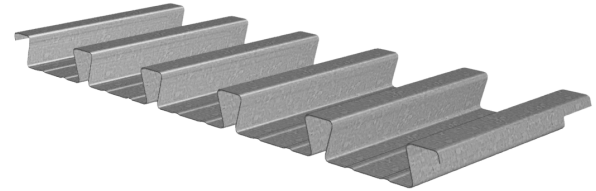


2.0DS-30 DOVETAIL ROOF DECK GRADE 50 STEEL

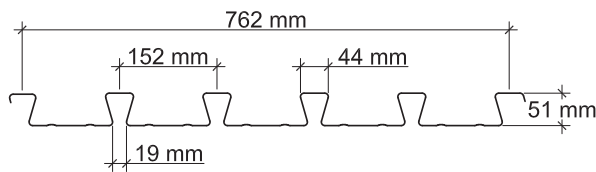
Metric
LSD

2.0DS-30 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} (kg/m ²)	Base Metal Thickness t (mm)	Yield Strength F_y (MPa)	Effective Moment of Inertia at Service Load* $I_d = (2I_e + I_g)/3$		Effective Section Modulus* at $F_y = 345$ MPa		Factored Moment*		Vertical Web Shear* ϕV_n (kN)
				I_{d+} (mm ⁴ ×10 ³)	I_{d-} (mm ⁴ ×10 ³)	S_{e+} (mm ³ ×10 ³)	S_{e-} (mm ³ ×10 ³)	ϕM_{n+} (N-m)	ϕM_{n-} (N-m)	
22	10.74	0.759	345	587.2	521.7	16.18	16.45	5025	5098	62
20	13.18	0.912	345	710.1	645.9	20.32	20.05	6301	6218	74
18	17.58	1.214	345	949.1	902.7	28.33	27.37	8794	8485	98
16	21.97	1.519	345	1190.8	1168.9	35.86	34.84	11125	10811	121

*Physical Properties per meter (m) of width

Factored Reactions at Supports Based on Web Crippling, ϕR_n (kN/m)

Deck Gage	Bearing Length of Webs (mm)											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	40	50	75	100	75	125	40	50	75	100	75	125
22	16.8	18.1	20.8	23.1	29.7	34.4	16.0	16.9	19.0	20.7	36.3	42.5
20	23.5	25.2	28.9	32.0	41.7	48.0	23.7	25.0	27.9	30.3	51.6	60.0
18	39.7	42.4	48.3	53.2	70.7	80.5	43.2	45.4	50.3	54.3	88.8	102.1
16	59.6	63.6	72.0	79.1	106.6	120.3	68.4	71.8	79.0	85.1	135.1	154.0

Standard Features

- ASTM A653/A653M SS GR50 Min., with Z275/G90 galvanized
- Standard lengths – 1.8 m to 12.2 m
- UL and FM Listed
- Cold-formed steel deck conforms to CAN/CSA S136-16 and meets the guidelines of CSSBI 10M-2018.

Optional Features

- Inquire regarding cost and lead times for:
 - 21, 19, or 17 gage
 - Alternative metallic and painted finishes
- Perforated Acoustical Versions

2.0DS-30 DOVETAIL ROOF DECK GRADE 50 STEEL

Metric
LSD

Inward Uniform Factored Loads, LSD (kPa)

Deck Gage	Spans	Criteria	Span (mm)										
			1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200
22	Single	ϕW_n	28.0	17.9	12.4	9.1	7.0	5.5	4.5	3.7	3.1	2.6	2.3
		L/240	22.2	11.4	6.6	4.1	2.8	1.9	1.4	1.1	0.8	0.6	0.5
	Double	ϕW_n	26.9	17.5	12.3	9.1	7.0	5.5	4.5	3.7	3.1	2.7	2.3
		L/240	47.4	24.3	14.1	8.9	5.9	4.2	3.0	2.3	1.8	1.4	1.1
	Triple	ϕW_n	32.8	21.6	15.2	11.3	8.7	6.9	5.6	4.6	3.9	3.3	2.9
		L/240	37.2	19.0	11.0	6.9	4.6	3.3	2.4	1.8	1.4	1.1	0.9
20	Single	ϕW_n	35.1	22.5	15.6	11.5	8.8	6.9	5.6	4.6	3.9	3.3	2.9
		L/240	26.8	13.7	7.9	5.0	3.4	2.4	1.7	1.3	1.0	0.8	0.6
	Double	ϕW_n	32.7	21.3	15.0	11.1	8.5	6.8	5.5	4.5	3.8	3.3	2.8
		L/240	58.8	30.1	17.4	11.0	7.3	5.2	3.8	2.8	2.2	1.7	1.4
	Triple	ϕW_n	39.9	26.3	18.5	13.7	10.6	8.4	6.8	5.7	4.8	4.1	3.5
		L/240	46.0	23.6	13.6	8.6	5.8	4.0	2.9	2.2	1.7	1.3	1.1
18	Single	ϕW_n	49.0	31.3	21.8	16.0	12.2	9.7	7.8	6.5	5.4	4.6	4.0
		L/240	35.8	18.3	10.6	6.7	4.5	3.1	2.3	1.7	1.3	1.0	0.8
	Double	ϕW_n	44.4	29.0	20.4	15.1	11.6	9.2	7.5	6.2	5.2	4.4	3.8
		L/240	82.1	42.0	24.3	15.3	10.3	7.2	5.3	3.9	3.0	2.4	1.9
	Triple	ϕW_n	54.2	35.7	25.2	18.7	14.4	11.5	9.3	7.7	6.5	5.5	4.8
		L/240	64.4	32.9	19.1	12.0	8.0	5.6	4.1	3.1	2.4	1.9	1.5
16	Single	ϕW_n	62.0	39.7	27.5	20.2	15.5	12.2	9.9	8.2	6.9	5.9	5.1
		L/240	45.0	23.0	13.3	8.4	5.6	3.9	2.9	2.2	1.7	1.3	1.0
	Double	ϕW_n	56.4	36.9	26.0	19.2	14.8	11.7	9.5	7.9	6.6	5.7	4.9
		L/240	106.3	54.4	31.5	19.8	13.3	9.3	6.8	5.1	3.9	3.1	2.5
	Triple	ϕW_n	68.7	45.3	32.0	23.8	18.4	14.6	11.9	9.8	8.3	7.1	6.1
		L/240	83.3	42.7	24.7	15.5	10.4	7.3	5.3	4.0	3.1	2.4	1.9

Note:

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