



# Technical Data Sheet

## 3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4575



[Product Details](#)



[Regulatory Info/SDS](#)

### Product Description

3M™ Dual Lock™ Reclosable Fasteners are positive locking, hidden fasteners designed for use in a variety of attachment solutions. They consist of continuous strips of polyolefin stems with a mushroom shaped top protruding up from the backing. When snapped together the mushroom shaped caps interlock producing a strong reliable Fastener.

3M™ Dual Lock™ Reclosable Fastener SJ4575 Low Profile is designed for indoor or outdoor use and low to medium temperature performance. This product offers temperature resistance up to 158°F and can be used with metals such as aluminum and stainless steel; as well as glass, many plastics (polypropylene, polyethylene, polycarbonate, ABS) powder coated paints and medium to low surface energy materials.

The Dual Lock Low Profile has one stem density of approximately 705 stems per square inch and they interlock to themselves. The low profile products are not intended to mate to the standard size Dual Lock.

There are a variety of pressure sensitive adhesives available with Dual Lock to cover most application needs. The pressure sensitive adhesive makes the Dual Lock easy to use, simply remove the liner, place the Dual Lock and apply firm consistent pressure to assure good contact with the substrate you are adhering. We also offer non-adhesive backed Dual Lock for applications where the PSA does not meet your needs.

### Product Features

- Black, low profile, polyolefin fastener is half the thickness of standard 3M™ Dual Lock™ Reclosable Fasteners and is self-mating
- Interlocking mushroom-shaped heads provide strong, reliable and durable fastening that can be opened and closed multiple times
- Low surface energy acrylic adhesive bonds well to a variety of substrates including metals, powder-coated paints and a broad range of plastics
- Strong fastener secures with an audible snap, verifying closure
- An alternative to screws and bolts, this hidden fastener provides a snug fit and smooth aesthetic appearance
- Features good temperature resistance of 158°F (70°C)
- Best suited for outdoor or indoor use

### General Information

This product is half the thickness of standard 3M™ Dual Lock™ Reclosable Fasteners, providing a low profile attachment. An alternative to screws and bolts, this hidden fastener provides a snug fit and smooth aesthetic appearance.

### Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

### Typical Physical Properties

| Attribute Name    | Test Condition | Value   |
|-------------------|----------------|---|
| Color             |                | Clear   |
| Backing Color     |                | Black   |
| Adhesive Type     |                | 300LSE (Clear Acrylic)                              |
| Weight            |                | 0.044 g/cm <sup>2</sup> (0.012 oz/in <sup>2</sup> ) |
| Material          |                | Polypropylene                                       |
| Thickness         | Unmated        | 1.63 mm (64.5 mil) <sup>1</sup>                     |
| Engaged Thickness |                | 2.489 mm (98 mil) <sup>1</sup>                      |
| Liner             |                | 86# Polycoated Kraft                                |
| Liner Thickness   |                | 0.17 mm (6.5 mil)                                   |

<sup>1</sup> Thickness depends upon the amount of compression load on the pieces.

## Typical Performance Characteristics

Substrate: Low Profile to Low Profile

| Attribute Name              | Temperature   | Backing             | Value   |
|-----------------------------|---------------|---------------------|---|
| 90° Peel Adhesion           | 22 °C (72 °F) | Flexible from Rigid | 2.9 N/cm (1.7 lb/in width) <sup>1</sup>         |
| Overlap Shear Strength      |               |                     | 28.2 N/cm <sup>2</sup> (41 lb/in <sup>2</sup> ) |
| T-Peel Adhesion             |               |                     | 0.9 N/cm (0.5 lb/in width) <sup>2</sup>         |
| Dynamic Tensile (Disengage) |               |                     | 27.5 N/cm <sup>2</sup> (40 lb/in <sup>2</sup> ) |
| Cleavage Strength           |               |                     | 7.1 N/cm (4 lb/in width) <sup>3</sup>           |

<sup>1</sup> 12 in/min (300 mm/min)

<sup>2</sup> Flexible from Flexible

<sup>3</sup> Rigid backed from Rigid backed

| Attribute Name                           | Substrate                  | Value                        |
|--|----------------------------|------------------------------|
| Long Term Temperature Resistance         |                            | 70 °C (158 °F) <sup>1</sup>  |
| Minimum Long Term Temperature Resistance |                            | -29 °C (-20 °F) <sup>1</sup> |
| Cycle Life                               | Low Profile to Low Profile | 150 <sup>2</sup>             |

<sup>1</sup> Long Term (day, weeks)

<sup>2</sup> Number of closures before losing 50% of original peel strength

## Design Considerations

- As a general rule, four square inches of fastener area per pound of static tensile or shear load to be supported is suggested as a starting point for evaluation. More or less area may be needed depending on specific conditions or end use applications.
- Whenever possible design one side of the Dual Lock reclosable fasteners to be larger than the mating side. This will allow for variability or mismatch in Dual lock alignment positions, and ensure 100% fastening area contact. Another approach would be to design two rectangular shaped fastener pieces so that they can be engaged in a cross web/perpendicular pattern (crossed).
- Dual Lock disengagement strength/performance is strongest in direct tensile. Peel/cleavage mode is where it is most easily removed.
- Final product performance depends upon a combination of factors: the substrate and its surface characteristics, the fastener selected, the application method and conditions, the time and environmental conditions required for the application. Because these factors are unique to each application, the user must evaluate Dual Lock and do any testing required to determine Dual Lock's suitability for the user's desired end use.

## Storage and Shelf Life

To obtain best performance, use this product within 24 months from date of manufacture.

## Automotive Disclaimer

**Select Automotive Applications:** This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

## Information

**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.

**Disclaimer:** 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit [www.3M.com](http://www.3M.com).

## **ISO Statement**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M  
Industrial Adhesives and Tapes Division  
3M Center, Building 225-35-06  
St. Paul, MN 55144-1000  
800-362-3550

3M and Dual Lock are trademarks of the 3M Company.  
©3M 2022 (5/22)