# 303-101 Tactile Warning Stud



Above. Shown with attractive machine finish

### Description

Manufactured from 316 grade steel. Satin polish finish as standard. Strips provide an underfoot warning to identify hazards and dangerous areas where is a change in levels.

### **Dimensions**

400 x 20 x 6mm thick 4no. 6mm CSK holes

### **Options**

Bespoke sizing Brass Bronze Full installation service



### Studmarc Installation Guide

### **Hole Drilling**

 Drill hole in the substrate to the required embedment depth using the appropriately sized carbide drill bit.

### **Manual Air Cleaning**

• The manual air pump shall be used for blowing out the debris that has built up in the holes from drilling. Blow out at least 4 times from the back of the hole, using an extension if needed.



• Brush **4** times with the specified brush size by inserting the steel brush to the back of the hole (if needed with extension) in a twisting motion.



• Blow out again with manual pump at least 4 times.



### **Injection & Installation of Stud**

Remove the threaded cap from the cartridge. Cut open the foil bag if necessary.
 Tightly attach the T-Flow mixing nozzle. Do not modify the mixer in any way. Make sure the mixing element is inside the mixer. Use only the supplied mixer.



• Insert the cartridge into the dispenser gun.



Discard the initial trigger pulls of adhesive. Depending on the size of the cartridge, an
initial amount of adhesive mix must be discarded. Each time when the mixer is
changed, new discard of waste is needed until the colour is homogeneous. Discard
quantities are 10cm for all cartridges.



• Inject the adhesive starting at the back of the hole, slowly withdrawing the mixer with each trigger pull. Fill holes approximately 2/3 full, to ensure that the annular gap between the anchor and the concrete is completely filled with adhesive along the embedment depth.



Before installation, verify that the stud is dry and free of contaminants. Proceed to
install the stud to the required embedment depth and allow the recommended time
for the resin to cure - refer to Minimum Curing Time section on the next page.



## **Stud**marc Installation Guide

### **Installation Data**

| Threaded rod<br>and rebar  | Size        | Nominal<br>drill bit<br>diameter<br>d <sub>o</sub> (mm) | Steel Brush | Cleaning methods                                |                             |  |
|--|-------------|---|-------------|---|-----------------------------|--|
|  |             |   |             | Hollow drilling<br>with vacuum<br>cleaner (HDB) | Manual<br>cleaning<br>(MAC) | Compressed<br>air<br>cleaning<br>(CAC) |
|  | M8          | 10  | 12 mm       |   | h <sub>ef</sub> ≤ 80 mm     |  |
| Studs  | M10         | 12  | 14 mm       |   | h <sub>ef</sub> ≤ 100 mm    |  |
|  | M12         | 14  | 16 mm       | No cleaning                                     | h <sub>ef</sub> ≤ 120 mm    | Yes                                    |
| Same annual annu | M16         | 18  | 20 mm       | needed  | h <sub>ef</sub> ≤ 160 mm    |  |
|  | M 20        | 22  | 24 mm       |   | h <sub>ef</sub> ≤ 200 mm    |  |
|  | M 24        | 28  | 30 mm       |   | h <sub>ef</sub> ≤ 240 mm    |  |
|  | $\phi$ 8 mm | 12  | 14 mm       |   | h <sub>ef</sub> ≤ 80 mm     |  |
|  | φ 10 mm     | 14  | 16 mm       |   | h <sub>ef</sub> ≤ 100 mm    |  |
| Rebar  | φ 12 mm     | 16  | 18 mm       | No cleaning                                     | h <sub>ef</sub> ≤ 120 mm    |  |
| 17111111111111111111111  | φ 14 mm     | 18  | 20 mm       | needed  | h <sub>ef</sub> ≤ 140 mm    | Yes                                    |
|  | φ 16 mm     | 20  | 22 mm       |   | h <sub>ef</sub> ≤ 160 mm    |  |
|  | φ 20 mm     | 24  | 28 mm       |   | h <sub>ef</sub> ≤ 200 mm    |  |
|  | φ 25 mm     | 32  | 34 mm       |   | h <sub>ef</sub> ≤ 240 mm    |  |

### **Minimum Curing Time**

| Min    | imum base material<br>temperature<br>C° | Resin (working time) In dry/wet concrete | Curing time in dry concrete | Curing time in wet concrete |
|--------|---|--|-----------------------------|-----------------------------|
| 0°C ≤  | T <sub>base material</sub> < 10°C       | 20 min                                   | 90 min                      | 180 min                     |
| 10°C ≤ | T <sub>base material</sub> < 20°C       | 9 min                                    | 60 min                      | 120 min                     |
| 20°C ≤ | T <sub>base material</sub> < 30°C       | 5 min                                    | 30 min                      | 60 min                      |
| 30°C ≤ | T <sub>base material</sub> ≤ 40°C       | 3 min                                    | 20 min                      | 40 min                      |

