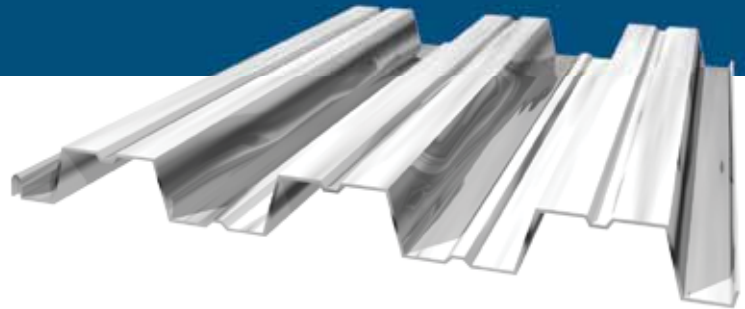




3.0" Composite Floor Deck



Composite Floor Deck brought to you by the Customer Service Leader

Cordeck is a full-service manufacturer and stocking distributor of corrugated steel deck, flashing and trim, and other building construction accessories. Cordeck's mission is to provide excellent customer service. This mission is the foundation for industry wide recognition as service leader for prompt, reliable deliveries, guaranteed quality, and large inventory of gauges and profiles. You can be certain of the product's total, maximum effectiveness, along with our ability to deliver the industry's highest quality, service, value, and customer satisfaction. Please contact us for further information. At Cordeck, we're devoted to our customers. We stand ready to earn, and keep, your full confidence and trust.

Features and Benefits

Prompt lead times are our specialty. All orders are promptly produced and shipped to meet your on-site specifications.

Project management and engineering services are offered by Cordeck's full, expert, in-house engineering and detailing services to assure optimal planning and design. Our experienced engineers and technicians provide individual customer service and attention to detail from concept to completion.

SDI Membership by the manufacturer guarantees product quality in accordance to the Steel Deck Institute (SDI).

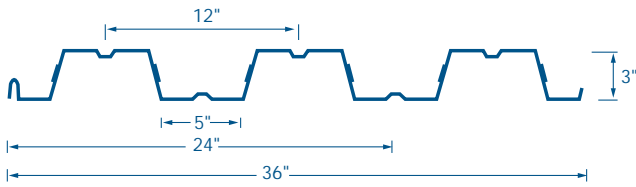
On-spec, guaranteed quality. Our production staff are true craftsmen, not just interested in getting the job done, but in doing it perfectly.

Form spans shown in the table are maximum unshored clear span lengths based on Load and Resistance Factor Design (LRFD) rationale. Form loading is based upon the SDI form span criteria that allows for the sequence of construction live loading that usually occurs during the construction phase with the placement of wet concrete by construction workers. This form span loading is represented by combinations of uniformly applied dead load and 20 psf construction load or uniformly applied dead load superimposed with 150 lb. mid-span concentrated load.

Superimposed uniform live loads shown in the tables are based on the SDI Composite Deck Design Handbook employing LRFD rationale. Composite deck slabs are single span condition with the deck serving as the positive reinforcing for the slab. Research has shown that the presence of shear studs for composite beam design influences the moment capacity of the composite deck system. When the number of shear studs present are of sufficient quantity, the composite deck slab can achieve its full ultimate moment capacity.

Welded wire fabric 1" below top surface of slab is recommended. If welded wire fabric is not used, the superimposed live loads in the following tables should be reduced by 10%.

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Gage	t in	Wd psf	Sp in ² /ft	Sn in ³ /ft	lp in ⁴ /ft	ln in ⁴ /ft	Va lbs/ft	Fy ksi
22	0.030	1.77	0.414	0.426	0.730	0.729	1528	50
20	0.036	2.14	0.534	0.551	0.920	0.919	2698	50
19	0.042	2.50	0.654	0.676	1.104	1.102	3678	50
18	0.047	2.84	0.770	0.797	1.254	1.252	4729	50
16	0.060	3.58	1.013	1.013	1.580	1.580	5309	40

