

Product category: PRO300 (3" flange RedHeader PRO) As Header
Product name: **400PRO300-43 (33ksi, CP60) - Unpunched**
 43mils (18ga) Coating: CP60 per ASTM C955

Geometric Properties

| | | | |
|----------------|----------|----------------------|-----------|
| Web depth | 4.000 in | Design thickness | 0.0451 in |
| Flange width | 3.000 in | Min. steel thickness | 0.0428 in |
| Stiffening lip | 1.000 in | Yield strength, Fy | 33 ksi |

Gross Section Properties of Full Section, Strong Axis

| | |
|----------------------------------|-----------------------|
| Cross sectional area (A) | 0.526 in ² |
| Member weight per foot of length | 1.79 lb/ft |
| Moment of inertia (Ix) | 1.448 in ⁴ |
| Section modulus (Sx) | 0.724 in ³ |
| Radius of gyration (Rx) | 1.660 in |
| Gross moment of inertia (Iy) | 0.726 in ⁴ |
| Gross section modulus (Sy) | 0.414 in ³ |
| Gross radius of gyration (Ry) | 1.175 in |

Effective Section Properties, Strong Axis

| | |
|--|-----------------------|
| Moment of inertia for deflection (Ixe) | 1.386 in ⁴ |
| Moment of inertia for deflection (Iye*) | 0.647 in ⁴ |
| Section modulus (Sxe) | 0.592 in ³ |
| Section modulus (Sye*) | 0.365 in ³ |
| Allowable bending moment (Max - Local) | 11.70 in-k |
| Allowable bending moment (May - Local*) | 7.21 in-k |
| Allowable bending moment (Max - Distortional) | 12.73 in-k |
| Allowable bending moment (May - Distortional*) | 7.27 in-k |
| Allowable shear force in web (Vax) | 1739 lb |

Torsional Properties

| | |
|---|-----------------------|
| St. Venant torsion constant (J x 1000) | 0.356 in ⁴ |
| Warping constant (Cw) | 3.628 in ⁶ |
| Distance from shear center to neutral axis (Xo) | -2.900 in |
| Radii of gyration (Ro) | 3.542 in |
| Torsional flexural constant (Beta) | 0.330 |

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

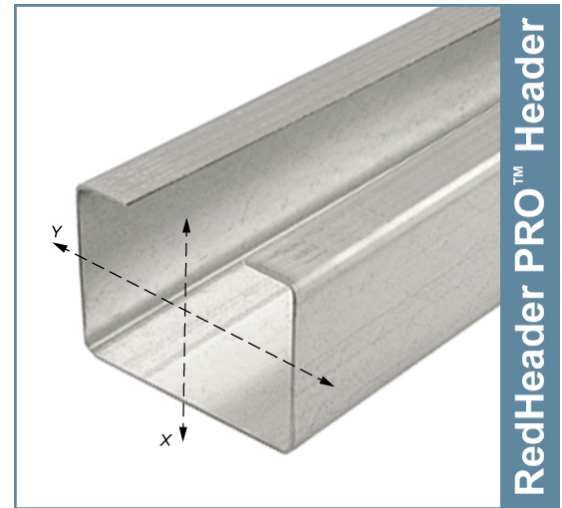
Sustainability Credits:

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)

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 ½" shorter to fit inside HDSC Header Brackets.
 (Header length = inside of jamb to inside of jamb - ½")

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.

Project Information

Name:
 Address:

Contractor Information

Name:
 Contact:
 Phone:
 Fax:

Architect Information

Name:
 Contact:
 Phone:
 Fax: