



**Driving road  
safety in the  
right direction.**





Safe, visible road signs,  
now and in the future.

From rural roads to high-speed expressways, our actions for over 75 years have remained the same: help bring families home safely. It's why we continue to innovate long-lasting, reflective traffic sign technologies to help guide road users—and automated vehicles—safely and efficiently on their way.

[3M.ca/RoadSafety](http://3M.ca/RoadSafety)

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Relax knowing you're covered by our premium 3M™ MCS™ Warranty.

# Retroreflective Sign Sheeting

3M pioneered the development of retroreflective sign sheeting over 75 years ago and continues to meet today's requirements with long-lasting and effective signs that help get drivers safely where they're going. Explore our full range of visibility performance levels to meet the needs of your specific application:



## Engineer Grade Sheeting

**Ideal for non-critical traffic signing and devices**

- ▶ An affordable choice for non-critical traffic signs

## High Intensity Prismatic Sheeting

**Intermediate reflectivity for regulated applications**

- ▶ Traffic signs, work zone devices and delineators

## 3M™ Diamond Grade™ Sheeting

**Maximum total reflected light**

- ▶ Higher luminance for long-distance visibility
- ▶ 3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting returns almost 60% of the available light to vehicle drivers—about double that of our high intensity prismatic reflective sheeting

### Standards:

- ▶ ASTM D4956 Type I

### Standards:

- ▶ ASTM D4956 Type III, Type IV

### Standards:

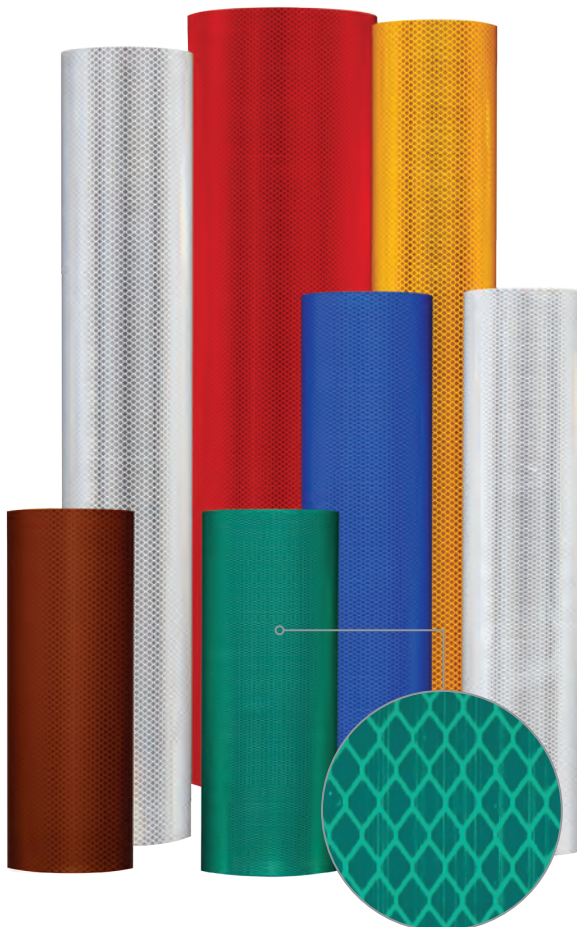
- ▶ ASTM D4956 Type IX and Type XI (Highest overall retroreflectivity class in relevant global industry standards)

# Maximum total reflected light.

## ▶ 3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting Series 4000

Achieve superior reflectivity at short and long distances with 3M Full-Cube Technology.

- ▶ Meets the highest overall retroreflectivity requirements in global industry standards (ASTM D4956 Type XI)
- ▶ Our best solution for signs positioned inside and outside of primary headlight illumination
- ▶ One of the brightest durable sheetings
- ▶ Performance warrantied for up to 12 years



4090 White



4095 Blue



4081 Fluorescent Yellow



4091 Yellow



4097 Green



4083 Fluorescent Yellow/Green



4092 Red



4099 Brown



4084 Fluorescent Orange

### Guidance you can count on.

Most efficient polycarbonate full-cube technology

Returns almost 2X more light\*

Broad observation angles

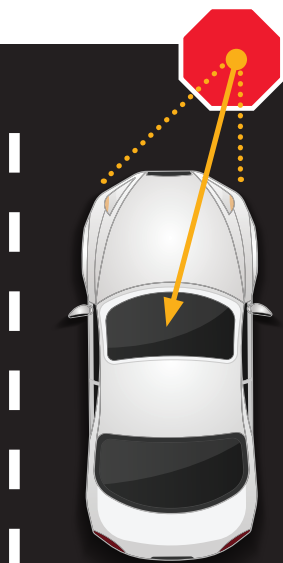
Polycarbonate, stable prismatic optics

\*vs. traditional sheeting



### 3M Full-Cube Technology

When you can almost double the average effective brightness of road signs, visibility and safety are a natural result. Of the three technologies used on roadways today, only fully reflective micro prismatic cube-corners, or 3M full-cube technology, are the most efficient.



