

3M™ Acrylic Plus Tape Series EX4000

Technical Data Sheet



Description

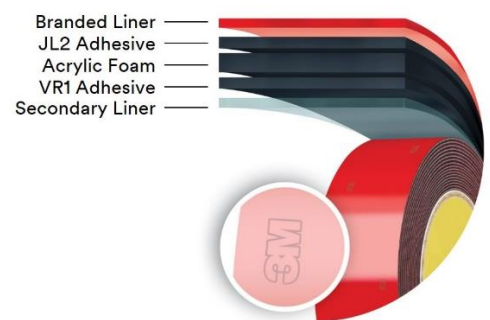
3M™ Acrylic Plus Tape Series EX4000 is a family of black, double-coated acrylic foam tapes designed for the attachment of automotive exterior trim parts such as body side moldings and claddings. 3M EX4000 tapes offer an advanced adhesive system that adheres well to traditional, low surface energy, and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



Liner Options

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

Physical Properties

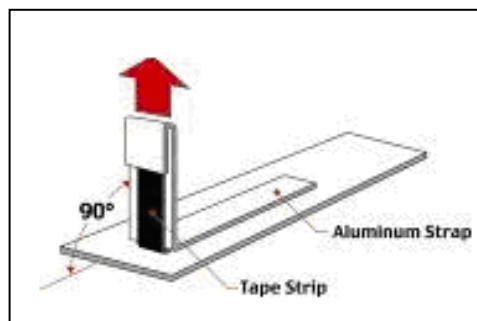
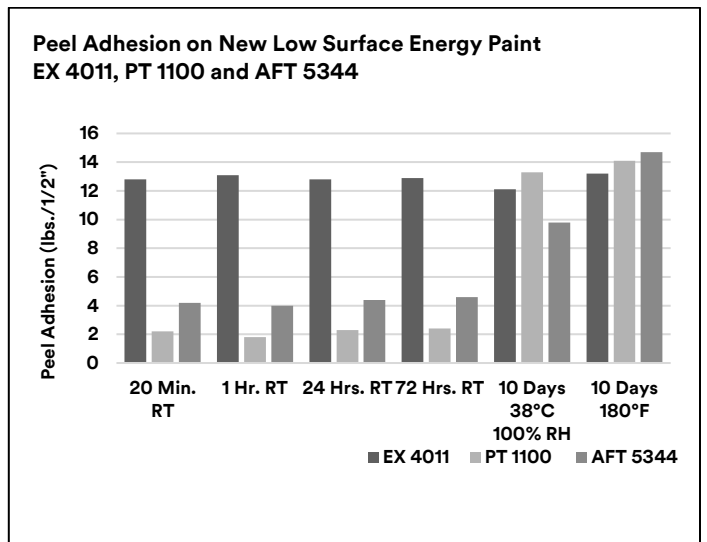
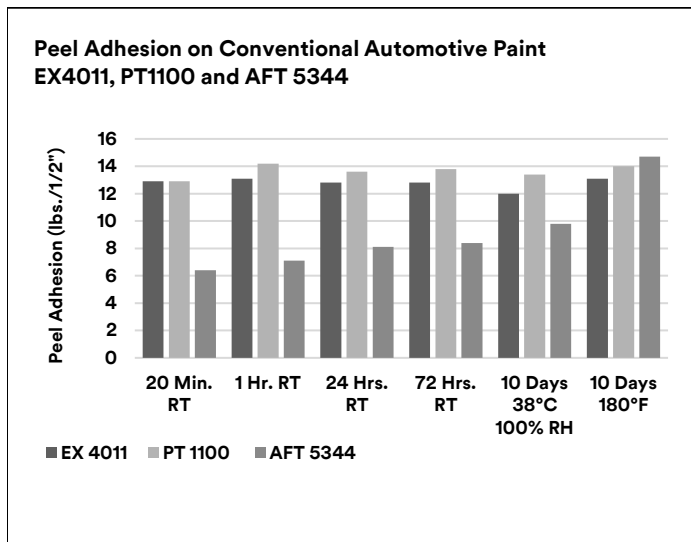
	EX4008	EX4011	EX4015
Thickness Range	0.76 mm (0.030 in) +/- 0.10 mm (0.004 in)	1.14 mm (0.045 in) +/- 0.13 mm (0.005 in)	1.52 mm (0.060 in) +/- 0.13 mm (0.005 in)
Density Range	633 kg/m ³ (39.5lb/ft ³) +/- 56 kg/m ³ (3.5 lb/ft ³)	545 kg/m ³ (34 lb/ft ³) +/- 56 kg/m ³ (3.5 lb/ft ³)	529 kg/m ³ (33 lb/ft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

