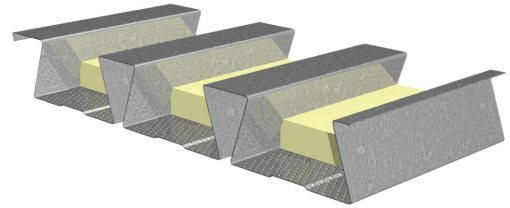


3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

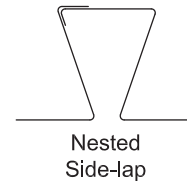
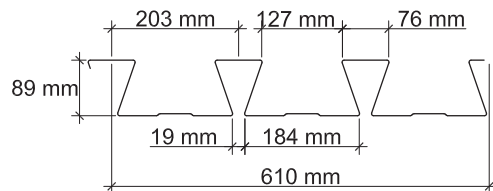
Metric
LSD

3.5DA ACOUSTICAL DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish



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 $F_y = 276$ MPa		Factored Moment*		Vertical Web Shear* ϕV_n (kN)
				I_{d+} (mm ⁴ x10 ³)	I_{d-} (mm ⁴ x10 ³)	S_{e+} (mm ³ x10 ³)	S_{e-} (mm ³ x10 ³)	ϕM_{n+} (N-m)	ϕM_{n-} (N-m)	
20	15.1	0.91	276	2090.7	1952.8	35.22	35.32	8739	8767	64
18	20.0	1.20	276	2865.0	2662.9	50.22	49.89	12463	12383	112
16	24.9	1.52	276	3713.0	3459.0	67.47	66.72	16746	16562	155

*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	
	50	75	100	125	100	150	50	75	100	125	100	150
20	13.7	15.7	17.4	18.8	27.8	31.8	13.1	14.6	15.8	16.9	32.8	37.9
18	23.1	26.3	29.0	31.3	46.2	52.5	24.0	26.6	28.7	30.6	55.8	64.0
16	35.4	40.1	44.1	47.6	70.2	79.3	39.2	43.1	46.4	49.3	86.1	98.2

Standard Features

- ASTM A653/A653M SS GR40 Min., with Z275/G90 galvanized
- Standard lengths – 1.83 m to 12.8 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:
 - Short cuts < 1.83 m
 - Sheet Lengths > 12.8 m
 - Alternative metallic and painted finishes

3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

Inward Uniform Factored Loads, LSD (kPa)

Deck Gage	Spans	Criteria	Span (mm)										
			3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300
20	Single	ϕW_n	6.4	5.4	4.6	4.0	3.5	3.0	2.7	2.4	2.2	1.9	1.8
		L/240	3.8	2.9	2.3	1.8	1.5	1.2	1.0	0.9	0.7	0.6	0.5
	Double	ϕW_n	6.3	5.3	4.6	3.9	3.4	3.0	2.7	2.4	2.1	1.9	1.8
		L/240	8.5	6.6	5.2	4.1	3.4	2.8	2.3	1.9	1.7	1.4	1.2
	Triple	ϕW_n	7.8	6.6	5.7	4.9							
		L/240	6.7	5.2	4.1	3.2							
18	Single	ϕW_n	9.2	7.7	6.6	5.7	4.9	4.3	3.8	3.4	3.1	2.8	2.5
		L/240	5.2	4.0	3.2	2.5	2.1	1.7	1.4	1.2	1.0	0.9	0.7
	Double	ϕW_n	9.0	7.6	6.5	5.6	4.9	4.3	3.8	3.4	3.0	2.7	2.5
		L/240	11.6	9.0	7.1	5.6	4.6	3.8	3.2	2.7	2.3	1.9	1.7
	Triple	ϕW_n	11.2	9.4	8.0	7.0							
		L/240	9.1	7.0	5.5	4.4							
16	Single	ϕW_n	12.3	10.4	8.8	7.6	6.6	5.8	5.2	4.6	4.1	3.7	3.4
		L/240	6.7	5.2	4.1	3.3	2.7	2.2	1.8	1.5	1.3	1.1	1.0
	Double	ϕW_n	12.0	10.1	8.7	7.5	6.5	5.7	5.1	4.5	4.1	3.7	3.3
		L/240	15.1	11.7	9.2	7.3	6.0	4.9	4.1	3.5	2.9	2.5	2.2
	Triple	ϕW_n	15.0	12.6	10.8	9.3							
		L/240	11.9	9.1	7.2	5.8							

