



BETCO®

B DECK TECHNICAL SHEET

B DECK SECTION PROPERTIES (PER FOOT OF WIDTH)

Base Steel Thickness	Weight (psf)	Yield Stress (ksi)	Section Modulus (in ³ /ft)		Deflection Moment of Inertia (in ⁴ /ft)		Allowable Bending		V _n /Ω (lbs/ft)	Allowable Web Crippling					
										End Bearing			Interior Bearing		
			S _{e+}	S _{e-}	I _{d+}	I _{d-}	M _p /Ω (in-lbs/ft)	M _n /Ω (in-lbs/ft)		1-1/2"	2"	3"	1-1/2"	2"	3"
22GA (0.0295")	1.6	50	0.172	0.175	0.146	0.168	5,150	5,232	2,473	809	889	1,024	1,151	1,249	1,413
20GA (0.0358")	2.0	50	0.216	0.223	0.182	0.209	6,462	6,676	2,989	1,154	1,265	1,450	1,675	1,811	2,039
18GA (0.0474")	2.6	50	0.293	0.297	0.258	0.278	8,772	8,902	3,929	1,930	2,104	2,397	2,872	3,090	3,454
16GA (0.0598")	3.0	50	0.375	0.377	0.340	0.351	11,238	11,297	4,917	2,952	3,206	3,632	4,478	4,797	5,331

B DECK CONSTRUCTION SPANS

Span Condition	Gage	ASD Span	ASD Cantilever Span	Construction Span Notes
Single	22	8'-4"	2'-1"	1. All construction load spans are calculated using a 200lb service load on a 1ft width of deck, in accordance with ANSI/SDI RD-2017 and ANSI/SDI SD-2022.
	20	10'-3"	2'-7"	
	18	13'-5"	3'-4"	
	16	16'-8"	4'-2"	
Double or Triple	22	10'-2"		2. All cantilever construction load spans are calculated using a 200lb service load on a 1ft width of deck and a 10psf uniform distributed load, in accordance with ANSI/SDI RD-2017 and ANSI/SDI SD-2022.
	20	12'-6"		
	18	16'-4"		
	16	20'-2"		

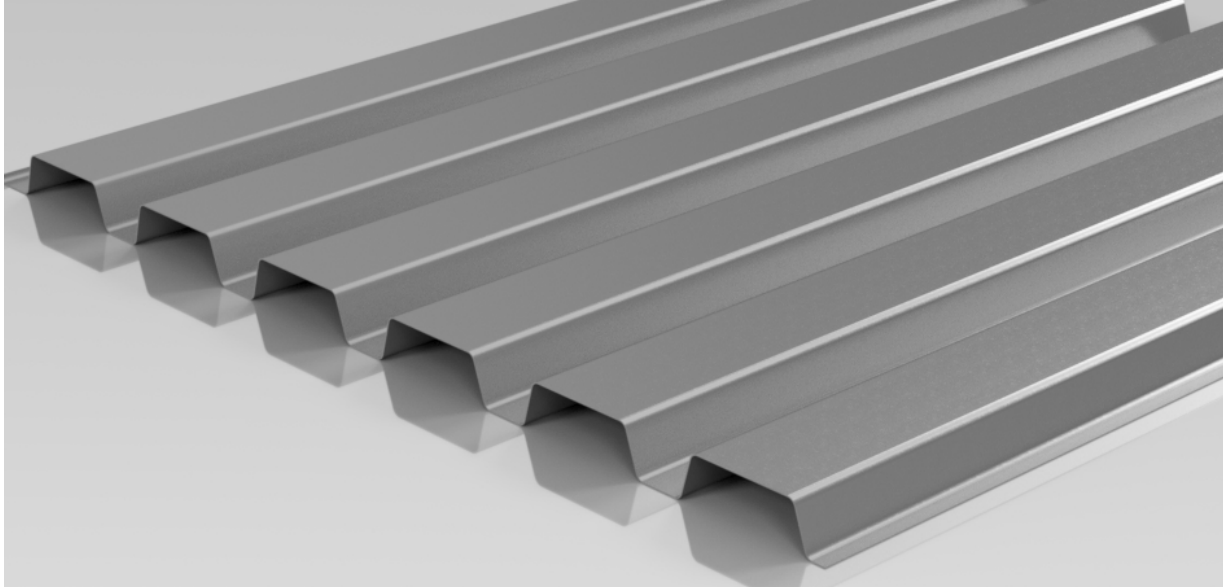
B DECK ALLOWABLE UNIFORMLY DISTRIBUTED LOADS (PSF)

