

Product Evaluation

RE: Review of Oralite 5900 High Intensity Prismatic Sign Sheeting (Reflective Sheeting)

PRODUCT

The Oralite 5900 high Intensity Prismatic Sign Sheeting is manufactured by ORAFOL Reflective solutions Americas located in Mississauga, Ontario.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Oralite 5900 high Intensity Prismatic Sign Sheeting is a highly reflective, weatherproof, self-adhesive film with excellent corrosion and solvent resistance. All Oralite products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Product Web Link:
<http://www.orafol.com/>

DESCRIPTION

Oralite 5900 high Intensity Prismatic Sign Sheeting conforming to all requirements of ASTM D4956 Type IV High Intensity sheeting. The Oralite 5900 series reflective sheeting consists of sealed cells of air backed micro prisms, using total internal reflection.

POTENTIAL USAGE

Oralite 5900 high Intensity Prismatic Sign Sheeting is ideal for permanent traffic signs, temporary traffic control devices and other types of safety devices requiring high visibility, legibility and durability. When used on permanent traffic signs.

STANDARDS

ASTM D4956 Standard Specification for Retroreflective Sheeting for Traffic Control
CALCOAST Industrial Testing Laboratory

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

PRODUCT COMPARISON TO STANDARD
 Typical Coefficient of Retroreflection (R_A) cd/fc/ft² (cd.1x⁻¹.m⁻²) of ULG II sheeting:

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
Oralite 5900 0.2°	-4°	360	270	145	50	65	30	18
ASTM Type IV 0.2°	-4°	360	270	145	50	65	30	18
Oralite 5900 0.2°	+30°	170	135	68	25	30	14	8.5
ASTM Type IV 0.2°	+30°	170	135	68	25	30	14	8.5
Oralite 5900 0.5°	-4°	150	110	60	21	27	13	7.5
ASTM Type IV 0.5°	-4°	150	110	60	21	27	13	7.5
Oralite 5900 0.5°	+30°	72	54	28	10	13	6	3.5
ASTM Type IV 0.5°	+30°	72	54	28	10	13	6	3.5

Oralite 5900 high Intensity Prismatic Sign Sheeting meets the performance requirements of the ASTM D4956, Type IV Sheeting (High Intensity) Standard Specification for Retroreflective Sheeting for Traffic Control.

The 3 year Outdoor Weathering test (Durability Study) on sign sheeting materials was not tested for this product.

RECOMMENDATIONS:
 Oralite 5900 high Intensity Prismatic Sign Sheeting material will be listed as a Trial 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

1. Summerwood Blvd east of Clover Bar Rd at Trail Crossing in Sherwood Park.
2. Foxboro Dr East of Clover Bar Rd at trail crossing in Sherwood Park
3. Alder Ave and Ivy Cres. / Alder Ct. in Sherwood Park.

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cc Innovation Evaluation Group – Roger Skirrow