



# Scotchmate™ Reclosable Fasteners

## SJ3526N and SJ3527N Family

### Nylon Hook and Loop

#### Product Information

##### Product Description

3M™ Scotchmate™ Reclosable Fasteners offer 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. Simply pull the strips apart by hand to disengage.

The woven hook is covered with flexible J shaped hooks, about 300 hooks per square inch (46/sq. cm.) protruding up from a woven backing. The woven loop backing is covered with thousands of soft, pliable napped loops, providing for thousands of openings and closings (cycles). The hook and loop are preshrunk to insure maximum dimensional stability and flatness.

These Scotchmate reclosable hook and loop fasteners are coated on the backside with a firm synthetic rubber pressure sensitive adhesive designed to function for indoor applications. This adhesive is especially suited for attachment to low surface energy substrates such as polyethylene, polypropylene, etc.

The hook product is available with a marked product splice making splice identification easier, allowing splice removal if desired. The product number is SJ3526NFSR. These products are also available with a brown, 83 pound polykraft paper liner. The paper liner allows easier diecutting of pieces. The hook is available as SJ3526NP and the loop as SJ3527NP. When shorter lengths are desired for evaluation, prototypes or small jobs a mini-pack containing a 4.9 yards (4.5 meters) roll of each SJ3526N (hook) and SJ3527N (loop) is available as a single package, MP3526N/27N.

##### Product Construction

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

Fastener Products	3M™ Scotchmate™ Reclosable Fasteners		
	Hook	SJ3526N MP3526N	SJ3526NP
	Loop	SJ3527N MP3527N	SJ3527NP
	Hook	SJ3526NFSR	
Material of Construction	Hook	nylon 6	
	Loop	nylon 6,6	
	Backing	nylon 6	
	Adhesive <sup>(a)</sup>	Transparent	
Standard Colors <sup>(b)</sup>	Black, White, Beige		
Thickness <sup>(c)</sup> max. unmated	Hook	3/32" (2.4 mm)	
	Loop	4/32" (3.2 mm)	
Selvage Edge <sup>(d)</sup>	3/32" (2.4 mm)		
In. (mm) ± 1/32" (0.8 mm)	4/32" (3.2 mm) for 4" wide		
Weight: oz/in <sup>2</sup> (g/cm <sup>2</sup> ) without liner	Hook	0.013 oz/in <sup>2</sup> (0.058 g/cm <sup>2</sup> )	
	Loop	0.015 oz/in <sup>2</sup> (0.063 g/cm <sup>2</sup> )	
Liner	White 3.0 mil polyethylene film with a silicone release coating and "3M™ Scotchmate™" printed in red.		Brown 83# polykraft liner with a silicone release coating. No printing.

a) The adhesive may produce a yellow tint to some light colored hook and loop products or adherends.

b) Other fastener colors are available as special orders. 3M recommends the user to evaluate a color sample to see if it meets their color requirements. See your 3M authorized distributor or 3M representative for a color selection guide, minimum requirements and lead times.

c) Thickness was measured using a 1/2" pressure foot supporting a 34 gram weight. Actual thickness depends upon the amount of compressional load on the pieces.

d) See table on page 5 for selvage edge and extended liner configurations.

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## Typical System Performance Characteristics

**Note: The following information is not product release requirements, nor product specifications. Rather this data represent typical performance using standard test methods. This is intended for use as a guide to assist in selection of 3M™ Scotchmate™ Reclosable Fasteners for further evaluation. Customer specifications should not be based solely on the data presented in this document.**

Unless stated, typical system performance characteristics were measured under controlled laboratory conditions of 72°F (22°C) and 50% relative humidity. The user should evaluate products in the actual application to ensure suitable performance for the intended use.

