



## AA408 Tensile Double Bolt Anchor Installation Instructions



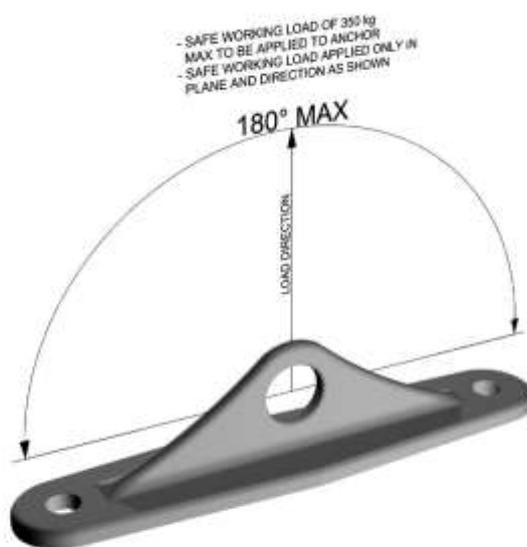
### **Things to know:**

AA408 is designed for installation in concrete and steel. It has been specifically developed for tensile loading applications. It is suitable as a re-belay/ aid climbing anchor, tensile rope access anchor or fall arrest anchor. It should be used in place of collared eye bolts in all applications where they are loaded under an angle greater than 20° with the surface they are installed in.

### **Fixing options:**

- 2 x Through bolt M12 (HOLE 14 DIA)
- 2 x Chemical HILTI HVU M12 (HOLE 14 DIA)
- 2 x HSL 3-B M12 (HOLE 18 DIA)

**Loading:** tensile or shear as per the diagram

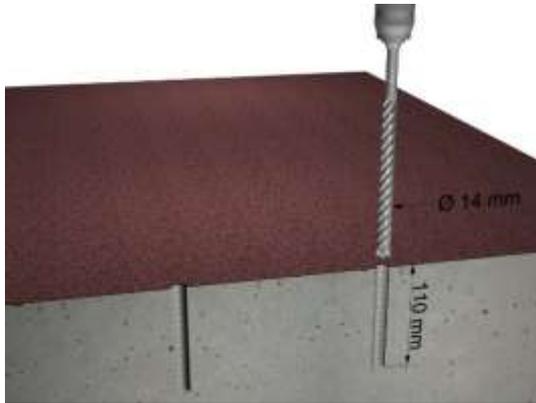


### **Tools needed for installation:**

Rebar detector, Rotary hammer drill, masonry drill bit 14 or 18, air pump, cleaning brush

**Installation steps – M12 chemset in concrete:**

1. Use Hilti Reo Scan or similar device to avoid drilling the steel reinforcement in concrete.
2. Mark the positions for holes to be drilled.
3. Drill two M14x110mm holes. When you start drilling the second hole, double check your holes line up with the anchor holes. Ensure the holes are parallel and 90° with the drilled surface



4. Clean the holes 3 times with compressed air and cleaning brush.



5. Insert one Hilti HVU M12 chemical pack in each hole.



6. Using rotary hammer with appropriate setting tool, install 2 stainless steel M12 rods through the holes in the base of AA408 anchor. The rods must have their tips cut on 45° angle to allow for correct mixing of chemical.



7. Allow sufficient drying time as per Hilti HVU instructions. Once cured, remove the hex nuts.



8. Install one M12 washers and one M12 nylock nut on each rod ensuring minimum of 3 threads are showing when nuts are fully tightened.



NOTE: When installing through water proofing membrane, a full gasket of quality polyurethane sealant is recommended between and around the anchor base plate and the membrane.

NOTE 2: Install M16 chemset as per the above instructions with re-drilled anchor body holes to take M16 rods

**Installation steps – M12 Hilti HSL-3B in concrete:**

1. Use Hilti Reo Scan or similar device to avoid drilling the steel reinforcement in concrete.
2. Mark the positions for holes to be drilled.
3. Assemble both HSL's onto the anchor body and check they line up with the marked holes

4. Drill two M18 x 125mm holes. When you start drilling the second hole, double check the holes line up with the HSL's in your assembly. Ensure the holes are parallel and 90° with the drilled surface
5. Clean the holes 3 times with compressed air and cleaning brush.
6. Offer the whole assembly to the drilled holes and tap both HSL's repeatedly with hammer until fully in.
7. Use a spanner to apply correct torque as per Hilti HSL-3B instructions.

### **Installation steps – M12 through bolt**

1. Use Hilti Reo Scan or similar device to avoid drilling the steel reinforcement in concrete.
2. Mark the positions for holes to be drilled.
3. Drill two M14 holes. When you start drilling the second hole, double check your holes line up with the anchor holes. Ensure the holes are parallel and 90° with the drilled surface
4. Insert two M12 stainless steel rods cut to size. Add two backing plates (BP2 or BP3) to each rod on the back side and M12 washer to each rod on the front side.
5. Install four M12 lock nuts; one for each end of the rod and tighten to 40 Nm using two spanners. Ensure minimum of 3 threads are showing when nuts are fully tightened.

### **Proof load and certification:**

All chemical and friction anchorages must be proof loaded before their initial use and subsequently on regular basis to satisfy the requirements set out in AS/NZS 1891.4:2009 and AS/NZS 4488.2:1997

- Proof load each rod individually to 7.5 kN
- Do not proof load the bracket

Through bolts must be visually inspected – do not proof load!

### **Note:**

The structure must be assessed by a structural engineer unless it is clear to a suitably qualified person that it is capable of withstanding the forces imposed on it during arresting of a fall and during work positioning.

### **DISCLAIMER**

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