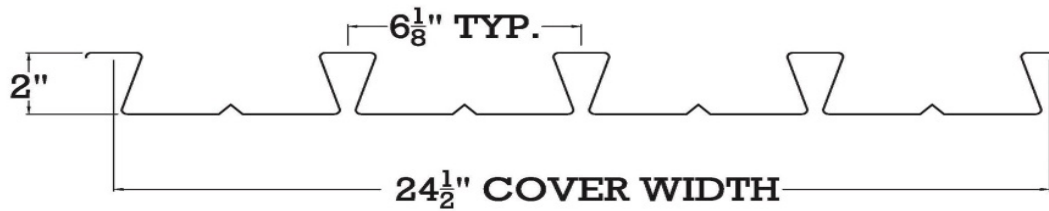


MARCORE-SR COMPOSITE DECK-20 GAUGE (WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK, F_y=50 ksi

THICKNESS	in.	0.0358
WEIGHT	psf	2.8
AREA	in ²	0.82
MOMENT OF INERTIA (I _p)	in ⁴ /ft	0.50
MOMENT OF INERTIA (I _N)	in ⁴ /ft	0.45
SECTION MODULUS (S _p)	in ³ /ft	0.37
SECTION MODULUS (S _N)	in ³ /ft	0.36
MOMENT CAPACITY (M _p)	lb-in/ft	10951
MOMENT CAPACITY (M _N)	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 - 145 lb. NWC	psf	44.3	50.3	56.3	62.2	68.5	74.5	80.4	86.4	91.4
SECTION MODULUS (S _p)	in ³ /ft	1.8	2.1	2.5	2.8	3.1	3.5	3.8	4.2	4.6
EFFECTIVE AREA (A)	in ²	38.0	42.8	47.5	52.3	57.0	61.8	66.5	71.3	76.0
AVG/ MOMENT OF INERTIA (I _{av})	in ⁴ /ft	6.6	9.1	12.1	15.8	20.1	25.0	30.7	37.2	44.6
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 RECOMONDATION

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

*Normal Weight Concrete 145 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 COMPOSIT DECK, SIMPLE SPAN											20 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 ²												
SPAN												
9	ft.	323	400	400	400	400	400	400	400	400	400	
10	ft.	223	330	400	400	400	400	400	400	400	400	
11	ft.	155	235	390	400	400	400	400	400	400	400	
12	ft.	109	169	286	334	400	400	400	400	400	400	
13	ft.	75	121	212	249	332	400	400	400	400	400	
14	ft.	51	86	157	186	251	329	370	400	400	400	
15	ft.	32	60	116	139	191	253	314	342	371	397	
16	ft.	18	40	85	103	145	195	253	292	317	340	
17	ft.		25	60	75	109	149	197	251	273	292	
18	ft.		12	41	53	80	113	153	198	236	252	
19	ft.			25	35	58	85	117	155	199	219	
20	ft.			13	21	39	62	88	120	157	190	
21	ft.					24	43	65	91	122	156	
22	ft.					11	27	46	68	94	122	
23	ft.						14	30	48	71	94	
24	ft.							16	31	51	71	
25	ft.								18	34	51	
26	ft.									20	34	
27	ft.										19	

*Normal Weight Concrete 145 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 ²									
SPAN									
16	ft.	215	239	273	307	341	376	400	400
17	ft.	169	200	236	265	295	325	354	380
18	ft.	132	158	204	230	257	283	308	331
19	ft.	103	124	172	201	224	247	270	289
20	ft.	80	97	137	176	196	216	236	253
21	ft.	60	75	109	149	172	190	208	223
22	ft.	44	57	85	120	151	167	183	196
23	ft.	31	42	66	95	130	147	161	173
24	ft.	20	29	49	74	104	130	142	152
25	ft.	10	18	35	57	83	113	126	135
26	ft.			23	42	64	90	111	119
27	ft.			13	29	48	71	98	104
28	ft.				18	35	54	78	92
29	ft.					23	40	61	80
30	ft.					13	27	46	65
31	ft.						16	33	49
32	ft.							21	35
33	ft.							11	23
34	ft.								13

*Normal Weight Concrete 145 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

