

Allowable Window Opening Width for RedHeader Lite

Used as Interior Jamb Studs for Window Opening

| Wall Height (ft) | Wall Size (in) | Member       | Mils (Gauge) | Interior Allowable Spans: Lateral Load (psf) = 5, Dead Load (psf) = 10 |         |        |         |        |         |        |         |
|------------------|----------------|--------------|--------------|--|---------|--------|---------|--------|---------|--------|---------|
|                  |                |              |              | Strong Axis Deflection Targets   |         |        |         |        |         |        |         |
|                  |                |              |              | L/120  |         | L/240  |         | L/360  |         | L/600  |         |
|                  |                |              |              | Sill Height (ft)   |         |        |         |        |         |        |         |
|                  |                | 2            |              | 3  |         | 2      |         | 3      |         |        |         |
| 9                | 2-1/2          | 250RHL250-33 | 33 (20)      | 7'-10"   | 8'-9"   | 7'-10" | 8'-9"   | 6'-7"  | 5'-10"  | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 14'-4"   | 13'-10" | 14'-4" | 13'-10" | 10'-1" | 8'-10"  | 4'-10" | 4'-4"   |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 7'-8"  | 8'-6"   | 7'-8"  | 8'-6"   | 7'-8"  | 8'-6"   | 7'-8"  | 8'-6"   |
|                  |                | 362RHL250-43 | 43 (18)      | 14'-0"   | 16'-0"  | 14'-0" | 16'-0"  | 14'-0" | 16'-0"  | 14'-0" | 13'-1"  |
|                  | 4              | 400RHL250-33 | 33 (20)      | 7'-7"  | 8'-5"   | 7'-7"  | 8'-5"   | 7'-7"  | 8'-5"   | 7'-7"  | 8'-5"   |
|                  |                | 400RHL250-43 | 43 (18)      | 14'-0"   | 15'-10" | 14'-0" | 15'-10" | 14'-0" | 15'-10" | 14'-0" | 15'-10" |
| 6                | 600RHL250-33   | 33 (20)      | 7'-4"        | 8'-1"  | 7'-4"   | 8'-1"  | 7'-4"   | 8'-1"  | 7'-4"   | 8'-1"  |         |
|                  | 600RHL250-43   | 43 (18)      | 13'-7"       | 15'-5"   | 13'-7"  | 15'-5" | 13'-7"  | 15'-5" | 13'-7"  | 15'-5" |         |
| 10               | 2-1/2          | 250RHL250-33 | 33 (20)      | 6'-8"  | 7'-3"   | 6'-8"  | 6'-9"   | 4'-0"  | 3'-9"   | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 12'-4"   | 11'-4"  | 11'-8" | 10'-1"  | 6'-7"  | 6'-0"   | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 6'-6"  | 7'-1"   | 6'-6"  | 7'-1"   | 6'-6"  | 7'-1"   | 6'-6"  | 6'-1"   |
|                  |                | 362RHL250-43 | 43 (18)      | 12'-1"   | 13'-6"  | 12'-1" | 13'-6"  | 12'-1" | 13'-6"  | 10'-5" | 9'-1"   |
|                  | 4              | 400RHL250-33 | 33 (20)      | 6'-6"  | 7'-0"   | 6'-6"  | 7'-0"   | 6'-6"  | 7'-0"   | 6'-6"  | 7'-0"   |
|                  |                | 400RHL250-43 | 43 (18)      | 12'-0"   | 13'-5"  | 12'-0" | 13'-5"  | 12'-0" | 13'-5"  | 12'-0" | 12'-0"  |
| 6                | 600RHL250-33   | 33 (20)      | 6'-3"        | 6'-9"  | 6'-3"   | 6'-9"  | 6'-3"   | 6'-9"  | 6'-3"   | 6'-9"  |         |
|                  | 600RHL250-43   | 43 (18)      | 11'-8"       | 13'-0"   | 11'-8"  | 13'-0" | 11'-8"  | 13'-0" | 11'-8"  | 13'-0" |         |
| 11               | 2-1/2          | 250RHL250-33 | 33 (20)      | 5'-10"   | 6'-0"   | 4'-10" | 4'-7"   | -      | -       | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 10'-10"  | 9'-3"   | 7'-11" | 7'-2"   | 4'-2"  | 4'-0"   | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 5'-8"  | 6'-0"   | 5'-8"  | 6'-0"   | 5'-8"  | 6'-0"   | 4'-3"  | 4'-0"   |
|                  |                | 362RHL250-43 | 43 (18)      | 10'-7"   | 11'-7"  | 10'-7" | 11'-7"  | 10'-7" | 11'-7"  | 6'-11" | 6'-4"   |
|                  | 4              | 400RHL250-33 | 33 (20)      | 5'-7"  | 6'-0"   | 5'-7"  | 6'-0"   | 5'-7"  | 6'-0"   | 5'-7"  | 5'-8"   |
|                  |                | 400RHL250-43 | 43 (18)      | 10'-7"   | 11'-6"  | 10'-7" | 11'-6"  | 10'-7" | 11'-6"  | 9'-8"  | 8'-7"   |
| 6                | 600RHL250-33   | 33 (20)      | 5'-5"        | 5'-9"  | 5'-5"   | 5'-9"  | 5'-5"   | 5'-9"  | 5'-5"   | 5'-9"  |         |
|                  | 600RHL250-43   | 43 (18)      | 10'-3"       | 11'-2"   | 10'-3"  | 11'-2" | 10'-3"  | 11'-2" | 10'-3"  | 11'-2" |         |
