Note:
Fy = 40 ksi

Data Base - Type B, F, N, J

ROOF DECK DATA BAS E																
ATT R IBUT E		TYP E B DECK (B, BI, BA, BIA)				TYP E F DECK			TYP E N DECK (NS, NI, NSA, NIA)				TYP E J DECK (J, JA)			
Note	Gage	22	20	18	16	22	20	18	22	20	18	16	20	19	18	16
	Thickness	.0295	.0358	.0474	.0598	.0295	.0358	.0474	.0295	.0358	.0474	.0598	.0358	.0418	.0474	.0598
	Weight, psf	1.6	1.9	2.6	3.3	1.6	2.0	2.6	2.0	2.4	3.2	4.1	2.8	3.3	3.8	4.8
1	I_p, in.^{4}	0.16	0.20	0.29	0.38	0.13	0.16	0.24	0.61	0.79	1.14	1.56	2.28	2.79	3.31	4.42
1	I_n, in.^{4}	0.18	0.23	0.30	0.38	0.15	0.18	0.24	0.82	1.02	1.35	1.70	2.73	3.20	3.63	4.57
1	S_p, in.^{3}	0.19	0.23	0.32	0.41	0.13	0.16	0.22	0.36	0.47	0.65	0.85	0.88	1.10	1.27	1.64
1	S_n, in.^{3}	0.19	0.24	0.32	0.41	0.14	0.17	0.23	0.40	0.51	0.70	0.90	0.97	1.17	1.35	1.71
2	Ext.R, lbs.	710	1010	1680	2560	710	1010	1680	510	730	1230	1900	460	620	780	1210
3	Ext.R, lbs.	820	1160	1920	2910	820	1160	1910	590	840	1400	2150	530	710	890	1380
4	Int.R, lbs.	1130	1640	2780	4300	1340	1900	3170	1010	1450	2430	3720	970	1290	1620	2480
5	Int.R, lbs.	1130	1640	2780	4300	1340	1910	3180	1090	1560	2600	3980	1040	1380	1740	2650
6	V, lbs.	1860	2250	2960	3700	2250	2730	3590	2430	3580	5620	7060	2000	3190	4230	6730
7	Max.1 span	5'9"	6'5"	7'9"	8'10"	5'2"	5'9"	7'0"	11'2"	12'9"	15'3"	17'11"	19'6"	20'8"	21'7"	23'2"
8	Max.2 span	6'9"	7'6"	9'1"	10'5"	6'1"	6'9"	8'3"	13'2"	15'0"	18'0"	20'8"	23'0"	24'3"	25'3"	27'2"
9	Max. Cant.	1'8"	1'10"	2'2"	2'8"	1'6"	1'8"	1'11"	3'4"	3'8"	4'4"	4'10"	5'9"	6'2"	6'6"	7'2"
10	FM span	6'0"	6'6"	7'5"	9'6"	4'11"	5'5"	6'3"	10'10"	12'3"	14'7"	16'6"				
10	FM Acoustic span	5'11"	6'6"	7'5"	9'3"				10'7"	11'11"	14'3"	16'1"				

