Details
Category: End Treatment
Sub Category: Terminal
Gating/Non Gating: Gating
Redirective/Non Redirective: NA
Permanent/Temporary: Permanent

Ownership & Supplier
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Accepted Test Level
NCHRP 350 Test Level 3 (TL3): 100km/hr

Description
The Brifen Wire Rope Terminal is a gating end treatment designed for the Brifen Four Wire Rope Safety Barrier system. It is suitable for the outer verge and median.

Drawing
Design

- Design of the Brifen Wire Rope Terminal shall be in accordance with the Supplier Brifen Wire Rope Safety Barrier Design and Installation Manual, VicRoads RDN 06-02 and the requirements outlined below.
- The terminal is a non-release type terminal and is placed in the approach and departure direction of travel.
- The non-release of cables allows the downstream system to remain tensioned and functional in the event of secondary impacts.
- Brifen Wire Rope Terminal requires a run-out area in accordance with SD 3573.
- The connection of the ropes to the anchor is designed to uncouple when a vehicle impact occurs near the anchor. A ‘safety check’ rope connected to the anchor retrains the movement of the released rope.

Post Specifications

- The Brifen Terminal End post specifications have been summarised in Table 1 below.

<table>
<thead>
<tr>
<th>Post Spacings</th>
<th>2m Centres</th>
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</thead>
<tbody>
<tr>
<td>Post Foundations</td>
<td>The deflection post (Post 1) and Posts 2-4 shall be mounted in concrete foundations</td>
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<tr>
<td>Post Installation</td>
<td>The first post is installed inclined at an 11° angle to the vertical. The remaining posts are installed vertically.</td>
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</tbody>
</table>

Table 1: Post Specifications

Anchor Block Details

- NOTE: Where no geotechnical investigation is undertaken to determine an approved alternative anchor, the manufacturer’s nominated default anchor shall be used.
- Default Anchor Dimensions: 2000Wx3000Lx1000D (mm)
- Bearing face of the anchor block must be vertical and straight.

Limitations

- It is preferred that kerbs or channels are not in front or behind the terminal.
- When a road heads into a sharp curve it is important to make sure the impact zone will be within the length of need and not in the terminal for adequate performance.
- The Brifen TL3 Terminal End is only suitable with the Brifen Longitudinal WRSB. The Brifen Terminal cannot be used with any other system.
- Barrier must NOT be tensioned for 7 days after the foundation piles have been cast.

Installation & Maintenance

- Installation of the Brifen Wire Rope Terminal shall be in accordance with the Supplier Brifen Wire Rope Safety Barrier Design and Installation Manual.

References

- Supplier Brifen Wire Rope Safety Barrier Design and Installation Manual
- VicRoads Standard Section 711 – Wire Rope Safety Barrier
- VicRoads Wire Rope Safety Barrier Installation and Maintenance Guideline
- VicRoads Road Design Note 06-02 – The Use of Wire Rope Safety Barriers (WRSB)
- VicRoads Standard Drawing SD 3573