

Safety Ring Anchor

Date	23/01/15
Reference	TDS03095

Part No.: RSR12GM



Part No.: RSR12SS



Part No.: DSM12SS



Part No	Thread Size	Internal Ring Diameter (mm)	Overall Length (mm)	For use only with	Setting Tool	Order Qty
RSR12GM(Gal)	M12	16	138	DSM12SS	SETSA4	4
RSR12SS(AISI 316[A4])	M12	16	138	DSM12SS	SETSA4	4

Product

The Ramset Safety Ring Anchor System has been specifically designed for use on buildings where window cleaners and ancillary trades require safe work practices to perform their duties.

The Safety Ring Anchor provides a secure, permanent anchorage point for fall arresting safety harness.

Description

High tensile carbon steel or AISI-316 Stainless Steel drop forged ring and shaft, used in conjunction with Ramset M12 Stainless Steel Dynaset™ Drop In anchor.

Recommended Uses

The Safety Ring Anchor is designed primarily as a fall arresting device.

Features

- High tensile steel for extra strength.
- Hardened and tempered to ensure toughness.
- Finishes to suit environmental requirements:
 - Hot dip galvanised
 - AISI 316 (A4) stainless steel
- 18mm internal eye diameter for lanyard connection.
- Individually tensile proof tested.

Physical Performance Properties

- Manufacturing Process: Drop Forging
- Hardening & Tempering: Meets BS970 Part 1
- Carbon Steel Material: BS970 Part 1 – 070M26
- Stainless Steel Material: BS970 Part 1 – 316S16

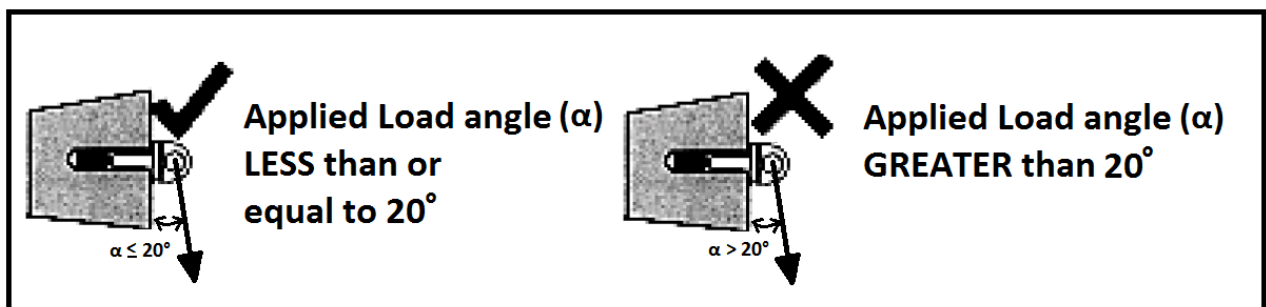
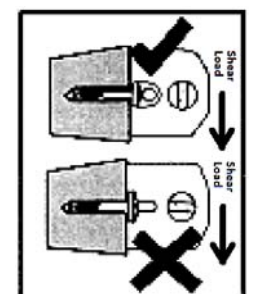
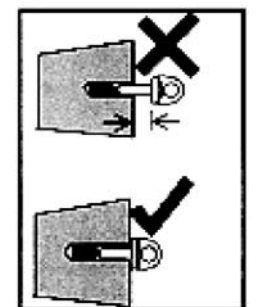
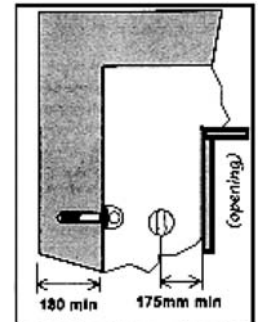
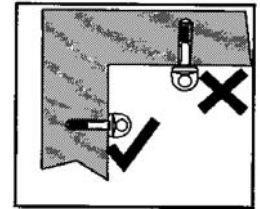
Compliance Statement

The Safety Ring Anchor meets the requirements of the following standards;

- British Standard BS EN795
- **Australian Standard AS 1891.4:2009 – Table 3.1 (a) single point anchor free fall arrest for one person based on installation into concrete strength $f'c = 20$ MPa**

Precautions

- Carefully read installation instructions prior to use.
- USE ONLY** as a complete system using the following;
 - Safety Ring Anchor
 - Ramset Dynaset Drop In Anchor (Stainless Steel M12)
 - Rubber Seal
- If used for fall protection, Safety Ring Anchors **SHOULD NEVER** be installed where they can be loaded in tension. The load **MUST** always be in shear. Install only into a vertically oriented substrate or where loading in shear is guaranteed.
- ONLY** install into sound concrete stronger than 20 MPa ($\beta > 25 \text{ N/mm}^2$)
- DO NOT** install into concrete elements less than 180 mm in thickness or within 175mm of an edge
- Ensure a hole is drilled perpendicular to the concrete surface to the correct depth using the specified drill bit.
- ONLY** install Safety Anchor Ring using Ramset setting Tool SETSA4.
- ALWAYS** install the Safety Ring Anchor with the rubber seal provided.
- The shoulder of the anchor must be flush and in contact with the concrete surface.
- Align the ring of the anchor in the direction of the applied shear load.
- DO NOT** over torque the Safety Ring Anchor.
- DO NOT** use Safety Ring Anchor as a lifting point. If intended for fall protection, attach only with 12mm diameter polyamide or nylon lanyards to Safety Ring Anchor.
- To avoid excessive shock loading beyond the capacity of the Safety Ring Anchor, **DO NOT** use with chains, cables or nylon lanyards over 2 metres in length.
- Every Safety Ring Anchor need to be proof load tested to 7.5 kN as required by AS 1891.4:2009 clause 3.1.2 (g).
- The angle of the applied load should not exceed 20° to the surface into which the Safety Ring Anchor is installed as stipulated in AS 1891.4:2009 3.1.2(g)



Installation Instructions

1. **Drill or core a \varnothing 15mm hole to depth of 130mm \pm 2.5mm.**
Clean hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.
2. Check depth is correct, using the reverse end of the setting tool (SETS4). The depth indicator groove **MUST** be level with the concrete surface.
3. Insert the DSM12SS into the hole by knocking it in, using the reverse end of the setting tool.
4. Using a hammer and setting tool, drive the expansion plug into the anchor until the depth indication groove is level with the concrete surface. **If this cannot be achieved, an alternative anchor point location must be selected.**
5. Insert safety ring anchor and rubber seal. Tighten with a bar to the following Tightening Specification;
 - a. Using a bar not more than 100mm long (the bar should not bend during installation).
 - b. Using a 150mm long bar, not more than 10mm in diameter and of yield strength not exceeding 300 MPa. R10 reinforcement bar is suitable for this purpose.

When bar starts to bend, the anchor ring should be returned back to the closest vertical orientation. **Ensure the anchor ring is aligned with the expected direction of the applied shear load.** The Stainless Steel M12 Dynaset™ will remain in position if the safety ring anchor is removed.

