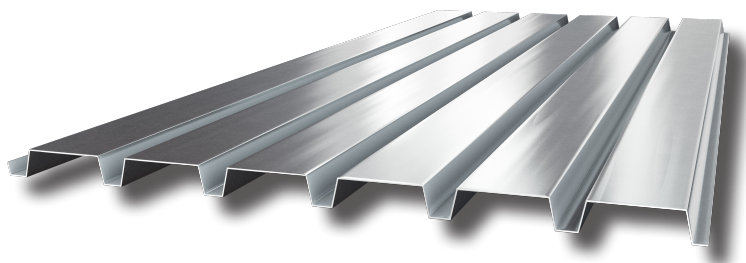




# 1.5" 'F' Intermediate Rib Roof Deck Specification Sheet

## 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 planing 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).

**AutoCAD® Drawings** can be transferred electronically for improved quality and reduced time and cost of drawing transmittal.

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

**On-Spec, Guaranteed Quality.** Our production staff are true craftsmen and take pride in completing each job to perfection.

**Knowledgeable, Courteous, Caring Employees Throughout Our Ranks.** We're a family business, no "big corporate" attitude here! We genuinely appreciate our customers' patronage and treat each order, regardless of size, with the utmost care and attention.

**CORDECK IS YOUR NATIONWIDE METAL DECK SUPPLY COMPANY**

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# 1.5" 'F' Intermediate Rib Roof Deck



## Section Properties

1.5" Type 'F' Roof Deck Section Properties								
Gage	t in	Wd psf	Sp in <sup>3</sup> /ft	Sn in <sup>3</sup> /ft	Ip in <sup>4</sup> /ft	ln in <sup>4</sup> /ft	Va lbs/ft	Fy ksi
22	0.030	1.73	0.112	0.121	0.113	0.129	1944	33
20	0.0358	2.09	0.139	0.148	0.145	0.157	2347	33
19	0.0418	2.42	0.166	0.172	0.177	0.183	2726	33
18	0.0474	2.74	0.19	0.195	0.206	0.208	3077	33

## Allowable Uniform Load

1.5" Type 'F' Roof Deck Allowable Uniform Load (PSF)													
No. of Spans	Gage	Max. SDI Const. Span	Allowable Total (PSF / Load Causing Deflection of L/240 or 1 inch (PSF))										
			Span - Feet and Inches (ctr. To ctr. Supports)										
			4' - 0"	4' - 6"	5' - 0"	5' - 6"	6' - 0"	6' - 6"	7' - 0"	7' - 6"	8' - 0"	8' - 6"	9' - 0"
1	22	4' - 3"	92 / 116	73 / 81	59 / 59	49 / 45	41 / 34	35 / 27	30 / 22	26 / 18	23 / 14	20 / 12	18 / 10
	20	5' - 4"	114 / 149	90 / 104	73 / 76	61 / 57	51 / 44	43 / 35	37 / 28	33 / 23	29 / 19	25 / 15	23 / 13
	19	6' - 0"	137 / 181	108 / 127	87 / 93	72 / 70	61 / 54	52 / 42	45 / 34	39 / 28	34 / 23	30 / 19	27 / 16
	18	6' - 5"	156 / 211	124 / 148	100 / 108	83 / 81	70 / 63	59 / 49	51 / 39	44 / 32	39 / 26	35 / 22	31 / 19
2	22	5' - 3"	99 / 299	78 / 210	63 / 153	52 / 115	44 / 88	38 / 70	32 / 56	28 / 45	25 / 37	22 / 31	20 / 26
	20	6' - 6"	121 / 373	96 / 262	78 / 191	64 / 143	54 / 110	46 / 87	40 / 70	35 / 57	30 / 47	27 / 39	24 / 33
	19	7' - 1"	140 / 444	111 / 312	90 / 227	75 / 171	63 / 132	53 / 104	46 / 83	40 / 67	35 / 56	31 / 46	28 / 39
	18	7' - 8"	159 / 511	126 / 359	102 / 262	85 / 196	71 / 151	61 / 119	52 / 95	46 / 77	40 / 64	35 / 53	32 / 45
3	22	5' - 3"	123 / 234	97 / 164	79 / 120	65 / 90	55 / 69	47 / 55	41 / 44	35 / 35	31 / 29	28 / 24	25 / 21
	20	6' - 6"	151 / 292	119 / 205	97 / 149	80 / 112	67 / 86	57 / 68	50 / 54	43 / 44	38 / 36	34 / 30	30 / 26
	19	7' - 1"	175 / 348	139 / 244	112 / 178	93 / 134	78 / 103	67 / 81	58 / 65	50 / 53	44 / 43	39 / 36	35 / 31
	18	7' - 8"	198 / 400	157 / 281	127 / 205	105 / 154	89 / 119	76 / 93	65 / 75	57 / 61	50 / 50	44 / 42	40 / 35

