

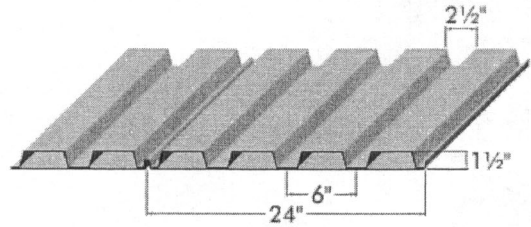
BC DECK

1-1/2" high x 6" pitch x 24" wide

SECTION PROPERTIES

$f_y = 33 \text{ ksi}$

GAGE	Wd (psf)	I _p (in ⁴)	I _n (in ⁴)	S _p (in ³)	S _n (in ³)
20/20	3.60	0.383	0.350	0.322	0.425
20/18	4.12	0.414	0.431	0.328	0.446
18/20	4.25	0.512	0.420	0.475	0.506
18/18	4.77	0.557	0.508	0.485	0.575
16/16	5.32	0.596	0.602	0.493	0.599
16/16	6.01	0.751	0.691	0.681	0.739
14/14	7.51	0.949	0.917	0.933	0.939



SINGLE SPAN

GAGE	20/20		20/18		18/20		18/18		18/16		16/16		14/14	
	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD
5'-0"	211	170	228	173	279	251	303	256	323	261	405	360	509	493
6'-0"	127	118	136	120	166	166	179	178	191	181	238	238	299	299
7'-0"	83	83	89	88	108	108	117	117	124	124	154	154	192	192
8'-0"	59	59	63	63	76	76	81	81	86	86	106	106	132	132
9'-0"	45	45	47	47	56	56	60	60	64	64	78	78	95	95
10'-0"	35	35	37	37	44	44	47	47	49	49	59	59	72	72
11'-0"	29	29	30	30	35	35	37	37	39	39	47	47	57	57
12'-0"	25	25	26	26	29	29	31	31	33	33	39	39	46	46

DOUBLE SPAN

GAGE	20/20		20/18		18/20		18/18		18/16		16/16		14/14	
	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD
6'-0"	225	143	229	146	284	180	320	203	332	211	410	261	520	331
7'-0"	167	106	170	108	211	134	238	151	247	157	305	194	387	246
8'-0"	128	81	131	83	162	103	182	116	191	121	235	149	299	189
9'-0"	93	65	100	66	121	81	131	92	139	96	173	118	216	150
10'-0"	71	52	75	54	91	66	98	75	104	78	129	96	160	122
11'-0"	56	43	59	44	71	55	76	62	81	65	99	80	123	101
12'-0"	45	37	48	37	57	46	61	52	64	54	79	67	97	85
13'-0"	38	31	40	32	47	39	50	45	53	46	64	57	78	73

TRIPLE SPAN

GAGE	20/20		20/18		18/20		18/18		18/16		16/16		14/14	
	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD	LRFD	ASD
8'-0"	103	97	110	99	134	127	145	144	154	148	192	185	239	234
9'-0"	75	75	80	79	97	97	105	105	111	111	137	137	171	171
10'-0"	57	57	61	61	73	73	79	79	84	84	103	103	127	127
11'-0"	46	46	48	48	58	58	62	62	65	65	80	80	98	98
12'-0"	37	37	40	40	47	47	50	50	53	53	64	64	78	78
13'-0"	32	32	33	33	39	39	41	41	44	44	52	52	63	63

MAXIMUM CONSTRUCTION SPANS (center-to-center of supports)

one span	8'-10"	9'-2"	10'-2"	10'-8"	11'-0"	12'-4"	13'-11"
multi-span	10'-5"	10'-10"	12'-0"	12'-7"	13'-0"	14'-7"	16'-5"
cantilever	2'-10"	3'-2"	3'-2"	3'-5"	3'-9"	4'-0"	4'-7"

GAGE	20/20	← gage of top hat section/bottom panel
span	LRFD ASD	← design method
5'-0"	211 170	← maximum allowable uniform total (dead+live) load **
		← span (center-to-center of supports)

- Wd** Weight of deck (uncoated)
- I_p** Moment of inertia of deck for positive bending
- I_n** Moment of inertia of deck for negative bending
- S_p** Section modulus of deck for positive bending
- S_n** Section modulus of deck for negative bending

- one span** Maximum single or multiple span during construction
- multi-span** Maximum single or multiple span during construction
- cantilever** Maximum cantilever during construction
- f_y** 33/24 ksi (for determining maximum loads/spans)
- **** An assumed 10 psf dead load is added to deflection

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.