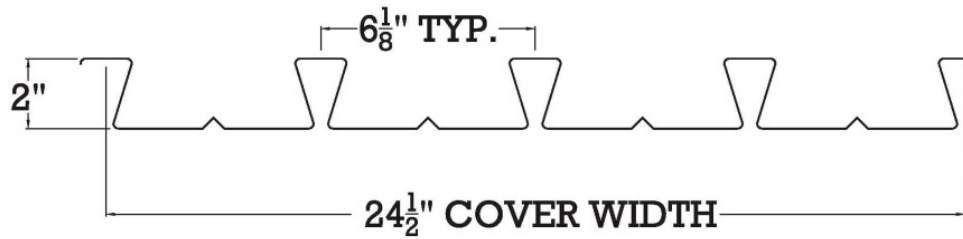


MARCORE-SR COMPOSITE DECK-18 GAUGE (WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK F_y=40 ksi

THICKNESS	in.	0.0474
WEIGHT	psf	3.7
AREA	in ²	1.08
MOMENT OF INERTIA (I _P)	in ⁴ /ft	0.67
MOMENT OF INERTIA (I _N)	in ⁴ /ft	0.67
SECTION MODULUS (S _P)	in ³ /ft	0.49
SECTION MODULUS (S _N)	in ³ /ft	0.49
MOMENT CAPACITY (M _P)	lb-in/ft	11244
MOMENT CAPACITY (M _N)	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 - 145lb.NWC	psf	44.5	50.5	56.7	63.3	68.6	74.6	80.6	86.5	92.6
SECTION MODULUS (S _P)	in ³ /ft	2.2	2.6	3.1	3.5	3.9	4.4	4.8	5.3	5.7
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	7.3	10.1	13.4	17.4	22.0	27.4	33.7	40.7	48.6
TEMP. REINFORC. W.W.F. 6" X 6"		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

*Normal Weight Concrete 145 pcf

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

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

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, SIMPLE 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 ²											
SPAN											
9	ft.	358	400	400	400	400	400	400	400	400	400
10	ft.	248	369	398	400	400	400	400	400	400	400
11	ft.	174	264	321	400	400	400	400	400	400	400
12	ft.	123	190	263	375	400	400	400	400	400	400
13	ft.	86	138	217	281	375	400	400	400	400	400
14	ft.	59	100	181	211	285	356	390	400	400	400
15	ft.	39	71	152	159	218	287	332	361	391	400
16	ft.	24	49	128	119	167	223	284	309	335	360
17	ft.	12	32	72	88	127	173	226	266	288	310
18	ft.		18	51	64	96	133	177	227	249	268
19	ft.			34	44	71	101	138	180	216	233
20	ft.			20	28	50	76	106	141	181	203
21	ft.				15	33	55	80	109	143	177
22	ft.					20	37	58	83	112	144
23	ft.						23	41	62	86	113
24	ft.						11	26	43	64	87
25	ft.							13	28	45	66
26	ft.								15	30	47
27	ft.									16	31
28	ft.										17

*Normal Weight Concrete 145 pcf

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

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 ²							
SPAN									
16	ft.	221	238	272	307	341	375	400	400
17	ft.	190	205	235	265	294	324	354	384
18	ft.	152	177	204	230	256	282	308	334
19	ft.	120	143	177	200	223	246	269	292
20	ft.	94	113	155	175	195	215	236	256
21	ft.	72	88	128	153	171	189	207	225
22	ft.	55	68	101	134	150	166	182	198
23	ft.	40	51	80	113	132	146	160	175
24	ft.	27	37	61	90	116	129	141	154
25	ft.	17	25	46	71	99	113	125	136
26	ft.		15	33	54	79	10	110	120
27	ft.			21	40	61	87	96	105
28	ft.			12	28	46	69	85	93
29	ft.				17	33	53	74	81
30	ft.					22	39	58	71
31	ft.					12	27	44	61
32	ft.						16	31	49
33	ft.							20	35
34	ft.							10	23
35	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-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"		
	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@8	#4@7	#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@7	#5@9	#4@9	#4@8	#5@10	#4@10	#4@9	#4@7
14'-6"	#5@10	#5@9	#5@6	#5@11	#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@9
15'-6"	#5@9	#5@8	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#4@7	#5@10	#5@8	#4@8	#4@7	#5@9
16'-0"	#5@8	#5@7		#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@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@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@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
18'-6"	#5@5			#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@7	#5@6	#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@5		#5@6	#5@5		#5@7	#5@6	#5@5
20'-6"							#5@5	#5@5		#5@6	#5@5		#5@6	#5@6	#5@4
21'-0"							#5@5			#5@5	#5@5		#5@6	#5@5	
21'-6"							#5@5			#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@4			#5@5	#5@4	
23'-6"													#5@5		
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@9	#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@7	#4@7	#5@9	#4@8	#4@7	#5@10	#4@9	#4@8	#5@10
17'-0"	#5@11	#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@9	#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@9	#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@9	#5@9	#5@7	#5@10	#5@9	#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@6	#5@5		#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@7	#5@6	#5@5
23'-6"	#5@5	#5@5		#5@5	#5@5		#5@5	#5@5		#5@6	#5@5	#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@5			#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)