Pro X Header® ~ Short Form Specification *US Patent NO. 6,799,408

ProX Header®
Manufactured by:
Brady Construction Innovations, Inc.

For More Information call: 1-888-475-7875

SECTION 092216 NON-STRUCTURAL METAL FRAMING & SECTION 054100 STRUCTURAL METAL FRAMING

ProX SHORT FORM SPECIFICATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Light gauge steel headers for use with non-load bearing at interior and exterior metal stud framing

1.02 REFERENCES

A. ASTM International:

1. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
2. ASTM A1003/A1003M Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
3. ASTM C645 Standard Specification for Nonstructural Steel Framing Members.
4. ASTM C954 Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness.
5. ASTM C955 Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases.
6. ASTM C1007 Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories.

B. Society of Automotive Engineers (SAE):

1. SAE J78 Standard Specification for Steel Self-Drilling Tapping Screws.

1.03 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 01 Submittal Procedures Section.

B. Product Data: Submit product data, including manufacturer's SPEC-DATA® sheet, for specified products.

C. Shop Drawings: Submit drawings showing configuration, layout and load carrying capacity of headers.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements and Approvals:

[Specify applicable requirements of regulatory agencies]

1. [Code agency name].
   a. [Report or approval number].

1.05 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 01 Product Requirements Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged skids with identification labels intact.

C. Storage and Protection: Store materials protected from physical damage and in a well ventilated area or recommended by the manufacturer.

PART 2 PRODUCTS

2.01 PROX HEADER (STEEL HEADER) & RELATED COMPONENTS

A. Manufacturer: Brady Construction Innovations, Inc.

1. Contact: P.O. Box 188619, Sacramento, CA 90210-1062; Telephone: (888) 475-7875; Fax: (818) 906-7325;website: www.proxheader.com or www.dietrichmetalframing.com.

B. Substitutions: No substitutions permitted.

2.02 MATERIALS

A. ProX Header:

1. Steel Sheet: ASTM A653/A653M and ASTM C645.
   a. 14 and 16 Gauge: Grade 50 with a minimum yield point of 50,000 psi (345 MPa).
   b. 18 and 20 Gauge: Grade 33 with a minimum yield point of 33,000 psi (228 MPa).

Specifier Note: Select gauge below.

2. Thickness: [14 gauge (68 mils)] [16 gauge (54 mils)] [18 gauge (43 mils)] [20 gauge (33 mils)] [25 gauge (18 mils)].
3. Width: [2 1/2 inches (64 mm)] [3 5/8 inches (92 mm)] [4 inches (102 mm)] [6 inches (152 mm)] [8 inches (203 mm)].
4. Length: 10 feet (3.1 m).

Specifier Note: Select finish below.

5. Finish: [Galvanized, Class G40 in accordance with ASTM A1003 with coating weight in accordance with ASTM C645] [Galvanized, Class G60 in accordance with ASTM A1003 with coating weight in accordance with ASTM C955] [Galvanized, Class G90 in accordance with ASTM A1003 with coating weight in accordance with ASTM C645].

2.03 COMPONENTS

A. Outer Member: ProX Outer, X 425 Series.

B. Insert Member: ProX Insert, XT 162 Series.

C. Internal Clip: ProX Clip Series:

1. Thickness: 16 gauge (54 mils).
2. Width: [2 1/2 inches (64 mm)] [3 5/8 inches (92 mm)] [4 inches (102 mm)] [6 inches (152 mm)] [8 inches (203 mm)].

2.04 ACCESSORIES

A. Fasteners: Sheet metal screws in accordance with ASTM C954 or SAE J78:

1. Interior: No. 8 screws.
2. Exterior: No. 10 screws.

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify that substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

3.03 INSTALLATION

A. Install ProX Headers in accordance with ASTM C1007.

END OF SECTION

For a complete Long Form MasterFormat™ Specification. Referance www.ReedFisrtSource.com and search ProXHeader

