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

스냅슛 (SNAPSHOOT)

ADDRESS (15431) 경기도 안산시 단원구 풍전로 37-9 트리플렉스 301동 118호
TEL 0507-1374-9229
FAX 0504-481-6749
E-MAIL bkkim@snapshoot.co.kr

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.

추락방지 시스템

안전대부착설비 · 수평·수직 라이프라인
레일 시스템 · 리지드 포스트

밀폐공간 진입·구조 솔루션

데빗암 · 삼각대 · 구조용 윈치
윈치 안전블록 · 구조장비

산업안전 보호구

전신형 안전대 · 랜야드 · 안전블록
작업 환경에 맞춘 개인보호구

산업용 소재·건축자재

산업용 테이프 · 접착제 · 기능성 소재
구조용 스크류 · 목조건축 자재

SNAPSHOOT
ENGINEERED FOR A SAFER TOMORROW

홈페이지 바로가기 →
문서 라이브러리 바로가기 →
시공사례 바로가기 →
문의하기 →

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



Science. Applied to Life.™

English-US

Last Revision Date: September, 2024

Supersedes: July, 2024

Technical Data Sheet

3M™ Flame Resistant Hook Fastener SJ3419FR

Product Details

Regulatory Info/SDS

Product Description

3M™ Reclosable Fasteners offer advanced closure alternatives to zippers, screws, snaps, hooks, bolts and more. They offer greater design flexibility, faster product assembly, smoother and cleaner exterior surfaces and improved product performance in many applications. The hook and loop fasteners consist of two strips of nylon fabric which engage to form a quick fastening attachment.

Product Features

• Commonly paired with 3M™ Flame Resistant Loop Fastener SJ3418FR, this hook fastener can also engage with other 3M™ Loop Fasteners.
• Flame resistant; meets FAR.25.853 Para.(a)(1)(ii) 12 second burn
• Available in black, white, beige (Other colors are available as special orders. 3M recommends the user to evaluate the products to see if it meets their color requirements. See your 3M authorized distributor or 3M representative for color selection guide and minimum requirement.)
• The woven hook is covered with about 300 tiny, sti hooks, per square inch (46/cm²). The hook is preshrunk to insure maximum dimensional stability and flatness.

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		Black, White
Weight		0.04 g/cm² (0.008 oz/in²)
Material		Nylon 6,6
Selvedge Edge		2.4 ± 0.8 mm (3/32 ± 1/32 in)
Thickness	Maximum unmated without liner	2 mm (78 mil) [1]
Engaged Thickness		3.1 mm (120 mil) [1]
Liner		none
Thickness Tolerance		± 15 %

[1] Thickness depends upon the amount of compression load on the pieces.

Typical Performance Characteristics

Attribute Name	Temperature	Substrate	Value
90° Peel Adhesion	23 °C (73 °F)	Nylon Hook to Nylon Loop	3.9 g/cm width (2.2 lb/in width) [1]
Overlap Shear Strength		Rigid to Rigid	16 N/cm² (23 lb/in²) [2]
T-Peel Adhesion		Nylon Hook to Nylon Loop	3.5 g/cm width (2 lb/in width) [3]
Dynamic Tensile (Engage)		Rigid to Rigid	< 0.69 N/cm² (< 1.0 lb/in²) [4]
Dynamic Tensile (Disengage)		Rigid to Rigid	8.1 N/cm² (12 lb/in²) [4]
Cleavage Strength		Rigid to Rigid	950 g/cm width (5.3 lb/in width) [5]

[1] 304 mm/min (12 in/min). The 90° peel has one of the mated fasteners attached to a non-anodized aluminum panel, while the other mated fastener is not attached to an adherend and is disengaged at 90° angle during the peel.

[2] 25 x 25 mm (1 in x 1 in) overlap; engaged with firm pressure and disengaged, peeled or cleaved at the rate of 304 mm/min (12 in/min)

[3] 304 mm/min (12 in/min)
The “T” peel test only measures the closure performance per ASTM D5170 and was not adhered to aluminum panels.

[4] 304 mm/min (12 in/min)

[5] System performance tests are determined by measuring the performance of the entire mated reclosable fastener system consisting of two non-anodized aluminum plates joined together with the indicated fasteners.

Attribute Name	Temperature	Substrate	Value
Static Shear	23 °C (73 °F)	Rigid to Rigid	10,000 min [1]
Static Shear	38 °C (100 °F)	Rigid to Rigid	120 min [1]
Static Tensile	23 °C (73 °F)		10,000 min [2]

[1] Holds 0.16 kg/cm² (2.2 lb/in²) for indicated Time and Temperature

[2] All combinations hold minimum 155 g/cm² (1000 g/in²) for indicated time and temperature

Attribute Name	Substrate	Value
Long Term Temperature Resistance		93 °C (200 °F) [1]
Cycle Life	Nylon Hook to Nylon Loop	5,000 [2]

[1] Long Term (day, weeks)

[2] Number of closures before losing 50% of original peel strength

Typical Environmental Performance

Temperature: 38 °C (100 °F)
Environmental Condition: 100%RH

Attribute Name	Value
Static Tensile	180 min [1]

[1] All combinations hold minimum 155 g/cm² (1000 g/in²) for indicated time and temperature

Handling/Application Information

Directions for Use

The plain backed 3M™ hook and loop fasteners are most commonly sewn into their applications. Liquid or hot melt adhesives and staples are other forms of attachment that can be utilized.

Sewing: Although the selvedge edge was initially developed for stitching on, customers often find that they get better anchorage when stitching through the hook and loop portions of the fastener – this may be application dependent. The type of thread and stitch type is also best determined based on individual application, however, the fastener should be stitched on all edges for the best seam strength. Typically, special machine adjustments
are not necessary when using our hook and loop fasteners.

Application Examples

3M™ Flame Resistant Hook and Loop Fasteners SJ3419FR and SJ3418FR can provide a strong fastening system with flame resistance for materials which can be sewn, stapled or adhered using hot melt or liquid adhesives. Because product performance will depend on actual conditions within any specific application, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular material purpose and suitable for the user's method of application.

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

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.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001: 2000 and ISO/TS 16949: 2002 standards.

3M™ Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000
3M.com/iatd