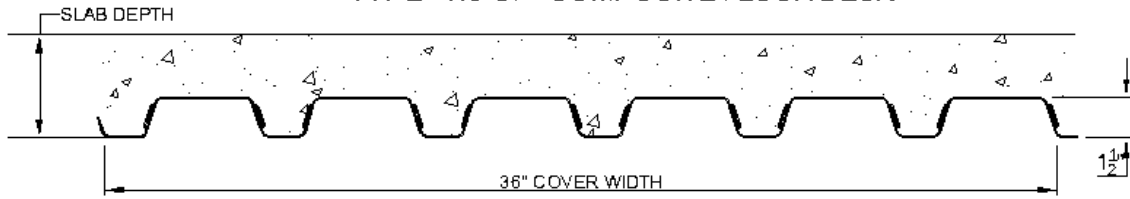


TYPE "1.5 CF" COMPOSITE FLOOR DECK

TYPE "1.5 CF" COMPOSITE FLOOR DECK



SECTION PROPERTIES FY=50 KSI

ASD ($\Omega = 1.67$)

DECK TYPE	DESIGN THICKNESS	WT PSF	I ^P IN. ⁴	I ^N IN. ⁴	S ^P IN. ³	S ^N IN. ³	M ^P /Ω IN.-LBS. PER FT.	M ^N /Ω IN.-LBS. PER FT.
22	.0295 IN.	1.6	.151	.173	.173	.171	5175	5111
20	.0358 IN.	2.0	.191	.216	.222	.219	6634	6549
18	.0474 IN.	2.6	.270	.292	.301	.303	9022	9072
16	.0598 IN.	3.0	.359	.370	.387	.383	11587	11457

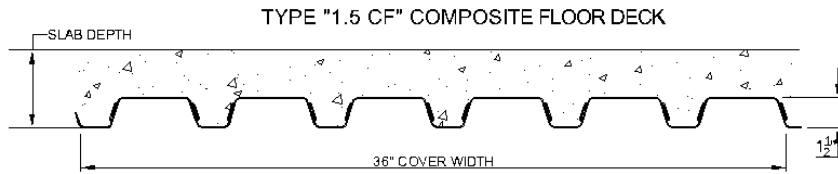
GENERAL INFORMATION

SLAB THICKNESS	3 1/2"	4"	4 1/2"	5	5 1/2"	6"
Vol. Conc. Yds/100SF	.78	.93	1.09	1.24	1.40	1.55
Conc. Wt. PSF (Light Wt.)	23	28	33	37	42	46
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1

SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN		SUPERIMPOSED LIVE LOAD, PSF																
				CLEAR SPAN, FT.																
				1 SPAN	2 SPAN	3 SPAN	5-0	5-6	6-0	6-6	7-0	7-6	8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6
LIGHT WEIGHT CONCRETE (115 PCF)	3 1/2" (t=2)	22	7-4	8-8	8-10	*	*	*	347	297	256	223	196	173	153	137	122	110	99	90
		20	8-10	10-1	10-5	*	*	*	*	354	306	267	235	207	184	165	148	133	120	109
		18	10-1	11-10	12-3	*	*	*	*	*	394	344	303	268	239	214	192	174	157	143
		16	11-1	13-4	13-9	*	*	*	*	*	*	*	360	320	285	256	230	208	189	172
	4" (t=2 1/2)	22	6-12	8-3	8-4	*	*	*	*	373	322	381	246	217	193	172	154	139	125	113
		20	8-4	9-6	9-10	*	*	*	*	*	386	336	296	261	232	208	186	168	152	138
		18	9-5	11-3	11-7	*	*	*	*	*	*	*	382	338	301	270	243	220	199	181
		16	10-5	12-7	13-0	*	*	*	*	*	*	*	*	371	333	300	271	246	225	
	4 1/2" (t=3)	22	6-8	7-10	7-11	*	*	*	*	*	391	341	299	264	235	209	188	169	152	138
		20	8-0	9-7	9-11	*	*	*	*	*	*	*	360	318	283	253	227	205	185	168
		18	8-11	10-8	11-0	*	*	*	*	*	*	*	*	368	330	297	268	243	221	221
		16	9-10	12-0	12-5	*	*	*	*	*	*	*	*	*	*	367	332	302	275	
	5" (t=3 1/2)	22	6-5	7-6	7-8	*	*	*	*	*	*	*	355	313	278	248	223	201	181	164
		20	7-7	8-9	9-0	*	*	*	*	*	*	*	*	378	336	301	270	244	220	200
		18	8-7	10-4	10-8	*	*	*	*	*	*	*	*	*	*	392	353	319	290	264
		16	9-6	11-7	11-12	*	*	*	*	*	*	*	*	*	*	*	396	360	332	329
	5 1/2" (t=4)	22	6-2	7-3	7-4	*	*	*	*	*	*	*	*	363	322	288	258	232	210	190
		20	7-4	8-5	8-8	*	*	*	*	*	*	*	*	*	390	349	313	283	256	232
		18	8-3	9-11	10-3	*	*	*	*	*	*	*	*	*	*	*	371	337	307	307
		16	9-1	11-1	11-6	*	*	*	*	*	*	*	*	*	*	*	*	386	352	328
	6" (t=4 1/2)	22	5-12	7-0	7-1	*	*	*	*	*	*	*	*	*	368	329	295	266	240	218
		20	7-1	8-2	8-4	*	*	*	*	*	*	*	*	*	*	398	358	323	293	266
		18	8-0	9-7	9-11	*	*	*	*	*	*	*	*	*	*	*	*	386	352	328
		16	8-10	10-9	11-1	*	*	*	*	*	*	*	*	*	*	*	*	*	386	352

