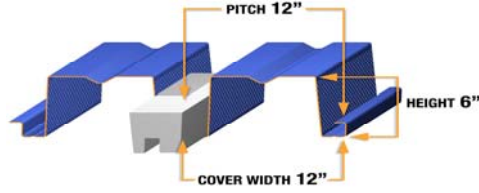


SECTION PROPERTIES

fy=40 ksi

| GAGE | Wd | I _D (DEFLECTION) | Sp | Sn | Rbe | | | Rbi | | | Va |
|------|------|--------------------------------|-------|-------|------|------|------|------|------|------|-------|
| | | | | | 4" | 5" | 6" | 4" | 5" | 6" | |
| 20 | 3.23 | 5.196 | 1.396 | 1.546 | 460 | 470 | 480 | 736 | 792 | 843 | 1393 |
| 18 | 4.28 | 6.992 | 2.092 | 2.165 | 863 | 881 | 898 | 1218 | 1307 | 1387 | 3240 |
| 16 | 5.39 | 8.815 | 2.693 | 2.728 | 1438 | 1465 | 1490 | 1849 | 1978 | 2094 | 6519 |
| 14 | 6.73 | 11.002 | 3.404 | 3.404 | 2193 | 2360 | 2403 | 2758 | 2942 | 3107 | 10505 |



| ASD DESIGN | | MAXIMUM SUPERIMPOSED UNIFORM ASD LOADS (psf) | | | | | | | | | | | |
|------------|-------------------|--|------|-----|-----|-------------|-----|-----|------|-------------|-----|------|------|
| Span | Load Combinations | SINGLE SPAN | | | | DOUBLE SPAN | | | | TRIPLE SPAN | | | |
| | | GAGE | | | | | | | | | | | |
| | | 20 | 18 | 16 | 14 | 20 | 18 | 16 | 14 | 20 | 18 | 16 | 14 |
| 15' - 0" | D+L (Strength) | 58* | 111* | 186 | 235 | 42* | 66* | 88* | 117* | 48* | 76* | 103* | 136* |
| | D+L (Deflection) | 58 | 111 | 166 | 207 | 42 | 66 | 88 | 117 | 48 | 76 | 103 | 136 |
| | L (Deflection) | 58 | 90 | 114 | 143 | 42 | 66 | 88 | 117 | 48 | 76 | 103 | 136 |
| 16' - 0" | D+L (Strength) | 54* | 104* | 163 | 206 | 39* | 61* | 81* | 107* | 45* | 70* | 95* | 125* |
| | D+L (Deflection) | 54 | 104 | 136 | 170 | 39 | 61 | 81 | 107 | 45 | 70 | 95 | 125 |
| | L (Deflection) | 54 | 74 | 94 | 118 | 39 | 61 | 81 | 107 | 45 | 70 | 95 | 125 |
| 17' - 0" | D+L (Strength) | 51* | 97* | 144 | 182 | 36* | 56* | 75* | 99* | | | | |
| | D+L (Deflection) | 51 | 89 | 112 | 140 | 36 | 56 | 75 | 99 | | | | |
| | L (Deflection) | 46 | 62 | 79 | 98 | 36 | 56 | 75 | 99 | | | | |
| 18' - 0" | D+L (Strength) | 48* | 92* | 128 | 161 | 34* | 52* | 70* | 91* | | | | |
| | D+L (Deflection) | 48 | 74 | 94 | 117 | 34 | 52 | 70 | 91 | | | | |
| | L (Deflection) | 39 | 52 | 66 | 83 | 34 | 52 | 70 | 91 | | | | |
| 19' - 0" | D+L (Strength) | 45* | 87* | 114 | 144 | 32* | 48* | 65* | 85* | | | | |
| | D+L (Deflection) | 45 | 62 | 79 | 99 | 32 | 48 | 65 | 85 | | | | |
| | L (Deflection) | 33 | 44 | 56 | 70 | 32 | 48 | 65 | 85 | | | | |
| 20' - 0" | D+L (Strength) | 43* | 79 | 102 | 129 | 30* | 45* | 60* | 79* | | | | |
| | D+L (Deflection) | 39 | 53 | 67 | 84 | 30 | 45 | 60 | 79 | | | | |
| | L (Deflection) | 28 | 38 | 48 | 60 | 30 | 45 | 60 | 79 | | | | |
| 21' - 0" | D+L (Strength) | 41* | 72 | 92 | 117 | 29* | 42* | 56* | 74* | | | | |
| | D+L (Deflection) | 31 | 43 | 54 | 68 | 29 | 42 | 56 | 74 | | | | |
| | L (Deflection) | 24 | 33 | 42 | 52 | 29 | 42 | 56 | 74 | | | | |
| 22' - 0" | D+L (Strength) | 39* | 65 | 84 | 106 | 27* | 40* | 53* | 69* | | | | |
| | D+L (Deflection) | 26 | 35 | 44 | 55 | 27 | 40 | 53 | 69 | | | | |
| | L (Deflection) | 21 | 29 | 36 | 45 | 27 | 40 | 53 | 69 | | | | |
| 23' - 0" | D+L (Strength) | 37* | 59 | 76 | 96 | 26* | 37* | 50* | 64* | | | | |
| | D+L (Deflection) | 21 | 28 | 36 | 45 | 26 | 37 | 50 | 64 | | | | |
| | L (Deflection) | 18 | 25 | 32 | 40 | 26 | 37 | 50 | 64 | | | | |
| 24' - 0" | D+L (Strength) | 35* | 54 | 69 | 88 | 24* | 35* | 47* | 61* | | | | |
| | D+L (Deflection) | 17 | 23 | 29 | 37 | 24 | 35 | 47 | 61 | | | | |
| | L (Deflection) | 16 | 22 | 28 | 35 | 24 | 35 | 47 | 61 | | | | |
| 25' - 0" | D+L (Strength) | 32 | 49 | 64 | 80 | | | | | | | | |
| | D+L (Deflection) | 14 | 19 | 24 | 30 | | | | | | | | |
| | L (Deflection) | 14 | 19 | 24 | 30 | | | | | | | | |
| 26' - 0" | D+L (Strength) | 30 | 45 | 58 | 74 | | | | | | | | |
| | D+L (Deflection) | 12 | 16 | 20 | 25 | | | | | | | | |
| | L (Deflection) | 12 | 16 | 20 | 25 | | | | | | | | |
| 27' - 0" | D+L (Strength) | 27 | 42 | 54 | 68 | | | | | | | | |
| | D+L (Deflection) | 9 | 13 | 16 | 20 | | | | | | | | |
| | L (Deflection) | 9 | 13 | 16 | 20 | | | | | | | | |
| 28' - 0" | D+L (Strength) | 25 | 38 | 50 | 63 | | | | | | | | |
| | D+L (Deflection) | 8 | 11 | 13 | 17 | | | | | | | | |
| | L (Deflection) | 8 | 11 | 13 | 17 | | | | | | | | |