Total Slab Depth D	Gage	Maximum Unshored Clear Spans			Superimposed Live Loads - PSF: NO STUDS															
		Single Span	Double Span	Triple Span	Span - Feet and Inches															
					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"	
5" 45 PSF 42 in ²	22	9'-2"	10'-7"	11'-8"	216	195	176	161	148	109	99	90	83	76	70	64	59	54	50	
	20	10'-8"	12'-11"	13'-4"	241	216	196	178	163	150	139	129	93	85	78	72	66	61	57	
	19	12'-0"	14'-4"	14'-7"	265	237	214	194	178	163	151	140	131	122	115	79	73	67	62	
	18	12'-10"	15'-1"	15'-1"	289	261	238	218	201	186	173	161	151	142	134	127	92	86	80	
	16	13'-5"	15'-7"	15'-11"	327	294	267	243	223	206	191	178	167	156	147	139	132	96	89	
5-1/2" 51 PSF 48 in ²	22	8'-9"	9'-8"	10'-11"	247	222	201	184	137	124	113	103	94	87	80	73	67	62	57	
	20	10'-1"	12'-4"	12'-9"	275	247	223	203	186	171	159	116	106	97	89	82	76	70	65	
	19	11'-4"	13'-8"	14'-2"	302	270	244	222	203	186	172	160	149	107	98	90	83	77	71	
	18	12'-5"	14'-7"	14'-7"	330	298	271	248	229	212	197	184	173	162	153	112	105	98	92	
	16	12'-9"	14'-11"	15'-5"	373	335	304	277	255	235	218	203	190	178	168	159	117	109	102	
6" 57 PSF 54 in ²	22	8'-4"	8'-10"	10'-1"	277	249	226	171	154	140	127	116	106	97	89	82	76	70	65	
	20	9'-8"	11'-10"	12'-3"	309	277	250	228	209	193	143	130	119	109	100	92	85	79	73	
	19	10'-10"	13'-2"	13'-7"	339	304	274	249	227	209	193	179	131	120	110	102	94	87	80	
	18	11'-10"	14'-2"	14'-2"	370	334	304	279	257	238	221	207	194	182	136	126	118	110	103	
	16	12'-2"	14'-4"	14'-10"	400	376	341	311	286	264	245	228	213	200	189	141	132	123	123	115
6-1/2" 63 PSF 60 in ²	22	8'-0"	8'-3"	9'-4"	307	277	251	190	171	155	141	129	118	108	99	91	84	78	72	
	20	9'-3"	11'-5"	11'-9"	343	307	278	253	232	174	158	144	132	121	111	103	95	87	81	
	19	10'-4"	12'-8"	13'-1"	377	337	304	276	252	232	214	159	146	134	123	113	104	96	89	
	18	11'-4"	13'-9"	13'-10"	400	371	338	309	285	264	246	229	216	162	151	140	131	122	115	
	16	11'-7"	13'-10"	14'-3"	400	400	378	345	317	293	272	253	237	222	169	157	146	136	128	
7" 69 PSF 66 in ²	22	7'-9"	7'-8"	8'-8"	338	304	233	209	188	171	155	142	130	119	109	101	93	86	79	
	20	9'-0"	10'-11"	11'-4"	377	338	305	278	255	192	174	159	145	133	122	113	104	96	89	
	19	10'-1"	12'-3"	12'-7"	400	370	334	303	277	255	236	175	160	147	135	124	115	106	98	
	18	11'-0"	13'-3"	13'-6"	400	400	371	340	313	290	270	252	236	178	166	154	144	135	126	
	16	11'-4"	13'-4"	13'-9"	400	400	400	379	348	322	298	278	260	200	185	172	161	150	140	
7-1/2" 75 PSF 72 in ²	22	7'-7"	7'-2"	8'-2"	368	331	254	228	205	186	169	154	141	130	119	110	101	93	86	
	20	8'-9"	10'-2"	11'-0"	400	368	333	303	231	209	190	173	158	145	134	123	113	105	97	
	19	9'-10"	11'-10"	12'-2"	400	400	364	331	302	278	209	191	175	160	147	136	125	116	107	
	18	10'-9"	12'-10"	13'-3"	400	400	400	370	341	316	294	275	210	195	181	168	157	147	138	
	16	11'-0"	12'-11"	13'-4"	400	400	400	400	380	351	325	303	283	218	202	188	175	164	153	

Product Information Design

- Cordeck certifies that our composite floor deck has been evaluated in accordance with the applicable SDI standards and property values for the Uniform Load Tables and meets or exceeds SDI requirements.
- The rib width limitations shown are taken at the theoretical intersection points of the flange and web projections. Depending on the radius used, the load table could vary from that shown.

