



3M™ Fasara™ Glass Decorative Films

Description

Fasara films are a tough, dimensionally stable, translucent polyester film, intended for use in creating window graphics and internally-illuminated displays applied to flat, glass surfaces. Can be removed when required.

Key Features

- A range of decorative effects: acid etched, sandblasted, rice paper
- Low gloss reduces glare
- Blocks up to 99% of UV light reduces fade on fabrics
- Increases personal safety from flying glass
- Removable without the use of heat and/or chemicals
- Up to 5 years 3M™ MCS™ Warranty
- Six patterns within the range

Applications and Uses

Fasara films are intended for use in creating window graphics and internally-illuminated displays applied to flat, glass surfaces

Note: Fasara Films are not intended, nor warranted, for application to the first (front) surface of exterior windows.

Limitations of End Uses

We do not normally warrant other applications, but please contact us to discuss your needs or let us suggest other 3M products.

Specifically, we do not warrant this film for the following:

- Screen printing
- Application between two sheets of glass
- Application to corrugated surfaces with/without rivets
- Exposure to petrochemical spills
- 3M Commercial Graphics Division products are not tested against automotive manufacturers' specifications and are, therefore, not warranted for use in fabricating graphics for automotive Original Equipment Manufacturers (OEM).

Product Line

This product is available in the following dimension:
1.270 m x 30.48 m
Please contact the 3M Sales Office for stock available and lead times.

Product Number	Colour / Pattern
H2EM LA Lausanne	Textured Effect
SH2EM OS Oslo	Textured Effect
SH2PT SA Sagano	Rice Paper Woven Effect
SH2PT YA Yamato	Rice Paper Marble Effect
SH2DG ST Seattle	Striped Effect
SH2DG RM Rome	Chequered Effect

Compatible Products

Application Tapes

- 3M™ Pre-mask Tape SCPM -19
- 3M™ Pre-space Tape SCPS -100

Main Characteristics

Property	Description
Film Type	Polyester
Film Opacity	Translucent
Adhesive type	Pressure sensitive, removable
Adhesive color	Clear
Liner	Transparent synthetic
Suitable application surface	Flat only
Suitable application substrates	Glass
Application temperature range	10°C – 38°C
Removal	5 yrs without heat and/or chemicals
Removal temperature	10°C

Other Characteristics

Product	Visual Light Transmission (%)
SH2EM LA Lausanne	82
SH2EM OS Oslo	77
SH2PT SA Sagano	53
SH2PT YA Yamato	52
SH2DG ST Seattle	53
SH2DG RM Rome	53

Chemical and Physical Properties

Values given are typical and are not for use in specifications. If a custom specification is desired, a request should be submitted through your sales representative. The data given below is for unprinted film.

Chemical Resistance

- Resists mild acids, mild alkalis, and salts
- Excellent water resistance

Physical Properties

Property	Metric Units
Thickness (film only)	0.075 mm
Thickness (film plus adhesive)	0.097 mm
Tensile Strength (ISO 1184-1983)	at 23°C 191 N/25 mm
Applied shrinkage	No detectable shrinkage
Service temperature range	-29°C to +80°C

Adhesion (FTM1)

SH2EM OS	8 N/25 mm
SH2EM LA	8 N/25 mm
SH2PT SA	12 N/25 mm
SH2PT YA	12 N/25 mm
SH2DG ST	8 N/25 mm
SH2DG RM	8 N/25 mm

These adhesion values are 24 hours after application.

Note: ISO refers to standards of the International Standards Organisation. FTM (Fimat Test Methods) refers to test methods listed by Fimat, the Association of European Tape Manufacturers.

Warranty

Only a Scotchprint® Graphics Authorised Manufacturer or 3M™ MCS™ Qualified Manufacturer can produce 3M™ MCS™ - Warranted Graphics. The warranty period is based on field experience and exposure tests. When the graphics are processed and used according to the 3M recommendations, they should have the performance life shown below. The actual performance depends on the:

- Selection and preparation of the substrate
- Application methods
- Exposure conditions
- Cleaning methods

Warranted Durability

These films are warranted for 5 years in all zones.