| 12               | 2-1/2          | 250RHL250-33 | 33 (20)      | 5'-1"  | 4'-8"   | 3'-3"  | 3'-1"   | -      | -       | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 8'-11"   | 7'-7"   | 5'-3"  | 5'-0"   | -      | -       | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 5'-0"  | 5'-2"   | 5'-0"  | 5'-2"   | 5'-0"  | 5'-2"   | -      | -       |
|                  |                | 362RHL250-43 | 43 (18)      | 9'-5"  | 10'-2"  | 9'-5"  | 10'-2"  | 9'-5"  | 9'-1"   | 4'-7"  | 4'-4"   |
|                  | 4              | 400RHL250-33 | 33 (20)      | 4'-11"   | 5'-2"   | 4'-11" | 5'-2"   | 4'-11" | 5'-2"   | 4'-1"  | 3'-10"  |
|                  |                | 400RHL250-43 | 43 (18)      | 9'-4"  | 10'-1"  | 9'-4"  | 10'-1"  | 9'-4"  | 10'-1"  | 6'-5"  | 6'-1"   |
| 6                | 600RHL250-33   | 33 (20)      | 4'-9"        | 5'-0"  | 4'-9"   | 5'-0"  | 4'-9"   | 5'-0"  | 4'-9"   | 5'-0"  |         |
|                  | 600RHL250-43   | 43 (18)      | 9'-1"        | 9'-10"   | 9'-1"   | 9'-10" | 9'-1"   | 9'-10" | 9'-1"   | 9'-10" |         |
| 13               | 2-1/2          | 250RHL250-33 | 33 (20)      | 4'-3"  | 3'-9"   | -      | -       | -      | -       | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 6'-10"   | 6'-1"   | 3'-8"  | 3'-5"   | -      | -       | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 4'-4"  | 4'-7"   | 4'-4"  | 4'-7"   | 4'-4"  | 4'-2"   | -      | -       |
|                  |                | 362RHL250-43 | 43 (18)      | 8'-5"  | 9'-0"   | 8'-5"  | 9'-0"   | 6'-10" | 6'-6"   | 3'-2"  | 3'-0"   |
|                  | 4              | 400RHL250-33 | 33 (20)      | 4'-4"  | 4'-6"   | 4'-4"  | 4'-6"   | 4'-4"  | 4'-6"   | -      | -       |
|                  |                | 400RHL250-43 | 43 (18)      | 8'-5"  | 9'-0"   | 8'-5"  | 9'-0"   | 8'-5"  | 9'-0"   | 4'-6"  | 4'-3"   |
| 6                | 600RHL250-33   | 33 (20)      | 4'-2"        | 4'-4"  | 4'-2"   | 4'-4"  | 4'-2"   | 4'-4"  | 4'-2"   | 4'-4"  |         |
|                  | 600RHL250-43   | 43 (18)      | 8'-2"        | 8'-8"  | 8'-2"   | 8'-8"  | 8'-2"   | 8'-8"  | 8'-2"   | 8'-8"  |         |
| 14               | 2-1/2          | 250RHL250-33 | 33 (20)      | 3'-5"  | 3'-1"   | -      | -       | -      | -       | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 5'-6"  | 5'-0"   | -      | -       | -      | -       | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 3'-11"   | 4'-0"   | 3'-11" | 4'-0"   | 3'-1"  | 3'-0"   | -      | -       |
|                  |                | 362RHL250-43 | 43 (18)      | 7'-7"  | 8'-1"   | 7'-7"  | 8'-1"   | 5'-0"  | 4'-9"   | -      | -       |
|                  | 4              | 400RHL250-33 | 33 (20)      | 3'-10"   | 4'-0"   | 3'-10" | 4'-0"   | 3'-10" | 4'-0"   | -      | -       |
|                  |                | 400RHL250-43 | 43 (18)      | 7'-7"  | 8'-0"   | 7'-7"  | 8'-0"   | 6'-9"  | 6'-6"   | 3'-3"  | 3'-1"   |
| 6                | 600RHL250-33   | 33 (20)      | 3'-8"        | 3'-9"  | 3'-8"   | 3'-9"  | 3'-8"   | 3'-9"  | 3'-8"   | 3'-9"  |         |
|                  | 600RHL250-43   | 43 (18)      | 7'-4"        | 7'-9"  | 7'-4"   | 7'-9"  | 7'-4"   | 7'-9"  | 7'-4"   | 7'-9"  |         |
| 15               | 2-1/2          | 250RHL250-33 | 33 (20)      | -  | -       | -      | -       | -      | -       | -      | -       |
|                  |                | 250RHL250-43 | 43 (18)      | 4'-7"  | 4'-2"   | -      | -       | -      | -       | -      | -       |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 3'-6"  | 3'-7"   | 3'-6"  | 3'-7"   | -      | -       | -      | -       |
|                  |                | 362RHL250-43 | 43 (18)      | 7'-0"  | 7'-3"   | 6'-6"  | 6'-4"   | 3'-8"  | 3'-6"   | -      | -       |
|                  | 4              | 400RHL250-33 | 33 (20)      | 3'-5"  | 3'-6"   | 3'-5"  | 3'-6"   | 3'-2"  | 3'-1"   | -      | -       |
|                  |                | 400RHL250-43 | 43 (18)      | 6'-11"   | 7'-3"   | 6'-11" | 7'-3"   | 5'-0"  | 4'-10"  | -      | -       |
| 6                | 600RHL250-33   | 33 (20)      | 3'-4"        | 3'-4"  | 3'-4"   | 3'-4"  | 3'-4"   | 3'-4"  | 3'-4"   | 3'-4"  |         |
|                  | 600RHL250-43   | 43 (18)      | 6'-8"        | 7'-0"  | 6'-8"   | 7'-0"  | 6'-8"   | 7'-0"  | 6'-8"   | 7'-0"  |         |

