CORDECK
building solutions

1.0” FORM DECK
Specification Sheet

FEATURES & 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.

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 and take pride in completing each job to perfection.

Form Spans Shown in the table are maximum unshored clear span lengths based on Allowable Strength Design (ASD). 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.

Form Deck Provides a strong, secure, stay in-place 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. Galvanized in accordance with ASTM A924 Form Deck is made from high strength, full hard steel that conforms to ASTM A653 SS. 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.

CORDECK IS YOUR NATIONWIDE METAL DECK SUPPLY COMPANY

Roof Deck	Form Deck	Cellular Roof Deck
Composite Floor Deck	Cellular Composite Floor Deck	Metal Deck Accessories

1.0” FORM DECK

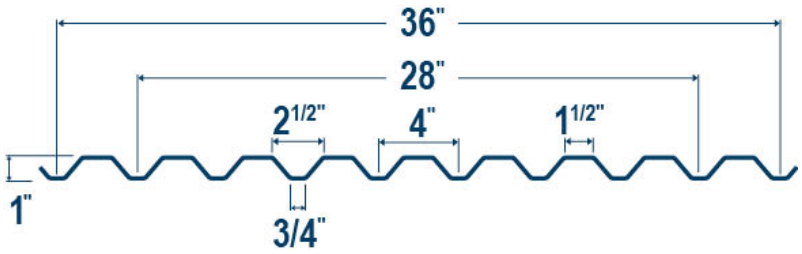
Section Properties

1" Form Deck Section Properties										
Gage	t	Wd	Sp	Sn	Ip	In	Va	Rext	Rint	Fy
	in	psf	in^3/ft	in^3/ft	in^4/ft	in^4/ft	plf	plf	plf	ksi
26	0.0179	0.93	0.066	0.071	0.037	0.042	1733	856	1168	60
24	0.0239	1.24	0.094	0.098	0.052	0.057	2304	1416	1970	60
22	0.0299	1.54	0.119	0.121	0.068	0.07	2867	2089	2947	60
20	0.0359	1.87	0.146	0.147	0.084	0.087	3426	2868	4089	60

Product Information Design

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.

The rib width limitations shown are taken at the theoretical intersection points on the flange and web projections. Depending on the radium used, the load table could vary from what is shown.



1.0” FORM DECK

Allowable Uniform Load (PSF)

