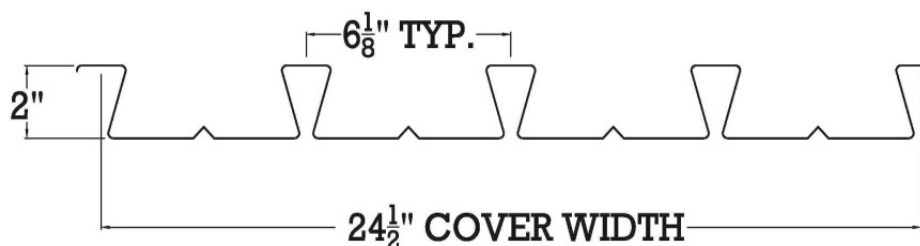


MARCORE-SR COMPOSITE DECK-22 GAUGE

(WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK

Fy= 50 ksi

THICKNESS	in.	0.0295
WEIGHT	psf	2.3
AREA	in ²	0.68
MOMENT OF INERTIA (I _p)	in ⁴ /ft	0.40
MOMENT OF INERTIA (I _N)	in ⁴ /ft	0.35
SECTION MODULUS (S _p)	in ³ /ft	0.28
SECTION MODULUS (S _N)	in ³ /ft	0.29
MOMENT CAPACITY (M _P)	lb-in/ft	8530
MOMENT CAPACITY (M _N)	lb-in/ft	8797

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 - 110 lb. LWC	psf	33.6	38.2	42.7	47.2	51.9	56.5	61.0	65.5	69.3
SECTION MODULUS (S _p)	in ³ /ft	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 /ft	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

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	22 ga.	ft.	7.25	7.00	6.75	6.50	6.50	6.25	6.00	5.75
Double	22 ga.	ft.	8.25	7.75	7.50	7.25	7.00	6.75	6.50	6.25

*Light Weight Concrete 110 pcf

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

MARCORE-SR COMPOSITE DECK-22 GAUGE

(WITH STIFFENER RIBS)

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, SINGLE SPAN
22 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.	322	400	400	400	400	400	400	400	400	400
10	ft.	225	328	400	400	400	400	400	400	400	400
11	ft.	160	236	380	400	400	400	400	400	400	400
12	ft.	115	173	287	332	371	400	400	400	400	400
13	ft.	82	127	215	251	310	342	375	400	400	400
14	ft.	59	94	163	191	254	289	316	344	372	398
15	ft.	41	68	123	146	196	246	269	293	317	339
16	ft.	27	49	93	111	152	201	231	251	272	291
17	ft.	17	34	70	84	118	157	199	217	235	251
18	ft.		22	51	63	91	123	162	188	203	218
19	ft.		13	36	46	69	96	128	163	177	189
20	ft.			24	33	51	74	100	131	154	165
21	ft.			15	21	37	56	78	104	135	144
22	ft.				12	25	41	60	82	108	126
23	ft.					15	28	44	63	86	109
24	ft.						18	31	47	67	87
25	ft.							20	34	51	68
26	ft.							11	23	37	52
27	ft.								13	25	38
28	ft.									15	26
29	ft.										16

*Light Weight Concrete 110 pcf

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

MARCORE-SR COMPOSITE DECK-22 GAUGE

(WITH STIFFENER RIBS)

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, DOUBLE & TRIPLE SPAN DECK								22 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.	161	171	191	211	231	251	272	291
17	ft.	138	147	164	182	199	217	235	251
18	ft.	119	127	142	157	172	188	203	218
19	ft.	103	110	123	137	150	163	177	189
20	ft.	88	96	107	119	131	142	154	165
21	ft.	70	83	93	104	114	124	135	144
22	ft.	55	67	81	90	100	109	118	126
23	ft.	42	52	71	79	87	95	104	111
24	ft.	31	40	61	69	76	83	91	97
25	ft.	22	30	48	60	66	73	79	85
26	ft.	14	21	36	52	58	63	69	74
27	ft.		13	27	43	50	55	60	64
28	ft.			18	32	43	47	52	56
29	ft.			11	23	37	41	45	48
30	ft.				15	28	35	39	41
31	ft.					19	29	33	35
32	ft.					12	24	27	29
33	ft.						16	22	24
34	ft.							18	19
35	ft.							12	15
36	ft.								11

*Light Weight Concrete 110 pcf

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

MARCORE-SR COMPOSITE DECK-22 GAUGE

(WITH STIFFENER RIBS)

