	1015 3.8+16R	962 4+14R

See footnotes on page 146.

Shallow VERCOR™

- **36/13 Screw Pattern at Supports**

#12 or #14 SDI Recognized Screws

to Supports 0.0385" and thicker

- **Sidelaps Connected with #10 Screws**



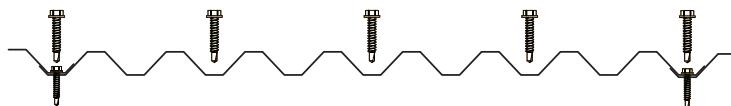
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb)x10⁶)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)					
		1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"
26	(none)	q 880 F 6.5+12R	652 7.6+7R	520 8.6+5R	453 9.6+3R	383 10.5+2R	- -
	#10 @ 12"	q 935 F 6.2+12R	752 6.9+8R	607 7.6+6R	562 7.9+4R	478 8.4+3R	463 8.6+3R
	#10 @ 8"	q 985 F 6+12R	798 6.6+8R	647 7.3+6R	596 7.6+4R	539 7.8+4R	515 8+3R
	#10 @ 6"	q 985 F 6+12R	798 6.6+8R	687 7+6R	629 7.3+5R	568 7.6+4R	541 7.7+3R
	#10 @ 4"	q 1029 F 5.9+12R	881 6.3+8R	760 6.7+6R	722 6.8+5R	651 7.1+4R	637 7.1+3R
	(none)	q 1175 F 5.3+6R	871 6.2+3R	694 7+2R	605 7.7+1R	511 8.5+0R	- -
24	#10 @ 12"	q 1260 F 5+6R	1024 5.5+4R	827 6.1+2R	771 6.3+2R	658 6.7+1R	640 6.8+1R
	#10 @ 8"	q 1334 F 4.9+6R	1092 5.3+4R	889 5.8+2R	823 6+2R	750 6.2+1R	720 6.3+1R
	#10 @ 6"	q 1334 F 4.9+6R	1092 5.3+4R	948 5.6+3R	873 5.8+2R	794 6+2R	758 6.1+1R
	#10 @ 4"	q 1400 F 4.7+6R	1215 5+4R	1057 5.3+3R	1012 5.4+2R	918 5.6+2R	903 5.6+1R
	(none)	q 1471 F 4.5+3R	1090 5.2+1R	869 5.9+1R	757 6.6+0R	640 7.2-1R	- -
	#10 @ 12"	q 1588 F 4.2+3R	1302 4.6+2R	1054 5.1+1R	988 5.3+1R	844 5.7+0R	825 5.7+0R
22	#10 @ 8"	q 1690 F 4.1+3R	1396 4.4+2R	1139 4.8+1R	1060 5+1R	971 5.2+1R	935 5.3+0R
	#10 @ 6"	q 1690 F 4.1+3R	1396 4.4+2R	1220 4.7+1R	1128 4.8+1R	1031 5+1R	988 5.1+1R
	#10 @ 4"	q 1778 F 3.9+3R	1561 4.2+2R	1367 4.4+1R	1316 4.5+1R	1200 4.6+1R	1184 4.6+1R
							1107 4.7+1R

See footnotes on page 146.

Deep VERCOR™

- 36/5 Screw Pattern at Supports
- #12 or #14 SDI Recognized Screws to Supports 0.0385" and thicker
- Sidelaps Connected with #10 Screws



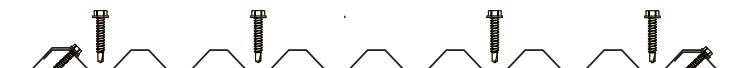
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)					
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
26	#10 @ 24"	q 214 F -4.2+280R	197 -0.8+224R	165 3+186R	157 4.4+159R	137 6.8+139R	135 7.4+124R
	#10 @ 18"	q 237 F -5.8+281R	216 -2.1+225R	185 1.5+187R	175 3.1+160R	168 4.3+140R	149 6.2+124R
	#10 @ 12"	q 259 F -6.8+281R	235 -3+225R	218 -0.4+187R	205 1.4+161R	195 2.8+140R	187 3.9+125R
	#10 @ 6"	q 332 F -8.8+282R	314 -5.2+226R	301 -2.8+188R	292 -1.1+161R	284 0.2+141R	278 1.2+125R
24	#10 @ 24"	q 287 F 1.9+144R	267 3.7+115R	227 6.2+95R	220 6.8+82R	191 8.5+71R	189 8.7+63R
	#10 @ 18"	q 321 F 0.6+145R	295 2.6+115R	253 4.8+96R	243 5.7+82R	235 6.3+72R	209 7.6+64R
	#10 @ 12"	q 353 F -0.3+145R	322 1.8+116R	301 3.2+96R	285 4.2+83R	272 5+72R	263 5.6+64R
	#10 @ 6"	q 454 F -2.1+146R	433 -0.2+116R	418 1.1+97R	406 2+83R	397 2.7+73R	390 3.2+65R
22	#10 @ 24"	q 365 F 4.1+84R	342 5.1+67R	292 7+55R	285 7.3+48R	250 8.6+41R	249 8.6+37R
	#10 @ 18"	q 411 F 2.9+85R	380 4.1+68R	326 5.8+56R	315 6.3+48R	306 6.7+42R	276 7.7+37R
	#10 @ 12"	q 452 F 2.1+85R	416 3.4+68R	390 4.3+56R	371 5+48R	356 5.5+42R	345 5.9+38R
	#10 @ 6"	q 583 F 0.5+86R	559 1.7+68R	542 2.5+57R	529 3+49R	519 3.4+43R	511 3.7+38R
20	#10 @ 24"	q 445 F 4.9+54R	420 5.6+43R	359 7.1+35R	353 7.2+30R	313 8.4+26R	313 8.3+23R
	#10 @ 18"	q 503 F 3.8+54R	469 4.7+43R	403 6+36R	391 6.3+31R	382 6.5+27R	344 7.4+24R
	#10 @ 12"	q 556 F 3.1+55R	514 4+44R	485 4.7+36R	462 5.1+31R	445 5.5+27R	432 5.7+24R
	#10 @ 6"	q 717 F 1.7+55R	691 2.4+44R	671 2.9+37R	657 3.3+31R	646 3.6+28R	637 3.8+24R

