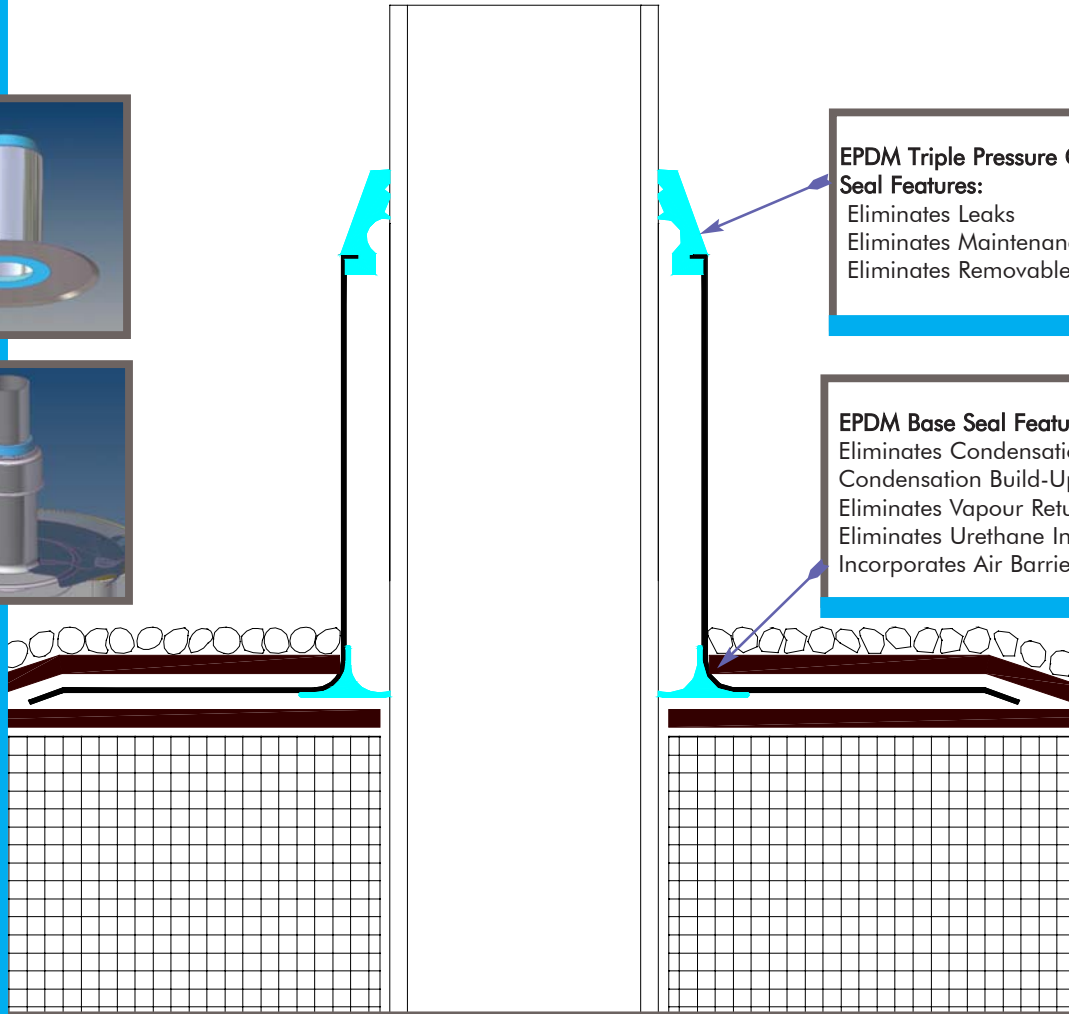
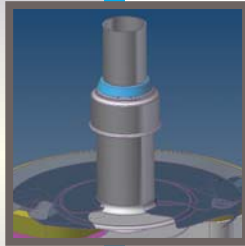
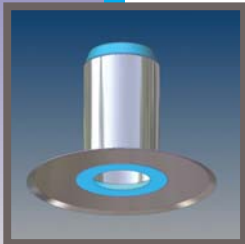
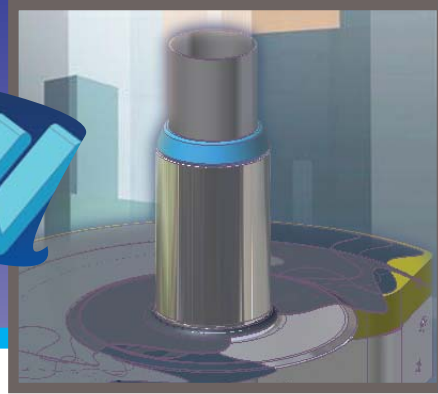


