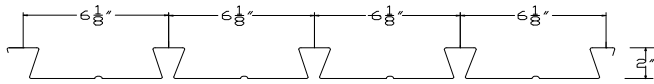


MARCORE-SR COMPOSITE DECK-22 GAUGE

(WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK FY=50 KSI

THICKNESS	IN.	0.0295
WEIGHT	LB/FT ²	2.2594
MOMENT OF INERTIA (I _p)	IN ⁴	0.4016
MOMENT OF INERTIA (I _n)	IN ⁴	0.3762
SECTION MODULUS (S _p)	IN ³	0.2953
SECTION MODULUS (S _n)	IN ³	0.2899

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	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8
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	4.4	6.1	8.1	10.5	13.4	16.6	20.4	24.6	29.4
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, 22 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	226	270	315	362	400	400	400	400	400
10	FT	178	213	249	286	323	362	400	400	400
11	FT	142	171	200	230	260	291	323	354	387
12	FT	115	138	162	187	212	238	264	290	317
13	FT	94	113	133	154	175	196	218	239	262
14	FT	78	94	110	128	145	163	181	199	218
15	FT		78	92	106	121	136	152	167	183
16	FT			77	89	102	114	128	141	155
17	FT				75	85	96	108	119	131
18	FT					72	81	91	101	111
19	FT							77	85	94
20	FT								72	80
21	FT									67

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	6.5	6.5	6.25	6.25	6.0	6.0	5.75	5.75	5.5

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

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