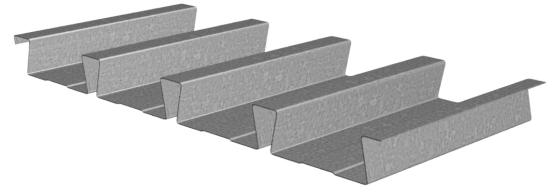


# 2.0D DOVETAIL ROOF DECK GRADE 40 STEEL

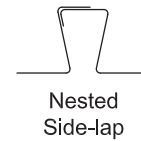
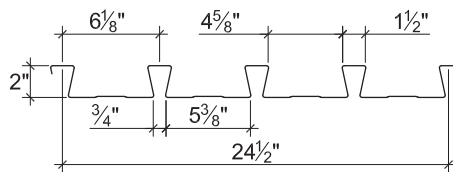
LRFD

## 2.0D DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish
- FM 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 $I_d = (2I_e + I_w)/3$		Effective Section Modulus at $F_y = 40$ ksi		Design Moment		Vertical Web Shear $\phi V_n$ (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)	$\phi M_{n+}$ (lb-ft/ft)	$\phi M_{n-}$ (lb-ft/ft)	
22	2.1	0.0295	40	0.387	0.359	0.272	0.272	816	816	4401
20	2.6	0.0358	40	0.472	0.447	0.343	0.334	1029	1002	5316
18	3.4	0.0474	40	0.626	0.612	0.463	0.450	1389	1350	6968
16	4.3	0.0598	40	0.792	0.791	0.587	0.576	1761	1728	8698

## Design Reactions at Supports Based on Web Crippling, $\phi R_n$ (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	999	1098	1264	1403	1905	2255	1075	1158	1297	1415	2331	2792
20	1425	1561	1790	1982	2712	3192	1618	1737	1937	2105	3358	4001
18	2381	2596	2957	3262	4516	5272	2897	3094	3426	3705	5672	6705
16	3638	3951	4476	4919	6885	7973	4656	4953	5451	5871	8726	10235

## Standard Features

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

## Optional Features

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

# 2.0D DOVETAIL ROOF DECK GRADE 40 STEEL

LRFD

## Inward Uniform Design Loads, LRFD (psf)

Deck Gage	Spans	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"
22	Single	$\phi W_n$	408	261	181	133	102	81	65	54	45	39	33
		L/240	396	203	117	74	50	35	25	19	15	12	9
	Double	$\phi W_n$	398	257	179	132	101	80	65	54	45	39	33
		L/240	886	454	262	165	111	78	57	43	33	26	21
	Triple	$\phi W_n$	492	319	223	165	126	100	81	67	56	48	42
		L/240	694	355	206	130	87	61	44	33	26	20	16
20	Single	$\phi W_n$	514	329	229	168	129	102	82	68	57	49	42
		L/240	483	248	143	90	60	42	31	23	18	14	11
	Double	$\phi W_n$	488	315	220	162	124	98	80	66	55	47	41
		L/240	1103	565	327	206	138	97	71	53	41	32	26
	Triple	$\phi W_n$	602	391	273	202	155	123	100	82	69	59	51
		L/240	864	443	256	161	108	76	55	42	32	25	20
18	Single	$\phi W_n$	694	444	309	227	174	137	111	92	77	66	57
		L/240	641	328	190	120	80	56	41	31	24	19	15
	Double	$\phi W_n$	656	424	296	218	168	133	107	89	75	64	55
		L/240	1510	773	447	282	189	133	97	73	56	44	35
	Triple	$\phi W_n$	810	526	368	272	209	165	134	111	93	80	69
		L/240	1184	606	351	221	148	104	76	57	44	34	28
16	Single	$\phi W_n$	881	564	391	288	220	174	141	116	98	83	72
		L/240	811	415	240	151	101	71	52	39	30	24	19
	Double	$\phi W_n$	839	542	379	279	214	170	138	114	96	82	70
		L/240	1952	999	578	364	244	171	125	94	72	57	46
	Triple	$\phi W_n$	1035	672	471	348	267	211	172	142	119	102	88
		L/240	1530	783	453	285	191	134	98	74	57	45	36

**Note:**

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.

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