Material

All steel to be used in Cordeck composite floor deck will be galvanized, prime painted, or a combination of the two.

1. Prime Painted

- Composite deck shall receive one coat of standard gray primer paint over cleaned and pretreated steel.
- The primer coat is intended to protect the steel for only a reasonably short period of exposure, in normal atmospheric conditions, and shall be considered an impermanent and provisional coating.

3.0" Composite Floor Deck

- c. Field painting of prime painted material is recommended especially where the deck is exposed.

dependent on many variables. The adhesion ability of fireproofing materials is the responsibility of the fireproofing applicator.

2. Galvanized

- a. All steel shall be coated to conform to ASTM A924 G-60 or G-90 or to Federal Specification QQ-S-775.
- b. Galvanized finish in G-60 or G-90 coating is desirable in high moisture atmospheric conditions.
- c. Cordeck shall not be responsible for the cleaning of the underside of steel deck to ensure bond of fireproofing. Adherence of fireproofing material is

3. Accessories

- a. Cordeck can supply end and side closures, pour stops, deck plates, rubber cell closures, screws, and other accessories needed to complete the project.

3.0" Composite Floor Deck Lightweight Concrete (110 PCF)																			
Total Slab Depth D Wt. Conc. Area Conc.	Gage	Maximum Unshored Clear Spans			Superimposed Live Loads - PSF: NO STUDS														
		Single Span	Double Span	Triple Span	Span - Feet and Inches														
					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"	14'-6"	15'-0"
5" 35 PSF 42 in ²	22	10'-2"	12'-4"	12'-9"	141	127	115	105	96	67	60	54	49	45	40				
	20	11'-11"	14'-2"	14'-7"	163	147	133	121	110	102	94	87	59	54	49	44	40		
	19	13'-4"	15'-7"	15'-7"	185	166	150	136	124	114	105	97	90	84	79	52	47	43	
	18	13'-9"	16'-1"	16'-1"	244	222	204	188	174	162	151	142	133	126	119	112	85	79	75
	16	14'-5"	16'-11"	16'-11"	277	254	234	217	202	189	177	166	157	149	141	134	127	99	94
5-1/2" 39 PSF 48 in ²	22	9'-8"	11'-7"	12'-2"	161	145	131	120	85	77	69	62	56	51	46	42			
	20	11'-3"	13'-7"	14'-0"	186	167	151	138	126	116	107	74	67	61	56	51	46	42	
	19	12'-8"	15'-0"	15'-1"	211	189	171	155	142	130	120	111	103	96	65	59	54	49	45
	18	13'-4"	15'-7"	15'-7"	278	253	232	214	198	184	172	161	152	143	135	103	97	91	85
	16	14'-0"	16'-4"	16'-5"	316	289	267	247	230	215	202	190	179	170	161	153	146	114	107
6" 44 PSF 54 in ²	22	9'-3"	10'-9"	11'-9"	181	163	147	107	96	86	78	70	63	57	52	47	43		
	20	10'-9"	13'-1"	13'-6"	209	188	170	155	141	130	93	84	76	69	63	57	52	47	43
	19	12'-1"	14'-5"	14'-8"	237	212	192	174	159	146	135	125	116	80	73	67	61	56	51
	18	12'-11"	15'-2"	15'-2"	312	284	261	240	223	207	193	181	170	161	124	116	109	102	96
	16	13'-7"	15'-9"	16'-0"	354	325	299	277	258	241	226	213	201	190	181	172	135	128	121
6-1/4" 46 PSF 57 in ²	22	9'-1"	10'-4"	11'-6"	191	172	155	113	101	91	82	74	67	60	55	50	45	41	
	20	10'-6"	12'-10"	13'-3"	221	198	179	163	149	137	98	88	80	73	66	60	55	50	46
	19	11'-10"	14'-2"	14'-6"	250	224	202	184	168	154	142	131	93	84	77	70	64	59	54
	18	12'-9"	15'-0"	15'-0"	329	300	275	253	235	218	204	191	180	169	131	122	115	108	101
	16	13'-4"	15'-6"	15'-10"	374	343	316	293	272	254	239	225	212	201	190	151	143	135	128
6-1/2" 48 PSF 60 in ²	22	8'-11"	10'-0"	11'-4"	200	180	134	119	107	96	86	78	70	64	58	52	47	43	
	20	10'-4"	12'-7"	13'-0"	232	209	189	172	157	114	103	93	84	77	70	63	58	53	48
	19	11'-7"	14'-0"	14'-4"	263	236	213	193	176	162	149	138	98	89	81	74	68	62	57
	18	12'-7"	14'-9"	14'-9"	346	316	289	267	247	230	215	201	189	178	138	129	121	113	107
	16	13'-0"	15'-2"	15'-7"	393	360	332	308	286	268	251	236	223	211	200	159	150	142	134
7-1/4" 55 PSF 72 in ²	22	8'-5"	9'-1"	10'-4"	230	173	153	137	122	110	99	89	81	73	66	60	55	49	45
	20	9'-9"	12'-0"	12'-5"	267	240	217	197	146	131	118	107	97	88	80	73	66	61	55
	19	10'-11"	13'-4"	13'-9"	302	271	244	222	203	186	137	124	112	102	93	85	78	71	65
	18	12'-0"	14'-4"	14'-4"	398	362	332	306	284	264	246	231	217	169	158	148	139	130	123
	16	12'-4"	14'-6"	15'-0"	400	400	381	353	329	307	288	271	256	207	194	183	173	163	154

