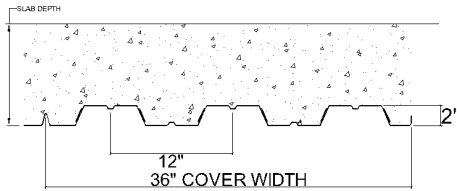


# TYPE "2.0CF" COMPOSITE FLOOR DECK

PROPERTIES SECTION

FY=50 KSI

ASD ( $\Omega=1.67$ )



DECK TYPE	DESIGN THICKNESS	WT PSF	I <sup>P</sup> IN. <sup>4</sup> PER FT.	I <sup>N</sup> IN. <sup>4</sup> PER FT.	S <sup>P</sup> IN. <sup>3</sup> PER FT.	S <sup>N</sup> IN. <sup>3</sup> PER FT.	M <sup>P</sup> /Ω IN.-LBS. PER FT.	M <sup>N</sup> /Ω IN.-LBS. PER FT.
22	.0295 IN.	1.58	.297	.277	.235	.246	7037	7351
20	.0358 IN.	1.90	.373	.357	.314	.326	9401	9760
18	.0474 IN.	2.50	.522	.507	.473	.486	14172	14551
16	.0598 IN.	3.19	.680	.670	.645	.643	19301	19251

## GENERAL INFORMATION

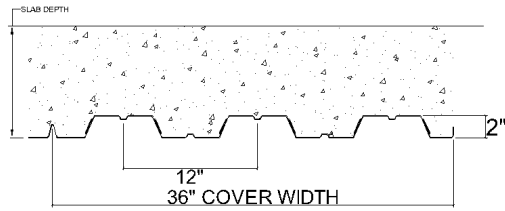
SLAB THICKNESS	4"	4 ½"	5"	5 ½"	6"	6 ½"
Vol. Conc. Yds/100SF	.94	1.09	1.24	1.40	1.55	1.71
Conc. Wt. PSF (Light Wt.)	31	35	39	44	48	53
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1	W2.1XW2.1

WHEN W.W.F. REINFORCEMENT IS NOT USED, THE SDI RECOMMENDS THAT THE LIVE LOAD VALUES BE REDUCED BY 10%

LIGHT WEIGHT CONCRETE (115 PCF)	SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF CLEAR SPAN														
			1 SPAN	2 SPAN	3 SPAN	7-0	7-6	8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6	12-0	12-6	13-0	13-6	14-0
			4" (t=2)	22	8-5	9-10	9-11	313	270	235	206	182	162	144	129	116	105	95	86	78
	20	10-2	11-4	11-8	375	325	283	249	220	196	175	157	141	128	116	106	96	88	81	
	18	11-5	13-9	14-3	*	*	369	325	288	256	230	207	187	169	154	141	129	118	109	
	16	12-5	15-10	16-5	*	*	*	*	357	318	285	257	233	212	193	176	162	149	137	
	4 ½" (t=2 ½)	22	8-1	9-5	9-7	*	329	287	252	222	197	176	158	142	128	116	106	96	88	80
	20	9-9	10-11	11-3	*	395	345	303	268	239	213	192	173	157	142	129	118	108	99	
	18	10-11	13-3	13-9	*	*	*	395	350	312	280	252	228	207	188	172	157	144	133	
	16	11-11	15-3	15-9	*	*	*	*	387	347	313	283	258	235	215	197	176	162	149	
	5" (t=3)	22	7-9	9-1	9-2	*	390	340	299	264	235	210	188	170	153	139	126	115	105	96
	20	9-6	11-6	11-11	*	*	*	360	319	284	254	228	206	187	170	155	141	129	119	
	18	10-7	12-10	13-3	*	*	*	*	371	333	300	271	246	224	205	188	172	159	146	
	16	11-6	14-9	15-3	*	*	*	*	*	372	337	307	280	256	235	216	197	176	162	
	5 ½" (t=3 ½)	22	7-6	8-9	8-10	*	*	395	347	307	273	244	219	197	178	162	147	134	123	112
	20	9-0	10-1	10-5	*	*	*	*	371	330	296	266	240	217	198	180	165	151	138	
	18	10-2	12-4	12-9	*	*	*	*	*	387	349	316	287	261	239	219	201	185	171	
	16	11-1	14-2	14-8	*	*	*	*	*	*	372	337	307	280	256	235	216	197	176	
	6" (t=4)	22	7-3	8-5	8-7	*	*	*	398	352	313	280	251	226	205	186	169	154	141	129
	20	8-9	9-9	10-1	*	*	*	*	*	378	339	305	275	249	227	207	189	174	159	
	18	9-10	11-11	12-4	*	*	*	*	*	*	362	329	299	274	252	231	213	196	180	
	16	10-9	13-9	14-2	*	*	*	*	*	*	375	343	315	289	266	244	222	201	181	
	6 ½" (t=4 ½)	22	7-0	8-2	8-3	*	*	*	*	397	353	315	283	255	231	210	191	174	159	146
	20	8-5	9-5	9-9	*	*	*	*	*	*	382	344	311	282	256	234	214	196	180	
	18	9-6	11-6	11-11	*	*	*	*	*	*	372	339	311	282	256	234	214	196	180	
	16	10-5	13-3	13-8	*	*	*	*	*	*	388	357	329	299	274	252	231	213	196	

