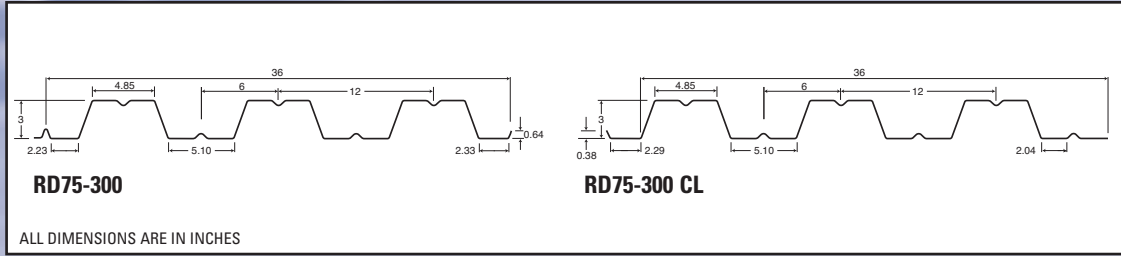


Roof Deck

RD75-300 / RD75-300 CL



Section Properties

(Per Foot of Width)

| Base Steel Thickness (in.) | Weight G90 (psf) | Yield Stress (ksi) | Section Modulus | | Deflection Moment of Inertia Mid Span (in ⁴) | Specified Web Crippling Data (lb) | | | |
|-------------------------------|---------------------|-----------------------|-----------------------------|----------------------------|---|-----------------------------------|---------|--------------|--------------|
| | | | Mid Span (in ³) | Support (in ³) | | End Pe1 | End Pe2 | Interior Pi1 | Interior Pi2 |
| 0.030 | 1.77 | 33 | 0.472 | 0.473 | 0.814 | 79.8 | 20.0 | 153 | 26.0 |
| 0.036 | 2.11 | 33 | 0.599 | 0.601 | 0.982 | 120 | 29.9 | 228 | 38.8 |
| 0.048 | 2.80 | 33 | 0.846 | 0.846 | 1.31 | 224 | 56.0 | 428 | 72.7 |
| 0.060 | 3.48 | 33 | 1.05 | 1.05 | 1.63 | 363 | 90.7 | 691 | 118 |

Load Table

Live Load Factor = 1.5; Importance Factor (I_{s-sls}) = 0.90; Importance Factor (I_{s-uls}) = 1.0

