Stamark™

High Performance Pavement Marking Tape A380ESD

Product Bulletin A380ESD **July 2010**

Health and Safety Information

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet (MSDS), and/or product label of chemicals prior to handling or use.

Description

3M™ Stamark™ A380ESD high performance tape is intended to be used as an Inlay marking on hot asphalt surfaces or as an Overlay marking on concrete and asphalt surfaces in locations where traffic is generally free rolling. For rough, cold asphalt surfaces the application method BitumenPlus can be used, which yields in improved adhesion of the tape compared to the Overlay application method.

Stamark A380ESD offers "Extended Season" applications due to an improved pressure sensitive adhesive (PSA) package on the bottom surface. Stamark A380ESD does not require 3M™ Stamark™ Surface Preparation Adhesive P-50 prior to application, if applied during the application season as outlined in the 3M Climate Guide for 3M™ Stamark™ Pavement marking Tapes.

Series A380ESD: used for lane lines, edge lines, channelizing lines, gore/hatch markings, stop lines and pedestrian crossings. Can be used for both new and refresh markings.

Product Construction

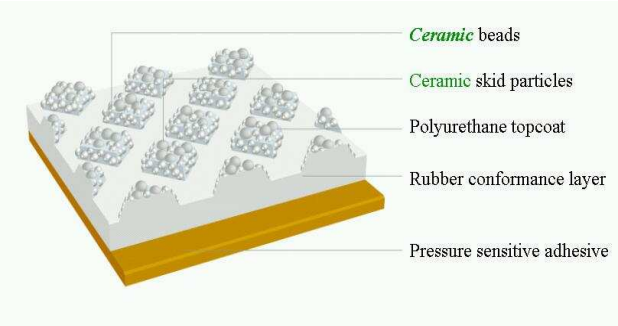

Figure 1: Production construction A380ESD

Product Features

- High performance Tape A380ESD is a road marking material with long-term retained retroreflectivity, skid resistance and whiteness
- Abrasion resistant ceramic beads and anti-skid particles bonded in a highly durable polyurethane topcoat
- Patterned surface that presents a near vertical face to traffic to maximize retroreflectance
- Product design which provides increased visibility under wet road conditions
- Conformable polymer layer made of high quality polymeric materials, pigments and glass beads
- Coated with an "Extended Season" pressure sensitive adhesive on bottom surface
- Nominal overall thickness of 3.0 mm

Product Performance

3M™ Stamark™ tape series A380ESD fulfils the following classes of BS EN 1436 in new conditions:

Qd	R_L	R_W	β	SRT
Q 4 *≥160 mcd*	*R 5* *≥300 mcd*	*RW3* *≥50 mcd*	*B 5* *≥0.6*	*S3* *≥55 SRT*

Typical, but non-warrantied initial R_L values range around 550 $mcd \cdot m^{-2} \cdot lx^{-1}$

General Performance Consideration

Maximum durability of 3M™ Stamark™ High Performance Tape will be realized when properly applied according to 3M recommendations provided in product bulletins and information folders.

The durability of A380ESD tape will depend on traffic conditions, application techniques used, as well as pavement and atmospheric conditions at the time of application. Damage may be caused by heavy trucks, excessive encroachment (crossover), narrow lane width, unpaved shoulders, snow removal and ice control techniques, such as sanding. It is recommended that the customer thoroughly evaluate A380ESD tape under the conditions in the specified location before making large-scale applications.

While experience has shown that, properly applied, these materials are highly effective traffic control devices, 3M makes no generalized durability claims.

Application

All applications of A380ESD tape should be installed using the instructions in this Product Bulletin and the appropriate Information Folders.

Three application methods are applicable for the 3M™ Stamark™ A380ESD: Inlay on the hot asphalt surface, Overlay on concrete and asphalt surfaces and the BitumenPlus application on all, especially rough, cold asphalt surfaces.

Climatic and surface conditions for Overlay applications:

- Air and Surface Temperatures: +10°C and rising
- Relative Air Humidity: < 80 %
- Clean and dry surface, no rain 48 hours prior to the application.
- Do not apply tape on longitudinal road surface joints.

Application Steps:

- Sweep road surface and use a high pressure air blower to remove dust and debris
- Apply tape by hand or using Tape Applicator
- The existing MTA-2 application equipment has to be upgraded using the plasmacoated transportation roll kit **DR995032239** in order to prevent adhesive sticking
- Use butt splices where required, do not overlap tape
- Use Roller Tamper Cart to tamp tape immediately after application. Be careful not to twist the roller on top of the tape
- Application can be made to pre-existing thermoplastic or paint lines that are in good condition e.g not flaking, chalking or otherwise coming away from the road surface. Suitability tests should be conducted prior to large applications

For further details on Overlay application, please read to Information Folder IF OV.
For Inlay application, please read IF AP.
For BitumenPlus application, please read IF BPlus.

Storage

Store 3M™ Stamark™ High Performance Tape A380ESD in a cool, dry area indoors. Use within one year of receipt.

Literature Reference

For additional information on 3M™ Stamark™ Tapes, Application Instructions or 3M™ Application Equipment, refer to the following publications:

IF OV	Information Folder Overlay Application
IF AP	Information Folder Inlay Application
IF BPlus	Information Folder BitumenPlus Application
IF PS-98	Information Folder Adhesive Spray Applicator PS-98
IF P50	Information Folder Surface Preparation Adhesive 3M™ Stamark™ P50
IF MTA2	Information Folder Manual Tape Applicator MTA-2
IF RTC-3	Information Folder Roller Tamper Cart RTC-3

3M assumes no responsibility for any injury, loss or damage arising out of the use of a product that is not of our manufacture. Where reference is made in literature to a commercially available product, made by another manufacturer, it shall be the user's responsibility to ascertain the precautionary measures for its use outlined by the manufacturer.

Important Notice

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. 3M shall not be liable and no warranty shall be liable and no warranty shall apply for products not applied according to our published information folder.

Before using, the user must determine the suitability of the product for its intended use, and the user assumes all risk and liability whatsoever in connection therewith. All questions of warranty and liability relating to this product are governed by the terms of the sale subject where applicable to the prevailing law. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of us.

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