1" Form Deck Load Table (psf)																							
Design Method: ASD Yield Strength: 60ksi																							
Gage	Span	Criteria	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	7'-0"	7'-3"	7'-6"	7'-9"	8'-0"
26	1	L/360	59	46	37	30	24	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		L/240	89	70	56	45	37	31	26	22	-	-	-	-	-	-	-	-	-	-	-	-	-
		L/180	119	93	75	60	50	41	35	29	25	21	-	-	-	-	-	-	-	-	-	-	-
		L/120	121	103	89	77	68	60	52	44	38	33	28	25	22	-	-	-	-	-	-	-	-
		Stress	121	103	89	77	68	60	53	48	43	39	35	32	30	27	25	23	22	-	-	-	-
	2	L/360	130	111	90	73	60	50	42	35	30	26	23	-	-	-	-	-	-	-	-	-	-
		L/240	130	111	95	83	73	65	58	52	46	39	34	30	26	23	20	-	-	-	-	-	-
		L/180	130	111	95	83	73	65	58	52	46	42	38	35	32	29	27	24	22	-	-	-	-
		L/120	130	111	95	83	73	65	58	52	46	42	38	35	32	29	27	25	23	22	20	-	-
		Stress	130	111	95	83	73	65	58	52	46	42	38	35	32	29	27	25	23	22	-	-	-
	3	L/360	112	88	70	57	47	39	33	28	23	20	-	-	-	-	-	-	-	-	-	-	-
		L/240	140	119	103	86	71	59	49	42	36	31	27	23	20	-	-	-	-	-	-	-	-
		L/180	140	119	103	89	79	69	62	55	48	41	36	31	27	24	21	-	-	-	-	-	-
		L/120	140	119	103	89	79	69	62	55	50	45	41	38	34	32	29	27	25	23	21	-	-
		Stress	140	119	103	89	79	69	62	55	50	45	41	38	34	32	29	27	25	23	22	-	-
24	1	L/360	83	65	52	42	34	28	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		L/240	125	98	78	64	52	43	36	31	26	22	-	-	-	-	-	-	-	-	-	-	-
		L/180	167	131	105	85	70	58	49	41	35	30	26	23	-	-	-	-	-	-	-	-	-
		L/120	172	146	126	110	96	85	74	62	53	46	40	35	30	27	24	21	-	-	-	-	-
		Stress	172	146	126	110	96	85	76	68	61	55	50	46	42	39	36	33	31	28	26	25	23
	2	L/360	178	151	127	103	84	70	59	50	43	37	32	28	24	21	-	-	-	-	-	-	-
		L/240	178	151	131	114	100	88	79	71	64	56	48	42	37	32	29	25	23	20	-	-	-
		L/180	178	151	131	114	100	88	79	71	64	58	52	48	44	40	37	34	31	28	25	22	20
		L/120	178	151	131	114	100	88	79	71	64	58	52	48	44	40	37	34	32	30	28	26	24
		Stress	178	151	131	114	100	88	79	71	64	58	52	48	44	40	37	34	32	30	28	26	24
	3	L/360	158	124	99	80	66	55	46	39	33	28	25	21	-	-	-	-	-	-	-	-	-
		L/240	192	163	141	121	99	83	69	59	50	43	37	33	29	25	22	-	-	-	-	-	-
		L/180	192	163	141	122	107	95	85	76	67	58	50	44	38	34	30	27	24	21	-	-	-
		L/120	192	163	141	122	107	95	85	76	68	62	56	51	47	43	40	37	34	32	29	26	24
		Stress	192	163	141	122	107	95	85	76	68	62	56	51	47	43	40	37	34	32	30	28	26
22	1	L/360	109	85	68	55	45	37	31	26	22	-	-	-	-	-	-	-	-	-	-	-	-
		L/240	164	129	103	83	68	57	47	40	34	29	25	22	-	-	-	-	-	-	-	-	-
		L/180	219	172	137	111	91	76	64	54	46	40	34	30	26	23	20	-	-	-	-	-	-
		L/120	263	224	193	168	138	115	96	82	70	60	52	45	40	35	31	27	24	22	-	-	-
		Stress	263	224	193	168	147	130	116	104	94	85	77	70	65	59	55	51	47	44	41	38	36
	2	L/360	263	207	166	134	110	92	77	65	56	48	42	36	32	28	25	22	-	-	-	-	-
		L/240	263	224	193	169	148	131	116	99	84	73	63	55	48	42	38	33	30	27	24	22	-
		L/180	263	224	193	169	148	131	117	105	95	86	78	71	65	57	51	45	40	36	32	29	26
		L/120	263	224	193	169	148	131	117	105	95	86	78	71	65	60	55	51	48	44	41	39	36
		Stress	263	224	193	169	148	131	117	105	95	86	78	71	65	60	55	51	48	44	41	39	36
	3	L/360	206	162	129	105	86	72	60	51	43	37	32	28	24	21	-	-	-	-	-	-	-
		L/240	285	243	195	158	130	108	91	77	66	57	49	43	37	33	29	26	23	21	-	-	-
		L/180	285	243	209	182	160	141	122	103	88	76	66	57	50	44	39	35	31	28	25	23	20
		L/120	285	243	209	182	160	141	126	113	102	92	84	77	70	65	60	53	48	43	38	35	31
		Stress	285	243	209	182	160	141	126	113	102	92	84	77	70	65	60	55	51	48	44	41	39
20	1	L/360	134	105	84	68	56	46	38	32	28	24	20	-	-	-	-	-	-	-	-	-	-
		L/240	202	159	127	103	84	70	59	50	42	36	31	27	24	21	-	-	-	-	-	-	-
		L/180	270	212	170	138	113	94	79	67	57	49	42	37	32	28	25	22	-	-	-	-	-
		L/120	386	319	255	207	170	142	119	101	86	74	64	56	49	43	38	34	30	27	24	22	-
		Stress	386	329	283	246	216	191	171	153	138	125	114	104	95	88	81	75	69	65	60	56	53
	2	L/360	326	256	205	166	136	113	95	81	69	59	51	45	39	34	30	27	24	21	-	-	-
		L/240	380	324	280	244	206	171	144	122	104	90	78	68	60	53	46	41	37	33	30	27	24
		L/180	380	324	280	244	215	190	170	152	138	120	105	91	80	71	63	56	50	45	40	36	33
		L/120	380	324	280	244	215	190	170	152	138	125	113	104	95	88	81	75	70	65	60	55	50
		Stress	380	324	280	244	215	190	170	152	138	125	113	104	95	88	81	75	70	65	60	56	53
	3	L/360	255	200	160	129	106	88	74	63	54	46	40	35	30	27	23	21	-	-	-	-	-
		L/240	383	301	240	195	160	133	112	95	81	70	61	53	46	41	36	32	28	25	23	20	-
		L/180	415	353	305	261	215	179	150	127	109	94	81	71	62	55	49	43	39	34	31	28	25
		L/120	415	353	305	265	233	206	183	164	148	134	122	107	94	83	74	66	59	53	47	43	39
		Stress	415	353	305	265	233	206	183	164	148	134	122	112	102	94	87	81	75	70	65	61	57

