

Product Evaluation

RE: Review of 3M Diamond Grade DG³ 4000 Series Reflective Sheeting

PRODUCT

The 3M Diamond Grade DG³ Reflective Sheeting incorporates “Full Cube” technology for optimal performance. The 3M Diamond Grade DG³ Reflective Sheeting is manufactured by 3M Canada located in London, Ontario.

VENDOR CLAIMS AND INFORMATION

CLAIMS

The 3M DG³ reflective sheeting will return nearly twice as much reflected light as the brightest material currently available. The 3M DG³ reflective sheeting design means that the entire cube surface is reflective. Product web link:

<http://multimedia.3m.com/mws/mediawebserver?66666UuZjcFSLXTtMxT25X&yEVuQEcuZgVs6EVs6E666666-->

DESCRIPTION

The 3M DG³ reflective sheeting material consists of full cube prismatic lens elements with a distinctive diamond seal pattern visible from the face of a smooth surface. Its optical elements are 100% efficient, returning almost 60% of available light, nearly double that of traditional prismatic sheeting.

POTENTIAL USAGE

The 3M DG³ reflective sheeting performs at all sight distances including short and medium sight distances and where signs are positioned in disadvantaged locations such as overhead signs.

STANDARDS

The 3M DG³ reflective sheeting material has been proposed to ASTM as Type XI sheeting and is designed as a replacement for all types of reflective sign sheeting in use today.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has no experience with this product. Alberta Transportation uses reflective sheeting material conforming to Standard Specifications for Highway Construction, Specification 5.18 Supply of Permanent Highway Signs, Posts and Bases.

APPLICABLE STANDARDS

The Alberta Transportation specification for Reflective Sign Sheeting Material is as follows:

Standard Specification for Highway Construction, Specification 5.18 Supply of Permanent Highway Signs, Posts and Bases

The Departments current standard for regulatory sign sheeting material is High Intensity meeting the requirements of ASTM D4956, Type III.

RECOMMENDATIONS:

3M DG³ reflective sheeting material should be listed as a Proven Product under Alberta Transportation Products List, Signs and Support System – Reflective Sheeting, Regulatory/Warning/Information Signs – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

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