NEW



EPDM Triple Pressure Grommet Seal Features:
Eliminates Leaks
Eliminates Maintenance
Eliminates Removable Cap

EPDM Base Seal Features:
Eliminates Condensation & Condensation Build-Up
Eliminates Vapour Return
Eliminates Urethane Insulation
Incorporates Air Barrier Principles

EPDM FLASHING SEALS

For Mechanical & Electrical Roof Penetrations

The New Generation of Flashings That Meet The Requirements of Air Leakage Control Better Than Any Vent Stack Flashing On The Market Today.

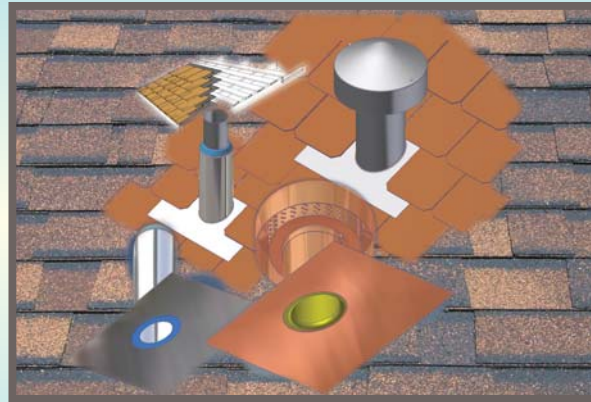
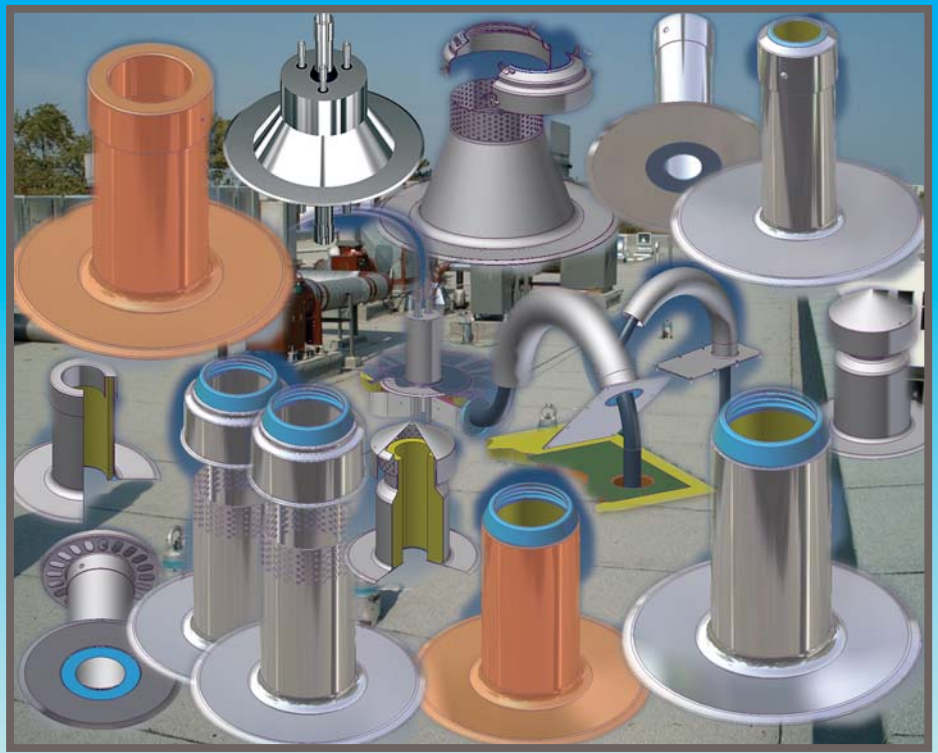


