

# **Product Submittal Sheet**

Technical Services: 888-437-3244 Engineering Services: 877-832-3206 Sales: 800-543-7140 clarkdietrich.com

Product category: Product name:

PRO300 (3" flange RedHeader PRO) As Header **600PRO300-68 (50ksi, CP60) - Unpunched** 

68mils (14ga) Coating: CP60 per ASTM C955

## **Geometric Properties**

Web depth	6.000 in	Design thickness	0.0713 in
Flange width	3.000 in	Min. steel thickness	0.0677 in
Stiffening lip	1.000 in	Yield strength, Fy	50 ksi

# **Gross Section Properties of Full Section, Strong Axis**

Cross sectional area (A)	0.960 in <sup>2</sup>
Member weight per foot of length	3.27 lb/ft
Moment of inertia (Ix)	5.611 in⁴
Section modulus (Sx)	1.870 in <sup>3</sup>
Radius of gyration (Rx)	2.417 in
Gross moment of inertia (Iy)	1.280 in⁴
Gross section modulus (Sy)	0.661 in <sup>3</sup>
Gross radius of gyration (Ry)	1.154 in

## **Effective Section Properties, Strong Axis**

Moment of inertia for deflection (Ixe)	5.610 in <sup>4</sup>
Moment of inertia for deflection (Iye*)	1.245 in <sup>4</sup>
Section modulus (Sxe)	1.713 in <sup>3</sup>
Section modulus (Sye*)	0.642 in <sup>3</sup>
Allowable bending moment (Max - Local)	51.27 in-k
Allowable bending moment (May - Local*)	19.22 in-k
Allowable bending moment (Max - Distortional)	47.66 in-k
Allowable bending moment (May - Distortional*)	16.85 in-k
Allowable shear force in web (Vax)	5350 lb

## **Torsional Properties**

St. Venant torsion constant (J x 1000)	1.627 in <sup>4</sup>
Warping constant (Cw)	11.200 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-2.554 in
Radii of gyration (Ro)	3.701 in
Torsional flexural constant (Beta)	0.524

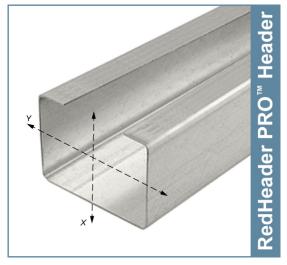
## **Section Property Notes**

\* Iye, Sye, and May are for a positive moment with the return lips in compression. (Installing the header with the flanges pointing up)

#### **ASTM & Code Standards:**

- AISI S100-12 and S100-07 w/S2-10 supplements
- Effective properties incorporate the strength increase from cold work of forming
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- SDS & Product Certification Information is available at www.clarkdietrich.com

## 05.40.00 (Cold-Formed Metal Framing)



- · Replaces lay-in and boxed headers.
- · Reduces material pieces, weight & screws.
- Insulation installs quicker.

#### **Ordering Information:**

Header lengths should be ordered  $\frac{1}{2}$ " shorter to fit inside HDSC Header Brackets. (Header length = inside of jamb to inside of jamb -  $\frac{1}{2}$ ")

## **HDSC Header Bracket profile data:**

See HDSC Header Bracket submittal sheet for allowable clip loads. All headers require the attachment of the HDSC Clip at each end with headers installed leg up.

#### **Sustainability Credits:**

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

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).

**LEED 2009 Credit MR 2 & MR 4** -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Project Information	<b>Contractor Information</b>	Architect Information
Name:	Name:	Name:
Address:	Contact:	Contact:
	Phone:	Phone:
	Fax:	Fax:
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