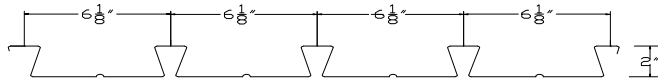


MARCORE-SR COMPOSITE DECK-18 GAUGE

(WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK FY=40 KSI

THICKNESS	IN.	0.0474
WEIGHT	LB/FT ²	3.4993
MOMENT OF INERTIA (I _p)	IN ⁴	0.6416
MOMENT OF INERTIA (I _n)	IN ⁴	0.6416
SECTION MODULUS (S _p)	IN ³	0.4685
SECTION MODULUS (S _n)	IN ³	0.4685

COMPOSITE DECK PROPERTIES

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*	LB/FT ²	33.6	38.2	42.7	47.2	51.9	56.5	61.0	65.5	69.3
SECTION MODULUS (S _p)	IN ³	2.1	2.4	2.9	3.3	3.7	4.2	4.6	5.1	5.5
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	5.4	7.4	9.8	12.6	16.0	19.9	24.3	29.3	34.9
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

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, 18 GAUGE

COMPOSITE DECK THICKNESS	IN	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
MAXIMUM WORKING ALLOWABLE UNIFORM LIVE LOAD LL, LB/FT²										
SPAN										
9	FT	331	397	400	400	400	400	400	400	400
10	FT	263	315	371	400	400	400	400	400	400
11	FT	212	255	300	347	394	400	400	400	400
12	FT	174	210	247	285	325	365	400	400	400
13	FT	144	174	205	238	271	304	339	374	400
14	FT		146	172	200	228	256	286	315	345
15	FT				169	193	218	242	268	294
16	FT					165	186	207	229	252
17	FT						159	178	197	217
18	FT							154	170	187
19	FT								147	163
20	FT									141
21	FT									

SHORING REQUIREMENTS

COMPOSITE DECK THICKNESS	IN	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
MAXIMUM UNSHORED SPAN	FT	7.5	7.5	7.25	7.25	7.0	7.0	6.75	6.75	6.5

*Light Weight Concrete 110#

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

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

	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@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	#6@10	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8
19'-6"	#5@9	#5@8	#6@9	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8
20'-0"	#5@9	#5@8	#6@9	#5@9	#5@8	#6@9	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
20'-6"	#5@8	#5@7	#6@8	#5@9	#5@8	#6@9	#5@9	#5@9	#6@10	#5@10	#5@9	#5@7
21'-0"	#5@8	#5@7	#6@8	#5@8	#5@7	#6@8	#5@9	#5@8	#6@9	#5@10	#5@9	#6@10
21'-6"	#5@7	#6@10	#6@7	#5@8	#5@7	#6@8	#5@8	#5@8	#6@9	#5@9	#5@8	#6@9
22'-0"	#5@7	#6@9	#6@7	#5@7	#5@7	#6@7	#5@8	#5@7	#6@8	#5@8	#5@8	#6@9
22'-6"	#6@10	#6@9		#5@7	#6@9		#5@7	#5@7	#6@8	#5@8	#5@7	#6@8
23'-0"	#6@9	#6@8		#5@7	#6@9		#5@7	#6@10	#6@7	#5@8	#5@7	#6@8
23'-6"	#6@9	#6@8		#6@9	#6@8		#5@7	#6@9		#5@7	#6@10	#6@7
24'-0"	#6@8	#6@7		#6@9	#6@8		#6@10	#6@9		#5@7	#6@9	#6@7
24'-6"	#6@8			#6@8			#6@9	#6@8		#6@10	#6@9	
25'-0"							#6@9	#6@8		#6@9	#6@8	

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