



ARDEX Optima

ARDEX Optima

DESCRIPTION

Ardex Optima is a two component cementitious acrylic modified white adhesive. When mixed in the recommended portions Ardex Optima produces a resilient water resistant adhesive for bonding most ceramic tiles to Butynol Synthetic Rubber and other substrates (see below).

APPLICATION RANGE

Location

Internal, external and water immersion.

Performance Levels

Residential, commercial and industrial.

Surfaces

Walls, floors and decks.

Tiles

Natural stone, porcelain, mosaics, fully vitrified & ceramic tiles.

Uses

Particularly suited for adhering ceramic and clay tiles to Butynol decking and facings as per the Ardex recommended direct-stick system described below.

Other suitable substrates

- Brick and blockwork
- Fibre cement sheets, plaster boards
- Tilt up and pre-cast concrete
- Cement render, concrete, aerated concrete
- Powder coated cladding, galvanised, stainless steel (degreased), brass
- Existing tiles (thoroughly cleaned)
- Superflex and Shelter acrylic waterproofing membranes
- Particleboard
- Roughened fibreglass

SUBSTRATE PREPARATION

Butynol

Butynol must be cleaned to remove any dust or contaminants. This can usually be accomplished by using sugar soap and water, but if more stubborn soils remain, contact your local Ardex representative for instruction. Allow surface to dry before applying adhesive.

MIXING

Mixing ratio three parts of powder by weight to one part of liquid (weight or volume).

Mix adhesive by mechanical means until a homogeneous creamy paste is achieved, do not over mix. Allow mix to stand for 2 minutes prior to use.

APPLICATION

Tile installation must conform to the requirements of the Australian Standard 4992-2003.

Lay the tiles using Ardex Optima applied to the membrane surface using a 12mm notched trowel to achieve a dry bed thickness of not less than 2.5 - 3mm. Place the tiles in position and work into the adhesive to ensure a 100% coverage to the reverse side of the tiles. Only spread the adhesive to an area of approximately 1m² at a time to ensure that the tiles can be placed before the adhesive forms a surface skin which will inhibit the bond strength.

Allow the Ardex Optima to cure for at least 24 hours before proceeding with the next stage. Low absorbency tile can extend the cure time.

GROUTING OF TILES

Flexigrout

All joints should be grouted using Ardex Flexigrout with Grout Booster (80:20) after the adhesive has fully cured. After mixing the grout in accordance with the instructions work it well into the joints ensuring there are no voids under the grout. Apply the grout to a small area of approximately 1m² at a time and clean excess grout from that area prior to proceeding. Only mix small quantities of grout at a time to enable workability within the pot life of the product.

Finishing Ardex Flexigrout should be carried out in the normal fashion by allowing the residual grout film to dry and polish off to totally remove.

Easypoxy

When using Ardex Easypoxy, cleaning the excess grout from the surface should be carried out using a wet cloth wrapped around a firm rectangular item such as a block of wood to remove the bulk of the excess. Surface should be finally cleaned using a clean wet scourer to remove all excess material from the joints and the tile surfaces.

COVERAGE

One 30kg/10L unit will cover 6m² using a 12mm notched trowel at the specified dry bed thickness of 2.5 - 3mm.

PACKAGING

Mini Kit (1.7L liquid/5kg powder)

Large Kit (10L liquid/6x5kg powder)

DRYING

Approximately 24 hrs at 23°C, 50% RH, allow longer for colder conditions.

STORAGE AND SHELF LIFE

12 months when stored at 5°C - 25°C in airtight, sealed container.

CAUTION

High temperatures caused by heat absorption by black Butynol will accelerate drying time.

TECHNICAL DATA

| | |
|--|-------------------------|
| Type | Two Part |
| Colour | White |
| Specific Gravity of liquid | 1.02 |
| pH | 7.5 |
| Application Properties (@ 23°C, 50% RH) | |
| Mixing Ratio | Powder/Liquid 30kg/10kg |
| Specific Gravity of Mix | 1.67kg/litre |
| Viscosity of Mix | 148,000 cps |
| Open Time | 25 minutes |
| Adjustability Time | 20 minutes |
| Pot Life | 45 minutes |
| Water Absorption | 1.18% |
| Mechanical Properties | |
| Shear Bond Strength (MPa) | |
| 7 days dry | 2.7 |
| 14 days dry | 3.56 |
| 7 days water immersion | 2.86 |
| 8 month immersion in fresh water concrete pool | 3.1 |
| Tensile Strength (MPa) | |
| 7 days | 2.3 |