



# HR-34 Roof & Wall Panel

4566 RIDGE DRIVE NE  
SALEM, OR 97301

| SECTION PROPERTIES |              |           |               |                                  |                                        |                                 |                                  |                                        |                                 | ALLOWABLE UNIFORM LOADS, psf<br>For various fastener spacings (i.e. span values) |       |       |       |       |       |      |      |              |       |       |       |       |       |      |      |  |  |
|--------------------|--------------|-----------|---------------|----------------------------------|----------------------------------------|---------------------------------|----------------------------------|----------------------------------------|---------------------------------|----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|------|--------------|-------|-------|-------|-------|-------|------|------|--|--|
| Ga.                | Width<br>in. | Yield ksi | Weight<br>psf | Top in Compression               |                                        |                                 | Bottom in Compression            |                                        |                                 | Inward Load                                                                      |       |       |       |       |       |      |      | Outward Load |       |       |       |       |       |      |      |  |  |
|                    |              |           |               | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft | 2.5'                                                                             | 3'    | 3.5'  | 4'    | 4.5'  | 5'    | 9'   | 10'  | 2.5'         | 3'    | 3.5'  | 4'    | 4.5'  | 5'    | 9'   | 10'  |  |  |
| 26                 | 34           | 80        | 0.96          | 0.0702                           | 0.0694                                 | 0.0699                          | 0.0675                           | 0.0683                                 | 0.0830                          | 447.4                                                                            | 310.7 | 228.2 | 174.8 | 138.1 | 111.8 | 34.5 | 28.0 | 531.2        | 368.9 | 271.0 | 207.5 | 164.0 | 132.8 | 41.0 | 33.2 |  |  |
| 24                 | 34           | 50        | 1.18          | 0.1060                           | 0.1067                                 | 0.1233                          | 0.1085                           | 0.1078                                 | 0.1337                          | 493.2                                                                            | 342.5 | 251.6 | 192.6 | 152.2 | 123.3 | 38.1 | 30.8 | 534.8        | 371.4 | 272.9 | 208.9 | 165.1 | 133.7 | 41.3 | 33.4 |  |  |
| 22                 | 34           | 50        | 1.46          | 0.1307                           | 0.1317                                 | 0.1539                          | 0.1343                           | 0.1333                                 | 0.1681                          | 615.6                                                                            | 427.5 | 314.1 | 240.5 | 190.0 | 153.9 | 47.5 | 38.5 | 672.4        | 466.9 | 343.1 | 262.7 | 207.5 | 168.1 | 51.9 | 42.0 |  |  |
| 20                 | 34           | 33        | 1.76          | 0.1767                           | 0.1777                                 | 0.2140                          | 0.1802                           | 0.1792                                 | 0.2200                          | 513.6                                                                            | 356.7 | 262.0 | 200.6 | 158.5 | 128.4 | 39.6 | 31.2 | 513.6        | 356.7 | 262.0 | 200.6 | 158.5 | 128.4 | 39.6 | 32.1 |  |  |

- Theoretical section properties have been calculated per AISI 2012 North American Specification for the Design of Cold-Formed Steel Structural Member.  
 $I_{xx}$  and  $S_{xx}$  are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- Allowable load does not address web crippling, fasteners, connection strength or support material.
- Panel weight is not considered.
- Load/Span values are based on theoretical computations and not load testing.
- Deflection is **not** considered.
- Allowable loads do not include a 1/3 stress increase for wind.

| SECTION PROPERTIES |              |           |               |                                  |                                        |                                  |                                  |                                        |                                  | ALLOWABLE UNIFORM LOADS, psf<br>For various fastener spacings (i.e. span values) |       |       |       |       |       |      |      |              |       |       |       |       |       |      |      |  |  |
|--------------------|--------------|-----------|---------------|----------------------------------|----------------------------------------|----------------------------------|----------------------------------|----------------------------------------|----------------------------------|----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|------|--------------|-------|-------|-------|-------|-------|------|------|--|--|
| Ga.                | Width<br>in. | Yield ksi | Weight<br>psf | Top in Compression               |                                        |                                  | Bottom in Compression            |                                        |                                  | Inward Load                                                                      |       |       |       |       |       |      |      | Outward Load |       |       |       |       |       |      |      |  |  |
|                    |              |           |               | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft. | 2.5'                                                                             | 3'    | 3.5'  | 4'    | 4.5'  | 5'    | 9'   | 10'  | 2.5'         | 3'    | 3.5'  | 4'    | 4.5'  | 5'    | 9'   | 10'  |  |  |
| 26                 | 34           | 80        | 0.96          | 0.0702                           | 0.0694                                 | 0.0699                           | 0.0675                           | 0.0683                                 | 0.0830                           | 447.4                                                                            | 310.7 | 228.2 | 174.8 | 138.1 | 111.8 | 25.1 | 18.3 | 531.2        | 368.9 | 271.0 | 207.5 | 164.0 | 132.8 | 24.7 | 18.0 |  |  |
| 24                 | 34           | 50        | 1.18          | 0.1060                           | 0.1067                                 | 0.1233                           | 0.1085                           | 0.1078                                 | 0.1337                           | 493.2                                                                            | 342.5 | 251.6 | 192.7 | 152.2 | 123.3 | 38.1 | 28.1 | 534.8        | 371.4 | 272.9 | 208.9 | 165.1 | 133.7 | 38.9 | 28.4 |  |  |
| 22                 | 34           | 50        | 1.46          | 0.1307                           | 0.1317                                 | 0.1539                           | 0.1343                           | 0.1333                                 | 0.1681                           | 615.6                                                                            | 427.5 | 314.1 | 240.5 | 190.0 | 153.9 | 47.5 | 34.7 | 672.4        | 466.9 | 343.1 | 262.7 | 207.5 | 168.1 | 48.2 | 35.1 |  |  |
| 20                 | 34           | 33        | 1.76          | 0.1767                           | 0.1777                                 | 0.2140                           | 0.1802                           | 0.1792                                 | 0.2200                           | 513.6                                                                            | 356.7 | 262.0 | 200.6 | 158.5 | 128.4 | 39.6 | 32.1 | 528.0        | 366.7 | 269.4 | 206.3 | 163.0 | 132.0 | 40.7 | 33.0 |  |  |