See footnotes on page 146.

Deep VERCOR™ (Inverted)

- 36/4 Screw Pattern at Supports
- Sidelaps Connected with #10 Screws



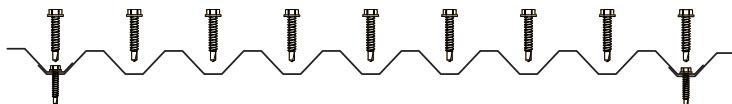
- To obtain allowable diaphragm shear strength and flexibility factors for Deep VERCOR (Inverted) using a 36/4 screw pattern at supports, multiply values listed for Deep VERCOR using a 36/5 screw pattern at supports by the following adjustment factors:

Adjustment Factor	Sidelap Fastener Spacing
	24" o.c. 18" o.c. 12" o.c. 6" o.c.
R_q	0.81 0.84 0.87 0.92
R_F	1.47 1.47 1.47 1.47

- These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns. To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.

Deep VERCOR™

- **36/9 Screw Pattern at Supports**
#12 or #14 SDI Recognized Screws
to Supports 0.0385" and thicker
- **Sidelaps Connected with #10 Screws**



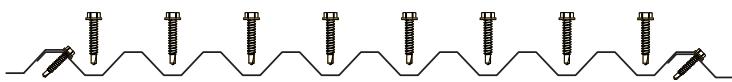
Allowable Diaphragm Shear Strength, q (plf) and Flexibility Factors, F ((in./lb) $\times 10^6$)

DECK GAGE	SIDELAP ATTACHMENT	SPAN (ft-in.)						
		4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"
26	#10 @ 24"	q 305	268	222	206	180	173	156
		F 10.8+6R	11.1+5R	12.4+3R	12.5+3R	13.5+2R	13.4+2R	14.4+1R
	#10 @ 18"	q 332	293	242	224	210	187	181
		F 9.9+7R	10.3+5R	11.4+4R	11.6+3R	11.7+3R	12.6+2R	12.6+2R
24	#10 @ 12"	q 359	314	284	259	241	228	218
		F 9.2+7R	9.7+6R	10.1+4R	10.4+4R	10.6+3R	10.8+3R	11+2R
	#10 @ 6"	q 457	418	390	370	355	343	279
		F 7.7+8R	8+6R	8.2+5R	8.3+4R	8.4+4R	8.5+3R	8.6+3R
22	#10 @ 24"	q 407	364	302	283	246	238	215
		F 9+3R	9.3+2R	10.4+1R	10.4+1R	11.3+0R	11.2+0R	12+0R
	#10 @ 18"	q 447	397	333	310	292	259	251
		F 8.2+3R	8.6+2R	9.5+1R	9.7+1R	9.8+1R	10.5+0R	10.5+0R
20	#10 @ 12"	q 486	429	390	362	338	320	306
		F 7.6+3R	8+2R	8.3+2R	8.6+2R	8.8+1R	8.9+1R	9.1+1R
	#10 @ 6"	q 629	579	545	520	500	485	413
		F 6.4+4R	6.5+3R	6.7+2R	6.8+2R	6.9+2R	6.9+2R	7+1R
22	#10 @ 24"	q 515	464	387	366	319	310	278
		F 7.8+1R	8+1R	9+0R	9+0R	9.8-1R	9.8-1R	10.5-1R
	#10 @ 18"	q 569	509	430	402	382	338	328
		F 7.1+1R	7.4+1R	8.2+0R	8.3+0R	8.4+0R	9.1+0R	9.1+0R
20	#10 @ 12"	q 622	553	505	470	444	422	404
		F 6.6+2R	6.9+1R	7.2+1R	7.4+1R	7.5+0R	7.7+0R	7.8+0R
	#10 @ 6"	q 813	754	713	683	659	641	567
		F 5.4+2R	5.6+2R	5.7+1R	5.7+1R	5.8+1R	5.9+1R	5.9+1R
20	#10 @ 24"	q 625	568	477	453	395	386	346
		F 6.9+0R	7.1+0R	8-1R	8-1R	8.8-1R	8.7-1R	9.3-1R
	#10 @ 18"	q 695	625	528	500	477	422	411
		F 6.3+1R	6.5+0R	7.3+0R	7.4+0R	7.5+0R	8.1+0R	8.1+0R
20	#10 @ 12"	q 763	682	626	585	553	529	509
		F 5.8+1R	6.1+0R	6.3+0R	6.5+0R	6.7+0R	6.8+0R	6.9+0R
	#10 @ 6"	q 1006	938	891	856	829	807	738
		F 4.7+1R	4.9+1R	4.9+1R	5+1R	5.1+1R	5.1+0R	5.2+0R

See footnotes on page 146.

