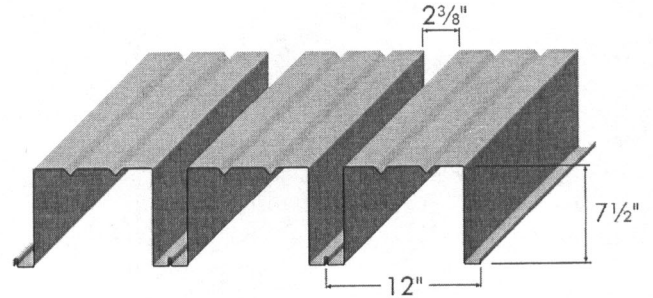


D7.5 ROOF DECK

7.5" high x 12" pitch x 12" wide

SECTION PROPERTIES $f_y = 33 \text{ ksi}$

GAGE	Wd (psf)	Ip (in ⁴)	In (in ⁴)	Sp (in ³)	Sn (in ³)
20	3.59	8.437	8.545	1.894	1.937
18	4.74	11.282	11.282	2.553	2.557
16	5.98	14.233	14.233	3.226	3.226
14	7.43	17.780	17.780	4.030	4.030

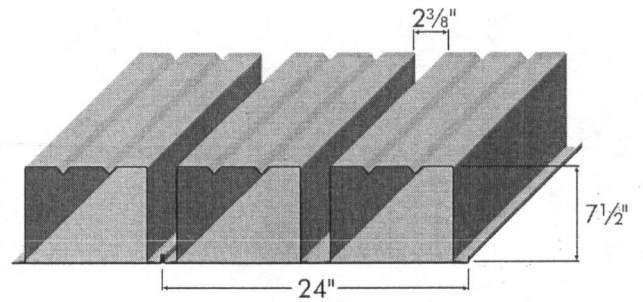


DC7.5 ROOF DECK

7.5" high x 24" pitch x 24" wide

SECTION PROPERTIES $f_y = 33 \text{ ksi}$

GAGE	Wd (psf)	Ip (in ⁴)	In (in ⁴)	Sp (in ³)	Sn (in ³)
20/20	4.81	13.177	9.946	2.921	2.326
20/18	5.33	14.577	11.496	3.003	2.882
18/20	5.85	16.002	11.925	3.856	2.696
18/18	6.37	17.754	13.613	3.975	3.250
18/16	6.92	19.321	15.517	4.068	3.919
16/18	7.48	20.622	15.887	5.075	3.653
16/16	8.04	22.478	17.875	5.202	4.336
14/14	10.04	28.078	23.291	6.556	5.755



MAXIMUM ALLOWABLE UNIFORM TOTAL LOADS, (psf) **

GAGE	D7.5 - SINGLE SPAN								DC7.5 - SINGLE SPAN															
	20		18		16		14		20/20		20/18		18/20		18/18		18/16		16/18		16/16		14/14	
span	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD
16'-0"	49	35	107	77	192	139	295	208	49	35	49	35	107	77	107	77	107	77	192	139	192	139	324	234
17'-0"	46	33	101	73	181	131	248	184	46	33	46	33	101	73	101	73	101	73	181	131	181	131	305	220
18'-0"	44	31	95	69	170	123	210	164	43	31	43	31	95	69	95	69	95	69	171	121	171	121	288	208
19'-0"	41	30	90	65	146	117	180	147	41	30	41	30	90	65	90	65	90	65	162	117	162	117	273	197
20'-0"	39	28	86	62	127	106	156	133	39	28	39	28	86	62	86	62	86	62	154	111	154	111	240	187
21'-0"	37	27	82	59	111	97	136	121	37	27	37	27	82	59	82	59	82	59	147	106	147	106	209	178
22'-0"	36	26	78	56	98	88	120	110	35	26	35	26	78	56	78	56	78	56	137	101	140	101	183	170
23'-0"	34	25	71	54	87	81	106	101	34	24	34	24	75	54	75	54	75	54	121	96	131	96	162	162
24'-0"	33	24	64	52	78	74	94	92	32	23	32	23	72	52	72	52	72	52	108	92	117	92	143	143
25'-0"	31	23	57	50	70	68	84	85	31	22	31	22	69	50	69	50	69	50	97	89	104	89	128	128
26'-0"	30	22	52	48	63	63	76	76	30	22	30	22	66	48	66	48	66	48	87	85	94	85	115	115
27'-0"	29	21	48	46	57	57	69	69	29	21	29	21	63	46	64	46	64	46	79	79	85	82	104	104
28'-0"	28	20	44	43	53	53	63	63	28	20	28	20	58	44	61	44	61	44	72	72	77	77	94	94
29'-0"	27	20	40	40	48	48	58	58	27	19	27	19	53	43	58	43	59	43	66	66	71	71	86	86
30'-0"	26	19	37	37	45	45	53	53	26	19	26	19	49	41	53	41	57	41	60	60	65	65	78	78
31'-0"	25	18	35	35	41	41	49	49	25	18	25	18	45	40	49	40	53	40	55	55	60	60	72	72
32'-0"	25	18	33	33	39	39	46	46	24	18	24	18	42	39	46	39	49	39	51	51	55	55	66	66

WEB CRIPPLING & SHEAR VALUES - D7.5 & DC7.5

GAGE	t (in)	Rbe (lb/ft)		Rbi (lb/ft)		Vn (lb/ft)	
		LRFD	ASD	LRFD	ASD	LRFD	ASD
20	0.0295	393	283	1263	911	1638	1066
18	0.0358	859	620	2167	1563	3769	2453
16	0.0474	1539	1110	3339	2408	7569	4925
14	0.0598	2593	1869	5148	3713	14657	9600

- Wd Weight of deck (uncoated)
- Ip Moment of inertia of deck for positive bending
- In Moment of inertia of deck for negative bending

- ** An assumed 10 psf dead load is added to deflection
- Sp Section modulus of deck for positive bending
- Sn Section modulus of deck for negative bending

The section property table is based on AISI's Cold Formed Steel Design Manual, 1996 Edition.

The loads and maximum construction spans are based on the Design Manual for Composite Decks, Form Decks, Roof Decks and Cellular Deck Floor Systems with Electrical Distribution, Pub No. 29. Available as acoustical, see page 37 for additional information.