

3M™ Display Surface Products

Description

3M™ Display Surface Products are a family of optically clear, durable protection, and privacy products. The products are designed to provide visual enhancement, increased durability and protection from damage. Multiple options are available for low reflection gloss films, anti-glare films, and durable glossy films. The films have a low tack, residue-free adhesive for easy application and removal. Products with the Scotchgard™ easy-to-clean layer help make cleaning easier than ever.

3M Display Surface Products are appropriate for ruggedized mobile computers as well as consumer electronics including mobile phones, tablet PCs, personal data assistants, and mobile media devices. 3M Display Surface Products are robust enough to protect the underlying display, yet thin enough to minimize any effect on touch screen sensitivity.

Typical Application

3M Display Surface Products can be utilized in several surfaces of the display. The most common location is as the outermost element of the display. This means the film would be laminated to the top of the display module, or to the front of a touch screen or digitizer if the device has one.

3M Display Surface Products are thin enough that they should not significantly affect the sensitivity of most touch screen technologies. However, there may be situations where 3M Display Surface Products should first be tested by lamination to the front of the touch screen. Customers are responsible for field testing on their device to determine effectiveness.

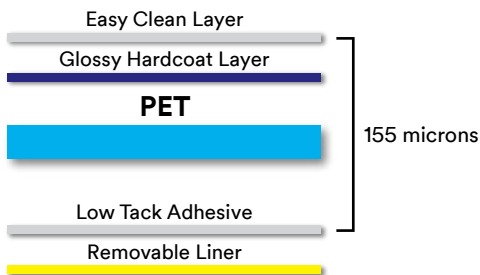


In order to maximize display enhancement, 3M Display Surface Products must be in intimate contact (optically coupled) with a display surface. This means that its adhesive layer must always be laminated to a surface, and not mounted as a free-floating film.

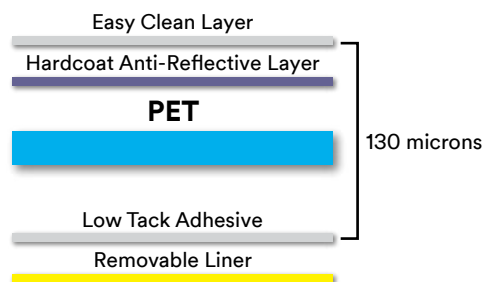
Constructions

The figures below illustrate the film's basic constructions. All dimensions are approximate, and the figures are not drawn to scale.

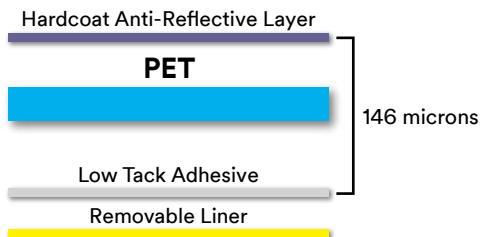
Glossy Protection Film (GLS 200)



Glossy Low Reflection Film (GLR 320)



Anti-Glare Protection Film (AFG 6200)



Lamination

It is recommended that a squeegee or roller be used to laminate the film to the surface. If a squeegee or roller is not used, allow the leading edge of the adhesive to wet out naturally and without assistance. Bubbling sometimes occurs during hand lamination. Large bubbles can be pushed towards the edge and out from under the film or can be eliminated by lifting the film and re-laminating. Small bubbles will diffuse through the adhesive and disappear after several hours dwell time (excluding Glossy Protection Film).

General Converting, Assembly and Handling Recommendations

During converting operations, both the front and rear protective liners should remain on the film. Die cutting is the recommended form of converting and will result in the cleanest edges; shear cutting and laser cutting may also be acceptable. Whatever method used, you should ensure that the part has clean, crisp edges without any raggedness or other damage. It is recommended that you die cut through the adhesive side liner to the film.

Remove protective liner, by tacking near an edge or corner with a piece of aggressive tape and pulling gently.

Be aware that handling any polymer film can generate electrostatic charges, which can attract dust and debris.

Remove any loose debris from the film by using compressed air.

Avoid fingerprints and debris by wearing clean latex gloves and holding the product at the edges.

Keep the area very clean to lessen the likelihood of debris contamination. Maintaining class 1000 clean-room conditions is recommended.

Using anti-static measures, such as ionized air blowers whenever possible, is recommended.

As always, protect the film, especially the edges, from any undue shock or stress.

Shelf Life and Storage (prior to application)

Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be placed on top of it to avoid damaging the product. Ambient temperature and humidity should be controlled to 10–30°C at 35–65% relative humidity.



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Availability

For availability, please contact our customer service group at 1-800-553-9215, DMSDcustomerservice@mmm.com. Or visit our website www.3m.com/displayenhancement.

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Date: 04/21/20

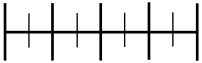
Printed Colors – Front:



Printed Colors – Back:



Match Colors:

Scale:  1 Inch

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