Deep VERCOR™ (Inverted)

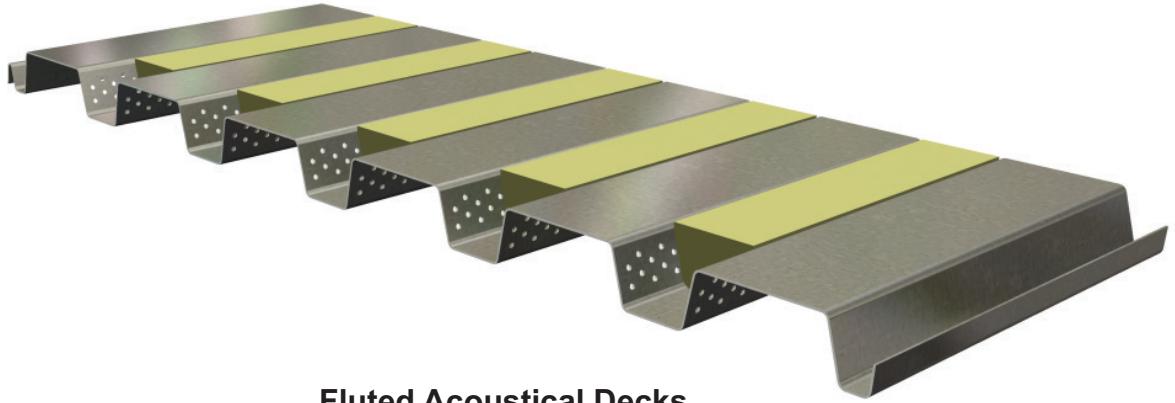
- **36/8 Screw Pattern at Supports**
- **Sidelaps Connected with #10 Screws**



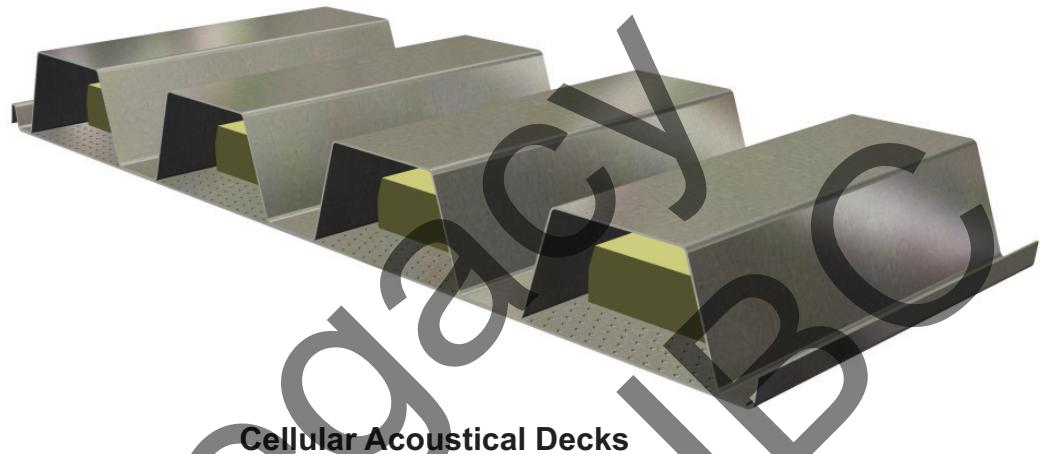
- To obtain allowable diaphragm shear strength and flexibility factors for Deep VERCOR (Inverted) using a 36/8 screw pattern at supports, multiply values listed for Deep VERCOR using a 36/9 screw pattern at supports by the following adjustment factors:

Adjustment Factor	Sidelap Fastener Spacing			
	24" o.c.	18" o.c.	12" o.c.	6" o.c.
R_q	0.75	0.79	0.81	0.87
R_F	1.08	1.06	1.05	1.02

- These adjustment factors are based on the maximum adjustment for the tabulated span lengths and fastener patterns.
To calculate a specific condition, use design equations listed at the end of Evaluation Report ER-0217.



Fluted Acoustical Decks



Cellular Acoustical Decks

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Fire-Rated Verco Roof Deck	161

ACOUSTICAL ROOF DECK

Verco 1½" and 3" deep fluted and cellular roof decks are available as acoustical decks. Acoustical deck can provide sound attenuation within buildings where the deck is exposed to the interior. Acoustical uses are limited to non-fire-rated assemblies.

Fluted Acoustical Deck

PLB-36, HSB-36, PLN3, HSN3, PLN-24 and N-24 fluted decks are available with acoustical perforations in the webs. The webs adjacent to the sidelaps of the PLB-36 and HSB-36 are not perforated as shown in Figure 15. Acoustical perforations are 5/32 inch in diameter on 7/16 staggered centers. The roofing contractor should install the acoustical insulation batts in fluted acoustical deck before placement of the roof insulation as shown in Figure 15. The web perforations have some impact on the deck section properties (vertical loads), allowable reactions due to web crippling, and diaphragm shear and flexibility, as shown on pages 26 and 28, 80 and 82, and 104 and 106.

