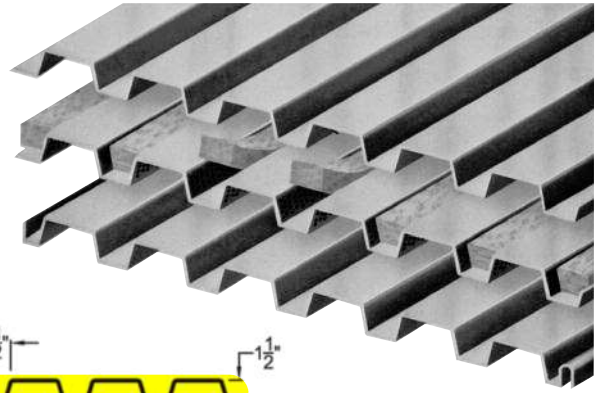
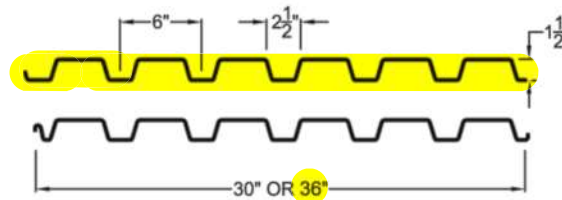


1.5 B, BI, BA, BIA, BSV

Maximum Sheet Length 42'-0"
 Extra charge for lengths under 6'-0"
 ICC ER-3415
 FM Global Approved²



ROOF



Interlocking side lap is not drawn to show actual detail.

SECTION PROPERTIES

| Deck type | Design thickness in. | W psf | Section Properties | | | | V _a lbs/ft | F _y ksi |
|-----------|----------------------|-------|---------------------|---------------------|---------------------|---------------------|-----------------------|--------------------|
| | | | I _p | S _p | I _n | S _n | | |
| | | | in ⁴ /ft | in ³ /ft | in ⁴ /ft | in ³ /ft | | |
| B24 | 0.0239 | 1.46 | 0.107 | 0.120 | 0.135 | 0.131 | 2634 | 60 |
| B22 | 0.0295 | 1.78 | 0.155 | 0.186 | 0.183 | 0.192 | 1818 | 33 |
| B20 | 0.0358 | 2.14 | 0.201 | 0.234 | 0.222 | 0.247 | 2193 | 33 |
| B19 | 0.0418 | 2.49 | 0.246 | 0.277 | 0.260 | 0.289 | 2546 | 33 |
| B18 | 0.0474 | 2.82 | 0.289 | 0.318 | 0.295 | 0.327 | 2870 | 33 |
| B16 | 0.0598 | 3.54 | 0.373 | 0.408 | 0.373 | 0.411 | 3578 | 33 |

ACOUSTICAL INFORMATION

| Deck Type | Absorption Coefficient | | | | | | Noise Reduction Coefficient ¹ |
|---------------|------------------------|-----|-----|------|------|------|--|
| | 125 | 250 | 500 | 1000 | 2000 | 4000 | |
| 1.5BA, 1.5BIA | .11 | .18 | .66 | 1.02 | 0.61 | 0.33 | 0.60 |

¹ Source: Riverbank Acoustical Laboratories.
 Test was conducted with 1.50 pcf fiberglass batts and 2 inch polyisocyanurate foam insulation for the SDI.

Type B (wide rib) deck provides excellent structural load carrying capacity per pound of steel utilized, and its nestable design eliminates the need for die-set ends.

1" or more rigid insulation is required for Type B deck.

Acoustical deck (Type BA, BIA) is particularly suitable in structures such as auditoriums, schools, and theatres where sound control is desirable. Acoustic perforations are located in the vertical webs where the load carrying properties are negligibly affected (less than 5%).

Inert, non-organic glass fiber sound absorbing batts are placed in the rib openings to absorb up to 60% of the sound striking the deck.

Batts are field installed and may require separation.

