SNAPSHOOT
ENGINEERED FOR A SAFER TOMORROW

# 현장을 이해하고, 필요한 솔루션을 연결합니다.

산업안전 · 추락방지 시스템
산업용 소재 · 건축자재
제품 제안부터 공급·시공·설치·교육까지




COMPANY INFORMATION

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TECHNICAL DOCUMENTS

## 인증서 · 데이터시트 · 기술자료

제품의 규격과 성능, 인증 및 적용 조건을 확인하기 위한 자료입니다.

ABOUT SNAPSHOOT

### 제품 공급을 넘어, 현장에 맞는 해결책으로

스냅슛은 산업현장의 작업 환경과 요구 조건을 바탕으로
적합한 제품과 시스템을 제안합니다. 현장 실사를 통해 설치 조건을 확인하고,
공급부터 시공·설치 및 사용 교육까지 필요한 과정을 함께합니다.

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본 페이지는 스냅슛의 자료 제공 안내용 표지입니다. 첨부된 인증서 및 기술자료의 발행 주체, 인증 대상과 적용 범위는 해당 원문을 기준으로 확인해 주세요.



English-US

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# Technical Data Sheet

## 3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570

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 SJ4570 Low Profile is designed for indoor 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

• Clear, 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 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 | | Clear |
| Adhesive Type | | 300LSE ( Clear Acrylic) |
| Weight | | 0.044 g/cm² (0.012 oz/in²) |
| Material | | Polypropylene |
| Thickness | Unmated | 1.63 mm (64.5 mil) [1] |
| Engaged Thickness | | 2.49 mm (98 mil) [1] |
| Liner | | 86# Polycoated Kraft |
| Liner Thickness | | 0.17 mm (6.5 mil) |

[1] 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 | 23 °C (73 °F) | Flexible from Rigid | 2.9 N/cm (1.7 lb/in width) [1] |
| Overlap Shear Strength | | | 28 N/cm² (41 lb/in²) |
| T-Peel Adhesion | | | 0.9 N/cm (0.5 lb/in width) [2] |
| Dynamic Tensile (Disengage) | | | 28 N/cm² (40 lb/in²) |
| Cleavage Strength | | | 7.1 N/cm (4 lb/in width) [3] |

[1] 304 mm/min (12 in/min)

[2] Flexible from Flexible

[3] Rigid backed from Rigid backed

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

[1] Long Term (day, weeks)

[2] 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

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For 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

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## ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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