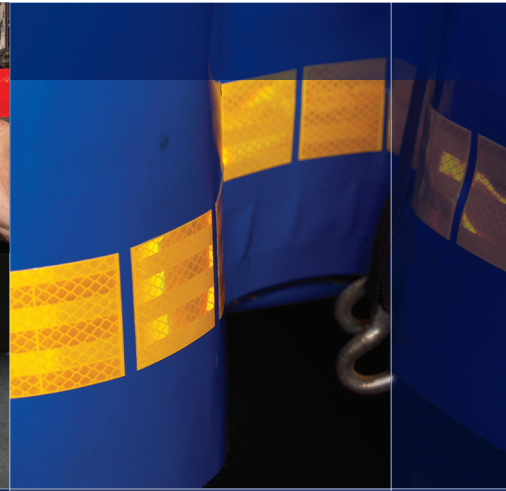
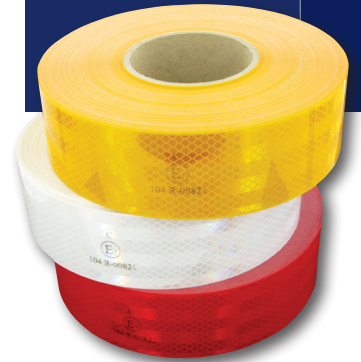


**3M Traffic Safety Systems**  
Heavy Vehicle Safety Solutions



# Keeping your fleet safer with 3M™ Diamond Grade™ Technology



- Delivers outstanding vehicle visibility, alerting more road users faster and earlier
- Helps prevent accidents, death and serious injury
- Prevents vehicle downtime
- Maximises your corporate image

**3M**

# Powerful 3M protection against collisions

3M's Diamond Grade 983 & 987 Series Reflective Tapes deliver outstanding truck visibility, continuously, 24 hours a day. They are also highly effective when trucks or trailers are parked on the side of the road.

It has been proven that more than 95% of night time accidents from the rear or side could be reduced by using outline markings<sup>1</sup>.

A truck with outline reflective markings is recognised earlier than an unmarked truck because they help to define the total SIZE of the truck for drivers. This gives other drivers more time to manoeuvre safely in traffic<sup>4</sup>.



## A chilling reminder for better truck visibility, especially at night

**It's a fact. The risk of an accident between a truck and a car is 30 times greater when a truck does not have high-visibility vehicle markings<sup>1</sup>.**

This chilling fact is a key reason why the European Union have made high-visibility truck markings compulsory in Europe under UN/ECE 104, effective from October 2011. Approximately 1,600 people are killed on Australian roads every year, and 40% of all road accidents occur at night<sup>1</sup>. But why? It mostly comes down to human factors:

- Only 5% of information we see during the day is seen at night
- A driver needs double the light to see an object to the same capacity every 13 years. A 60 year-old driver requires 8 times more light and approximately 40% more time to respond than a 20-year old<sup>2</sup>. With an ageing population, this is an ever increasing concern.

The average financial loss for per truck incident costs fleet owners close to **\$128,480<sup>3</sup>** - vehicle damage and repair costs only.

**You can help reduce our road trauma, while protecting yourself and employees from huge financial and personal loss.**

## 3M™ Diamond Grade™ 983 & 987 Series Reflective Markings deliver...

- ✓ Reduced chance of an accident up to 30 TIMES and save lives
- ✓ Outstanding full vehicle visibility improves safety of your vehicle
- ✓ Meet the Australian Trucking Association Voluntary Code of Practice and mandatory European regulations under ECE104
- ✓ Less vehicle downtime and decreased repair costs
- ✓ Protect your company against potential legal action related to third party safety
- ✓ Employee satisfaction – high workplace safety
- ✓ Improve corporate image through being more proactive about safety

## Markings that should be used

In addition to mandatory rear marker plates, full-contour and partial-contour vehicle markings are now mandatory for heavy vehicles in Europe under ECE104 and also recommended in Australia under the Australian Trucking Association Voluntary Code of Practice. For your FREE copy of the ATA Code, please contact 3M Traffic Safety Systems on 136 136.

Position on Vehicle	Colours
Front	White
Sides	Yellow or White
Rear	Red

There are two options to choose from, a complete contour line marking or a partial contour marking. Partial contour markings are the minimum requirement.

Contour markings should cover at least 80% of the total length and width of the vehicle/trailer and should be as close as practicable to the edges. A combination of marked and unmarked vehicles/trailers is discouraged.

