

Pro-Shield Thermal Hanger Shield Fig. PRO-SHIELD



Description

Pro-Shields are 360° thermal hanger shields designed to meet the broadest range of pipe support applications. They provide a continuous section of insulation with factory applied jacketing meeting ASTM E 96A (maximum 0.02 perm) through a wide variety of pipe hangers for pipe systems operating between +20°F and +1200°F. The insulation and jacketing extend beyond the galvanized steel shield for a neatly sealed joint with the adjoining insulation. Pro-Shields are suitable for use in any type of clamp as well as in band-type hangers and on flat surfaces. To assure proper support in all situations, high density 450 PSI inserts are installed in units for 10" pipe with 1" insulation thickness and in all units for 12" pipe and larger. Pro-Shields meet the MSS standard for a Type 40 shield per MSS SP-58, Paragraph 7.63 – 7.66. Pro-Shields Meet ASTM E84 Standards Flame Spread-5-, smoke developed-5-. Rounded shield corners on all commercial size units.

Dimensions

	½" to 5"	6" to 8"	10" to 12"	14" to 18"	20" to 24"	20" to 48" *
Insulation Length	6" 150 mm	9" 230 mm	9" 230 mm	12" 300 mm	9" 230 mm	9" 230 mm
Shield Length	4" 100 mm	6" 150 mm	6" 150 mm	10" 250 mm	6" 150 mm	6" 150 mm
Shield Gauge	22 ga. 0.9 mm	18 ga. 1.3 mm	18 ga. 1.3 mm	12 ga. 2.8 mm	18 ga. 1.3 mm	14 ga. 2.0 mm
Compressive Strength	100 PSI	100 PSI	Cal Sil 100 PSI Insert 450 PSI	Cal Sil 100 PSI Insert 450 PSI	360° Insert 450 PSI	360° Insert 450 PSI

* 20"- 48" pipe may be fabricated in 60 degree segments.

Specifications

Applications:

- For indoor use on clamping support systems, flat surfaces, clevis or other band-type hangers (see WeatherShield Upgrade submittal for outdoor use).
- Pipe sizes 16" and larger installed in clevis or two bolt hangers only.
- Suitable for chilled to steam piping and dual temperature lines.
- Hanger spans per MSS SP-58 Table A3.
- Available for pipe ½" through 48", insulation thickness ½" through 6". ½" insulation only available through 6" pipe size.

Materials/Construction:

- Suitable for temperature range 20° F to 1200° F.
- 100 PSI Calcium silicate meeting ASTM C-533 Type 1, Pipe sizes ½" to 18" 100 PSI, C-585, C-795, E-84, Thermal Conductivity, Also, 20" through 48" pipe 450 PSI Type II Grade 5 calcium silicate meeting ASTM 6-656, C-795 and E-84 ('k')=4.0 @ 75° F.
- Adhesive complying with NFPA 90-A, ASTM E-84.
- G-90 Galvanized steel shield, small check per ASTM A-653 (replaces A-527). Rounded corners for safety.
- Factory applied jacketing meeting ASTM E 96A (maximum 0.02 perm), ASTM D-774, D-828 and E-84.
- Structural insert (10" pipe with 1" insulation and 12" pipe and larger) minimum 450 PSI calcium silicate meeting ASTM C-656 Type II, and 12" to 18" pipe Grade 5, C-795 and E-84.
- 20" pipe and larger 360° 450 PSI Type 2 calcium silicate meeting ASTM C-656 Type II, Grade 5, C-795 and E-84.
- All units and components 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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Allowable Loads – Recommended Spans

	Clevis	Trapeze		Roller	Flat Surface
½" Pipe	90 lbs. 7 ft. (2.13 m)	35 lbs. 7 ft. (2.13 m)	10" Pipe	1,160 lbs. 10 ft. (6.7 m)	830 lbs. 10 ft. (3.0 m)
¾" Pipe	110 lbs. 7 ft. (2.13 m)	45 lbs. 7 ft. (2.13 m)	12" Pipe	1,400 lbs. 10 ft. (3.0 m)	1,175 lbs. 10 ft. (3.0 m)
1" Pipe	140 lbs. 7 ft. (2.13 m)	57 lbs. 7 ft. (2.13 m)	14" Pipe	1,800 lbs. 10 ft. (3.0 m)	1,250 lbs. 10 ft. (3.0 m)
1¼" Pipe	175 lbs. 7 ft. (2.13 m)	72 lbs. 7 ft. (2.13 m)	16" Pipe	2,600 lbs. 10 ft. (3.0 m)	See Max Span R.H.
1½" Pipe	205 lbs. 9 ft. (2.74 m)	82 lbs. 9 ft. (2.74 m)	18" Pipe	3,300 lbs. 10 ft. (3.0 m)	See Max Span R.H.
2" Pipe	255 lbs. 10 ft. (3.0 m)	105 lbs. 10 ft. (3.0 m)	20" Pipe	8,000 lbs. 10 ft. (3.0 m)	See Max Span R.H.
2½" Pipe	275 lbs. 10 ft. (3.0 m)	145 lbs. 10 ft. (3.0 m)	24" Pipe	9,500 lbs. 10 ft. (3.0 m)	See Max Span R.H.
3" Pipe	340 lbs. 10 ft. (3.0 m)	160 lbs. 10 ft. (3.0 m)	30" Pipe	14,540 lbs. 10 ft. (3.0 m)	See Max Span R.H.
4" Pipe	380 lbs. 10 ft. (3.0 m)	170 lbs. 10 ft. (3.0 m)	36" Pipe	17,450 lbs. 10 ft. (3.0 m)	See Max Span R.H.
6" Pipe	605 lbs. 10 ft. (5.2 m)	330 lbs. 10 ft. (3.0 m)	42" Pipe	20,350 lbs. 10 ft. (3.0 m)	See Max Span R.H.
8" Pipe	800 lbs. 10 ft. (3.0 m)	510 lbs. 10 ft. (3.0 m)	48" Pipe	23,260 lbs. 10 ft. (3.0 m)	See Max Span R.H.

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.

