

3M™ Acrylic Plus Tape Series EX4000

Technical Data Sheet



Description

3M™ Acrylic Plus Tape Series EX4000 is a family of black, double-coated acrylic foam tapes designed for the attachment of automotive exterior trim parts such as body side moldings and claddings. 3M EX4000 tapes offer an advanced adhesive system that adheres well to traditional, low surface energy, and scratch- and mar-resistant automotive paint systems.

In addition, 3M EX4000 tapes offer the following key features:

- Unique foam core that provides stress relaxation when high application loads are encountered, while maintaining tight bond-line aesthetics under normal conditions.
- Excellent resistance to impact in cold weather
- Black color provides good bond-line appearance

Some typical applications for 3M EX4000 tapes include body side moldings, claddings, roof ditch moldings and wheel flares.

Product Construction

Branded Liner
JL2 Adhesive
Acrylic Foam
VR1 Adhesive



Branded Liner
JL2 Adhesive
Acrylic Foam
VR1 Adhesive
Secondary Liner



Liner Options

See the technical update “[3M™ Acrylic Foam and Acrylic Plus Tapes: Product Constructions](#)” for liner and tabbing information.

Physical Properties

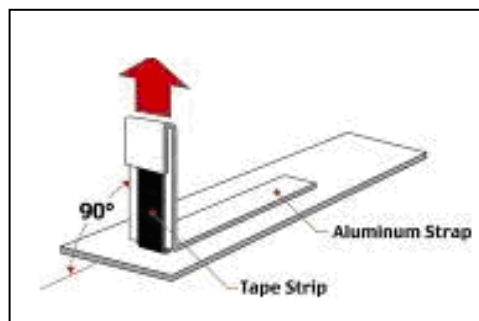
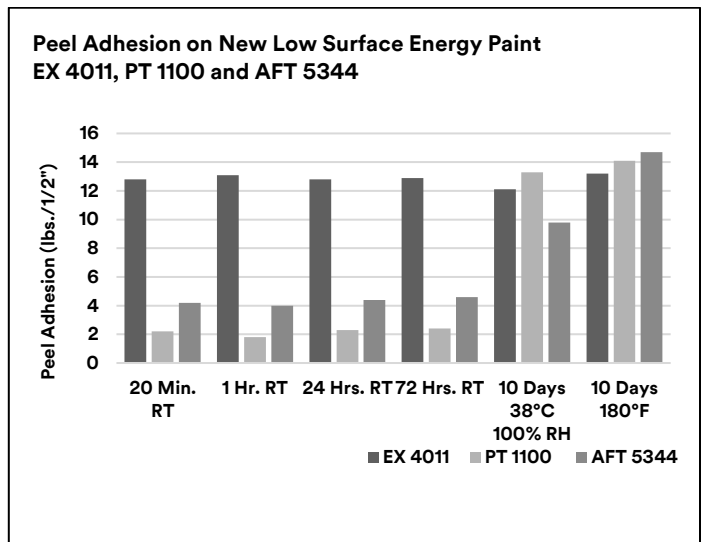
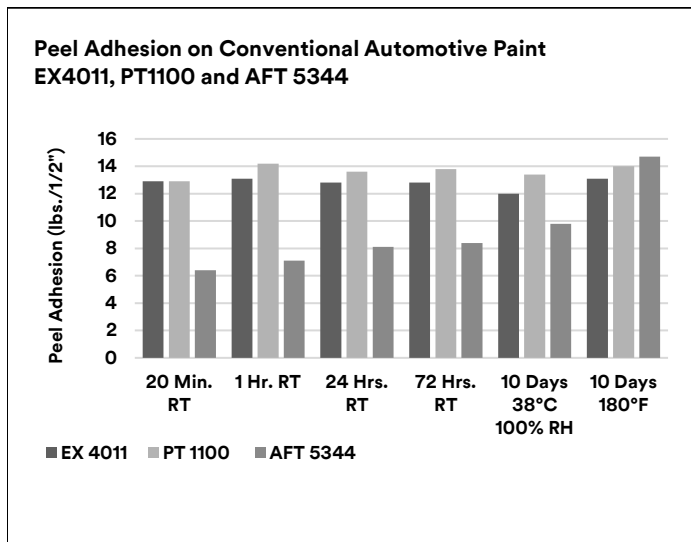
	EX4008	EX4011	EX4015
Thickness Range	0.76 mm (0.030 in) +/- 0.10 mm (0.004 in)	1.14 mm (0.045 in) +/- 0.13 mm (0.005 in)	1.52 mm (0.060 in) +/- 0.13 mm (0.005 in)
Density Range	633 kg/m ³ (39.5lb/ft ³) +/- 56 kg/m ³ (3.5 lb/ft ³)	545 kg/m ³ (34 lb/ft ³) +/- 56 kg/m ³ (3.5 lb/ft ³)	529 kg/m ³ (33 lb/ft ³) +/- 56 kg/m ³ (3.5 lb/ft ³)

Performance Properties

Typical performance of 3M™ Acrylic Plus Tape EX4000 Series is shown below. Peel values depend on paint composition. These values are for reference only.

