

HDS® 362HDS300-33 (33ksi, CP60) - As Header

3-5/8" Heavy duty stud with 3" flange for structural openings - Unpunched

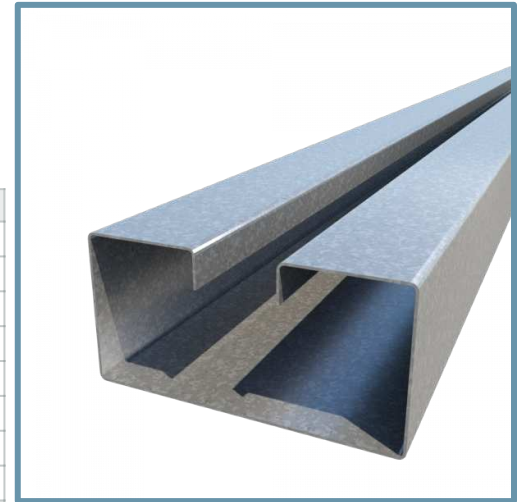
Geometric Properties

Web depth: 3.625 in	Yield strength, Fy: 33ksi	Coating: CP60
Flange width (A): 3.000 in	Return lip (B): 1.0625 in	Stiffening lip (C): 0.750
Thickness: 33mils (20ga)	Design Thickness: 0.0346 in	Min. steel thickness: 0.0329 in

Gross Section Properties of Full Section, Strong Axis	
Cross sectional area (A)	0.443 in ²
Member weight per foot of length	1.51 lb/ft
Moment of inertia (Ix)	0.927 in ⁴
Section Modulus (Sx)	0.512in ³
Radius of gyration (Rx)	1.447 in
Moment of inertia (Iy)	0.625 in ⁴
Section modulus (Sy)	0.416 ³
Radius of gyration (Ry)	1.188 in
Effective Section Properties	
Cross sectional area (Ae)	0.215 in ²
Moment of Inertia about x-axis (Ixe)	0.851 in ⁴
Moment of Inertia about y-axis (Iye)	0.626 in ⁴
Section Modulus about x-axis (Sxe)	0.369 in ³
Section Modulus about y-axis (Sye)	0.416 in ³
Allowable local moment capacity about x-axis (Max-local)	7.29 (in-k)
Allowable local moment capacity about y-axis (May-local)	8.23 (in-k)
Allowable distortional moment capacity about x-axis (Max-dist)	9.83 (in-k)
Allowable distortional moment capacity about y-axis (May-dist)	8.23 (in-k)
Shear strength capacity of section about x-axis (Vax)	1024 lbs
Shear strength capacity of section about y-axis (Vay)	2048 lbs
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.177 in ⁴
Warping constant (Cw)	4.541 in ⁶
Distance from shear center to the centroid along the principal axis (Xo)	-3.502 in
Distance from shear center to web centerline (m)	1.709 in
Radii of gyration (Ro)	3.971 in
Torsional flexural constant (Beta)	0.222

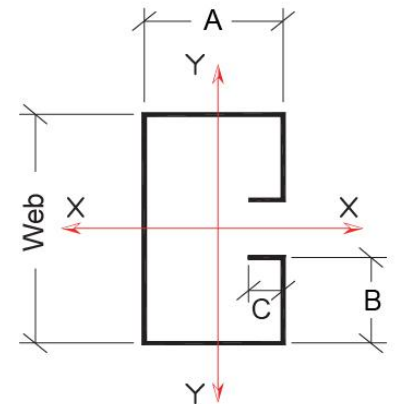
Code Approvals & Performance Standards

- **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)
- **IBC 2021** International Building Code
- **IAPMO ER-0723** Evaluation Report for HDS and RedHeader Pro
- **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



Ordering Information:

Header lengths should be ordered 1/2" shorter to fit inside HDSC Header Brackets (Header length = inside of jamb to inside of jamb - 1/2")

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

- **LEED v4.1 MR Credit:** Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- **LEED v4 MR Credit:** Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

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Gross radius of gyration (Ry)	1.188 in
Effective Section Properties	
Cross sectional area (Ae)	0.215 in ²
Moment of Inertia about x-axis (Ixe)	0.851 in ⁴
Section Modulus about x-axis (Sxe)	0.358 in ³
Allowable local moment capacity about x-axis (Max-local)	7.08 (in-k)
Allowable distortional moment capacity about x-axis (Max-dist)	9.76 (in-k)
Shear strength capacity of section about x-axis (Vax)	521 lbs
Shear strength capacity of section about y-axis (Vay)	2048 lbs
Torsional Properties	
St. Venant torsional constant (J x 1000)	0.177 in ⁴
Warping constant (Cw)	4.541 in ⁶
Distance from shear center to the centroid along the principal axis (Xo)	-3.502 in
Distance from shear center to web centerline (m)	1.709 in
Radii of gyration (Ro)	3.971 in
Torsional flexural constant (Beta)	0.222
Maximum unbraced length (Lu)	102.6 in
Axial Load	
Allowable axial load for section	3.9 kips

- Axial load capacities are based on full-braced condition (structural elements that are installed to provide full restraint or support, i.e. KL=0)
- Section properties are based on a punched jamb stud.

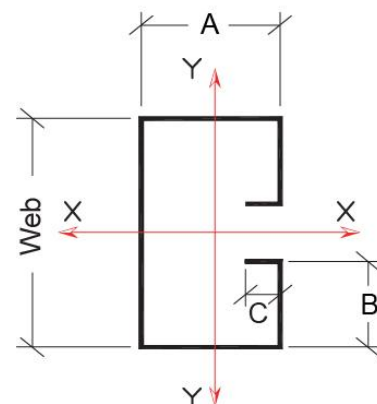
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