Beam Clamps & Upper Attachments

B351L
Steel C-Clamp
w/Locknut
MSS SP-58 Type 23
WW-H-171E Type 23

B3050
Beam Clamp
MSS SP-58 Type 21
WW-H-171E Type 21

B3054
Malleable Iron C-Clamp
w/Locknut
MSS SP-58 Type 23
WW-H-171E Type 23

B3362-B3365
Retaining Strap For
B351L & B3050

B3304
Wide Jaw Reversible C-Clamp
(Malleable Iron)
MSS SP-58 Type 23
WW-H-171E Type 19 & 23

B3305
Retaining Straps For
B351L & B3304

B3291-B3298
FS Beam Clamp
w/Weldless Eye Nut (Forged Steel)
MSS SP-58 Type 28 & 29
WW-H-171E Type 28 & 29

B3306
Clevis Concrete Plate

B3100
Standard Clevis Hanger
B3102
Clevis Hanger For Ductile Iron Pipe
MSS SP-58 Type 1
WW-H-171E Type 1

S6Hangers, Bands, & Straps

B3060
Side Beam Angle Clip
MSS SP-58 Type 34
WW-H-171E Type 35

B3104
Light Duty Clevis Hanger
B3104CT
For Copper Tubing
MSS SP-58 Type 1
WW-H-171E Type 1

B3083
Welded Beam Attachment w/hdw.
MSS SP-58 Type 22
WW-H-171E Type 22

B3108
Standard U-Bolt
MSS SP-58 Type 24
WW-H-171E Type 24

Clamps & Guides

B3373
Riser Clamp
MSS SP-58 Type 8
WW-H-171E Type 8

B3140
Standard Pipe Clamp
MSS SP-58 Type 4
WW-H-171E Type 4

B3148
Standard U-Bolt
MSS SP-58 Type 24
WW-H-171E Type 24

B3144
Double Bolt Pipe Clamp
MSS SP-58 Type 3
WW-H-171E Type 3

1.01 SECTION INCLUDES
A. The work covered under this section consists of the furnishing of all necessary labor, supervision, materials, equipment, and services to completely execute the pipe hanger and supports as described in this specification.

1.02 REFERENCES
C. ASTM A 653 - Specification for Steel Sheet, Zin-Coated (Galvanized) or Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
F. MSS SP-69 - Manufacturers Standardization Society: Pipe Hangers and Supports - Selection and Application.
G. NFPA 13 - Installation of Sprinkler Systems.

1.03 QUALITY ASSURANCE
A. Hangers and supports used in fire protection piping systems shall be listed and labeled by Underwriters Laboratories.
B. Steel pipe hangers and supports shall have the manufacturer's name, part number, and applicable size stamped in the part itself for identification.
C. Hangers and supports shall be designed and manufactured in conformance with MSS SP-58.
D. Supports for sprinkler piping shall be in conformance with NFPA 13.

1.04 SUBMITTALS
A. Submit product data on all hanger and support devices, including shields and attachment methods. Product data to include, but not limited to materials, finishes, approvals, load ratings, and dimensional information.
Pipe Rollers, Roller Stands, Saddles, & Shields

- **B3110** Adjustable Steel Yoke Pipe Roll MSS SP-58 Type 43 WW-H-171E Type 44
- **B3114** Pipe Roll w/Sockets MSS SP-58 Type 41 WW-H-171E Type 42
- **B3120** Roller Chair MSS SP-58 Type 44 WW-H-171E Type 45
- **B3117SL** Steel Roller Stand MSS SP-58 Type 44 WW-H-171E Type 45
- **B3118SL** Adjustable Roller Stand w/Base Plate MSS SP-58 Type 46 WW-H-171E Type 47
- **B3151** Insulation Protection Shield MSS SP-58 Type 40 WW-H-171E Type 41
- **B3154** Short Insulation Protection Shield

Brackets & Pipe Supports

- **B3160 - B3165** Pipe Covering Protection Saddle MSS SP-58 Type 39A & 39B WW-H-171E Type 40A & 40B
- **B3066** Medium Duty Bracket MSS SP-58 Type 32 WW-H-171E Type 33
- **B3067** Heavy Duty Bracket MSS SP-58 Type 33 WW-H-171E Type 34
- **B3088** Base Stand B3088T Threaded Base Stand
- **B3090** Pipe Support w/U-Bolt MSS SP-58 Type 37 WW-H-171E Type 38
- **B3095** Pipe Saddle Support MSS SP-58 Type 36 WW-H-171E Type 37

