

# A stunning innovation however you look at it



Once in a while a new product innovation comes along that stands in a league of its own.

That's what you have with 3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting, a microprismatic reflective sheeting that gives outstanding performance at every viewing angle and every viewing distance. By using Diamond Grade DG<sup>3</sup> Reflective Sheeting you'll be giving drivers the best chance of reading and understanding your road signs. They'll see them sooner and they'll see them for longer, giving drivers those vital extra moments to make their decisions and to drive more safely.



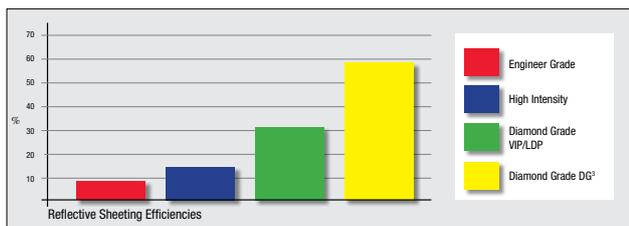
## The power of two – cubed!

Diamond Grade DG<sup>3</sup> Reflective Sheeting builds on the powerful performance of 3M's established 3M™ Diamond Grade™ LDP and VIP Reflective Sheatings. But whereas these two materials use truncated cube corners to reflect light back to drivers, Diamond Grade DG<sup>3</sup> Reflective Sheeting uses more efficient full cube corner optics

The revolutionary full cube corner technology combines the performance of both Diamond Grade VIP and LDP sheetings to produce a reflective sheeting that provides exceptional performance in the short, medium and long viewing distances.

The result is that more light gets directed back to the drivers at all driving positions and distances, making Diamond Grade DG<sup>3</sup> reflective sheeting the perfect choice for every signing application.

### Reflective Sheeting Efficiencies



## Clearly a better solution

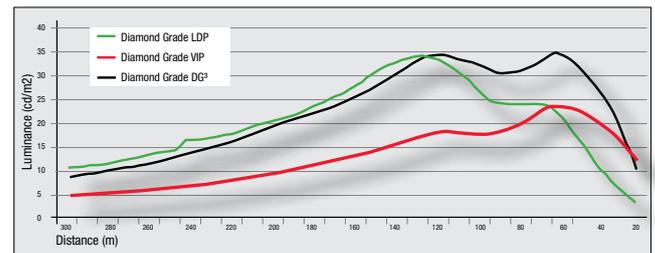
In daylight, low light, night-time and all weather conditions, 3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting is brighter, clearer and easier to see.

Diamond Grade DG<sup>3</sup> Reflective Sheeting can also be used for additional signs in existing signing schemes, as by day it looks the same as Diamond Grade VIP and LDP sheetings and offers improved performance at night.

What's more, there's a healthy 12 year warranty, which is backed by 3M's 70 years of experience in developing and manufacturing retroreflective sheetings. That's experience you can call on directly, whenever you need our help or advice.

So as a sign specifier, or a sign-maker, 3M will be with you all the way to get the best results from your use of Diamond Grade DG<sup>3</sup> Reflective Sheeting.

Left-hand Shoulder Sign Viewed From Car with VW Passat headlights\*



\*Approximated. Based on 3M data for a left shoulder mounted sign



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## Certification

European Technical Approvals (ETA) are used to verify the compliance of microprismatic sheetings with one or more reflective performance classes and to verify the reliability of their manufacture. It is only via ETAs that microprismatic sheeting may be CE marked. ETA's are included in the normative part of BS EN 12899-1:2007. ETA's are used to comply with BS EN 12899-1:2007:

- By specifiers to select certified sheetings
- By certification bodies for CE marking of microprismatic signs

DG<sup>3</sup> has been granted ETA 07/0272 in which it meets Classes 3A, 3B, 3 and is CE marked. This unique product combines the long distance sign brightness performance (class 3A) with the medium distance and truck driver sign brightness (class 3B).

DG<sup>3</sup> also meets the performance requirements of BS 8408 and has been rated in accordance with that standard.

## Specification

Signs using DG<sup>3</sup> may be specified:

- Using ETA classes of performance for microprismatic reflective sheeting
- Using sign brightness performance using BS 8408 performance indices.

## Diamond Grade DG<sup>3</sup> Reflective Sheeting - the best for every driver

Diamond Grade DG<sup>3</sup> Reflective Sheeting is unique. Its use of full cube corner optics means it can outperform every other microprismatic material across all viewing distances. Combined with 3M's expertise, that makes Diamond Grade DG<sup>3</sup> Reflective Sheeting the right choice for:

- Use on motorways and high speed trunk roads
- Use in town centres and at complex junctions
- Use at blindspots and roundabouts
- Directional signs
- Regulatory & Warning signs
- Optimum performance in daylight and darkness
- Assisting disadvantaged drivers, such as the elderly and drivers of heavy goods vehicles
- Protecting your investment
- And most importantly, improving road safety.

## Environmental Benefits

Compared to the manufacturing processes used to produce encapsulated lens sheeting, the manufacturing process for 3M prismatic sheeting:

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

The 12 year warranted performance life of DG<sup>3</sup> reflective sheeting minimises sign replacement and disposal costs. DG<sup>3</sup> may also eliminate the need for external illumination on some signs.