Acoustic Insulation Placement

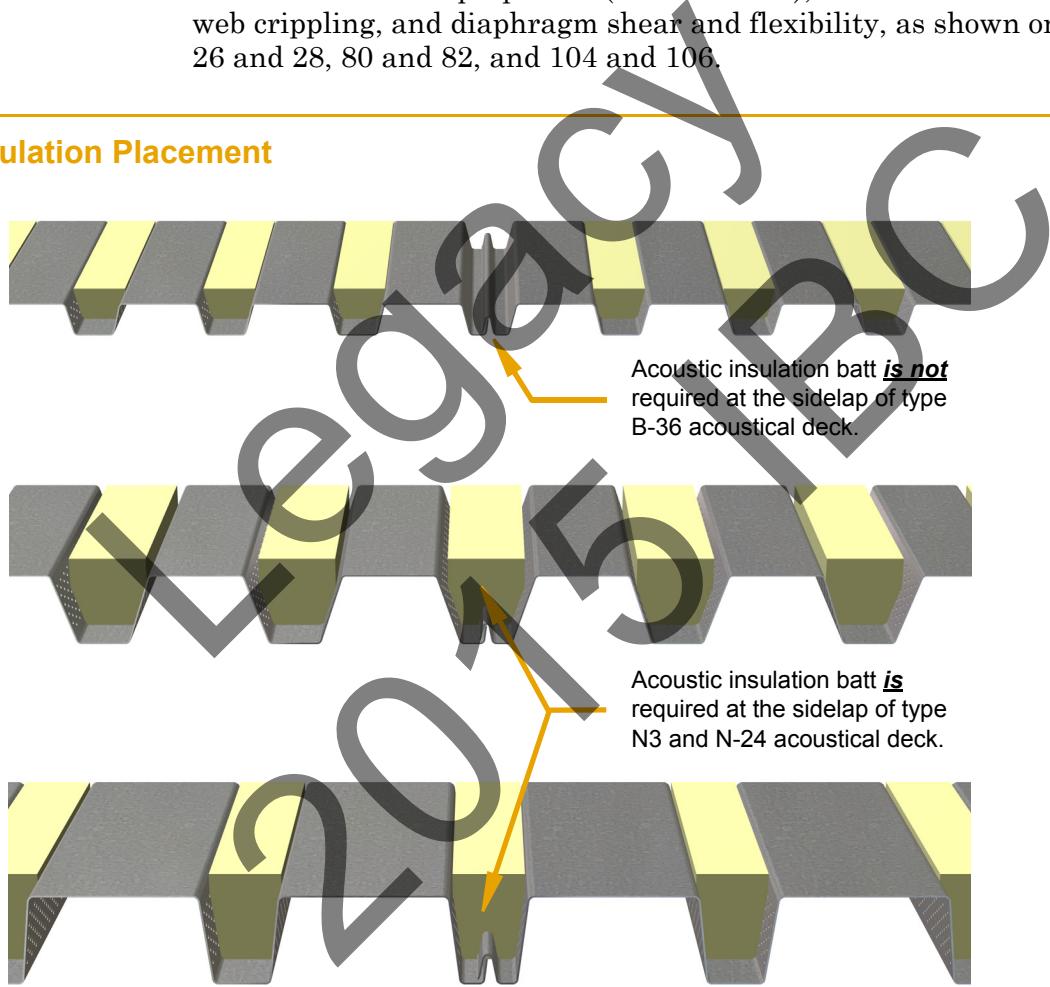


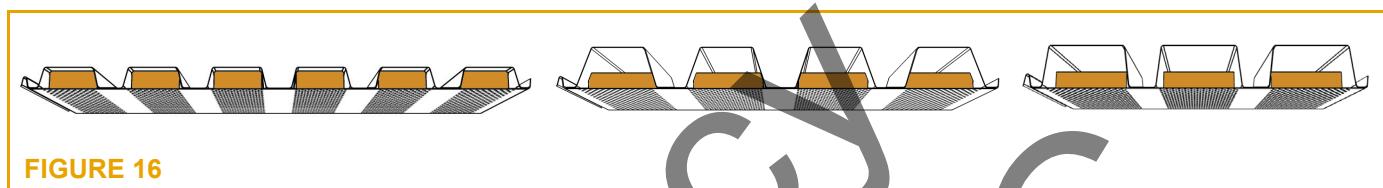
FIGURE 15

Fully Perforated Deck

The fluted profiles are also available fully perforated with the perforations across the entire section except for the sidelaps. Contact your Verco representative for availability.

Cellular Acoustical Deck

PLB-36-CD, HSB-36-CD, PLN3-CD, HSN3-CD, PLN-24-CD and N-24-CD cellular decks are available with acoustical perforations in the flat bottom plate. Acoustical perforations are 5/32 inch in diameter on 7/16 staggered centers in bands centered under the top flanges of the fluted top sections. The insulation batts in acoustical cellular deck are factory installed as shown in Figure 16. The perforations in the flat bottom plates have some impact on the deck section properties (vertical loads) and diaphragm shear and flexibility as shown on pages 124 thru 127.



Roof Insulation

The performance of acoustical decks may be affected by the type of insulation placed above the deck. Acoustical performance data for fluted decks is shown with the historically used rigid fiberglass insulation board, polyisocyanurate insulation (poly-iso) board, and with roof board. The choice of insulation placed above the deck has minimal impact on the acoustical performance of cellular deck therefore only polyisocyanurate insulation is used in the cellular deck assemblies.

Acoustical Insulation

The acoustical insulation batts used in fluted or cellular acoustical decks are available encapsulated (wrapped) as a special order. Optional spacers may be installed in cellular acoustical decks between the flat bottom plate and the insulation batts. The acoustical performance of fluted decks with wrapped insulation batts and cellular acoustical decks with spacers are available from the Verco website at www.vercodeck.com.

