



SM5227

METAL BUILDING SEALANT TAPE

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

Tacky Tape[®] SM5227 is 100% solids, asbestos-free butyl tape sealant that is a highly rubbery, tacky, reinforced compound designed for sealing metal lap joints in the metal building industry. It is easy to apply and compress during installation. It exhibits excellent application and performance characteristics over a wide temperature range and will not become brittle, crack or flow during service. It is available in various sizes supplied in ready-to-use rolls and pre-cut end lap pads for standing seam roof (SSR) applications. It is also available in double and triple bead rolls and end lap pads.

TYPICAL USES:

Tacky Tape[®] is designed to seal and prevent the entry of dust, air and moisture and assure a weather tight seal in metal building details.

- Metal rib and end joints
- Standing seam roof end laps
- Sealing roof curbs roof jacks and skylights
- Sealing polyethylene sheeting
- Sealing air conditioning equipment
- Window and door flanges
- Sub sill air and water seal between Wood & Concrete.

ADVANTAGES:

- Excellent for sealing Galvalume[®], Galvalume Plus[®], Zinalume[®] and KYNAR 500[®]
- Adheres to oily Galvalume[®]
- Will not corrode Galvalume[®], Galvalume Plus[®] and KYNAR 500[®]
- Meets ASTM and Federal Standards
- Non-staining
- Permanently flexible
- Resistant to ultraviolet and infrared radiations, precipitation, atmospheric hydrocarbon contamination and extremes in temperature

APPLICATION:

Optimally, a clean dry uncontaminated surface is desired to obtain intimate adhesion, but realistically there are field situations that prevent complete control of surface conditions. Obviously, excessive oil, caked-on dirt, free standing water and ice or snow must be removed before sealant tape is applied. This sealant tape can be applied in cold temperatures. Temperatures below 40°F (4.44°C) often promote the formation

of condensation and frost substrates. These should be removed before the sealant tape is applied in order to achieve optimum performance. Remove condensation and other moisture with a clean dry cloth and isopropyl (IPA) alcohol. Follow this with a dry cloth wipe.

A light film of lubricant used in roll forming is usually present on unpainted surfaces, such as Galvalume and should not adversely affect the sealant tape performance. If excess lubricant is present wiping with a clean cloth should minimize it.

Position tape sealant on required seal area with release backing paper on top. The tape sealant should be positioned on the "wet", or entry sides of the fasteners to prevent passage of dynamic weather elements. Using a smooth even hand motion; press the tape to the surface to make intimate contact without distorting the tape sealant. Avoid lapping the tape by butt joining tapes at transition points. Remove release-backing paper prior to mating adjoining surface and fastening. IF SEALANT TAPE IS IN DIRECT CONTACT WITH ANY OTHER SEALANT OR ELASTOMER, A COMPATIBILITY TEST MUST BE CONDUCTED PRIOR TO USE.

SM5227 is compatible with the following ITW Polymers Sealants products:

- ACRYL-R[®] SM5430 Non-Skinning Sealant
- ACRYL-R[®] SM5504 Narrow Joint Sealant
- ACRYL-R[®] SM5522 Acrylic Sealant
- Permathane[®] SM7100 and SM7108 Polyurethane Sealants

LIMITATIONS:

Not recommended for:

- For applications requiring continuous water submersion, consult ITW Polymers Sealants field sales representative.
- Joints that are not mechanically fixed.
- Do not apply sealant to wet or frost bearing surfaces. See application paragraph

TYPICAL PROPERTIES:

Property	Typical Values	Test Method
Specific Gravity:	1.47	ASTM D 792
Density:	13.54 Lbs/Gal 1.62 Kg/Liter	ITW PSNA Lab Test
Percent Solids:	100%	ITW PSNA Lab Test
Peel Adhesion PIW (N/mm ²) / % Cohesive Separation		AAMA 800
Galvalume	16 (2.8) / 100	1/16" (0.158cm) thick
Anodized Aluminum	16 (2.8) / 100	
Mill Finish Aluminum	16 (2.8) / 100	
Polyvinylidene Fluoride	17 (2.8) / 100	
PVC Plastisol	17 (2.8) / 100	
Polyester	16 (2.8) / 100	
Siliconized Polyester	16 (2.8) / 100	
Tensile Adhesive Strength PSI (kPa)	20 (138) 95	ASTM C 907
% Cohesive Separation		
Yield Strength PSI (kPa)	8 (55)	ASTM C 908
% Elongation	>1000	ASTM C 908
Sag	None	AAMA 800
Vehicle Migration	Pass, <1/8" (<3.175mm)	AAMA 800
Water Resistance	No Effects	AAMA 800
Hardness (Shore 00)	50-60	AAMA 800
Crazing to Acrylic plastics	None	MIL-S-11030C
Cone Penetration (0.1mm)		ASTM D 217
@77°F (25°C)	85-100	300 g cone
@120°F (48.8°C)	125-135	(5 Sec)
@0°F (-17.7°C)	45-55	
Application Temperature Range	-5°F to 120°F (-20°C to 49°C)	ITW PSNA Lab Test
Service Temperature Range	-40°F to 200°F (-40°C to 93°C)	ITW PSNA Lab Test
Color	Light Gray	Visual ITW PSNA Test
Weatherability QUV, 340A lamp 1000 Hrs	Excellent, no cracking, chalking, wash-off or flow (sag)	ITW PSNA Lab Test
6" Static Water Pressure	Pass – No Leakage	ASTM Proposed Test Method
Water Penetration	Pass – No leakage	ASTM E 1646
Air Leakage	At 1.57 PSF 0.051 CFM/FT ² 0.068 CFM/FT ² At 6.24 PSF 0.1024 CFM/FT ² 0.1365 CFM/FT ²	ASTM E 1680
Shelf Life	18 months when stored at or below 100°F (38°C)	

SPECIFICATION COMPLIANCE:

<p>AAMA 804.3 AAMA 807.3 Federal Specification TT-C-1796A, Type II, Class B USDA Acceptable UL Approval for SM5227 has been granted on sizes up to and including ¾" width x ¼" thick</p>
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- Zincalume® is a registered trademark of BHP Steel
- KYNAR 500® is a registered trademark of Elf Atochem North America, Inc.
- Tacky Tape® and ACRYL-R® are registered trademarks of ITW Polymers Sealants NA, Inc.

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Refer to the Safety Data Sheet (SDS) for further information.
Complete technical information is available from
ITW Polymers Sealants North America, Inc.