1.0” FORM DECK

Maximum Construction Clear Spans

1" Form Deck Unshored Clear Spans (LRFD)									
Total Concrete	Gage	Weight	NW Concrete 145 pcf			Weight	LW Concrete 110 pcf		
Depth (in)		(psf)	1 Span	2 Span	3 Span	(psf)	1 Span	2 Span	3 Span
2.5	26	23.7	3'-6"	4'-5"	4'-6"	18.2	3'-9"	4'-8"	4'-9"
	24	24	4'-7"	5'-10"	5'-11"	18.5	4'-11"	6'-2"	6'-3"
	22	24.3	6'-2"	7'-11"	7'-11"	18.8	6'-8"	7'-11"	7'-11"
	20	24.7	8'-1"	9'-7"	9'-7"	19.2	8'-9"	9'-7"	9'-7"
3	26	29.8	3'-4"	4'-3"	4'-3"	22.8	3'-7"	4'-6"	4'-7"
	24	30.1	4'-4"	5'-6"	5'-7"	23.1	4'-8"	5'-10"	5'-11"
	22	30.4	5'-9"	7'-4"	7'-6"	23.4	6'-3"	7'-11"	7'-11"
	20	30.7	7'-6"	9'-4"	9'-7"	23.7	8'-2"	9'-7"	9'-7"
3.5	26	35.8	3'-2"	4'-0"	4'-1"	27.4	3'-5"	4'-4"	4'-4"
	24	36.1	4'-1"	5'-2"	5'-3"	27.7	4'-5"	5'-7"	5'-8"
	22	36.4	5'-5"	7'-0"	7'-1"	28	5'-11"	7'-7"	7'-8"
	20	36.8	7'-0"	8'-9"	9'-1"	28.3	7'-8"	9'-7"	9'-7"
4	26	41.9	3'-1"	3'-11"	3'-11"	32	3'-3"	4'-2"	4'-3"
	24	42.2	3'-11"	5'-0"	5'-0"	32.3	4'-3"	5'-4"	5'-5"
	22	42.5	5'-2"	6'-7"	6'-8"	32.6	5'-8"	7'-3"	7'-4"
	20	42.8	6'-7"	8'-4"	8'-7"	32.9	7'-3"	9'-1"	9'-5"
4.5	26	47.9	2'-11"	3'-9"	3'-9"	36.6	3'-2"	4'-0"	4'-1"
	24	48.2	3'-9"	4'-9"	4'-10"	36.9	4'-1"	5'-2"	5'-3"
	22	48.5	4'-11"	6'-4"	6'-5"	37.2	5'-5"	6'-11"	7'-0"
	20	48.8	6'-4"	7'-11"	8'-2"	37.5	6'-11"	8'-9"	9'-0"
5	26	53.9	2'-10"	3'-7"	3'-8"	41.1	3'-1"	3'-11"	3'-11"
	24	54.2	3'-7"	4'-7"	4'-8"	41.5	3'-11"	5'-0"	5'-1"
	22	54.5	4'-9"	6'-1"	6'-2"	41.7	5'-2"	6'-8"	6'-9"
	20	54.9	6'-0"	7'-7"	7'-10"	42.1	6'-8"	8'-4"	8'-8"
5.5	26	60	2'-9"	3'-6"	3'-6"	45.7	3'-0"	3'-9"	3'-10"
	24	60.3	3'-6"	4'-5"	4'-6"	46	3'-10"	4'-10"	4'-11"
	22	60.6	4'-7"	5'-10"	5'-11"	46.3	5'-0"	6'-5"	6'-6"
	20	60.9	5'-9"	7'-4"	7'-6"	46.7	6'-5"	8'-1"	8'-4"

