

Product Evaluation

RE: Review of Avery Dennison T-7500 Series Prismatic Reflective Sheeting

PRODUCT

Avery Dennison T-7500 series prismatic reflective sheeting provides the highest level of reflectivity with its unique prismatic construction. Avery Dennison, located in Nilus Illinois, USA, manufactures the T-7500 series sheeting.

VENDOR CLAIMS AND INFORMATION

CLAIMS

The Avery Dennison T-7500 series sheeting provides high conspicuity, high legibility and gives drivers the maximum time to read and react.

The T-7500 series sheeting material has undergone outdoor weathering testing in accordance to ASTM D-4956. Outdoor weathering results have been submitted for the T-7500 reflective sheeting material series, which show that results exceed the minimum ASTM D-4956 requirements. Product web link: <http://reflectives.averydennison.com/en/home/products/traffic/prismatic-sheeting/t-7500-mvp-series.html>

DESCRIPTION

The Avery Dennison T-7500 Prismatic Grade Reflective Sheeting is a super-high performance, durable micro-prismatic retroreflective material.

POTENTIAL USAGE

The Avery Dennison T-7500 series reflective sheeting is engineered for use as a permanent traffic control device for, stop, yield, wrong way, do not enter and overhead signs.

STANDARDS

ASTM D4956 Standard Specification for Retroreflective Sheeting for Traffic Control

ALBERTA INFRASTRUCTURE AND TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Infrastructure and Transportation has accepted the use of 7514 florescent orange sheeting in work zones, however the department has limited experience with the non-fluorescent sheeting in this series.

Alberta Infrastructure and Transportation has used super-high-performance reflective sheeting materials for specialized applications such as stop, yield, wrong way, do not enter and overhead signs.

APPLICABLE STANDARDS

The Alberta Infrastructure and 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 Avery Dennison T-7500 series sheeting material meets the performance requirements of the ASTM D4956, Type VIII sheeting Very high intensity (Observation angles of 0.2° and 0.5°) standard specification for retroreflective sheeting for traffic control.

PRODUCT COMPARISON TO ALBERTA INFRASTRUCTURE AND TRANSPORTATION and ASTM STANDARDS

Minimum Typical Coefficient of Retroreflection (R_A) cd/fc/ft² (cd.1x⁻¹.m⁻²) of T-7500 series sheeting:

Observation Angle		Entrance Angle	White	Red
T-7500	0.2°	-4°	700	105
A.T.	0.2°	-4°	370	98
ASTM (Type VIII)	0.2°	-4°	700	105
T-7500	0.2°	+30°	325	49
A.T.	0.2°	+30°	225	65
ASTM (Type VIII)	0.2°	+30°	325	49
T-7500	0.5°	-4°	250	55
A.T.	0.5°	-4°	275	70
ASTM (Type VIII)	0.5°	-4°	250	38
T-7500	0.5°	+30°	115	17
A.T.	0.5°	+30°	125	32
ASTM (Type VIII)	0.5°	+30°	115	17

Avery Dennison T-7500 series sheeting material meet the minimum coefficient of retroreflection as specified for the Type VIII sheeting for observation angles of 0.2° and 0.5°.

RECOMMENDATIONS:

Avery Dennison T-7500 series sheeting material be listed as a Proven Product under Alberta Infrastructure and Transportation Products List, Signs and Support System – Reflective Sheeting, Specialized Applications – Proprietary, based on the information provided.

TRIAL PROJECTS

Intersection at Hwy. 2 & 13 – overhead sign on hwy. 13 to the east of hwy. 2 (installed in 2003)
Hwy. 831 – N. of Lamont to Jct. Hwy. 45 (installed in 2005)

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