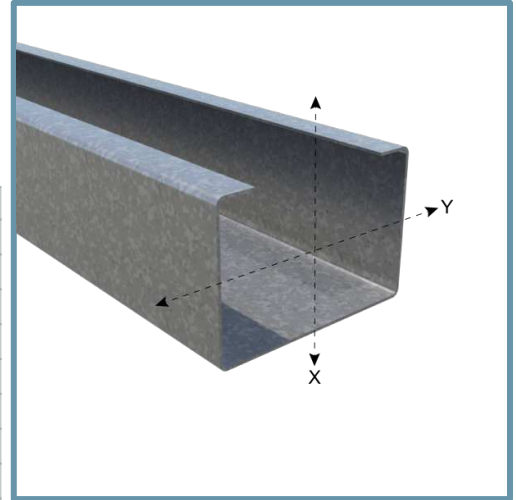


Redheader Lite 600RHL250-43 (33ksi, CP60) - As Header

6" Header stud with 2-1/2" flange for interior openings - Unpunched

Geometric Properties

| | | |
|----------------------------------|------------------------------------|--|
| Web depth: 6.000 in | Flange width: 2.500 in | Return lip: 0.625 in |
| Thickness: 43mils (18ga) | Design Thickness: 0.0451 in | Min. steel thickness: 0.0428 in |
| Yield strength, Fy: 33ksi | Coating: CP60 | |



| Gross Section Properties of Full Section, Strong Axis | |
|--|-----------------------|
| Cross sectional area (A) | 0.537 in ² |
| Member weight per foot of length | 1.83 lb/ft |
| Moment of inertia (Ix) | 3.082 in ⁴ |
| Section Modulus (Sx) | 1.027in ³ |
| Radius of gyration (Rx) | 2.396 in |
| Moment of inertia (Iy) | 0.458 in ⁴ |
| Section modulus (Sy) | 0.602 ³ |
| Gross radius of gyration (Ry) | 0.923 in |
| Effective Section Properties | |
| Cross sectional area (Ae) | 0.333 in ² |
| Moment of Inertia about x-axis (Ixe) | 3.082 in ⁴ |
| Moment of Inertia about y-axis (Iye) | 0.458 in ⁴ |
| Section Modulus about x-axis (Sxe) | 0.918 in ³ |
| Section Modulus about y-axis (Sye) | 0.263 in ³ |
| Allowable local moment capacity about x-axis (Max-local) | 18.14 (in-k) |
| Allowable local moment capacity about y-axis (May-local) | 5.20 (in-k) |
| Allowable distortional moment capacity about x-axis (Max-dist) | 16.21 (in-k) |
| Allowable distortional moment capacity about y-axis (May-dist) | 4.15 (in-k) |
| Shear strength capacity of section about x-axis (Vax) | 1415 lbs |
| Shear strength capacity of section about y-axis (Vay) | 1713 lbs |
| Torsional Properties | |
| St. Venant torsional constant (J x 1000) | 0.364 in ⁴ |
| Warping constant (Cw) | 3.411 in ⁶ |
| Distance from shear center to the centroid along the principal axis (Xo) | -1.874 in |
| Distance from shear center to web centerline (m) | 1.136 in |
| Radii of gyration (Ro) | 3.182 in |
| Torsional flexural constant (Beta) | 0.652 |

- Section properties are based on using AIS S100-16/S2-20.
- Moment and Shear capacities about Y-axis listed in unperforated effective section can be used for perforated effective section properties.
- Axial load capacities are based on fully-brace condition.

Code Approvals & Performance Standards

- [AISI S100-16 \(2020\) w/S2-20](#) North American Specification for the Design of Cold-Formed Steel Structural Members
- [AISI S240-20](#) North American Standard for Cold-Formed Steel Structural Framing
 - (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)
 - Section A3 Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
 - Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
 - Section C Installation - (Referencing ASTM C1007)
- [SDS For ASTM A1003 Steel Framing Products](#) For Interior Framing, Exterior Framing and Clips/Accessories

Features:

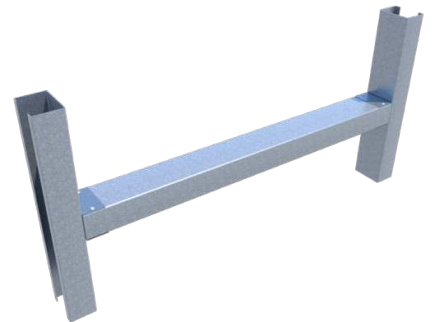
- Replaces lay-in and boxed headers.
- Reduces material pieces, weight & screws.
- Reduces installation time.

