



1.5" Floor Deck Tables: 1.5" Composite and 1.5" Form 50 KSI

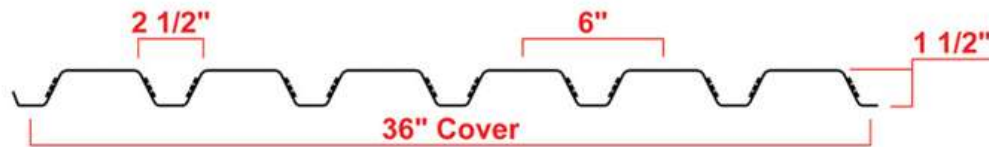


Table 1A – Section Properties and Flexural Resistance (Bare Deck) (1.5 Composite and 1.5 Inverted Form)

							ASD ($\Omega = 1.67$)			
Profile	Gage Number	Design Thickness (inches)	Weight (psf)	F_y ksi	S_{e+} (inch ³) per foot	S_{e-} (inch ³) per foot	M_p/Ω inch-lbs per ft	M_n/Ω inch-lbs per foot	I_{d+} (inch ⁴) per ft.	I_{d-} (inch ⁴) per ft.
1.5x6	22	0.0295	1.6	50	0.167	0.176	5002	5269	0.148	0.172
1.5x6	20	0.0358	2.0	50	0.222	0.227	6647	6806	0.184	0.213
1.5x6	18	0.0474	2.6	50	0.305	0.317	9132	9481	0.262	0.291
1.5x6	16	0.0598	3.0	50	0.392	0.402	11737	12036	0.350	0.368

Table 1A Notes:

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



Table 4.1 – Construction Span Table – 1.5 Composite and 1.5 Inverted Form ($F_y = 50$ ksi) - 20 psf Construction Load

Normal Weight Concrete (145 pcf)

Total Slab Depth	Deck Type	Maximum Unshored Clear Span		
		1 span	2 span	3 span
3.50 (t=2.00) 31 PSF	1.5x6x22 ga	6' 4"	7' 5"	7' 6"
	1.5x6x20 ga	7' 8"	9' 0"	9' 1"
	1.5x6x18 ga	8' 7"	10' 7"	11' 0"
	1.5x6x16 ga	9' 6"	12' 0"	12' 4"
4.00 (t=2.50) 37 PSF	1.5x6x22 ga	6' 0"	7' 1"	7' 2"
	1.5x6x20 ga	7' 3"	8' 6"	8' 8"
	1.5x6x18 ga	8' 2"	10' 1"	10' 5"
	1.5x6x16 ga	9' 0"	11' 5"	11' 9"
4.50 (t=3.00) 43 PSF	1.5x6x22 ga	5' 9"	6' 9"	6' 10"
	1.5x6x20 ga	7' 0"	8' 7"	8' 10"
	1.5x6x18 ga	7' 10"	9' 8"	10' 0"
	1.5x6x16 ga	8' 7"	10' 10"	11' 3"
5.00 (t=3.50) 49 PSF	1.5x6x22 ga	5' 7"	6' 6"	6' 7"
	1.5x6x20 ga	6' 8"	7' 10"	7' 11"
	1.5x6x18 ga	7' 6"	9' 3"	9' 7"
	1.5x6x16 ga	8' 3"	10' 5"	10' 9"
5.50 (t=4.00) 55 PSF	1.5x6x22 ga	5' 4"	6' 3"	6' 4"
	1.5x6x20 ga	6' 5"	7' 6"	7' 7"
	1.5x6x18 ga	7' 3"	8' 11"	9' 2"
	1.5x6x16 ga	7' 12"	10' 0"	10' 4"
6.00 (t=4.50) 61 PSF	1.5x6x22 ga	5' 2"	6' 1"	6' 2"
	1.5x6x20 ga	6' 3"	7' 3"	7' 4"
	1.5x6x18 ga	7' 0"	8' 7"	8' 10"
	1.5x6x16 ga	7' 9"	9' 8"	10' 0"

Lightweight Concrete (115 pcf)

Total Slab Depth	Deck Type	Maximum Unshored Clear Span		
		1 span	2 span	3 span
3.50 (t=2.00) 23 PSF	1.5x6x22 ga	7' 2"	8' 6"	8' 7"
	1.5x6x20 ga	8' 10"	10' 3"	10' 6"
	1.5x6x18 ga	9' 0"	12' 1"	12' 6"
	1.5x6x16 ga	11' 0"	13' 8"	14' 1"
4.00 (t=2.50) 28 PSF	1.5x6x22 ga	6' 10"	8' 0"	8' 1"
	1.5x6x20 ga	8' 4"	9' 9"	9' 11"
	1.5x6x18 ga	9' 4"	11' 6"	11' 10"
	1.5x6x16 ga	10' 4"	12' 11"	13' 4"
4.50 (t=3.00) 33 PSF	1.5x6x22 ga	6' 6"	7' 8"	7' 9"
	1.5x6x20 ga	7' 11"	9' 9"	10' 1"
	1.5x6x18 ga	8' 10"	10' 11"	11' 3"
	1.5x6x16 ga	9' 9"	12' 4"	12' 9"
5.00 (t=3.50) 37 PSF	1.5x6x22 ga	6' 3"	7' 4"	7' 5"
	1.5x6x20 ga	7' 7"	8' 11"	9' 0"
	1.5x6x18 ga	8' 6"	10' 6"	10' 11"
	1.5x6x16 ga	9' 5"	11' 10"	12' 3"
5.50 (t=4.00) 42 PSF	1.5x6x22 ga	6' 0"	7' 1"	7' 2"
	1.5x6x20 ga	7' 3"	8' 6"	8' 8"
	1.5x6x18 ga	8' 2"	10' 1"	10' 5"
	1.5x6x16 ga	9' 0"	11' 5"	11' 9"
6.00 (t=4.50) 46 PSF	1.5x6x22 ga	5' 10"	6' 10"	6' 11"
	1.5x6x20 ga	7' 1"	8' 3"	8' 4"
	1.5x6x18 ga	7' 11"	9' 9"	10' 1"
	1.5x6x16 ga	8' 9"	11' 0"	11' 5"

Tables 4 Notes:

1. Web crippling and shear have not been accounted for in these tables. Required bearing should be determined based on specific span conditions.