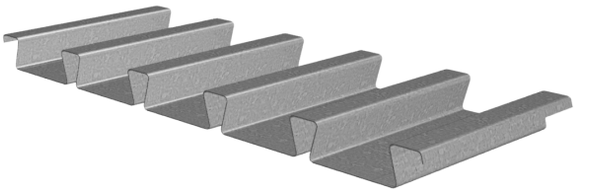
2.0DF-30 DOVETAIL ROOF DECK
GRADE 50 STEEL

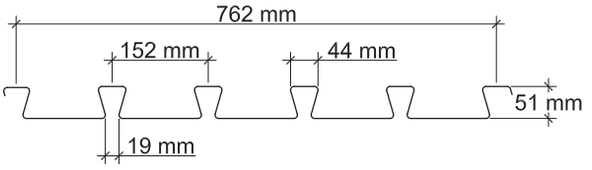
Metric LSD

2.0DF-30 DOVETAIL ROOF DECK

- **Enhanced 2-Coat Polyester Paint**
- **White Factory Primer Paint**
- **Galvanized Finish**
- **FM Listed**



Nominal Dimensions



Nested
Side-lap

Section Properties

Deck Gage	Deck Weight w_{dd} (kg/m²)	Base Metal Thickness t (mm)	Yield Strength F_y (MPa)	Effective Moment of Inertia at Service Load* $I_d = (2I_e+I_g)/3$ I_d+ (mm⁴x10³)	I_d- (mm⁴x10³)	Effective Section Modulus* at F_y = 345 MPa S_e+ (mm³x10³)	S_e- (mm³x10³)	Factored Moment* øM$_n$+ (N-m)	øM$_n$- (N-m)	Vertical Web Shear* øV$_n$ (kN)
20	13.18	0.912	345	715.6	639.1	20.43	18.49	6335	5743	74
18	17.58	1.214	345	954.5	901.3	28.49	26.40	8839	8189	98
16	21.97	1.519	345	1197.6	1170.3	36.02	33.98	11182	10536	121

*Physical Properties per meter (m) of width

Factored Reactions at Supports Based on Web Crippling, øR$_n$ (kN/m)

Deck Gage	Bearing Length of Webs (mm) One-Flange Loading End Bearing 40	50	75	100	One-Flange Loading Interior Bearing 75	125	Two-Flange Loading End Bearing 40	50	75	100	Two-Flange Loading Interior Bearing 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
- 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:
  - -19 or 17 gage
  - -Alternative metallic and painted finishes
- Perforated Acoustical Versions

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	ϕW_n	35.3	22.6	15.7	11.5	8.8	7.0	5.6	4.7	3.9	3.3	2.9
		L/240	27.0	13.8	8.0	5.0	3.4	2.4	1.7	1.3	1.0	0.8	0.6
	Double	ϕW_n	30.4	19.8	13.9	10.3	7.9	6.3	5.1	4.2	3.5	3.0	2.6
		L/240	58.1	29.8	17.2	10.8	7.3	5.1	3.7	2.8	2.2	1.7	1.4
	Triple	ϕW_n	37.3	24.4	17.2	12.7	9.8	7.8	6.3	5.2	4.4	3.8	3.2
		L/240	45.6	23.3	13.5	8.5	5.7	4.0	2.9	2.2	1.7	1.3	1.1
18	Single	ϕW_n	49.2	31.5	21.9	16.1	12.3	9.7	7.9	6.5	5.5	4.7	4.0
		L/240	36.0	18.5	10.7	6.7	4.5	3.2	2.3	1.7	1.3	1.0	0.8
	Double	ϕW_n	43.1	28.1	19.7	14.6	11.2	8.9	7.2	6.0	5.0	4.3	3.7
		L/240	82.0	42.0	24.3	15.3	10.2	7.2	5.2	3.9	3.0	2.4	1.9
	Triple	ϕW_n	52.6	34.6	24.4	18.1	14.0	11.1	9.0	7.5	6.3	5.4	4.6
		L/240	64.3	32.9	19.0	12.0	8.0	5.6	4.1	3.1	2.4	1.9	1.5
16	Single	ϕW_n	62.3	39.9	27.7	20.3	15.6	12.3	10.0	8.2	6.9	5.9	5.1
		L/240	45.2	23.2	13.4	8.4	5.7	4.0	2.9	2.2	1.7	1.3	1.1
	Double	ϕW_n	55.1	36.1	25.3	18.8	14.4	11.4	9.3	7.7	6.5	5.5	4.8
		L/240	106.4	54.5	31.5	19.9	13.3	9.3	6.8	5.1	3.9	3.1	2.5
	Triple	ϕW_n	67.2	44.3	31.3	23.2	17.9	14.2	11.6	9.6	8.1	6.9	5.9
		L/240	83.4	42.7	24.7	15.6	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.