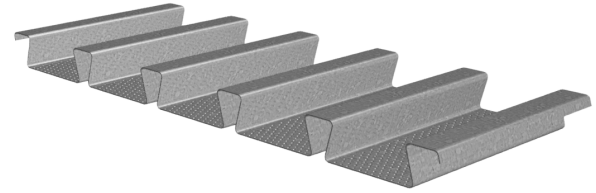


# 2.0DF-30 AC ACOUSTICAL DOVETAIL ROOF DECK GRADE 50 STEEL

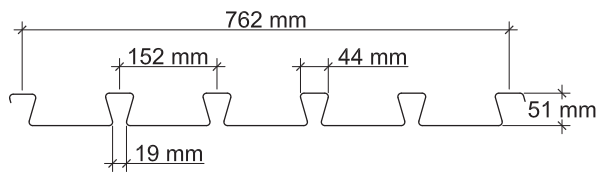
Metric  
LSD

## 2.0DF-30 AC 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 <sup>2</sup> )	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* $\phi V_n$ (kN)
				$I_{d+}$ (mm <sup>4</sup> ×10 <sup>3</sup> )	$I_{d-}$ (mm <sup>4</sup> ×10 <sup>3</sup> )	$S_{e+}$ (mm <sup>3</sup> ×10 <sup>3</sup> )	$S_{e-}$ (mm <sup>3</sup> ×10 <sup>3</sup> )	$\phi M_{n+}$ (N-m)	$\phi M_{n-}$ (N-m)	
20	12.21	0.912	345	613.1	588.6	18.98	16.45	5889	5104	74
18	16.60	1.214	345	818.0	819.4	25.97	25.22	8063	7819	98
16	20.51	1.519	345	1026.9	1057.0	32.69	33.01	10145	10245	121

\*Physical Properties per meter (m) of width

## Factored Reactions at Supports Based on Web Crippling, $\phi R_n$ (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
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
- 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:
  - 19 or 17 gage
  - Alternative metallic and painted finishes

# 2.0DF-30 AC ACOUSTICAL 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
20	Single	$\phi W_n$	32.8	21.0	14.6	10.7	8.2	6.5	5.2	4.3	3.6	3.1	2.7
		L/240	23.2	11.9	6.9	4.3	2.9	2.0	1.5	1.1	0.9	0.7	0.5
	Double	$\phi W_n$	27.3	17.7	12.4	9.2	7.0	5.6	4.5	3.7	3.1	2.7	2.3
		L/240	53.5	27.4	15.9	10.0	6.7	4.7	3.4	2.6	2.0	1.6	1.2
	Triple	$\phi W_n$	33.6	21.9	15.4	11.4	8.8	6.9	5.6	4.7	3.9	3.3	2.9
		L/240	42.0	21.5	12.4	7.8	5.2	3.7	2.7	2.0	1.6	1.2	1.0
18	Single	$\phi W_n$	44.9	28.7	20.0	14.7	11.2	8.9	7.2	5.9	5.0	4.3	3.7
		L/240	30.9	15.8	9.2	5.8	3.9	2.7	2.0	1.5	1.1	0.9	0.7
	Double	$\phi W_n$	41.3	26.9	18.9	14.0	10.7	8.5	6.9	5.7	4.8	4.1	3.5
		L/240	74.5	38.2	22.1	13.9	9.3	6.5	4.8	3.6	2.8	2.2	1.7
	Triple	$\phi W_n$	50.5	33.2	23.4	17.3	13.3	10.6	8.6	7.1	6.0	5.1	4.4
		L/240	58.4	29.9	17.3	10.9	7.3	5.1	3.7	2.8	2.2	1.7	1.4
16	Single	$\phi W_n$	56.5	36.2	25.1	18.4	14.1	11.2	9.0	7.5	6.3	5.3	4.6
		L/240	38.8	19.9	11.5	7.2	4.8	3.4	2.5	1.9	1.4	1.1	0.9
	Double	$\phi W_n$	53.8	35.1	24.7	18.3	14.0	11.1	9.0	7.5	6.3	5.4	4.6
		L/240	96.1	49.2	28.5	17.9	12.0	8.4	6.2	4.6	3.6	2.8	2.2
	Triple	$\phi W_n$	65.6	43.2	30.5	22.6	17.4	13.8	11.3	9.3	7.8	6.7	5.8
		L/240	75.4	38.6	22.3	14.1	9.4	6.6	4.8	3.6	2.8	2.2	1.8

**Note:**

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

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