**14%** Encapsulated glass bead sheeting:  
Reflects 14% of light back to source

**32%** Truncated cube corner sheeting (most common):  
Reflects about 32% of light back to source

**58%** 3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting with 3M full cube technology:  
Reflects 58% of light back to source



# Intermediate reflectivity for regulated applications.

## ▶ 3M™ High Intensity Prismatic Reflective Sheeting Series 3930

The reflective sheeting you need to meet most common middle grade performance standards.

- ▶ Suitable for many traffic signs
- ▶ Meets middle-grade performance standards (ASTM D4956 Type IV)
- ▶ Warrantied for up to 10 years
- ▶ Great for different imaging methods—compatible with select digital printing solutions, electronic cuttable films and screen print imaging methods



3930 White



3935 Blue



3931 Yellow



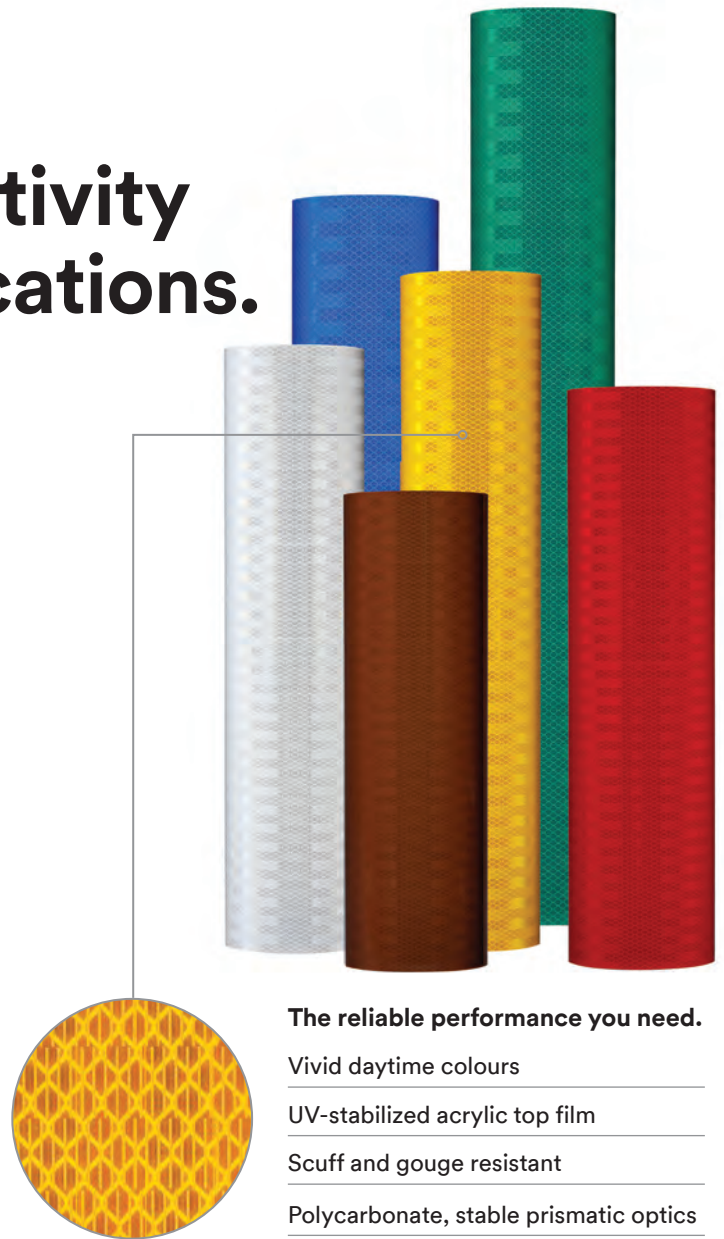
3937 Green



3932 Red



3939 Brown



**The reliable performance you need.**

Vivid daytime colours

UV-stabilized acrylic top film

Scuff and gouge resistant

Polycarbonate, stable prismatic optics

## On the road to the future.

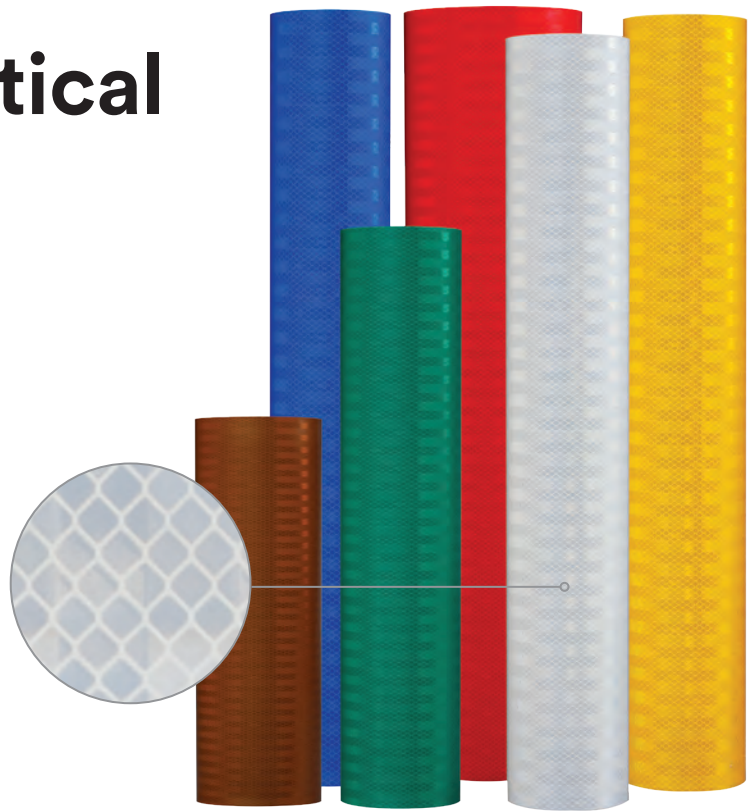
The transportation industry is rapidly changing and autonomous vehicles will soon be on our roads. That's why we are developing new sign technology and more robust pavement markings to help guide the vehicles of the future.



# Ideal for non-critical traffic signing applications.

## ▶ 3M™ Engineer Grade Prismatic Sheeting Series 3400

- ▶ Exceeds reflectivity within the engineer grade class (ASTM D4956 Type I)
- ▶ Robust design aids hand application to large substrate sheets
- ▶ Easy application with a micro-seal technology that supports conventional and select digital imaging methods.



