See The Science of being Seen

Get reassurance that your workwear is compliant and made using authentic 3M™ Scotchlite™ Reflective Material
We live in a world where people don’t always make the right choice. Health and safety professionals have a challenging job convincing people to wear protective equipment for their own safety. You must combine compliance to standards and regulations and employee safety, comfort, and even style. Everyone wants to look good, but they don’t always want to wear protective equipment. We know this and it is why we continue to listen, test and add innovations to improve our products so people wear them longer.

We provide solutions for work situations requiring basic personal protective equipment (PPE) through to environments that call for the most sophisticated and comprehensive protection. Whether the customer is a single tradesperson, medium sized business or an organisation employing thousands of workers, 3M has a workplace safety solution to meet your needs.

When job requirements call for special problem solving expertise, you can rely on 3M to use its diverse industry knowledge and history of innovation to give you the confidence and power to protect your world.

The 3M range of solutions for worker safety includes:

- Respiratory Protection
- Hearing Protection
- Communications
- Eye, Head & Face Protection
- Welding Protection
- Spill Management
- Worker Visibility
- Detection & Monitoring
- Body Protection

3M Safety brands you can trust:
Training and Support

3M’s team of Specialist Representatives are available nationally, to provide support and training that meet the needs of our customers. Furthermore, our qualified and highly experienced team are able to assist customers by:

- Conducting initial and ongoing assessments of the workplace.
- Recommending appropriate respiratory, hearing, eye protection, communication and spill management solutions required to maintain a safe work environment
- Providing technical advice about the correct use and maintenance of the solution that has been selected
- Facilitate on-site fit testing for both respiratory and hearing protection solutions, as required

No matter how effective a piece of Personal Protective Equipment (PPE) is, it will offer little or no protection if it is not fitted and/or worn correctly. Proper inspection, cleaning and storage is vital for safety equipment that protects a worker’s health and well-being.

That is why we offer training programs that explain the correct way to fit, inspect, clean and store the PPE designed and manufactured by 3M.

Technical Assistance

3M TechAssist is the ideal point of contact for your questions, especially when you require a prompt answer. Supported by trained staff, TechAssist is an immediate link to the worldwide resources of 3M.

Customers can contact TechAssist to answer questions on product information, technical advice, guidance with product selection, Australia/New Zealand Standards and other important information they need to know on a day-to-day basis.

See back cover for Technical Assistance contact details.

ANZ Distributor network

3M distributes our wide range of workplace safety products through a network of distributors, resellers and retailers throughout Australia and New Zealand.
Workplace Visibility Solutions

Visibility by day and night is an essential safety aspect for workers who are exposed to dangers during their daily work.

3M™ Scotchlite™ Reflective Material improves visibility and safety for the wearer during daytime, at night or under low light conditions such as bad weather.

As the market leader in reflective material, 3M has a large portfolio of products to meet your worker visibility needs. Scotchlite reflective material can be used in many different occupational fields from firefighting to mining, road construction and police work.

Its superior quality and performance provides long lasting functionality even under harsh conditions.

The wide range of Scotchlite reflective material products allows you to design shirts, pants, vests, jackets, rainwear, footwear, helmets and apparel that satisfy your exact specifications.

The 3M Australia & New Zealand Supply Program - Your Guarantee

The 3M Australia & New Zealand Supply program offers Australian and New Zealand customers the certainty of authentic 3M™ Scotchlite™ Reflective Material when purchasing any garments incorporating our retro-reflective trim.

Also, purchasing through the 3M Australia & New Zealand Supply program entitles you to an array of technical services that our high visibility workwear experts can provide.

As an added benefit, 3M Australia & New Zealand offers a full garment replacement warranty in the event of a reflective material not meeting the applicable 3M product specifications – providing even more certainty that you have made the right choice.

Always ask if your product is supported by the 3M Australia & New Zealand Supply Guarantee or check the garment for the above sew-in “3M Australia & New Zealand Supply” yellow label.
Retro-Reflection Technology

3M™ Scotchlite™ Reflective Material makes use of a technology known as retro-reflection. The material is easy to process which allows for numerous creative possibilities. Scotchlite reflective material can be sewn into garments or simply applied using a heat transfer process.

