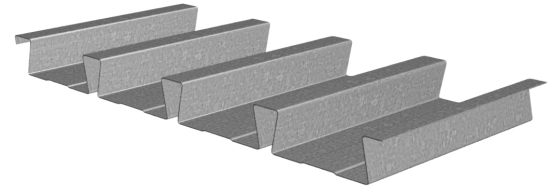


# 2.0D DOVETAIL ROOF DECK GRADE 40 STEEL

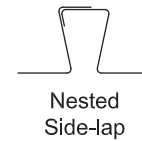
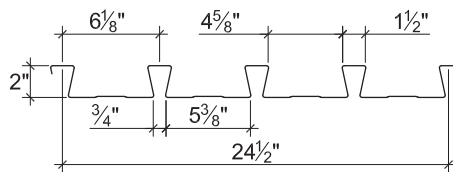
ASD

## 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 $I_d = (2I_e + I_o)/3$		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 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

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## Inward Uniform Allowable Loads, ASD (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	$W_n / \Omega$	272	174	121	89	68	54	43	36	30	26	22
		L/240	---	---	117	74	50	35	25	19	15	12	9
	Double	$W_n / \Omega$	264	171	119	88	67	53	43	36	30	26	22
		L/240	---	---	---	---	---	---	---	---	---	---	21
	Triple	$W_n / \Omega$	327	212	148	109	84	67	54	45	38	32	28
		L/240	---	---	---	---	---	61	44	33	26	20	16
20	Single	$W_n / \Omega$	342	219	152	112	86	68	55	45	38	32	28
		L/240	---	---	143	90	60	42	31	23	18	14	11
	Double	$W_n / \Omega$	324	209	146	108	83	65	53	44	37	31	27
		L/240	---	---	---	---	---	---	---	---	---	---	26
	Triple	$W_n / \Omega$	401	260	182	134	103	82	66	55	46	39	34
		L/240	---	---	---	---	---	76	55	42	32	25	20
18	Single	$W_n / \Omega$	462	296	205	151	115	91	74	61	51	44	38
		L/240	---	---	190	120	80	56	41	31	24	19	15
	Double	$W_n / \Omega$	436	282	197	145	111	88	72	59	50	42	37
		L/240	---	---	---	---	---	---	---	---	---	---	35
	Triple	$W_n / \Omega$	539	350	245	181	139	110	89	74	62	53	46
		L/240	---	---	---	---	---	104	76	57	44	34	28
16	Single	$W_n / \Omega$	586	375	260	191	146	116	94	77	65	55	48
		L/240	---	---	240	151	101	71	52	39	30	24	19
	Double	$W_n / \Omega$	558	361	252	186	143	113	92	76	64	54	47
		L/240	---	---	---	---	---	---	---	---	---	---	46
	Triple	$W_n / \Omega$	688	447	313	231	178	141	114	94	79	68	58
		L/240	---	---	---	---	---	134	98	74	57	45	36

### Notes:

1. Table does not account for web crippling. Required bearing should be determined based on specific span conditions.
2. The symbol “---” indicates that the uniform allowable load based on deflection exceeds the allowable load based on stress.

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