



# Standard Specification for Preformed Plastic Pavement Marking Tape for Extended Service Life<sup>1</sup>

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## 1. Scope

1.1 This specification covers white or yellow preformed plastic pavement marking tape, that when applied to a road surface, will provide a service life normally greater than one year depending on the average daily traffic count (ADT).

1.2 The preformed plastic pavement tape is suitable for longitudinal markings and transverse markings including word/symbol markings. It is designed to be a pavement marking with extended service life.

1.3 The values stated in SI units are to be regarded as the standard.

## 2. Referenced Documents

### 2.1 ASTM Standards:

D 1000 Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications<sup>2</sup>

D 1898 Practice for Sampling of Plastics<sup>3</sup>

D 4061 Test Method for Retroreflectance of Horizontal Coatings<sup>4</sup>

E 303 Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester<sup>5</sup>

E 313 Practice for Calculating Yellowness and Whiteness Indices from Instrumentally Measured Color Coordinates<sup>4</sup>

### 2.2 Federal Standards:

FHWA Highway Yellow Color Tolerance Chart, P.R. Color No. 1<sup>6</sup>

## 3. Terminology

### 3.1 Definitions:

3.1.1 *extended service life or period*—a minimum service period of 12 months when placed in accordance with the manufacturers' recommended procedures on pavement surfaces having a daily traffic count not to exceed 15 000 ADT per lane.

3.1.2 *retroreflection*—reflection in which radiation is returned in directions close to the direction from which it came and maintained over wide variations of the direction of the incident radiation.

3.1.3 *surface pattern*—a pattern on the surface, in which the raised areas are a minimum of 0.8 mm (31 mils) high and occupy approximately 50 % of the surface area, presenting a substantial area of nearly vertical face to traffic from any approach.

## 4. Classification

4.1 *Preformed Plastic Pavement Striping Tape* shall be identified as:

4.1.1 Type I; Grade A, B, C, D, or E

4.1.2 Type II; Grade A, B, C, D, or E

4.1.3 Type III; Grade A, B, C, D, or E

4.1.4 Type IV; Grade A, B, C, D, or E

4.1.5 Type V; Grade A, B, C, D, or E

4.1.6 Type VI; Grade A, B, C, D, or E

4.1.7 Type VII; Grade A, B, C, D, or E

### 4.2 Types:

4.2.1 *Type I*—A tape that has retroreflective elements exposed in its surface and intermixed within its body.

4.2.2 *Type II*—A tape that has no retroreflective elements exposed in its surface but has retroreflective elements intermixed within its body.

4.2.3 *Type III*—A tape that has no retroreflective elements.

4.2.4 *Type IV*—A tape that has reflective elements exposed in its surface but no reflective elements in its body.

4.2.5 *Type V*—A tape that has a surface pattern with retroreflective elements exposed on the raised areas and faces and intermixed within its body.

4.2.6 *Type VI*—A tape that has retroreflective elements and skid resistant particles exposed in its surface and retroreflective elements intermixed within its body.

4.2.7 *Type VII*—A tape that has a surface pattern with retroreflective elements and skid resistant particles exposed on the patterned surface and retroreflective elements intermixed within its body.

### 4.3 Grades:

4.3.1 *Grade A*—A tape without precoated adhesive, for application with a liquid contact cement.

4.3.2 *Grade B*—A tape with precoated pressure sensitive

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 10.01.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 08.01.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 06.01.

<sup>5</sup> *Annual Book of ASTM Standards*, Vol 04.03.

<sup>6</sup> Available from Hale Color Charts, 11765 Old Frederic Rd., Marriotsville, MD 21104.