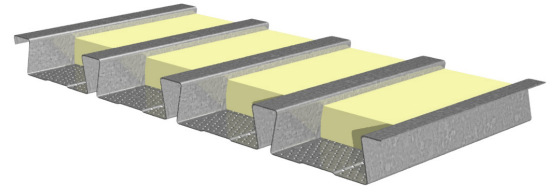


2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

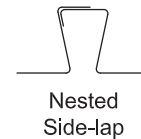
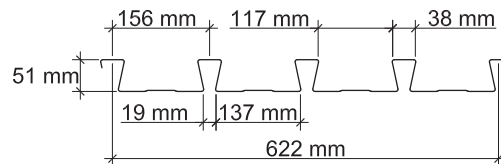
Metric
LSD

2.0DA 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)	
22	9.76	0.75	276	464.3	423.3	14.03	13.87	3483	3443	54
20	11.71	0.91	276	566.7	525.8	17.74	17.04	4404	4232	65
18	15.62	1.20	276	752.4	721.0	23.93	22.96	5937	5697	86
16	19.52	1.52	276	951.8	934.1	30.32	29.36	7526	7286	107

*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	13.2	14.2	16.3	18.1	24.4	28.9	13.1	13.9	15.5	16.9	29.9	35.7
20	18.8	20.1	23.1	25.6	34.8	40.9	19.7	20.8	23.2	25.2	43.0	51.2
18	31.3	33.5	38.2	42.1	57.9	67.5	35.2	37.1	41.0	44.3	72.7	85.9
16	47.8	51.0	57.8	63.5	88.3	102.3	56.5	59.3	65.3	70.3	111.8	131.2

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

2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 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	19.4	12.4	8.6	6.3	4.8	3.8	3.1	2.6	2.2	1.8	1.6
		L/240	17.5	9.0	5.2	3.3	2.2	1.5	1.1	0.8	0.6	0.5	0.4
	Double	ϕW_n	18.5	12.0	8.4	6.2	4.8	3.8	3.1	2.5	2.1	1.8	1.6
		L/240	38.5	19.7	11.4	7.2	4.8	3.4	2.5	1.9	1.4	1.1	0.9
	Triple	ϕW_n	22.8	14.9	10.4	7.7	5.9	4.7	3.8	3.1	2.6	2.3	1.9
		L/240	30.2	15.5	8.9	5.6	3.8	2.6	1.9	1.5	1.1	0.9	0.7
20	Single	ϕW_n	24.5	15.7	10.9	8.0	6.1	4.8	3.9	3.2	2.7	2.3	2.0
		L/240	21.4	11.0	6.3	4.0	2.7	1.9	1.4	1.0	0.8	0.6	0.5
	Double	ϕW_n	22.8	14.7	10.3	7.6	5.8	4.6	3.7	3.1	2.6	2.2	1.9
		L/240	47.8	24.5	14.2	8.9	6.0	4.2	3.1	2.3	1.8	1.4	1.1
	Triple	ϕW_n	28.0	18.3	12.8	9.5	7.3	5.8	4.7	3.9	3.3	2.8	2.4
		L/240	37.5	19.2	11.1	7.0	4.7	3.3	2.4	1.8	1.4	1.1	0.9
18	Single	ϕW_n	33.1	21.2	14.7	10.8	8.3	6.5	5.3	4.4	3.7	3.1	2.7
		L/240	28.4	14.5	8.4	5.3	3.6	2.5	1.8	1.4	1.1	0.8	0.7
	Double	ϕW_n	30.6	19.8	13.9	10.2	7.9	6.2	5.0	4.2	3.5	3.0	2.6
		L/240	65.6	33.6	19.4	12.2	8.2	5.8	4.2	3.2	2.4	1.9	1.5
	Triple	ϕW_n	37.6	24.5	17.2	12.7	9.8	7.7	6.3	5.2	4.4	3.7	3.2
		L/240	51.4	26.3	15.2	9.6	6.4	4.5	3.3	2.5	1.9	1.5	1.2
16	Single	ϕW_n	41.9	26.8	18.6	13.7	10.5	8.3	6.7	5.5	4.7	4.0	3.4
		L/240	35.9	18.4	10.6	6.7	4.5	3.2	2.3	1.7	1.3	1.0	0.8
	Double	ϕW_n	39.0	25.3	17.7	13.1	10.0	8.0	6.5	5.3	4.5	3.8	3.3
		L/240	85.0	43.5	25.2	15.9	10.6	7.5	5.4	4.1	3.1	2.5	2.0
	Triple	ϕW_n	48.0	31.3	22.0	16.3	12.5	9.9	8.0	6.7	5.6	4.8	4.1
		L/240	66.6	34.1	19.7	12.4	8.3	5.8	4.3	3.2	2.5	1.9	1.6