CPVC Pipe Straps

- **B3092** Adjustable Pipe Saddle Support w/Yoke MSS SP-58 Type 37 WW-H-171E Type 38
- **B3093** Adjustable Pipe Saddle Support MSS SP-58 Type 38 WW-H-171E Type 39
- **B3181** 1-Hole Wrap Around CPVC Pipe Strap
- **B3182** 2-Hole CPVC Pipe Strap
- **B3183** 2-Hole Side Mount CPVC Pipe Strap
- **B3184** 2-Hole Stand-Off CPVC Pipe Strap
- **B3185** 1-Hole Wrap Around CPVC Pipe Strap

Snap N Shield

- **BPS_25B or BPS_25W** Snap N Shields

Concrete Inserts

- **B22-I Series**
- **B55-I Series**
- **B25-I Series** Continuous Concrete Insert
- **B2505-B2508** Channel Spot Insert MSS SP-58 Type 18
- **B2500** Light Duty Spot Insert MSS SP-58 Type 18 WW-H-171E Type 19 N2500 Steel Insert Nut
- **B2501** Light Duty Spot Insert MSS SP-58 Type 18 WW-H-171E Type 18
- **B3014** Malleable Iron Insert MSS SP-58 Type 18 WW-H-171E Type 18 B3014N Malleable Iron Insert Nut
- **B3151** Adjustable Metal Deck Ceiling Bolt

Hardware

- **B3222** Eye Socket MSS SP-58 Type 16 WW-H-171E Type 16
- **B3200** Weldless Eye Nut MSS SP-58 Type 17 WW-H-171E Type 17
- **B3224** Hanger Adjuster MSS SP-58 Type 15 WW-H-171E Type 15
- **B3201** Forged Steel Clevis MSS SP-58 Type 14 WW-H-171E Type 14
- **B3203** Extension Piece

Armafix™ Clamps

- **B655** Steel Rod Coupling
- **B656** Steel Reducing Rod Coupling
- **B3220** Malleable Iron Rod Coupling
- **IPH Series Insert w/Clamps**
- **IPH WO Series Insert Only**
Seismic Brace Fittings

Channels - Solid, Hole Patterns, & Combinations

Channel Nut Sizing Chart

<table>
<thead>
<tr>
<th>Bolt Size</th>
<th>B11 &amp; B12 Channels</th>
<th>B22, B24, B26 &amp; B32 Channels</th>
<th>B42, B52, B54 &amp; B56 Channels</th>
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<td>TN221</td>
<td>N221WO</td>
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Dura-Blok™ Rooftop Supports

- DB Series
- DB6 Series
- DBM Series
- DB10 Series
- DBR Series
- DB____DS Series
- DME Series
- DMB Series
- DBR Series
### Pipe & Conduit Clamps

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<tr>
<th>Pipe or Conduit Size</th>
<th>Pipe &amp; Conduit (Rigid &amp; Pipe)</th>
<th>Multi-Grip (Rigid)</th>
<th>Standard Pipe (Pipe &amp; Conduit)</th>
<th>BVP VibraClamp™ (Pipe &amp; Conduit)</th>
<th>O.D. Tubing Size</th>
<th>Dura-Copper (Copper Tubing)</th>
<th>BVT VibraClamp™ (O.D. Tubing)</th>
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### Bolted Metal Framing Specification

**PART 1 - GENERAL**

1.01 WORK INCLUDED
- A. Continuous slot, bolted framing channels and all associated fittings and hardware.
- B. Trapeze type supports for cable tray, conduit, pipe and other similar systems.
- C. Use of bolited metal framing as a surface metal raceway.

1.02 REFERENCES
- B. ASTM A123 - Specification for Zinc (hot-dip galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strips.
- C. ASTM A1011, 33,000 PSI min. yield - Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Structural Quality.
- E. ASTM A653 33,000 PSI min. yield G90 - Specification for Steel Sheet, Zinc Coated (Galvanized) by the Hot-Dip Process.
- G. MFMA - Metal Framing Standards Publication, MFMA-1.

1.03 QUALITY ASSURANCE
- A. Manufacturers - Firms regularly engaged in the manufacture of bolted metal framing of the types required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. A material heat code number shall be stamped on all strut and fittings. This is required to maintain traceability of the product to the material test reports to the ASTM standard.
- C. For stainless steel items, the part number shall contain a material designator (EXAMPLE: B-Line B25SS4 for type 316 or B2SS4 for type 304), or a separate stamp shall be included to reference the type of material used.
- D. MFMA Compliance: comply with the latest revision of MFMA Standard Publication Number MFMA-3, “Metal Framing”.
- E. NEC Compliance: Comply with the latest revision NFPA 70 - Article 352 “Surface Metal Raceways and Surface Nonmetallic Raceways”.
- F. UL Compliance: Comply with UL “Standard for Surface Metal Raceway and Fittings”.

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