Extreme Sealing Tape 4412G

Product Data Sheet

October 2012
Supersedes: NEW

Product Description

3M™ Extreme Sealing Tape 4412G is a single coated, pressure sensitive adhesive (very conformable multipurpose acrylic) tape designed for difficult sealing applications. The backing on this tape is an ionomer film (acrylic and etshylene copolymer) that is very tough yet flexible and abrasion resistant. The very soft and thick acrylic adhesive has excellent sealing properties and good long term, outdoor durability. This single coated tape is designed to seal over an existing joint, seam, or penetration. The adhesive is designed to adhere well to the ionomer film so that overlap layers of this tape can be used and still provide a tight seam to itself and the joint or seam to be sealed.

Physical Properties

Thickness (ASTM D-3652) Adhesive Ionomer Backing Total	 1,90 mm 0,10 mm 2,00 mm
Density	820 kg/m³
Release Liner	0,08 mm, matte finish, translucent, polyester film
Tape Colour	Translucent grey

Performance Characteristics

Peel Adhesion **(**acc. to AFERA 5001 F) Stainless steel, 90° peel, 23°C, 72h dwell, jaw speed 300mm/min, with Al peel strip and 9460 backing	18,9 N/cm
Tensile (acc. to AFERA 5004 A) 12mm x 100mm, jaw speed 300mm/min.	19,6 N/cm
Tensile Elongation (acc. to AFERA 5004 A) 12mm x 100mm, jaw speed 300mm/min.	577,9 %
Temperature Performance Max (hours/minutes) Max Continuous (days / weeks)	 150 °C 90 °C

Application Guidelines	Depending on the surfaces to be sealed, one of three basic surface preparations will be required: 1) Good cleaning with a 50:50 mixture of isopropyl alcohol and water to remove contaminants; 2) Fine abrading with e.g. a 180x grit or finer abrasive followed by good cleaning with a 50:50 mixture of isopropyl alcohol and water; or 3) Good cleaning with a 50:50 mixture of isopropyl alcohol and water followed by application of an adhesion promoter or primer. Ideal tape application is accomplished when temperature is between 21 °C and 38 °C (70 °F and 100 °F) and the bond is allowed to dwell 24 hours. Tape application to surfaces at temperatures below 10 °C (50 °F) is generally not recommended. Once properly applied, low temperature holding is generally satisfactory. With the protective release liner still attached to the tape, apply tape by hand using light hand pressure. If applying the tape over a “step” or ridge, use a thin plastic tool to press the tape tightly into the corners of adjoining surfaces and around other irregularities. Using a soft roller, such as a medium nap paint roller, apply medium pressure to conform tape on contours, seam edges, rivets, or screw heads. Peel off the protective release liner. To optimize adherence and conformance to uneven surfaces, a final tape roll down should be done after the non-stretchy, release liner has been removed. As an extra measure of sealing insurance, a very small dab of 3M™ 4000UV Hybrid Adhesive Sealant Fast Cure should be used at the end of any cut length of 3M™ Extreme Sealing Tape 4412G where the tape is sealing over an irregular surface.
Storage	Store in original cartons between 4 °C and 38 °C and 0 % to 90 % relative humidity. Optimum storage conditions are 21 °C and 50 % relative humidity.
Shelf Life	When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture. The date of manufacture is listed as a run number beginning with the letter “K” and followed by a 5 digit Julian calendar code (YYDDD). The first two digits refer to the year of manufacture. The last three digits refer to the days after January 1, e.g. run #K12273 would translate to a September 30, 2012 date of manufacture.
For Additional Information	To request additional product information or to arrange for sales assistance, please see below for contact details.

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.
This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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