



UNIQUE GRG STONE MOULDINGS

ARMOURCAST PRODUCT SPECIFICATION

INTRODUCTION

ArmourCast is the trade name given to a composite stone material manufactured exclusively by Armourcoat Ltd.

ArmourCast materials can be cast or hand laminated into moulds to produce a wide array of stone panels, mouldings or items.

Product

ArmourCast material is a mineral powder made from alpha hemi-hydrated gypsum plaster combined with crushed stone aggregates, mica and other minor additives to control its working characteristics. The ArmourCast material is mixed with a gauging liquid of ArmourCast resin and water to achieve the correct working consistency, and then applied to the surface of the mould. The back of the mould is then laminated with a minimum of 2 layers of Glasfibre matt and resin modified gypsum.

Manufacture

The ArmourCast materials are manufactured exclusively in the UK by Armourcoat Ltd, Morewood Close, London Road, Sevenoaks, Kent TN132HU

The ArmourCast stone mouldings are manufactured from the ArmourCast range of materials by Armourcoat Ltd and selected agents around the World.

Samples and Submittals

Submit 2no samples no smaller than 150mm x 150mm of the Approved ArmourCast finish.

Samples are for general appearance comparisons only as small colour variations will occur within and between items.

Submit shop drawings as required for Architect approval showing layout, sections, details, reinforcing, colour references & fixing and fastening to the intended substrate.

Surface Sealer

ArmourCast is sealed with Armourcoat Clearseal Matt which is an acrylic sealer that reduces the porosity of the sealer.

ArmourCast Anti graffiti sealer can also be applied if required.

TECHNICAL DATA

Material composition

ArmourCast is a composition of crushed marble, limestone, gypsum, mica and acrylic polymer onto a laminated glass fiber reinforced gypsum backing. ArmourCast is a natural mineral material and contains no volatile organic compounds. ArmourCast contains no asbestos.

WPB birch plywood is laminated into the castings and return flanges to provide fixing points where necessary. Galvanized and perforated steel or EPS can also be laminated into the larger castings to provide extra rigidity and strength as required.



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Physical Properties

Flat veneer panels are nominally 9mm thick +/- 1mm
ArmourCast moldings will be from 10- 50mm thick depending upon the requirement for support struts and reinforcement.
ArmourCast panels and cast designs will normally weigh from 10 -18kg/M² however designs with a great depth of relief and support brackets can weigh up to 25kg/M²
ArmourCast has a compressive strength of 18 – 30 N/mm² and the strength will vary dependant upon the final combination of ingredients.
ArmourCast is entirely UV stable.

Tolerance

Gypsum products expand upon setting , and then can shrink back slightly upon drying , and therefore the final cast can end up with small dimensional differences from the original mould.
Dimensional tolerance +/- 1.5%
Warping out of plane - up to 1.5mm in 1000mm

Fire Resistance

ArmourCast is Non Combustible and rated as class 'O' for flame and smoke development when tested to BS 476 part 6 & 7.

Water resistance

ArmourCast can be washed with a damp cloth but should not come into regular contact with water.
ArmourCast is unaffected by humidity and can be used a covered external situations where it will not come into contact with any water.
ArmourCast is not suitable for exterior applications.

SCOPE OF WORKS

Project name

Location

(eg fix ArmourCast panels to atrium & lift lobby walls)

Drawings

Refer to drawings no:

Substrates

(eg Install Eurofox panel support framework to concrete walls and fix ArmourCast panels using Sika Tack panel adhesive system)

INSTALLATION

Storage and Handling

Store ArmourCast units/ panels on a level clean and dry surface in an area protected from weather and damage from other trades. Do not lean panels against walls as they may warp over time.
All flat or veneer panels should remain in the crate resting on edge until they are fixed to the wall.



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Responsibility of the Installer

It is the responsibility of the installer to:
order the correct material quantities including a waste allowance , and verify that the wall and panel dimensions are in accordance with the plans and drawings.
Ensure that the substrate is straight and true and has sufficient load bearing capacity to receive and adequately support the ArmourCast panels or items to be fixed.

Cutting ArmourCast panels

Where site cutting is required the ArmourCast panels can be cut or mitred in one of the following ways:
Fine tooth hand saw. Apply masking tape to the surface and mark the line to be cut. Support both parts of the panel and cut through the panel.

Mini grinder 125mm(5") with slotted diamond tipped blade.

Chop saw with diamond tipped stone cutting blade.

It can help the cutting process to damp down the back of the moulding 10 – 15 minutes before cutting but do not saturate the material or wet cut the material as staining may occur.

After cutting the ArmourCast panels sand the edge of the panel or moulding with 80 or 150 grit wrapped onto a sanding block.

Joint treatments , Grouting and Patching

Dry joints – Either butt the panels tightly together or use tile spacers to establish a consistent gap between panels.

Grouted joints - To achieve grouted joints between panels of for skirting , architrave and dado rails fix the items to the surface and use tile spacers to achieve a consistent gap between items. Apply masking tape carefully and accurately either side of the join to protect the surface of the moulding. Mix the ArmourCast grout and fill the joint. Use a tool or 5mm drill bit to create a half round joint. Do not attempt the create a flush or invisible joint. It will not work.