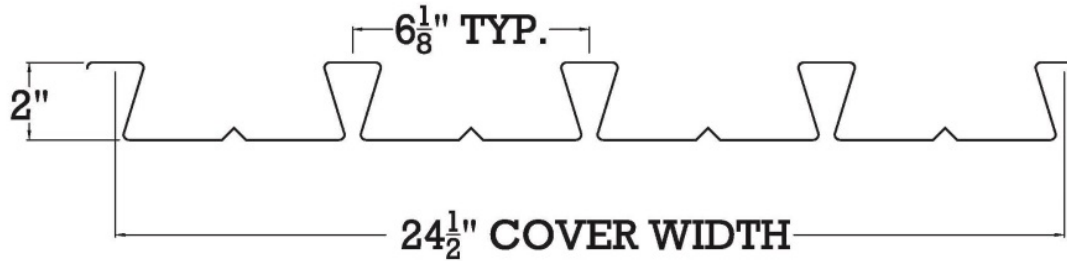


**MARCORE-SR COMPOSITE DECK-18 GAUGE**  
(WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK		F <sub>y</sub> =40 ksi
THICKNESS	in.	0.0474
WEIGHT	psf	3.7
AREA	in <sup>2</sup>	1.08
MOMENT OF INERTIA (I <sub>p</sub> )	in <sup>4</sup> /ft	0.67
MOMENT OF INERTIA (I <sub>N</sub> )	in <sup>4</sup> /ft	0.67
SECTION MODULUS (S <sub>p</sub> )	in <sup>3</sup> /ft	0.49
SECTION MODULUS (S <sub>N</sub> )	in <sup>3</sup> /ft	0.49
MOMENT CAPACITY (M <sub>p</sub> )	lb-in/ft	11244
MOMENT CAPACITY (M <sub>N</sub> )	lb-in/ft	11244

**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	33.7	38.3	42.8	48.1	52.1	56.6	61.1	65.7	70.2
SECTION MODULUS (S <sub>p</sub> )	in <sup>3</sup> /ft	2.0	2.4	2.8	3.2	3.7	4.1	4.5	5.0	5.4
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	5.4	7.3	9.7	12.5	15.9	19.7	24.1	29.0	34.6
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	18 ga.	ft.	8.75	8.50	8.00	7.75	7.75	7.50	7.25	7.00	7.00
Double	18 ga.	ft.	9.50	9.00	8.75	8.75	8.25	8.00	7.75	7.50	7.25

\*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-18 GAUGE (WITH STIFFENER RIBS)

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

**18 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.	369	400	400	400	400	400	400	400	400	400
10	ft.	259	381	400	400	400	400	400	400	400	400
11	ft.	185	276	400	400	400	400	400	400	400	400
12	ft.	134	203	337	390	400	400	400	400	400	400
13	ft.	97	150	255	296	391	400	400	400	400	400
14	ft.	70	112	194	226	302	369	400	400	400	400
15	ft.	50	83	149	174	235	305	346	377	400	400
16	ft.	35	61	114	134	184	241	299	325	351	378
17	ft.	23	44	87	103	144	191	245	282	305	328
18	ft.	13	30	65	79	112	151	196	246	266	286
19	ft.		19	48	59	87	119	157	200	233	251
20	ft.		10	34	43	67	94	125	162	203	220
21	ft.			23	30	50	73	99	130	165	194
22	ft.			13	20	36	55	78	104	134	168
23	ft.				11	24	41	60	83	108	137
24	ft.					15	29	45	64	86	111
25	ft.						18	32	49	68	89
26	ft.						10	21	36	52	71
27	ft.							12	24	38	55
28	ft.								15	27	41
29	ft.									17	29
30	ft.										18
31	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-18 GAUGE (WITH STIFFENER RIBS)

### SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, DOUBLE & TRIPLE SPAN 18 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.	166	178	202	241	299	325	351	378
17	ft.	143	153	174	195	245	282	305	328
18	ft.	124	132	151	169	196	246	266	286
19	ft.	107	115	131	147	163	200	233	251
20	ft.	93	100	114	128	142	162	203	220
21	ft.	81	87	99	112	124	137	165	194
22	ft.	69	75	87	98	109	120	134	168
23	ft.	54	66	76	86	95	105	115	137
24	ft.	42	52	66	75	84	92	101	111
25	ft.	31	40	58	66	73	81	89	96
26	ft.	22	30	49	57	64	71	78	85
27	ft.	15	21	38	50	56	62	68	74
28	ft.		13	28	43	48	54	59	65
29	ft.			20	35	42	47	52	56
30	ft.			12	26	36	40	45	49
31	ft.				18	30	34	38	42
32	ft.				10	23	29	32	36
33	ft.					15	24	27	30
34	ft.						19	22	25
35	ft.						12	18	20
36	ft.							14	16
37	ft.								12
38	ft.								8

\*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-18 GAUGE (WITH STIFFENER RIBS)

### TWO SPAN COMPOSITE DECK 18 GAUGE 2 SPAN CONDITION REINFORCING OVER INTERMEDIATE SUPPORT

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

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

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