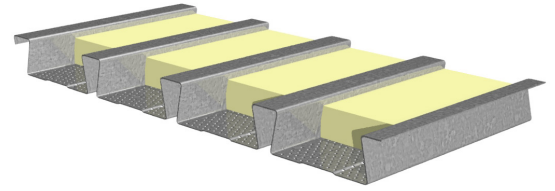


2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

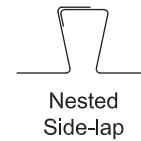
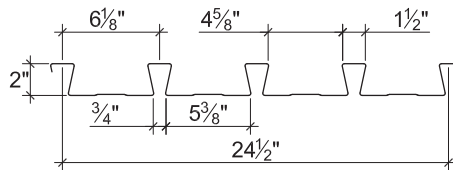
LRFD

2.0DA ACOUSTICAL 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} (psf)	Base Metal Thickness t (in.)	Yield Strength F_y (ksi)	Effective Moment of Inertia at Service Load $I_d = (2I_e + I_p)/3$		Effective Section Modulus at $F_y = 40$ ksi		Design 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	4401
20	2.4	0.0358	40	0.415	0.385	0.330	0.317	990	951	5316
18	3.2	0.0474	40	0.551	0.528	0.445	0.427	1335	1281	6968
16	4.0	0.0598	40	0.697	0.684	0.564	0.546	1692	1638	8698

Design 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	999	1098	1264	1403	1905	2255	1075	1158	1297	1415	2331	2792
20	1425	1561	1790	1982	2712	3192	1618	1737	1937	2105	3358	4001
18	2381	2596	2957	3262	4516	5272	2897	3094	3426	3705	5672	6705
16	3638	3951	4476	4919	6885	7973	4656	4953	5451	5871	8726	10235

Standard Features

- ASTM A653 SS GR 40 Min. with G90
- Standard lengths – 6'-0" to 42'-0"
- Tables conform to ANSI/SDI RD-2017
- IAPMO UES ER-423 and FM Listed

Optional Features

- Inquire regarding cost and lead times for:
 - 19 gage
 - Short cuts < 6'-0"
 - Alternative metallic and painted finishes

2.0DA ACOUSTICAL DOVETAIL ROOF DECK GRADE 40 STEEL

LRFD

Inward Uniform Design Loads, LRFD (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	378	244	170	125	96	76	62	51	43	37	32
		L/240	765	392	227	143	96	67	49	37	28	22	18
	Triple	ϕW_n	468	303	212	156	120	95	77	64	54	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	464	300	209	154	118	93	76	63	53	45	39
		L/240	950	486	281	177	119	83	61	46	35	28	22
	Triple	ϕW_n	574	372	260	192	147	117	95	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	624	403	281	207	159	126	102	84	71	60	52
		L/240	1303	667	386	243	163	114	83	63	48	38	30
	Triple	ϕW_n	772	500	350	258	198	157	127	105	89	76	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	797	515	360	265	203	161	130	108	91	77	67
		L/240	1688	864	500	315	211	148	108	81	63	49	39
	Triple	ϕW_n	985	639	447	330	253	201	163	135	113	97	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.

NOTICE: Design defects that could cause injury or death may result from relying on the information in this document without independent verification by a qualified professional. The information in this document is provided "AS IS". Nucor Corporation and its affiliates expressly disclaim: (i) any and all representations, warranties and conditions and (ii) all liability arising out of or related to this document and the information in it.