	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
SPAN															
13'-0"	#4@9	#4@8	#5@8	#4@9	#4@8	#5@9	#4@10	#4@9	#5@11	#4@11	#4@10	#4@7	#4@12	#4@11	#4@8
13'-6"	#4@8	#5@11	#5@7	#4@8	#4@7	#5@9	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7	#4@11	#4@10	#4@7
14'-0"	#5@11	#5@10	#5@7	#4@8	#5@11	#5@8	#4@8	#4@8	#5@9	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7
14'-6"	#5@10	#5@9	#5@6	#4@7	#5@10	#5@7	#4@8	#4@7	#5@8	#4@8	#4@7	#5@9	#4@9	#4@8	#5@10
15'-0"	#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#4@7	#5@10	#5@8	#4@8	#4@7	#5@9	#4@8	#4@7	#5@10
15'-6"	#5@9	#5@8	#5@5	#5@9	#5@8	#5@6	#5@11	#5@9	#5@7	#4@7	#5@11	#5@8	#4@8	#4@7	#5@9
16'-0"	#5@8	#5@7	#5@5	#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@11	#5@8
16'-6"	#5@7	#5@6	#5@4	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
17'-0"	#5@7	#5@6		#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
17'-6"	#5@6	#5@5		#5@7	#5@6	#5@4	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@9	#5@9	#5@7
18'-0"	#5@5			#5@6	#5@5	#5@4	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
18'-6"				#5@6	#5@5		#5@7	#5@6	#5@5	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
19'-0"				#5@5	#5@5		#5@6	#5@5	#5@4	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
19'-6"				#5@5			#5@6	#5@5		#5@7	#5@6	#5@5	#5@7	#5@7	#5@5
20'-0"							#5@5	#5@5		#5@6	#5@5	#5@4	#5@7	#5@6	#5@5
20'-6"							#5@5	#5@5		#5@6	#5@5		#5@7	#5@6	#5@4
21'-0"							#5@5			#5@5	#5@5		#5@6	#5@5	#5@4
21'-6"										#5@5	#5@5		#5@5	#5@5	
22'-0"										#5@5	#5@4		#5@5	#5@5	
22'-6"										#5@5			#5@5	#5@5	
23'-0"													#5@5	#5@4	
23'-6"													#5@5	#5@4	
24'-0"													#5@4		

	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
SPAN												
13'-0"	#4@12	#4@11	#4@9	#4@13	#4@12	#4@10	#4@14	#4@13	#4@10	#4@15	#4@14	#4@11
13'-6"	#4@11	#4@10	#4@8	#4@12	#4@11	#4@9	#4@13	#4@12	#4@9	#4@14	#4@13	#4@10
14'-0"	#4@10	#4@10	#4@7	#4@11	#4@10	#4@8	#4@12	#4@11	#4@9	#4@13	#4@12	#4@9
14'-6"	#4@10	#4@9	#4@7	#4@10	#4@9	#4@7	#4@11	#4@10	#4@8	#4@12	#4@11	#4@9
15'-0"	#4@9	#4@8	#5@10	#4@9	#4@9	#4@7	#4@10	#4@9	#4@7	#4@11	#4@10	#4@8
15'-6"	#4@8	#4@7	#5@10	#4@9	#4@8	#5@10	#4@9	#4@9	#4@7	#4@10	#4@9	#4@7
16'-0"	#4@8	#4@7	#5@9	#4@8	#4@7	#5@10	#4@9	#4@8	#5@10	#4@9	#4@9	#4@7
16'-6"	#4@7	#5@11	#5@8	#4@8	#4@7	#5@9	#4@8	#4@7	#5@10	#4@9	#4@8	#5@10
17'-0"	#4@7	#5@10	#5@8	#4@7	#5@11	#5@8	#4@7	#4@7	#5@9	#4@8	#4@7	#5@10
17'-6"	#5@10	#5@9	#5@7	#5@11	#5@10	#5@8	#4@7	#5@11	#5@8	#4@8	#4@7	#5@9
18'-0"	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7	#5@11	#5@10	#5@8	#4@7	#5@11	#5@8
18'-6"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7	#4@7	#5@10	#5@8
19'-0"	#5@8	#5@8	#5@6	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@10	#5@7
19'-6"	#5@8	#5@7	#5@5	#5@8	#5@8	#5@6	#5@9	#5@8	#5@7	#5@10	#5@9	#5@7
20'-0"	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@8	#5@8	#5@6	#5@9	#5@8	#5@7
20'-6"	#5@7	#5@6	#5@5	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
21'-0"	#5@7	#5@6	#5@5	#5@7	#5@7	#5@5	#5@7	#5@7	#5@5	#5@8	#5@7	#5@6
21'-6"	#5@6	#5@5	#5@4	#5@7	#5@6	#5@5	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
22'-0"	#5@6	#5@5	#5@4	#5@6	#5@6	#5@4	#5@7	#5@6	#5@5	#5@7	#5@7	#5@5
22'-6"	#5@5	#5@5		#5@6	#5@5		#5@6	#5@6	#5@5	#5@7	#5@6	#5@5
23'-0"	#5@5	#5@5		#5@5	#5@5		#5@6	#5@5	#5@4	#5@7	#5@6	#5@5
23'-6"	#5@5	#5@5		#5@5	#5@5		#5@5	#5@5		#5@6	#5@6	#5@5
24'-0"	#5@5	#5@4		#5@5	#5@5		#5@5	#5@5		#5@6	#5@5	
24'-6"	#5@5	#5@4		#5@5	#5@4		#5@5	#5@5		#5@5	#5@5	
25'-0"	#5@4			#5@5			#5@5	#5@5		#5@5	#5@5	

(*) allowable superimposed dead and live loads (lb/ft²)