Millions of small glass spheres, or micro-prisms reflect the incident light and focus it back towards the original light source. The obvious safety advantage is that the person in the light can be seen better and sooner thanks to the retro-reflective effect.

Scotchlite reflective material uses two different technologies in our retro-reflective range of materials:

Glass Bead Technology
This technology utilises millions of high performance glass beads that reflect light effectively in all directions due to their spherical nature.

Microprismatic Technology
Microprismatic Technology incorporates retro-reflective microscopic prisms formed on a polymeric film to create a bright reflective appearance on garments and accessories.

Features and Benefits:
+ Highly reflective
+ High durability
+ Flexible, fabric-like feel makes it very comfortable to wear and provides freedom of movement, easy storage and folding
+ Extensive Flame Resistant* products available
+ Range of products: sew-on and heat laminate
+ Industrial wash products available

Features and Benefits:
+ Highly reflective
+ High durability
+ Attractive, high-gloss finish
+ Provides enhanced day visibility combined with high visibility at night and low light situations
+ Available in different colours
+ Can be sewn or welded onto garments (not suitable where static electricity is an issue, eg. coal mining)

*Flame Resistant: property of a material whereby combustion is prevented, terminated or inhibited following the application of a source of ignition. Fire retardant: chemical that tends to inhibit combustion when applied on, mixed in or combined with combustible materials. (NFPA Glossary of Terms 2008)
Industrial Safety Applications
Australia/New Zealand Standards for High Visibility Garments

3M™ Scotchlite™ Reflective Material is manufactured within an ISO 9002 controlled manufacturing environment. To ensure the highest safety levels are reached, all fabrics, trims and films exceed the requirements of the relevant AS/NZS standards.

AS/NZS 1906.4
Retro-reflective materials for road traffic control purposes
This Standard describes the material performance parameters for Class R (retro-reflective) and Class RF (retro-reflective and fluorescent) materials.

AS/NZS 4602.1
High visibility safety garments for high risk applications
This Standard specifies the visual requirements for high visibility safety garments for occupational wear by people who may be exposed to the hazards of moving traffic, moving plant or equipment in high risk situations. It covers possible designs suitable for both daytime and night time wear.

Enlightening Fact
At night, you are more visible in a white garment than a Class D Garment because fluorescence is a daytime only phenomenon. It needs UV from the sun to make it ‘glow’.

Class D/N for 24 hour Day/Night use
Minimum width of retro-reflective tape = 50 mm.
Exception in Australia for 2 x 25mm strips.

Class N for Night time use

Class D for Daytime use
Australian/New Zealand Standards for High Visibility Garments for Fire Service Personnel

Standard: AS/NZS 4967 - Protective clothing for structural firefighting

Standard: AS/NZS 4824 - Protective clothing for wildland firefighting
These Standards specify the minimum requirements and test methods for assessing protective clothing that is intended to be worn by fire service personnel. Retro-reflective and/or fluorescent trims are submitted to flame spread and heat resistance tests as well as luminous intensity after heat exposure.

Standard: AS/NZS 4602.2 - High visibility safety garments Part 2: Garments for fire service personnel
The objective of the Standard is to define requirements for high visibility safety garments for fire service personnel working in smoke, traffic or other high risk situations. Garments are classified into two categories depending on the outer shell material and the quantity of high visibility trim used.

Classification 1 Garment

Classification 2 Garment

Trusted to stay bright
It's no wonder you see 3M™ Scotchlite™ Reflective Material - Series 9500 Fire Coat Trim on so many firefighters and emergency personnel worldwide. For over 25 years, it has been earning trust and respect from those whose safety depends on being visible.

Trusted to stand up through extreme heat
Exposure to extreme temperatures is a fact of life in fire fighting. That's why we engineer Scotchlite reflective material - series 9500 fire coat trim to be able to take the heat.
Look for the 3M logo

To verify their authenticity, certain 3M™ Scotchlite™ Reflective Material products (see below table) have an embedded 3M logo visible on the front where it can easily be seen, even on a completed garment. Protecting our trademarks is extremely important at 3M, and authenticating our product with the 3M logo is one measure we take so you always know you’re getting what you specified.

