

# Euromix® Universal Render

**Euromix® Universal Render is a pre-blended, acrylic modified general use rendering plaster, manufactured using selected blended mineral sand, off white Portland Cement, lime and selected performance enhancing chemicals.**

## 1. Product Summary:

When mixed with water and an acrylic emulsion bonding agent (Euromix® Bond) Universal Render provides a weather resistant finish that is suitable for decorative rendering and patching over most substrates in interior and exterior wall and ceiling applications.

Applied by hand, in one layer ranging from 2mm to 8mm thickness, Euromix® Render can be floated or sponge finished ready for other renders, texture coats or paints.

<b>Product Name</b>	Euromix® Universal Render
<b>Code</b>	RENUNI
<b>Packaging</b>	Dry packed in 20kg composite paper / plastic / paper bags
<b>Appearance</b>	In the bag and before the addition of water, Euromix® Render appears as an off-white / light grey mixture of finely ground, cement like materials. After application and drying Euromix® Render finishes to light grey colour with a slightly rough texture – may be pigmented with metallic oxides.

## 2. Product Features:

Pre-mixed	Reduces waste and material loss associated with traditional renders.
Workability additives	The wet material ‘flows’ well on hawks, trowels and other tradesman’s tools making it easy to apply and finish off.
Engineered and factory controlled formulation	The proportions of cement, sand and other components are consistently maintained at levels designed to give superior adhesion when compared to traditional cement renders (poor adhesion to the substrate often results in traditional renders becoming ‘drummy’ to the touch).
Specially formulated components	Special modifiers in the mix ensure that the render can be decoratively over-coated 48 hours after application (in normal weather conditions), saving time and reducing costs, like those relating to scaffolding, when compared to conventional sand and cement renders. Enhance adhesion and weather resistant properties.

## 3. Typical Uses:

Euromix® Universal Render is suitable for architectural rendering and patching applications over most substrates including clay and cement bricks/blocks, pre-cast or site poured concrete surfaces, autoclaved aerated concrete blocks / panels (AAC), fibre cement sheeting (FC) and expanded polystyrene sheet (EPS) surfaces.

## 4. General Performance Guidelines:

<b>Weather</b>	Excellent weather resistance when top coated.
<b>Water</b>	Resistant to rain and condensation when top coated.
<b>Temperature</b>	Performs well after hydration in temperatures from – 4 to + 60°C
<b>Abrasion</b>	Good resistance to abrasion after full curing.
<b>Solvents</b>	Sensitive to exposed aromatic hydrocarbons, acetone and strong solvents

## 5. Some Key Properties:

Bulk Density	1700 – 1900kg/m <sup>3</sup>
Specific Gravity	2.7
Bond Strength	≥ 0.20Mpa
Compressive Strength	≥ 5.0 MPa - at 28 days, when mixed at 3.0 L water / 20 kg using ISO/CEN prisms.
Abrasion resistance	High - cannot be sanded.
Coverage	Approx 1.8 Kg / SQM / 1mm thickness.
Shelf life	12 months in unopened, properly stored bags. Once opened the entire contents of the bag should be used immediately.

## 6. Application Guidelines:

### 6.1 General:

Euromix® Renders are designed for use as decorative finishes, they are not meant to be used in ‘engineered’ applications (where special strength, movement, hardness or other performance characteristics are required). Euroset recommends that Euromix® Render be applied by skilled trades people who are experienced in acrylic rendering application.

### 6.2 Substrate Preparation

All substrates must be clean, dry and free from any material that may inhibit adhesion (including loose paint, grease, oil, fungus / moss, dirt, friable materials and any mould release agents). New concrete should be allowed to dry for 12-28 days before coating (ensure that the moisture content is less than 15%).

# Euromix® Universal Render

Mask windows and architectural trim elements before applying render. Floor and adjacent walling materials should be protected against spills and splashes by plastic film or similar.

## 6.3 Mixing of Render

Euromix® Render should be mixed with a 'solution' of bonding agent (Euromix® Bond) plus water by mechanical mixer or with a traditional concrete mixer. The required volume of 'solution' (Euromix® Bond plus water) should be prepared in a mixing bucket and then steadily added to the Euromix® Render powder until it is smooth and lump free.

This mixture should hold a stiff peak on the hawk. If the mix is too 'stiff' or too 'wet' it will be difficult to apply and finish – it is also likely that finished strengths will be low. Do not mix more material than can be used within one (1) hour.

## 6.4 Bond Ratios

In normal use approximately 4 litres of Bond / water mix is required for 1 bag (20 Kg) of Euromix Render. The bond / water ratio for common substrates / surfaces is;

	Bond	Water
Clay Bricks	1	19
Calcil	1	15
AAC	1	9
Concrete	1	9
FC & EPS Surfaces	1	4
Render	1	19

## 6.5 Application

Apply Euromix® Render to the surface manually with hawk & trowel. Allow the render to stabilize before levelling and finishing to the desired texture.

