

3M™ Dichroic Glass Finishes DF-PA

Product Bulletin

Product Description

3M Dichroic Glass Finishes DF-PA Film offers a way to create unique, ever-changing colour to interior building surfaces. Influenced by the light source, this transparent film provides a dichroic colour effect, meaning it appears to change colour when viewed at various angles.

The “Blaze” films shift colours in the warm tones of cyan/blue/magenta and red/gold colour regions of the spectrum.

The “Chill” films shift colours in the cool tones of blue/magenta/yellow and gold/blue colour regions of the spectrum.

The film has a clear, pressure sensitive adhesive and the product is suitable for application to glass. In addition, a tough surface layer helps resist scratching and abrasion during normal use.

Product Line

DF-PA Blaze
DF-PA Chill

Product Characteristics

These are typical values for unprocessed products. Contact your 3M representative for a custom specification.

Product Composition

Film material	Multi-layer polyester, with tough coated polyester top film
Surface finish	Gloss
Adhesive type	Clear Acrylic Pressure Sensitive
Liner type	Silicone coated Polyester

Thickness (film)	Chill	112 µm
	Blaze	117 µm

Physical Performance

Adhesion	Approx. 33 N/25mm	FTM1 180° peel, substrate:glass; °C/50% RH
Transmissive colour	Chill	Blue/Magenta/Yellow
	Blaze	Cyan/ Blue/Magenta
Reflective colour	Chill	Gold/Blue
	Blaze	Red/Gold
UV Transmission	Blocks up to 97% of UV light	

Application

Application temperature	+12 °C to +38 °C	(air and substrate)
Application method	Wet	
Service temperature	-29 °C to +65 °C	
Surface/Substrate type	Flat glass	
Electronic Cutting	Not recommended	
Printing	These are not printable films	

For further information, refer to 3M Instruction Bulletin 5.8.2 Application and Removal of 3M™ Dichroic Glass Finish DF-PA

Removal of graphic

Removable without heat and/or chemicals. It is recommended that removal is carried out at room temperature (15°C – 20°C). NB Some adhesive residue may remain after removing the film. No liability is given for ease or speed of removal. For further information, refer to 3M Instruction Bulletin 5.8.2 Application and Removal of 3M™ Dichroic Glass Finishes DF-PA.

Warranty	Unprocessed film	The following warranty/durability data are given for unprocessed film only. This warranty does not apply to film problems caused by defective application.
	Exposure Types	(Vertical = the face of the graphic is $\pm 10^\circ$ from vertical.)
	Indoor application/Vertical 3 years	Film applied to second surface (interior) of a glazed unit.
	Indoor application/Vertical 5 years	Film applied to interior glass partitions with no direct UV light.
Durability	Indoor application/Vertical 7 years	Interior applications (no direct UV light) – partition glass.

Limitation of end uses 3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs.

Film applied to Surfaces other than glass.
 Contoured/curved glass.
 Other than interior applications.
 In between two sheets of glass.
 Surfaces which are not clean and smooth.

Important Notice: 3M Architectural Markets products are not tested against automotive manufacturer specifications.

Safety Glass has a tendency to absorb heat when exposed to sunlight. The degree of absorption across the glass can vary due to a variety of circumstances such as partial shading, heating and cooling vents, and the insulating characteristics of the frame. The temperature difference across the glass, if great enough, can produce stresses which may cause glass breakage. The ability of glass to resist breakage due to temperature stress is affected by size, thickness, quality of cut, edge treatment, tinting of the glass, and the frame design. 3M therefore accepts no liability for glass breakage.

Maintenance and Cleaning Regular cleaning will help maintain the product's appearance; we would recommend this is carried out every 30 days.

- Remove dust and grit, using a soft, damp cloth.
- To clean the films, use water and a nick-free squeegee, moving the squeegee in only one direction.
- Where the film is soiled, use a cloth with a mild liquid detergent and water solution; rinse off the detergent solution with clean water.
- Do not use ammonia, chlorine, or organic based cleaning products, polishing or cleaning compounds, sponges, brushes or electric polishing equipment.

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 on 01344 858000.

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.

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