

Chill-Shield Thermal Hanger Shield Fig. CHILLSHIELD



Description

Chill-Shields are 360° thermal hanger shields designed to meet a broad range of pipe support applications on low temperature lines. They provide a continuous section of insulation and factory applied jacketing meeting ASTM E 96A (maximum 0.02 perm), and are designed for pipe systems operating between -250° F and 300° F. The insulation and jacketing extend beyond the galvanized steel shield for a neat, joint with the adjoining insulation. Chill-Shields are suitable for use in any type of clamp as well as in band-type hangers. Polyisocyanurate inserts and heavy gauge steel shields ensure proper pipe support. These cost-effective designs meet the requirements of either pipe or tube systems. Chill-Shields are an ASTM fire rated system meeting 25/50 Flame /Smoke rating when tested with fiberglass pipe insulation.

Specifications

Applications:

- For indoor use on clamping support systems, clevis or other band-type hangers.
- Chilled piping to domestic hot water.
- Hanger spans per MSS SP-58 Table A3 (not suitable for extended hanger spans).
- Available for pipe 1/2 inch through 24 inches.

Materials/Construction:

- 360° Polyisocyanurate 24 PSI material—Thermal Conductivity ('k') .19 @ 75° F for Tube sizes through 6" and pipe sizes 1/4" through 2 1/2", 40 PSI material—Thermal Conductivity ('k') .20 @ 75° F for pipe sizes 3" to 5" and tube sizes larger than 6". 80 PSI material for 6" & 8" pipe ('k') .2.
- Meeting ASTM D-1621, D-1622, D-1623, C-203, C-518.
- 360° Non-reactive factory applied jacketing meeting ASTM E 96A (maximum 0.02 perm), ASTM D-774, D-828.
- Adhesive complying with NFPA 90-A.
- G-90 Galvanized steel shield, small check per ASTM A-653 (replaces A-527). Rounded corners for safety.
- All units are asbestos free and 100% made and assembled in the U.S.A.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

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Dimensions

	5/8" Tube to 1 1/2" Pipe	2 1/8" Tube to 3 1/8" Tube	3" Pipe	4 1/8" Tube	4" Pipe	5 1/8" Tube	5" Pipe	6 1/8" Tube & 8 1/8" Tube	6" & 8" Pipe	10" to 24" Pipe
Insulation Length	6"	6"	6"	6"	6"	6"	6"	9"	9"	
Shield Length	4"	4"	4"	4"	4"	4"	4"	6"	6"	Call Sales
Shield Gauge	22 ga.	22 ga.	22 ga.	22 ga.	22 ga.	22 ga.	22 ga.	18 ga.	18 ga.	
Compression Strength	24 PSI	24 PSI	40 PSI	24 PSI	40 PSI	24 PSI	40 PSI	40 PSI	80 PSI	

Allowable Loads – MSS Recommended Spans* – Tube

	Load/Span	Water Svc.	Load/Span	Water Svc.	Load/Span	Water Svc.		
5/8" Tube	16.4 # / 5 ft.*	#/ft. – .51	1 5/8" Tube	42.5 # / 7 ft.*	#/ft. – 1.91	4 1/8" Tube	108.0 # / 10 ft.	#/ft. – 10.1
7/8" Tube	22.9 # / 5 ft.*	#/ft. – .66	2 1/8" Tube	55.6 # / 8 ft.*	#/ft. – 3.1	5 1/8" Tube	134.2 # / 10 ft.	#/ft. – 15.7
1 1/8" Tube	29.5 # / 6 ft.*	#/ft. – 1.01	2 1/2" Tube	68.7 # / 8 ft.*	#/ft. – 4.6	6 1/8" Tube	240.5 # / 10 ft.	#/ft. – 21.8
1 3/8" Tube	36.0 # / 7 ft.*	#/ft. – 1.43	3 1/8" Tube	81.8 # / 9 ft.*	#/ft. – 6.3	8 1/8" Tube	510.5 # / 10 ft.	#/ft. – 39.5

Allowable Loads – MSS Recommended Spans* – Pipe

	Load/Span	Water Svc.	Load/Span	Water Svc.	Load/Span	Water Svc.	10" to 24"	
1/2" Pipe	22.0 # / 7 ft.*	#/ft. – .98	1 1/2" Pipe	49.7 # / 9 ft.*	#/ft. – 3.6	4" Pipe	188.5 # / 10 ft.	#/ft. – 16.3
3/4" Pipe	27.5 # / 7 ft.*	#/ft. – 1.36	2" Pipe	62.2 # / 10 ft.	#/ft. – 5.1	5" Pipe	233.0 # / 10 ft.	#/ft. – 23.3
1" Pipe	34.4 # / 7 ft.*	#/ft. – 2.1	2 1/2" Pipe	120.4 # / 10 ft.	#/ft. – 7.9	6" Pipe	550.0 # / 10 ft.	#/ft. – 31.5
1 1/4" Pipe	43.5 # / 7 ft.*	#/ft. – 2.9	3" Pipe	146.6 # / 10 ft.	#/ft. – 10.8	8" Pipe	720.0 # / 10 ft.	#/ft. – 50.3

* Designates MSS Maximum Span

Material Specifications

- Polyisocyanurate, 24 to 80 PSI Meeting ASTM C-203, C-518, C-585, C-795, D-1621, D-1622, D-1623, and E-84. Flame Spread/Smoke Developed – 25/450.
- Insert material on 10" pipe and larger will have compressive strength to match design requirements.
- Polypropylene Vapor Barrier Jacket Meeting ASTM D-744, C-1136, and E-84, Flame Spread -0-, Smoke Developed -40-.
- Non-Flamable, Water Based Adhesive Complying to NFPA 90-A.
- Galvanized Steel Shields, G-90 Small Check per ASTM A-653 (replaces A-527).
- 100% American-Made Components and Construction.
- Asbestos-Free Materials.