

3M™ Reflective Sheeting 610 Series

Health and 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.

Description

3M™ Reflective Sheeting Series 610 is an enclosed lens sheeting with a clear pressure sensitive adhesive and easy release liner, intended for production of temporary signs and pressure sensitive stickers which have the same appearance in the daytime and at night when viewed by retroreflected light. Series 610 sheeting has a standard liner and is commonly used for screen printed graphics. 3M 990 screen print inks may be used with this sheeting for the production of temporary graphics.

Series 610 meets the initial requirements of a class RA1 reflective sheeting and may be used to make signs that conform to BS 8442: Miscellaneous road traffic signs and devices – requirements and test methods.

Colour	Product Code
White	610
Yellow	611

Colour and luminance Factor

The colour and luminance factors of the Series 610 retroreflective sheetings conform to the values in table 1 below.

Table 1 Colour and luminance factor

Colour	1		2		3		4		Lum. Factor β
	x	y	x	y	x	y	x	y	
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	≥ 0.35
Yellow	0.522	0.477	0.470	0.440	0.427	0.483	0.465	0.534	≥ 0.27

Application

3M 610 Series is a pressure sensitive sheeting which should be applied at room temperature (15 °C or higher) using a mechanical squeeze roll applicator at moderate pressure.

Coefficients of Retroreflection

When measured in accordance with the procedure specified in CIE 54.2, using CIE standard illuminant A, the initial coefficients of retroreflection expressed in candelas per lux per square metre conform to the values in Table 2.

Table 2
Minimum Coefficient of Retroreflection
(cd/lux/m²)
at 0.2° Observation angle

Sheeting colour	Entrance Angle	
	5°	40°
610 white	70	10
611 yellow	50	7

Storage

3M Reflective sheeting should be stored in a cool, dry area, preferably at 18-24°C and 30-50% relative humidity and should be applied within a year of purchase.

Rolls should be stored horizontally in the shipping carton. Partially used rolls should be returned to the shipping carton or suspended horizontally from a rod or pipe through the core. Unprocessed sheets should be stored flat.

Important Notice to Purchaser

Technical information provided by 3M is based on experience and/or tests believed to be reliable but its accuracy is not guaranteed and the results may not be relevant to every user's application. 3M does not accept responsibility or liability, direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use.

Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

All questions of liability relating to 3M products are governed by the seller's terms of sale subject where applicable to the prevailing law.

If any goods supplied or processed by or on behalf of 3M prove on inspection to be defective in material or workmanship 3M will (at its option) replace the same or refund to the Buyer the price of the goods or services.

Except as set out above, all warranties and conditions, whether expressed or implied, statutory or otherwise are excluded to the fullest extent permissible at law.

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