

MECHANICAL PIPE & INSULATION SUPPORT

(SNAP 'N SHIELD™ PIPE SUPPORT)

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. The work covered by this specification consists of furnishing all labor, equipment, materials and accessories, and performing all operations required for the correct installation of insulated protection shields (saddles) for mechanical piping systems.

1.02 REFERENCES

- A. UL 723 – Standards for Test for Surface Burning Characteristics of Building Materials
- B. CAN/ULC S102.2 - Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies
- C. ASTM E84 – Test method for Surface Burning Characteristics of Building Materials.
- D. MSS SP69 - Manufacturers Standardization Society: Pipe Hangers and Supports- Selection and Application

1.03 QUALITY ASSURANCE

- A. Pipe supports and insulation protection shields that are damaged shall not be installed.
- B. Material shall be delivered in non-broken, factory furnished packaging and stored in a clean, dry indoor space that provides protection against the weather.
- C. Workmanship: All pipe supports to be installed by qualified personnel and installed in accordance with manufacturer's recommendations.
 - 1. All work shall comply with all applicable federal, state, and local codes and laws having jurisdiction.
 - 2. All work shall conform to accepted industry and trade standards for pipe support.
 - 3. Insulation protection shields shall not be applied until all surfaces are clean, dry, and free of dirt, dust, grease, frost, moisture, and other extraneous elements.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Manufacturer: Subject to compliance with these specifications, pipe support insulation protection shields shall be Snap 'N Shield™ design as supplied by Eaton. [or engineer approved equal].

2.02 MATERIALS & DESIGN

- A. The insulation protection shield shall be a prime grade of high-impact copolymer polypropylene and available in white and black colors.
- B. Snap 'N Shield™ insulation protection shields shall be used in conjunction with strut, band hangers, or clevis hangers such as: B-Line B22 strut (1-5/8" x 1-5/8"), B-Line Fig 200 band hangers or B-Line B3100 clevis hangers for proper installation.
- C. Materials shall have a flame-spread index of 25 or less and a smoke-developed index of 50 or less for ceiling application and flame-spread index of 150 or less and a smoke-developed index of 250 or less for raised floor applications when tested in accordance with UL 723 (ASTM E84) for the U.S.A. Materials shall have a flame-spread index of 145 or less and a smoke-developed index of 600 or less when tested in accordance with CAN/ULC-S102.2 for Canada.
- D. Materials shall be paintable (with applicable paint type) and UV resistant with an operating temperature between -40°F to 178°F.
- E. Product shall be FDA compliant, RoHS compliant, and CA Proposition 65 compliant.
- F. The insulation protection shield shall have non-adhesive textured interior surface and tapered lip at end to allow for the thermal expansion of insulated pipes without damaging insulation.
- G. The insulation protection shield shall be designed with high sidewalls to contain refrigerant liquid lines from displacing and making contact with threaded rod.
- H. The insulation protection shield contact surface to insulation should equal or exceed 12" in length to effectively distribute load of pipe.
- I. The insulation protection shield shall be designed such that it can be installed on strut oriented for horizontal and vertical applications, applied to any of the four strut loading sides.

- J. The insulation protection shield shall be designed such that the strut attachment feature on bottom of the shield will be wide enough to allow for optional self-tapping screw.
- K. Shield with strut attachment to 1 5/8" x 1 5/8" channel shall install horizontally or from the side to minimize the distance required to lift pipe and insulation during installation.
- L. Shield designed for use with clevis hangers and band hangers shall be of one-piece design with integrated strap that snaps closed and provides force to bottom of hanger that allows for quick assembly and secure fit.
- M. Shield shall have central keel along the bottom of part that extends the length of shield up to the attachment feature (strut or pipe hanger); this allows for less interference to structures or objects under the shield and reduces need to field modify the shield.
- N. Shields shall have integral cable tie grooves at both ends of part with recess at the top of shield to effectively retain cable tie.
- O. Any products claiming to be a similar, like, or equal must demonstrate (meet or exceed) the properties as explained in this specification. Supporting technical data, samples, published specifications and the like must be submitted for comparison.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Use Snap 'N Shield™ insulation protection shields to prevent damage of insulation at clevis hangers, strut systems, or other pipe support systems.
- B. The proper Snap N Shield™ size selected for use shall be equal to, or as close to, without being less than the total outside diameter of the insulation and pipe together. Contact the manufacturer for sizing clarification.
- C. The insulation protection shield shall be of one piece design to reduce installation time with strut, clevis, or band hanger and eliminate possibility of unintentional disassembly.
- D. The insulation protection shield shall be able to be installed without tools.

END OF SECTION