Notes:

- 1 This table is based on the sill heights listed in the table and the condition where the opening is centered in the jamb span. Other conditions may result in differing results. Contact Technical Service for analysis of other conditions.
- 2 Opening widths are limited to 16'-0" for 2-1/2", 3-5/8", 4", & 6" members.
- 3 Physical properties and this table have been calculated in conformance with the AISI-S100-2016 (2020) w/S2-20.
- 4 Effective properties incorporate the strength increase from the Cold Work of Forming as applicable per AISI S100-2016 (2020) with S2-20 section A3.3.2.
- 5 The strength analysis included separate bending and shear checks plus the combined interaction of bending and shear effects per section H2 of AISI S100-2016 (2020) with S2-20.
- 6 The strength analysis included separate bending and axial load checks plus the combined interaction of bending and axial load effects per section H1 of AISI S100-2016 (2020) w/S2-20.
- 7 Web crippling strength check includes both single stud per section G5 of AISI S100-2016 (2020) w/S2-20 and stud-to-track connection per section B3.2.5.1 of AISI S240-20.
- 8 Single stud web crippling strength is based on minimum of all conditions and load cases in Table G5-2 of AISI S100-2016 (2020) with S2-20.
- 9 The tabulated values for flexural stress were based upon a fully braced side jamb.
- 10 This table is not applicable for axial load bearing walls but is applicable for non-axial load bearing walls.
- 11 Tables were prepared using a 16" o.c. spacing from the jamb stud to the first adjacent typical wall stud.
- 12 Wall base track is assumed to be 18ga (43mils) minimum thickness with one screw per stud flange. Wall top connection is assumed to have a minimum 1.25" bearing on the top track.

