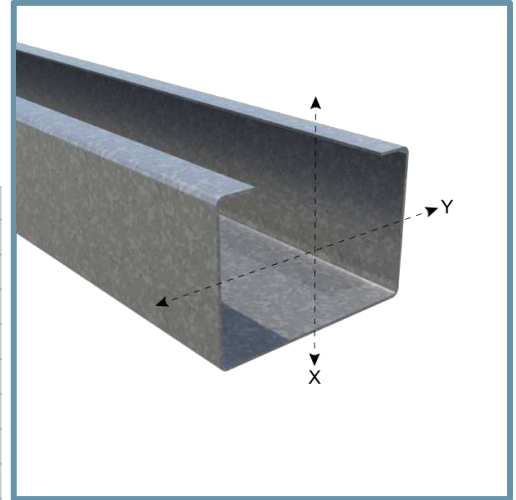


Redheader Lite 600RHL250-33 (33ksi, CP60) - As Header

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: 33mils (20ga)	Design Thickness: 0.0346 in	Min. steel thickness: 0.0329 in
Yield strength, Fy: 33ksi	Coating: CP60	



Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.413 in ²
Member weight per foot of length	1.41 lb/ft
Moment of inertia (Ix)	2.383 in ⁴
Section Modulus (Sx)	0.794in ³
Radius of gyration (Rx)	2.401 in
Moment of inertia (Iy)	0.356 in ⁴
Section modulus (Sy)	0.468 ³
Gross radius of gyration (Ry)	0.928 in
Effective Section Properties	
Cross sectional area (Ae)	0.225 in ²
Moment of Inertia about x-axis (Ixe)	2.291 in ⁴
Moment of Inertia about y-axis (Iye)	0.356 in ⁴
Section Modulus about x-axis (Sxe)	0.649 in ³
Section Modulus about y-axis (Sye)	0.197 in ³
Allowable local moment capacity about x-axis (Max-local)	12.82 (in-k)
Allowable local moment capacity about y-axis (May-local)	3.90 (in-k)
Allowable distortional moment capacity about x-axis (Max-dist)	11.27 (in-k)
Allowable distortional moment capacity about y-axis (May-dist)	2.90 (in-k)
Shear strength capacity of section about x-axis (Vax)	638 lbs
Shear strength capacity of section about y-axis (Vay)	772 lbs
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.165 in ⁴
Warping constant (Cw)	2.666 in ⁶
Distance from shear center to the centroid along the principal axis (Xo)	-1.886 in
Distance from shear center to web centerline (m)	1.143 in
Radii of gyration (Ro)	3.194 in
Torsional flexural constant (Beta)	0.651

- 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.
- **Flange-Width to thickness ration exceeds 60.**

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:

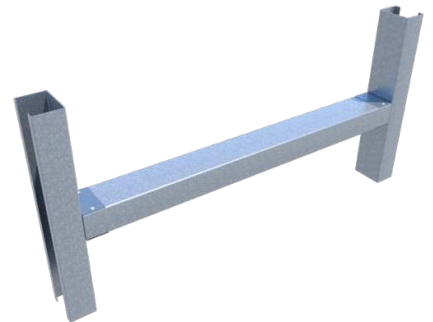
- Replaces lay-in and boxed headers.
- Reduces material pieces, weight & screws.
- Reduces installation time.

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").



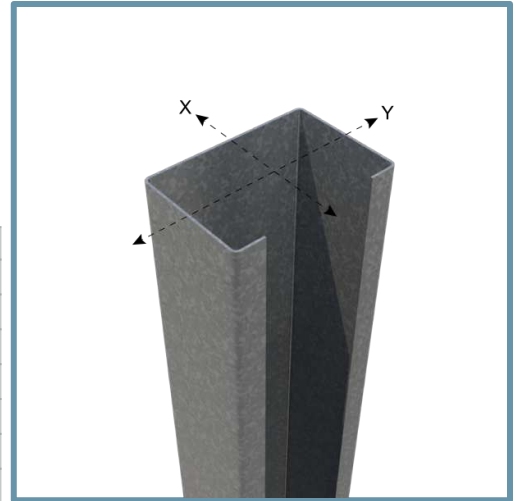
RedHeader Lite Jamb Stud 600RHL250-33 (33ksi, CP60) - As Jamb

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: 33mils (20ga) **Design Thickness:** 0.0346 in **Min. steel thickness:** 0.0329 in
Yield strength, F_y: 33ksi **Coating:** CP60

Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.413 in ²
Member weight per foot of length	1.41 lb/ft
Moment of inertia (I _x)	2.383 in ⁴
Section Modulus (S _x)	0.794in ³
Radius of gyration (R _x)	2.401 in
Moment of inertia (I _y)	0.356 in ⁴
Section modulus (S _y)	0.468 ³
Gross radius of gyration (R _y)	0.928 in
Effective Section Properties	
Cross sectional area (A _e)	0.203 in ²
Moment of Inertia about x-axis (I _{xe})	2.291 in ⁴
Section Modulus about x-axis (S _{xe})	0.649 in ³
Allowable local moment capacity about x-axis (Max-local)	12.82 (in-k)
Allowable distortional moment capacity about x-axis (Max-dist)	10.97 (in-k)
Shear strength capacity of section about x-axis (V _{ax})	638 lbs
Shear strength capacity of section about y-axis (V _{ay})	lbs
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.165 in ⁴
Warping constant (C _w)	2.666 in ⁶
Distance from shear center to web centerline (m)	1.143 in
Radii of gyration (R _o)	3.194 in
Torsional flexural constant (Beta)	0.651
Maximum unbraced length (L _u)	62.6 in
Axial Load	
Allowable axial load for section	3.7 kips



Features:

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



- 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.
- **Flange-Width to thickness ratio exceeds 60.**

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