



1.5" Roof Deck Tables: B-Deck 50 KSI



Table 1A – Section Properties and Flexural Resistance (Bare Deck)

Profile	Gage Number	Design Thickness (inches)	Weight (psf)	F_y ksi	S_{e+} (inch ³) per foot	S_{e-} (inch ³) per foot	ASD ($\Omega = 1.67$)		I_{d+} (inch ⁴) per ft.	I_{d-} (inch ⁴) per ft.
							M_p/Ω inch-lbs per ft	M_n/Ω inch-lbs per foot		
1.5WR	22	0.0295	1.6	50	0.167	0.176	5002	5269	0.148	0.172
1.5WR	20	0.0358	2.0	50	0.222	0.227	6647	6806	0.184	0.213
1.5WR	18	0.0474	2.6	50	0.305	0.317	9132	9481	0.262	0.291
1.5WR	16	0.0598	3.0	50	0.392	0.402	11737	12036	0.350	0.368

Table 1A Notes:

- All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, AISI S100-2012 and AISI S100-2016



Table 3 – 1.5WR Deck (Bare Deck –Roof)

**Table 3.1 1.5WR (50 ksi) Roof Deck Construction Spans
(ANSI/SDI RD-2017 Section 2.4.A.3 and 2.4.A.4)**

Span Cond.	Gage Number	ASD Span		ASD Cantilever Span	
Single	22	8'-04"		2'-02"	
	20	11'-01"		2'-10"	
	18	15'-03"		3'-11"	
	16	19'-07"		4'-11"	
Double or Triple	22	10'-03"			
	20	13'-08"			
	18	18'-09"			
	16	24'-01"			

Tables 3 Notes:

1. All construction load spans are calculated using a 200 pound service load on a 1 foot width of deck, in accordance with ANSI/SDI RD-2017.
2. All cantilever construction load spans are calculated using a 200 pound service load on a 1 foot width of deck and a 10 psf uniform distributed load, in accordance with ANSI/SDI RD-2017.