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 2.0 INCHES.  
MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 4.0 INCHES. LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI. \* INDICATES LIVE LOADS IN EXCESS OF 400 P.S.F. UNDERWRITES LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF. ROLLED IN HANGER TABS ALSO AVAILABLE UPON REQUEST

## TYPE "2.0CF" COMPOSITE FLOOR DECK



**SECTION  
PROPERTIES**

FY=50 KSI

ASD ( $\Omega=1.67$ )

DECK TYPE	DESIGN THICKNESS	WT PSF	I <sup>P</sup> IN. <sup>4</sup>	I <sup>N</sup> IN. <sup>4</sup>	S <sup>P</sup> IN. <sup>3</sup>	S <sup>N</sup> IN. <sup>3</sup>	M <sup>P</sup> /Ω IN. - LBS. PER FT	M <sup>N</sup> /Ω IN. - LBS. PER FT
22	.0295 IN.	1.58	.297	.277	.235	.246	7037	7351
20	.0358 IN.	1.90	.373	.357	.314	.326	9401	9760
18	.0474 IN.	2.50	.522	.507	.473	.486	14172	14551
16	.0598 IN.	3.19	.680	.670	.645	.643	19301	19251

**GENERAL INFORMATION**

SLAB THICKNESS	4"	4 ½"	5"	5 ½"	6"	6 ½"
Vol. Conc. Yds/100SF	.94	1.09	1.24	1.40	1.55	1.71
Conc. Wt. PSF (Normal Wt.)	39	45	51	57	63	69
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1	W2.1XW2.1