Note:

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

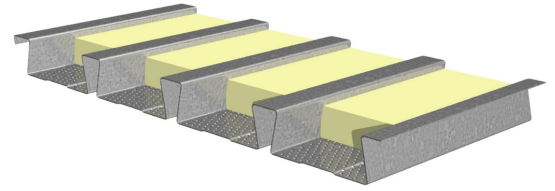
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2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

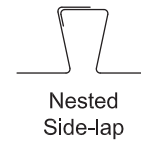
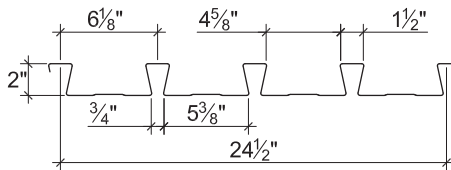
Imperial
LSD

2.0DA 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)	
22	2.0	0.0295	40	0.340	0.310	0.261	0.258	783	774	3706
20	2.4	0.0358	40	0.415	0.385	0.330	0.317	990	951	4477
18	3.2	0.0474	40	0.551	0.528	0.445	0.427	1335	1281	5868
16	4.0	0.0598	40	0.697	0.684	0.564	0.546	1692	1638	7325

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	
	1 1/2"	2"	3"	4"	3"	5"	1 1/2"	2"	3"	4"	3"	5"
22	888	976	1123	1248	1681	1990	885	953	1068	1165	2057	2463
20	1267	1388	1591	1762	2393	2817	1333	1431	1595	1734	2963	3530
18	2116	2308	2629	2899	3985	4652	2386	2548	2821	3051	5005	5916
16	3234	3512	3979	4372	6075	7035	3835	4079	4489	4835	7699	9031

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

2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

Inward Uniform Factored Loads, LSD (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	ϕW_n	392	251	174	128	98	77	63	52	44	37	32
		L/240	348	178	103	65	44	31	22	17	13	10	8
	Double	ϕW_n	374	242	169	125	96	76	62	51	43	37	32
		L/240	765	392	227	143	96	67	49	37	28	22	18
	Triple	ϕW_n	462	300	210	155	119	95	77	64	53	46	39
		L/240	600	307	178	112	75	53	38	29	22	17	14
20	Single	ϕW_n	495	317	220	162	124	98	79	65	55	47	40
		L/240	425	218	126	79	53	37	27	20	16	12	10
	Double	ϕW_n	460	298	208	154	118	93	76	63	53	45	39
		L/240	950	486	281	177	119	83	61	46	35	28	22
	Triple	ϕW_n	566	369	258	191	147	116	94	78	66	56	48
		L/240	745	381	221	139	93	65	48	36	28	22	17
18	Single	ϕW_n	667	427	297	218	167	132	107	88	74	63	54
		L/240	564	289	167	105	71	50	36	27	21	16	13
	Double	ϕW_n	618	400	280	207	159	126	102	84	71	60	52
		L/240	1303	667	386	243	163	114	83	63	48	38	30
	Triple	ϕW_n	761	496	348	257	197	156	127	105	88	75	65
		L/240	1021	523	303	191	128	90	65	49	38	30	24
16	Single	ϕW_n	846	541	376	276	212	167	135	112	94	80	69
		L/240	714	366	212	133	89	63	46	34	26	21	17
	Double	ϕW_n	789	512	358	264	203	161	130	108	91	77	67
		L/240	1688	864	500	315	211	148	108	81	63	49	39
	Triple	ϕW_n	971	633	444	328	252	200	162	134	113	96	83
		L/240	1323	677	392	247	165	116	85	64	49	39	31

Note:

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

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