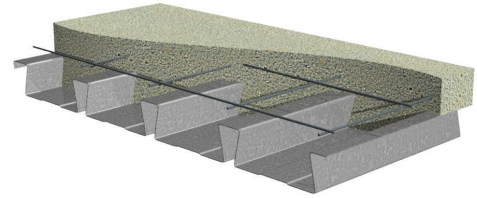
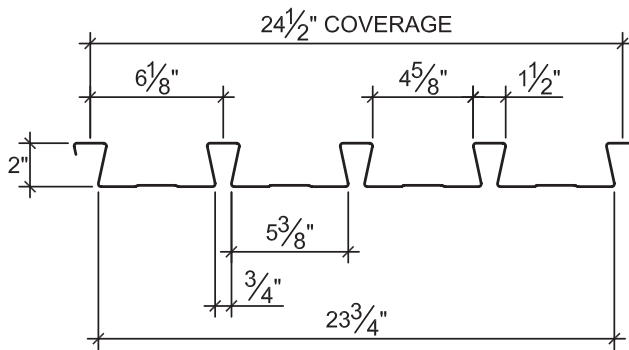


## 2.0D FORMLOK DOVETAIL DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish
- UL Listed



### Nominal Dimensions



### Section Properties

Deck Gage	Deck Weight $w_{dd}$ (psf)	Base Metal Thickness $t$ (in.)	Yield Strength $F_y$ (ksi)	Effective Moment of Inertia at Service Load $I_d = (2le+lg)/3$		Effective Section Modulus at $F_y = 40$ ksi		Allowable Moment		Vertical Web Shear $V_n/\Omega$ (lb/ft)
				$I_{d+}$ (in <sup>4</sup> /ft)	$I_{d-}$ (in <sup>4</sup> /ft)	$S_{e+}$ (in <sup>3</sup> /ft)	$S_{e-}$ (in <sup>3</sup> /ft)	$M_{n+}/\Omega$ (lb-ft/ft)	$M_{n-}/\Omega$ (lb-ft/ft)	
22	2.1	0.0295	40	0.387	0.359	0.272	0.272	543	543	2896
20	2.6	0.0358	40	0.472	0.447	0.343	0.334	684	666	3498
18	3.4	0.0474	40	0.626	0.612	0.463	0.450	924	898	4584
16	4.3	0.0598	40	0.792	0.791	0.587	0.576	1172	1150	5723

### Allowable Reactions at Supports Based on Web Crippling, $R_n/\Omega$ (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	1 1/2"	2"	3"	4"	3"	5"	1 1/2"	2"	3"	4"	3"	5"
22	653	717	826	917	1281	1516	702	757	848	925	1567	1877
20	931	1020	1170	1296	1823	2146	1058	1136	1266	1376	2258	2690
18	1556	1697	1933	2132	3036	3544	1893	2023	2239	2422	3813	4507
16	2378	2582	2926	3215	4629	5360	3043	3237	3563	3837	5866	6880

### Standard Features

- ASTM A653 SS GR 40 Min. with G90
- Standard lengths – 6'-0" to 42'-0"
- Tables conform to ANSI/SDI C-2017
- IAPMO UES ER-423 and UL Listed

### Optional Features

- Inquire regarding cost and lead times for:
  - 19 gage
  - Short cuts < 6'-0"
  - Alternative metallic and painted finishes