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Zone 1: Northern and Central Europe

Austria, Baltic States, Belgium, Bosnia, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greenland, Hungary, Iceland, Ireland, Italy (North of Rome), Liechtenstein, Luxembourg, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland, UK

Zone 2: Mediterranean Europe

Albania, Bulgaria, Corsica, Crete, Greece, Italy (South of Rome), Macedonia, Malta, Portugal, Russia, Sardinia, Spain, Turkey

Zone 3: Middle East and Africa

Afghanistan, Bahrain, Cyprus, Dubai, Israel, Kuwait, Iran, Iraq, Jordan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, UAE, Yemen, Algeria, Angola, Benin, Botswana, Burkina, Burundi, Cameroon, CAR, Chad, Congo, Djibouti, Egypt, Eritrea, Gabon, Ghana, Guinea, Ivory Coast, Libya, Liberia, Madagascar, Mali, Mauritania, Morocco, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somali Republic, South Africa, Sudan, Togo, Tunisia, Uganda, Zaire, Zambia, Zimbabwe

Fabrication

This bulletin does not contain detailed Electrocut, processing or application procedures for the subject products. The appropriate Instruction Bulletin(s) may be obtained by contacting your 3M sales representative or 3M Technical Service. Films Sagano, Yamato, Seattle and Rome have a patterned effect. In order to ensure a uniform appearance, after application, it is essential that the films are applied in the same orientation, using the **water and detergent method. Due to the special liner of FASARA low speed cutting/weeding is required. When cut into meters the graphics need to be wound carefully on a core for delivery to the customer.**

Caution

Prevent personal injury due to slipping. Transparent liners can be slippery and difficult to see on walking surfaces. Immediately dispose of the waste liner.

Minimum Cutting Heights

Users are encouraged to do their own evaluation for the specific heights and design detail required for a particular job. The variable characteristic of electronically controlled cutting equipment warrants that users verify their specific requirements. Factors that affect cutting quality and capability that the user needs to consider are:

1. Sharpness of knife blade: dull blades create a serrated look on the edge of the cut film.
2. Weight on knife blade:
 - Ideal weight will result in a slight scoring of the liner.
 - Too light a weight will cause incomplete cutting through film and adhesive.
 - Excessive weight results in cut liner, blade dragging which will accelerate blade wear.
3. Temperature and relative humidity are minor considerations, but extremes, as well as rapid fluctuations, are to be avoided.
4. Stock film should be stored in the same environment as the cutting equipment.
5. Stroke width of characters, style of serifs or extensions and small details of scanned or digitized artwork.

Weeding

Any excess film should be weeded (removed) as soon after cutting as practical. This is to minimize the effect of possible adhesive flow 24 or more hours after cutting.

Pre-masking/Pre-spacing

When these films are used for complete coverage pre-masking is not required. If, however, it is necessary to protect the film during shipment and application 3M™ Pre-mask Tape SCPM-19 may be used.

Conditions	3M Application Tapes
General Premasking	3M™ Pre-space Tape 3M™ SCPS - 100

Application

Refer to the Instruction Bulletin 5.8.1 Scotchshield™ for application details. **Due to polyester characteristics of FASARA films slow weeding is recommended.**

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline).

Removal

Film can be removed without the use of heat and/or chemicals.

Shelf Life

The shelf life of the film is 2 years and should be applied within 2 years of the receipt of film if unprocessed. Processed film should be applied within 1 year of processing and within 2 years of receipt of the film.

Health & Safety

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department or your local 3M Technical Service representative.

Transport of Finished Graphics

When cut into meters the material needs to be wound carefully on a core for delivery and shipment to the customer.

Important Notice to Purchaser

The 3M products described in this publication are covered by a 3M warranty and limitation of liability.

3M's warranty provides that if 3M finds that goods are defective in material or workmanship they will be replaced or the price refunded at 3M's option but note that 3M does not accept liability for other direct losses (except for personal injury or death) or consequential losses relating to defective products or from information supplied by 3M. Purchasers and users of 3M products, and not 3M supplying companies, are always solely responsible for deciding on the suitability of the 3M product for their required or intended use.

Related 3M Literature

Listed below is related 3M Technical Literature which may be of interest:

Subject	Bulletin No.
Instruction Bulletins	
Design of markings	2.1
Pre-masking and pre-spacing	4.3
Storage, Maintenance and Removal	6.5
Surface preparation	5.8
Application	5.8
3M™ MCS™ Warranty Bulletin	

Glossary of Terms

Matched Component System™ or MCS™

The system pursuant to which Finished Graphics are produced by a Graphic Manufacturer using only 3M Products and components and manufactured in accordance with 3M's Product or Instruction Bulletins, 3M Specification Document and using 3M Approved Technologies.

Removable Adhesive

Films with removable adhesive can be lifted easily from most suitable substrates and may require the application of heat to add the process.

Important Notice

This bulletin provides technical information only. All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

For Further Assistance

For help on specific questions relating 3M Commercial Graphics Division products, contact your local 3M Technical Service representative or

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