TWO SPAN COMPOSITE DECK 22 GAUGE

2 SPAN CONDITION REINFORCING OVER INTERMEDIATE SUPPORT

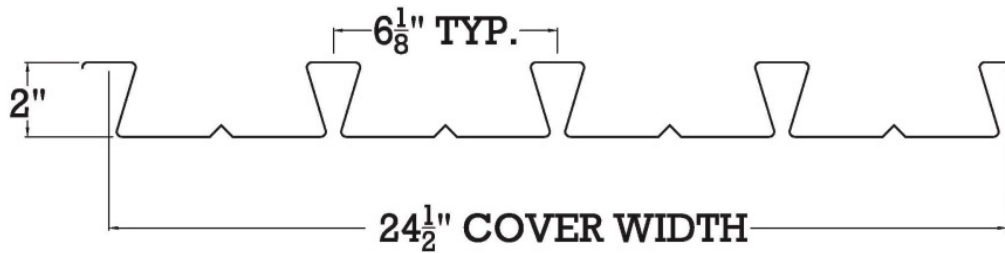
SPAN	COMPOSITE SLAB THICKNESS														
	4.0"			4.5"			5.0"			5.5"			6.0"		
	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100	25+40	25+50	5+100
13'-0"	#4@9	#4@8	#5@9	#4@11	#4@9	#5@10	#4@12	#4@10	#4@7	#4@13	#4@11	#4@8	#4@14	#4@13	#4@9
13'-6"	#4@8	#4@7	#5@8	#4@10	#4@8	#5@9	#4@11	#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	#5@7	#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	#5@7	#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	#5@6	#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	#5@7	#4@7	#5@11	#5@8	#4@8	#4@7	#5@9
17'-0"				#5@9	#5@7		#5@10	#5@9	#5@6	#4@7	#5@10	#5@7	#4@7	#5@11	#5@8
17'-6"				#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#4@7	#5@10	#5@7
18'-0"				#5@7			#5@9	#5@7		#5@10	#5@9	#5@6	#5@11	#5@9	#5@7
18'-6"							#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7
19'-0"							#5@7	#5@7		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
19'-6"							#5@7			#5@8	#5@7		#5@9	#5@8	#5@5
20'-0"										#5@7	#5@7		#5@8	#5@7	#5@5
20'-6"										#5@7	#5@6		#5@8	#5@7	#5@5
21'-0"										#5@7			#5@7	#5@6	
21'-6"													#5@7	#5@5	
22'-0"													#5@7		
22'-6"													#5@6		
23'-0"															
23'-6"															
24'-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	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8
19'-6"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8
20'-0"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
20'-6"	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@10	#5@9	#5@7
21'-0"	#5@8	#5@7	#5@5	#5@8	#5@8	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
21'-6"	#5@7	#5@7		#5@8	#5@7		#5@8	#5@8	#5@6	#5@9	#5@8	#5@6
22'-0"	#5@7	#5@6		#5@7	#5@7		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
22'-6"	#5@7	#5@6		#5@7	#5@7		#5@8	#5@7		#5@8	#5@7	#5@5
23'-0"	#5@6	#5@5		#5@7	#5@6		#5@7	#5@7		#5@8	#5@7	#5@5
23'-6"	#5@6			#5@7			#5@7	#5@6		#5@7	#5@7	
24'-0"							#5@7	#5@6		#5@7	#5@6	
24'-6"							#5@6			#5@7	#5@6	
25'-0"										#5@6	#5@5	

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

MARCORE-SR COMPOSITE DECK-20 GAUGE

(WITH STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK Fy=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 - 110 lb. LWC	psf	33.6	38.2	42.7	47.2	51.9	56.5	61.0	65.5	69.3
SECTION MODULUS (S _p)	in ³ /ft	1.7	2.0	2.3	2.6	2.9	3.3	3.6	4.0	4.3
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	4.8	6.5	8.7	11.2	14.2	17.7	21.7	26.2	31.2
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 RECOMMENDATION

Span	Composite Slab Thickness, in.	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
MARCURE-SR										
Single	20 ga.	ft.	8.00	7.75	7.50	7.25	7.00	6.75	6.50	6.25
Double	20 ga.	ft.	9.25	8.75	8.50	8.25	8.00	7.50	7.25	7.00