Header Brackets:

RedHeader Lite requires the use of the RHLC Header Bracket or EasyClip S-Series clip. Refer to [RedHeader Lite Technical Data](#) to determine the applicable clip for your condition. All headers brackets require the RedHeader Lite to be installed leg up.

Ordering information:

When using the RHLC clip, header lengths should be ordered 1/2" shorter to fit inside RHLC Header Brackets (Header length = inside of jamb to inside of jamb - 1/2").



RedHeader Lite Jamb Stud 600RHL250-43 (33ksi, CP60) - As Jamb

6" Jamb stud with 2-1/2" for interior openings - Unpunched

Geometric Properties

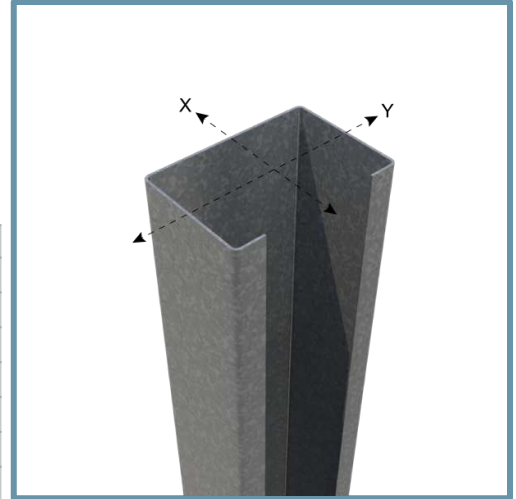
| | | |
|----------------------------------|------------------------------------|--|
| Web depth: 6.000 in | Flange width: 2.500 in | Return lip: 0.625 in |
| Thickness: 43mils (18ga) | Design Thickness: 0.0451 in | Min. steel thickness: 0.0428 in |
| Yield strength, Fy: 33ksi | Coating: CP60 | |

| Gross Section Properties of Full Section, Strong Axis | |
|--|-----------------------|
| Cross sectional area (A) | 0.537 in ² |
| Member weight per foot of length | 1.83 lb/ft |
| Moment of inertia (Ix) | 3.082 in ⁴ |
| Section Modulus (Sx) | 1.027in ³ |
| Radius of gyration (Rx) | 2.396 in |
| Moment of inertia (Iy) | 0.458 in ⁴ |
| Section modulus (Sy) | 0.602 ³ |
| Gross radius of gyration (Ry) | 0.923 in |
| Effective Section Properties | |
| Cross sectional area (Ae) | 0.298 in ² |
| Moment of Inertia about x-axis (Ixe) | 3.082 in ⁴ |
| Section Modulus about x-axis (Sxe) | 0.918 in ³ |
| Allowable local moment capacity about x-axis (Max-local) | 18.14 (in-k) |
| Allowable distortional moment capacity about x-axis (Max-dist) | 15.74 (in-k) |
| Shear strength capacity of section about x-axis (Vax) | 1240 lbs |
| Shear strength capacity of section about y-axis (Vay) | lbs |
| Torsional Properties | |
| St. Venant torsional constant (J x 1000) | 0.364 in ⁴ |
| Warping constant (Cw) | 3.411 in ⁶ |
| Distance from shear center to web centerline (m) | 1.136 in |
| Radii of gyration (Ro) | 3.182 in |
| Torsional flexural constant (Beta) | 0.652 |
| Maximum unbraced length (Lu) | 62.4 in |
| Axial Load | |
| Allowable axial load for section | 5.5 kips |

- Section properties are based on using AIS S100-16/S2-20.
- Effective section properties are based on a perforated profile.
- Moment and Shear capacities about Y-axis listed in unperforated effective section can be used for perforated effective section properties.
- Axial load capacities are based on fully-brace condition.

Code Approvals & Performance Standards

- [AISI S100-16 \(2020\) w/S2-20](#) North American Specification for the Design of Cold-Formed Steel Structural Members
- [AISI S240-20](#) North American Standard for Cold-Formed Steel Structural Framing
 - (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)
 - Section A3 Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
 - Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
 - Section C Installation - (Referencing ASTM C1007)
- [SDS For ASTM A1003 Steel Framing Products](#) For Interior Framing, Exterior Framing and Clips/Accessories



Features:

- Replaces built-up jambs.
- Reduces material pieces, weight & screws.
- Reduces installation time.

