

Installation Instructions for STAY GRATE™ SS2 units

Version current as at 1st September 2015

NOTE: STAY GRATE™ SS2 assembly includes STAY GRATE™ SS2 unit, chemical anchoring device and screw. Installation instructions are for STAY GRATE™ assembly's using Anzor M10 Internal Threaded Anchors with Hobson 316 M10 countersunk socket screw and using Chemset™ 101 Plus resin.

Figure 1. Plan and Profile of STAY GRATE™ SS2 unit.

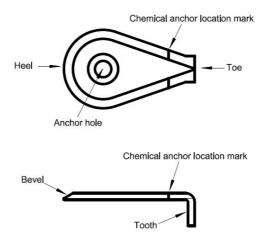
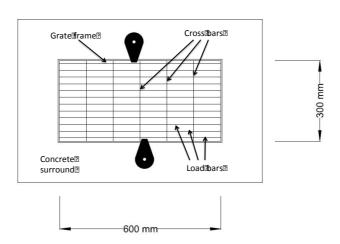


Figure 2. Identification of component parts of grate and surround.





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- 1. Identify the number of STAY GRATE™ SS2 units to be installed, and the configuration in which they need to be placed, dependent on the size and number of grates to be fixed.
 - Refer to Figure 3: Recommended installation configurations for STAY GRATE™ SS2 units for different grate sizes.
- 2. Place STAY GRATE™ SS2 units in intended location, heel to the concrete surround and toe into the grating, ensuring there are no obstructions to the plate and that it makes close contact with the concrete surround (if necessary, level-off the concrete surface to be installed). Ensure the STAY GRATE™ SS2 tooth engages the grate frame or the first load bar. Ensure the chemical anchor location marks on the bevel are not over the edge of the concrete surround into the grate space below*
 - Refer to Figure 1 Plan and Profile of STAY GRATE™ SS2 unit, and Figure 2 Identification of component parts of grate and surround.
- 3. Mark the position of the Anchor Hole with a 12mm diameter drill bit to a depth of approximately 5mm.
- 4. Remove STAY GRATE™ SS2 unit and complete drilling anchor hole in the concrete using an 18mm masonry bit to a depth of 95mm.
- 5. ESSENTIAL: Clean the drilled hole with compressed air or similar method (air pump) to remove all drilling debris and dust. Dust and debris in the anchor hole will interfere with the Chemset™ 101 Plus bond and reduce the load capacity of the STAY GRATE™ assembly. Ensure no dust or debris remains on the concrete surface where the STAY GRATE™ unit is to be placed. If holes are wet or flooded, clean hole with brush and rinse hole with clean water. Prepared hole may be damp, but not filled with water.
- 6. Apply nickel-based anti-seize lubricant to countersunk socket screw in accordance with manufacturer's recommendations. In applications where resistance to vibration is required the use of a suitable Loctite™ thread-adhesive or similar product is recommended. All products used in conjunction with STAY GRATE™ units must be applied strictly in accordance with the Manufacturer's Specifications.
 - NOTE: Where chloride concentrations in water are higher than 500ppm or where high levels of sulphuric acid are present use of a 316 Stainless Steel screw is recommended.



- 7. Assemble the STAY GRATE™ SS2 plate, stainless steel screw and anchor, and hand-tighten the screw to the anchor. Back the screw off by two complete turns, to allow tightening of the assembly once the Chemset™ has cured and the anchor is secure.
- 8. Insert the Chemset™ 101 Plus resin into the drilled hole in accordance with the manufacturers' specifications.
- 9. Place STAY GRATE™ SS2 unit in position, ensuring again the chemical anchor location marks on the bevel are not over the edge of the concrete surround. Ensure the tooth engages the grate frame or first load bar. Insert the anchor into the hole, rotating the socket to ensure even distribution of Chemset™ 101 Plus resin and to avoid trapping air.
- 10. Allow Chemset[™] 101 Plus resin to cure for the appropriate time, in accordance with the manufacturers' recommendations. Refer to technical datasheet and MSDS available from www.ramset.com.au for precautions and further detailed installation instructions for Chemset[™] 101 Plus.
- 11. Tighten the head of the screw to 11Nm torque with a 6mm Allen key until the screw head is firm in the recess, below the STAY GRATE™ SS2 unit surface.

<u>Please refer to Worksafe Safety Alert July 2014 "Torqueing fasteners with rattle guns" and ensure fasteners are correctly torqued to manufacturer's specifications.</u>

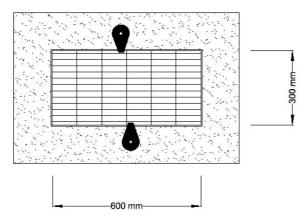
http://www.worksafe.vic.gov.au/forms-and-publications/forms-and-publications/torqueing-fasteners-with-rattle-guns

*IMPORTANT: All anchoring devices and screws used in conjunction with STAY GRATE™ SS2 units must be installed strictly in accordance with the Manufacturers' Specifications.

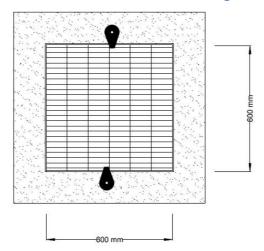


Figure 3. Recommended installation configurations for STAY GRATE™SS2 units for different grate sizes

3a. Configuration of STAY GRATE™ SS2 units for 300mm x 600mm grate.

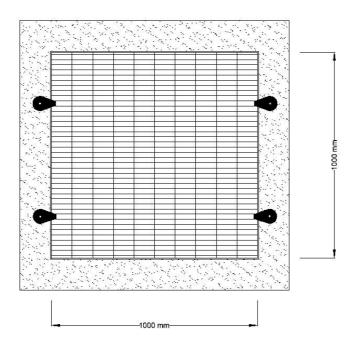


3b. Configuration of STAY GRATE™ SS2 units for 600mm x 600mm grate.



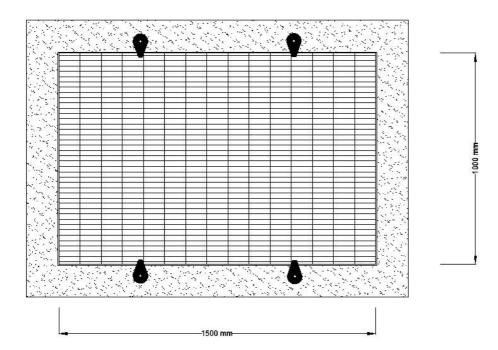


3c.Configuration of STAY GRATE™ SS2 units for 1000mm x 1000mm grate.





3d. Configuration of STAY GRATE™ SS2 units for 1000mm x 1500mm grate.



3e. Configuration of STAY GRATE™ SS2 units for 6000mm x 1000mm grate.

