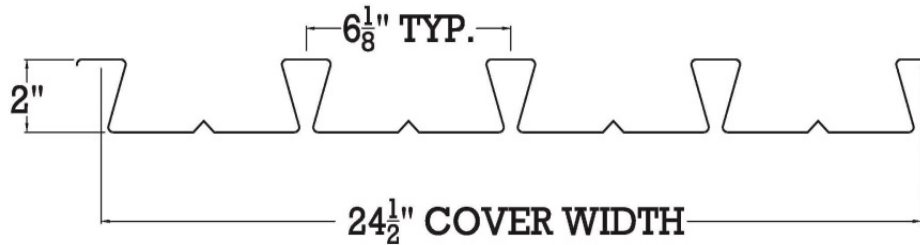


## MARCORE-SR COMPOSITE DECK-22 GAUGE (WITH STIFFENER RIBS)



### SECTION PROPERTIES OF STEEL DECK F<sub>y</sub> = 50 ksi

THICKNESS	in.	0.0295
WEIGHT	psf	2.3
AREA	in <sup>2</sup>	0.68
MOMENT OF INERTIA (I <sub>p</sub> )	in <sup>4</sup> /ft	0.40
MOMENT OF INERTIA (I <sub>N</sub> )	in <sup>4</sup> /ft	0.35
SECTION MODULUS (S <sub>p</sub> )	in <sup>3</sup> /ft	0.28
SECTION MODULUS (S <sub>N</sub> )	in <sup>3</sup> /ft	0.29
MOMENT CAPACITY (M <sub>p</sub> )	lb-in/ft	8530
MOMENT CAPACITY (M <sub>N</sub> )	lb-in/ft	8797

### GENERAL INFORMATION

CONCRETE THICKNESS	in	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
COMPOSITE DECK THICKNESS	in	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
CONCRETE - 110 lb. LWC	psf	33.6	38.2	42.7	47.2	51.9	56.5	61.0	65.5	69.3
SECTION MODULUS (S <sub>p</sub> )	in <sup>3</sup> /ft	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8
EFFECTIVE AREA (A)	in <sup>2</sup>	38.0	42.8	47.5	52.3	57.0	61.8	66.5	71.3	76.0
AVG/ MOMENT OF INERTIA (I <sub>av</sub> )	in <sup>4</sup> /ft	4.4	6.1	8.1	10.5	13.4	16.6	20.4	24.6	29.4
TEMP. REINFORC. W.W. F. 6"X6"		w1.4xw1.4	w1.4xw1.4	w1.4xw1.4	w2xw2	w2xw2	w2.9xw2.9	w2.9xw2.9	w2.9xw2.9	w2.9xw2.9

### SHORING RECOMMENDATION

Span	Composite Slab Thickness, in.		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
	MARCORE-SR										
Single	22 ga.	ft.	7.25	7.00	6.75	6.50	6.50	6.25	6.00	6.00	5.75
Double	22 ga.	ft.	8.25	7.75	7.50	7.25	7.00	6.75	6.50	6.50	6.25

\*Light Weight Concrete 110 pcf

UNDERWRITERS LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF.

