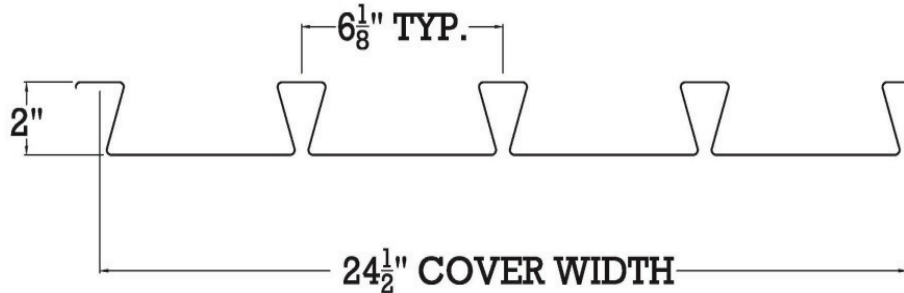


MARCORE-S COMPOSITE DECK-22 GAUGE (WITHOUT STIFFENER RIBS)



SECTION PROPERTIES OF STEEL DECK		F _y =50 ksi
THICKNESS	in.	0.0295
WEIGHT	psf	2.3
AREA	in ²	0.66
MOMENT OF INERTIA (I _p)	in ⁴ /ft	0.40
MOMENT OF INERTIA (I _N)	in ⁴ /ft	0.26
SECTION MODULUS (S _p)	in ³ /ft	0.26
SECTION MODULUS (S _N)	in ³ /ft	0.24
MOMENT CAPACITY (M _p)	lb-in/ft	7800
MOMENT CAPACITY (M _N)	lb-in/ft	7200

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	1.4	1.7	2.0	2.2	2.5	2.8	3.1	3.4	3.7
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	4.4	6.1	8.1	10.4	13.2	16.5	20.2	24.4	29.1
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.	MARCORE-S									
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	
Single	22 ga.	ft.	7.00	6.75	6.50	6.25	6.25	6.00	5.75	5.75	5.50
Double	22 ga.	ft.	7.50	7.25	7.00	6.50	6.50	6.25	6.00	6.00	5.75

*Light Weight Concrete 110 pcf

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

MARCORE-S COMPOSITE DECK-22 GAUGE (WITHOUT 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.	320	400	400	400	400	400	400	400	400	400
10	ft.	223	326	400	400	400	400	400	400	400	400
11	ft.	158	235	369	391	400	400	400	400	400	400
12	ft.	114	171	284	322	360	400	400	400	400	400
13	ft.	82	126	213	248	300	332	363	394	400	400
14	ft.	58	93	161	188	252	280	306	333	359	385
15	ft.	40	68	122	144	195	238	261	283	306	328
16	ft.	27	49	92	109	151	199	223	243	262	281
17	ft.	16	34	69	83	116	156	192	209	226	242
18	ft.		22	50	62	89	122	160	181	196	210
19	ft.		12	36	45	68	95	126	157	170	182
20	ft.			24	31	50	73	99	130	148	159
21	ft.			14	20	36	55	77	103	129	139
22	ft.				11	24	40	59	80	106	121
23	ft.					14	28	43	62	83	106
24	ft.						17	30	46	65	86
25	ft.							20	33	49	67
26	ft.							10	22	35	51
27	ft.								12	24	37
28	ft.									14	25
29	ft.										15

*Light Weight Concrete 110 pcf

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

MARCORE-S COMPOSITE DECK-22 GAUGE (WITHOUT STIFFENER RIBS)

SUPERIMPOSED LIVE LOAD ON COMPOSITE DECK, DOUBLE & TRIPLE SPAN 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.	168	164	184	204	223	243	262	281
17	ft.	145	141	159	175	192	209	226	242
18	ft.	125	122	137	152	166	181	196	210
19	ft.	109	105	119	131	144	157	170	182
20	ft.	87	91	103	114	126	137	148	159
21	ft.	69	79	90	100	109	119	129	139
22	ft.	54	65	78	87	95	104	113	121
23	ft.	41	51	68	76	83	91	98	106
24	ft.	30	39	59	66	73	79	86	92
25	ft.	21	28	47	57	63	69	75	81
26	ft.	14	20	35	49	55	60	65	70
27	ft.		12	26	42	47	52	56	61
28	ft.			17	31	41	45	49	52
29	ft.			10	22	35	38	42	45
30	ft.				14	27	32	35	38
31	ft.					19	27	30	32
32	ft.					11	22	24	26
33	ft.						15	20	21
34	ft.							15	17
35	ft.							11	12

*Light Weight Concrete 110 pcf

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

MARCORE-S COMPOSITE DECK-22 GAUGE

(WITHOUT 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@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@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@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@8	#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@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@7	
21'-6"													#5@7	#5@6	
22'-0"													#5@7	#5@5	
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@12
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@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)