

## STANDARD B DECK

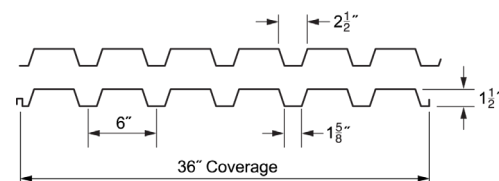
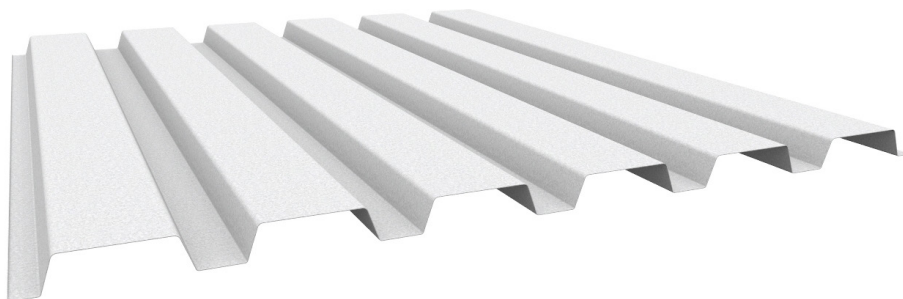
### BALANCE OF STRENGTH, ECONOMY AND VERSATILITY

Type B, wide-rib structural roof deck is a high-performance, cost-efficient choice with a variety of options to meet multiple project needs. Standard or cellular, acoustic or vented, interlocking or nested side laps, B deck is among the most flexible of our 1½-inch-deep roof decks.

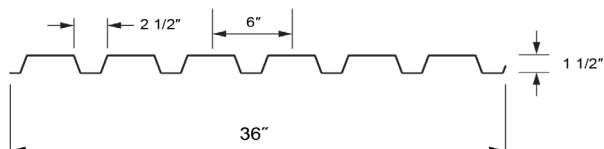
#### Standard B Deck

Type B roof deck provides the best balance of strength and economy of all the 1½-inch-deep roof decks. Where rigid roofing insulation is used with B deck, a minimum 1-inch thickness is required. B deck is available in lengths from 6' 0" to 40' 0". Conforms to ASTM A1008/A1008M for uncoated and painted deck, and A653/A653M for galvanized deck. Approved by UL, ULC and listed in the UL and ULC Fire Resistance Directories. Yield strength up to 80 ksi.

- B-Dek is available with nested side laps.
- Available as an acoustic deck, types BA, BA-Dek and BIA are manufactured with perforations in the vertical ribs, having an NRC rating of 0.50 to 0.95 when used with rigid insulation, as tested in accordance with ANSI/ASTM C423 and E795.
- Available as a vented deck, types BV, BV-Dek and BIV are manufactured with slot vents in the bottom flutes (to be specified when venting is required for cementitious insulation fill).
- The openings for types BV and BIV can be specified from 0.5% up to 1.5% of total surface.
- The openings for BV-Dek can be specified from 0.25% up to 2.0% of total surface.
- Also available with rolled-in hanger tabs (non-vented types only).
- Type B roof deck is FM-approved for use as a component in Classes 1-60, 1-75 and 1-90 wind uplift construction.
- When ratings above 1-90 are required, the contract documents must specify special requirements in accordance with FM Data Sheet 1-29, Section 2.2.13.
- Types B, BI and B-Dek are ICC-, FM- and UL-approved.



## STANDARD B DECK



Height	1 1/2 in.
Fy (minimum)	33 ksi
Modulus of Elasticity	29500 ksi

### SECTION PROPERTIES

Gauge	Fy (ksi)	Coverage (in)	Thickness (in)	Weight (psf)	I (in <sup>4</sup> /ft)	Sp (in <sup>3</sup> /ft)	Sn (in <sup>3</sup> /ft)
22	33	36	0.0295	1.63	0.177	0.189	0.198
20	33	36	0.0358	1.96	0.213	0.235	0.247
18	33	36	0.0474	2.57	0.290	0.315	0.316

### ALLOWABLE UNIFORM LOADS

Span Condition	Gauge	Allowable Total (Dead + Live) Uniform Load (psf)										Max. Constr. Span (ctr. to ctr.)
		Center to Center Span (ft. - in.)										
		5 - 0	5 - 6	6 - 0	6 - 6	7 - 0	7 - 6	8 - 0	8 - 6	9 - 0	9 - 6	
Single	22	91	71	57	47	40	34	30	27	24	22	5 - 8
	20	111	86	69	56	47	40	35	31	27	25	6 - 7
	18	156	119	94	76	63	53	46	40	35	31	8 - 2
Double	22	107	88	74	63	54	47	42	37	33	30	6 - 8
	20	133	110	92	79	68	59	52	46	41	37	7 - 10
	18	170	140	118	101	87	76	66	59	53	47	9 - 6
Triple	22	133	110	93	79	68	59	50	44	38	34	6 - 9
	20	166	137	115	98	84	70	59	51	45	39	7 - 11
	18	213	176	146	125	107	93	78	67	58	51	9 - 8

### NOTES

- Section properties are calculated using the AISI cold-formed steel design specifications, 1996 edition.
- Loads and maximum construction spans are based on the SDI design manual for composite decks, form decks and roof decks, publication no. 30.
- Maximum cantilever spans are based on SDI criteria and are sensitive to adjacent spans. For this table, adjacent span is assumed to be at least 1.5 times longer than the cantilever span.
- Minimum end-bearing length shall be 1 1/2".
- Loads shown in **RED** are governed by the live-load deflection not in excess of 1/240 of span. 10 psf dead load has been included.
- Perforations that are placed in the vertical ribs of type BA deck reduce the strength less than 5 %.

### FACTORY MUTUAL SPANS

Gauge	Max. Ctr. to Ctr. Span (ft.-in.)
22	6 - 0
20	6 - 6
18	7 - 5

### CANTILEVER SPANS

Gauge	Max. Cantilever Span (ft.-in.)
22	2 - 0
20	2 - 4
18	2 - 8