

PRODUCT DATA SHEET

Brite-Line Deltaline® XRP

Extended Reflective Performance Pavement Marking Tape

Deltaline® XRP profiled tape is a high performance durable pavement marking that also provides Extended Reflective Performance not achievable from traditional markings. Deltaline® XRP is available in white, yellow, and high contrast, in a variety of roll widths and as words and symbols.

Applications

Deltaline® XRP Extended Reflective Performance 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.

XRP: White (W) and Yellow (Y) materials are intended for use as lane lines, edge lines, and transverse markings on asphalt and concrete surfaces. High Contrast with black edges is intended for use on light colored surfaces.

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

Product Features

- Durable, conformable, and highly retroreflective
- Profile design provides long term Reflective retention.
- 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 from 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
- White: XRP-W, Yellow: XRP-Y, Contrast: HCL

Reflectance

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

Table # 1

| Minimum Retroreflectivity Values | White | Yellow |
|--------------------------------------------|--------|--------|
| Entrance Angle | 88.76° | 88.76° |
| Observation Angle | 1.05° | 1.05° |
| Retroreflectivity (mcd/m ² /lx) | 700 | 500 |

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 an initial skid resistance value of 45 BPN when tested according to ASTM Method E303. These measurements can be made at any angle from down web.

PRODUCT DATA SHEET
Brite-Line Deltaline® XRP
Extended Reflective Performance Pavement Marking Tape

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 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 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 ² /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 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.)

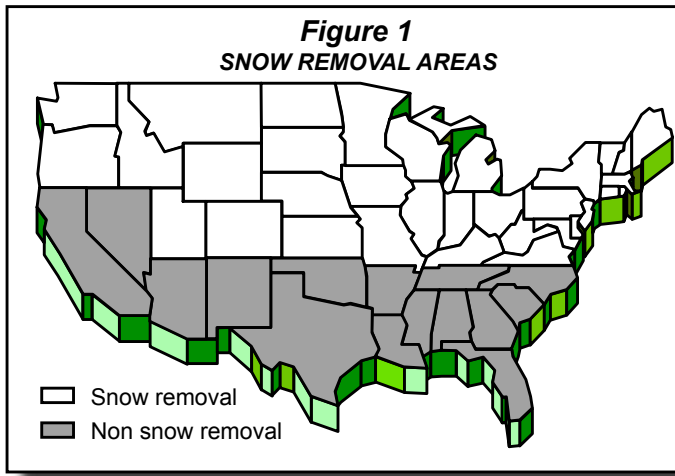
| Table # 3 | Non-Snow Areas ¹ | Snow Removal Areas ² |
|---------------------------------------|-----------------------------|---------------------------------|
| Longitudinal Lines² | | |
| New Asphalt Inlay | 4 Years | 4 Years |
| Overlay – Any Surface ^{3,4} | 4 Years | 4 Years |
| Legends and Symbols: | | |
| New Asphalt Inlay | 2 Years | 2 Years |
| Overlay | | |
| New Asphalt 0-3 Days | 2 YR Primed ⁴ | 2 YR Primed ⁴ |
| 4-10 Days | 1 | 1 |
| 11-90 Days | 1 | 1 |
| Old Asphalt | 1 | 1 |
| New Concrete | 1 | 1 |
| Old Concrete | 1 | 1 |

¹2 Year when Primed⁴

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.

PRODUCT DATA SHEET
Brite-Line Deltaline® XRP
Extended Reflective Performance Pavement Marking Tape

3. Applications made on new concrete that has been open to traffic less than 3 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 for all Overlay and Concrete applications.



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

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.

PRODUCT DATA SHEET

Brite-Line Deltaline® XRP-HCL

Extended Reflective Performance High Contrast Lane Tape

Deltaline® XRP-HCL profiled tape is a high performance durable pavement marking that also provides Extended Reflective Performance not achievable from traditional markings. Deltaline® XRP-HCL is available in white, yellow, and high contrast, in a variety of roll widths and as words and symbols.

Applications

Deltaline® XRP-HCL Extended Reflective Performance 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.

XRP: White (W) and Yellow (Y) materials are intended for use as lane lines, edge lines, and transverse markings on asphalt and concrete surfaces. High Contrast with black edges is intended for use on light colored surfaces.

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

Product Features

- Durable, conformable, and highly retroreflective
- Profile design provides long term Reflective retention.
- 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 from 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
- White: XRP-W, Yellow: XRP-Y, Contrast: HCL

Reflectance

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Skid Resistance

The surface of the tape provides an initial skid resistance value of 45 BPN when tested according to ASTM Method E303. These measurements can be made at any angle from down web.

PRODUCT DATA SHEET
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Extended Reflective Performance High Contrast Lane Tape

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 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® LLC will provide replacement materials for Deltaline® XRP-HCL 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 ² /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® LLC will provide replacement materials for Deltaline® XRP-HCL 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 ¹ | Snow Removal Areas ² |
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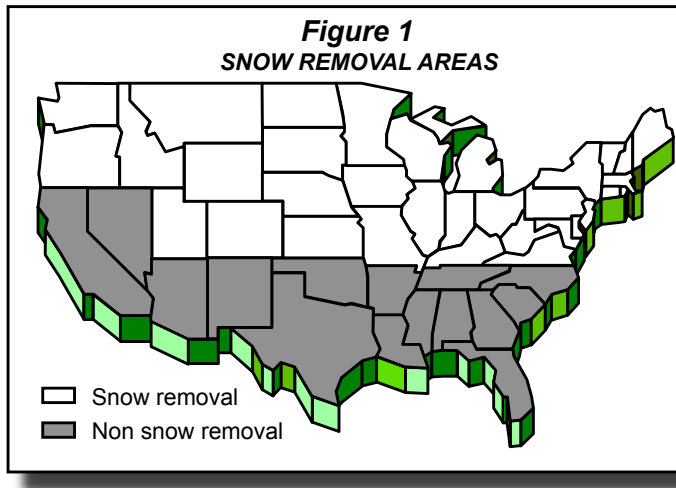
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PRODUCT DATA SHEET

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