



SAVING **KIWI** LIVES

BY USING REFLECTIVE TAPES & VINYLs TO IMPROVE TRUCK SAFETY.

STATISTICS PROVE ...

trucks are disproportionately represented in fatal accidents and it is generally the occupants of the smaller, lighter vehicles that come off worst in collisions between cars and trucks. The deaths or serious injuries of occupants of smaller vehicles are often caused by the driver of the smaller vehicle not responding in time to avoid the collision, largely due to poor visibility - they simply didn't see the truck in time to avoid a collision.

Check out the sobering facts opposite. In addition:

- A further **772** people were injured in road crashes involving trucks.
- In **61%** of fatal crashes, the truck driver was identified as not being at fault.
- Around **80%** of truck crash fatalities occur on the open road, with **42%** occurring at night.

There is a solution to these terrible statistics ...

3M REFLECTIVE VINYLs AND TAPES by Admark

Road safety is a shared responsibility - Admark is pleased to offer the New Zealand trucking community a cost-effective solution to these statistics by utilising reflective vinyls and tapes. Not only can our graphic solutions offer enhanced safety and visibility for trucks and heavier vehicles, they also provide the opportunity for the space on these vehicles to be used to strengthen your brand's visual identity through the use of computer-cut and photo-realistic images and logos. Reflective markings substantially add to the visibility of heavy vehicles and their trailers from all angles at an extremely low cost.



VEHICLE FLEET

Heavy trucks and buses make up only **6%** of the vehicle fleet ...

6%



ROAD FATALITIES

yet they are involved in of road fatalities, which ...

23%



NUMBER OF DEATHS

equates to approximately deaths on our roads each year.

67



In fatal collisions involving a car and a truck, **96%** of the deaths are car occupants.

96%



The risk of an accident between a truck and a car is **30 x** greater when a truck doesn't have hi-vis markings.

30

Facts and figures sourced from: Ministry of Transport NZ Truck report/statistics - 2015/ATA Industry Technical Council - 2nd edition draft July 2016.

Admark
VISUAL IMAGING LTD

WHAT ARE REFLECTIVE TAPES & VINYLs?



*Goodman Fielder truck with red conspicuity tape outline.
As you can see, it has minimal impact on your vehicle's daytime aesthetic,
however it will have a huge impact on your vehicle's visibility at night.*

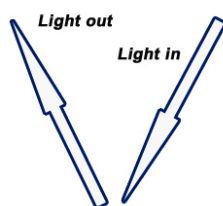
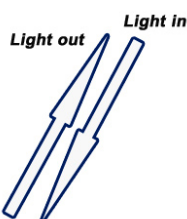
Reflective vinyls or films and tapes are composed of wide angle, exposed retroreflective lenses bonded to an adhesive. They help the eye perceive objects in low-light conditions when illuminated by a light source (ie the lights from a vehicle).



Retroreflective tape



Reflective graphics



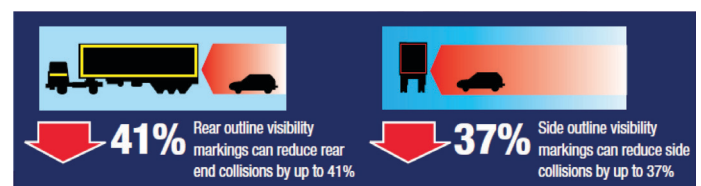
Reflective vinyl and retroreflective tape contour markings (also known as 'conspicuity tape') on a heavy vehicle are designed to give other road users visibility of the vehicle ahead and the ability to perceive their distance and closing distance. A full contour of the vehicle makes this visible perception easiest. A contour means that the outline shape of the vehicle is depicted as clearly as possible.

Studies have proven the usage of reflective tape/vinyl on trucks is effective in increasing visibility, particularly at night and in poor visibility conditions such as rain, fog, dusk and dawn where light is poor. Earlier visibility leaves more response time for the driver, enhancing safety.

Significant reductions in side and rear impacts can be achieved with the use of reflective tapes:

41% decrease in rear end collisions

37% decrease in side collisions



*Source: Contour markings of vehicles - final report - 2000
Darmstadt University of Technology*

Many of Admark's clients routinely use reflective graphics to achieve not only increased visibility and safety, but highly effective visual branding as well.



Fonterra's Dairy for Life tanker branding is an effective use of reflective mediums - vibrant, yet simple computer-cut graphics during the day, and a highly visible (and therefore safe) image at night. The graphics not only improve safety, but strengthen Fonterra's brand.

✓ WARRANTIES

- Admark uses exclusively 3M retroreflective tapes and reflective vinyls.
- Admark is 3M NZ's largest manufacturer and NZ's only Platinum Supplier.
- As a Platinum Supplier, Admark can offer the best warranties in the business.