## Maintenance Loads Standard

1.5" Type 'F' Roof Deck SDI - Maximum Spans for Construction and Maintenance Loads Standard			
Deck Profile	Deck Type	Span Condition	Maximum Span
Intermediate Rib Deck	IR22	1	4' - 6"
		2 or more	5' - 6"
	IR20	1	5' - 3"
		2 or more	6' - 5"

## SDI Maximum Cantilever Spans

1.5" Type 'F' Roof Deck SDI Maximum Cantilever Spans for 1 - 1/2" Roof Deck		
Deck Profile	Deck Type	Cantilever Span
Intermediate Rib Deck	IW22	1' - 2"
	IW20	1' - 5"

## FM Allowable Spans

1.5" Type 'F' Roof Deck FM Allowable Spans			
Deck Profile	Design Thickness		
Type F36	0.0295	0.0358	0.0474
Intermediate Rib	4' - 11"	5' - 5"	6' - 3"

# 1.5” ‘F’ Intermediate Rib Roof Deck

## Product Information Design

Cordeck certifies that our ‘F’ Intermediate Rib Roof 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.

Load shown in tables are uniformly distributed total (dead plus live) load in psf (kPa). All loads are governed by the allowable flexural stress limit of 20 ksi (140 Mpa) maximum yield steel. Where heavy construction loads or other unusual concentrated loads are anticipated during the lifetime of the deck, the specified live load must be increased to offset the effects of the abnormal concentrated load. See Maximum Spans for Construction and Maintenance Loads in the SDI Design Manual.

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

## Material

All steel used to manufacture Cordeck’s ‘F’ Intermediate Rib Roof 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. Roof deck shall receive one coat of standard gray primer paint over cleaned and pretreated steel.
3. 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.
4. 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.

# 1.5” ‘F’ Intermediate Rib Roof 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 1.5” ‘F’ Intermediate Rib Roof Deck conforms to all applicable SDI Deck Manual specifications.

## Installation

1. Cordeck's Roof Deck shall be installed by qualified and experienced workers.
2. Roof Deck installation drawings shall be submitted to the project architect and engineer for approval prior to the manufacture of materials.
3. Roof Deck shall be placed in accordance with approved erection drawings.
4. End laps shall be a nominal 2” and positioned over supports.
5. Position each deck unit on a supporting structural frame. Adjust to final position with accurately aligned side laps and end bearings on supporting members. On joist framing, be sure the appropriate end laps occur over a top chord angle for proper anchorage.
6. When one row is placed end to end begin another making alignment adjustments if necessary.
7. Each deck unit shall be placed on supporting steel framework and adjusted steel framework.
8. Cutting the openings through the deck and all skew cutting shall be performed in the field. Openings not shown on the erection drawing such as those required for stack, conduits, plumbing, vents, etc., shall be cut and reinforced if necessary by the trades requiring the openings.

## Attachment

1. Roof Deck sheets shall be attached as soon as possible after placement. All sheets placed shall be attached prior to the end of each work day. Arc welding is the most commonly used method for attaching Cordeck Metal Roof Deck to structural supports. Welder shall immediately follow the placement crew.

## Attachment Cont.

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 attached all thicknesses of material to the structural supports.
3. Caution shall be exercised on the selection of the electrodes to provide positive attachment and to prevent high amperage blow holes.
4. Puddle welds shall be at least 5/8” in diameter or elongated puddle welds with an equal perimeter. Fillet welds, when use, shall be at least 1” long.
  - a. 1.5” ‘F’ Intermediate Rib Roof Deck ends shall be welded to structural supports at 12” on center maximum and 18” on center maximum at intermediate supports.
  - b. Various mechanical fastening systems other than welding are recognized as viable anchoring methods provided they are reviewed, approved, or specified by the project designer. These include, but are not limited to, power-activated or pneumatically driven fasteners and screws.
  - c. When spans exceed 5’-0”, side laps shall be fastened together at a maximum spacing of 36” on center.

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.