Follow these steps to confirm it’s authentic 3M™ Scotchlite™ Reflective Material

1. Stand approximately three metres away from garment.
2. Hold a flashlight or flashlight app on your mobile phone directly in front of your nose, and aim it toward the garment.
3. Take a few steps forward or backward, as optimal viewing distance will vary based upon room illumination and the brightness of your light source.
4. The 3M logo will appear in a continuous, bidirectional pattern to validate you are looking at authentic Scotchlite reflective material.
Why 3M?

Trusted
3M invented retroreflective technology and has been advancing the science for over 70 years. We are known worldwide for delivering quality products that do what they promise.

Compliance
3M™ Scotchlite™ Reflective Material products are tested by independent laboratories according to the most relevant national standards, including AS/NZS 1906.4, 4824 and 4967. We go beyond minimum requirements, continuously testing and meticulously applying quality control systems to help ensure consistent performance beyond conventional guidelines.

Support
Wherever your garments are being manufactured, you’ll benefit from the experience and on-the-ground support of 3M’s renowned global supply chain and dedicated support team.

Performance
3M products are known for high performance. Our time-tested processes, quality assurance protocols, and Six Sigma method improvements are why Scotchlite reflective material products are trusted worldwide to last through multiple laundry cycles and to meet or exceed many global high visibility standards.

Quality
Our dedicated, leading edge facilities are designed for the highest quality precision engineering, resulting in the most reliable product performance. You have reassurance that products will perform to specifications, order after order.

Innovation
3M backs you with unsurpassed technical and design expertise and the broadest product portfolio in the industry. So no matter what your need, there is a high quality Scotchlite reflective material solution that is right for you.
## 3M™ Scotchlite™ Reflective Material Selection Guide

A complete range to meet all your design and performance

<table>
<thead>
<tr>
<th>Product</th>
<th>Daytime Colour</th>
<th>Typical Brightness $R_a$ (cd/kr⁻¹/m²)</th>
<th>Backing Fabric/Film</th>
<th>Product Features/Certifications¹</th>
<th>Domestic wash/dry cycles²</th>
<th>Typical Applications &amp; Industries²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transfer Films</strong></td>
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<tr>
<td>5510</td>
<td></td>
<td>330</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
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<tr>
<td>5530</td>
<td></td>
<td>330</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
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<tr>
<td>5607</td>
<td></td>
<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
</tr>
<tr>
<td>8711</td>
<td></td>
<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 25</td>
<td>¹</td>
<td></td>
</tr>
<tr>
<td>8712</td>
<td></td>
<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 25</td>
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<td></td>
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<tr>
<td>8725A</td>
<td></td>
<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 50</td>
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<tr>
<td>8725PC</td>
<td></td>
<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 50</td>
<td>¹</td>
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<td>9720</td>
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<td>500</td>
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<td>9740</td>
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<td>500</td>
<td>Heat activated adhesive film</td>
<td>- 65°C x 50</td>
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<tr>
<td><strong>High Gloss Fabrics</strong></td>
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<tr>
<td>7160</td>
<td></td>
<td>700</td>
<td>White flexible vinyl film sealed on backside</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
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<tr>
<td>7187</td>
<td></td>
<td>500</td>
<td>Lime/Yellow flexible vinyl film sealed on backside</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
</tr>
<tr>
<td>7196</td>
<td></td>
<td>500</td>
<td>Orange flexible vinyl film sealed on backside</td>
<td>- 65°C x 75</td>
<td>¹</td>
<td></td>
</tr>
</tbody>
</table>

¹ Product Features/Certifications:
- AS/NZS 1906.4, Class R
- Can be die-cut, hand-cut or guillotined
- Protected by plastic liner on the glass beads surface
- Segmented trim keeps wearer drier and cooler
- Improved drape compared to solid trims
- Improved wash durability compared to equivalent 3M solid trims provides better value

² Typical Applications & Industries:
- Ideal for screen printing prior to lamination
- Linerless
- Arch Thermal Performance Value (ATPV) ≥ 5 cal/cm² according to ASTM 19594
- Industrial wash performance
- 3M logo on front of product (8712N alternative without logo also available)
- 3M logo on front of product (8725N alternative without logo also available)

