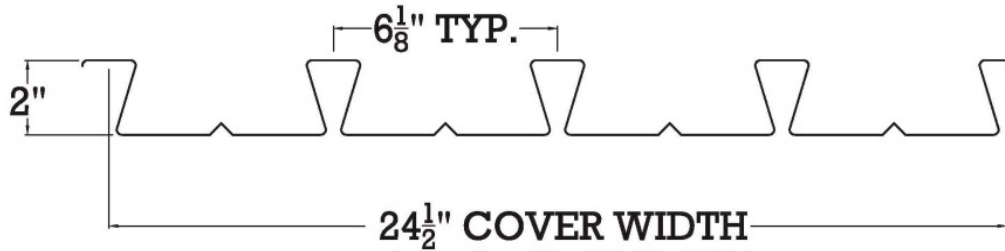


**MARCORE-SR COMPOSITE DECK-20 GAUGE**  
(WITH STIFFENER RIBS)



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

THICKNESS	in.	0.0358
WEIGHT	psf	2.8
AREA	in <sup>2</sup>	0.82
MOMENT OF INERTIA (I <sub>p</sub> )	in <sup>4</sup> /ft	0.50
MOMENT OF INERTIA (I <sub>N</sub> )	in <sup>4</sup> /ft	0.45
SECTION MODULUS (S <sub>p</sub> )	in <sup>3</sup> /ft	0.37
SECTION MODULUS (S <sub>N</sub> )	in <sup>3</sup> /ft	0.36
MOMENT CAPACITY (M <sub>P</sub> )	lb-in/ft	10951
MOMENT CAPACITY (M <sub>N</sub> )	Lb-in/ft	10878

**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	1.7	2.0	2.3	2.6	2.9	3.3	3.6	4.0	4.3
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	4.8	6.5	8.7	11.2	14.2	17.7	21.7	26.2	31.2
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	20 ga.	ft.	8.00	7.75	7.50	7.25	7.00	6.75	6.50	6.50	6.25
Double	20 ga.	ft.	9.25	8.75	8.50	8.25	8.00	7.50	7.50	7.25	7.00

\*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-20 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.	334	400	400	400	400	400	400	400	400	400
10	ft.	233	342	400	400	400	400	400	400	400	400
11	ft.	166	247	400	400	400	400	400	400	400	400
12	ft.	119	181	301	353	400	400	400	400	400	400
13	ft.	86	133	226	268	349	400	400	400	400	400
14	ft.	62	98	171	206	268	347	385	400	400	400
15	ft.	43	72	130	159	208	271	329	358	387	400
16	ft.	29	52	99	123	161	213	272	308	334	358
17	ft.	18	37	74	94	125	167	216	267	289	310
18	ft.		24	55	72	97	131	172	218	252	270
19	ft.		14	40	55	74	103	137	175	221	237
20	ft.			27	40	56	80	108	141	179	208
21	ft.			17	29	41	61	84	112	145	179
22	ft.				19	28	45	65	89	116	146
23	ft.				11	18	32	49	69	93	118
24	ft.						21	35	52	73	94
25	ft.						12	24	38	56	75
26	ft.							14	27	42	58
27	ft.								16	30	43
28	ft.									19	31
29	ft.									10	20
30	ft.										10

\*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-20 GAUGE (WITH STIFFENER RIBS)

### SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, DOUBLE & TRIPLE SPAN 20 GAUGE

COMPOSITE DECK THICKNESS	in	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									
16	ft.	167	182	203	226	272	308	334	358
17	ft.	144	158	175	195	216	267	289	310
18	ft.	124	137	151	170	188	218	252	270
19	ft.	108	119	132	148	163	179	221	237
20	ft.	94	104	115	129	143	157	179	208
21	ft.	75	91	100	113	125	137	150	179
22	ft.	59	76	88	99	110	121	132	146
23	ft.	45	61	77	86	96	106	116	125
24	ft.	34	48	66	76	84	93	102	110
25	ft.	24	37	52	66	74	82	90	97
26	ft.	16	28	40	58	65	72	79	85
27	ft.		20	30	47	57	63	69	75
28	ft.		13	21	36	49	55	61	65
29	ft.			13	27	42	47	53	57
30	ft.				18	32	41	46	49
31	ft.				11	23	35	40	43
32	ft.					15	28	34	36
33	ft.						19	28	31
34	ft.						12	24	25
35	ft.							16	21
36	ft.								16
37	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-20 GAUGE (WITH STIFFENER RIBS)

### TWO SPAN COMPOSITE DECK 20 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@12	#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@10	#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	#5@6	#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@9	#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@7		#5@9	#5@8	#5@6	#5@11	#5@9	#5@7	#4@7	#5@11	#5@8	#4@8	#4@7	#5@8
17'-0"	#5@7			#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@7		#5@8	#5@7	#5@5	#5@10	#5@8	#5@6	#5@11	#5@9	#5@7
18'-6"				#5@7			#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@6		#5@8	#5@7	#5@5	#5@9	#5@8	#5@5
20'-0"							#5@7			#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@6		#5@7	#5@7	#5@5
21'-6"										#5@6			#5@7	#5@6	
22'-0"													#5@6	#5@5	
22'-6"													#5@6	#5@5	
23'-0"													#5@5		
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@13	#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@11
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@9	#4@7	#4@11	#4@10	#4@8
16'-6"	#4@8	#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@8	#4@8	#5@9	#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@9	#5@9	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
20'-6"	#5@8	#5@7	#5@6	#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@6	#5@8	#5@8		#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
21'-6"	#5@7	#5@7	#5@6	#5@8	#5@7		#5@8	#5@8	#5@6	#5@9	#5@8	#5@6
22'-0"	#5@7	#5@6	#5@5	#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@5	#5@8	#5@7	#5@5
23'-0"	#5@6	#5@5		#5@7	#5@6		#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
23'-6"	#5@6	#5@5		#5@7	#5@6		#5@7	#5@6		#5@7	#5@7	#5@5
24'-0"	#5@5			#5@6			#5@7	#5@6		#5@7	#5@6	#5@5
24'-6"							#5@6	#5@5		#5@7	#5@6	
25'-0"							#5@6			#5@6	#5@5	

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