



What is regulation ECE104?

- ECE104 is a regulation that establishes guidelines for the use of retro-reflective safety markings on heavy goods vehicles operating on our roads.
- ECE104 is already in force and mandatory in several countries e.g. Italy, Germany, Netherlands and South Africa.
- The markings need to be between 50mm to 60mm
- The reflective markings clearly outline the rear and sides of the vehicle, making the vehicle highly visible at up to 1000 metres at in low light conditions

Why is it being introduced?

Quite simply to save lives!

Research has demonstrated that outlining the contours of vehicles with high visibility safety marking tape significantly reduces the number of accidents involving long and heavy vehicles. The visibility of a vehicle is increased leading to a better safety record for vehicle operators and other road users.

A reduced accident rate means a reduced repair bill, which equally saves costs. It also improves corporate image by having a better safety reputation and safety record.

When is the regulation being introduced?

From July 2011 all newly registered vehicles which fall under certain vehicle categories operating in the UK will need to be equipped with side and rear reflective markings which meet the requirements of ECE104. Other European countries will also be introducing the regulation. Markings are encouraged to be applied as soon as possible to help reduce accidents save lives and show commitment to best practice.

Which vehicles will be affected?

The vehicle categories that will be affected are:

N2 - Vehicles designed and constructed for the carriage of goods and having a maximum weight exceeding 7.5 tonnes but not exceeding 12 tonnes.

N3 - Vehicles designed and constructed for the carriage of goods and having a maximum weight exceeding 12 tonnes.

O3 - Trailers with a maximum mass exceeding 3.5 tonnes but not exceeding 10 tonnes.

O4 - Trailers with a maximum mass exceeding 10 tonnes.

Where do you apply the marking tape?

Rear of the Vehicle

- A complete contour line marking (box) needs to be applied
- The conspicuity marking should be as close as practicable to the edge of the vehicle and should equate to at least 80% of the overall width of the vehicle
- Red and yellow marking tape only - red is the UK preference

Side of the Vehicle

- There are two options: a complete contour line marking (box) or a partial contour line marking (corner ticks)
- Partial contour markings are the minimum requirement
- The marking tape shall equate to at least 80%* of:
 - for motor vehicles, the length of the vehicle (excluding the cab)
 - for trailers, the length of the vehicle (excluding the drawbar)
- The length of the upper corner marking tape must be a minimum of 25cm in each direction
- Yellow and white marking tape only - yellow is the UK preference

*down to 60% or 40% for difficult or especially difficult applications

Front of the Vehicle

- It is optional but advisable to use white marking tape on the front of the vehicle

Complete Contour Markings



Partial Contour Markings





Why choose 3M reflective vehicle marking tape?

3M is a \$25 billion diversified technology company which, since 1902, has been creating innovative products that help make the world healthier, safer and more productive. 3M prides itself on the high quality of its products.

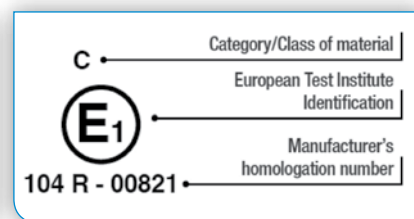
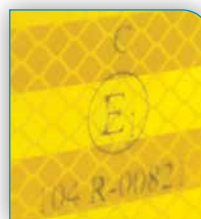
3M Diamond Grade Vehicle Marking Film Series:

- Conforms to regulation ECE104
- Offers excellent reflectivity – reflects at almost 90°
- Ease of application – easy to handle and does not require specialist applicators
- Daytime appearance – very vibrant
- Technical assistance – 3M provide excellent technical assistance
- Excellent adhesion to vehicle – products bond well to the selected substrates and endure after outdoor exposure and frequent power washing and cleaning
- Product warranty – 8 years for rigid sides and 3 years for 987 curtain sides
- High quality, durable, all plastic construction – not susceptible to corrosion
- Resists cracking – beyond area of impact
- Excellent chemical resistance - withstands exposure to a broad range of chemicals and cleaning solutions with no effect

What is the “E-mark”?

Look out for the E-Mark when you upgrade your vehicle to meet ECE104 requirements

- The E-mark is proof that the product has been extensively tested and certified by an independent and authorised centre. The E-mark will be granted only when the marking tape has met the requirements of ECE104.
- The E-mark is permanently printed within the approved marking tape at least every 50 cm (see image below)
- Without the E-Mark printed within the marking tape, the product is not compliant with the regulation.
- 3M™ Diamond Grade™ Vehicle Marking Film Series have met all the requirements of ECE104 and the E-Mark can be found printed on the material
- The E-mark gives you piece of mind that the product will perform to a high standard



What ECE104 compliant products do 3M manufacture?

Features	3M™ Diamond Grade™ Vehicle Marking Film Series 983	3M™ Diamond Grade™ Vehicle Marking Film Series 987
Typical Use	For application on rigid sided vehicles	For application on curtain-sides
Suitable application surfaces and substrates	Aluminium, Stainless Steel, Automotive Paint	3M approved coated curtains, not older than 6 months
Maximum Warranty	8 Years	3 Years
Standard Colour Range	White, Red and Yellow	White, Red and Yellow
Adhesive Tape	Clear, pressure sensitive, quickly and easily applied	Clear, pressure sensitive, quickly and easily applied
ECE104 Compliant	Yes	Yes
Product Construction	Highly reflective prismatic construction	Highly reflective prismatic construction
Roll Size	55mm x 50m	50mm x 50m
E-Mark	Yes (104 R – 00821)	Yes (104 R-001307)