Data Base - Type B, F, N, J

ROOF DECK DATA BAS E																
ATT R IBUT E		TYP E B DECK (B, BI, BA, BIA)				TYP E F DECK			TYP E N DECK (NS, NI, NSA, NIA)				TYP E J DECK (J, JA)			
Note	Gage	22	20	18	16	22	20	18	22	20	18	16	20	19	18	16
	Thickness	.0295	.0358	.0474	.0598	.0295	.0358	.0474	.0295	.0358	.0474	.0598	.0358	.0418	.0474	.0598
	Weight, psf	1.6	1.9	2.6	3.3	1.6	2.0	2.6	2.0	2.4	3.2	4.1	2.8	3.3	3.8	4.8
1	I_p, in.^{4}	0.16	0.20	0.29	0.38	0.13	0.16	0.24	0.61	0.79	1.14	1.56	2.28	2.79	3.31	4.42
1	I_n, in.^{4}	0.18	0.23	0.30	0.38	0.15	0.18	0.24	0.82	1.02	1.35	1.70	2.73	3.20	3.63	4.57
1	S_p, in.^{3}	0.19	0.23	0.32	0.41	0.13	0.16	0.22	0.36	0.47	0.65	0.85	0.88	1.10	1.27	1.64
1	S_n, in.^{3}	0.19	0.24	0.32	0.41	0.14	0.17	0.23	0.40	0.51	0.70	0.90	0.97	1.17	1.35	1.71
2	Ext.R, lbs.	1080	1540	2570	3920	1090	1550	2570	780	1120	1890	2900	700	950	1200	1860
3	Ext.R, lbs.	1250	1770	2930	4450	1250	1770	2930	900	1290	2150	3280	810	1080	1370	2100
4	Int.R, lbs.	1690	2440	4140	6390	1990	2830	4720	1510	2160	3610	5530	1440	1910	2410	3700
5	Int.R, lbs.	1690	2440	4140	6390	2000	2850	4730	1620	2320	3870	5910	1550	2050	2580	3950
6	V, lbs.	2830	3420	4500	5620	3430	4140	5450	3700	5450	8540	10730	3040	4840	6430	10230
7	Max.1 span	5'9"	6'5"	7'9"	8'10"	5'2"	5'9"	7'0"	11'2"	12'9"	15'3"	17'11"	19'6"	20'8"	21'7"	23'2"
8	Max.2 span	6'9"	7'6"	9'1"	10'5"	6'1"	6'9"	8'3"	13'2"	15'0"	18'0"	20'8"	23'0"	24'3"	25'3"	27'2"
9	Max. Cant.	1'8"	1'10"	2'2"	2'8"	1'6"	1'8"	1'11"	3'4"	3'8"	4'4"	4'10"	5'9"	6'2"	6'6"	7'2"
10	FM span	6'0"	6'6"	7'5"	9'6"	4'11"	5'5"	6'3"	10'10"	12'3"	14'7"	16'6"				
10	FM Acoustic span	5'11"	6'6"	7'5"	9'3"				10'7"	11'11"	14'3"	16'1"				

ROOF DECK DATABASE NOTES:

1. I_p, I_n, S_p, and S_n are the section properties per foot of width. These values were calculated using the AISI Specifications. The subscripts denote positive or negative bending.
2. Allowable end reaction per foot of deck width with 2" bearing for ASD and the factored nominal reaction for LRFD.
3. Allowable end reaction per foot of deck width with 3" bearing for ASD and the factored nominal reaction for LRFD.
4. Allowable interior reaction per foot of deck width with 4" bearing for ASD and the factored nominal reaction for LRFD.
5. Allowable interior reaction per foot of deck width with 5" bearing for ASD and the factored nominal reaction for LRFD.
6. Allowable vertical shear per foot of width and the factored nominal shear for LRFD. Do not confuse this with horizontal diaphragm shear strength. Table values of 2, 3, 4, 5 and 6 have been multiplied by the appropriate factor for the LRFD tables.
7. Maximum recommended single span for roofs.
8. Maximum recommended multi span for roofs.
9. Maximum recommended cantilever span based on SDI criteria. Values are sensitive to adjacent spans as they are controlled by deflection. For this table, adjacent spans are assumed to be at least 2 times greater than the cantilever span. Call if you need a more precise calculation.
10. Maximum spans for Factory Mutual Class 1 construction. Refer to the FM Approval Guide and FM 1-29 for fastening requirements and span restrictions at perimeter.

GENERAL NOTES:

A. B is generally known as "wide rib" deck: F is "intermediate rib", the 3" N is "deep rib" and the 4 ½" J is one of the "deep long span" decks.
B. The deck type B means flat side lap; BI is "interlocking" side lap – BI is only available on special order in 16 gage; BA and BIA means the decks are acoustical. F deck is only available with the flat side lap. F is only available on special order in 16 gage. NS is flat side lap and NI is interlocking. J deck is only available with interlocking side laps. NA, NIA and JA are acoustic decks. Better side lap connections are obtained by screwing or welding through the flat side laps and this is the recommended type. Side lap screws are not possible for J Deck. Both sides of interlocking side lap must be fastened at supports.
C. Information not provided on this chart may be obtained from Canam Engineering offices.
D. 21 gage and 19 gage are available on special order for all 1 ½" and 3" roof decks.

