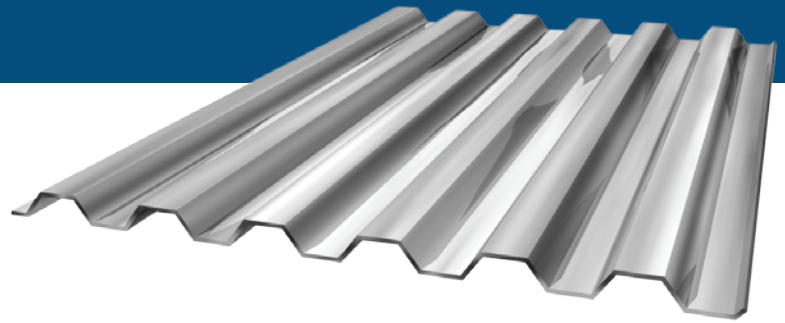




# 1" Form Deck



## Form 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 the 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.

**Bundle Placement plans** are provided to ensure correct location of bundles during unloading and hoisting to steel framework.

**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.

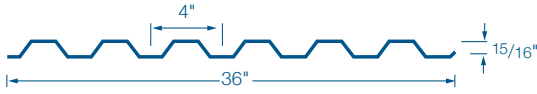
**Form Deck provides** a strong, secure, stay in-place form for poured concrete applications. Installation is fast, easy, and economical.

**Form Deck is designed** to serve as a permanent steel base for poured reinforced concrete floor slabs. Structurally, Form Deck provides a strong efficient section for forming slabs, while giving lateral stability to structural members.

**Form Deck is made from high strength,** full hard steel that conforms to ASTM A653 SS Grade 80. Galvanized in accordance with ASTM A924 Class G-60 and G-90. Form Deck should always be galvanized when used as a structural support for light weight insulating concrete fill.

**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%.

# 1" Form Deck



Gage	t in	Wd psf	Sp in <sup>3</sup> /ft	Sn in <sup>3</sup> /ft	Ip in <sup>4</sup> /ft	In in <sup>4</sup> /ft	Va lbs/ft	Fy ksi
26	0.018	0.96	0.067	0.071	0.040	0.042	2216	60
24	0.024	1.28	0.098	0.103	0.057	0.059	3867	60
22	0.030	1.57	0.130	0.134	0.073	0.073	4803	60
20	0.036	1.91	0.167	0.165	0.088	0.088	5744	60

Gage	No. of Spans	Design Criteria	Clear Span												
			3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
26	1	Fb=36000	178	152	131	114	100	79	64	53	45	38	33	29	25
		L/240	97	77	61	50	41	29	21	16	12	10	8	6	5
		L/180	130	102	82	66	55	38	28	21	16	13	10	8	7
	2	Fb=36000	187	159	138	120	106	84	68	56	47	40	35	30	27
		L/240	240	189	151	123	101	71	52	39	30	24	19	15	13
		L/180	320	252	202	164	135	95	69	52	40	31	25	20	17
	3	Fb=36000	232	198	171	149	132	104	84	70	59	50	43	38	33
		L/240	188	148	118	96	79	56	41	30	23	18	15	12	10
		L/180	250	197	158	128	106	74	54	41	31	25	20	16	13
24	1	Fb=36000	261	222	192	167	147	116	94	78	65	56	48	42	37
		L/240	139	109	87	71	58	41	30	22	17	14	11	9	7
		L/180	185	145	116	95	78	55	40	30	23	18	15	12	10
	2	Fb=36000	272	232	200	174	153	121	98	81	68	58	50	44	39
		L/240	340	267	214	174	143	101	73	55	42	33	27	22	18
		L/180	453	356	285	232	191	134	98	73	57	45	36	29	24
	3	Fb=36000	338	289	249	218	191	151	123	102	85	73	63	55	48
		L/240	266	209	167	136	112	79	57	43	33	26	21	17	14
		L/180	354	279	223	181	149	105	77	58	44	35	28	23	19
22	1	Fb=36000	346	295	254	221	195	154	125	103	86	74	64	55	49
		L/240	178	140	112	91	75	53	38	29	22	17	14	11	9
		L/180	237	186	149	121	100	70	51	38	30	23	19	15	12
	2	Fb=36000	353	301	260	227	200	158	128	106	89	76	65	57	50
		L/240	427	336	269	219	180	127	92	69	53	42	34	27	23
		L/180	570	448	359	292	240	169	123	92	71	56	45	36	30
	3	Fb=36000	440	375	324	283	249	197	160	132	111	95	82	71	63
		L/240	334	263	211	171	141	99	72	54	42	33	26	21	18
		L/180	446	351	281	228	188	132	96	72	56	44	35	29	24
20	1	Fb=36000	444	379	327	284	250	198	160	132	111	95	82	71	63
		L/240	214	168	135	110	90	63	46	35	27	21	17	14	11
		L/180	285	224	180	146	120	85	62	46	36	28	22	18	15
	2	Fb=36000	435	371	320	279	246	194	158	130	109	93	81	70	62
		L/240	515	405	324	264	217	153	111	84	64	51	41	33	27
		L/180	687	540	433	352	290	204	148	111	86	68	54	44	36
	3	Fb=36000	541	462	399	348	306	242	197	163	137	117	101	88	77
		L/240	403	317	254	206	170	119	87	65	50	40	32	26	21
		L/180	538	423	339	275	227	159	116	87	67	53	42	34	28

## Product Information Design

1. Cordeck certifies that our form 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.
2. 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.