BACKGROUND

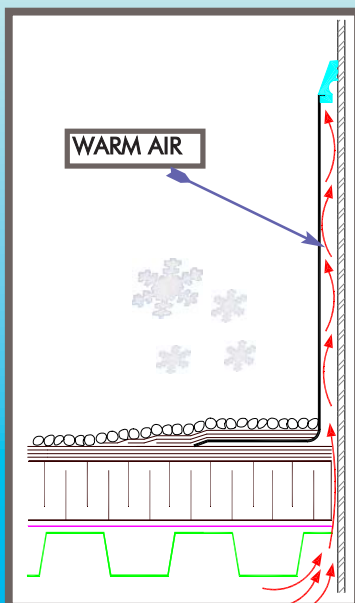
Flashing leaks are the most common mode of roofing failure. Whenever leaks of an unknown source occur, flashings are often checked first. Roofing experts generally agree that faulty flashings cause 1/4 to 3/4 of all roofing failures. These failures result from faulty design as well as poor field application and defective materials. Flashings require as much of the designer's attention as other roofing components; detailing should not be left to the contractor.

The flashing of vent stacks is of particular concern. Every roofer has encountered the problem of condensation build-up in vent pipe flashings. It is a phenomena that has cost roofers enormous headaches and time, and building owners untold millions of dollars in repair costs for drywall, ceiling tiles, paint and other decor over the years. This is exclusive of architect roof related issues (client relations, litigation and similar concerns). Since condensation can enter a flashing cavity through the smallest hairline crevice or pin hole, it is inevitable that many flashing designs will experience condensation build-up.

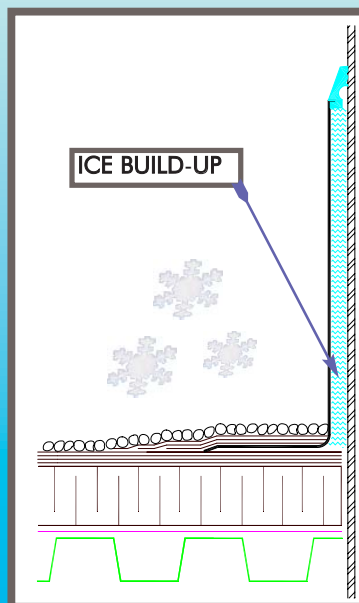
With the repair of leaking and deteriorating flashings so common and costly, first-cost economy should be a secondary consideration in material selection and design; quality and durability are the prime considerations in flashing design.



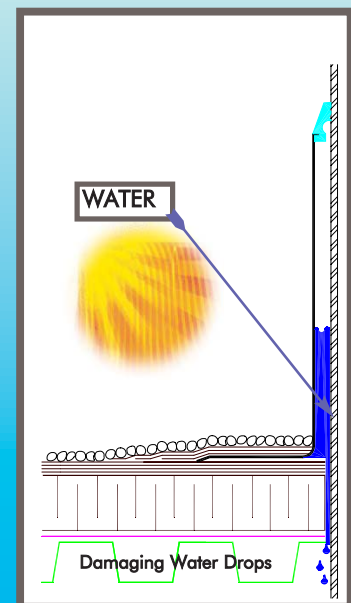
THE PHENOMENA OF CONDENSATION BUILD-UP



In the winter, warm interior air penetrates into cracks in the roofing assembly and becomes trapped in the flashing cavity. Once this air contacts the cold exterior flashing surface, the warm air condenses and begins to freeze.



Over the duration of the winter, the flashing cavity eventually freezes and becomes solid with ice.