Allowable Window Opening Width for RedHeader Lite

Used as Interior Jamb Studs for Window Opening

| Wall Height (ft) | Wall Size (in) | Member       | Mils (Gauge) | Interior Allowable Spans: Lateral Load (psf) = 7.5, Dead Load (psf) = 10 |        |        |        |        |        |        |        |
|------------------|----------------|--------------|--------------|--|--------|--------|--------|--------|--------|--------|--------|
|                  |                |              |              | Strong Axis Deflection Targets   |        |        |        |        |        |        |        |
|                  |                |              |              | L/120  |        | L/240  |        | L/360  |        | L/600  |        |
|                  |                |              |              | Sill Height (ft)   |        |        |        |        |        |        |        |
|                  |                | 2            |              | 3  |        | 2      |        | 3      |        |        |        |
| 9                | 2-1/2          | 250RHL250-33 | 33 (20)      | 4'-5"  | 4'-8"  | 4'-5"  | 4'-8"  | 3'-6"  | 3'-1"  | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 8'-9"  | 9'-4"  | 8'-9"  | 8'-10" | 5'-8"  | 5'-1"  | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  |
|                  |                | 362RHL250-43 | 43 (18)      | 8'-6"  | 9'-6"  | 8'-6"  | 9'-6"  | 8'-6"  | 9'-6"  | 8'-6"  | 8'-0"  |
|                  | 4              | 400RHL250-33 | 33 (20)      | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  | 4'-3"  | 4'-6"  |
|                  |                | 400RHL250-43 | 43 (18)      | 8'-6"  | 9'-5"  | 8'-6"  | 9'-5"  | 8'-6"  | 9'-5"  | 8'-6"  | 9'-5"  |
| 6                | 600RHL250-33   | 33 (20)      | 4'-0"        | 4'-3"  | 4'-0"  | 4'-3"  | 4'-0"  | 4'-3"  | 4'-0"  | 4'-3"  |        |
|                  | 600RHL250-43   | 43 (18)      | 8'-2"        | 9'-2"  | 8'-2"  | 9'-2"  | 8'-2"  | 9'-2"  | 8'-2"  | 9'-2"  |        |
| 10               | 2-1/2          | 250RHL250-33 | 33 (20)      | 3'-8"  | 3'-10" | 3'-8"  | 3'-9"  | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 7'-5"  | 7'-6"  | 6'-7"  | 6'-0"  | 3'-6"  | 3'-2"  | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 3'-7"  | 3'-8"  | 3'-7"  | 3'-8"  | 3'-7"  | 3'-8"  | 3'-6"  | 3'-3"  |
|                  |                | 362RHL250-43 | 43 (18)      | 7'-3"  | 8'-0"  | 7'-3"  | 8'-0"  | 7'-3"  | 8'-0"  | 5'-9"  | 5'-3"  |
|                  | 4              | 400RHL250-33 | 33 (20)      | 3'-6"  | 3'-8"  | 3'-6"  | 3'-8"  | 3'-6"  | 3'-8"  | 3'-6"  | 3'-8"  |
|                  |                | 400RHL250-43 | 43 (18)      | 7'-3"  | 7'-11" | 7'-3"  | 7'-11" | 7'-3"  | 7'-11" | 7'-3"  | 7'-2"  |
| 6                | 600RHL250-33   | 33 (20)      | 3'-4"        | 3'-6"  | 3'-4"  | 3'-6"  | 3'-4"  | 3'-6"  | 3'-4"  | 3'-6"  |        |
|                  | 600RHL250-43   | 43 (18)      | 7'-0"        | 7'-8"  | 7'-0"  | 7'-8"  | 7'-0"  | 7'-8"  | 7'-0"  | 7'-8"  |        |
| 11               | 2-1/2          | 250RHL250-33 | 33 (20)      | 3'-1"  | 3'-2"  | -      | -      | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 6'-6"  | 6'-0"  | 4'-2"  | 4'-0"  | -      | -      | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | 3'-0"  | 3'-1"  | 3'-0"  | 3'-1"  | 3'-0"  | 3'-1"  | -      | -      |
|                  |                | 362RHL250-43 | 43 (18)      | 6'-4"  | 6'-9"  | 6'-4"  | 6'-9"  | 6'-4"  | 6'-9"  | 3'-8"  | 3'-5"  |
|                  | 4              | 400RHL250-33 | 33 (20)      | 3'-0"  | 3'-0"  | 3'-0"  | 3'-0"  | 3'-0"  | 3'-0"  | 3'-0"  | 3'-0"  |
