

Ultimate-Span Thermal Hanger Shield Fig. ULTIMATE-SPAN



Description

Ultimate-Span thermal hanger shields are designed to provide a superior safety margin when supporting pipe with hanger spans up to the maximum allowed in Table 4 of the MSS SP-58 in clevis or clamp hangers. These 360° thermal hanger shields provide a continuous section of insulation and factory applied jacketing meeting ASTM E 96A (maximum 0.02 perm) through the hanger and can be used on piping systems operating between +20° F. and +1800° F. The insulation and jacketing extend beyond the galvanized steel shield for a neatly sealed joint with the adjoining insulation. To achieve the protection required by long hanger spans, Ultimate-Span thermal hanger shields utilize heavier gauge shields, and utilize Type 2 calcium silicate (Grade 5, 450 PSI for 10" through 18" and Grade 6, 900 PSI for 20" pipe and larger). The Ultimate-Span meets or exceeds the MSS standard for Type 40 Shields per MSS SP-58, Paragraph 7.63 – 7.66. Ultimate-Span meets the ASTM E84 Standard Flame Spread -5-, Smoke Developed -5-. Rounded shield corners on all commercial size units.

Dimensions

| | 1/2" to 2" | 2 1/2" to 3" | 4" to 8" | 10" to 18" | 20" to 24" | 30" to 48" |
|-----------------------|------------------|------------------|------------------|-------------------------------|-------------------|-------------------|
| Insulation Length | 6" 150 mm | 9" 230 mm | 9" 230 mm | 9" 230 mm | 9" 230 mm | 9" 230 mm |
| Shield Length | 4" 100 mm | 6" 150 mm | 6" 150 mm | 6" 150 mm | 6" 150 mm | 6" 150 mm |
| Shield Gauge | 22 ga. 1.3 mm | 18 ga. 1.6 mm | 14 ga. 2.0 mm | 14 ga. 2.0 mm | 14 ga. 2.75 mm | 12 ga. 2.65 mm |
| Compressive Thickness | 100 PSI | 100 PSI | 100 PSI | Top 100 PSI Bottom 450 PSI | 360° 900 PSI | 360° 900 PSI |

Specifications

Applications:

- For indoor use on all band and clamping hanger systems (see WeatherShield Upgrade data sheet for outdoor applications).
- Chilled to steam piping and dual temperature lines.
- Hanger spans per MSS SP-58 Table 4 in clevis or two-bolt clamp hangers.
- Available for pipe through 24 inches. Pipe larger than 24" will be custom quoted.
- Insulation thickness 1/2 inch through 4 inches. 1/2" insulation available only through 6" pipe size

Materials/Construction:

- 1/2" through 8" pipe – 360° 100 PSI Calcium silicate meeting ASTM C-533 Type 1, C-585, C-795, E-84, Thermal Conductivity ('k') .40 @ 75° F mean.
- 10" through 18" pipe 100 PSI Calcium Silicate top, 450 PSI Type 2 Grade 5 Calcium Silicate bottom.
- 20" through 48" pipe 900 PSI Type 2 Grade 6 Calcium Silicate.
- Adhesive complying to NFPA 90-A and 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.
- 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: | |

Ultimate-Span Thermal Hanger Shield Fig. ULTIMATE-SPAN

Allowable Loads – Recommended Spans

| | Clevis Hanger | Two-Bolt Clamp |
|----------|-------------------------------|-------------------------------|
| 2½" Pipe | 325 lbs. 11 ft. (3.4 m) | 350 lbs. 11 ft. (3.4 m) |
| 4" Pipe | 405 lbs. 14 ft. (4.3 m) | 405 lbs. 14 ft. (4.3 m) |
| 6" Pipe | 1,015 lbs. 17 ft. (5.2 m) | 1,070 lbs. 17 ft. (5.2 m) |
| 8" Pipe | 1,555 lbs. 19 ft. (5.8 m) | 1,625 lbs. 19 ft. (5.8 m) |
| 10" Pipe | 2,450 lbs. 22 ft. (6.7 m) | 2,575 lbs. 22 ft. (6.7 m) |
| 12" Pipe | 3,480 lbs. 23 ft. (7.0 m) | 3,550 lbs. 23 ft. (7.0 m) |
| 14" Pipe | 4,770 lbs. 25 ft. (7.6 m) | 4,820 lbs. 25 ft. (7.6 m) |
| 16" Pipe | 8,050 lbs. 27 ft. (8.2 m) | 8,250 lbs. 27 ft. (8.2 m) |
| 18" Pipe | 9,025 lbs. 28 ft. (8.5 m) | 9,505 lbs. 28 ft. (8.5 m) |
| 20" Pipe | 9,550 lbs. 30 ft. (9.1 m) | 10,550 lbs. 30 ft. (9.1 m) |
| 22" Pipe | 10,500 lbs. 30 ft. (9.1 m) | 11,850 lbs. 30 ft. (9.1 m) |
| 24" Pipe | 15,500 lbs. 32 ft. (9.8 m) | 17,350 lbs. 32 ft. (9.8 m) |
| 30" Pipe | 20,300 | 24,400 |
| 36" Pipe | 24,400 | 30,500 |
| 42" Pipe | 28,500 | 35,500 |
| 48" Pipe | 32,000 | 40,000 |

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.