Once the warmer weather arrives, the ice slowly begins melting. It passes through the cracks in which it arrived, sometimes taking months to completely drain back through the roof assembly, to the consternation of building occupants.

Eliminates Condensation & Condensation Build-Up

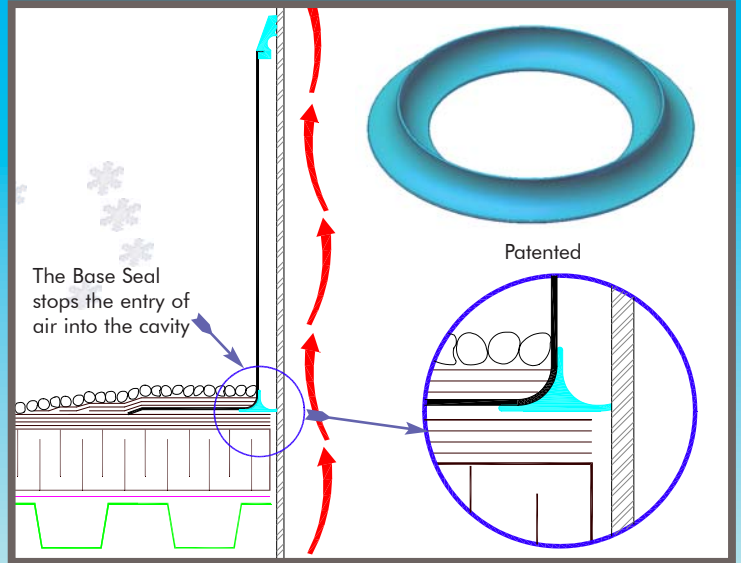
The patented Thaler Base Seal is a circular shaped, injection molded elastomer manufactured using EPDM (Ethylene Propylene Diene Monomer). The outer edge of the Base Seal is adhered to the underside of the deck flange of all Thaler STACK JACK Flashings using an EPDM contact cement. The inside diameter of the Base Seal is made slightly smaller than the outside diameter of the vent pipe. When the Base Seal is stretched over the vent pipe, it attempts to return to its original size due to the "memory" in the EPDM, a permanent attribute of the material.

Eliminates Vapour Return

Vent pipe flashings with a separate cap or hood can often redirect expelled vent pipe gases or fumes back down into ceiling spaces via the flashing/vent pipe cavity space. The EPDM Base Seal eliminates vapour return by providing an airtight seal.

Eliminates Urethane Insulation

Many construction professionals specify urethane insulated vent stack flashings to prevent condensation build-up. However, the Thaler Base Seal due to its ability to eliminate condensation build-up also eliminates the need for urethane insulation. Curiously, Thaler manufacture vent pipe flashings with both a Base Seal and urethane insulation in order to supply the building industry with a product that provides roofers and specifiers with a certain comfort level. Thaler would like to go on record however, in stating that Thaler STACK JACK flashings equipped with an EPDM Base Seal do not need urethane insulation to prevent condensation.



Incorporates Air Barrier Principles

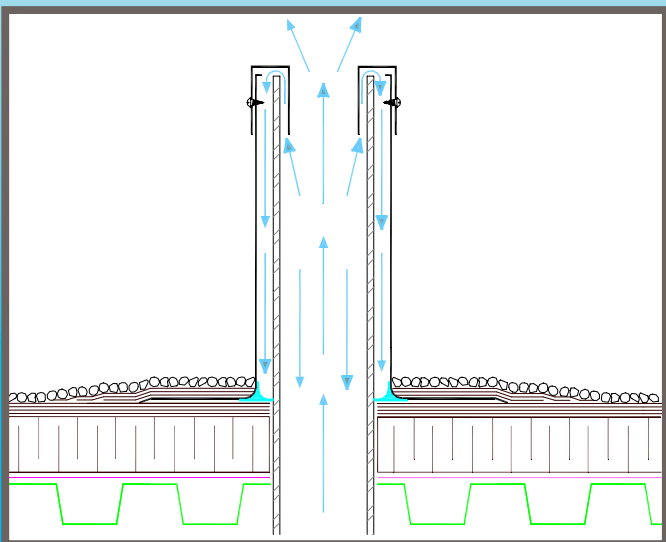
An air barrier is an assembly of materials, not necessarily the same material everywhere, linked and structurally fastened to parts of the building envelope to form a continuous and air impermeable plane.

