



Technical Data Sheet

3M™ Scotch® Photoelectric Scanning Tape
7800



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Product Description

Scotch® Photoelectric Scanning Tape 7800 is an exposed-lens retroreflective tape with a pressure-sensitive adhesive that is designed for use as expendable code marks in automatic warehouse or conveyor operations. This product affords contrast with its background for increased accuracy, reliability, and depth-of-field in photoelectric sorting and classification systems and may be employed with automatic on-line applicators or manual dispensers for identification or simple sortation of paperboard shipping containers.

Product Features

- Lower price.
- Sticks to various surfaces.
- Accurate and reliable photoelectric sorting.
- Worry-free performance.
- Suitable for high volume.

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Attribute Name	Test Condition	Value
Color		Medium gray
Application Thickness		0.17 mm (7 mil)
Lens		Exposed
Typical Luminance Factor		200x
Typical Luminance Factor	Skewed 45° reading	100x

Typical Performance Characteristics

Temperature: 22 °C (72 °F)

Substrate: Neenah Bond Paper

Attribute Name	Value
180° Peel Adhesion	0.33 N/cm (3 oz/in)

Attribute Name	Value
Short Term Temperature Resistance	260 °C (500 °F) ¹
Long Term Temperature Resistance	177 °C (350 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Handling/Application Information

Application Techniques

Automatic and manual dispensers are available to facilitate application of 3M™ Scotchlite™ Photoelectric Grade Sheeting 7590.

Application may be made at temperatures as low as 10°F (-12°C) to a clean and dry surface. The sheeting will remain serviceable for many years when properly applied to a suitable substrate and used in typical indoor or outdoor environments.

The sheeting maintains approximately 90% of its dry brightness with water falling on the surface (Rainfall Test Method of Federal Highway Administration Specification, FP-74, Section 718.01 [6]).

Use in high temperature environments (above 200°F [93°C]) for an extended period of time could permanently reduce retroreflective efficiency. Repeated freeze-thaw cycles may cause subtle but visible cracking of the reflective surface, which should not significantly affect performance. Extreme cracking will reduce the optical performance of the sheeting.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 12 months from date of manufacture.

Available Sizes

Available Length

Width	Value
1/2, 3/4, 1, 2 in widths	45.7 m (50 yd)
1/2 in width	183 m (200 yd)

Available Sizes - Detailed

Custom widths and lengths available on request, subject to minimum order requirements.

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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