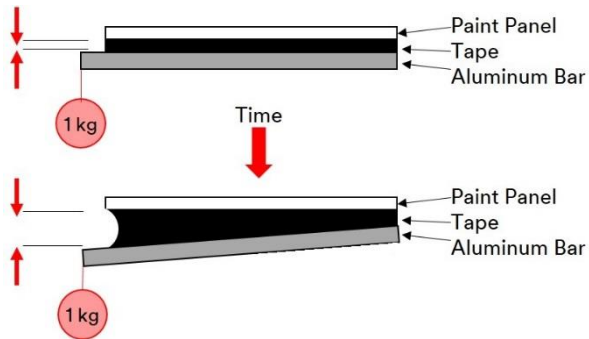
Note: Care should be taken to make sure the surface is clean and dry prior to application of the tape and to not saturate the tape with strong polar solvents, like alcohols, after initial application. After adhesion build, the JL2 adhesive is durable to typical automotive environmental conditions and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

90° Peel Adhesion Testing

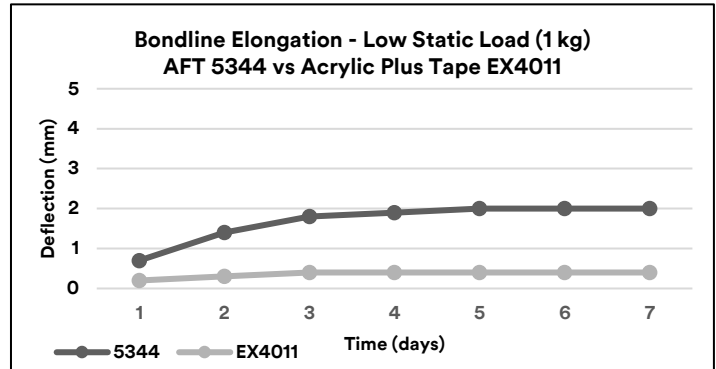


Static Break Away (Typical Results)

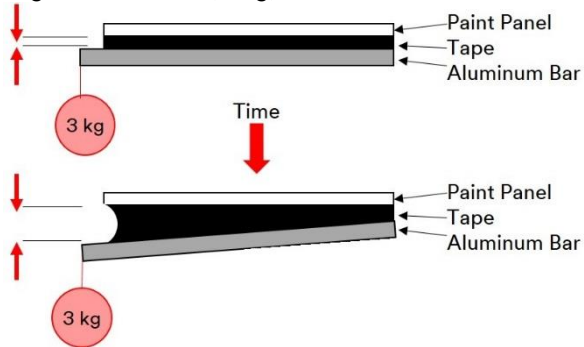
Deflection (Bondline Elongation) Low Static Load (1 kg)



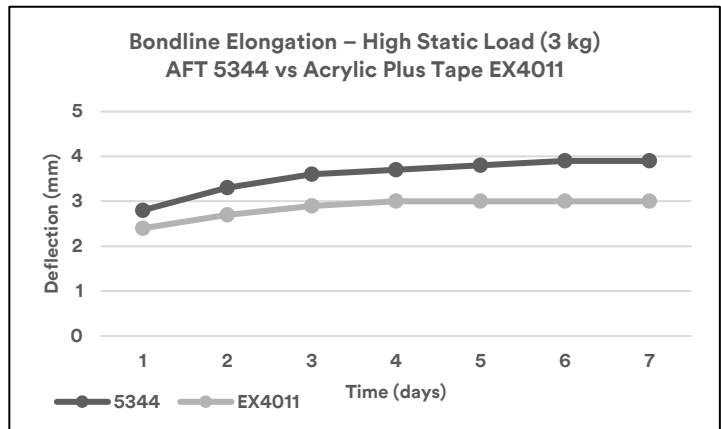
3M™ Acrylic Plus Tape EX4011 demonstrates low elongation properties under low load conditions for good bond line aesthetics.



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.mdsystem.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.

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Automotive and Aerospace Solutions Division
3M Center
St. Paul, MN 55144-1000
1-800-328-1684
3M.com/autosolutions



www.marianinc.com
1-800-773-0062

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