The Thaler EPDM Base Seal eliminates any condensation in vent pipe flashing cavities by preventing exfiltration of moist air through the roof deck at vent pipe locations, while providing durability (20 year warranty), flexibility to accommodate building movement, continuity resistance to air flow structural soundness, capable of resisting wind and other loads, over the life span of the roof maintenance free design.

The Thaler EPDM Base Seal meets the requirements for air leakage control better than any vent stack flashing on the market today.

Since the EPDM is not allowed to return to its original size, the seal ends up applying constant pressure to the outside of the vent pipe thereby providing a 100% airtight seal ensuring that no condensation can occur in the flashing/vent pipe cavity space. Without this seal, warm interior air typically enters the flashing cavity primarily via crevices around protruding pipes in steel deck construction.

Although it is a good idea to provide a mastic seal around the pipe at the membrane level (BUR) to prevent bitumen drippage, by first cutting the membrane back a 1/2" (13 mm) from the pipe, the mastic will soon develop hairline cracks due to the flexing of the steel deck from roof traffic and the elements e.g. wind, snow piling, etc. The 100% airtight Thaler Base Seal eliminates the condensation build-up and freezing/melting cycle that takes place through any cracks or crevices.



THALER EPDM TRIPLE PRESSURE GROMMET SEAL

Eliminates Leaks

Similar to the Thaler Base Seal, the inside diameter of the Thaler Triple Pressure Grommet Top Seal is made slightly smaller than the outside diameter of the vent pipe. When the Top Seal is stretched over the vent pipe, it attempts to return to its original size due to the “memory” in the EPDM, thereby providing a 100% watertight seal.

Thaler STACK JACK Flashings employing the EPDM Triple Pressure Grommet Top Seal are CSA Approved as tested to CSA B272-93 – Prefabricated Self-Sealing Roof Vent Flashings. In addition to the CSA tests, Thaler in-house testing was performed with the seal submerged in 8” (203 mm) of water for 3 months with no leakage.

The Top Seal actually provides a triple barrier against water entry as all three fins of the seal are designed to be in contact with the vent pipe. Any one fin will stop water, however the other two fins provide additional protection.