WHEN W.W.F. REINFORCEMENT IS NOT USED, THE SDI RECOMMENDS THAT THE LIVE LOAD VALUES BE REDUCED BY 10%

NORMAL WEIGHT CONCRETE (145 PCF)	SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF CLEAR SPAN, FT.														
			1 SPAN	2 SPAN	3 SPAN	7-0	7-6	8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6	12-0	12-6	13-0	13-6	14-0
			N																	
NORMAL WEIGHT CONCRETE (145 PCF)	4" (t=2)	22	7-9	9-1	9-2	322	277	241	211	186	164	146	131	117	105	95	86	77	70	64
		20	9-5	106	10-10	388	335	292	256	226	200	179	160	144	130	117	106	97	88	80
		18	10-7	12-10	13-3	*	*	383	337	298	265	237	213	192	174	158	144	131	120	110
		16	11-6	14-9	15-3	*	*	*	*	371	331	297	267	241	219	199	182	166	153	140
	4 ½" (t=2 ½)	22	7-5	8-8	8-9	390	336	293	256	226	200	178	159	143	128	116	105	95	86	78
		20	8-11	10-0	10-4	*	*	354	311	274	244	217	195	175	158	143	130	118	108	98
		18	10-1	12-3	12-8	*	*	*	*	361	322	288	259	233	211	192	175	160	146	134
		16	11-0	14-1	14-6	*	*	*	*	*	360	324	293	266	242	221	202	186	171	
	5" (t=3)	22	7-1	8-3	8-4	*	398	347	304	268	237	211	189	170	153	138	125	113	103	94
		20	8-9	10-5	10-9	*	*	*	368	325	289	258	231	208	188	170	155	141	128	117
		18	9-8	11-8	12-1	*	*	*	*	*	381	341	307	277	251	228	208	190	174	160
		16	10-6	13-5	13-11	*	*	*	*	*	*	384	347	315	287	263	241	221	203	
5 ½" (t=3 ½)	22	6-10	7-11	8-0	*	*	*	352	311	276	246	220	197	178	161	145	132	120	109	
	20	8-2	9-2	9-6	*	*	*	*	378	336	300	269	242	219	198	180	164	150	137	
	18	9-3	11-3	11-7	*	*	*	*	*	397	357	322	292	265	242	221	203	186	171	
	16	10-2	12-11	13-4	*	*	*	*	*	*	397	357	322	292	265	242	221	203		
6" (t=4)	22	6-7	7-8	7-9	*	*	*	*	355	315	281	251	226	204	184	167	151	138	126	
	20	7-10	8-10	9-2	*	*	*	*	*	384	343	307	277	250	227	206	188	172	157	
	18	9-0	10-10	11-2	*	*	*	*	*	*	384	343	307	277	250	227	206	188	172	
	16	9-10	12-5	12-10	*	*	*	*	*	*	384	343	307	277	250	227	206	188		
6 ½" (t=4 ½)	22	6-4	7-5	7-6	*	*	*	*	*	355	316	283	255	230	208	188	171	156	142	
	20	7-7	8-7	8-10	*	*	*	*	*	*	386	347	312	283	256	233	213	194	178	
	18	8-9	10-5	10-9	*	*	*	*	*	*	*	377	343	313	287	263	242	222	202	
	16	9-6	12-0	12-5	*	*	*	*	*	*	*	377	343	313	287	263	242	222		

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 2.0 INCHES.  
 MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 4.0 INCHES.  
 LOAD TABLES AND SECTION PROPERTIES WERE GENERATED BY THE SDI. \* INDICATES LIVE LOADS IN EXCESS OF 400 P.S.F.  
 UNDERWRITES LABORATORIES, INC. FIRE RATED FLOOR DESIGN ASSEMBLY LIVE LOAD LIMIT FOR COMPOSITE DECK SLABS IS 250 PSF. ROLLED IN HANGER TABS ALSO AVAILABLE UPON REQUEST

**SHEAR AND WEB CRIPPLING (BARE DECK) TYPE “2.0 CF” COMPOSITE FLOOR DECK AND  
“2.0 NCF” NON COMPOSITE FORM DECK (50 KSI)**

DECK TYPE	V <sup>N</sup> / <u>Q</u> LBS PER FT	WEB CRIPPLING (R <sup>N</sup> / <u>Q</u> ), LBS/FT. ONE FLANGE LOADING END BEARING			WEB CRIPPLING (R <sup>N</sup> / <u>Q</u> ), LBS/FT. ONE FLANGE LOADING INTERIOR BEARING		
		2"	3"	4"	2"	3"	4"
22	1566	421	485	539	657	743	815
20	2166	601	689	763	942	1061	1161
18	3131	1002	1142	1259	1589	1776	1934
16	3932	1530	1734	1905	2446	2719	2949

ALL SECTION PROPERTIES AND ASD FLEXURAL STRENGTHS ARE CALCULATED IN ACCORDANCE WITH ANSI/SDI C-2017, ANSI/SDI NC-2017, ANSI/SDI SD-2022 AND AISI S100-2012 AND AISI S100-2016