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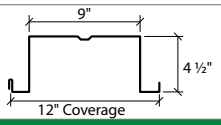
Note:
Fy = 40 ksi

Type J, JA Deep Long Span Roof Deck (4½" Deep)

Areas marked with this symbol represent impractical spans.

TYP E J



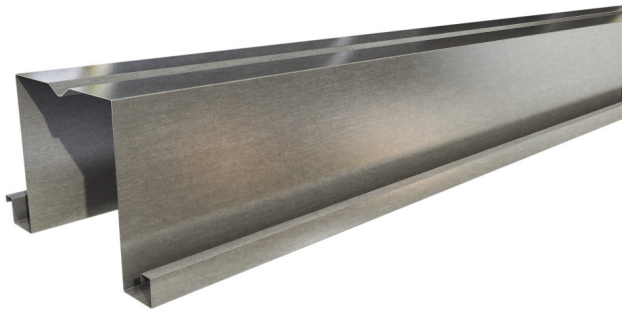
(Uniform Total Load, psf/Load Producing L/240 or 1", psf)

Span Condition	Gage	Span 10'0"	11'0"	12'0"	13'0"	14'0"	15'0"	16'0"	17'0"	18'0"	19'0"	20'0"
Single	20	92/150	84/112	77/87	71/68	66/55	61/44	55/37	49/30	43/26	39/22	35/19
	19	124/183	113/138	103/106	95/83	89/67	78/54	69/45	61/37	54/31	49/27	44/23
	18	156/217	142/163	130/126	120/99	104/79	90/64	79/53	70/44	63/37	56/32	51/27
	16	242/290	217/218	182/168	155/132	134/106	117/86	103/71	91/59	81/50	73/42	66/36
Double	20	78/360	71/271	65/209	60/164	55/131	52/107	49/88	46/73	43/62	41/53	38/45
	19	103/441	94/331	86/255	79/201	74/161	69/131	65/108	61/90	57/76	51/64	46/55
	18	130/523	118/393	108/303	100/238	93/191	86/155	81/128	73/106	66/90	59/76	53/65
	16	198/699	180/525	165/404	153/318	137/255	120/207	106/171	94/142	84/120	75/102	68/87
Triple	20	88/282	80/212	73/163	68/128	63/103	59/84					
	19	117/345	107/259	98/200	90/157	84/126	78/102					
	18	147/409	134/308	123/237	113/186	105/149	98/121					
	16	225/547	205/411	188/316	173/249	161/199	149/162					

(Uniform Total Load, psf/Load Producing L/240 or 1", psf)

Span Condition	Gage	Span 10'0"	11'0"	12'0"	13'0"	14'0"	15'0"	16'0"	17'0"	18'0"	19'0"	20'0"
Single	20	140/150	127/112	117/87	108/68	100/55	93/44	87/37	77/30	69/26	62/22	56/19
	19	190/183	173/138	158/106	146/83	136/67	124/54	109/45	96/37	86/31	77/27	70/23
	18	240/217	218/163	200/126	185/99	164/79	143/64	126/53	111/44	99/37	89/32	80/27
	16	372/290	338/218	289/168	246/132	212/106	185/86	162/71	144/59	128/50	115/42	104/36
Double	20	115/360	105/271	96/209	89/164	82/131	77/107	72/88	68/73	64/62	61/53	58/45
	19	153/441	139/331	127/255	118/201	109/161	102/131	96/108	90/90	85/76	80/64	73/55
	18	193/523	175/393	161/303	148/238	138/191	129/155	121/128	113/106	104/90	93/76	84/65
	16	296/699	269/525	247/404	228/318	211/255	190/207	167/171	148/142	132/120	119/102	107/87
Triple	20	131/282	119/212	109/163	101/128	94/103	87/84					
	19	174/345	158/259	145/200	134/157	124/126	116/102					
	18	219/409	199/308	183/237	169/186	156/149	146/121					
	16	336/547	306/411	280/316	259/249	240/199	224/162					

Yellow shading indicates areas where web crippling controls.



LOAD TABLES

United Steel Deck