



## COLUMN INSTALLATION SHEET

### Installation: Start with Fixing Plates

Our standard fixing plates (code M01) should first be secured to the concrete slab before any paving is laid, by means of galvanised bolts fitted, with builders epoxy (Hydrapoxy, Megapoxy or equivalent), into drilled holes of the appropriate diameter. On our Steelwork Drawings Sheet, you will find full details of these plates and also our Top Bracket (code M02) fittings.

### Columns :Trim Steelwork, Fix Plates

First trim the shaft metalwork and stonework (if necessary) to your required site dimensions. Then fix the standard plates to the concrete slab or footing with epoxy and galvanised bolts, using a spirit level to ensure that the spigot is set level on the horizontal plane. Note carefully that the columns must have adequate structural footing, and that columns and their fixing plates should not be installed onto tiles or pavers, but epoxy fixed using bolts direct into the concrete slab.

### Install GRC Elements

Trim the column shaft to site dimensions using a hand held angle grinder to a pencil line scribed on the column shaft. Smear builder's epoxy over the inner flange to the base element which will fit inside the bottom of the shaft. Lower shaft section onto the flange then insert the steel into the void. Smear builder's epoxy (Hydrapoxy, Megapoxy or equivalent) over the inner flange of the capital element. Before this epoxy cement sets, place the capital element over the shaft and plumb the steel pipe to the centre of the capital element. Attach the top bearing plate to the top of the steel pipe. After closing the neck of the capital with Cell-Aire or polystyrene, fill the top of the capital element with a mortar mix (1:4 sand and cement.) 50 mm deep. Seal the centre of the top with bituminous paint to ensure a waterproof finish.

### Filling the Shaft

To eliminate the risk of shrinkage stress fractures we recommend that the inside of the column shaft be lined with an isolating material such as polystyrene sheet or polyethylene Cell-Aire foam wrap 5mm ribbed (by Sealed Air). Use a stapling gun to form a long tube of Cell-Aire fed into the shaft and then direct the pour into the top of this tube. If concrete fill is employed without any poly isolation material we have awritten sheet detailing the best method to reduce the risk of shrinkage fractures. Please request this sheet before starting.

### Cleaning And Finishing Work

To clean any cement spatter or smears that occur during the installation simply wash the area affected with clean water immediately after the stain has been made. For stains after the job is completed, saturate the element with clean water and mix up a solution of (5:1) water to Cyndan concrete wash or phosphoric acid, around 300 ml at a time. Pour this mixture into a standard hand mister and very carefully mist the area around the smear.

### Paint Finish

We recommend the use of Porters Paints as suitable finishes for these columns. Our standard colours can be matched exactly and a flat or satin finish can be achieved. 'Stone Paint Fine' gives the best results in our experience. Follow the manufacturer's recommendations with regard to undercoat and final topcoat.