3430 White



3431 Yellow



3432 Red



3435 Blue



3437 Green



3439 Brown

## Traffic-compliant screen print inks.

### ▶ 3M™ Process Colour Series 880 Screen Inks

3M™ Screenprinting Inks are designed for application by screen printing onto 3M™ Reflective Sheetings to provide a compatible and durable imaging system.

- ▶ Colourfast and durable—matches warranty of base sheeting
- ▶ No clear coat required
- ▶ Compatible with standard prismatic sheeting
- ▶ Custom colours available





# Economical imaging film for low-volume signage.

## ▶ 3M™ ElectroCut™ 1170 Series

Get reliable compliance to day and night colour specifications on 3M prismatic sheetings.

- ▶ Precise cutting and fast weeding
- ▶ High-transparency with UV-resistant colour
- ▶ Warranted to match sheeting performance



1171 Yellow



1175 Blue



1179 Brown



1178 Black



1172 Red



1177 Green



1174 Orange

# Drive down replacement costs while protecting public safety.

- ▶ Help protect and enhance traffic sign images.
  - ▶ 3M™ Protective Overlay Film Series 1160 – Graffiti-Resistant  
Easily remove paint and ink from this durable overlamine
  - ▶ 3M™ ElectroCut™ Film Series 1170C UV  
Premium UV protection defends against fading, finishing retroreflectivity after digital printing



# Create custom and traffic signs with ease.



## ► Digital sign printing

Create traffic signs with digital printing for any level of production. 3M™ Digital Printing Solutions give you quick, on-demand prints for regulated and non-regulated signs backed by the 3M™ MCS™ Warranty.

## ► Digital printer programs

Our partnerships with industry-leading digital printer manufacturers help ensure guaranteed performance.