# 2.0D FORMLOK® DOVETAIL DECK-SLAB NORMAL WEIGHT CONCRETE (145 pcf)

ASD

Slab Depth		Maximum Unshored Spans			Composite Deck-Slab Properties				
		Deck Gage	Maximum Unshored Construction Clear Span			Concrete + Deck (psf)	Deflection $I_d = (I_{cr} + I_u)/2$ (in <sup>4</sup> /ft)	Moment $M_{no}/\Omega$ (kip-ft/ft)	Shear $V_{no}/\Omega$ (kip/ft)
Total	Topping		1	2	3				
4"	2"	22	6'-10"	7'-11"	8'-1"	46.0	5.75	3.44	3.97
		20	7'-11"	8'-9"	9'-0"	46.5	6.16	4.09	3.97
		18	9'-6"	10'-1"	10'-5"	47.3	6.85	5.22	3.97
		16	10'-11"	11'-4"	11'-9"	48.2	7.50	6.38	3.97
5¼"	¾"	22	6'-3"	7'-2"	7'-4"	61.1	12.19	4.44	5.21
		20	7'-2"	7'-11"	8'-2"	61.6	13.03	5.29	5.21
		18	8'-7"	9'-2"	9'-5"	62.4	14.42	6.79	5.21
		16	9'-10"	10'-4"	10'-8"	63.3	15.75	8.32	5.21
5½"	¾"	22	6'-1"	7'-0"	7'-2"	64.1	13.87	4.64	5.38
		20	7'-1"	7'-9"	8'-0"	64.6	14.81	5.53	5.46
		18	8'-5"	9'-0"	9'-3"	65.4	16.39	7.11	5.46
		16	9'-8"	10'-1"	10'-6"	66.3	17.90	8.73	5.46

**Note:**

1. Maximum unshored spans do not consider web-crippling. Required bearing should be determined based on specific span conditions.

Total Slab Depth		Deck Gage	Superimposed Allowable Load, $W_n/\Omega$ , Limited by L/360 (psf)								NWC (145 pcf), $f'_c = 3000$ psi
			Span (ft.-in.)								
			10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	18'-0"	20'-0"
4"	22		229	181	145	114	91	74	61	39	22
	20		269	202	155	122	98	79	65	46	33
	18		299	224	173	136	109	88	73	51	37
	16		327	246	189	149	119	97	80	56	40
5¼"	22		293	232	185	148	119	96	77	48	27
	20		361	288	232	188	154	126	103	68	44
	18		480	386	314	258	214	178	149	105	73
	16		602	487	398	313	250	203	168	118	86
5½"	22		307	242	193	155	125	100	80	50	28
	20		378	301	242	197	161	132	108	71	46
	18		503	404	329	271	224	187	156	110	76
	16		631	510	418	346	285	231	190	134	97

**Notes:**

1. For high loads long term concrete creep should be considered.
2. See Composite Deck-Slab Strength Web Based Solutions for alternate slabs or LRFD design.

# 2.0D FORMLOK® DOVETAIL DECK-SLAB

## LIGHT WEIGHT CONCRETE (110 pcf)

ASD

Slab Depth		Maximum Unshored Spans			Composite Deck-Slab Properties				
		Deck Gage	Maximum Unshored Construction Clear Span			Concrete + Deck (psf)	Deflection $I_d = (I_{cr} + I_u)/2$ (in <sup>4</sup> /ft)	Moment $M_{no}/\Omega$ (kip-ft/ft)	Shear $V_{no}/\Omega$ (kip/ft)
Total	Topping		1	2	3				
4"	2"	22	7'-6"	8'-8"	8'-10"	35.4	4.43	3.30	3.97
		20	8'-8"	9'-7"	9'-11"	35.9	4.79	3.90	3.97
		18	10'-6"	11'-0"	11'-5"	36.7	5.36	4.96	3.97
		16	11'-10"	12'-5"	12'-10"	37.6	5.89	6.02	3.97
4½"	2½"	22	7'-2"	8'-4"	8'-6"	40.0	6.11	3.68	4.32
		20	8'-4"	9'-3"	9'-6"	40.5	6.59	4.36	4.47
		18	10'-1"	10'-8"	11'-0"	41.3	7.36	5.55	4.47
		16	11'-6"	11'-11"	12'-4"	42.2	8.09	6.76	4.47
5¼"	3¼"	22	6'-10"	7'-11"	8'-1"	46.9	9.33	4.27	4.60
		20	7'-11"	8'-9"	9'-0"	47.4	10.04	5.08	5.15
		18	9'-6"	10'-1"	10'-5"	48.2	11.21	6.48	5.21
		16	10'-11"	11'-4"	11'-9"	49.1	12.30	7.91	5.21

**Note:**

- Maximum unshored spans do not consider web-crippling. Required bearing should be determined based on specific span conditions.