3.0" Composite Floor Deck

3.0" Composite Floor Deck Normal Weight Concrete (145 PCF)																				
Total Slab Depth D Wt. Conc. Area Conc.	Gage	Maximum Unshored Clear Spans			Superimposed Live Loads - PSF: 12" o.c.															
		Single Span	Double Span	Triple Span	Span - Feet and Inches															
					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"	
5-1/2" 51 PSF 48 in ²	22	8'-9"	9'-8"	10'-11"	400	400	400	400	364	323	287	257	231	206	187	170	154	140	127	
	20	10'-1"	12'-4"	12'-9"	400	400	400	400	400	389	347	311	280	253	229	208	189	173	158	
	19	11'-4"	13'-8"	14'-2"	400	400	400	400	400	400	400	400	361	325	294	267	243	221	202	181
	18	12'-5"	14'-7"	14'-7"	400	400	400	400	400	400	400	400	400	365	330	300	267	238	212	190
	16	12'-9"	14'-11"	15'-5"	400	400	399	399	399	399	386	329	296	267	242	220	200	183	167	
6" 57 PSF 54 in ²	22	8'-4"	8'-10"	10'-1"	400	400	400	400	400	367	327	293	263	237	214	194	175	159	145	
	20	9'-8"	11'-10"	12'-3"	400	400	400	400	400	400	397	356	321	289	262	238	217	198	181	
	19	10'-10"	13'-2"	13'-7"	400	400	400	400	400	400	400	400	400	373	337	306	279	254	232	213
	18	11'-10"	14'-2"	14'-2"	400	400	400	400	400	400	400	400	400	400	380	345	315	288	263	242
	16	12'-2"	14'-4"	14'-10"	400	400	400	399	399	399	399	376	339	306	278	252	230	210	192	
6-1/2" 63 PSF 60 in ²	22	8'-0"	8'-3"	9'-4"	400	400	400	400	400	400	367	329	295	266	240	217	197	179	163	
	20	9'-3"	11'-5"	11'-9"	400	400	400	400	400	400	400	400	361	326	295	268	244	223	204	
	19	10'-4"	12'-8"	13'-1"	400	400	400	400	400	400	400	400	400	381	346	315	287	263	241	
	18	11'-4"	13'-9"	13'-10"	400	400	400	400	400	400	400	400	400	400	391	356	325	296	274	
	16	11'-7"	13'-10"	14'-3"	400	400	400	400	399	399	399	399	381	345	313	284	259	236	216	
7" 69 PSF 66 in ²	22	7'-9"	7'-8"	8'-8"	400	400	400	400	400	400	400	365	328	295	267	241	219	199	181	
	20	9'-0"	10'-11"	11'-4"	400	400	400	400	400	400	400	400	400	362	328	296	272	248	226	
	19	10'-1"	12'-2"	12'-7"	400	400	400	400	400	400	400	400	400	400	385	350	320	293	268	
	18	11'-0"	13'-3"	13'-6"	400	400	400	400	400	400	400	400	400	400	400	397	363	333	306	
	16	11'-4"	13'-4"	13'-9"	400	400	400	400	400	400	399	399	399	383	348	316	288	263	241	
7-1/2" 75 PSF 72 in ²	22	7'-7"	7'-2"	8'-2"	400	400	400	400	400	400	400	400	360	324	293	265	241	219	199	
	20	8'-9"	10'-2"	10'-11"	400	400	400	400	400	400	400	400	400	399	361	328	299	273	249	
	19	9'-10"	11'-9"	12'-2"	400	400	400	400	400	400	400	400	400	400	400	386	353	323	296	
	18	10'-9"	12'-10"	13'-3"	400	400	400	400	400	400	400	400	400	400	400	400	400	388	338	
	16	11'-0"	12'-11"	13'-4"	400	400	400	400	400	400	400	399	399	399	383	348	318	290	266	