Noise Reduction Coefficients

Tables 7 and 8 summarize the sound absorption coefficients for fluted and cellular decks at a number of frequencies. The complete acoustical test reports with the full range of absorption coefficients are available from the Verco website. The noise reduction coefficient (NRC) historically reported is the average of the coefficients at 250, 500, 1000, and 2000 Hz expressed to the nearest integral multiple of 0.05. The sound absorption average (SAA) is the average of the sound absorption coefficients for the twelve one-third octave bands from 200 through 2500 Hz inclusive, rounded to the nearest 0.01.

Table 7 lists the noise reduction values for PLB-36, HSB-36, PLN3, HSN3, PLN-24 and N-24 fluted decks with web perforations or fully perforated.

Table 7: Noise Reduction Coefficients of Acoustical Deck

Profile	Roof Insulation	AC Insulation	Absorption Coefficients						SSA	NRC	RAL Test No.
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz			
PLB-36 AC or HSB-36 AC	Fiberglass	Plain	0.69	1.29	1.11	0.71	0.41	0.22	0.85	0.90	A13-262
	Poly-iso	Plain	0.11	0.23	0.66	0.89	0.38	0.24	0.53	0.55	A13-220
	Roof Board	Plain	0.10	0.33	0.55	0.90	0.42	0.23	0.55	0.55	A14-047
PLN3 AC or HSN3 AC	Fiberglass	Plain	0.69	1.32	1.16	0.93	0.49	0.30	0.94	1.00	A13-265
	Poly-iso	Plain	0.18	0.44	0.86	0.94	0.51	0.36	0.66	0.70	A13-214
	Roof Board	Plain	0.21	0.45	0.77	0.87	0.5	0.32	0.63	0.65	A14-049
PLN-24 AC or N-24 AC	Fiberglass	Plain	0.81	1.27	1.11	0.81	0.47	0.32	0.91	0.90	A13-263
	Poly-iso	Plain	0.20	0.33	0.87	0.84	0.47	0.32	0.63	0.65	A13-226
	Roof Board	Plain	0.27	0.56	0.84	0.88	0.52	0.36	0.69	0.70	A14-048

NOTES:

AC – fluted deck with perforated webs

Roof Insulation – insulation board above the deck

AC Insulation – insulation provided for installation in the deck flutes

Plain – unwrapped fiberglass insulation batts without facing

Table 8 lists the noise reduction values for PLB-36-CD, HSB-36-CD, PLN3-CD, HSN3-CD, PLN-24-CD and N-24-CD cellular acoustical decks.

Table 8: Noise Reduction Coefficients of Acoustical Cellular Deck

Profile	Roof Insulation	AC Insulation	Absorption Coefficients						SSA	NRC	RAL Test No.
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz			
PLB-CD AC or HSB-CD AC	Poly-iso	Plain	0.17	0.60	0.91	1.06	0.76	0.53	0.82	0.85	A13-251
	Poly-iso	Wrapped	0.34	0.53	0.76	0.55	0.40	0.33	0.57	0.55	A13-249
PLN3-CD AC or HSN3-CD AC	Poly-iso	Plain	0.58	0.70	1.16	0.93	0.79	0.63	0.90	0.90	A13-234
	Poly-iso	Wrapped	0.54	0.70	0.92	0.67	0.50	0.33	0.70	0.70	A13-237
PLN-24-CD AC or N-24-CD AC	Poly-iso	Plain	0.84	0.79	1.16	0.98	0.82	0.60	0.96	0.95	A04-143

NOTES:

AC – cellular deck with perforated bands in flat bottom plate

Plain – unwrapped fiberglass insulation batts without facing

Wrapped – encapsulated fiberglass insulation batts

Sound Transmission

Sound transmission between spaces within a structure or between the exterior and interior of a building is a function of the mass of the floor or roof assembly, and thus is not greatly impacted by the choice of steel roof deck itself, with or without acoustical insulation.

Appearance

Acoustical decks are normally exposed to view, therefore it is appropriate to review the product appearance considerations described on page 15.

FACTORY MUTUAL



All Verco 1½" and 3" fluted and cellular roof deck profiles meet Factory Mutual (FM) Approvals as: STEEL ROOF DECKS; Class I fire; Class I-60, I-75, and I-90 Wind Uplift Rating; Live Load Deflections; and Foot Traffic Resistance of Insulation per FM Standard 4451.

Allowable Spans based upon the most conservative considerations of FM Standard 4451 for live load deflection, and Class I-60, I-75, and I-90 Wind Uplift Rating related to deck bending and fastener pull-over are shown in Table 9 for the specified fluted decks, and Table 10 for cellular decks. (Note: Approved spans are measured center-to-center of support members. FM Standard 4451 limits deflection at L/240 for a 200 lb. point load at mid-span. The specific FM Approved above deck components and selected attachments should also be considered.)

FM Global's RoofNav program, available from their website (www.roofnav.fmglobal.com), may be searched using the company name, Verco, for steel deck. Please note that specific assemblies within RoofNav do not list specific steel decks so as not to unnecessarily restrict what can be used. For a more comprehensive and an expanded list of allowable spans based upon FM Standard 4451 for each Wind Uplift Rating Class I-60, I-75 and I-90 for Verco deck with specific FM Approved support connections and connection spacing are also available from the Verco website (www.vercodeck.com).

