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)

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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.

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

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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.



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English-US

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Technical Data Sheet

3M™ Double Coated Tape 94220

Regulatory Info/SDS

Product Description

Finite Element Analysis (FEA)data is available for this product at: **3m.com/FEA**

3M™ Double Coated Tapes with 3M™ Adhesive 420 are high tack film tapes that feature a polyester film carrier for dimensional stability and improved handling with ease of die cutting and laminating. The high tack acrylic 3M adhesive 420 provides both high performance at a wide temperature range and excellent adhesion to many plastics.

Product Features

• A polyester carrier in the products provides dimensional stability and improved handling with ease of die cutting and lamination compared to adhesive transfer tapes.
• 3M™ Adhesive 420 provides good temperature and chemical resistance and withstands tough application environments.
• 3M™ Adhesive 420 provides good shock resistance when dropped at various temperatures.
• 3M™ Adhesive 420 provides good adhesion to both HSE and LSE substrates.

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 Method	Test Condition	Value
Adhesive Type			420 Acrylic
Adhesive Carrier			Clear Polyester
Adhesive Thickness		Faceside	0.095 mm (3.7 mil) [1]
Carrier Thickness			0.012 mm (0.5 mil)
Adhesive Thickness		Backside	0.095 mm (3.7 mil) [2]
Total Tape Thickness	ASTM D3652		0.2 mm (7.9 mil)
Liner			58# Polycoated Kraft
Liner Thickness			0.11 mm (4.2 mil)
Primary Liner Color			Tan

[1] Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

[2] Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 23 °C (73 °F)
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

Dwell Time	Substrate	Value
15 min	ABS	7.1 N/cm (65 oz/in) [1]
15 min	Polycarbonate (PC)	8.2 N/cm (75 oz/in) [1]
15 min	Polypropylene (PP)	4.9 N/cm (45 oz/in) [1]
15 min	Stainless Steel	7.1 N/cm (65 oz/in) [1]
72 h	ABS	8.2 N/cm (75 oz/in) [1]

Dwell Time	Substrate	Value
72 h	Polycarbonate (PC)	8.8 N/cm (80 oz/in) [1]
72 h	Polypropylene (PP)	4.9 N/cm (45 oz/in) [1]
72 h	Stainless Steel	9.4 N/cm (85 oz/in) [1]

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

Static Shear

Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	1000 g	>10,000 min [1]
70 °C (158 °F)	500 g	>10,000 min [1]

[1] 25 x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	149 °C (300 °F) [1]
Long Term Temperature Resistance	121 °C (250 °F) [2]

[1] Short Term (minutes, hour)

[2] Long Term (day, weeks)

Typical Environmental Performance

Attribute Name	Value
UV Resistance	Adhesive is resistant to oxidation and ozone when exposed to air or ultraviolet light.

Typical Environmental Characteristics

Environmental Resistance

Humidity Resistance: High humidity has minimal effect on adhesive performance. No significant reduction in bond strength is observed after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

UV Resistance: When properly applied, nameplates and decorative trim parts are not adversely affected by exposure.

Water Resistance: Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained.

Temperature Cycling Resistance: High bond strength is maintained after cycling four times through:
4 hours at 158°F (70°C)
4 hours at -20°F (-29°C)
4 hours at 73°F (22°C)

Chemical Resistance: When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids, and alkalis.

Humidity Resistance

No adverse effect on the bond after exposed to 100% relative humidity at 100°F (38°C).

Handling/Application Information

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength. To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.*
*Note: Carefully read and follow the manufacturer's precautions and directions for use when using solvents. Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

Application Equipment

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

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.

Available Sizes

Attribute Name	Width	Value
Core Size (ID)		76.2 mm (3 in)
Maximum Available Width		1372 mm (54 in)
Maximum Length	1/2 in to 63/64 in	164 m (180 yd)
Maximum Length	1 in to 54 in	329 m (360 yd)
Minimum Available Width		12.7 mm (1/2 in)
Normal Slitting Tolerance		±0.08 mm (±1/32 in)
Note		Subject to Minimum Order Requirements

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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