3M

Dual Lock[™] Low Profile Reclosable Fasteners

SJ4570 Clear SJ4575 Black

Technical Data

Product Description

3MTM Dual LockTM Low Profile Reclosable Fasteners SJ4570 and SJ4575 can replace conventional fasteners, such as screws, clips, rivets, snaps, hook and loop and bolts in many applications where access or repositioning is needed. Dual Lock low profile reclosable fasteners consist of continuous strips of plastic backing, with tiny plastic mushroom shaped stems protruding up from the backing strip. When two pieces of 3MTM Dual LockTM Low Profile Reclosable Fasteners are pressed together, the "mushroom heads" interlock with one another creating an audible snap, indicating the fastener is engaged. The Dual Lock low profile reclosable fastener is thinner allowing it to be more flexible than similar reclosable fasteners. The Dual Lock low profile reclosable fastener SJ4570 is a clear fastener offering transparent properties to allow color and patterns to visibly show through giving the fastener an almost invisible appearance. The Dual Lock low profile reclosable fastener SJ4575 is black in color and gives a definite presence for when you want to see your fastener or have it blend in with a dark background. The Dual Lock low profile reclosable fasteners offer intermediate strength between regular 3MTM Dual LockTM and 3MTM ScotchmateTM Reclosable Fasteners, with all of the advantages of a self-mating product.

Product Construction

| Product | 3M™ Dual Lock™ Low Pro SJ4570 | ofile Reclosable Fastener SJ4575 |
|---------------------------|----------------------------------|-------------------------------------|
| Material of Construction: | Polypro | pylene |
| Backing Color: | Clear | Black |
| Adhesive: Color: | Cle | ear |
| Type: | 300 LSE | (Acrylic) |
| Liner Type: | 6.5 mil 86# Po | lycoated Kraft |
| | | |

Typical Physical Properties and Performance Characteristics Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

| Weight, ounce/1 in.² (grams/cm²): | 0.012 (0.044) |
|-----------------------------------|-------------------------------------|
| Operating Temperature Range: | -20°F (29°C) and up to 158°F (70°C) |
| Inch (mm) ± 15% without Liner: | |
| Single Thickness | .0645 (1.63) |
| Engaged Thickness | .0910 (2.31) |
| Plasticizer Resistance: | No |
| Closure Cycle Life: | 100 - 150 |

 Cycle Life is the number of cycles (openings and closings) that the fastener is subjected to while maintaining ≥ 50% of the original values for tensile.

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Typical Performance Characteristics

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(Closure Performance)

| Dynamic Tensile Engagement Strength, lbs/sq. inch (kNewtons/m²): | | 26 (179) | |
|--|------------------------------------|----------------------|-----------|
| Dynamic Tensile Disengagement Strength, lbs/sq. inch (kNewtons/m²): | | 42 (289) | |
| Dynamic Shear (1" x 1" overlap) Strength, lbs/sq. inch (kNewtons/m²): | | 32 (220) | |
| 90° Angle T-Peel Lbs/inch width (N/cm) | | 1.2 (2.1) | |
| Static Shear Holding Power on Stainless Steel | Lbs./sq. in. (g/cm²) 2.2 (70.3) | Lbs./sq. i 1.1 (3 | |
| - at -20°F: | 10,000 minutes | 10,000 ו | minutes |
| - at 72°F/50% relative humidity: | 10,000 minutes | 10,000 ו | minutes |
| - at 158°F: | NA | 10,000 ı | minutes |
| Static Tensile Holding Power on aluminum | | | |
| - at -20°F: | 10,000 minutes | 10,000 ו | minutes |
| - at 72°F/50% relative humidity: | 10,000 minutes | 10,000 ı | minutes |
| - at 158°F: | NA | 10,000 г | minutes |
| (Adhesive Performance) | To Stainless Steel | To Polypropylene | To ABS |
| 90° Angle Peel Adhesion: Lbs/inch width (N/cm) | | | |
| - initial (1 minute dwell): | 6.0 (10.5) | 3.5 (6.1) | 6.0 (10.5 |
| after 1 week at 72°F/50% relative humidity: | 8.0 (14.0) | 7.0 (12.3) | 8.0 (14.0 |
| - after 1 week at 158°F: | 7.0 (12.3) | 5.0 (8.8) | 5.0 (8.8) |
| - after 1 week at 100°F/100% relative humidity: | 5.0 (8.8) | 6.0 (10.5) | 6.0 (10.5 |

[•] Peeled at the rate of 12 inches (305 mm) per minute.

Note: In long term static load applications, conditions such as temperature variation, jarring, vibration, etc., can affect long term performance. The user should design the amount of fastening area based on the specific conditions in the application. Four square inches of fastening area per pound of static load is suggested as a starting point for such evaluations.

| Ava | :1, | ah | ı | Ci. | 700 |
|-----|-----|----|----|-------------|-----|
| AVS | 113 | an | 10 | S 12 | 740 |

| Possible Widt (inches ± | | Standard Roll Length: | |
|----------------------------|------|-----------------------|--|
| | 5/8" | 50 yds | |
| | 1" | 50 yds | |
| | 2" | 50 yds | |
| | 4" | 50 yds & 75 yds | |
| Maximum | 6" | 75 yds | |

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| Application Ideas |
|-------------------|
|-------------------|

Whether you prefer our clear version for it's transparent properties or the black version, both are backed with 3MTM Laminating Adhesive 300LSE, 3MTM Dual LockTM Low Profile Reclosable Fasteners SJ4570 and SJ4575 are designed for powder-coated paint, polypropylene, and surfaces lightly contaminated with oil as well as acrylic, sealed wood, glass, metal, foam and fiberglass. Used in POP (point of purchase), trade show exhibition and electronics, Dual Lock low profile reclosable fasteners attach ceiling tiles, carpet, seat cushions, trade show graphics, access panels, wall panels and small electronic devices.

Storage

Store in original package at 72°F (22°C) and 50% relative humidity.

Shelf Life

If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.

Product Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.