System Performance <sup>(a)</sup>			
3M™ Scotchmate™ Reclosable Fasteners			
SJ3526N Hook engaged to SJ3527N Loop		SJ3527N Loop engaged to Dual Lock™ SJ3540 <sup>(b)</sup>	
<b>TENSILE (Rigid to Rigid Adherends)</b>		lbs <sub>f</sub> /sq inch (Newtons/cm <sup>2</sup> ):	
Dynamic Tensile Engagement Strength		< 1.0 (0.69)	< 1.0 (0.69)
Dynamic Tensile Disengagement <sup>(c)</sup>		13.5 (9.3)	50.5 (34.8)
Static Tensile Holding Power		Holds 1.1#/in <sup>2</sup> (77.5 grams/cm <sup>2</sup> ) for indicated time and temperature	
100°F		7,300 minutes	8,500 minutes
120°F		1,000 minutes	2,800 minutes
158°F		300 minutes	200 minutes
100°F/100% RH		4,400 minutes	5,800 minutes
<b>SHEAR (Rigid to Rigid Adherends)</b>		lbs <sub>f</sub> /sq inch (Newtons/cm <sup>2</sup> ):	
Dynamic Shear (1" x 1" overlap) <sup>(c)</sup>		24.5 (16.9)	93.2 (64.3)
Static Shear Holding Power		Holds 1.1#/in <sup>2</sup> (77.5 grams/cm <sup>2</sup> ) for indicated time and temperature	
100°F		10,000 minutes	10,000 minutes
120°F		1,000 minutes	4,300 minutes
158°F		400 minutes	400 minutes
100°F/100% RH		10,000 minutes	10,000 minutes
<b>INITIAL PEEL AND CLEAVAGE<sup>(c)</sup></b>		Pounds/inch width (grams/cm width)	
"T" Peel Strength (Flexible to Flexible) Ave		1.7 (300)	6.0 (1,070)
90° Peel Strength (Flexible to Rigid) Ave		1.5 (270)	4.9 (880)
Cleavage Peel Strength (Rigid to Rigid)		7.9 (1,400)	31 (5,500)
<b>ENGAGED THICKNESS<sup>(d)</sup></b>			
(Nominal without liner)	Inches (cm)	0.14 (0.36)	0.20 (0.51)
<b>CLOSURE CYCLE LIFE<sup>(e)</sup></b>		5,000	50
<b>SHELF LIFE</b>		Eighteen months from date of manufacturing when stored in original packaging at 72°F (21°C) and 50% relative humidity.	

**Note: Long Term Static Load:** Conditions such as temperature variations, engagement area, closure pressure and vibrations or side to side movement after engagement or exposure to prolonged periods of moisture, ultraviolet or other environmental factors can affect the closure strength and long term static load performance. Reclosable fasteners may slip or creep in the direction of the static load forces when subjected to static loads at temperatures or weights greater than indicated. The user is responsible for designing the amount of fastening area based upon the specific conditions for the application. Four square inches of fastening area per pound (57.3 sq. cm/kilogram) of static load is suggested as a starting point for such evaluations.

- 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. The "T" peel test only measures the closure performance per ASTM D5170 and was not adhered to aluminum panels. The 90° peel has one of the mated fasteners attached to a non-anodized aluminum plate while the other mated fastener is not attached to an adherend and is disengaged at a 90° angle.
- The use of 3M™ Scotchmate™ Loop Reclosable Fasteners engaged to 3M™ Dual Lock™ Reclosable Fasteners provides increased strength over standard Scotchmate reclosable fasteners, with a limited number of reclosures compared with Scotchmate systems. Due to the very high strength of Scotchmate reclosable fasteners mated to Dual Lock reclosable fasteners, extra care should be given to ensure the maximum bond strength is obtained to the adherends being joined. Failure to obtain bond strengths sufficiently high to the adherend may cause the fastener's adhesive to release from the adherend.
- 3M™ Scotchmate™ Reclosable Fasteners SJ3526N and SJ3527N and SJ3540 are engaged with firm pressure and disengaged, peeled or cleaved at the rate of 12 inches (305 mm) per minute.
- The engaged thickness was measured using a 0.5" diameter pressure foot supporting a 34 gram weight. Engaged thickness per given fastener area will decrease when compressed or increase with no load or when the engaged are separated in tensile.
- Cycle Life is the number of cycles (openings and closings) that the fastener is subjected to while maintaining 50% or greater of the initial peel value.

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#### Roll Lengths – Yards (Meters)