- A full portfolio of printers, including high-speed, standard and entry-level.

- Instant curing inks for reduced production time.
- Solutions backed by 3M™ MCS™ Warranty for Traffic.
- Programs available from Durst, EFI and HP.



Model	Durst Rho 163TS / 163TS HS	EFI H1625-RS	HP 365
Speed	275/550 ft <sup>2</sup> /hr*   25/51 m <sup>2</sup> /hr	200 ft <sup>2</sup> /hr*   18 m <sup>2</sup> /hr	95 ft <sup>2</sup> /hr*   8 m <sup>2</sup> /hr
Warranty	Full 3M™ MCS™ Warranty for Traffic; <sup>1</sup> 3M™ MCS™ Warranty for non-regulated signs <sup>2</sup>	Full 3M™ MCS™ Warranty for Traffic; <sup>1</sup> 3M™ MCS™ Warranty for non-regulated signs <sup>2</sup>	3M™ MCS™ Warranty for Traffic for most colours <sup>3</sup> Work zone performance statement <sup>4</sup>
Instant curing	Yes	Yes	Yes
Contact	<a href="http://www.durst.it">www.durst.it</a>	<a href="http://www.efi.com">www.efi.com</a>	<a href="http://www.hp.com/go/Latex365">www.hp.com/go/Latex365</a>

\*Speed ft<sup>2</sup>/hr when running at required settings for traffic applications.

1 | Qualifies for local countries' warranty for regulated traffic signs. 2 | Qualifies for local countries' warranty for non-regulated signs. 3 | Qualifies for local countries' warranty for regulated traffic signs printed with Black, ASTM Blue, Green, Yellow, Red, Brown and Purple using approved software. 4 | Resulting sign performance is considered to be commensurate with typically expected work zone sign life.



## 3M™ Piezo Inkjet Series 8800 & 8900 UV Inks

Colourfast and durable traffic-compliant digital printing inks that match warranty of base sheeting.

- Custom-coloured sign capability
- Instant curing for streamlined production
- 8800 compatible with Durst 161 and 162 Series Printers
- 8900 compatible with EFI H1625-RS and Durst 163 Series Printers



# Long-lasting quality and performance you can count on.

## ► Warranties and durability

Our retroreflective sheetings, process colours inkjet inks and electronic cuttable films are designed and tested to help you deliver long-lasting signs to your customers. Finished graphics using these matched components are protected by the 3M Performance Guarantee, 3M™ MCS™ Warranty, and the 3M™ MCS™ Warranty for Traffic.

- Up to 12 years of protection when using select 3M components
- Available for multiple imaging methods
- Available for several classes of reflective sheeting
- Multiple warranty tiers



3M Performance Guarantee	3M™ MCS™ Warranty	3M™ MCS™ Warranty for Traffic
When 3M™ MCS™ Warranty approved inks aren't an option, try a 3M Performance Guarantee for specific 3M Inkjet products with qualified and tested OEM inks.	Get protection for most applications with a comprehensive non-regulated, finished sign warranty for almost all finished signs you create.	Our premier warranty provides top-of-the-line coverage for regulated, finished signs. When you use 3M traffic sign materials, you get all the benefits of the 3M™ MCS™ Warranty, plus guaranteed traffic colours and retroreflectivity retention.

Warranty Coverage Comparison		3M Performance Guarantee	3M™ MCS™ Warranty	3M™ MCS™ Warranty for Traffic
Physical Defects of 3M Product	Obvious damage	▲	▲	▲
Manufacturing Defects	Visual defects	▲	▲	▲
	Adhesive defects	▲	▲	▲
	Adhesion failure on recommended substrates		▲	▲
Printing Defects and Ink Performance	Image defects when printing		▲	▲
	Excessive image fading		▲	▲
	Image cracking, crazing or peeling		▲	▲
	Blistering		▲	▲
	Excessive dimensional change		▲	▲
Cutting Defects	Clean cutting and weeding		▲	▲
Traffic Colours	Daytime and nighttime			▲
Retroreflection	Retention			▲

Visit [3M.ca/RoadSafety](http://3M.ca/RoadSafety) for full warranty information.

3M is dedicated to improving traffic safety and mobility on a global level by offering a portfolio of products to help get everyone home safely.

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Traffic Signs and Services | Connected Roads  
 Pavement Markings | Temporary Traffic Control  
 Conspicuity | Vehicle Registration Solutions



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