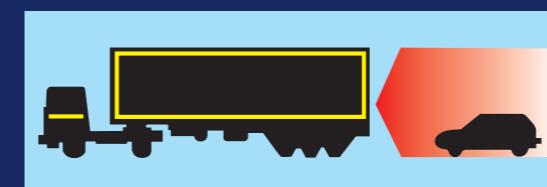
Full Contour Markings



Partial Contour Markings



## Potential results with improved truck visibility



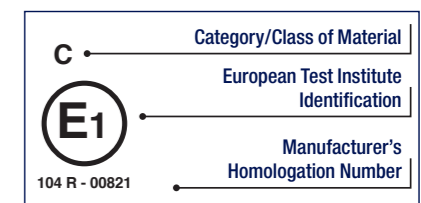
**41%** Rear outline visibility markings can reduce rear end collisions by up to 41%



**37%** Side outline visibility markings can reduce side collisions by up to 37%

## What Is UN/ECE104?

UN/ECE104 is the regulation which governs the use of retroreflective markings on heavy vehicles in European Union countries, which will become mandatory from October 2011. Homologation of approved ECE104 retro-reflective materials is identified with an E-mark symbol. The symbol is proof that the products have been tested and certified by an independent and authorised centre and meet all the requirements of ECE104.



Category C (Contour) materials are the brightest materials for vehicle markings. With a brightness of 300-450 cd/lx.m<sup>2</sup>, these films may only be used for contour (safety/conspicuity) markings. Without the E-Mark, the product is not compliant with the regulation.

1. Prof. Dr.-Ing. H.-J. Schmidt-Clausen, Laboratory of Lighting Technology, Darmstadt University of Technology; Contour Marking of Vehicles, Final Report FO 76 / 00  
 2. R. E. Marland, "Let's Shed Some Light on Pedestrian and Cyclist Safety: An Approach to the Problem," US. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1967.  
 3. Owen P. Driscoll - Major Accident Investigation Report 2009 – National Transport Insurance, National Centre for Truck Accident Research  
 4. LBI Unfallforschung Austria: Viewing Behaviour Survey / 2001

# What material is recommended?

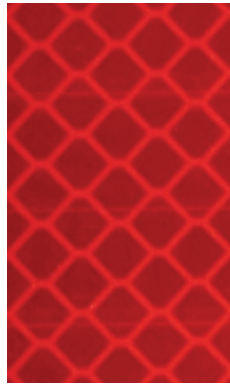
3M offer a complete range of ECE104-complaint reflective tapes for marking rigid and curtain sided heavy vehicles. These products provide outstanding reflectivity and durability, are easy to apply, and backed by 3M's technical and customer service.



Features	3M™ Diamond Grade™ Vehicle Marking Film Series 983	3M™ Diamond Grade™ Vehicle Marking Film Series 987
<b>Typical Use</b>	For application on rigid surfaces	For application on curtain-sides
<b>Suitable Application Surfaces and Substrates</b>	Aluminium, Stainless Steel, Automotive Paint	3M approved coated curtains, not older than 6 months
<b>Durability</b>	7 Years	3 Years
<b>Standard Colour Range</b>	White, Red, Yellow, Fluorescent Yellow	White, Red, Yellow
<b>Adhesive Tape</b>	Clear, Pressure Sensitive	Clear, Pressure Sensitive
<b>ECE104 Compliant</b>	Yes	Yes
<b>Product Construction</b>	Highly reflective prismatic construction	Highly reflective prismatic construction
<b>Roll Size</b>	50mm x 15m, 100mm x 15m, 50mm x 45.7m, 100mm x 45.7m, 55mm x 50mm	51mm x 50m
<b>E-Mark</b>	Yes (104 R – 00821)	Yes (104 R 001507)
<b>Adhesive Tape</b>	Quickly and easily applied	Quickly and easily applied



3M™ Diamond Grade™  
983-10ES (White)



3M™ Diamond Grade™  
983-72ES (Red)



3M™ Diamond Grade™  
983-71ES (Yellow)



3M™ Diamond Grade™  
983-21ES (Fluorescent  
Yellow)

## Speak to us today

For your **FREE** copy of the Australian Trucking Association Voluntary Code of Practice or details on your nearest distributor, contact 3M Traffic Safety Systems on 136 136.



3M Australia Pty Ltd  
3M Traffic Safety Systems  
ABN 90 000 100 096  
950 Pacific Highway  
Pymble NSW 2073  
Freecall: 136 136  
www.3M.com.au/trafficsafety

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