

**RE: Review of 3M All Weather Thermoplastic Traffic Marking**

**PRODUCT**

3M All Weather Thermoplastic Traffic Marking contains a unique dual optics system that enhances dry and wet reflectivity. 3M All Weather Thermoplastic Traffic Marking is manufactured by 3M Canada located in London, Ontario.

**VENDOR CLAIMS AND INFORMATION**

**CLAIMS**

3M All Weather Thermoplastic Traffic Marking consists of a mixture of high quality resins, pigments and optics. The optics system intermixed into the thermoplastic binder contains all weather elements and glass beads. A second drop of glass beads is necessary to improve the durability of the finished marking and provides increased visibility during dry conditions. Product web link -

[http://solutions.3m.com/wps/portal/3M/en\\_US/Traffic\\_Safety/TSS/Offerings/Products/Pavement\\_Markings/?PC\\_7\\_RJH9U5230GE3E02LECFTDQOVJ4\\_nid=KVJ54DSZSSbeMRKM0WZXCWq](http://solutions.3m.com/wps/portal/3M/en_US/Traffic_Safety/TSS/Offerings/Products/Pavement_Markings/?PC_7_RJH9U5230GE3E02LECFTDQOVJ4_nid=KVJ54DSZSSbeMRKM0WZXCWq)

**DESCRIPTION**

3M All Weather Thermoplastic Traffic Marking system consists of a high performance thermoplastic and 3M bonded core elements. The 3M Thermoplastic highest performance option contains 3M all weather elements, Type 3 and Type 1 beads intermixed into the binder. 3M's bonded core elements consist of a blend of microcrystalline ceramic beads embedded on a center core to provide optimal performance in both wet and dry conditions. The 3M Thermoplastic system is designed to be inlaid at a thickness greater than 60 mils (1.5mm).

**POTENTIAL USAGE**

3M All Weather Thermoplastic Traffic Marking dual optics systems enhance dry and wet retro-reflectivity. As weather conditions change the wet and dry reflective components automatically take over the task of providing retro-reflectivity.

**STANDARDS**

ASTM D4061 Retro in dry conditions  
ASTM E2176 Retro in rain  
ASTM E2177 wet recovery

**ALBERTA TRANSPORTATION COMMENTS**

**EXPERIENCE**

Alberta Transportation has experience with durable pavement markings such as System 400, 600 (MMA), PolyCarb Mark 55.4, Rainline, Pathfinder and HD-21A durable waterborne products. These products are currently listed on Alberta Transportation's Products List under Proven Products.

**APPLICATION STANDARDS**

At present Alberta Transportation does not have a standard for Durable Pavement Markings. Alberta Transportation does have a special provision (SpS200) for Durable Pavement Message Markings and recommended practices for Wet Night High Visibility Durable Pavement Markings. .

**RECOMMENDATIONS**

3M All Weather Thermoplastic Traffic Marking be listed as a Potential Product under Alberta Transportation Products List, Pavement Markings – Durable Plastic – Wet Night High Visibility – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

**TRIAL PROJECTS**

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow  
Richard Chow  
Bill Kenny  
Jim Gavin