



## ARCHITECTURAL FIXING NOTES

The objective of the Nustone GRC architectural system is to provide a fully detailed correct and complete finish to the façade of your building. Great value can be added if the detailing is done in an informed and sensitive way. Our expertise in profile selection and matching for balanced proportion will help to achieve a maximized effect. Profiles will be supplied as drawn without modification. Wall thickness of all GRC material will average 20mm, and the void inside the element should be left empty unless otherwise specified by the architect or builder. This is what you can expect from our conservation grade architectural moulding systems.

### THEY WILL BE DURABLE AND SOLID.

There will be no 'hollow' report when tapped after installation and there will be no chance of bruising when ladders are propped against the profiles. The risk of attack by birds is not a consideration with our super dense industrial grade GRC. LESS DURABLE foam based systems can't compare to the extended life of GRC.

### A COMPLETE ARCHITECTURAL SYSTEM.

All elements will be supplied in such a way that the amount of mitring and trimming on site will be minimal. All schedules and installation plans are will be decided jointly with the builder and the project engineer. All elements will be made according to the schedule already supplied and will be numbered for easy identification. Lengths of elements will be decided by the builder, but should be around 2metres, maximum length will be 3metres. External and internal corners will be included in a fitting schedule. Returns or any special connections or junctions will be available if required.

### PROFESSIONAL INSTALLATION OF MOULDED ELEMENTS

#### BEFORE INSTALLATION

All surfaces to be clean and free of loose matter before commencement. The substrate needs to be flat, clean, dry and solid, not subject to expansion and free from grease, oil and other impurities. Old paint remnants and water damaged or loose cement should be removed. Recommended surfaces are roughcast concrete.

#### THERMAL AND BUILDING MOVEMENT

All walls and openings will be subject to normal thermal stresses and movement stresses. The builder and the project engineer should advise the location, number and width of expansion joints. Expect to have a minimum 10mm expansion/slip joint at least every 6m in every elevation. At a designated movement junction, the GRC moulding will be fixed to one substrate only and float over the movement joint. It is not to be fixed to the adjoining substrate.

#### RAMSET NYLON ANCHORS AND LONGER GALVANISED CARRIAGE BOLTS

The moulding elements will be installed using 'Ramset' or equivalent mechanical anchors and carriage bolts drilled through the element to the wall masonry, or by making special fixing points or special drilling or build-in flanges to the elements themselves. Light anchors will suit the smaller profiles, medium grade 'Ramset Dynabolts' will suit the heavier profiles. Appropriate anchors will be specified for your project having regard to site conditions and the weights and profiles as ordered.

#### SEALING AND FILLING GRC, SELLEYS PRODUCTS

The use of a polycarbonate or polyurethane sealer (Selleys Pro Series Sealant or equivalent) on the concrete or masonry wall will enable the elements to seat with a waterproof joint. Joints should be 8mm and will be filled and finished using Selley's Polyfilla Gap Sealant or equivalent.

#### AVERAGE WEIGHT OF ELEMENTS

The weight of the larger elements will be around 25/35Kg per linear metre the smaller elements will be around 10Kg per linear metre. A medium weight 'Ramset' anchor system with washers and connectors will carry this weight, anchor points should be around 700mm apart, or as specified by the builder having regard to site conditions.

## **REPAIRS TO MINOR CRACKS**

Repairs to cracks and open joints should be made with Selley's Polyfilla Exterior Filler used according to manufacturer's directions. Cut open in a V section, allow to dry, then sand with coarse sandpaper and polish with fine sandpaper to achieve a suitable finished surface. Use the grade of Polyfilla suitable for the amount of movement expected over the life of the joint.

## **TRIM ELEMENTS TO REQUIRED LENGTH**

Trim the mouldings using sharp Stanley knife or hand held angle grinder. Over a 2metre length moulding you must mechanically fix within 50mm of each end and at approximately 400mm centres (bottom and top) in the main run of the moulding. In marine environments (within 1Km of the sea) stainless steel anchors are strongly recommended.

## **POSITIONING ELEMENTS**

Positioning the GRC moulding run a string line at the edge or the outside edge in the case of a window surround setting up a precise straight line from point to point. Carefully mark the anchor points and then pre-drill holes for the orange Ramset nylon anchor fittings.

## **DRILLING ANCHOR POINTS**

All profiles must be pre-drilled and countersunk prior to plastic anchor insertion. Drill through the pre-drilled moulding and into the substrate and then counter sink the plastic anchor heads at least 3mm below the profile surface. Tap home the anchor without stressing the GRC moulding.

## **APPLY POLYCARBONATE SEALANT**

Apply the polycarbonate sealant to the fixing location and the rear of the moulding apply mouldings before the preparation loses its adhesive properties. Have regard to the time noted in the manufacturer's specifications.

## **FASTENING THE GRC MOULDING**

Drill through the pre-drilled moulding and into the substrate with a drill bit to suit the size of the shank of the permanent nylon anchor. Then mechanically fasten deep enough to countersink into the countersink cavity. The head of the anchor should be at least 5mm below the surface of the GRC moulding. In a brick or block substrate it is essential to fix through to the masonry substrate and not into the top layer of mortar. Tap home the anchor, taking care not to damage or stress the moulding. Fill and finish the fixing points using Selley's Polyfilla Gap Sealant or equivalent.

## **UNDERCOAT AND PAINTING**

The mouldings can be finished using Porter's Stonepaint Fine or Coarse grade made to the project colour as selected by the owners to match the elements. For antique or special textured finishes ask Porter's staff for information to add attractive patination to the setting. An undercoat or primer is recommended especially over joint sections. Rendermix is recommended for walls and vertical surfaces where architectural elements are used.