Span Length (ft)		SINGLE SPAN				DOUBLE SPAN				TRIPLE SPAN			
		BASE STEEL THICKNESS (GAGE)				BASE STEEL THICKNESS (GAGE)				BASE STEEL THICKNESS (GAGE)			
		22	20	18	16	22	20	18	16	22	20	18	16
5'-0"	Strength	136	170	231	297	138	176	235	298	173	221	294	374
	Defl.	76	96	135	179	184	230	326	430	144	180	255	336
	Uplift	141	180	240	304	139	174	237	303	173	217	295	378
5'-6"	Strength	112	140	191	245	114	145	194	246	143	182	243	308
	Defl.	57	72	102	134	138	173	245	323	108	135	192	253
	Uplift	117	149	199	252	115	144	196	251	143	180	244	313
6'-0"	Strength	94	118	160	205	95	122	162	206	120	153	203	259
	Defl.	44	55	78	103	107	133	189	249	83	104	148	195
	Uplift	98	126	167	212	97	122	165	211	121	152	206	263
6'-6"	Strength	80	100	136	174	81	103	138	175	102	130	173	220
	Defl.	35	44	62	81	84	105	148	196	66	82	116	153
	Uplift	84	107	143	181	83	104	141	180	103	129	176	225
7'-0"	Strength	68	86	117	150	70	89	119	151	87	112	149	189
	Defl.	28	35	49	65	67	84	119	157	52	66	93	123
	Uplift	73	93	124	157	72	90	122	156	89	112	152	194
7'-6"	Strength	59	75	101	130	60	77	103	131	76	97	129	164
	Defl.	23	28	40	53	55	68	97	127	43	53	76	100
	Uplift	64	81	108	137	63	79	107	136	78	98	133	169
8'-0"	Strength	52	65	89	114	53	68	90	115	67	85	113	144
	Defl.	19	23	33	44	45	56	80	105	35	44	62	82
	Uplift	56	72	95	121	55	69	94	120	69	86	117	149
8'-6"	Strength	46	58	78	101	47	60	80	101	59	75	100	127
	Defl.	16	19	28	36	37	47	66	88	29	37	52	68
	Uplift	50	64	85	107	49	62	84	107	61	77	104	133
9'-0"	Strength	41	51	70	89	41	53	71	90	52	67	89	113
	Defl.	13	16	23	31	32	40	56	74	25	31	44	58
	Uplift	45	57	76	96	44	55	75	95	55	68	93	119
9'-6"	Strength	36	46	62	80	37	47	63	80	47	60	80	101
	Defl.	11	14	20	26	27	34	48	63	21	26	37	49
	Uplift	40	51	68	86	40	50	67	86	49	62	84	107
10'-0"	Strength	33	41	56	72	33	43	57	72	42	54	72	91
	Defl.	10	12	17	22	23	29	41	54	18	23	32	42
	Uplift	36	47	62	78	36	45	61	78	45	56	76	97

continued on back



1. All section properties, ASD flexural strengths, and ASD ($\Omega = 1.67$) uniform loads are calculated in accordance with ANSI/SDI RD-2017, ANSI/SDI SD-2022, AISI S100-2012 and AISI S100-2016.
2. Loads shown in tables are uniformly distributed superimposed loads in psf. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.
3. For loads that cause L/120 Deflection, multiply by 2.0. For loads that cause L/180 Deflection, multiply by 1.33. For loads that cause L/360 Deflection, multiply by 0.667.



NEED HELP CHOOSING THE RIGHT DECKING FOR YOUR NEXT BUILD?

Reach out to sales@betcoinc.com for expert guidance, product specs, and pricing. BETCO decking solutions are ready to elevate your next project—one panel at a time.



Scan here for
more information.