

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 +225° 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 5" and Pipe sizes 1/2" through 2", 40 PSI Material- Thermal Conductivity ('k') .20 @ 75° F for Tube sizes 6" and 8" and Pipe sizes 2 1/2" through 5", 80 PSI Material- Thermal Conductivity ('k') .20 @ 75° F for pipe sizes 6" and 8."
- 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 5 1/8" Tube	1/2" Pipe to 2" Pipe	2 1/2" Pipe to 5" Pipe	6 1/8" Tube & 8 1/8" Tube	6" & 8" Pipe	10" to 24" Pipe
Insulation Length	6"	6"	6"	9"	9"	
Shield Length	4"	4"	4"	6"	6"	Call Plant
Shield Gauge	22 ga.	22 ga.	22 ga.	18 ga.	18 ga.	
Compression Strength	24 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 5/8" 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	Call Plant
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

WeatherShield Upgrade Protection System For Outdoor Applications

Description / Features

WeatherShield modifications are appropriate for hostile environment or outdoor applications. For calcium silicate products we utilize Johns Manville T-1200 water resistant calcium silicate formulated specifically to shed water. The Standard WeatherShield is constructed with the Ventureclad Smooth aluminum jacketing material laminated between the steel protection shield and the insulation material. WeatherShield modifications may be specified on any 360° product from VEP. WeatherShields must be installed as 360° units to maintain their integrity and weather resistance.

Construction / Installation Procedure

On large units, the bottom shield's weather barrier covers approximately 240° of the unit's circumference. The flaps overlap

the top vapor barrier and are then attached with two strips of self-sealing tape, sealing it to the lower half of the unit. If a top metal shield is required, it can be slid into place completing the unit. Insulation and jacketing extend beyond the steel protection shield for a neat, weather-tight connection with the adjoining insulation.

Standard weather barrier layer is smooth surface Ventureclad aluminum jacketing.

Pricing Policy

All WeatherShield upgrades will be quoted on a per job basis to a list of materials.