Table 9: Simplified FM Approved Spans (c-c) for the most conservative considerations of FM Standard 4451 for live load deflection, and Class I-60, I-75, and I-90 Wind Uplift Rating related to deck bending and fastener pull-over for 1½" and 3" Fluted Roof Decks

Gage	No. of Spans	PLB-36 or HSB-36		PLN3 or HSN3		PLN-24 or N-24	
		Plain	Acoustic	Plain	Acoustic	Plain	Acoustic
22	1	6'-0"	5'-11"	12'-1"	10'-10"	12'-3"	9'-0"
	2+	7'-4"	7'-4"	12'-6"	11'-11"	12'-4"	11'-10"
20	1	6'-8"	6'-8"	13'-6"	12'-1"	13'-7"	10'-1"
	2+	8'-1"	8'-0"	14'-1"	13'-6"	14'-0"	13'-4"
18	1	7'-10"	7'-9"	15'-10"	14'-1"	16'-0"	11'-11"
	2+	9'-4"	9'-3"	17'-3"	16'-6"	17'-0"	16'-3"
16	1	8'-10"	8'-9"	17'-11"	16'-0"	18'-3"	13'-4"
	2+	10'-4"	10'-4"	19'-9"	18'-11"	19'-3"	18'-6"

Note: FM Approved Spans are limited to L/240 deflection due to 200 lb point load at mid-span.

Table 10: Simplified FM Approved Spans (c-c) for the most conservative considerations of FM Standard 4451 for live load deflection, and Class I-60, I-75, and I-90 Wind Uplift Rating related to deck bending and fastener pull-over for 1½" and 3" Cellular Roof Decks

Gage	No. of Spans	PLB-36-CD or HSB-36-CD		PLN3-CD or HSN3-CD		PLN-24-CD or N-24-CD	
		Plain	Acoustic	Plain	Acoustic	Plain	Acoustic
20/20	1	9'-3"	9'-1"	17'-9"	17'-8"	15'-3"	13'-0"
	2	10'-10"	10'-9"	15'-0"	14'-11"	15'-1"	15'-1"
	3+	10'-10"	10'-9"	10'-8"	10'-8"	10'-8"	10'-8"
20/18	1	9'-7"	9'-6"	18'-9"	18'-6"	15'-6"	13'-10"
	2	11'-3"	11'-1"	14'-11"	14'-10"	15'-1"	15'-1"
	3+	11'-4"	11'-1"	10'-8"	10'-8"	10'-8"	10'-8"
18/20	1	10'-6"	10'-4"	19'-8"	19'-8"	18'-8"	14'-1"
	2	12'-4"	12'-1"	16'-0"	16'-0"	16'-0"	16'-0"
	3+	12'-4"	12'-1"	10'-8"	10'-8"	10'-8"	10'-8"
18/18	1	10'-11"	10'-9"	21'-2"	20'-9"	18'-11"	15'-7"
	2	12'-11"	12'-9"	16'-0"	16'-0"	16'-0"	16'-0"
	3+	12'-11"	12'-9"	10'-8"	10'-8"	10'-8"	10'-8"
18/16	1	11'-4"	11'-1"	21'-9"	21'-6"	19'-0"	16'-0"
	2	13'-4"	13'-1"	16'-0"	16'-0"	16'-0"	16'-0"
	3+	13'-4"	13'-1"	10'-8"	10'-8"	10'-8"	10'-8"
16/18	1	12'-0"	11'-10"	23'-2"	22'-11"	22'-0"	16'-9"
	2	14'-1"	13'-11"	16'-0"	16'-0"	16'-0"	16'-0"
	3+	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"
16/16	1	12'-6"	12'-3"	24'-0"	23'-9"	22'-3"	17'-8"
	2	14'-7"	14'-6"	16'-0"	16'-0"	16'-0"	16'-0"
	3+	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"	10'-8"

Note: FM Approved Spans are limited to L/240 deflection due to 200 lb point load at mid-span.

Fire-Rated Verco Roof Deck (UL)



Verco roof decks may be used in assemblies which are required to meet hourly fire ratings. Approved hourly fire rated assemblies are a combination of specific proprietary materials as listed in the UL fire resistance directory.

Refer to Table 11 below for a listing of UL fire-rated assemblies utilizing Verco roof deck profiles. Refer to the particular UL assembly being considered for full details of construction, including specific information about fill or fireproofing thicknesses and span limitations.

ROOF DECK FIRE RESISTANCE RATINGS

Table 11 2, 3, 4, 6, 7

RESTRAINED ASSEMBLY RATING (hr)	UL #	FRAME	SYSTEM	DECK ¹					PROTECTED ⁵
				B	N3	N24	W2	VERCOR	
1-1½	P225	Beam/Joist	Deck/Board	✓	✓	✓			AC Ceiling
1-1½	P230	Beam/Joist	Deck/Board	✓					AC Ceiling
1-3	P518	CFS	Deck/Board	✓				✓	Gyp Board
¾-2	P701	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P711	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P717	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-3	P719	Beam/Joist	Deck/Board	✓	✓	✓		✓	SFRM
1-3	P723	Beam/Joist	Deck/Board	✓	✓	✓		✓	SFRM
¾-2	P726	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-3	P732	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
¾-2	P734	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P739	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P740	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P741	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P742	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P743	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
¾-2	P748	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-3	P750	Beam/Joist	Deck/Board	✓	✓	✓	✓		SFRM
1-3	P751	Beam/Joist	Deck/Board	✓	✓	✓	✓		SFRM
1-2	P819	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P829	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P837	Beam/Joist	Deck/Board	✓	✓	✓			SFRM
1-2	P838	Beam/Joist	Deck/Board	✓	✓	✓			SFRM

