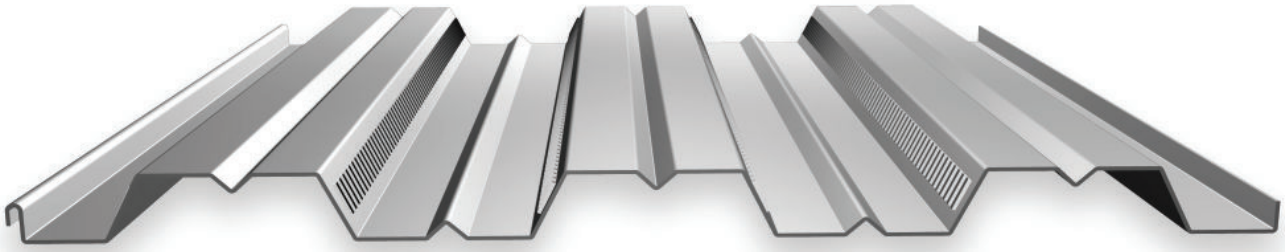
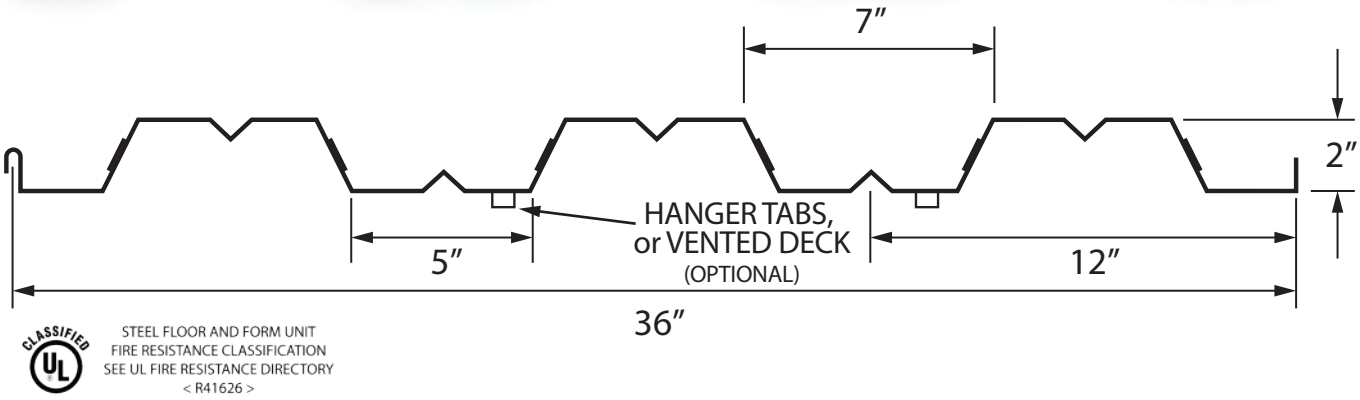
STRONGSEAM™ PANELS 2″ COMPOSITE DECK [FLOOR DECK]

METAL PANELS INC.™

AT A GLANCE:

- 36″ coverage
- 2″ rib - embossed
- Available in 20 ga., 18 ga., & 16 ga. galvanized
- Stocked in Grade 50, G60 finish





CLASSIFIED UL

STEEL FLOOR AND FORM UNIT
FIRE RESISTANCE CLASSIFICATION
SEE UL FIRE RESISTANCE DIRECTORY
< R41626 >

Composite Metal Deck is a reliable and easy to install choice for your metal floor decking.

MPI manufactures StrongSeam 2″ Composite Deck in 20 ga., 18 ga. & 16 ga. Typically 2″ Composite Deck is used for applications in outdoor or indoor concrete flooring. StrongSeam 2″ Composite Deck supports construction spans from 1 ft to 10 ft in distance, depending upon the gauge and back-span condition (single, double, triple).

STRONGSEAM™ PANELS 2" COMPOSITE DECK

GRADE 50 STEEL

Section Properties and Flexural Resistance (Bare Deck) (2x12 Composite and 2x12 Form)

							ASD (Ω = 1.67)			
Profile	Gauge #	Design Thickness (inches)	Weight (psf)	F_y ksi	S_e+ ($inch^3$) per ft	S_e- ($inch^3$) per ft	M_p/Ω inch-lbs per ft	M_n/Ω inch-lbs per ft	I_d+ ($inch^4$) per ft	I_d- ($inch^4$) per ft
2x12	**22**	0.0295	1.6	50	0.237	0.244	7105	7311	0.294	0.273
2x12	**20**	0.0358	1.9	50	0.317	0.324	9481	9701	0.371	0.350
2x12	**18**	0.0474	2.5	50	0.471	0.479	14102	14351	0.513	0.500
2x12	**16**	0.0598	3.2	50	0.622	0.629	18633	18822	0.662	0.653

Table 1A Notes:

1. All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2022, and AISI S100-2012 and AISI S100-2016

Shear and Web Crippling (Bare Deck) (2x12 Composite and 2x12 Form) (50 ksi)

			Web Crippling (R_n/Ω), lbs/ft One Flange Loading End Bearing			Web Crippling (R_n/Ω), lbs/ft One Flange Loading Interior Bearing		
Profile	Gauge #	V_n/Ω lbs per ft	2"	3"	4"	2"	3"	4"
2x12	22	2033	417	480	533	649	735	806
2x12	20	2815	594	681	754	932	1049	1148
2x12	18	3709	991	1129	1245	1571	1757	1913
2x12	16	4641	1513	1714	1884	2420	2690	2917

Table 1B Notes:

1. All section properties and ASD flexural strengths are calculated in accordance with ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2022, and AISI S100-2012 and AISI S100-2016

Uniform Downward Loads, ASD (psf) 2x12 Composite and 2x12 Form (50 ksi)

Span	Gauge #	6'-00"	7'-00"	8'-00"	9'-00"	10'-00"	11'-00"	12'-00"	13'-00"	14-00"	15'-00"	16'-00"
Single	**22**	132	97	74	58	47	39	33	28	24	21	19
	20	176	129	99	78	63	52	44	37	32	28	25
	18	261	192	147	116	94	78	65	56	48	42	37
	16	345	254	194	153	124	103	86	74	63	55	49
Double	**22**	135	99	76	60	49	40	34	29	25	22	19
	20	180	132	101	80	65	53	45	38	33	29	25
	18	266	195	149	118	96	79	66	57	49	43	37
	16	349	256	196	155	125	104	87	74	64	56	49
Triple	**22**	169	124	95	75	61	50	42	36	31	27	24
	20	225	165	126	100	81	67	56	48	41	36	32
	18	332	244	187	148	120	99	83	71	61	53	47
	16	436	320	245	194	157	130	109	93	80	70	61

Tables Notes:

1. All section properties and ASD (Ω = 1.67) uniform loads are calculated in accordance with ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2022, and 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. Bending Moment formulae used for flexural stress limitations are:

Simple and Two Span $M = \frac{wl^2}{8}$

Three Span or More $M = \frac{wl^2}{10}$

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