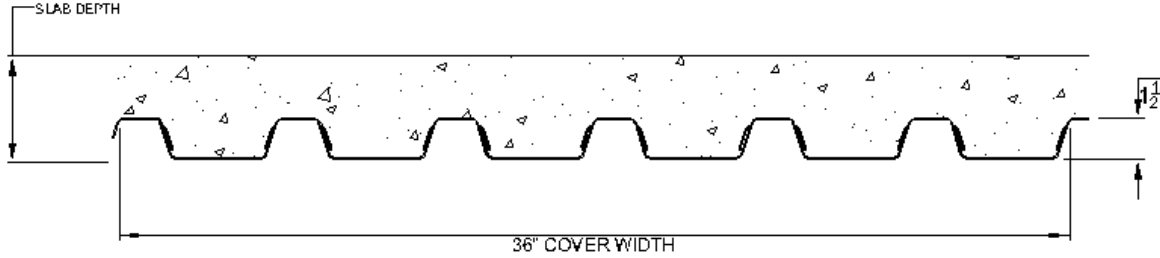


TYPE "1.5 ICF" COMPOSITE FLOOR DECK



SECTION PROPERTIES $FY=50$ KSI

ASD ($\phi = 1.67$)

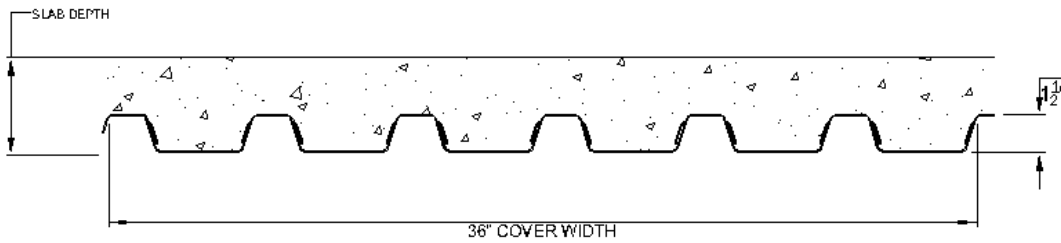
DECK TYPE	DESIGN THICKNESS	WT PSF	I^P IN. ⁴	I^N IN. ⁴	S^P IN. ³	S^N IN. ³	M^P/ϕ IN. - LBS. PER FT	M^N/ϕ IN. - LBS. PER FT
22	.0295 IN.	1.6	0.173	0.151	0.171	0.173	5111	5175
20	.0358 IN.	2.0	0.216	0.191	0.219	0.222	6549	6634
18	.0474 IN.	2.6	0.292	0.270	0.303	0.301	9072	9022
16	.0598 IN.	3.0	0.370	0.359	0.383	0.387	11457	11587

GENERAL INFORMATION

SLAB THICKNESS	3 1/2"	4"	4 1/2"	5	5 1/2"	6"
Vol. Conc. Yds/100SF	.92	1.07	1.22	1.38	1.53	1.69
Conc. Wt. PSF (Normal Wt.)	36	42	48	54	60	66
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 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	12-0
			3 1/2" (t=2)	22 20 18 16	7-9 9-5 10-7 11-6	9-1 106 12-10 14-9	9-2 10-10 13-3 15-3	*	*	*	*	365	314	273	239	210	186	165	147	132
4" (t=2 1/2)	22 20 18 16	7-5 8-11 10-1 11-0	8-8 10-0 12-3 14-1	8-9 10-4 12-8 14-6	*	*	*	*	*	384	334	292	257	228	202	181	162	145	131	
4 1/2" (t=3)	22 20 18 16	7-1 8-9 9-8 10-6	8-3 10-5 11-8 13-5	8-4 10-9 12-1 13-11	*	*	*	*	*	*	397	347	306	271	241	215	193	173	156	
5" (t=3 1/2)	22 20 18 16	6-10 8-2 9-3 10-2	7-11 9-2 11-3 12-11	8-0 9-6 11-7 13-4	*	*	*	*	*	*	*	*	356	315	280	250	225	202	182	
5 1/2" (t=4)	22 20 18 16	6-7 7-10 9-0 9-10	7-8 8-10 10-10 12-5	7-9 9-2 11-2 12-10	*	*	*	*	*	*	*	*	*	360	320	286	257	231	209	
6" (t=4 1/2)	22 20 18 16	6-4 7-7 8-9 9-6	7-5 8-7 10-5 12-0	7-6 8-10 10-9 12-5	*	*	*	*	*	*	*	*	*	*	361	323	290	261	236	

