EAB Installation Guide

MANDATORY PPE REQUIRED

NOTE: HEAVY LIFTING WILL BE REQUIRED IN THIS SOP

TOOLS REQUIRED
32MPA Concrete, String Line, Spirit Level & Auger/Digging Tools

PENDING LOCATION TRAFFIC MANAGEMENT MAY ALSO BE REQUIRED TO ENSURE THE SAFETY OF OTHERS

RSS EAB - Installation Weights and Dimension

<table>
<thead>
<tr>
<th></th>
<th>Bollard, Cartridge &amp; Reo Cage</th>
<th>Bollard Only</th>
<th>Cartridge Only</th>
<th>Reo Cage Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>450mm</td>
<td>150mm</td>
<td>355.6mm</td>
<td>450mm</td>
</tr>
<tr>
<td>Length</td>
<td>1850mm</td>
<td>1450mm</td>
<td>800mm</td>
<td>800mm</td>
</tr>
<tr>
<td>Weight</td>
<td>120.3kg</td>
<td>67.5kg</td>
<td>28.5kg</td>
<td>24.5kg</td>
</tr>
</tbody>
</table>

For further information please contact Roadside Services & Solutions

VIC (03) 9722 9101
SA (08) 8258 3099
NT 0418 471 426
NSW 0429 461 943
Before starting, ensure that you have called “Dial Before you Dig” or have located the services located in the area the bollard/s are to be installed.

Ensure you have the Inspection & Test Plan document as this needs to be completed and returned to Roadside Services & Solutions.

Mark out where the hole centres are to be dug or augered, as per site design.

Note: It is recommended that the spacing to be 600mm from the curbing, this may vary slightly depending on the job requirements. Refer to the RSS EAB manual for recommendations on spacing.

If installing multiple bollards, use a string line to check the bollards are in a straight line.

Note: Ensure ITP has been checked for correct locator. This is to avoid hitting any services.

Auger or manually dig a 1000mm deep x 600mm diameter wide hole.

Note: If using machinery refer to the SWMS for the safe operating procedure.

Place the HD foam block or ½ a Besser brick in the centre of the hole and place the Roadside Energy Absorbing cartridge on top of the foam or brick.

Note: The smaller end of the cartridge must be at the bottom of the hole to ensure correct bollard performance.

Fill the remainder of the hole with minimum 32MPa strength concrete.

Note: If the cartridge is to be covered with concrete or asphalt, the covering depth must not exceed a depth of 25mm.

The cartridge may be covered with non-binded pavers to a depth of 50mm.
Use a spirit level to ensure the cartridge is correctly positioned.

Note: Using a 150mm x 1450mm light-weight galvanised pipe placed into the cartridge to check that the bollards will be vertical may assist.

Fill the remainder of the hole with minimum 32MPa strength concrete.

Note: If the cartridge is to be covered with concrete or asphalt, the covering depth must not exceed a depth of 25mm. The cartridge may be covered with non-binded pavers to a depth of 50mm

Install the bollard once the concrete is dried by placing the Roadside EAB in the centre of the cartridge and lowering approximately 400mm on to the cross-bar.

Finish off by screeding the concrete surface and if applicable replace pavers around the installed bollard.

Clean, sweep up any excess dirt or debris from the site.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ACTIVITY</th>
<th>ACCEPTANCE CRITERIA</th>
<th>H/R/W/M/V</th>
<th>INTIALS</th>
<th>PICTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Position Cartridge Use a spirit level to ensure the cartridge is correctly positioned.</td>
<td></td>
<td></td>
<td><img src="image1.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Using a 150mm x 1450mm light-weight galvanised pipe placed into the cartridge to check that the bollards will be vertical may assist.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Pour Concrete</td>
<td>Fill the remainder of the hole with minimum 32MPa strength concrete.</td>
<td></td>
<td></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: If the cartridge is to be covered with concrete or asphalt, the covering depth must not exceed a depth of 25mm. The cartridge may be covered with non-binded pavers to a depth of 50mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Place Bollard</td>
<td>Install the bollard once the concrete is dried by placing the Roadside EAB in the centre of the cartridge and lowering approximately 400mm on to the cross-bar.</td>
<td></td>
<td></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>10</td>
<td>Replace Pavement</td>
<td>Finish off by screeding the concrete surface and if applicable replace pavers around the installed bollard.</td>
<td></td>
<td></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>11</td>
<td>Finish</td>
<td>Clean, sweep up any excess dirt or debris from the site.</td>
<td></td>
<td></td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**KEY:** H = Hold Point  R = Review Documentation  W = Witness  M = Measure/Count  V = Visual Inspection  RSS = Roadside or Employee