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.

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 →
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English-US

Last Revision Date: June, 2024

Supersedes: April, 2016

Technical Data Sheet

3M™ Scotchgard™ Multi-Layer Protective Film 1004MS

Product Description

3M™ Scotchgard™ Multi-Layer Protective Film 1004MS is an optically transparent, pressure-sensitive polyester film tape designed to protect surfaces from intentional and unintentional damage caused by scratching, etching, abrasion and graffiti. A damaged film layer can be quickly and easily removed, exposing a fresh protective sheet.

Product Features

- Multi-layer construction reduces total application and removal costs versus single layer protection.
- Thick polyester film construction prevents typical scratches from affecting layers below.
- Film protects glass from chemical etching agents such as Bath Etch™ or Armour Etch™.
- Film on glass and polycarbonate meets ASTM E162, ASTM E662, FMVSS-302 and Bombardier SMP 800-C requirements.
- Durable top-coat layer prevents light scratches caused by installation, wiping, cleaning or abrasion
- Resists the effects of outgassing when used on polycarbonate and acrylic.
- Optimized inter-layer adhesive provides firm, adequate adhesion yet fast and easy removal.
- High clarity construction provides glass-like 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 Method	Value
Adhesive Type		Acrylic
Backing		Polyester
Number of Layers		4
Total Thickness, 4 Layers	ASTM D3652	0.5 mm (19.5 mil)
Visible Light Transmission	ASTM D1003	88 %
Clarity	ASTM D1003	96 %
Haze	ASTM D1003	3 %

Typical Performance Characteristics

Substrate: Polycarbonate (PC)

Attribute Name	Test Method	Value
180° Peel Adhesion	ASTM D3330	28 oz/in

Handling/Application Information

Application Examples

• 3M™ Scotchgard™ Multi-Layer Protective Film 1004MS protects glass, polycarbonate, acrylic and other surfaces from damage due to scratching, abrasion or chemical etching. Used for protecting smooth, flat surfaces such as public transportation windows and doors, modesty panels, transit kiosks, shelters, displays, mirrors and elevators.





Application Techniques

• For best results, surface must be clean and free of dirt, debris and oils and should be applied when the surface temperature exceeds 50°F (10°C).
• Use of an application solution and 3M Heavy Duty Squeegee is suggested for easy positioning and squeegee application (3M Part No. 70-0710-4672-9).
• Removal of film layers immediately after wet application is not recommended.
• Use of film removal tool is recommended for easy peel-back of target layer.
• For detailed application instructions and tips, see 3M Technical Bulletin (70-0709-5334-7).

Application Examples

• Some acrylic and polycarbonate substrates have low surface energy coatings leading to adhesion issues. Test before use.
• Not approved as glazing material for windshields requiring conformance to Federal Code 49 CFR 571.205. This standard applies to passenger cars, multipurpose passenger vehicles, trucks, buses, motorcycles, slide-in campers and pick-up covers.
• May be used outdoors for short term use (typically <1 year) with minimal change in haze, clarity, light transmission and minimal adhesive residue left on most surfaces. Some exposure conditions (e.g. direct sun facing, higher temperatures) may shorten performance.
• Blocks more than 98% of UV light that can degrade plastics and fabrics.
• Note: Removal of film layer generates static charge.

Industry Specifications

FMVSS-302
Bombardier SMP 800-C

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 - Detailed

Sheets and Custom Sizes

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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