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



SECTION PROPERTIES FY=50 KSI

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	0.173	0.151	0.171	0.173	5111	5175
20	.0358 IN.	2.0	0.216	0.191	0.219	0.222	6549	6634
18	.0474 IN.	2.6	0.292	0.270	0.303	0.301	9072	9022
16	.0598 IN.	3.0	0.370	0.359	0.383	0.387	11457	11587

GENERAL INFORMATION

SLAB THICKNESS	3 ½"	4"	4 ½"	5	5 ½"	6"
Vol. Conc. Yds/100SF	.92	1.07	1.22	1.38	1.53	1.69
Conc. Wt. PSF (Light Wt.)	27	32	37	41	46	50
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														
		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	12-0
3 ½" (t=2)	22	8-5	9-10	9-11	*	*	*	*	357	308	268	235	208	184	164	147	132	119	108
	20	10-2	11-4	11-8	*	*	*	*	*	370	322	283	251	223	199	179	161	146	132
	18	11-5	13-9	14-3	*	*	*	*	*	*	*	363	322	287	257	231	209	189	172
	16	12-5	15-10	16-5	*	*	*	*	*	*	*	*	378	338	303	273	247	224	204
4" (t=2 ½)	22	8-1	9-5	9-7	*	*	*	*	*	377	329	288	255	226	202	181	162	147	133
	20	9-9	10-11	11-3	*	*	*	*	*	*	395	347	307	273	244	219	198	179	162
	18	10-11	13-3	13-9	*	*	*	*	*	*	*	*	357	320	288	260	236	215	215
	16	11-11	15-3	15-9	*	*	*	*	*	*	*	*	*	396	357	323	293	268	
4 ½" (t=3)	22	7-9	9-1	9-2	*	*	*	*	*	*	391	343	303	269	240	215	194	175	158
	20	9-6	11-6	11-11	*	*	*	*	*	*	*	*	366	326	291	262	236	213	194
	18	10-7	12-10	13-3	*	*	*	*	*	*	*	*	*	382	343	311	282	256	256
	16	11-6	14-9	15-3	*	*	*	*	*	*	*	*	*	*	387	351	324	293	268
5" (t=3 ½)	22	7-6	8-9	8-10	*	*	*	*	*	*	*	*	353	314	280	252	226	205	185
	20	9-0	10-1	10-5	*	*	*	*	*	*	*	*	*	380	340	306	276	250	227
	18	10-2	12-4	12-9	*	*	*	*	*	*	*	*	*	*	363	330	300	276	250
	16	11-1	14-2	14-8	*	*	*	*	*	*	*	*	*	*	*	363	330	300	276
5 ½" (t=4)	22	7-3	8-5	8-7	*	*	*	*	*	*	*	*	*	359	321	288	259	234	212
	20	8-9	9-9	10-1	*	*	*	*	*	*	*	*	*	*	389	350	316	286	260
	18	9-10	11-11	12-4	*	*	*	*	*	*	*	*	*	*	*	363	330	300	276
	16	10-9	13-9	14-2	*	*	*	*	*	*	*	*	*	*	*	*	363	330	300
6" (t=4 ½)	22	7-0	8-2	8-3	*	*	*	*	*	*	*	*	*	*	362	325	293	265	240
	20	8-5	9-5	9-9	*	*	*	*	*	*	*	*	*	*	395	357	323	294	268
	18	9-6	11-6	11-11	*	*	*	*	*	*	*	*	*	*	*	363	330	300	276
	16	10-5	13-3	13-8	*	*	*	*	*	*	*	*	*	*	*	*	363	330	300

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 ICF 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