| | | | |
|----------|------------------|-----|---|
| 15' - 0" | D+L (Strength) | 58* | ← Max. superimposed ASD dead + live load (psf) (governed by strength limitation) |
| | D+L (Deflection) | 58 | ← Max. superimposed ASD dead + live load (psf) (governed by deflection limitation of L/240 or 1") |
| | L (Deflection) | 58 | ← Max. superimposed ASD live load (psf) (governed by deflection limitation of L/360 or 1") |

Vertical load span (center to center spacing)

- Wd Weight of deck (uncoated), psf
- I_D Moment of inertia for deflection per foot of deck width, (in⁴)/ft
- Sp Section modulus for positive bending per foot of deck width, (in³)/ft
- Sn Section modulus for negative bending per foot of deck width, (in³)/ft
- Va Allowable shear value per foot of deck width, plf
- Rbe Allowable exterior web crippling value per foot of deck width, plf
- Rbi Allowable interior web crippling value per foot of deck width, plf
- D Uniform dead load, psf
- L Uniform live load, psf

Notes: 1. Bending strength based on allowable flexural stress of 24 ksi.
 2. Loads marked with asterisk (*) are governed by moment & shear, interior (6" bearing) and exterior (4" bearing) reactions (web crippling) or applied moment & reactions.
 3. An upper limit of 400 psf has been applied to the loads.
 4. Deck length over 45'-0" require inquiry and special accommodations. Please contact the Metal-Dek Group® for further information.

The section properties table is based on 2001 AISI's North American Specification for the Design of Cold-Formed Steel Structural Members (2004 Supplement).