|                  |                | 400RHL250-43 | 43 (18)      | 6'-3"  | 6'-9"  | 6'-3"  | 6'-9"  | 6'-3"  | 6'-9"  | 5'-2"  | 4'-10" |
| 6                | 600RHL250-33   | 33 (20)      | -            | -  | -      | -      | -      | -      | -      | -      |        |
|                  | 600RHL250-43   | 43 (18)      | 6'-1"        | 6'-6"  | 6'-1"  | 6'-6"  | 6'-1"  | 6'-6"  | 6'-1"  | 6'-6"  |        |
| 12               | 2-1/2          | 250RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 5'-1"  | 4'-8"  | -      | -      | -      | -      | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 362RHL250-43 | 43 (18)      | 5'-7"  | 5'-11" | 5'-7"  | 5'-11" | 5'-5"  | 5'-1"  | -      | -      |
|                  | 4              | 400RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 400RHL250-43 | 43 (18)      | 5'-6"  | 5'-10" | 5'-6"  | 5'-10" | 5'-6"  | 5'-10" | 3'-6"  | 3'-3"  |
| 6                | 600RHL250-33   | 33 (20)      | -            | -  | -      | -      | -      | -      | -      | -      |        |
|                  | 600RHL250-43   | 43 (18)      | 5'-4"        | 5'-8"  | 5'-4"  | 5'-8"  | 5'-4"  | 5'-8"  | 5'-4"  | 5'-8"  |        |
| 13               | 2-1/2          | 250RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 4'-1"  | 3'-9"  | -      | -      | -      | -      | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 362RHL250-43 | 43 (18)      | 5'-0"  | 5'-2"  | 5'-0"  | 5'-2"  | 3'-9"  | 3'-7"  | -      | -      |
|                  | 4              | 400RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 400RHL250-43 | 43 (18)      | 4'-11"   | 5'-1"  | 4'-11" | 5'-1"  | 4'-11" | 5'-0"  | -      | -      |
| 6                | 600RHL250-33   | 33 (20)      | -            | -  | -      | -      | -      | -      | -      | -      |        |
|                  | 600RHL250-43   | 43 (18)      | 4'-9"        | 5'-0"  | 4'-9"  | 5'-0"  | 4'-9"  | 5'-0"  | 4'-9"  | 5'-0"  |        |
| 14               | 2-1/2          | 250RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | 3'-4"  | 3'-0"  | -      | -      | -      | -      | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 362RHL250-43 | 43 (18)      | 4'-5"  | 4'-7"  | 4'-5"  | 4'-7"  | -      | -      | -      | -      |
|                  | 4              | 400RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 400RHL250-43 | 43 (18)      | 4'-4"  | 4'-6"  | 4'-4"  | 4'-6"  | 3'-9"  | 3'-7"  | -      | -      |
| 6                | 600RHL250-33   | 33 (20)      | -            | -  | -      | -      | -      | -      | -      | -      |        |
|                  | 600RHL250-43   | 43 (18)      | 4'-3"        | 4'-4"  | 4'-3"  | 4'-4"  | 4'-3"  | 4'-4"  | 4'-3"  | 4'-4"  |        |
| 15               | 2-1/2          | 250RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 250RHL250-43 | 43 (18)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 362RHL250-43 | 43 (18)      | 4'-0"  | 4'-1"  | 3'-8"  | 3'-6"  | -      | -      | -      | -      |
|                  | 4              | 400RHL250-33 | 33 (20)      | -  | -      | -      | -      | -      | -      | -      | -      |
|                  |                | 400RHL250-43 | 43 (18)      | 4'-0"  | 4'-0"  | 4'-0"  | 4'-0"  | -      | -      | -      | -      |
| 6                | 600RHL250-33   | 33 (20)      | -            | -  | -      | -      | -      | -      | -      | -      |        |
|                  | 600RHL250-43   | 43 (18)      | 3'-9"        | 3'-11"   | 3'-9"  | 3'-11" | 3'-9"  | 3'-11" | 3'-9"  | 3'-11" |        |