(continued on next page)

Table 11 (continued)

RESTRAINED ASSEMBLY RATING (hr)	UL #	FRAME	SYSTEM	DECK ¹					PROTECTED ⁵
				B	N3	N24	W2	VERCOR	
1-2	P907	Beam/Joist	Insulating Concrete					✓	No
1-2	P908	Beam/Joist	Insulating Concrete					✓	No
1-2	P920	Beam/Joist	Insulating Concrete	✓	✓	✓	✓		No
1-2	P921	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P922	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P923	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P925	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P926	Beam/Joist	Insulating Concrete					✓	No
1-2	P927	Beam/Joist	Insulating Concrete					✓	No
1-2	P928	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P929	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P930	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P936	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P937	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P938	Beam/Joist	Insulating Concrete					✓	No
1-2	P939	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P940	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P943	Beam/Joist	Insulating Concrete					✓	No
1-2	P944	Beam/Joist	Insulating Concrete	✓	✓	✓	✓		No
1-2	P945	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No
1-2	P947	Beam/Joist	Insulating Concrete	✓	✓	✓	✓	✓	No

1. "B" = PLB and HSB, PLB and B FORMLOK
 "N24" = PLN and N, PLN and N FORMLOK
 "N3" = PLN3 and HSN3, PLN3 and N3 FORMLOK
 "W2" = PLW2 and W2 FORMLOK
 "VERCOR" = 1^{5/16}" Deep VERCOR

2. Refer to UL Fire Resistance Directory, Evaluation Reports for Verco Steel Deck, or municipality requirements for full details of construction including usage limitations and mesh requirements.
3. Also see various "unclassified" listings that may apply to Verco decks based on deck profile.
4. Code-compliant Verco gray primer paint is formulated for compatibility with spray-applied fireproofing. Verco steel decks in the protected assemblies listed above may be galvanized or painted, excluding assemblies P230, P726 and P748, which shall be galvanized only. Verco steel decks in the unprotected assemblies listed above shall be galvanized only. Galvanized decks with primer painted underside are not approved for use in fire-rated systems.
5. Protected assemblies have spray-applied fireproofing applied directly to the underside of the deck. Unprotected assemblies do not require spray-applied fireproofing applied to the underside of the deck.
 "AC Ceiling = Fire Rated Acoustical Ceiling system."
 "Gyp Board = UL Classified Gypsum Board."
 "SFRM = Spray-Applied Fire Resistive Materials."
6. Verco Decking, Inc. assumes no responsibility for adhesion of any spray-applied fireproofing material, nor for any treatment, cleaning, or surface preparation of the deck required for adhesion of fire protection material.
7. Sidelap fastening with the PunchLok® II Tool, button punches, or seam welds is required for fluted decks, except for P225, P518, P717, P719, P723, P732, P739, P741, P743, P750, P751, P819, P829, and P929, which also allow screws.

Metric (SI) Conversions

	US	Multiplied by	= Metric		US	Multiplied by	= Metric
Length	in.	x	25.4 = mm	Mass	oz	x	28.34952 = g
	in.	x	2.54 = cm		lb	x	0.4535924 = kg
	ft	x	304.8 = mm		plf	x	1.488164 = kg/m
	ft	x	30.48 = cm		psf	x	4.882428 = kg/m ²
	ft	x	0.3048 = m		pcf	x	16.01846 = kg/m ³
Area	in. ²	x	645.16 = mm ²	Force	lb	x	4.448222 = N
	in. ²	x	6.4516 = cm ²		plf	x	14.5939 = N/m
	ft ²	x	0.09290304 = m ²		psi	x	6.894757 = kN/m ²
Volume	in. ³	x	16,387.06 = mm ³		psf	x	47.88026 = N/m ²
	in. ³	x	16.38706 = cm ³		in.-lb (in.-kips)	x	0.1129848 = Nm (kNm)
	ft ³	x	0.02831685 = m ³		in.-lb/ft (in.-kips/ft)	x	0.3706850 = Nm/m (kNm/m)
Moment of Inertia	in. ⁴	x	416231.4 = mm ⁴	Flexibility	in./lb x 10 ⁶	x	5.71015 = mm/N x 10 ⁶
	in. ⁴	x	41.62314 = cm ⁴		Galvanizing	oz/ft ²	x 305.15169 = g/m ²
	in. ⁴ /ft	x	1365588 = mm ⁴ /m	Paint	mil	x	0.0254 = mm
	in. ⁴ /ft	x	136.5588 = cm ⁴ /m				
Section Modulus	in. ³ /ft	x	53763 = mm ³ /m				
	in. ³ /ft	x	53.763 = cm ³ /m				

Metric Definitions:

"m" - meter
"cm" - centimeter
"mm" – millimeter
"g" – gram

"kg" - kilogram
"N" – Newton
"Pa" – Pascal

Note: "Metric" is the common term used to refer to measurements denoted by the formal term "Standard International" or "SI."

Conversion factors and notation as per IEEE/ASTM SI 10-2010 and common mathematical practices.

The PunchLok II tool and the method of using it are the subject of U.S. Patent No. 6,212,932, U.S. Patent No. 6,397,469 and/or U.S. Patent No. 8,667,656.

