3M is a diversified manufacturer of industrial and consumer products with an outstanding reputation for quality and service.

The Traffic Safety Systems Group of 3M pioneered the use of retroreflective materials for the traffic safety industry and has for over 50 years produced innovative and successful traffic safety products.

## 3M<sup>™</sup> Marker Series 290 Reflecting Road Stud



√quality √durability √performance



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## High-performance

## delineation guides drivers to greater safety

Sealed body

components

Finger grips

The result of a continuous search for ways to improve road safety, the  $3M^{\scriptscriptstyle{\text{M}}}$  Marker Series 290 is an improved permanent surface mounted reflecting road stud that has been approved by the Department for Transport for use in any position on all road surfaces.

3M has combined innovative technologies such as advanced optical design, hard ceramer coatings and computer-aided construction design to produce a highly visible, long-lasting system that stands a cut above existing road studs.

Superior design provides more

reliable visibility

3M Series 290 studs act as extremely valuable lining supplements. They compliment road markings and stand out at night to alert motorists to road changes such as bends and exits and improve lane line guidance. Designed for application on all asphalt and concrete type road surfaces, these markers provide highly effective, long-life visibility - at night and particularly in wet weather.

Available in white, amber, red and green, the marker's high-performance lens yields high brightness retroreflected light when illuminated by car headlights, with reflective values in excess of the requirements of BS EN1463 Part 1. Series 290 studs feature a tough polycarbonate lens with microprismatic optical technology.

This improved ceramer-coated lens is highly resistant to the abrasion and cracking, which can reduce the performance of a standard lens. In effect, the marker yields greater durability, increased brightness and high-retained

retroreflectivity.

The Series 290 stud gives maximum impact resistance. When tested according to ASTM standards, the marker body displays no cracking or breakage using a 1000 gm weight from a height of 1 metre.

Tough construction gives

Flex-resistant

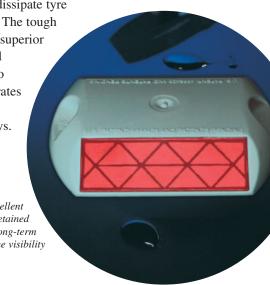
base

## long-lasting performance

The computer-aided body design combined with innovative materials give the Series 290 stud its strength. Manufactured from a high-impact-resistant polycarbonate resin, the

inner-ribbed contour of the stud is shaped to dissipate tyre impact, increase strength and reduce damage. The tough polycarbonate reflective lens is coated with a superior protective material that combines ceramic and polymeric elements, adding more resistance to abrasion. The result is a marker that demonstrates high-impact strength and holds up longer on today's heavily trafficked roads and motorways.

Increased brightness, excellent wet reflectivity and high retained retroreflectivity provide long-term night time visibility



3M Marker Series 290

The studs are available in all UK and Ireland colour combinations.

Abrasion-resistant ceramer coating

Tough polycarbonate micro-prismatic lens

Shape & weight make application easier

Moulded into its superior body design, finger grips aid the application process. The Series 290 stud is lightweight and is applied with hot melt bitumen adhesive. 3M offer a full range of road marking products and technical help to assist you with application. For more information on 3M's road marking products, contact your 3M Traffic Safety Systems representative.

3M 290 studs are classified as being **Type P3A** studs, (i.e. Permanent, Plastic reflector with abrasion resistant layer, non-depressible) and **Class PRP1 Type 2** retroreflectors according to EN1463 part 1:1998. 3M 290 studs achieved the highest possible classifications in road test performance as per EN1463 part 2:2000; **Class S1** (Road Presence) • **Class R1** (Night-time visibility).