Notes:

- This table is based on the sill heights listed in the table and the condition where the opening is centered in the jamb span. Other conditions may result in differing results. Contact Technical Service for analysis of other conditions.
- Opening widths are limited to 16'-0" for 2-1/2", 3-5/8", 4", & 6" members.
- Physical properties and this table have been calculated in conformance with the AISI-S100-2016 (2020) w/S2-20.
- Effective properties incorporate the strength increase from the Cold Work of Forming as applicable per AISI S100-2016 (2020) with S2-20 section A3.3.2.
- The strength analysis included separate bending and shear checks plus the combined interaction of bending and shear effects per section H2 of AISI S100-2016 (2020) with S2-20.
- The strength analysis included separate bending and axial load checks plus the combined interaction of bending and axial load effects per section H1 of AISI S100-2016 (2020) w/S2-20.
- Web crippling strength check includes both single stud per section G5 of AISI S100-2016 (2020) w/S2-20 and stud-to-track connection per section B3.2.5.1 of AISI S240-20.
- Single stud web crippling strength is based on minimum of all conditions and load cases in Table G5-2 of AISI S100-2016 (2020) with S2-20.
- The tabulated values for flexural stress were based upon a fully braced side jamb.
- This table is not applicable for axial load bearing walls but is applicable for non-axial load bearing walls.
- Tables were prepared using a 16" o.c. spacing from the jamb stud to the first adjacent typical wall stud.
- Wall base track is assumed to be 18ga (43mils) minimum thickness with one screw per stud flange. Wall top connection is assumed to have a minimum 1.25" bearing on the top track.

