

Product Evaluation

RE: Review of 3M 380IES and 3M 380IES-5

PRODUCT INFORMATION

Product Name: 3M 380IES and 3M 380IES-5
Website: <https://www.3mcanada.ca/>

Manufacturer: 3M Canada Company
Supplier: 3M Canada Company

VENDOR CLAIMS AND INFORMATION

CLAIMS

Abrasion-resistant microcrystalline ceramic beads is bonded in a highly durable polyurethane topcoat. Yellow microcrystalline ceramic beads incorporated in 381I-ES Tape improve nighttime yellow color. Its patterned design presents a near vertical surface to traffic to maximize retroreflectance. Its nominal total thickness is 2.3 mm.

DESCRIPTION

The Tape incorporates an improved pressure sensitive adhesive ("PSA") package on its bottom surface, enabling "Extended Season" applications. When applied during the standard application season, as defined in the 3M Stamark Pavement Markings Tapes Climate Guide, Tape does not require the use of a 3M stamark surface preparation adhesive.

POTENTIAL USAGE

3M 380I-ES ("Tape") is a durable pavement marking tape that can be used as an inlay marking in snowplow areas when recessed into grooves in new asphalt and concrete surfaces, or as an overlay marking on most asphalt and concrete pavement surfaces in good condition. It is used for long lines, edge lines, channelizing lines, gore markings, stop bars, and crosswalks.

STANDARDS

ASTM E1710 Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retro-reflectometer

ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester

ASTM D6228 Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS COMMENTS

EXPERIENCE

Alberta Transportation and Economic Corridors is trialing this product.

APPLICABLE STANDARDS

At present Alberta Transportation and Economic Corridors does not have a standard for Pavement Marking Tapes.

RECOMMENDATIONS

3M 380IES and 3M 380IES-5 be listed as Trial Products under Alberta Transportation Products List, Pavement Markings – Traffic Marking Tape – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

RESTRICTIONS ON USE

Caveat:

TRIAL PROJECTS

3M 380IES placed on Anthony Henday Drive in summer of 2023 at 50 Street (all shoulders and skip lines) and at a small section on the concrete roadway westbound west of Calgary trail on the skip lines.

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cc New Products Evaluation Group – Kristen Tappenden