3.0" Composite Floor Deck

3.0" Composite Floor Deck Lightweight Concrete (110 PCF)																			
Total Slab Depth D Wt. Conc. Area Conc.	Gage	Maximum Unshored Clear Spans			Superimposed Live Loads - PSF: Studs @ 12" o.c.														
		Single Span	Double Span	Triple Span	Span - Feet and Inches														
					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"	14'-6"	15'-0"
5-1/2" 39 PSF 48 in ²	22	9'-8"	11'-7"	12'-2"	400	400	373	331	296	266	240	217	194	172	153	136	122	110	99
	20	11'-3"	13'-6"	14'-0"	400	400	400	398	356	312	271	238	209	185	164	147	132	119	107
	19	12'-8"	15'-0"	15'-1"	386	384	383	382	381	333	289	253	223	197	175	156	140	126	114
	18	13'-4"	15'-7"	15'-7"	377	373	369	366	363	351	305	267	235	208	185	165	148	133	120
	16	14'-0"	16'-4"	16'-5"	384	379	374	371	348	315	286	260	238	218	201	183	164	148	133
6" 44 PSF 54 in ²	22	9'-3"	10'-9"	11'-8"	400	400	400	377	337	303	273	247	224	204	186	170	155	140	127
	20	10'-9"	13'-0"	13'-6"	400	400	400	400	366	331	300	266	236	210	187	168	151	136	
	19	12'-1"	14'-5"	14'-8"	388	386	384	383	382	381	364	322	264	251	223	199	179	161	145
	18	12'-11"	15'-2"	15'-2"	384	379	374	371	367	364	362	339	299	264	235	210	188	169	153
	16	13'-7"	15'-9"	16'-0"	391	386	381	376	373	359	326	297	271	249	229	211	190	175	162
6-1/4" 46 PSF 57 in ²	22	9'-1"	10'-4"	11'-6"	400	400	400	400	358	322	290	262	238	216	197	180	165	151	139
	20	10'-6"	12'-10"	13'-3"	400	400	400	400	400	389	351	318	289	264	235	210	188	169	153
	19	11'-10"	14'-2"	14'-6"	389	387	385	384	383	381	381	352	318	261	250	223	200	180	163
	18	12'-9"	15'-0"	15'-0"	387	382	377	373	370	366	364	361	335	296	263	235	211	190	171
	16	13'-4"	15'-5"	15'-10"	395	389	384	379	375	372	346	315	288	264	243	218	201	186	172
6-1/2" 48 PSF 60 in ²	22	8'-11"	10'-0"	11'-3"	400	400	400	400	379	340	307	277	252	229	209	191	175	160	147
	20	10'-4"	12'-7"	13'-0"	400	400	400	400	400	400	372	337	307	280	256	234	210	189	171
	19	11'-7"	13'-11"	14'-4"	390	388	386	384	383	382	381	373	337	308	279	249	223	201	182
	18	12'-7"	14'-9"	14'-9"	390	384	380	375	372	369	366	363	361	330	294	262	235	212	191
	16	13'-0"	15'-2"	15'-7"	399	392	387	382	378	375	366	334	305	280	257	231	213	197	182
7-1/4" 55 PSF 72 in ²	22	8'-5"	9'-1"	10'-4"	400	400	400	400	400	396	357	323	293	267	243	222	204	187	171
	20	9'-9"	12'-0"	12'-4"	400	400	400	400	400	400	400	393	358	326	298	274	251	231	213
	19	10'-11"	13'-3"	13'-9"	393	390	388	387	385	384	380	379	378	360	330	303	279	257	237
	18	12'-0"	14'-4"	14'-4"	400	393	387	383	378	375	372	369	366	357	352	324	299	276	256
	16	12'-4"	14'-6"	15'-0"	400	400	396	391	386	382	379	375	356	319	293	270	249	230	213