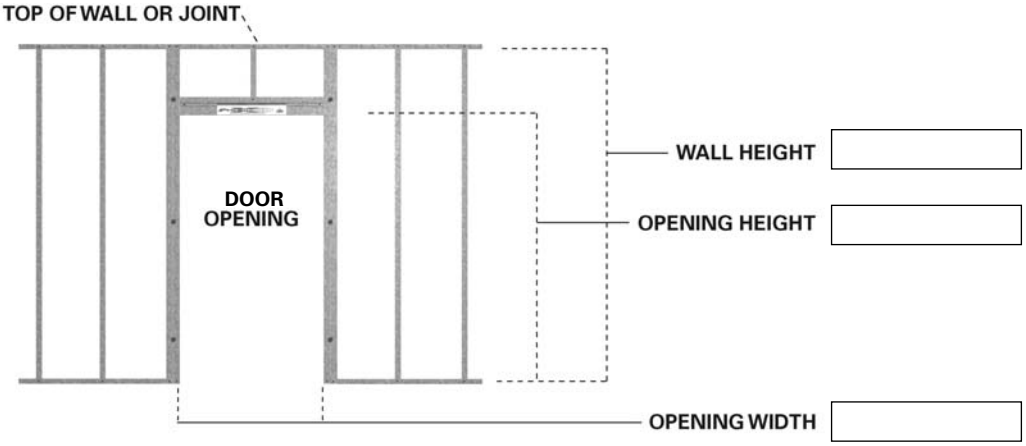
Pro X Header® ~ Member Selector

*US Patent NO. 6,799,408

Building a Better Way.

MEMBER SELECTOR

1 INPUT PAGE PHASE (INTERIOR AND EXTERIOR) - INPUT PAGE



WINDOW

HVAC

Find ProX Header Option

2 CALCULATIONS PHASE

HEADER SPANS, LOADS, & GEOMETRY
Span = 6.0ft
Wall Weight, Wt. = 7.0psf
Out-of-plane Wind Pressure, P = 5.0psf
Actual Height of Wall above Header, hwall actual = 14.3ft
Max effective ht. for DLvertical, hwall effective = 14.3ft *
Window or Door Height, hopening = 7.0ft

DLvertical = Wt. x hwall effective = 100plf
Out-of-plane Trib Area = (hwall actual + hopening) x 1/2 = 10.7ft
WLout-of-plane = P x Trib Area = 53plf

STRESS CHECK
Vertical
Mx = DL x Span2 / 8 = 5416.74lb-in
Mx / Allowable Mx = 0.66 < 1.0, CRITERIA MET - APPROVED
Out-of-plane
My = WL x Span2 / 8 = 2880 lb-in
My / Allowable My = 0.08 < 1.0, CRITERIA MET - APPROVED
Biaxial
(Mx / Allowable Mx) + (My / Allowable My) = 0.74
< 1.0, CRITERIA MET - APPROVED
DEFLECTION CHECK
Dvertical = (5 x DL x Span4) / (384 x E x Ix) = 0.12 in
or L/616 < CRITERIA MET - APPROVED
Dout-of-plane = (5 x WL x Span4) / (384 x E x Iy) = 0.01 in
or L/5447 < CRITERIA MET - APPROVED

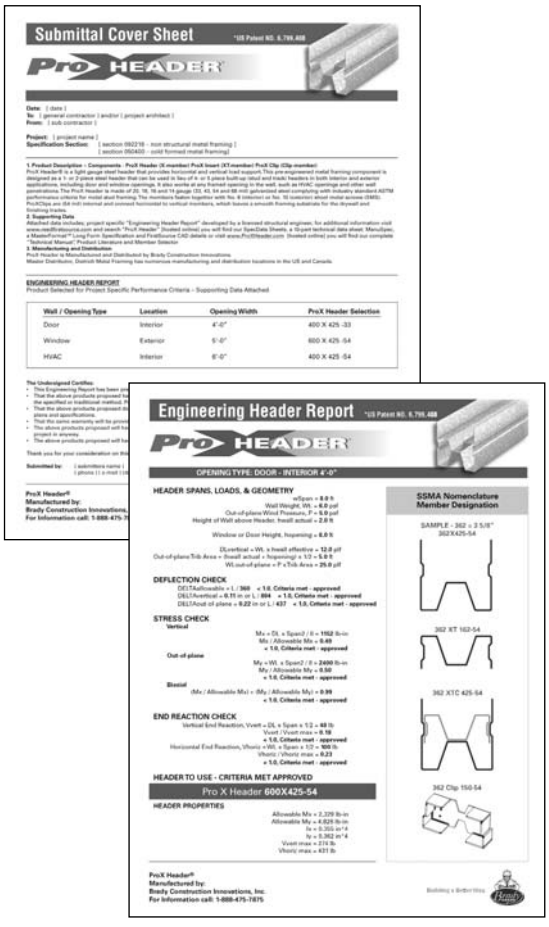
END REACTION CHECK
Vertical End Reaction, Vvert = DL x Span x 1/2 = 300.93lb
Vvert / Vvert max = 0.36 < 1.0, CRITERIA MET - APPROVED

Horizontal End Reaction, Vhoriz = WL x Span x 1/2 =160lb
Vhoriz / Vhoriz max = 0.10 < 1.0, CRITERIA MET - APPROVED

HEADER TO USE - CRITERIA MET APPROVED

Pro X Header 600X425-54

3 OUTPUT PHASE - (SPEC. AND SUBMITTAL)



ProX ONLINE MEMBER SELECTOR