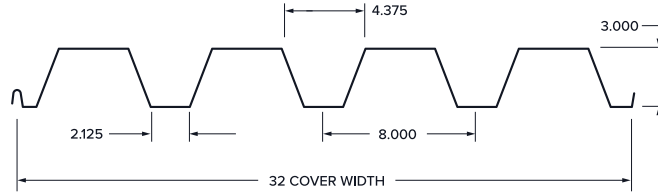


PROPERTIES

Gage	Thickness (in)	Cover (in)	Weight (psf)
22	0.0295	32	1.88
20	0.0358		2.28
18	0.0474		3.02
16	0.0598		3.80



ASD

SECTION PROPERTIES

DESIGN STRENGTHS

Gage	F _y (ksi)	I _D 1 Span (in ⁴ /ft)	I _D 2+ Span (in ⁴ /ft)	I _p (in ⁴ /ft)	I _n (in ⁴ /ft)	S _p (in ³ /ft)	S _n (in ³ /ft)	M _{n,p} /Ω (in-lb/ft)	M _{n,n} /Ω (in-lb/ft)	V _n /Ω (lb/ft)	*R _{be} /Ω (lb/ft)	*R _{bi} /Ω (lb/ft)
22	50	0.687	0.762	0.642	0.754	0.348	0.405	10420	12117	2184	539	1087
20	50	0.864	0.936	0.826	0.933	0.451	0.514	13517	15383	3779	777	1559
18	50	1.199	1.242	1.178	1.242	0.663	0.721	19856	21582	6618	1317	2624
16	50	1.549	1.562	1.543	1.562	0.890	0.934	26654	27967	9158	2032	4030

- Notes:**
- Section properties are calculated in accordance with the AISI S100-16.
 - Web crippling design strengths* are based on minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing.

ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

Span Condition	Gage	Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf)										SDI Max. Constr. Span (ctr / ctr)
		Center to Center Span (ft - in)										
		8 - 0	10 - 0	11 - 0	12 - 0	13 - 0	14 - 0	15 - 0	16 - 0	18 - 0	20 - 0	
Single	22	109 / 88	69 / 45	57 / 34	48 / 26	41 / 20	35 / 16	31 / 13	27 / 11	-	-	17 - 4
	20	141 / 111	90 / 57	74 / 43	63 / 33	53 / 26	46 / 21	40 / 17	35 / 14	28 / 10	23 / 7	22 - 6
	18	207 / 154	132 / 79	109 / 59	92 / 45	78 / 36	68 / 29	59 / 23	52 / 19	41 / 13	33 / 10	33 - 1
	16	278 / 198	178 / 102	147 / 76	123 / 59	105 / 46	91 / 37	79 / 30	69 / 25	55 / 17	44 / 13	40 - 0
Double	22	109 / 235	79 / 120	65 / 90	55 / 70	47 / 55	41 / 44	35 / 36	31 / 29	25 / 21	-	21 - 4
	20	156 / 289	101 / 148	84 / 111	71 / 86	60 / 67	52 / 54	45 / 44	40 / 36	32 / 25	26 / 18	27 - 8
	18	222 / 384	143 / 196	118 / 148	99 / 114	85 / 89	73 / 72	64 / 58	56 / 48	44 / 34	36 / 25	40 - 0
	16	288 / 482	185 / 247	153 / 186	129 / 143	110 / 112	95 / 90	83 / 73	73 / 60	57 / 42	47 / 31	40 - 0
Triple	22	123 / 184	97 / 94	81 / 71	68 / 55	58 / 43	51 / 34	44 / 28	-	-	-	21 - 8
	20	177 / 226	126 / 116	104 / 87	88 / 67	75 / 53	65 / 42	56 / 34	-	-	-	28 - 1
	18	275 / 300	178 / 154	147 / 115	124 / 89	106 / 70	91 / 56	79 / 46	-	-	-	40 - 0
	16	358 / 377	230 / 193	191 / 145	161 / 112	137 / 88	118 / 70	103 / 57	-	-	-	40 - 0

- Notes:**
- Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing. Check web crippling if minimums are not met.
 - Maximum construction spans shown include a check for a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria, which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
 - Values in RED are shown for use in determining deck capacity under deflection limits more stringent than Span/240. The total loads shown are not to be exceeded.
 - See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

MAXIMUM CANTILEVER SPANS

Gage	F _y (ksi)	Back-Span Condition		
		Single	Double	Triple
22	50	4 - 5	4 - 2	4 - 1
20	50	5 - 4	5 - 4	4 - 4
18	50	5 - 8	5 - 11	4 - 4
16	50	6 - 0	5 - 11	4 - 4

- Notes:**
- Maximum cantilever spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
 - Bearing width at perimeter support assumed to be 3" minimum
 - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.