Eliminates Maintenance

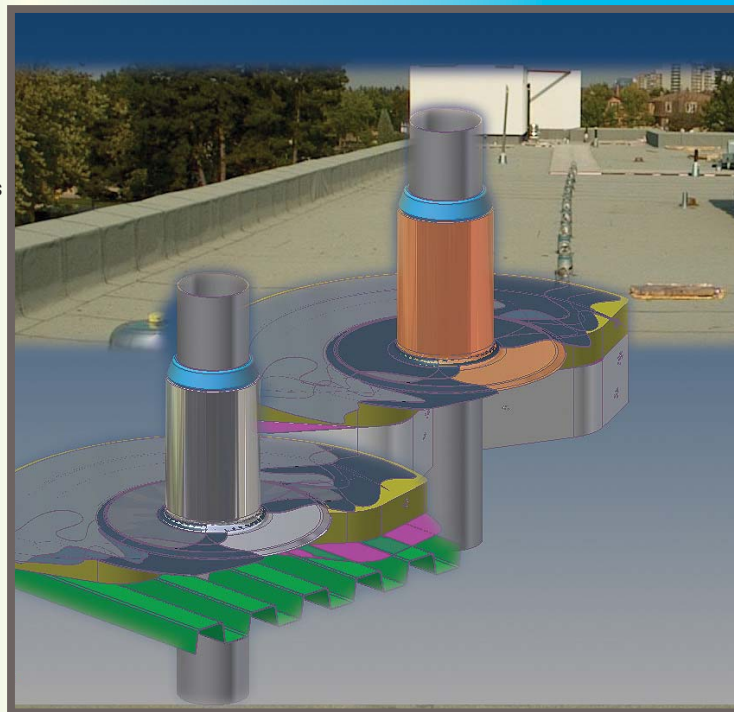
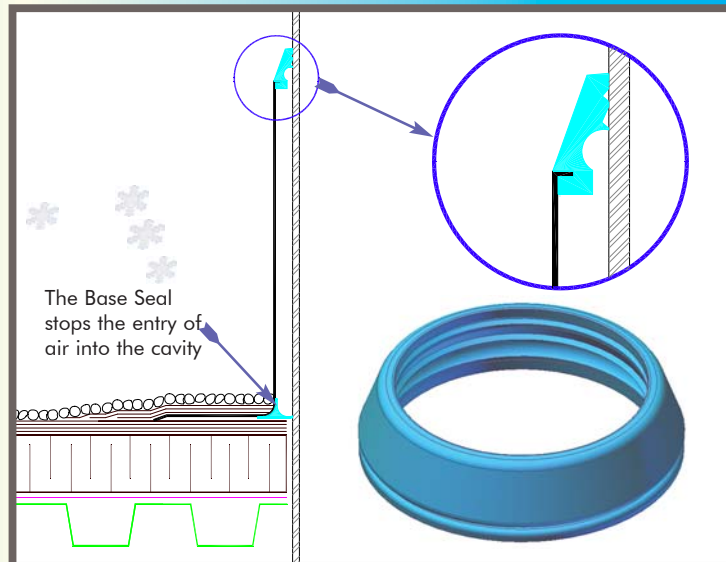
The Thaler EPDM Triple Pressure Grommet Top Seal is a friction fit watertight seal that never needs caulking. Any caulking at any time will invalidate the Thaler 20 year warranty that provides protection from leaks, condensation and defects in materials and/or manufacture when installed in accordance with Thaler written “Installation Instructions”. Copy of Warranty Certificate available upon request.

The Thaler 20 year warranty is testament to the reliability of the EPDM Top Seal (and Base Seal). If leaks are occurring in the roof, construction professionals are counseled to look elsewhere for the source of moisture intrusion. The inappropriate caulking of the EPDM Top Seal will only deface an otherwise attractive flashing product.

Eliminates Removable Cap

The best flashing detail at vent stack penetrations follows the general rule of attaching the base flashing to the structural deck and counter flashing to the penetrating element. This concept has been embodied in vent stack flashings for well over 75 years for both flashings with removable metal caps (small stacks) and flashings with welded or clamped counter flashings (taller stacks).

Now, however, the EPDM Triple Pressure Grommet Top Seal supplied with the new generation of Thaler STACK JACK Flashings makes metal caps and counter flashings obsolete. The base flashing and counter flashing are combined in one unit.



OTHER THALER PRODUCTS

EPDM Flashing Seals are also employed for a wide range of other Thaler products (Architectural Roof Supports, Mechanical & Electrical Roof Supports, Fall Arrest Roof Anchors, and Split Flashings). See respective Thaler product literature.

GENERAL PROPERTIES OF EPDM (ASTM)

Advantages: Excellent resistance to heat, ozone and sunlight; very good flexibility at low temperatures; good resistance to alkalis, acids and oxygenated solvents; superior resistance to water and steam; excellent colour stability.

Limitations: Poor resistance to oil, gasoline and hydrocarbon solvents.

Physical Properties

Specific Gravity	0.86
Hardness, Durometer	30A - 90A
Tensile Strength	500 - 3500
Elongation %	100 - 700
Compression Set %	20 - 60
Resilience %	40 - 75
Tear Resistance	Fair - Good

Thermal Properties

Service Temperature	Max. 121°C (250°F), Min. -54°C (-65°F)
---------------------	---

Thermal Value

A Thaler STACK JACK equipped with both an EPDM Top Seal and EPDM Base Seal will provide the equivalent thermal resistance as a 1" (25 mm) thick double glazed window.

