



EMSEAL MST

Multi-Use Sealant Tape New Technology



Product Innovation:

The result of a 3-year R&D project, EMSEAL **MST Multi-Use Sealant Tape** features a major breakthrough in sealant technology. The innovation comes in the composition of the patent-pending acrylic adhesive infused into the cellular foam base material. This new proprietary chemistry incorporates a hydrophobic component never before available in a sealant formulation.

The result is a material that features sealing performance significantly greater than any acrylic-impregnated predecessor. In addition, it is **odorless, clean handling, UV stable, non-staining, and highly versatile.**



Product Description:

EMSEAL **MST Multi-Use Sealant Tape** is a preformed expanding tape seal. **MST** is made of a resilient cellular foam infused with a hydrophobic, modified-acrylic, liquid adhesive sealant which is then compressed to a sealing density level appropriate to the application. The result is a hybrid sealant that features the best characteristics of foam and liquid sealants while eliminating their respective weaknesses. **MST** compresses uniformly without overspill to provide a lasting seal.

MST is available in a wide variety of configurations. Users determine the size of **MST** suited to their specific application and performance needs. Typically, higher compression levels are required for watertightness in standing water or water run-off applications; lower compression can be used, for example, for snow seals at roof ridges (see compression chart on Page 2).

MST replaces and outperforms liquid and butyl-tape sealants as well as closed-cell and unimpregnated open-cell foam closures.

EMSEAL **MST** is packaged precompressed in rolls. The material contains a pressure sensitive mounting-adhesive on one face to facilitate installation.

Product Uses:

MST sealant tape is used to seal out dust, air, wind-driven snow, and moisture from joint details in metal buildings, panels, roofs, and other building components and assemblies. **MST** is ideal as a filler in expansion/compression joints subject to movement from thermal expansion and contraction, and as a gasket in mechanically fastened, non-moving applications.

MST can be used against metal, plastic, wood, concrete, and other common building materials.

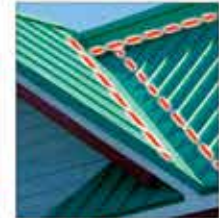
Product Features:

- Clean handling, non-staining, odorless, UV-stable
- Resistant to bugs and vermin
- Will not extrude from between joints like caulk or butyl tapes
- Conforms to contours and fills gaps
- Maintains a seal during thermal expansion and contraction of building panels
- Good thermal and sound insulator
- No shrinkage or blow-out due to closed-cell breakage

Some of the many uses for



Metal Roof
and other metal construction junctions



Building Seams



Sill Plates
and ground level water seams



Window Wells



Walks/Driveways
and concrete joining other materials



Bulkhead/Steps



Window Casings
and other finished areas



Door Frames



Truck Caps



AC Window Units

...hundreds of other uses and applications



EMSEAL MST

Multi-Use Building Sealants



TABLE 1: Typical Physical Properties of MST		
Property	Value	Test Method
Base Material	Cellular high-density polyurethane foam	N/A
Impregnation	Proprietary, Hydrophobic Water-based Modified Acrylic	N/A
Color	Aluminum Gray	N/A
Tensile strength	22.3 psi min (153.8 kPa)	ASTM D3574 E
Elongation - ultimate	157% min	ASTM D3574 E
Temperature range High - permanent Low - permanent	185°F (85°C) -40°F (-40°C)	
UV resistance	No changes	ASTM G155-00A Accelerated Weatherometer
Resistance to aging	No changes	ASTM G155-00A Accelerated Weatherometer
Bleeding	None	N/A
Compression set	5% max	ASTM D3574 E

Compression Levels



Higher levels of compression offer greater protection

* Watertight up to 5 PSF per ASTM E-331 modified to run 24 hours instead of standard 15 minutes. This equates to a 1-inch standing head of water for 24 hours without leakage.

Limitations

- **MST** will not adhere to components that are dirty or dust covered or to surfaces coated with oils or other release agents.
- **MST** will expand to follow and fill irregular substrates within reason. Sharp corners and acute angles may need to be filled with additional filler pieces of **MST** in order to ensure a proper seal.
- Substrate must be capable of resisting, without deflection, approximately 1.5 to 2.5 lb/in² (10 to 17 kPa) back pressure from the **MST**.

Standard and Custom Sizes

EMSEAL products are available internationally. The product range is continually being developed. EMSEAL reserves the right to modify or withdraw any product without prior notice.

Installation Guidelines

1 Storage and Surface Preparation

Tape should be stored in a warm dry interior location. Ideal application temperature is approx. 75°F (24°C). Expansion will be faster at higher temperatures and slower at lower temperatures.

Tip: For faster expansion in cold conditions keep the material warm before use and, if desired, apply heat from a hair dryer to installed material to accelerate expansion.

Joint faces should be dry and cleaned of dirt, oils, grease, etc. There should exist sufficient depth to receive full width of the sealant.

IMPORTANT: Reels must be stored FLAT and kept compact. Should material expand in package it can still be used. Unroll material, allow it to expand, then recompress it between surfaces to be sealed.

2 Opening Reels

Only open materials that will be immediately used. Remove shrink wrap.



Cut in front of colored marking tape and pull back release liner to expose mounting adhesive.

3 Square Off Ends

Start and finish ends must be cut square. For easier cutting spray knife or scissors with mist of water.



4 Peel Off Liner

Remove release liner to expose adhesive face of tape.



5 Adhere to Surfaces

Press adhesive face to one surface. Align other surface with tape. Secure surfaces together.

Tip: If needed, cut and fit small filler pieces of tape to fill panel corrugation or voids.



6 Join Lengths with Miters

To form a continuous strip overlap tapes and miter with a moist knife at 45° angle. Pinch mitered faces together.



Available in many sizes.

If this tape size does not return the results you desire in your specific application, ask your vendor for other size options.