



# SOP – INSSOP009 – Installation – Speed Cushion with Angle Bar

Rev 7 (22/11/2023) – Owner: Chief Operating Officer



ROAD SAFETY RENTAL

## 1. Objective and Scope

To describe how to safely install Saferoads 25mm Rumble Bars.

## 2. Safety: Working on or beside a roadway is inherently dangerous.

## 3. Personal protective equipment (PPE)



Safety Boots (steel capped) with rubber soles.



Eye and hearing protection is compulsory



Use a dust mask when using compressed air for blowing drilled holes



Hi-Viz must be worn when installing product



Gloves must be worn when installing product



Hi-Viz Protective Clothing is to be worn

## 4. Equipment Required

- Compressor with air nozzle
- Hammer drill and bits
- Industrial vacuum cleaner
- Generator
- Epoxy and gun (refer SDS)
- Small hand tools
- Traffic Mngt Equipment

## 5. Qualifications and Competencies




- Safe use of hand tools;
- Manual handling and Road traffic management.

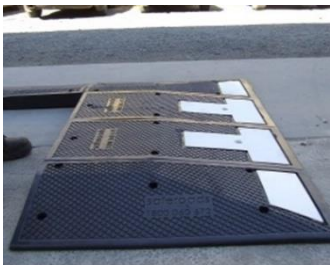








## 6. Documentation and Setup


- Ensure that the selected installer provides a copy of Public Liability Insurance, WorkCover, SWMS and plant service records. (No documentation - no job).
- Contact Dial before you dig; if required (recommended);
- Ensure you are at the correct location and set up traffic control is to Australian Standards, or as advised and required by the client.



## 7. Installation

Step 1 – Position the rumble bar	Step 2 – Layout corners	Step 3 – Layout centre sections
		
Position the Speed Cushion on a clean road surface, as per site plan provided.	Place steel fixing angles into position with corner sections slotted into place	Place steel fixing angles into position with centre sections slotted into place

Step 4 – Layout	Step 5 – Layout alternate side	Step 6 – Marking designated holes
		
<p>Continue to place segments to form the desired width of the Speed Cushion, but without fastening them in place.</p>	<p>Repeat process on other side of speed cushion to form complete cushion. Once all segments are down ensure all segments are firmly placed together without any gaps between.</p>	<p>Place steel fixing angles into position with rubber centre sections slotted into place</p>
Step 7 – Location to drill	Step 8 – Clean holes	Step 9 – Using epoxy for angle fixing
		
<p>Continue to place segments to form the desired width of the Speed Cushion, but without fastening them in place.</p>	<p>Use airgun to remove dust from hole. if using air gun be careful of airborne dust and stones.</p>	<p>Using epoxy and caulking gun, insert nozzle into hole and insert epoxy. we recommends 3 caulks per hole.</p>
Step 10 – Insert plug & screw	Step 11 – Drilling holes	Step 12 – Repeat drilling process
		
<p>Insert orange nylon plug (ramset ultra-long) into hole. Slide angle bracket back over hole and insert ultra-long screw</p>	<p>Remove all rubber segments from one side and swivel angle bracket to one side to expose painted locations for fasteners. Repeat drilling and cleaning</p>	<p>Repeat process for angle bracket on other side of speed cushion</p>

Step 13 – Reposition segments	Step 14 –Drilling holes	Step 15 – Clean holes in rubber
		
<p>Re-instate all rubber speed cushion parts, so the cushion is firmly placed together, without gaps.</p>	<p>With a 14mm masonry bit, drill holes through the speed cushion segments into paved surface</p>	<p>Use airgun to remove dust from hole. if using air gun be careful of airborne dust and stones.</p>
Step 16 – Clean holes in concrete	Step 17 – Using epoxy for angle fixing	Step 18 – Insert nylon plug
		
<p>Remove one segment at a time and use an industrial vacuum cleaner or air gun to remove dust from each hole.</p>	<p>Using epoxy and caulking gun, insert nozzle into hole and insert epoxy. we recommends 3 caulks per hole.</p>	<p>Insert nylon plug into hole using hammer. Note: be careful of splatter of any excess epoxy</p>
Step 19 – Lining up holes	Step 20 – Insert bolts	Step 21 – Tighten bolts
		
<p>Quickly re-instate the segment into the correct position, lining up the fastener holes.</p>	<p>Insert the coach bolts and hand tighten.</p>	<p>Using air compressor and rattle gun, drill in the coach bolt with a 10mm socket screw, being careful not to tighten it all the way. Note: the coach bolt will rotate the plastic sleeve in the holes if over tightened mechanically.</p>



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### Step 22 – Final tightening



Finish tightening coach bolts using a ratchet socket wrench with a 17mm socket. Note: ensure this step is completed not too long after the previous step as the epoxy will set.

### Step 23 – Final checks

#### Clean Worksite

- Sweep any excess dirt or debris from the site and collect any left-over parts
- Housekeeping practices adhered to and worksite is left clean and safe; and
- Items have been fitted correctly and safely.
- Workmanship is to specification;
- Materials quality is acceptable;
- Unused materials are removed; and
- Quality checks performed.
- Surrounds are restored to prior condition; and
- No spillage and/or damage to any soil, habitat, atmosphere or drainage.

### SOP REVISION UPDATES

#### SOP Amendment Level

Rev #	Date	Comment
7	22/11/2023	a. PPE Icons updated – No Revision change
7	20/01/2022	a. Review by Manager – Supply, Safety and Systems – No Revision change (format only)
7	08/10/2020	b. New Format
6	05/04/2018	a. Reference including Housekeeping / Revision Details