*Light Weight Concrete 110 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, SINGLE SPAN
22 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.	334	400	400	400	400	400	400	400	400	400
10	ft.	233	342	400	400	400	400	400	400	400	400
11	ft.	166	247	400	400	400	400	400	400	400	400
12	ft.	119	181	301	353	400	400	400	400	400	400
13	ft.	86	133	226	268	349	400	400	400	400	400
14	ft.	62	98	171	206	268	347	385	400	400	400
15	ft.	43	72	130	159	208	271	329	358	387	400
16	ft.	29	52	99	123	161	213	272	308	334	358
17	ft.	18	37	74	94	125	167	216	267	289	310
18	ft.		24	55	72	97	131	172	218	252	270
19	ft.		14	40	55	74	103	137	175	221	237
20	ft.			27	40	56	80	108	141	179	208
21	ft.			17	29	41	61	84	112	145	179
22	ft.				19	28	45	65	89	116	146
23	ft.				11	18	32	49	69	93	118
24	ft.						21	35	52	73	94
25	ft.						12	24	38	56	75
26	ft.							14	27	42	58
27	ft.								16	30	43
28	ft.									19	31
29	ft.									10	20
30	ft.										10

*Light Weight Concrete 110 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.	167	182	203	226	272	308	334	358
17	ft.	144	158	175	195	216	267	289	310
18	ft.	124	137	151	170	188	218	252	270
19	ft.	108	119	132	148	163	179	221	237
20	ft.	94	104	115	129	143	157	179	208
21	ft.	75	91	100	113	125	137	150	179
22	ft.	59	76	88	99	110	121	132	146
23	ft.	45	61	77	86	96	106	116	125
24	ft.	34	48	66	76	84	93	102	110
25	ft.	24	37	52	66	74	82	90	97
26	ft.	16	28	40	58	65	72	79	85
27	ft.		20	30	47	57	63	69	75
28	ft.		13	21	36	49	55	61	65
29	ft.			13	27	42	47	53	57
30	ft.				18	32	41	46	49
31	ft.				11	23	35	40	43
32	ft.					15	28	34	36
33	ft.						19	28	31
34	ft.						12	24	25
35	ft.							16	21
36	ft.								16
37	ft.								11

*Light Weight Concrete 110 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

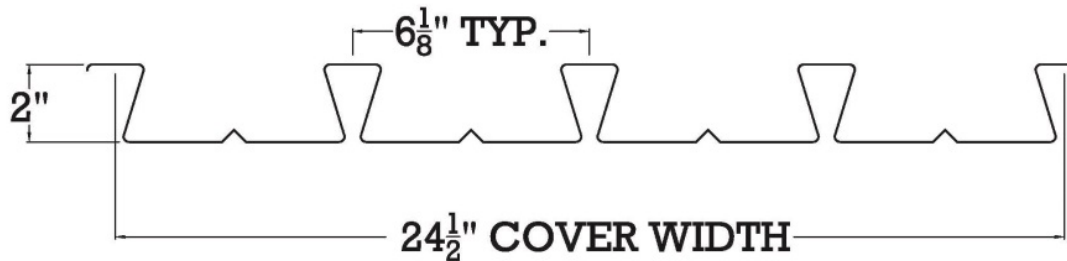
2 SPAN CONDITION REINFORCING OVER INTERMEDIATE SUPPORT

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

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

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



SECTION PROPERTIES OF STEEL DECK

Fy=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 - 110 lb. LWC	psf	33.7	38.3	42.8	48.1	52.1	56.6	61.1	65.7	70.2
SECTION MODULUS (S _p)	in ³ /ft	2.0	2.4	2.8	3.2	3.7	4.1	4.5	5.0	5.4
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	5.4	7.3	9.7	12.5	15.9	19.7	24.1	29.0	34.6
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 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
Double	18 ga.	ft.	9.50	9.00	8.75	8.75	8.25	8.00	7.75	7.50

*Light Weight Concrete 110 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)

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, SINGLE 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.	369	400	400	400	400	400	400	400	400	400
10	ft.	259	381	400	400	400	400	400	400	400	400
11	ft.	185	276	400	400	400	400	400	400	400	400
12	ft.	134	203	337	390	400	400	400	400	400	400
13	ft.	97	150	255	296	391	400	400	400	400	400
14	ft.	70	112	194	226	302	369	400	400	400	400
15	ft.	50	83	149	174	235	305	346	377	400	400
16	ft.	35	61	114	134	184	241	299	325	351	378
17	ft.	23	44	87	103	144	191	245	282	305	328
18	ft.	13	30	65	79	112	151	196	246	266	286
19	ft.		19	48	59	87	119	157	200	233	251
20	ft.		10	34	43	67	94	125	162	203	220
21	ft.			23	30	50	73	99	130	165	194
22	ft.			13	20	36	55	78	104	134	168
23	ft.				11	24	41	60	83	108	137
24	ft.					15	29	45	64	86	111
25	ft.						18	32	49	68	89
26	ft.						10	21	36	52	71
27	ft.							12	24	38	55
28	ft.								15	27	41
29	ft.									17	29
30	ft.										18
31	ft.										10