Maximum Specified Uniformly Distributed Loads in psf

| Span (ft.) | | 1-Span Base Steel Thickness (in.) | | | | 2-Span Base Steel Thickness (in.) | | | | 3-Span Base Steel Thickness (in.) | | | |
|---------------|---|--------------------------------------|-------|-------|-------|--------------------------------------|-------|-------|-------|--------------------------------------|-------|-------|-------|
| | | 0.030 | 0.036 | 0.048 | 0.060 | 0.030 | 0.036 | 0.048 | 0.060 | 0.030 | 0.036 | 0.048 | 0.060 |
| 6'-0" | S | 173 | 219 | 310 | 386 | 173 | 220 | 308 | 383 | 217 | 276 | 385 | 478 |
| | D | 274 | 330 | 440 | 550 | 657 | 793 | 1056 | 1319 | 518 | 624 | 832 | 1039 |
| 6'-6" | S | 148 | 187 | 264 | 329 | 148 | 188 | 262 | 326 | 185 | 235 | 328 | 408 |
| | D | 215 | 260 | 346 | 432 | 517 | 624 | 831 | 1038 | 407 | 491 | 654 | 817 |
| 7'-0" | S | 127 | 161 | 228 | 284 | 127 | 162 | 226 | 281 | 159 | 202 | 283 | 351 |
| | D | 172 | 208 | 277 | 346 | 414 | 499 | 665 | 831 | 326 | 393 | 524 | 654 |
| 7'-6" | S | 111 | 140 | 199 | 247 | 111 | 141 | 197 | 245 | 139 | 176 | 246 | 306 |
| | D | 140 | 169 | 225 | 281 | 337 | 406 | 541 | 676 | 265 | 320 | 426 | 532 |
| 8'-0" | S | 97 | 123 | 174 | 217 | 98 | 124 | 173 | 215 | 122 | 155 | 216 | 269 |
| | D | 116 | 139 | 186 | 232 | 277 | 334 | 446 | 557 | 218 | 263 | 351 | 438 |
| 8'-6" | S | 86 | 109 | 155 | 192 | 86 | 110 | 153 | 191 | 108 | 137 | 192 | 238 |
| | D | 96 | 116 | 155 | 193 | 231 | 279 | 372 | 464 | 182 | 220 | 293 | 365 |
| 9'-0" | S | 77 | 98 | 138 | 172 | 77 | 98 | 137 | 170 | 96 | 122 | 171 | 213 |
| | D | 81 | 98 | 130 | 163 | 195 | 235 | 313 | 391 | 153 | 185 | 246 | 308 |
| 9'-6" | S | 69 | 88 | 124 | 154 | 69 | 88 | 123 | 153 | 87 | 110 | 153 | 191 |
| | D | 69 | 83 | 111 | 138 | 166 | 200 | 266 | 332 | 130 | 157 | 210 | 262 |
| 10'-0" | S | 62 | 79 | 112 | 139 | 62 | 79 | 111 | 138 | 78 | 99 | 138 | 172 |
| | D | 59 | 71 | 95 | 119 | 142 | 171 | 228 | 285 | 112 | 135 | 180 | 224 |
| 10'-6" | S | 57 | 72 | 101 | 126 | 57 | 72 | 100 | 125 | 71 | 90 | 126 | 156 |
| | D | 51 | 62 | 82 | 103 | 123 | 148 | 197 | 246 | 97 | 116 | 155 | 194 |
| 11'-0" | S | 52 | 65 | 92 | 115 | 52 | 66 | 92 | 114 | 65 | 82 | 114 | 142 |
| | D | 44 | 54 | 71 | 89 | 107 | 129 | 171 | 214 | 84 | 101 | 135 | 169 |
| 11'-6" | S | 47 | 60 | 84 | 105 | 47 | 60 | 84 | 104 | 59 | 75 | 105 | 130 |
| | D | 39 | 47 | 63 | 78 | 93 | 113 | 150 | 187 | 74 | 89 | 118 | 148 |
| 12'-0" | S | 43 | 55 | 78 | 96 | 43 | 55 | 77 | 96 | 54 | 69 | 96 | 120 |
| | D | 34 | 41 | 55 | 69 | 82 | 99 | 132 | 165 | 65 | 78 | 104 | 130 |
| 12'-6" | S | 40 | 51 | 71 | 89 | 40 | 51 | 71 | 88 | 50 | 63 | 89 | 110 |
| | D | 30 | 37 | 49 | 61 | 73 | 88 | 117 | 146 | 57 | 69 | 92 | 115 |
| 13'-0" | S | 37 | 47 | 66 | 82 | 37 | 47 | 66 | 82 | 46 | 59 | 82 | 102 |
| | D | 27 | 32 | 43 | 54 | 65 | 78 | 104 | 130 | 51 | 61 | 82 | 102 |
| 13'-6" | S | 34 | 43 | 61 | 76 | 34 | 44 | 61 | 76 | 43 | 54 | 76 | 94 |
| | D | 24 | 29 | 39 | 48 | 58 | 70 | 93 | 116 | 45 | 55 | 73 | 91 |
| 14'-0" | S | 32 | 40 | 57 | 71 | 32 | 40 | 57 | 70 | 40 | 51 | 71 | 88 |
| | D | 22 | 26 | 35 | 43 | 52 | 62 | 83 | 104 | 41 | 49 | 65 | 82 |

Notes:

- Steel conforms to ASTM A653.
- Section properties are in accordance with CSA-S136-07.
- Values in row "S" are based on strength.
- Values in row "D" are based on a deflection limit of 1/240 of the span.
- Web crippling not included in strength values. See example calculation in notes to designer.
- Contact the sales department for stocked colours and gauges.
- The load table contained on this data sheet was prepared by Dr. R.M. Schuster P.Eng. Professor Emeritus of Structural Engineering, University of Waterloo, Ontario, Canada.
- Bundled deck produced from either Galvalume or G90 Galvanized coated steel is susceptible to storage stain when exposed to the elements. This staining is superficial only and is not a valid reason for rejection of this product.