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- Allowable load does not address web crippling, fasteners, connection strength or support material.
- Panel weight is not considered.
- Load/Span values are based on theoretical computations and not load testing.
- Deflection consideration is limited by a maximum deflection ratio of  $L/120$  of span.
- Allowable loads do not include a 1/3 stress increase for wind.

| SECTION PROPERTIES |              |              |               |                                  |                                        |                                 |                                  |                                        |                                 | ALLOWABLE UNIFORM LOADS, psf<br>For various fastener spacings (i.e. span values) |       |       |       |       |       |      |      |              |       |       |       |       |       |      |      |  |  |
|--------------------|--------------|--------------|---------------|----------------------------------|----------------------------------------|---------------------------------|----------------------------------|----------------------------------------|---------------------------------|----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|------|--------------|-------|-------|-------|-------|-------|------|------|--|--|
| Ga.                | Width<br>in. | Yield<br>ksi | Weight<br>psf | Top in Compression               |                                        |                                 | Bottom in Compression            |                                        |                                 | Inward Load                                                                      |       |       |       |       |       |      |      | Outward Load |       |       |       |       |       |      |      |  |  |
|                    |              |              |               | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft | $I_{xx}$<br>in <sup>4</sup> /ft. | $I_{xx}$ (eff)<br>in <sup>4</sup> /ft. | $S_{xx}$<br>in <sup>3</sup> /ft | 2.5'                                                                             | 3'    | 3.5   | 4'    | 4.5'  | 5'    | 9'   | 10'  | 2.5'         | 3'    | 3.5   | 4'    | 4.5'  | 5'    | 9'   | 10'  |  |  |
| 26                 | 34           | 80           | 0.96          | 0.0702                           | 0.0694                                 | 0.0699                          | 0.0675                           | 0.0683                                 | 0.0830                          | 447.4                                                                            | 310.7 | 228.2 | 174.8 | 134.0 | 97.5  | 16.7 | 12.2 | 531.2        | 368.9 | 271.0 | 187.3 | 131.6 | 95.9  | 16.5 | 12.0 |  |  |
| 24                 | 34           | 50           | 1.18          | 0.1060                           | 0.1067                                 | 0.1233                          | 0.1085                           | 0.1078                                 | 0.1337                          | 493.2                                                                            | 342.5 | 251.6 | 192.7 | 152.2 | 123.3 | 25.7 | 18.7 | 534.8        | 371.4 | 272.9 | 208.9 | 165.1 | 133.7 | 26.0 | 18.9 |  |  |
| 22                 | 34           | 50           | 1.46          | 0.1307                           | 0.1317                                 | 0.1539                          | 0.1343                           | 0.1333                                 | 0.1681                          | 615.6                                                                            | 427.5 | 314.1 | 240.5 | 190.0 | 153.9 | 31.7 | 23.1 | 672.4        | 466.9 | 343.1 | 262.7 | 207.5 | 168.1 | 32.1 | 23.4 |  |  |
| 20                 | 34           | 33           | 1.76          | 0.1767                           | 0.1777                                 | 0.2140                          | 0.1802                           | 0.1792                                 | 0.2200                          | 513.6                                                                            | 356.7 | 262.0 | 200.6 | 158.5 | 128.4 | 39.6 | 31.2 | 528.0        | 366.7 | 269.4 | 206.3 | 162.7 | 132.0 | 40.7 | 31.5 |  |  |

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- Allowable load does not address web crippling, fasteners, connection strength or support material.
- Panel weight is not considered.
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- Deflection consideration is limited by a maximum deflection ratio of  $L/180$  of span.
- Allowable loads do not include a 1/3 stress increase for wind.



EXPIRES 09-16-2018