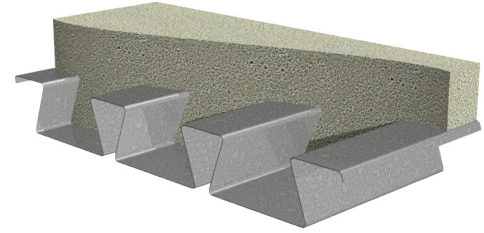


3.5DF-24 FL FORMLOK® DOVETAIL DECK GRADE 50 STEEL

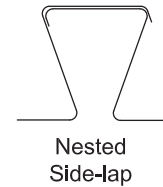
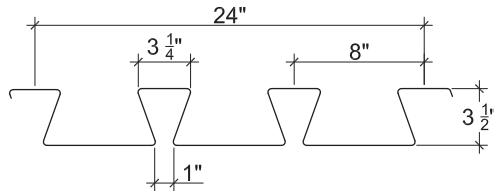
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3.5DF-24 FL DOVETAIL DECK

- 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 $I_d = (2I_e + I_g)/3$		Effective Section Modulus at $F_y = 50$ ksi		Factored Moment		Vertical Web Shear ϕV_n (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	ϕM_{n+} (lb-ft/ft)	ϕM_{n-} (lb-ft/ft)	
18	4.5	0.0478	50	2.688	2.496	1.055	0.935	3957	3507	8721
16	5.6	0.0598	50	3.430	3.256	1.417	1.289	5314	4835	12520

Factored Reactions at Supports Based on Web Crippling, ϕR_n (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading					Two-Flange Loading						
	End Bearing		Interior Bearing			End Bearing		Interior Bearing				
	2"	3"	4"	5"	4"	6"	2"	3"	4"	5"	4"	6"
18	1992	2269	2502	2708	3850	4376	2006	2220	2400	2559	4650	5337
16	3015	3416	3754	4051	5794	6552	3232	3557	3831	4072	7102	8110

Standard Features

- ASTM A653/A653M SS GR50 Min., with Z275/G90 galvanized or ZF75/A25 galvanized
- Standard lengths – 6'-0" to 40'-0"
- UL Listed
- Cold-formed steel deck conforms to AISI S100-16 and meets the guidelines of CSSBI 12M-2024.

Optional Features

- Inquire regarding cost and lead times for:
 - 17 gage
 - Alternative metallic and painted finishes

3.5DF-24 FL FORMLOK® DOVETAIL DECK NORMAL WEIGHT CONCRETE (145 pcf)

Imperial
LSD

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 ⁴ /ft)	Moment ϕM_{no} (kip-ft/ft)	Shear ϕV_{no} (kip/ft)
Total	Topping		1	2	3				
5½"	2"	18	14'-4"	15'-3"	15'-9"	59.7	15.73	14.76	6.01
		16	15'-2"	17'-10"	17'-7"	60.8	17.27	17.29	6.01
5¾"	2¼"	18	14'-2"	14'-11"	15'-5"	62.7	17.72	15.33	6.28
		16	15'-0"	17'-6"	17'-4"	63.8	19.36	18.61	6.28
6"	2½"	18	14'-0"	14'-8"	15'-2"	65.8	19.88	15.92	6.56
		16	14'-10"	17'-2"	17'-2"	66.9	21.69	19.32	6.56

Notes:

1. Maximum unshored spans are based on 20.9 psf uniform construction live load and 151 plf concentrated construction live load.
2. Maximum unshored spans do not consider web-crippling. Required bearing should be determined based on specific span conditions.

Superimposed Factored Load, ϕW_n , / Deflection at L/360 (psf) NWC (145 pcf), $f'_c = 3000$ psi

Total Slab Depth	Deck Gage	Span (ft-in.)							
		15'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	23'-0"	25'-0"
5½"	18	449/203	333/139	289/117	252/100	220/85	193/74	148/56	114/43
	16	538/223	402/153	350/129	307/110	269/94	237/81	185/62	145/48
5¾"	18	466/229	345/157	300/132	261/112	228/96	199/83	153/63	117/49
	16	581/250	435/172	379/145	332/123	292/105	257/91	201/69	158/54
6"	18	483/257	358/176	310/149	270/126	236/108	206/93	158/71	121/55
	16	603/280	451/192	393/162	344/138	302/118	266/102	208/77	163/60

Notes:

1. The composite deck-slab design is based on tested performance and engineering analysis in accordance Section 7.6.1 of CSSBI 12M-2024.
2. For high loads long term concrete creep should be considered.
3. Use Composite Deck-Slab Strength Web Based Solutions for alternate slabs.