### Superimposed Allowable Load, $W_n/\Omega$ , Limited by L/360 (psf)

LWC (110 pcf),  $f'_c = 3000$  psi

Total Slab Depth	Deck Gage	Span (ft-in.)								
		10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	18'-0"	20'-0"
4"	22	193	145	112	88	70	57	47	33	24
	20	209	157	121	95	76	61	51	35	26
	18	234	175	135	106	85	69	57	40	29
	16	257	193	149	117	93	76	62	44	32
4½"	22	254	200	154	121	97	79	65	45	33
	20	287	216	166	131	104	85	70	49	35
	18	321	241	186	146	117	95	78	55	40
	16	353	265	204	160	128	104	86	60	44
5¼"	22	294	235	190	155	127	105	86	58	38
	20	358	288	234	192	159	130	107	75	54
	18	470	367	283	222	178	145	119	83	61
	16	537	403	311	244	195	159	131	92	67

**Notes:**

- For high loads long term concrete creep should be considered.
- See Composite Deck-Slab Strength Web Based Solutions for alternate slabs or LRFD design.

# 2.0D FORMLOK® DOVETAIL DECK-SLAB

ASD

## 2.0D FormLok Deck-Slab Information

Total Slab Depth (in.)	Theoretical Concrete Volume (yd <sup>3</sup> /100 ft <sup>2</sup> )	Min. A <sub>s</sub> for T&S (in. <sup>2</sup> )	Recommended Reinforcing for Temperature and Shrinkage				
			WWR (OR)	Bekaert Dramix® Steel Fiber Alternates to WWR (pcy)			
				3D 65/60BG	3D 80/60BG	4D 65/60BG	4D 80/60BG or 5D 65/60BG
<b>Normal Weight Concrete (145 pcf)</b>							
4	1.12	0.028	6x6-W1.4xW1.4	27	22	33	34
4½	1.28	0.028	6x6-W1.4xW1.4	22	14	33	34
4¾	1.35	0.028	6x6-W1.4xW1.4	20	14	33	34
5	1.43	0.028	6x6-W1.4xW1.4	19	14	33	34
5¼	1.51	0.029	6x6-W2.1xW2.1	18	14	33	34
5½	1.58	0.032	6x6-W2.1xW2.1	18	14	33	34
6	1.74	0.036	6x6-W2.1xW2.1	18	14	33	34
6¾	1.97	0.043	6x6-W2.9xW2.9	18	14	33	34
<b>Light Weight Concrete (110 pcf)</b>							
4	1.12	0.028	6x6-W1.4xW1.4	N/A	33	33	34
4½	1.28	0.028	6x6-W1.4xW1.4	30	27	33	34
5	1.43	0.028	6x6-W1.4xW1.4	23	24	33	34
5¼	1.51	0.029	6x6-W2.1xW2.1	22	23	33	34
5½	1.58	0.032	6x6-W2.1xW2.1	22	23	33	34
6	1.74	0.036	6x6-W2.1xW2.1	22	23	33	34

### Notes:

1. Recommended WWR reinforcing is for minimum temperature and shrinkage per SDI-C. Larger WWR may be required to comply with UL Fire Resistant Designs.
2. FRC reinforcement is based on IAPMO UES ER-497 and ER-465.
3. Dramix® 4D 65/60BG, 4D 80/60BG and 5D 65/60BG should only be used when both required for diaphragm reinforcement and with minimum  $f'_c = 4000$  psi.
4. Dramix® fibers may be used in UL or ULC fire rated assemblies in lieu of WWR. See UL file R13907 for additional information.
5. For information on Bekaert Dramix® fibers contact 770-514-2295 or [infobuilding@bekaert.com](mailto:infobuilding@bekaert.com).
6. DRAMIX is a registered trademark of Bekaert.

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