# 1" Form Deck

1.0" Form Deck Maximum Construction Clear Spans									
Total Slab Depth	Gage	Weight PSF	N.W. Concrete (145 PCF)			Weight PSF	L.W. Concrete (110 PCF)		
			1 Span	2 Span	3 Span		1 Span	2 Span	3 Span
2.5	26	25	3'-8"	4'-10"	4'-10"	19	3'-11"	5'-1"	5'-1"
	24	25	4'-11"	6'-5"	6'-6"	19	5'-3"	6'-10"	6'-11"
	22	25	6'-0"	7'-10"	7'-10"	20	6'-5"	8'-0"	8'-3"
	20	26	6'-8"	8'-3"	8'-3"	20	7'-3"	8'-11"	9'-0"
3	26	31	3'-6"	4'-7"	4'-7"	24	3'-9"	4'-10"	4'-11"
	24	31	4'-7"	6'-1"	6'-1"	24	4'-11"	6'-6"	6'-7"
	22	31	5'-7"	7'-3"	7'-3"	24	6'-1"	7'-11"	7'-11"
	20	32	6'-3"	7'-8"	7'-8"	25	6'-10"	8'-5"	8'-5"
3.5	26	37	3'-4"	4'-4"	4'-5"	28	3'-7"	4'-8"	4'-9"
	24	37	4'-4"	5'-9"	5'-10"	29	4'-9"	6'-2"	6'-3"
	22	37	5'-3"	6'-10"	6'-10"	29	5'-9"	7'-6"	7'-6"
	20	38	5'-11"	7'-3"	7'-3"	29	6'-5"	7'-11"	7'-11"
4	26	43	3'-2"	4'-2"	4'-3"	33	3'-5"	4'-6"	4'-7"
	24	43	4'-2"	5'-6"	5'-7"	33	4'-6"	5'-11"	6'-0"
	22	43	5'-0"	6'-6"	6'-6"	33	5'-6"	7'-1"	7'-1"
	20	44	5'-7"	6'-11"	6'-11"	34	6'-1"	7'-7"	7'-7"
4.5	26	49	3'-1"	4'-1"	4'-1"	37	3'-4"	4'-4"	4'-5"
	24	49	4'-0"	5'-4"	5'-4"	38	4'-4"	5'-9"	5'-10"
	22	50	4'-9"	6'-3"	6'-3"	38	5'-3"	6'-10"	6'-10"
	20	50	5'-4"	6'-8"	6'-8"	38	5'-10"	7'-3"	7'-3"
5	26	55	2'-11"	3'-11"	4'-0"	42	3'-2"	4'-3"	4'-3"
	24	55	3'-10"	5'-1"	5'-2"	42	4'-2"	5'-7"	5'-7"
	22	56	4'-7"	6'-0"	6'-0"	43	5'-0"	6'-7"	6'-7"
	20	56	5'-2"	6'-5"	6'-5"	43	5'-8"	7'-0"	7'-0"
5.5	26	61	2'-10"	3'-10"	3'-10"	47	3'-1"	4'-1"	4'-2"
	24	61	3'-8"	4'-11"	5'-0"	47	4'-0"	5'-5"	5'-5"
	22	62	4'-5"	5'-10"	5'-10"	47	4'-10"	6'-4"	6'-4"
	20	62	5'-0"	6'-2"	6'-2"	47	5'-5"	6'-9"	6'-9"

## Material

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

### 1. Prime Painted

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

### 2. Galvanized

- All steel shall be coated to conform to ASTM A924 G-60 or G-90 or to Federal Specification QQ-S-775.
- Galvanized finish in G-60 or G-90 coating is desirable in high moisture atmospheric conditions.

- Cordeck shall not be responsible for the cleaning of the underside of steel deck to ensure bond of fireproofing. Adherence of fireproofing material is dependent on many variables. The adhesion ability of fireproofing materials is the responsibility of the fireproofing applicator.

### 3. Accessories

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

# 1" Form 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 Cellular Deck Manual specifications.
3. Cordeck 1" Form Deck conforms to all applicable SDI Cellular 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. Form 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 form 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 no 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 (at perimeter supports) fastened at mid-span or 36" intervals, whichever is smaller.
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.
  - a. 1-1/2" deep deck side laps are to be screw attached or welded. 2" and 3" deep deck side laps are to be button punched, welded, or Gator Crimp (GTR).
  - b. End closures of the deck (if required) are to be fastened by tack welding or sheet metal screws at 36" centers maximum. Side closures of the deck, if required, are to be fastened by 1" fillet welds at 12" centers maximum.
  - c. Pour stop accessories of the deck, if required, are to be fastened by 1" fillet welds at 12" centers maximum.

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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