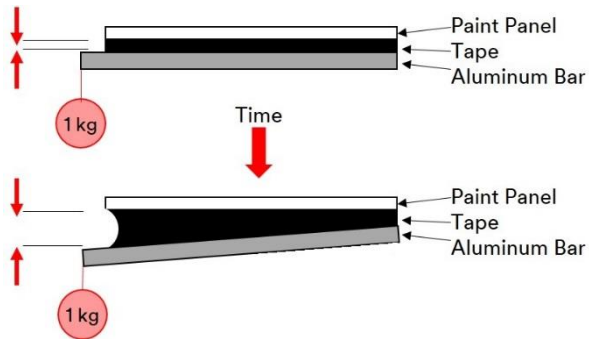
Note: Care should be taken to make sure the surface is clean and dry prior to application of the tape and to not saturate the tape with strong polar solvents, like alcohols, after initial application. After adhesion build, the JL2 adhesive is durable to typical automotive environmental conditions and chemicals and provides a robust attachment solution. If this is a concern, please contact your 3M Technical Representative.

90° Peel Adhesion Testing

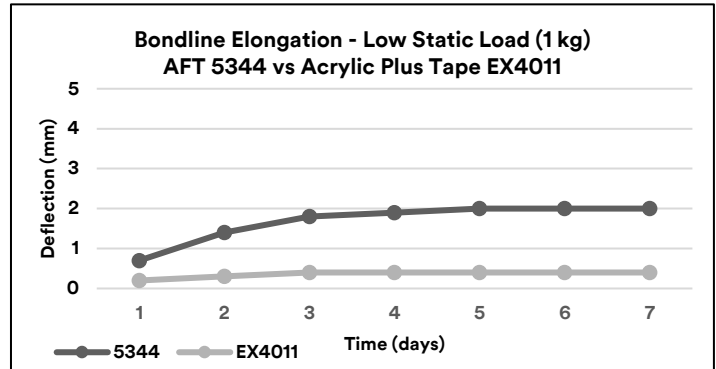


Static Break Away (Typical Results)

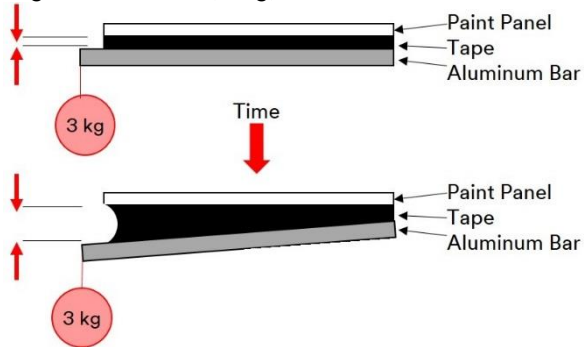
Deflection (Bondline Elongation) Low Static Load (1 kg)



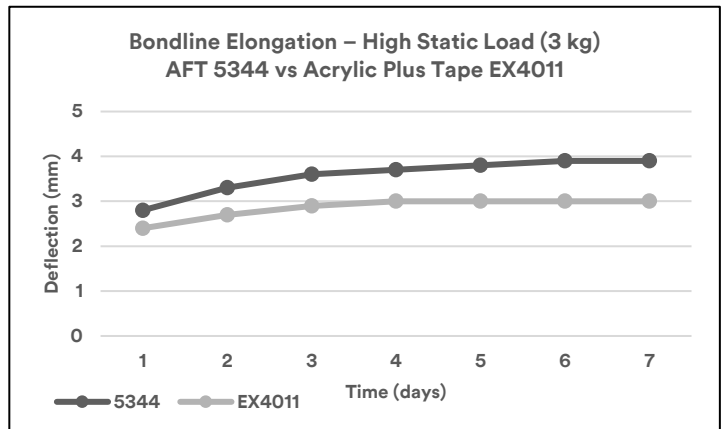
3M™ Acrylic Plus Tape EX4011 demonstrates low elongation properties under low load conditions for good bond line aesthetics.



Deflection (Bondline Elongation) High Static Load (3 kg)



3M™ Acrylic Plus Tape EX4011 demonstrates high elongation properties under high load conditions to relieve stress for good durability.



Shelf Life

Two years from date of manufacture when stored at 4°C–38°C (40°F–100°F) and 0–95% relative humidity (RH). The optimum storage conditions are 22°C (72°F) and 50% relative humidity.

Regulatory Information

Please refer to the product label and Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the SDS, which is available on request or at www.3M.com/msds.

The product is published as a material entry and is available for access on www.mdssystem.com. For product IMDS I.D. number, email requests to 3M-IMDSrequest@mmm.com.

Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M application engineer or call product application support at 1-800-328-1684.

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information. **Product Selection and Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property. **Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.



Automotive and Aerospace Solutions Division

3M Center
St. Paul, MN 55144-1000
1-800-328-1684
3M.com/autosolutions

3M is a trademark of 3M Company
Please recycle. Printed in USA.
© 3M 2020. All rights reserved.