- High gloss microprismatic retroreflective material for glossy appearance on reflective element
- Sealed edges with channels for sewing
- 3M pattern appears on tape surface for brand identification
- Premium seal strength for durable applications
- 3M pattern on tape surface for brand identification
- Fluorescent colour suitable for 24 hours high visibility environments

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<tr>
<td><strong>Sew On Fabrics</strong></td>
<td></td>
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</table>
| 8906 | | 500 | 60% Polyester 35% cotton | • AS/NZS 1906.4, class R  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification |  | |
| 8910 | | 500 | 60% Polyester 35% cotton | • AS/NZS 1906.4, class R  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification |  | |
| 9910 | | 500 | 100% polyester | • AS/NZS 1906.4, class R  
• Abrasion resistant  
• Light industrial washable  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification |  | |
| 9920 | | 500 | 100% polyester | • AS/NZS 1906.4, class R  
• Abrasion resistant  
• Industrial washable  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification |  | |
| **Flame Resistant** | | | | | | |
| 8935 | | 500 | 100% Cotton | • AS/NZS 1906.4, class R  
• AS/NZS 4382, Wildland firefighting  
• AS/NZS 4967, Structural firefighting  
• Good abrasion and chemical resistant |  | |
| 9586 | | 500 | Aramid backing | • AS/NZS 1906.4  
• AS/NZS 4382 “Wildland firefighting”  
• AS/NZS 4967 “Structural firefighting”  
• Good abrasion resistance  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification  
• 3M logo on front of product |  | |
| 9587 | | 500 | Aramid backing | • AS/NZS 1906.4  
• AS/NZS 4382 “Wildland firefighting”  
• AS/NZS 4967 “Structural firefighting”  
• Good abrasion resistance  
• Fabric backing printed with “3M™ Scotchlite™ Reflective Material” for easy identification  
• 3M logo on front of product |  | |

\(^1\) Reflective materials can only be certified to AS/NZS standards by accredited independent laboratories.  
\(^2\) Home wash cycles according to ISO 6330 (Method 2A). Dry cleaning according to ISO 3175 (Method 9.1).  
\(^3\) Applications are not limited to the examples below  
\(^4\) Only when applied on compliant fabrics such as certain aramids, modacrylics and FR treated cottons

Legend:

- \(\text{Home Wash}\) = Home Wash  
- \(\text{Industrial Wash}\) = Industrial Wash  
- \(\text{Dry Clean}\) = Dry Clean  
- \(\text{Iron}\) = Iron  
- \(\text{High Visibility Vest}\) = High Visibility Vest  
- \(\text{Workwear}\) = Workwear  
- \(\text{Rainwear}\) = Rainwear  
- \(\text{Police}\) = Police  
- \(\text{Ambulance}\) = Ambulance  
- \(\text{Rescue/Emergency Services}\) = Rescue/Emergency Services  
- \(\text{Oil & Gas Industry}\) = Oil & Gas Industry  
- \(\text{Water Industry}\) = Water Industry  
- \(\text{Power Industry}\) = Power Industry  
- \(\text{Mining}\) = Mining  
- \(\text{Fire Fighting}\) = Fire Fighting  
- \(\text{Construction}\) = Construction
Important Notice

WARRANTY, LIMITED REMEDY AND DISCLAIMER: 3M warrants that 3M™ Scotchlite™ Reflective Material that is stored, maintained and used in accordance with 3M’s written instructions will meet the applicable 3M product specifications. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If any Scotchlite reflective material does not conform to this warranty, then the sole and exclusive remedy is the replacement of the garment utilising the 3M product.

LIMITATION OF LIABILITY: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract or strict liability.

PRODUCT USE: Because of the variety of factors that can affect the use and performance of Scotchlite reflective material, user is solely responsible for evaluating the product and determining whether it is fit for a particular purpose and suitable for user’s method of application. User is solely responsible for determining the proper amount and placement of the product. While reflective products enhance visibility, no reflective product can ensure visibility or safety under all possible conditions. 3M may change the product, specification and availability of the product as improvements are made; therefore, user should contact 3M for latest information before specifying the product.

As an added benefit, 3M Australia & New Zealand offer a full garment replacement warranty in the event of a reflective material not meeting the applicable 3M product specifications – providing even more certainty that you have made the right choice (see page 4 for more information).