

**PRODUCT DATA SHEET**

**Deltaline® XRP-R & HCL-R**

**High Performance Durable Pavement Marking Tape**

Deltaline® profiled marking tape is an easy to install, highly durable, conformable, highly retroreflective delineator. The Deltaline® XRP-R has extended reflective performance and enhanced wet reflectivity over traditional flat tapes and paints. Deltaline® XRP-R is available in white and yellow, in a variety of widths as well as words and symbols. The roadway can be opened to traffic immediately after application.

**Application**

Deltaline® XRP-R & HCL-R (Extended Reflective Performance) & (High Contrast Line) series tapes can be used as an inlay on new asphalt or surface applied on most pavement surfaces where high levels of reflectivity are required to ensure the safety of the motoring public, and traffic is generally free rolling.

Series XRP-R: White (W) and Yellow (Y) materials are intended for use as lane lines, edge lines, and gore markings on asphalt surfaces.

Series HCL-R: High Contrast Line with black edges is intended for use as lane lines on light colored surfaces.

All applications using Series XRP-R and HCL-R tapes can be installed by following the instructions listed on the appropriate Brite-Line® Product Application Instructions.

**Product Features**

- Durable, conformable, and highly retroreflective
- Excellent reflective properties in wet conditions
- Profile design that provides long term reflectivity
- Abrasion resistant ceramic beads and anti-skid particles bonded to a durable polyurethane topcoat
- Channels between raised areas are substantially free of exposed reflective spheres
- Conformable construction is made of high quality polymeric materials, pigments, and glass beads
- Coated with pressure sensitive adhesive on bottom surface for ease of application
- Manufactured without the use of heavy metals, lead chromate pigments, or other similar lead containing chemicals
- Nominal thickness of 0.065 inches (1.6mm) at profile heights
- Excellent reflective properties in wet conditions

**Reflectance**

Table 1 illustrates Deltaline® XRP-R pavement marking tapes excellent minimum reflective properties. Measurements made using ASTM Test Method E1710 & E2177.

Minimum Retroreflectivity Values	White	Yellow
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Dry Retroreflectivity (mcd/m <sup>2</sup> /lx)	700	500
Wet Retroreflectivity (mcd/m <sup>2</sup> /lx)	250	200

These measurements can be taken at any angle from down web.

\* “The quantity specific luminance (SL) relates to the way the effective retroreflective surface is focused on the retina of the human eye and to the visual effect thereby produced. It is recommended for describing the performance of highway signs and striping..” Federal Test Method Standard 370, 3.1.3, Note 6. March 1, 1977.

**Skid Resistance**

The surface of the tape provides a minimum initial skid resistance value of 45 BPN when tested according to ASTM Method E303.

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**Patch Ability**

Heavy traffic and snow plowing may cause wear and damage. New materials can be patched into these areas following instructions indicated on the appropriate Brite-Line® Product Application Instructions.

Recommended Usage and  
 Material Replacement Provisions

**Performance Life**

The performance life of pavement markings will depend on the following:

- Traffic conditions
- Snow removal practices
- Pavement surfaces
- Application techniques

It is recommended that each customer thoroughly evaluate Deltaline® XRP-R & HCL-R Pavement Marking Tapes under the conditions in the specified location. While experience has shown that when properly applied, these materials are highly effective traffic control devices, Brite-Line® Technologies LLC makes no generalized performance claims.

**Material Replacement Provisions**

Brite-Line® Technologies LLC will provide replacement materials for Deltaline® XRP-R & HCL-R tapes determined to be Inadequate traffic control devices due to:

1. Failure to meet the minimum retained reflectance values as shown in Table # 2 as determined by instructions in Section C.

Table 2

Minimum Retroreflectivity Values	White	Yellow
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflectivity (mcd/m <sup>2</sup> /lx)	100	100

2. Loss of adhesion or complete wear-through, except mountainous, heavy snowfall areas above 5,000 feet (1,500m) in elevation.

Brite-Line® Technologies will provide replacement materials for Deltaline® XRP-R and HCL-R tapes determined to be Inadequate traffic control devices for the period of time defined in Table 3. (Refer to Figure 1 for classification of snow removal and non-snow removal areas.)

Table 3

	Non-Snow Areas <sup>1</sup>	Snow Removal Areas <sup>2</sup>
<b>Longitudinal Lines<sup>2</sup></b>		
New Asphalt Inlay	4 Years	4 Years
Overlay – Any Surface <sup>3,4</sup>	4 Years	4 Years
<b>Legends and Symbols:</b>		
New Asphalt Inlay	2 Years	2 Years
<b>Overlay</b>		
New Asphalt 0-3 Days	2 YR Primed <sup>4</sup>	2 YR Primed <sup>4</sup>
4-10 Days	1	1
11-90 Days	1	1
Old Asphalt	1	1
New Concrete	1	1
Old Concrete	1	1

<sup>1</sup>2 Year when Primed<sup>4</sup>

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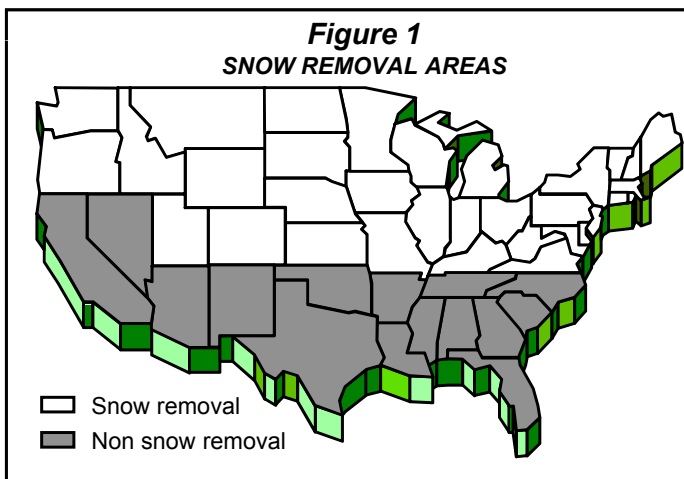
1. Overlay applications after September 1st in snow removal areas are not recommended and are not covered under these materials replacement provisions. Damage to pavement markings caused by snow removal equipment is not covered under these material replacement provisions. Snowplow damage is generally characterized by chatter marks, gouges, or localized areas of missing pieces in the marking.
2. Overlay applications of Deltaline® tapes as gore markings in snow removal areas are not covered under these material replacement provisions. Each customer must carefully evaluate traffic conditions and determine the suitability of markings used in these applications.
3. Applications made on new concrete that has been open to traffic less than months must be sandblasted to remove the curing compound and primed with the specified pavement preparation adhesive to qualify for these material replacement provisions.
4. Brite-Line D-20 adhesive is the recommended primer for all Overlay and Concrete applications.

**Important Notice To Buyer:**

All statements, technical information and recommendations contained herein are based on tests believed to be reliable. The accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied:

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of, or the inability to use the product. Before using, user shall determine the suitability of the product for the intended use, and user assumes all risk and liability whatsoever in connection therewith.

Statements or recommendations not contained herein shall have no force or effect unless in an agreement signed by officers of seller and manufacturer.



Applications of these materials are not recommended in mountainous, heavy snowplow areas above 5,000 ft. (1,500m) in elevation.