- 3M retroreflective tapes and vinyls have an estimated lifespan of around 7 years.

7



Burger King's Flame Grilled Whopper truck is a standout during the day, and through the use of reflective graphics, an inferno at night. This inferno reinforces Burger King's unique flame grilled taste selling point and we have a feeling it may have inspired many a trip to BK on its travels as well!



CONSPICUITY TAPE APPLICATIONS ...

These images were supplied by 3M. They depict various applications of conspicuity tape and the effect they have on increased visibility and safety.



COST INDICATIONS



\$2.50

It costs less than \$2.50 a week
for truck safety - that's two
coffees a month
or a pie a week!

INCREASED TRUCK VISIBILITY COSTS LESS THAN \$2.50 A WEEK

The application cost of retroreflective markings is low and Admark's 3M products are warranted for a period of up to seven years. A full contour marking for an average tanker costs around \$900; divide this by 7 for the annual cost and by 52 for the weekly cost. At just under \$2.50 a week, the numbers stack up. But let's face it - it's not really about numbers is it? It's about people's lives.

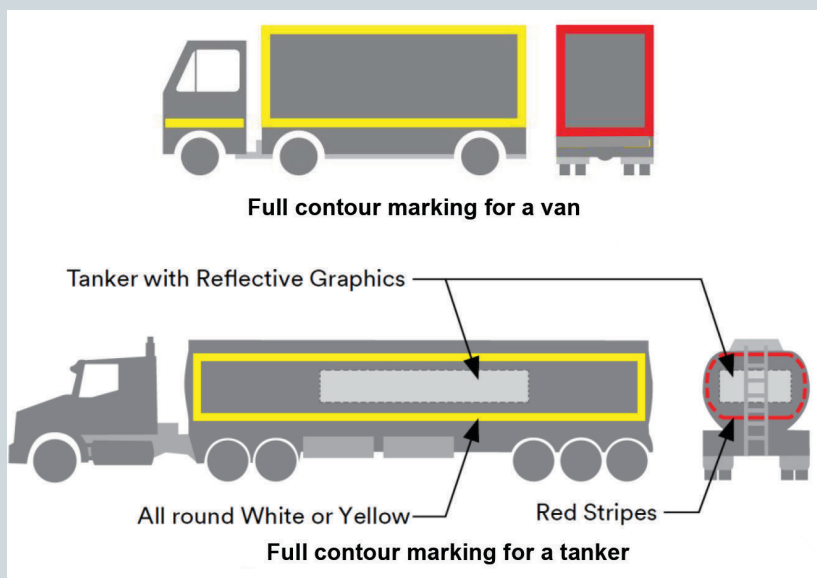
Interestingly, studies have estimated the cost per truck incident at more than \$120,000AUD. They also showed that fatalities were not the fault of the truck driver. Further, at least 70% of truck crashes involved a truck and another vehicle and 40% of road accidents occurred at night due to only 5% of the information on a heavy vehicle being seen. They concluded a continuous reflective strip is most effective and maintains 50-70% effectiveness in adverse weather vs no markings.

(Major Accident Investigation report 2013 - National Centre for Truck Accident Research, Australia)

LBi Unfallforschung Austria: Viewing Behaviour Survey 2001

Transportation Group University of Brunswick, Canada)

PREFERRED LAYOUT - FULL CONTOUR



Reflective tape is applied as close as possible to the edge of the vehicle to form a continuous line, depicting the outline of the vehicle. This provides maximum visibility to other road users and is best practice.

ESTIMATED COST: \$650-900

“Outlining the front, rear and sides of your vehicle with retroreflective material significantly improves its visibility. This material reflects other motorist's lights back off your vehicle. Reflective conspicuity tape is effective and quick and easy to apply.”

(NZ Transport Association website)

PARTIAL CONTOUR

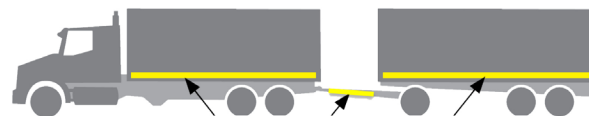


partial contour marking

A single strip of retroreflective tape is applied along each side and the rear of the body or trailer, with 'L' shape sections 0.5m long in each corner.

ESTIMATED COST: \$600

STRIP MARKING

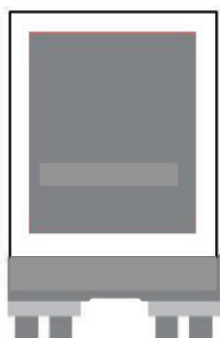


Strip markings of yellow or white on the sides

A single strip of retroreflective tape is applied along each side of the vehicle and body or trailer side, and a strip across the rear. This basic layout shall only apply to those vehicles that do not use retroreflective graphics or logos or have limited structure onto which tape can be applied on the upper sections of the trailer.