Material

All steel used to manufacture Cordeck’s 1.0” Form Deck will be galvanized, prime painted, or a combination of the two.

Prime Painted

1. All steel shall be produced to ASTM A1008 standard.
2. 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. Field painting of prime painted material is recommended especially where the deck is exposed.

Galvanized

1. All G-60 or G-90 shall be produced to ASTM A653 standards.
2. All steel shall be coated to conform to ASTM A924 G-60 or G-90 or to Federal Specifications QQ-S-775.
3. Galvanized finish in G-60 coating is desirable in high moisture atmospheric conditions.
4. Cordeck shall not be responsible for the cleaning of the underside of the 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.

Accessories

1. Cordeck can supply metal deck accessories necessary to complete your project.

1.0” FORM DECK

SDI Member

1. All steel deck material is manufactured by Steel Deck Institute members or manufactured in accordance to SDI.
2. Cordeck certifies that all material will be in accordance with the SDI Deck Manual specifications.
3. Cordeck’s 1.0” Form Deck conforms to all applicable SDI Deck Manual specifications.

Installation

1. Cordeck’s Metal Deck shall be installed by qualified and experienced workers.
2. Metal Deck installation drawings shall be submitted to the project architect and engineer for approval prior to the manufacture of materials.
3. Metal Deck shall be placed in accordance with approved erection drawings.
4. Metal Deck sheets shall be lapped 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, conduit, plumbing, vents, etc., shall be cut and reinforced in accordance with SDI.

Attachment

1. Metal 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. Accessories shall be attached to supporting structure or deck at a spacing not to exceed 12” o.c.
2. Temporary shoring, if required, shall be designed and installed in accordance with the standards applicable to the specific shoring system and shall be left in place until the concrete attains 75% of its specified design strength.
3. Welding of deck and accessories, when used, shall be in accordance with AWS D1.3. When steel headed stud anchors are used, the stud anchor shall be permitted as a substitute for an arc spot weld to the supporting structure.
4. Deck panels are to be fastened to all supports at 12” o.c. maximum unless more frequent fastener spacing is required for diaphragm design. Deck to be fastened using one of the following methods, depending on support thickness and hardness and designer approval:
    a. 3/4” minimum Arc Spot welds.
    b. Powder actuated or pneumatically driven fasteners.
    c. Screws with a minimum diameter of 0.216 inches (#12 diameter).

At deck butt joints, both sheets are to be fastened. Deck panels with spans greater than 5 feet shall have side lap fasteners.

5. Side laps shall be fastened at intervals not to exceed 36”, unless more frequent fastener spacing is required for diaphragm design, using one of the following methods, depending on designer approval:
    d. Screws with a minimum diameter of 0.19 inches (#10 diameter)
    e. Crimp or button punch.
    f. 5/8” minimum Arc Spot welds or a minimum 1 ½” long fillet or seam welds.
    g. Other sidelap attachments approved by the authority having jurisdiction.
6. Minimum fastener edge distances shall be determined in accordance with AISI S100.
7. Deck bearing surfaces shall be brought into contact as required by fastening methods.
8. 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 metal 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 condensations with a ventilated waterproof covering.
3. Bundles must be stacked so there is no danger of shifting or material damage. Bundles must be checked for tightness and re-tightened if necessary.
4. Deck bundles on the building frame must always be placed near a main supporting beam at the column or a wall. In no situation are the bundles to be placed on unbolted frames or unattached and unbridged joists. The structural frame must be properly braced to receive the bundles.

CORDECK building solutions

MADE IN USA