

Product Evaluation

RE: Review of Orion Portable Steel Barrier

PRODUCT

The Orion Portable Steel Barrier is manufactured by Lindsay Transportation Solutions located in Rio Vista, California and distributed by Roadside Supply Ltd located in Ardrossan, Alberta.

VENDOR CLAIMS AND INFORMATION

CLAIMS

The Orion Portable Steel Barrier is a longitudinal barrier in accordance with the definition in the National Cooperative Highway Research Program Report 350 (NCHRP Report 350). This system has been tested and performs in an acceptable manner in accordance with the guidelines of NCHRP Report 350 at Test Level 3. Product Web Link: <http://www.barriersystemsinc.com/orion-portable-steel-barrier>

DESCRIPTION

The Orion Portable Steel Barrier comes in 11.7m segments and is approximately 450mm wide and 865mm tall and weighs approximately 900 kg. The system is made up of the following components:

- All steel structural components shall be fabricated from mild steel in conformance with ASTM-A36. The components shall be hot dipped galvanized per ASTM-123.
- The W-Beam rail elements shall conform to AASHTO RWM02A Class B guardrail or equivalent.
- The Thrie Beam rail elements shall conform to AASHTO M180, Type II or IV or equivalent.
- Fasteners shall be Class 5.8 (Grade 2) or greater and hotdipped or mechanically galvanized in accordance with ASTM 123 or ASTM 153.

POTENTIAL USAGE

The Orion Portable Steel Barrier is made up of steel units that when joined together using a steel pin and pinned to the ground at each end provides positive work zone barrier protection to temporary construction sites and other miscellaneous roadside activities.

STANDARDS

NCHRP 350

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has no experience with this product

APPLICABLE STANDARDS

The Alberta Transportation specifications for guardrail are:

- Specification 2.19, Guardrail and Guideposts
- Specification 5.25, Supply of W-Beam Guardrail and Posts
- Specification 5.27, Supply of Cable Barrier and Metal Posts

RECOMMENDATIONS:

Orion Portable Steel Barrier be listed as a Trial Product under Alberta Transportation Products List, Traffic Control Devices – Barrier Systems – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

Hwy 53, approx. 15km east of Donalda

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow,
Bill Kenny