Note:

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

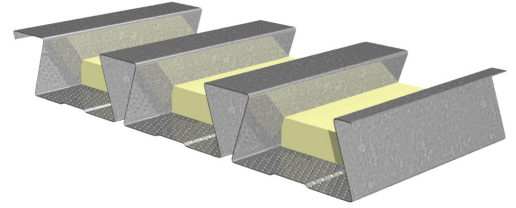
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3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

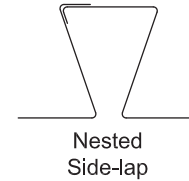
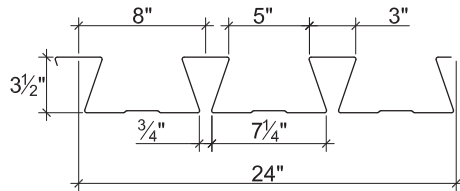
Imperial
LSD

3.5DA ACOUSTICAL DOVETAIL ROOF DECK

- Enhanced 2-Coat Polyester Paint
- White Factory Primer Paint
- Galvanized Finish



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 $I_d = (2I_e + I_g)/3$		Effective Section Modulus at $F_y = 40$ ksi		Factored Moment		Vertical Web Shear ϕV_n (lb/ft)
				I_{d+} (in ⁴ /ft)	I_{d-} (in ⁴ /ft)	S_{e+} (in ³ /ft)	S_{e-} (in ³ /ft)	ϕM_{n+} (lb-ft/ft)	ϕM_{n-} (lb-ft/ft)	
20	3.1	0.0358	40	1.531	1.430	0.655	0.657	1965	1971	4397
18	4.1	0.0474	40	2.098	1.950	0.934	0.928	2802	2784	7695
16	5.1	0.0598	40	2.719	2.533	1.255	1.241	3765	3723	10640

Factored Reactions at Supports Based on Web Crippling, ϕR_n (lb/ft)

Deck Gage	Bearing Length of Webs											
	One-Flange Loading						Two-Flange Loading					
	End Bearing				Interior Bearing		End Bearing				Interior Bearing	
	2"	3"	4"	5"	4"	6"	2"	3"	4"	5"	4"	6"
20	942	1080	1197	1299	1915	2192	900	1003	1090	1167	2263	2613
18	1588	1809	1995	2159	3178	3614	1650	1827	1976	2107	3841	4410
16	2439	2763	3036	3277	4831	5462	2693	2964	3192	3393	5926	6768

Standard Features

- ASTM A653/A653M SS GR40 Min., with Z275/G90 galvanized
- Standard lengths – 6'-0" to 42'-0"
- 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:
 - Short cuts < 6'-0"
 - Sheet Lengths > 42'-0"
 - Alternative metallic and painted finishes

3.5DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

Inward Uniform Factored Loads, LSD (psf)

Deck Gage	Spans	Criteria	Span (ft-in.)										
			11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"
20	Single	ϕW_n	130	109	93	80	70	61	54	49	44	39	36
		L/240	75	58	46	37	30	25	20	17	15	13	11
	Double	ϕW_n	128	108	92	79	69	61	54	48	43	39	36
		L/240	170	131	103	82	67	55	46	39	33	28	24
	Triple	ϕW_n	158	134	114	99							
		L/240	133	102	81	65							
18	Single	ϕW_n	185	156	133	114	100	88	78	69	62	56	51
		L/240	103	80	63	50	41	34	28	24	20	17	15
	Double	ϕW_n	182	153	131	113	98	86	77	68	61	55	50
		L/240	231	178	140	112	91	75	63	53	45	38	33
	Triple	ϕW_n	226	190	162	140							
		L/240	181	140	110	88							
16	Single	ϕW_n	249	209	178	154	134	118	104	93	83	75	68
		L/240	134	103	81	65	53	44	36	31	26	22	19
	Double	ϕW_n	243	205	175	151	131	116	103	92	82	74	67
		L/240	301	231	182	146	119	98	81	69	58	50	43
	Triple	ϕW_n	302	255	217	188							
		L/240	236	181	143	114							

Note:

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

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