January 2018
Supersedes Data Sheet dated October 2014

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3M™ Blackout Film F577

Technical Data Sheet



3M™ Blackout Film F577 is a high performance Blackout Film intended for application to a wide range of interior and exterior surfaces, such as window frames, window sashes, window extensions, body and door pillars, dashboard components and lids (metal or plastic). The film has a textured surface and matte black appearance. It is highly conformable and scratch resistant and has excellent weathering performance.

The air-bleedable feature of the adhesive layer has been designed for air bubble free application of the blackout film while still providing strong, reliable adhesion under extreme conditions of environmental stress such as climatic change and humidity cycling.

3M Blackout Film F577 features, advantages, and benefits include:

- Effective design tool for brand differentiation and visual impact
- Reduction of time requirements and expense of certain paint processes and related steps
- Potential for reduction in production costs by supplying die-cut, pre-masked parts and simple dispensing tools
- Appearance that meets stringent automotive OEM design specifications

Applications



Door Pillars and Window Sashes



Pillars

Product Construction

Application Tape (optional)
Black Film Layer
Adhesive Layer
Poly-coated Layer



Physical Properties

Characteristics	Results	Test Method
Nominal thickness (film +adhesive)	190 µm (7.5 mils)	3M DCC654
Tensile Strength	19 MPa	3M DCC654
Elongation	125 %	3M DCC654

Product Characteristics

Characteristics	Results
Surface	Random medium texture
Color	Matte black
Film	PVC
Adhesive	Pressure sensitive modified acrylic with adequate initial adhesion and strong, reliable final adhesion to a wide variety of automotive surfaces in all types of environmental conditions
Liner	Poly-coated paper liner for easy film release and precision cut edges

Performance Properties

Performance tests are run using standard test procedures in 3M laboratories. These values presented are typical and not to be used for specification purposes.

Test Description	Results	Test Method
180° Peel Adhesion (Standard Paint)		
30 minutes @ SLC (Standard Lab Conditions)	400 N/m	3M DCC654
48 hours @ SLC	500 N/m	3M DCC654
7 days at 80°C	900 N/m	3M DCC654
Thermal Cycling	700 N/m	3M DCC654
Environmental Simulations		
Thermal Cycling – 5 cycles	Pass	3M DCC654
Salt Spray – 7 days	Pass	3M DCC654
Fluid Resistance		
Fuel Immersion Resistance (5 min submerged followed by 5 min @ SLC, 3 cycles)	Pass	3M DCC654
Solvent Resistance (25 rub cycles): Window washer fluid, Antifreeze, SAE20 oil, Diesel fuel	Pass	3M DCC654
High Pressure Wash (1,000 PSI)	Pass	3M Internal
Acid Resistance (three drops 1% HCL, 30 min)	Pass	3M DCC654
Weathering Exposure		
Xenon Accelerated 2640 KJ (SAE J2527)	Pass	3M DCC654
Natural Weathering (Florida and Arizona) – 24 months	Pass	3M DCC654

Application Conditions

Recommended temperature range of 24 ± 6°C for part, vehicle body, and ambient conditions. Heat or cool as needed to maintain required temperature range. Clean application area is required.

Shelf Life

One year from date of receipt by customer when stored in original packaging at 22 ± 4°C and at a maximum moisture of 60% RH.

Please refer to the product label and Article Information Sheet (AIS) for health and safety information before using.

Contact Information

The information provided in this technical document is intended as a guide for these products. For more information or help in selecting a 3M product for an application, please contact your 3M technical service representative or call 1-800-328-1684.

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