

3M™ Acrylic *Plus* Tape Series EX4300

Technical Data Sheet



General Description

3M™ Acrylic *Plus* Tape EX4300 Series features a liner-side adhesive formulated to meet and exceed the bonding requirements to current low surface energy clear coats as well as providing continuous performance on traditional paints. The non-liner-side adhesive delivers proven bonding performance to automotive trim and other components.

The viscoelastic black core of 3M Acrylic *Plus* Tape EX4300 series offers stress handling flexibility over a range of thermal and environmental conditions. The red, 3M branded liner is silicone-coated on both sides for easy release and efficient tape application.

Product Features

- Excellent adhesion to low surface energy paint systems, including the newest carbamate technologies
- Delivers rapid adhesion build for robust bonding of exterior trim components
- Stress relaxation characteristics of the viscoelastic black core allow the tape to conform well to complex geometries, deliver excellent wet out, and maintain bondline aesthetics under normal stress loads
- Demonstrates stable adhesive performance over a range of temperatures and environmental conditions

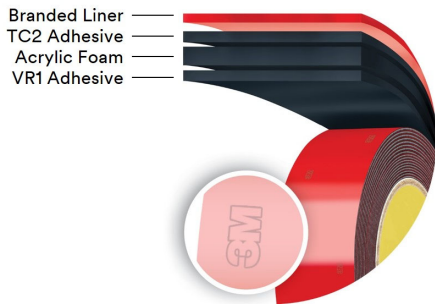
General 3M™ Acrylic *Plus* Tape Benefits

Viscoelastic Flexibility: unique formula for excellent adhesion and stress relaxation qualities that deliver conformability during thermal expansion and in periods of high stress

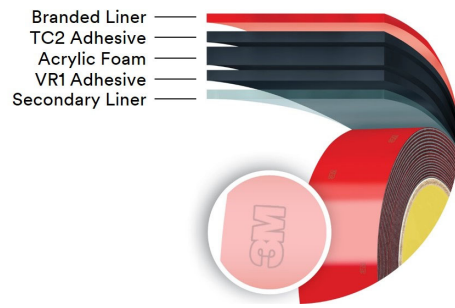
Ease of Use: tape can be die-cut into intricate shapes allowing for easy peel and stick bonding—enabling attachment in areas where mechanical attachment is difficult or impossible

Design Freedom: enables easy differentiation of vehicle models by providing flexibility to respond quickly to changes in design and materials, allowing for easy installation of dealer installed accessories

Product Construction



EX4300



EX4300T

Physical Properties

| | EX4308 | EX4311 | EX4315 |
|-----------------|---|--|--|
| Thickness Range | 0.76 mm (0.030 in) +/- 0.08 mm (0.003 in) | 1.14 mm (0.045 in) +/- 0.13 mm (0.005 in) | 1.52 mm (0.060 in) +/- 0.15 mm (0.006 in) |
| Density Range | 577 kg/m ³ (36 lb/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) |
| Roll Widths | Available in the following standard widths: <ul style="list-style-type: none"> • Millimeter widths rounded to the nearest whole number and 1/8 inch increments starting with 1/4 inch • Minimum widths: 4 mm Levelwound, 5 mm Planetary (Standard versions) Width tolerance: <ul style="list-style-type: none"> • +/- 0.4 mm for planetary rolls up to 18 mm wide and level wound rolls • +/- 0.8 mm for planetary rolls wider than 18 mm | | |
| Core | Black, Acrylic Foam | | |
| Adhesive | <ul style="list-style-type: none"> • Liner-side: TC2 high performance acrylic adhesive with excellent adhesion to low surface energy paint systems, including the newest carbamate technologies • Non-liner-side: VR1 adhesive bonds to a range of automotive metals and medium surface energy substrates* | | |
| Liner | <ul style="list-style-type: none"> • 4.5 mil, red, 3M branded liner, silicone-coated on both sides for easy release • T-liner version: removable T-liner is silicone-coated on one side and enables heat-bond and other PSA tabbing | | |
| Tabbing | <ul style="list-style-type: none"> • An extended liner tab is recommended • Tape available with tabbable liner option: 3M™ Acrylic Plus Tape EX4300T Series • Heat-bond tabbing: 3M™ Tabbing Tapes 5081 and 5400 for T-liner versions • PSA Tabbing: 3M™ Tabbing and Splicing Tape 5699 for silicone liners, 3M™ Tabbing Tape 5300 for non-silicone liners | | |
| Splices | <ul style="list-style-type: none"> • Number of splices depends on order quantity or roll length • Level wound rolls have an average of 3 to 4 splices • Smaller order quantities (smaller than one jumbo) rolls could contain up to 14 splices | | |

*May require adhesion promoter on MSE substrates. Performance testing is recommended. Requires adhesion promoter on LSE substrates, please contact your 3M application engineer to help determine the proper adhesion promoter.

Application Guidelines

The following are recommended for successful tape applications:

- **Clean surface.** Remove all contaminants so that the bonding surface is free of dust, mold release, condensation, etc.
- **Appropriate pressurization.** Pressure is needed to provide intimate contact between the tape and bonding surface. 3M recommends 15 psi momentary pressure on the bond line. This is a guideline and required pressure levels will be impacted by substrate hardness.
- **Avoid air entrapment.** Tape should be laminated and pressurized in one operation; from one end to the other.
- **Avoid excessive tape stretch.** During tape application, do not exceed 4% stretch. Stretch can be influenced by tension, speed and roller diameter.
- **Appropriate temperature.** Optimum component and 3M tape application temperature is 60°F to 110°F.

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

The 3M Acrylic Foam Tape EX4300 Series tapes are non-hazardous articles by OSHA definition. Regulatory information is available on request or at www.3M.com/MSDS.

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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