

Dovetail Acoustical Roof Deck		Sectional Properties (per foot of width)						
	Deck Type	Gauge	Wt/ Ft ²	I _p In. ⁴	Sp +In. ³	S _n ³ -In. ³	Allowable Reaction lbs.	
							End*	Int.*
	2"	22	2.21	0.383	0.275	0.256	598	1425
	2"	20	2.69	0.467	0.344	0.319	881	2023
	2"	18	3.56	0.625	0.461	0.439	1517	3357
2"	16	4.49	0.795	0.588	0.570	2353	5106	

*End Bearing = 2"

*Intermediate Bearing = 4"

Uniform Total Load (Dead and Live) in Pounds Per Square Foot – Span Length C./C. Support												
	Single Span				Double Span				Triple Span			
Gauge	22	20	18	16	22	20	18	16	22	20	18	16
Span												
6'-6"	101	121	159	200	96	119	164	213	119	148	204	265
7'-0"	83	99	129	162	82	103	141	184	103	128	176	229
7'-6"	69	82	107	133	72	90	123	160	90	112	154	200
8'-0"	59	69	90	111	63	79	108	141	79	98	135	176
8'-6"	50	59	76	95	56	70	96	125	70	87	120	156
9'-0"	44	52	66	81	50	62	86	111	62	78	107	139
9'-6"	39	45	57	70	45	56	77	100	56	70	96	124
10'-0"	35	40	51	62	40	50	69	90	50	63	87	108
10'-6"	31	36	45	55	36	46	63	82	46	57	76	94
11'-0"		33	40	49	33	41	57	75	42	52	68	83
11'-6"		30	36	44	30	38	52	68	38	47	60	74
12'-0"			33	40	28	35	48	63	35	43	54	66
12'-6"			31	36	26	32	44	58	32	39	49	60
13'-0"				33	24	30	41	53	30	36	45	54
13'-6"				31	22	27	38	49		33	41	49
14'-0"					20	25	35	46		31	38	45
14'-6"						24	33	43			35	42

- Notes: 1. Loads in shaded areas are governed by live load deflection not in excess of 1/240. As assumed 10 psf dead load is added to deflection.
2. Loads with asterisks (*) are governed by the allowable flexural stress limit of 24 ksi.
3. All other loads are governed by the end or intermediate reactions listed above.

All data taken from manufacturer's catalogs and is presented for estimating purposes only.

Section properties have been determined in accordance with the American Iron and Steel Institute's Specifications for the Design of Cold Formed Steel Structural Members.

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CARRON AND COMPANY