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 1.5 INCHES.
 MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 3.0 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 "1.5 CF" COMPOSITE FLOOR DECK



SECTION PROPERTIES $F_y=50$ KSI

ASD ($\Omega=1.67$)

DECK TYPE	DESIGN THICKNESS	WT PSF	I^P IN. ⁴	I^N IN. ⁴	S^P IN. ³	S^N IN. ³	M^P/Ω IN.-LBS. PER FT.	M^N/Ω IN.-LBS. PER FT.
22	.0295 IN.	1.6	0.151	0.173	0.173	0.171	5175	5111
20	.0358 IN.	2.0	0.191	0.219	0.222	0.219	6634	6549
18	.0474 IN.	2.6	0.270	0.292	0.301	0.307	9022	9072
16	.0598 IN.	3.0	.0359	0.370	0.387	0.387	11587	11457

GENERAL INFORMATION

SLAB THICKNESS	3 1/2"	4"	4 1/2"	5	5 1/2"	6"
Vol. Conc. Yds/100SF	.78	.93	1.09	1.24	1.40	1.55
Conc. Wt. PSF (Normal Wt.)	31	37	43	49	55	61
Recommended W.W.F. 6"x6"	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W1.4XW1.4	W2.1XW2.1	W2.1XW2.1

NORMAL WEIGHT CONCRETE (145 PCF)	SLAB DEPTH	DECK TYPE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF														
			1 SPAN	2 SPAN	3 SPAN	CLEAR SPAN, FT.														
						5-0	5-6	6-0	6-6	7-0	7-6	8-0	8-6	9-0	9-6	10-0	10-6	11-0	11-6	12-0
3 1/2" (t=2)	22	6-9	8-0	8-1	*	*	*	358	305	263	228	200	176	155	138	123	110	99	89	
	20	8-1	9-3	9-7	*	*	*	*	367	317	275	241	213	189	168	150	135	121	110	
	18	9-2	10-11	11-3	*	*	*	*	*	*	358	315	278	247	221	198	178	161	146	
	16	10-1	12-3	12-8	*	*	*	*	*	*	*	388	344	306	274	246	222	202	183	
	4" (t=2 1/2)	22	6-5	7-6	7-8	*	*	*	*	383	330	287	251	221	195	173	155	139	124	112
		20	7-7	8-9	9-0	*	*	*	*	*	398	346	303	268	237	211	189	170	153	138
		18	8-7	10-4	10-8	*	*	*	*	*	*	396	350	311	278	250	225	204	185	165
		16	9-6	11-7	12-0	*	*	*	*	*	*	*	386	346	311	281	255	232	202	
	4 1/2" (t=3)	22	6-1	5-10	7-3	*	*	*	*	*	*	348	304	268	237	211	188	169	152	137
		20	7-3	6-11	8-11	*	*	*	*	*	*	*	368	325	288	257	230	207	187	169
		18	8-2	7-10	10-2	*	*	*	*	*	*	*	*	379	339	304	275	248	226	206
		16	9-0	8-7	11-5	*	*	*	*	*	*	*	*	*	380	343	311	281	255	
5" (t=3 1/2)	22	5-10	6-10	6-11	*	*	*	*	*	*	*	359	316	280	249	223	200	180	162	
	20	6-11	7-11	8-2	*	*	*	*	*	*	*	*	384	341	304	273	245	221	200	
	18	7-10	9-4	9-8	*	*	*	*	*	*	*	*	*	361	326	295	268	248	226	
	16	8-7	10-6	10-10	*	*	*	*	*	*	*	*	*	*	361	326	295	268		
5 1/2" (t=4)	22	5-8	6-7	6-8	*	*	*	*	*	*	*	*	366	324	289	258	231	208	188	
	20	6-8	7-8	7-10	*	*	*	*	*	*	*	*	*	395	353	316	284	256	232	
	18	7-7	8-12	9-3	*	*	*	*	*	*	*	*	*	*	378	342	311	284	256	
	16	8-4	10-1	10-5	*	*	*	*	*	*	*	*	*	*	*	378	342	311		
6" (t=4 1/2)	22	5-5	6-4	6-5	*	*	*	*	*	*	*	*	*	369	329	294	264	237	214	
	20	6-5	7-4	7-7	*	*	*	*	*	*	*	*	*	*	360	324	292	265	235	
	18	7-3	8-8	8-11	*	*	*	*	*	*	*	*	*	*	*	361	325	293	266	
	16	8-0	9-9	10-0	*	*	*	*	*	*	*	*	*	*	*	*	361	325		

MINIMUM EXTERIOR BEARING LENGTH REQUIRED IS 1.5 INCHES.

MINIMUM INTERIOR BEARING LENGTH REQUIRED IS 3.0 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 “1.5 CF FLOOR DECK FY=50 KSI

DECK TYPE	V^N/Ω LBS PER FT	WEB CRIPPLING (R^N/Ω), LBS/FT. ONE FLANGE LOADING END BEARING			WEB CRIPPLING (R^N/Ω), LBS/FT. ONE FLANGE LOADING INTERIOR BEARING		
		1-5”	2”	3”	1.5”	2”	3”
22	2552	829	911	1049	1231	1336	1511
20	3096	1181	1294	1484	1780	1924	2166
18	4072	1973	2151	2451	3029	3258	3642
16	5097	3016	3275	3710	4698	5033	5593

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