Specific Resistance

Oxidation	Excellent
Ozone	Excellent
Sunlight Aging	Excellent
Heat Aging	Excellent
Flame	Poor
Oil	Poor
Fuel	Poor
Ketone Esters	Excellent
Aliphatic Hydrocarbons	Poor
Aromatic Hydrocarbons	Fair
Weather	Excellent
Water	Very Good

SUPER-SEAL RETROFIT DRAIN SEAL

The Most Cost Efficient, Installer-Friendly, Versatile and Maintenance Free Retrofit Drain Seal Product on The Market To-day

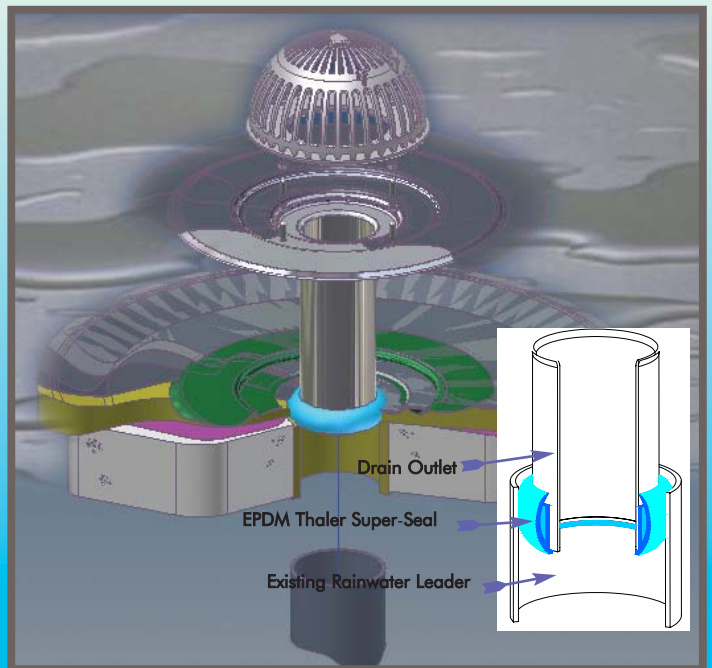
Explanation

Rain accumulation on roofs employ roof drains to remove the water. The system works well until drains or pipe become clogged due to debris entering the system, missing strainers, vandalism, or similar causes. When a blockage occurs, water will rise back up to the top of the drainage pipe at roof level. The seal between the drain outlet and drainage pipe now becomes critical. Without an adequate seal, water will penetrate the juncture of outlet and rainwater leader and enter the building, causing severe damage.