Allowable Window Opening Width for RedHeader Lite

Used as Interior Jamb Studs for Window Opening

| Wall Height (ft) | Wall Size (in) | Member       | Mils (Gauge) | Interior Allowable Spans: Lateral Load (psf) = 10, Dead Load (psf) = 10 |       |        |        |        |       |        |       |
|------------------|----------------|--------------|--------------|---|-------|--------|--------|--------|-------|--------|-------|
|                  |                |              |              | Strong Axis Deflection Targets  |       |        |        |        |       |        |       |
|                  |                |              |              | L/120   |       | L/240  |        | L/360  |       | L/600  |       |
|                  |                |              |              | Sill Height (ft)  |       |        |        |        |       |        |       |
|                  |                | 2            |              | 3   |       | 2      |        | 3      |       |        |       |
| 9                | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | 5'-11"  | 6'-5" | 5'-11" | 6'-0"  | 3'-7"  | 3'-3" | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | 5'-9"   | 6'-3" | 5'-9"  | 6'-3"  | 5'-9"  | 6'-3" | 5'-9"  | 5'-4" |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | 5'-9"   | 6'-3" | 5'-9"  | 6'-3"  | 5'-9"  | 6'-3" | 5'-9"  | 6'-3" |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | 5'-6"        | 6'-0"   | 5'-6" | 6'-0"  | 5'-6"  | 6'-0"  | 5'-6" | 6'-0"  |       |
| 10               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | 5'-0"   | 5'-4" | 4'-2"  | 3'-10" | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | 4'-10"  | 5'-2" | 4'-10" | 5'-2"  | 4'-10" | 5'-2" | 3'-8"  | 3'-4" |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | 4'-10"  | 5'-2" | 4'-10" | 5'-2"  | 4'-10" | 5'-2" | 4'-10" | 4'-9" |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | 4'-8"        | 5'-0"   | 4'-8" | 5'-0"  | 4'-8"  | 5'-0"  | 4'-8" | 5'-0"  |       |
| 11               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | 4'-3"   | 4'-0" | -      | -      | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | 4'-2"   | 4'-4" | 4'-2"  | 4'-4"  | 4'-2"  | 4'-4" | -      | -     |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | 4'-2"   | 4'-4" | 4'-2"  | 4'-4"  | 4'-2"  | 4'-4" | 3'-4"  | 3'-1" |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | 4'-0"        | 4'-2"   | 4'-0" | 4'-2"  | 4'-0"  | 4'-2"  | 4'-0" | 4'-2"  |       |
| 12               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | 3'-6"   | 3'-2" | -      | -      | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | 3'-7"   | 3'-9" | 3'-7"  | 3'-9"  | 3'-6"  | 3'-3" | -      | -     |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | 3'-7"   | 3'-8" | 3'-7"  | 3'-8"  | 3'-7"  | 3'-8" | -      | -     |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | 3'-5"        | 3'-7"   | 3'-5" | 3'-7"  | 3'-5"  | 3'-7"  | 3'-5" | 3'-7"  |       |
| 13               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | 3'-2"   | 3'-3" | 3'-2"  | 3'-3"  | -      | -     | -      | -     |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | 3'-2"   | 3'-2" | 3'-2"  | 3'-2"  | 3'-2"  | 3'-2" | -      | -     |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | 3'-0"        | 3'-1"   | 3'-0" | 3'-1"  | 3'-0"  | 3'-1"  | 3'-0" | 3'-1"  |       |
| 14               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
| 15               | 2-1/2          | 250RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 250RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  | 3-5/8          | 362RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 362RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  | 4              | 400RHL250-33 | 33 (20)      | -   | -     | -      | -      | -      | -     | -      | -     |
|                  |                | 400RHL250-43 | 43 (18)      | -   | -     | -      | -      | -      | -     | -      | -     |
| 6                | 600RHL250-33   | 33 (20)      | -            | -   | -     | -      | -      | -      | -     | -      |       |
|                  | 600RHL250-43   | 43 (18)      | -            | -   | -     | -      | -      | -      | -     | -      |       |

Notes:

- 1 This table is based on the sill heights listed in the table and the condition where the opening is centered in the jamb span. Other conditions may result in differing results. Contact Technical Service for analysis of other conditions.
- 2 Opening widths are limited to 16'-0" for 2-1/2", 3-5/8", 4", & 6" members.
- 3 Physical properties and this table have been calculated in conformance with the AISI-S100-2016 (2020) w/S2-20.
- 4 Effective properties incorporate the strength increase from the Cold Work of Forming as applicable per AISI S100-2016 (2020) with S2-20 section A3.3.2.
- 5 The strength analysis included separate bending and shear checks plus the combined interaction of bending and shear effects per section H2 of AISI S100-2016 (2020) with S2-20.
- 6 The strength analysis included separate bending and axial load checks plus the combined interaction of bending and axial load effects per section H1 of AISI S100-2016 (2020) w/S2-20.
- 7 Web crippling strength check includes both single stud per section G5 of AISI S100-2016 (2020) w/S2-20 and stud-to-track connection per section B3.2.5.1 of AISI S240-20.
- 8 Single stud web crippling strength is based on minimum of all conditions and load cases in Table G5-2 of AISI S100-2016 (2020) with S2-20.
- 9 The tabulated values for flexural stress were based upon a fully braced side jamb.
- 10 This table is not applicable for axial load bearing walls but is applicable for non-axial load bearing walls.
- 11 Tables were prepared using a 16" o.c. spacing from the jamb stud to the first adjacent typical wall stud.
- 12 Wall base track is assumed to be 18ga (43mils) minimum thickness with one screw per stud flange. Wall top connection is assumed to have a minimum 1.25" bearing on the top track.