ESTIMATED COST: \$750

FRONT OF TRAILERS



It is highly recommended that if a trailer or truck is regularly parked outside a secured depot, retroreflective tape should be applied to its forward face.

ESTIMATED COST: \$290-450

CURTAIN SIDERS



Example of segmented tape options for curtain sided trailers

Due to the materials used on curtain-side trailers, special retroreflective tapes must be used - they are either flexible or segmented so they can flex as the curtain is retracted. Colours should be yellow, white or silver. The placement of strips should follow one of the options detailed previously.

ESTIMATED COST: \$900

PRICING NOTES

Pricing is indicative only and may vary from application to application, dependent on a number of factors. Pricing is current as at November 2016. Retroreflective tape to suit either curved or flexible surfaces (ie truck curtains) will cost around 50% more than standard tape applicable to hard, flat surfaces. Application is dependent on access to the top of the trailer. The availability of suitable equipment for working at heights to apply the material will have significant impact on the tape's application time.

Estimated cost matrix:

Front - white tape = \$150 per 15ml roll | Side - yellow/white tape= \$150 per 15m roll | Rear - red tape = \$150 per 15m roll

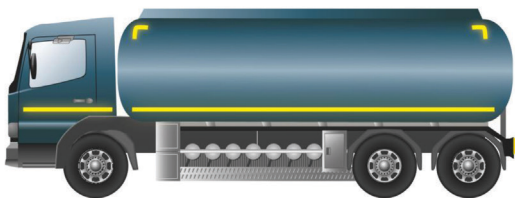
Application cost: \$20 per 15 minute unit

Preparation with isopropyl alcohol, dirt free etc = \$20 per 15 minute unit.

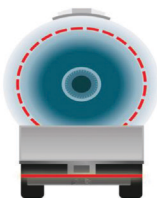
Approved standards markings in New Zealand:

Yellow or white/silver tape on sides | yellow or white/silver tape on front | red or alternating red and white/silver tape on rear. When used around lamps, the tape should be the same colour as the lamps.

CONSPICUITY TAPE APPLICATIONS

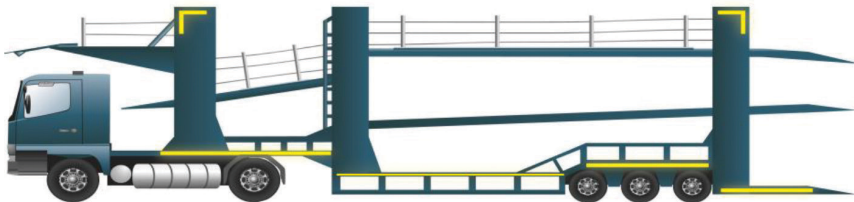


Tanker with partial contour markings

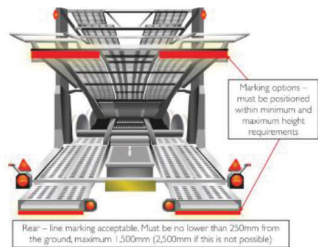


Concrete mixer/agitator with line markings

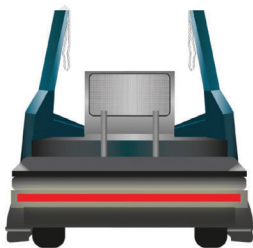
If practicable to within 600mm of rear of vehicle



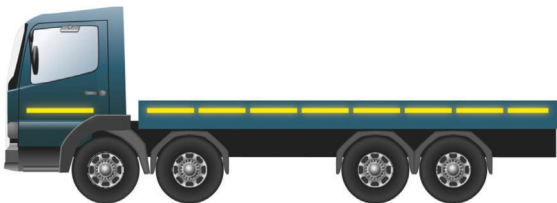
Car carrier with partial contour markings



Skip loader with line markings



Rubbish truck with partial contour markings
Many rubbish trucks will not be able to take a full line or contour marking due to the equipment being fitted. In these cases, it is acceptable to retain rear marker plates with conspicuity markings fitted to the fullest extent practicable.



Rigid with tray and line markings



Semi-trailer with tray and line markings



For more information on how
you can help save Kiwi lives,
call Admark.



07-846 0646

www.admarkprint.co.nz

279 Kahikatea Drive, Frankton, Hamilton 3240
p | +64 7 846 0646 e | admark@admarkprint.co.nz



www.facebook.com/Admarkprint

Admark
RETAIL PRICING LTD