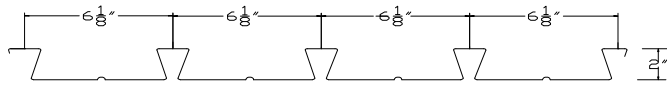


MARCORE-SR COMPOSITE DECK-18 GAUGE (WITH STIFFENER RIBS)



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 - 145 lb. NWC*	LB/FT ²	44.3	50.3	56.3	62.2	68.5	74.5	80.4	86.4	91.4
SECTION MODULUS (S _p)	IN ³	2.3	2.7	3.1	3.6	4.0	4.5	4.9	5.4	5.9
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	7.4	10.1	13.5	17.5	22.2	27.7	33.9	41.0	49.0
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	362	400	400	400	400	400	400	400	400
10	FT	286	341	398	400	400	400	400	400	400
11	FT	230	275	321	369	400	400	400	400	400
12	FT	188	225	263	302	342	382	400	400	400
13	FT	155	185	217	250	283	317	351	386	400
14	FT	129	154	181	209	237	265	294	324	354
15	FT		129	152	176	199	224	248	273	299
16	FT			128	148	169	189	211	232	254
17	FT				126	143	161	179	198	217
18	FT					122	137	153	169	186
19	FT						117	131	145	160
20	FT							112	124	137
21	FT								106	118

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	7.25	7.0	7.0	6.75	6.5	6.5	6.25	6.25	6.0

*Normal Weight Concrete 145#

UNDERWRITERS LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 25

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

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@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	#6@10	#5@10	#5@9	#5@7	#5@11	#5@10	#5@8	#4@7	#5@11	#5@8
18'-6"	#5@9	#5@8	#6@9	#5@9	#5@9	#5@7	#5@10	#5@9	#5@7	#4@7	#5@10	#5@8
19'-0"	#5@8	#5@8	#6@9	#5@9	#5@8	#6@9	#5@9	#5@9	#5@7	#5@10	#5@9	#5@7
19'-6"	#5@8	#5@7	#6@8	#5@8	#5@8	#6@9	#5@9	#5@8	#6@10	#5@10	#5@9	#5@7
20'-0"	#5@7	#5@7	#6@8	#5@8	#5@7	#6@8	#5@8	#5@8	#6@9	#5@9	#5@8	#6@10
20'-6"	#5@7	#6@9	#6@7	#5@7	#5@7	#6@8	#5@8	#5@7	#6@8	#5@9	#5@8	#6@9
21'-0"	#6@10	#6@9	#6@7	#5@7	#6@10	#6@7	#5@7	#5@7	#6@8	#5@8	#5@7	#6@9
21'-6"	#6@9	#6@8	#6@6	#6@10	#6@9	#6@7	#5@7	#6@10	#6@7	#5@8	#5@7	#6@8
22'-0"	#6@9	#6@8		#6@9	#6@8		#6@10	#6@9	#6@7	#5@7	#5@7	#6@8
22'-6"	#6@8	#6@7		#6@9	#6@8		#6@9	#6@9	#6@7	#5@7	#6@9	#6@7
23'-0"	#6@8	#6@7		#6@8	#6@8		#6@9	#6@8		#6@10	#6@9	#6@7
23'-6"	#6@7	#6@7		#6@8	#6@7		#6@8	#6@8		#6@9	#6@8	#6@7
24'-0"	#6@7	#6@6		#6@7	#6@7		#6@8	#6@7		#6@9	#6@8	
24'-6"	#6@7			#6@7			#6@8	#6@7		#6@8	#6@8	
25'-0"	#6@6			#6@7			#6@7	#6@7		#6@8	#6@7	

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