## MARCORE-SR COMPOSITE DECK-22 GAUGE (WITH STIFFENER RIBS)

**SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, SINGLE SPAN**

**22 GAUGE**

COMPOSITE DECK THICKNESS	in.	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
		MAXIMUM WORKING ALLOWABLE UNIFORM LIVE LOAD LL, LB/FT <sup>2</sup>									
SPAN											
9	ft.	322	400	400	400	400	400	400	400	400	400
10	ft.	225	328	400	400	400	400	400	400	400	400
11	ft.	160	236	380	400	400	400	400	400	400	400
12	ft.	115	173	287	332	371	400	400	400	400	400
13	ft.	82	127	215	251	310	342	375	400	400	400
14	ft.	59	94	163	191	254	289	316	344	372	398
15	ft.	41	68	123	146	196	246	269	293	317	339
16	ft.	27	49	93	111	152	201	231	251	272	291
17	ft.	17	34	70	84	118	157	199	217	235	251
18	ft.		22	51	63	91	123	162	188	203	218
19	ft.		13	36	46	69	96	128	163	177	189
20	ft.			24	33	51	74	100	131	154	165
21	ft.			15	21	37	56	78	104	135	144
22	ft.				12	25	41	60	82	108	126
23	ft.					15	28	44	63	86	109
24	ft.						18	31	47	67	87
25	ft.							20	34	51	68
26	ft.							11	23	37	52
27	ft.								13	25	38
28	ft.									15	26
29	ft.										16

\*Light Weight Concrete 110 pcf

UNDERWRITERS LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF.

## MARCORE-SR COMPOSITE DECK-22 GAUGE (WITH STIFFENER RIBS)

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, DOUBLE & TRIPLE SPAN DECK									22 GAUGE
COMPOSITE DECK THICKNESS	in	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
SPAN	MAXIMUM WORKING ALLOWABLE UNIFORM LIVE LOAD LL, LB/FT <sup>2</sup>								
16	ft.	161	171	191	211	231	251	272	291
17	ft.	138	147	164	182	199	217	235	251
18	ft.	119	127	142	157	172	188	203	218
19	ft.	103	110	123	137	150	163	177	189
20	ft.	88	96	107	119	131	142	154	165
21	ft.	70	83	93	104	114	124	135	144
22	ft.	55	67	81	90	100	109	118	126
23	ft.	42	52	71	79	87	95	104	111
24	ft.	31	40	61	69	76	83	91	97
25	ft.	22	30	48	60	66	73	79	85
26	ft.	14	21	36	52	58	63	69	74
27	ft.		13	27	43	50	55	60	64
28	ft.			18	32	43	47	52	56
29	ft.			11	23	37	41	45	48
30	ft.				15	28	35	39	41
31	ft.					19	29	33	35
32	ft.					12	24	27	29
33	ft.						16	22	24
34	ft.							18	19
35	ft.							12	15
36	ft.								11

\*Light Weight Concrete 110 pcf

UNDERWRITERS LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF

## MARCORE-SR COMPOSITE DECK-22 GAUGE (WITH STIFFENER RIBS)

### TWO SPAN COMPOSITE DECK 22 GAUGE 2 SPAN CONDITION REINFORCING OVER INTERMEDIATE SUPPORT

SPAN	COMPOSITE SLAB THICKNESS														
	4.0"			4.5"			5.0"			5.5"			6.0"		
	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100
13'-0"	#4@9	#4@8	#5@9	#4@11	#4@9	#5@10	#4@12	#4@10	#4@7	#4@13	#4@11	#4@8	#4@14	#4@13	#4@9
13'-6"	#4@8	#4@7	#5@8	#4@10	#4@8	#5@9	#4@11	#4@9	#4@7	#4@12	#4@10	#4@8	#4@13	#4@11	#4@8
14'-0"	#4@8	#5@10	#5@7	#4@9	#4@8	#5@9	#4@10	#4@9	#5@10	#4@11	#4@10	#4@7	#4@12	#4@11	#4@8
14'-6"	#5@11	#5@9	#5@7	#4@8	#4@7	#5@8	#4@9	#4@8	#5@9	#4@10	#4@9	#5@11	#4@11	#4@10	#4@7
15'-0"	#5@10	#5@9		#4@7	#5@10	#5@7	#4@8	#4@7	#5@8	#4@9	#4@8	#5@10	#4@10	#4@9	#5@11
15'-6"	#5@9	#5@8		#5@11	#5@10	#5@7	#4@8	#4@7	#5@8	#4@8	#4@7	#5@9	#4@9	#4@8	#5@10
16'-0"	#5@8	#5@7		#5@10	#5@9	#5@6	#4@7	#5@10	#5@7	#4@8	#4@7	#5@8	#4@8	#4@8	#5@9
16'-6"	#5@8			#5@9	#5@8		#5@11	#5@9	#5@7	#4@7	#5@11	#5@8	#4@8	#4@7	#5@9
17'-0"				#5@9	#5@7		#5@10	#5@9	#5@6	#4@7	#5@10	#5@7	#4@7	#5@11	#5@8
17'-6"				#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#4@7	#5@10	#5@7
18'-0"				#5@7			#5@9	#5@7		#5@10	#5@9	#5@6	#5@11	#5@9	#5@7
18'-6"							#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7
19'-0"							#5@7	#5@7		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
19'-6"							#5@7			#5@8	#5@7		#5@9	#5@8	#5@5
20'-0"										#5@7	#5@7		#5@8	#5@7	#5@5
20'-6"										#5@7	#5@6		#5@8	#5@7	#5@5
21'-0"										#5@7			#5@7	#5@6	
21'-6"													#5@7	#5@5	
22'-0"													#5@7		
22'-6"													#5@6		
23'-0"															
23'-6"															
24'-0"															