#### 3M™ Scotchmate™ Reclosable Fasteners<sup>(a),(b)</sup>

Standard Sizes Available <sup>(c)</sup>			SJ3526N (Hook)		SJ3527N (Loop)		MP 3526N/27N	SJ3526NFSR (Hook)	SJ3526NP (Hook)	SJ3527N (Loop)
Widths in. ± 1/16" (mm) ± 1.6	Selvage Edge <sup>(d)</sup>	Extended Liner <sup>(d)</sup>	25 (22.8)	50 (45.7)	25 (22.8)	50 (45.7)	4.9 (4.5)	50 (45.7)	100 (91.4)	100 (91.4)
1/2" (12.7 mm)	One Edge	One Edge	BK, B, W		BK, W					
11/16" (17.5 mm)	One Edge	One Edge	B		B					
5/8" (15.9 mm)	One Edge	One Edge	B, BK, W		B, BK, W					
3/4" (19 mm)	One Edge	One Edge	BK	B, BK, W	B, BK, W					
1" (25.4 mm)	One Edge	One Edge	BK, W	B, BK, W	BK, W	B, BK, W	BK, W	W	W	W
1-1/4" (31.8)	Two Edges	Two Edges	BK		BK					
1-1/2" (38.1 mm)	Two Edges	Two Edges	BK, W		B, BK, W			W	B, BK, W	B, BK, W
2" (50.8 mm)	Two Edges	Two Edges	B, BK, W		B, BK, W				BK, W	BK
2-1/8" (54 mm)	Two Edges	Two Edges	B		B					
4" (101.6)	Two Edges	Two Edges	B, BK, W		BK, B, W					

#### Fabricated Forms<sup>(e)</sup>

See Below for Standard Forms

#### Cut Pieces

- a) 3M™ Scotchmate™ Reclosable Fasteners SJ3526NP and SJ3527NP are the same as Scotchmate reclosable fasteners SJ3526N and SJ3527N respectively, but with a paper instead of film liner. Scotchmate reclosable fastener SJ3526NFSR is SJ3526N with a marked product splice making splice identification easier if splice removal is desired. MP3526N/27N is a package containing a single 4.9 yards (4.5 m) roll of each product for use when smaller quantities are needed.
- b) Standard colors are white (W), black (BK) and beige (B). Other colors are available as special orders. 3M recommends the user to evaluate a color sample to determine if it meets their color requirements. See your local 3M authorized distributor or 3M representative for a color selection guide, minimum order quantities and lead times.
- c) 3M™ Scotchmate™ Reclosable Fasteners SJ3526N, SJ3527N, SJ3526NFSR, SJ3526NP and SJ3527NP come standard on a 3" diameter fiber core in widths up to 4". The diameter of the side shield is 17.5 inches (44.5 cm) and the width of the roll with the side shield is the product width plus 1/4". Contact your authorized 3M distributor or 3M representative for details on supplying widths or special sizes not listed above.
- d) Selvage edges and extended liner availability. Other configurations may be possible as a special order, or via a 3M authorized distributor.
- e) 3M™ Reclosable Fasteners can be fabricated in many custom shapes and sizes to fit your product design and manufacturing process. Some standard shapes and sizes are listed below. For others not listed please contact your local 3M authorized converter or 3M representative for additional options, configurations and ordering information.

Product Number	Fabricated Forms
SJ3526N	5/8" x 5/8" individual cut pieces of black hook.
SJ3527N	5/8" x 5/8" individual cut pieces of black loop.
SJ3526N/27N	1" x 3" premated samples in black or white.
SJ3526N/27N	1" x 6" premated black hook and loop pieces.

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## Application Ideas

3M™ Scotchmate™ Reclosable Fasteners SJ3526N and SJ3527N family of products can provide a firm adhesive bond to a wide variety of surfaces, including, but not limited to those listed below. 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.

### Plastics

Paper and cardboard	Acrylic	ABS	
Glass	Sealed Wood	Polycarbonate	Polystyrene
CARC Paint	Bare and painted Metal	Polypropylene	Rigid Vinyl
Fabrics	Polyethylene		

Scotchmate reclosable fasteners SJ3526N and SJ3527N family of products are not recommended for attaching to flexible vinyl or plasticized substrates.

Scotchmate reclosable fasteners SJ3526N and SJ3527N family of products has shown to be useful for:

Anti-scratch surface	Attaching accessories and equipment
Medical Braces	Vibration and sound dampening control
Attaching Exhibit and Display Graphics	

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## Certification/ Recognition

**Mil Spec. MIL-F-21840:** 3M™ Scotchmate™ Reclosable Fasteners SJ3526N and SJ3527N family of products meet the physical requirements of Mil spec. MIL-F-21840, Type II and III, Class 1. Type II and III, Class 5 requirements are met by engaging Scotchmate reclosable fastener SJ3527N, or any of our nylon Scotchmate loop products, to any polyester Scotchmate hook product such as SJ3576 or SJ3586FR.

**C.I.D. A-A-55126A:** 3M is currently not certifying to this C.I.D. This C.I.D. has lower performance requirements than MIL-F-21840 and also contains errors and omissions preventing reliable product testing.