*Light Weight Concrete 110 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)

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.	166	178	202	241	299	325	351	378
17	ft.	143	153	174	195	245	282	305	328
18	ft.	124	132	151	169	196	246	266	286
19	ft.	107	115	131	147	163	200	233	251
20	ft.	93	100	114	128	142	162	203	220
21	ft.	81	87	99	112	124	137	165	194
22	ft.	69	75	87	98	109	120	134	168
23	ft.	54	66	76	86	95	105	115	137
24	ft.	42	52	66	75	84	92	101	111
25	ft.	31	40	58	66	73	81	89	96
26	ft.	22	30	49	57	64	71	78	85
27	ft.	15	21	38	50	56	62	68	74
28	ft.		13	28	43	48	54	59	65
29	ft.			20	35	42	47	52	56
30	ft.			12	26	36	40	45	49
31	ft.				18	30	34	38	42
32	ft.				10	23	29	32	36
33	ft.					15	24	27	30
34	ft.						19	22	25
35	ft.						12	18	20
36	ft.							14	16
37	ft.								12
38	ft.								8

*Light Weight Concrete 110 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"		
SPAN	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@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	#5@6	#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	#5@7	#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	#5@6	#4@7	#5@10	#5@7	#4@8	#4@7	#5@8	#4@8	#4@7	#5@9
16'-6"	#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#4@7	#5@10	#5@7	#4@8	#4@7	#5@8
17'-0"	#5@7			#5@8	#5@7		#5@10	#5@9	#5@6	#4@7	#5@10	#5@7	#4@7	#5@11	#5@8
17'-6"	#5@7			#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@7	#4@7	#5@10	#5@7
18'-0"				#5@7	#5@6		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
18'-6"				#5@7	#5@6		#5@8	#5@7		#5@9	#5@8	#5@5	#5@10	#5@9	#5@6
19'-0"				#5@6			#5@7	#5@7		#5@8	#5@7	#5@5	#5@9	#5@8	#5@6
19'-6"							#5@7	#5@6		#5@8	#5@7	#5@5	#5@9	#5@8	#5@5
20'-0"							#5@7	#5@5		#5@7	#5@7		#5@8	#5@7	#5@5
20'-6"							#5@6			#5@7	#5@6		#5@7	#5@7	#5@5
21'-0"										#5@7	#5@5		#5@7	#5@6	#5@5
21'-6"										#5@6	#5@5		#5@7	#5@6	
22'-0"										#5@5			#5@6	#5@5	
22'-6"										#5@5			#5@6	#5@5	
23'-0"													#5@5	#5@5	
23'-6"													#5@5		
24'-0"															

	COMPOSITE SLAB THICKNESS											
	6.5"			7.0"			7.5"			8.0"		
SPAN	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@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	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8	#4@7	#4@7	#5@8
19'-6"	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7	#4@7	#5@10	#5@8
20'-0"	#5@9	#5@8	#5@6	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7	#5@11	#5@10	#5@7
20'-6"	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@9	#5@9	#5@7	#5@10	#5@9	#5@7
21'-0"	#5@8	#5@7	#5@5	#5@8	#5@7	#5@5	#5@9	#5@8	#5@6	#5@10	#5@9	#5@7
21'-6"	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@8	#5@8	#5@6	#5@9	#5@8	#5@6
22'-0"	#5@7	#5@6	#5@5	#5@7	#5@7	#5@5	#5@8	#5@7	#5@5	#5@8	#5@8	#5@6
22'-6"	#5@7	#5@6		#5@7	#5@6		#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
23'-0"	#5@6	#5@5		#5@7	#5@6		#5@7	#5@7	#5@5	#5@8	#5@7	#5@5
23'-6"	#5@6	#5@5		#5@6	#5@5		#5@7	#5@6		#5@7	#5@7	#5@5
24'-0"	#5@5	#5@5		#5@6	#5@5		#5@7	#5@6		#5@7	#5@6	#5@5
24'-6"	#5@5			#5@5			#5@6	#5@5		#5@7	#5@6	
25'-0"							#5@6	#5@5		#5@6	#5@5	

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