

1982 Lunt Ave, Elk Grove Village, IL 60007

phone: (847) 299-7880 fax: (847) 299-7804 www.tapecase.com sales@tapecase.com

# **3M**

# Dual Lock<sup>™</sup> Low Profile Reclosable Fastener

SJ4575 Black

# Product Description

3M™ Dual Lock™ Low Profile Reclosable Fastener 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 3M™ Dual Lock™ 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 fasteners is thinner allowing it to be more flexible than similar reclosable fasteners.

#### 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 3M™ Dual Lock™ and 3M™ Scotchmate™ Reclosable Fasteners, with all of the advantages of a self-mating product.

#### Product Construction

Product	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4575	
Material of Construction:	Polypropylene	
Backing Color:	Black	
Adhesive: Color:	Clear	
Type:	300 LSE (Acrylic)	
Liner Type:	6.5 mil 86# Polycoated Kraft	



1982 Lunt Ave, Elk Grove Village, IL 60007

phone: (847) 299-7880 fax: (847) 299-7804 www.tapecase.com sales@tapecase.com

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)
Engaged Thickness, inch (mm) ± 15%: (without liner)	0.107 (2.7)
Plasticizer Resistance:	No
Closure Cycle Life:	25-100

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, shear or peel.

#### Typical Performance Characteristics

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

## (Closure Performance)

Dynamic Tensile Engagement Strength, lbs/sq. inch (kNewtons/m²):	26 (1	179)
Dynamic Tensile Disengagement Strength, Ibs/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. in. (g/cm²) 1.1 (35.2)
- at -20°F:	10,000 minutes	10,000 minutes
- at 72°F/50% relative humidity:	10,000 minutes	10,000 minutes
- at 158°F:	NA	10,000 minutes



1982 Lunt Ave, Elk Grove Village, IL 60007

phone: (847) 299-7880 fax: (847) 299-7804 www.tapecase.com sales@tapecase.com

#### Static Tensile Holding Power on aluminum

- at -20°F:	10,000 minutes	10,000 minutes
- at 72°F/50% relative humidity:	10,000 minutes	10,000 minutes
- at 158°F:	NA	10.000 minutes

(Adhesive Performance)	To Stainless Steel	To Polypropylene	To ABS
90° Angle Peel Adhesion: Lbs/inch width (N/cm)			
<ul> <li>after 1 week at 72°F/50% relative humidity:</li> </ul>	9.1 (15.9)	6.5 (11.4)	8.9 (15.6)
- after 1 week at 158°F:	6.2 (10.9)	4.6 (8.1)	5.0 (8.8)
<ul> <li>after 1 week at 100°F/100% relative humidity:</li> </ul>	5.9 (10.3)	6.3 (11.0)	6.6 (11.6)

<sup>.</sup> Disengaged or 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.

## Attachment Guide

# PRESSURE SENSITIVE ADHESIVE ATTACHMENT:

The adhesive system provides reliable bonding to a wide variety of materials:

Bare Metals Many Plastics: ABS Painted Metals Acrylic Glass Polycarbonate Fiberglass Polystyrene Sealed Wood Rigid Vinyl Powder Coated Paints

Structural Composites

Glass



1982 Lunt Ave, Elk Grove Village, IL 60007

phone: (847) 299-7880 fax: (847) 299-7804 www.tapecase.com sales@tapecase.com

## Attachment Techniques

The following information is intended to assist the designer considering the use of 3M<sup>TM</sup> Dual Lock<sup>TM</sup> Low Profile Reclosable Fasteners SJ4575. Final product performance depends on actual conditions, such as fastener selected, the conditions in which the fastener is applied, the time and environmental conditions in which it is expected to perform. Because many of these factors are uniquely within the user's knowledge and control, it is required 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 and desired end use.

As a general rule, four square inches of fastener area per pound (57.3 square centimeters per kilogram) of static 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.

There are typically 6 different methods for attaching Dual Lock low profile reclosable fasteners to various surfaces. The most important technique for Dual Lock low profile reclosable fastener is summarized below. For complete details on techniques and options for attaching  $3M^{TM}$  Scotchmate<sup>TM</sup> or  $3M^{TM}$  Dual Lock<sup>TM</sup> Reclosable Fasteners please see the technical bulletin "Attachment of  $3M^{TM}$  Scotchmate<sup>TM</sup> and  $3M^{TM}$  Dual Lock<sup>TM</sup> Reclosable Fasteners."

**Pressure Sensitive Adhesive attachment:** The fasteners and substrate surfaces should have equilibrated for a minimum of 1 hour at temperatures of 68°F (20°C) or greater before application. These adhesive backed fasteners should be applied to surfaces that are smooth, dry and free of oils, mold release agents or other surface contaminants.

The substrate should be cleaned with an appropriate cleaning method for the customers substrate(s) and surface contaminant(s) and amount that need to be removed. **NOTE:** Be sure to follow the manufacturer's precautions and directions for use when using solvents, or other cleaning method.

The liner is removed and without touching the adhesive, the fastener is applied to the surface using firm roller pressure to help ensure complete adhesive contact to the substrate. The pressure-sensitive adhesive bonds on contact and parts can be handled immediately. Adhesive bond strength increases with time, pressure and temperature. A minimum of twenty four (24) hours dwell is recommended before applying a load or disengaging. Recommended time to achieve maximum bond strength is 72 hours (3 days).

# Application Ideas

Whether you prefer our clear version for it's transparent properties or the black version, both are backed with 3M<sup>TM</sup> Laminating Adhesive 300LSE, 3M<sup>TM</sup> Dual Lock<sup>TM</sup> Low Profile Reclosable Fasteners 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.



1982 Lunt Ave, Elk Grove Village, IL 60007 phone: (847) 299-7880

> fax: (847) 299-7804 www.tapecase.com sales@tapecase.com

#### **Available Sizes**

# Squares/Rectangles

Width	Length	Per Pack
1"	1"	100
1"	2"	100
1"	3"	100

#### NOTE:

- When applying pressure sensitive adhesive films to any surface, be sure that the surface is free from oil or other surface contaminates such as powder, dust or release agents. Adhesive performance should be carefully checked when used on substrates containing plasticizers..
  The above values are "Typical Values" which have a nominal range about them and are not intended for specification
- purposes.