3M[™] Engineer Grade Prismatic (EGP) Reflective Sheeting

Product Description

3M Engineer Grade Prismatic Reflective Sheeting is a non-metalised microprismatic sheeting for permanent road traffic signs meeting the performance requirements of BS EN 12899-1:2007 Class RA1.

Application/Suitability

EGP is designed for use on permanent road traffic signs and delineators, street nameplates, safety markings and other general signing. The sheeting is supplied with a pressure sensitive adhesive which is protected by a plastic liner. EGP meets the colour and performance requirements of BS EN 12899-1:2007

Effective Performance Life

3M Engineer Grade Prismatic Sheeting, when correctly applied to approved substrates by 3M approved signmakers will provide a seven year effective performance life, with a brightness retention after that period of at least 70% of the photometric requirements in Table 8 of BS EN 12899-1:2007

Benefits

- Durable provides a seven year effective performance life.
- As part of the 3M Matched Component System[™] for assured durability, can be imaged by digitally printing with 3M[™] Piezo Ink Jet Series 8800UV, by screen printing with 3M[™] Ink Series 880i, using 3M ElectroCut[™] Film Series 1170 or 3M Scotchcal[™] Non Reflective Films.
- Improved legibility, due to better colour contrast
- Enhanced brightness by day and by night
- Better visibility in all weather conditions
- Environmental benefits (further information can be found under Environmental/Energy Advantage section overleaf.)



Product Construction/Specification

EGP is a multilayer, non-metallised microprismatic sheeting, supplied with a pressure sensitive adhesive which is protected by a plastic liner.

The sheeting complies with all relevant clauses of BS EN 12899-1:2007 for Class RA1 materials and the photometric requirements as set out in the table below:

	Observation Angle	Minimum Coefficient of retroreflection (cd/m2/lx)						
Entrance Angle		White	Yellow	Red	Interstate Green	Blue	Brown	Orange
-5°	12'	70	50	14,5	9	4	1	25
	20'	50	35	10	7	2	0,6	20
	1°	5	3	1	0,5	#	#	1,2
15°	12'	30	22	6	3,5	1,7	0,3	10
	20'	24	16	4	3	1	0,2	8
	1°	2,5	1,5	0,5	0,3	#	#	0.5
40°	12'	10	7	2	1,5	0,5	#	2,2
	20'	9	6	1,8	1,2	#	#	2,2
	1°	1,5	1,0	0,5	0,2	#	#	#

indicates "value greater than zero but not significant or applicable".

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Application Surface

3M Engineer Grade Prismatic Sheeting is recommended for use on properly prepared flat aluminium and British Steel HP200 substrates. For recommended substrate preparation please request Instruction Bulletin 1.7. Users are urged to carefully evaluate all other substrates for adhesion and sheeting durability. Sheeting failures caused by the substrate or improper surface preparation, are not the responsibility of 3M.

Colours

3M[™] Engineer Grade Prismatic Sheeting is available in the following colours: White, Yellow, Red, Blue, Interstate Green, Brown (available from November 2010), Orange (available from November 2010)

Availability

For full product information please refer to the website or Customer Service Centre.

Environmental/Energy Advantage

EGP is designed to minimise environmental impacts from manufacturing to disposal.

The manufacturing process for 3M Engineer Grade Prismatic (EGP) Sheeting has the following advantages over making glass beaded Class RA1 sheeting;

- reduces VOC (volatile organic compound) air emissions by 97%,
- reduces energy consumption by 77%
- reduces solid waste by 46%.

Product Information

For more detailed technical information please request the relevant product bulletin or download it from the website.



For further information or samples, please contact: 3M Customer Service Centre on: 0161 237 6394 Or if within Republic of Ireland on: 01 280 3555



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