VERTICAL LOADS FOR TYPE 1.5B

| No. of Spans | Deck Type | Max. SDI Const. Span | Allowable Total (PSF) / Load Causing Deflection of L/240 or 1 inch (PSF) | | | | | | | | | | |
|--------------|-----------|----------------------|--|-----------|-----------|-----------|-----------|-----------|----------|---------|---------|---------|---------|
| | | | Span (ft.-in.) ctr to ctr of supports | | | | | | | | | | |
| | | | 5-0 | 5-6 | 6-0 | 6-6 | 7-0 | 7-6 | 8-0 | 8-6 | 9-0 | 9-6 | 10-0 |
| 1 | B24 | 4'-8" | 115 / 56 | 95 / 42 | 80 / 32 | 68 / 26 | 59 / 20 | 51 / 17 | 45 / 14 | 40 / 11 | 35 / 10 | 32 / 8 | 29 / 7 |
| | B22 | 5'-7" | 98 / 81 | 81 / 61 | 68 / 47 | 58 / 37 | 50 / 30 | 44 / 24 | 38 / 20 | 34 / 17 | 30 / 14 | 27 / 12 | 25 / 10 |
| | B20 | 6'-5" | 123 / 105 | 102 / 79 | 86 / 61 | 73 / 48 | 63 / 38 | 55 / 31 | 48 / 26 | 43 / 21 | 38 / 18 | 34 / 15 | 31 / 13 |
| | B19 | 7'-1" | 146 / 129 | 121 / 97 | 101 / 75 | 86 / 59 | 74 / 47 | 65 / 38 | 57 / 31 | 51 / 26 | 45 / 22 | 40 / 19 | 36 / 16 |
| | B18 | 7'-8" | 168 / 152 | 138 / 114 | 116 / 88 | 99 / 69 | 85 / 55 | 74 / 45 | 65 / 37 | 58 / 31 | 52 / 26 | 46 / 22 | 42 / 19 |
| | B16 | 8'-8" | 215 / 196 | 178 / 147 | 149 / 113 | 127 / 89 | 110 / 71 | 96 / 58 | 84 / 48 | 74 / 40 | 66 / 34 | 60 / 29 | 54 / 24 |
| 2 | B24 | 5'-10" | 124 / 153 | 103 / 115 | 86 / 88 | 74 / 70 | 64 / 56 | 56 / 45 | 49 / 37 | 43 / 31 | 39 / 26 | 35 / 22 | 31 / 19 |
| | B22 | 6'-11" | 100 / 213 | 83 / 160 | 70 / 124 | 59 / 97 | 51 / 78 | 45 / 63 | 39 / 52 | 35 / 43 | 31 / 37 | 28 / 31 | 25 / 27 |
| | B20 | 7'-9" | 128 / 267 | 106 / 201 | 89 / 155 | 76 / 122 | 66 / 97 | 57 / 79 | 51 / 65 | 45 / 54 | 40 / 46 | 36 / 39 | 32 / 33 |
| | B19 | 8'-5" | 150 / 320 | 124 / 240 | 104 / 185 | 89 / 145 | 77 / 116 | 67 / 95 | 59 / 78 | 52 / 65 | 47 / 55 | 42 / 47 | 38 / 40 |
| | B18 | 9'-1" | 169 / 369 | 140 / 277 | 118 / 213 | 101 / 168 | 87 / 134 | 76 / 109 | 67 / 90 | 59 / 75 | 53 / 63 | 48 / 54 | 43 / 46 |
| | B16 | 10'-3" | 213 / 471 | 176 / 354 | 149 / 273 | 127 / 214 | 110 / 172 | 95 / 140 | 84 / 115 | 74 / 96 | 66 / 81 | 60 / 69 | 54 / 59 |
| 3 | B24 | 5'-10" | 154 / 120 | 128 / 90 | 108 / 69 | 92 / 55 | 79 / 44 | 69 / 35 | 61 / 29 | 54 / 24 | 48 / 21 | 43 / 17 | 39 / 15 |
| | B22 | 6'-11" | 124 / 167 | 103 / 126 | 87 / 97 | 74 / 76 | 64 / 61 | 56 / 50 | 49 / 41 | 43 / 34 | 39 / 29 | 35 / 24 | 31 / 21 |
| | B20 | 7'-9" | 159 / 209 | 132 / 157 | 111 / 121 | 95 / 95 | 82 / 76 | 72 / 62 | 63 / 51 | 56 / 43 | 50 / 36 | 45 / 31 | 40 / 26 |
| | B19 | 8'-5" | 186 / 250 | 154 / 188 | 130 / 145 | 111 / 114 | 96 / 91 | 84 / 74 | 74 / 61 | 65 / 51 | 58 / 43 | 52 / 37 | 47 / 31 |
| | B18 | 9'-1" | 210 / 289 | 174 / 217 | 147 / 167 | 126 / 132 | 108 / 105 | 95 / 86 | 83 / 71 | 74 / 59 | 66 / 50 | 59 / 42 | 54 / 36 |
| | B16 | 10'-3" | 264 / 369 | 219 / 277 | 185 / 214 | 158 / 168 | 136 / 135 | 119 / 109 | 105 / 90 | 93 / 75 | 83 / 63 | 74 / 54 | 67 / 46 |

Notes: 1. Minimum exterior bearing length required is 1.50 inches. Minimum interior bearing length required is 3.00 inches. If these minimum lengths are not provided, web crippling must be checked.
 2. FM Global approved numbers and spans available on page 21.