SPAN	COMPOSITE SLAB THICKNESS											
	6.5"			7.0"			7.5"			8.0"		
	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100
13'-0"	#4@15	#4@14	#4@10	#4@16	#4@14	#4@11	#4@17	#4@15	#4@12	#4@18	#4@16	#4@13
13'-6"	#4@14	#4@12	#4@9	#4@15	#4@13	#4@10	#4@15	#4@14	#4@11	#4@16	#4@15	#4@12
14'-0"	#4@13	#4@11	#4@8	#4@13	#4@12	#4@9	#4@14	#4@13	#4@10	#4@15	#4@14	#4@11
14'-6"	#4@12	#4@10	#4@8	#4@12	#4@11	#4@8	#4@13	#4@12	#4@9	#4@14	#4@13	#4@10
15'-0"	#4@11	#4@10	#4@7	#4@11	#4@10	#4@8	#4@12	#4@11	#4@8	#4@13	#4@12	#4@9
15'-6"	#4@10	#4@9	#4@7	#4@11	#4@10	#4@7	#4@11	#4@10	#4@8	#4@12	#4@11	#4@8
16'-0"	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7	#4@10	#4@10	#4@7	#4@11	#4@10	#4@8
16'-6"	#4@9	#4@8	#5@9	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7	#4@10	#4@9	#4@7
17'-0"	#4@8	#4@7	#5@9	#4@9	#4@8	#5@10	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7
17'-6"	#4@7	#4@7	#5@8	#4@8	#4@7	#5@9	#4@8	#4@8	#5@10	#4@9	#4@8	#5@10
18'-0"	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8	#4@8	#4@7	#5@9	#4@8	#4@8	#5@10
18'-6"	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8	#4@8	#4@7	#5@9
19'-0"	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8
19'-6"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8
20'-0"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
20'-6"	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7
21'-0"	#5@8	#5@7	#5@5	#5@8	#5@8	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
21'-6"	#5@7	#5@7		#5@8	#5@7		#5@8	#5@8	#5@6	#5@9	#5@8	#5@6
22'-0"	#5@7	#5@6		#5@7	#5@7		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
22'-6"	#5@7	#5@6		#5@7	#5@7		#5@8	#5@7		#5@8	#5@7	#5@5
23'-0"	#5@6	#5@5		#5@7	#5@6		#5@7	#5@7		#5@8	#5@7	#5@5
23'-6"	#5@6			#5@7			#5@7	#5@6		#5@7	#5@7	
24'-0"							#5@7	#5@6		#5@7	#5@6	
24'-6"							#5@6			#5@7	#5@6	
25'-0"										#5@6	#5@5	

(\* ) allowable superimposed dead and live loads (lb/ft<sup>2</sup>)