3.0" Composite Floor Deck

SDI Member

1. All steel deck material is manufactured by SDI members or manufactured in accordance to SDI.
2. Cordeck certifies that all material will be in accordance with the SDI Composite Deck Manual specifications.
3. Cordeck 3.0" Composite Floor Deck conforms to all applicable SDI Composite Deck Manual specifications.

Installation

1. Cordeck steel deck shall be installed by qualified and experienced workers.
2. Deck installation drawings shall be submitted to the project architect and engineer for approval prior to the manufacture of materials.
3. Deck shall be placed in accordance with approved erection drawings.
4. Deck sheets shall be butted over supports.
5. End bearing: install deck ends over supports with a minimum end bearing of 1-1/2" or as indicated on erection drawings.
6. Each deck unit shall be placed on supporting steel framework and adjusted to final positions before permanently fastened. Do not use unfastened deck as a working platform or storage area.
7. Cutting of openings through the deck and all skew cutting shall be performed in the field. Openings not shown on the erection drawings such as those required for stack, conduits, plumbing, vents, etc., shall be cut, and reinforced if necessary, in accordance with SDI.

Attachment

1. Floor deck sheets and accessories shall be attached as soon as possible and all sheets and accessories shall be attached at the end of each working day. Electric arc welding is the best and most economical method for attaching composite deck sheets to structural supports. Welder shall follow close to the placement crew.
2. All welds are to be made from the top of the deck down through the bottom flange of the ribs. Welds shall penetrate and attach all thicknesses of material to the structural supports.
3. Deck panels are to be fastened to all supports at 12" on center maximum with not less than 3/4" diameter arc spot welds. At deck butt joints, both sheets are to be fastened. Deck panels with spans greater than 5 feet shall have side laps and perimeter edges
4. Puddle welds shall be at least 5/8" diameter or elongated puddle welds with an equal perimeter. Fillet welds, when used, shall be at least 1" long.

Attachment must be determined by the designer as part of the overall building design process. Values given in this document are adequate in most cases.

Storage and Handling

1. Protect steel deck from corrosion, deformation, and other damage during storage, handling, and installation.
2. Deck not promptly erected shall be stored off the ground, with one end elevated to provide drainage. Bundles must be protected against condensation with a ventilated waterproof covering. Deck should always be protected from snow and salt.
3. Bundles must be stacked so there is no danger of shifting or material damage. Bundles must be checked for tightness, and retightened as necessary.
4. Deck bundles on the building frame must always be placed near a main supporting beam, at a column, or a wall. In no situation are the bundles to be placed on unbolted frames or on unattached and unbridged joists. The structural frame must be properly braced to receive the bundles.

"Whatever it takes"



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