



# 3M™ Reflective Sheeting

## Description

3M Reflective Sheeting is a durable flexible retroreflective sheeting consisting of spherical lens elements enclosed within a transparent resin having a smooth flat outer surface. This sheeting retains its high reflectivity when totally wet by rain. a high tack pressure sensitive adhesive. The adhesive is protected by a removable liner.

## Photometric Requirements

The values in **Table 1** are minimum coefficients of retroreflection and are expressed in candelas per lux per square metre (cd./lux/m<sup>2</sup>) Measurements are made in accordance with CIE publication 54.

Entrance Angle	Observation Angle	White*	Yellow*
5°	12'	70	50
	20'	50	35
	1.0°	5	3
15°	12'	55	35
	20'	45	20
	1.0°	3	2
40°	12'	10	7
	20'	9	5
	1.0°	1.5	0.5

(cd./lux/m<sup>2</sup>)\*

The sheeting shall maintain 90% of the values in Table 1 with water falling on the sheeting.

## Colour Requirements

The chromaticity co-ordinates and luminance factors shall comply with the limits of **Table 2**. Measurements shall be made in accordance with the provisions of CIE Publication no. 15 using CIE Standard Illuminant D65 and CIE 45/0 geometry.

**TABLE 2: CHROMATICITY COORDINATES**

Colour	1		2		3		4		Min Lum. Factor
	x	y	x	y	x	y	x	y	
White (090)	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	0.35
Yellow (091)	0.545	0.454	0.487	0.423	0.427	0.483	0.465	0.534	0.27

## Application

3M Reflective Sheeting has a high-tack pressure sensitive adhesive especially designed for application to plastic and rough substrates, as well as recommended metal substrates. It can also be applied at lower temperatures (5°C and above). Application by hand or by mechanical or hand squeeze roll applicator is recommended.

These sheeting's are most easily handled and applied when air and substrate surface temperatures are between 8°C and 28°C. To avoid cracking, hand application should be done carefully with a plastic applicator or a 5cm rubber hand roller.

To minimise the possibility of wrinkling, air entrapment or cracking when applying large emblems, pre-masking or pre-spacing with 3M application tape is recommended for ease of handling.

These reflective sheeting's are suitable for use on flat surfaces. Although flexible, they may not conform to embossed or compound curved surfaces. Trial application should be made to determine the suitability of the material for this purpose.

## Maintenance

Clean the sheeting surface by rinsing and/or washing with a mild, non-abrasive detergent and water, using a soft brush or cloth. A solvent such as paraffin will remove tar, oil or road film.