Thaler Super-Seal

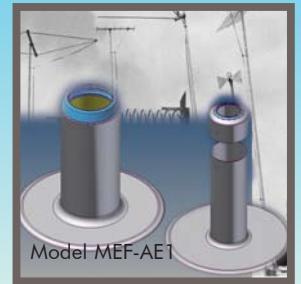
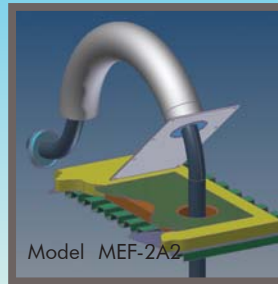
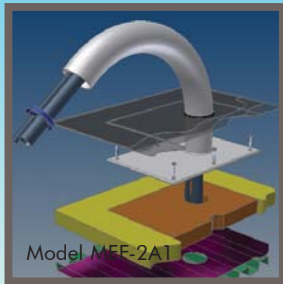
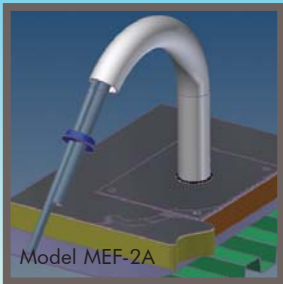
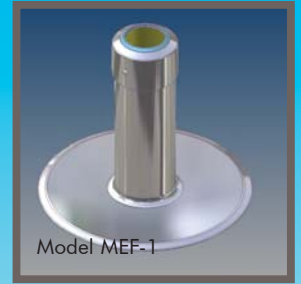
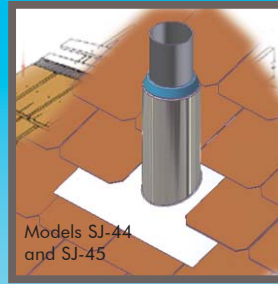
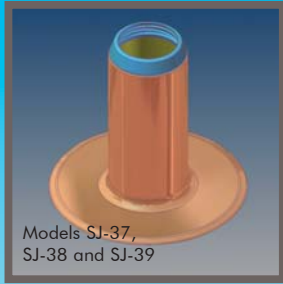
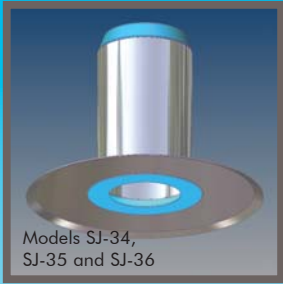
The Thaler Super-Seal is a patented, injection molded elastomer sealing ring manufactured using EPDM (Ethylene Propylene Diene Monomer). this "ring gasket", supplied snug to fit in to the end of any Thaler roof drain outlet, is made slightly larger than the leader inside diameter. When the drain outlet (with Super-Seal) is squeezed into the leader, the EPDM attempts to return to its original size due to the "memory" in the EPDM, thereby providing a 100% water tight seal. The EPDM maintains its original shape, even after 20 years, and allows the drain to be re-used time and time again for any subsequent re-roofing.

See [Thaler Super-Seal Retrofit Drain Seal Brochure](#).

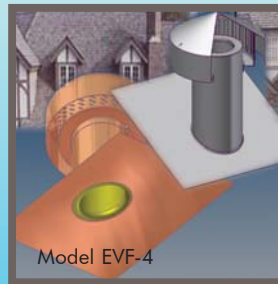
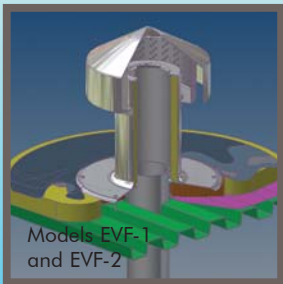
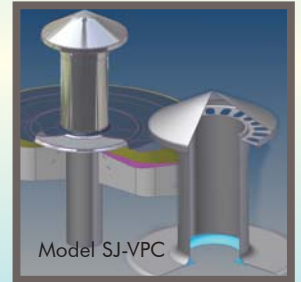
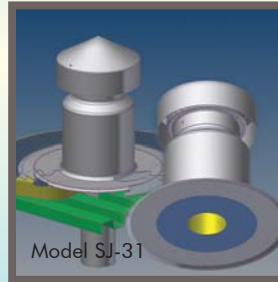
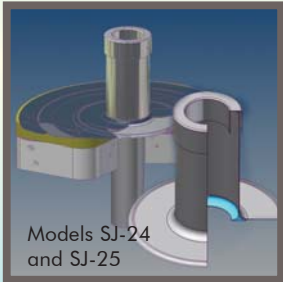


THALER FLASHING PRODUCTS WITH EPDM SEALS

With Base Seal and Triple Pressure Grommet Seals...



With Base Seal Only...



1902 Common St. Suite 500
New Braunfels, Texas, 78130, USA
tel: 830-626-6001 fax: 830-626-6010
tel: 866-583-6001, 800-576-1200
www.thalermetalusa.com

THALER Metal USA Inc.



THALER Metal Industries Ltd.

2611 Drew Road, Mississauga, ON,
L4T 1G1, CANADA
tel: 905-677-1520 fax: 905-677-1503
1-800-387-7217
www.thalermetal.com

With Triple Pressure Grommet Seal Only...