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 - Arc spot welds 10, 11
 - Cellular Deck tables
 - (q and F) 137–142
 - Fillet welds 13
 - HSB®-36 tables (q and F) 67–70
 - HSN3™ tables (q and F) 98
 - N-24 tables (q and F) 122
 - PLB™-36 tables (q and F) 30–33
 - PLN™-24 tables (q and F) 108
 - PLN3™ tables (q and F) 84
 - ShearTranz® II-42 System 11
 - Top seam welds 10, 11, 13
- Wind uplift 7–8

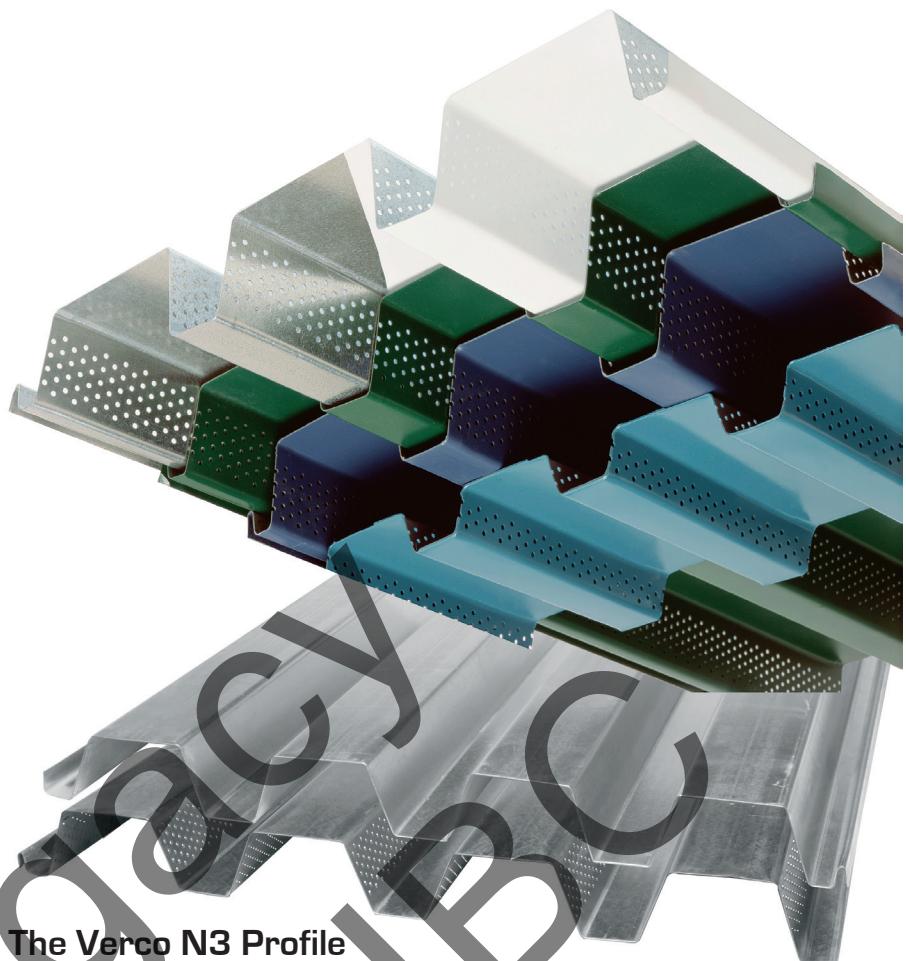
Verco can supply factory applied primer paint in standard gray, white, or custom colors over galvanized or cold rolled steel to meet your project requirements.

Depending on the circumstances, use of Verco factory primer painted deck can:

- Eliminate field painting
- Provide an excellent primer base for field finish paint

Use of the PunchLok II System compliments the benefits of the factory primer painted deck and increases the cost savings.

By offering a variety of both attachment and finish options, Verco provides the flexibility to combine finish and attachment options to minimize construction time and maximize project cost savings.



The Verco N3 Profile

Verco now offers two 3" deep roof deck options, N3 and N-24. The Verco N3 roof and floor deck profiles have a 32" cover width. This additional cover width results in fewer sheets to spread and less sidelaps to fasten. The N3 profile offers superb shear strength with fewer support and sidelap fasteners to install.



VERCO SIDELAP CONNECTION 2 (VSC2)

Building on the success of the industry changing PunchLok System, the Verco PunchLok II System provides an even stronger sidelap connection with the same benefits of the original PunchLok System including:

- Simple visual inspection, no gauges required
- Consistency from first punch to last punch of the day
- Efficient and easy to use
- Allows the use of Verco's factory applied custom color primer coating without weld damage

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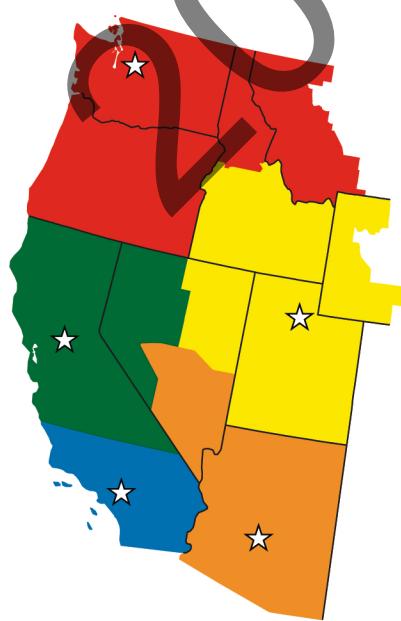
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PunchLok® II
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