Spillage and partially set material should not be re-tempered with water and should be discarded. Tools and equipment should be cleaned with water immediately after use.

It is recommended that Euromix® Render be applied in layers of 8mm maximum thickness. Higher thicknesses can be achieved in multiple coats (allow at least 24 hours between coats).

When the applied material has firmed sufficiently it can be first leveled and made true with a straight edge, before being floated with a large polyurethane, polystyrene or wooden float to achieve a flat, smooth surface.

It is possible that some shrinkage of the applied product may occur in situations where the thickness applied varies (as with raked brickwork, over chasings, etc.). Here it is recommended that a first coat of Euromix® Render be screeded and left for sufficient time for the shrinkage to occur before applying a following coat.

## 6.5 Curing

Ensure adequate protection from the drying effects of direct sunlight, wind and low humidity or a combination of these elements. Rapid drying of the surface can cause cracking, low strength and a friable render. Do not apply Euromix® Render when temperature will be above 35°C, especially if windy.

Also do not attempt to apply Euromix® Render when the temperature is below 10°C or where the chill factor is high.

Ensure that the curing render is protected from rain, extreme frosts and other sources of excess moisture (e.g.; overflowing gutters and down pipes).

Drying and curing of Render is affected by type, dryness and porosity of the substrate surface, temperature, humidity, ventilation, climate conditions and application technique and therefore the following drying and curing are given as a guide only (*for normal weather conditions, at 25°C and 50% R*);

Surface dry	Four (4) hours.
Recoat with Render	One (1) day.
Texture Coating	Three (3) days.
Paint	Three (3) days for acrylic paints. Twenty-one (21) days for oil / alkyd based paints.

## 6.6 Coverage:

Coverage is variable, dependent upon type, texture and porosity of the substrate and the application technique. As a guide 1 bag (20 Kg) when applied at @ 4mm thickness will cover 3-5 Sqm.

## 6.7 Clean Up:

Tools should be cleaned with water before the Render has cured. Any spillage or splashes should be removed immediately as the Render is extremely difficult to remove once cured and is likely to stain.

Collect waste in containers and dispose of as trade waste in accordance with the site and local authority guidelines. Keep the powdered and cured Render out of sewer or storm water drains.

## 7. Health & Safety:

The International Agency for research on cancer (IARC) has classified "Crystalline Silica" as a Human Carcinogen.

Keep exposure to dust as low as possible, to minimise health problems such as skin, eye and respiratory irritation. Avoid repeated skin contact with both the dry and the wet mixtures.

Carry out work in such a way to minimise the exposure to dust and repeated skin contact. Use mechanical ventilation or extraction to minimize exposure where dust will be generated whilst handling the render. Work areas should be cleaned regularly by wet sweeping or vacuuming.

# Euromix® Universal Render

If preparation of the substrate to be rendered requires cutting or grinding of masonry then ensure that goggles, respirators and hearing protection are available and that they are worn.

<b>Precautions in Use</b>	The use of gloves, goggles and overalls is recommended when Euromix® Universal Render is being applied.
<b>Safety &amp; Precautions</b>	The use of gloves and goggles is recommended. Protect eyes as grit in product may scratch and irritate.
<b>First Aid</b>	If swallowed give glass of water to drink and seek medical advice. If in eyes flush thoroughly with clean water, holding lid open to ensure any trapped product maybe flushed away. If on skin, remove contaminated clothing and wash skin with soap and water. If inhaled, unlikely due to consistency of product, remove person to fresh air.

## 8. Limitations in Use:

Do not apply in wet conditions or when rain or frost is imminent or in temperatures outside the range of 10C and 35C. Substrate moisture must be less than 15%.

Product should not be subjected to hydrostatic pressure, continual or excessive rising damp, movement and vibration.

Do not apply in wet conditions or when rain or frost is imminent or in temperatures outside the range of 10C and 35C. Substrate moisture must be less than 15%.

Product should not be subjected to hydrostatic pressure, continual or excessive rising damp, movement and vibration.

Euromix® Render is designed for use as a decorative render finish. Where special performance outcomes are required of the render, like high inter-laminar bond strength to cope with exceptional surface loadings or possible structural movement, it is critical that the potential use be discussed with Euroset prior to application.

### 8.1 Movement in Buildings:

Movements in buildings and within / between the materials that they are constructed with, are commonplace (causes include foundation settlement, seismic displacement and behaviour of materials in relation to changes in temperature or moisture content).

These movements usually result in visible cracking of the building claddings / linings (as well as other potentially more damaging modes of failure).

Sound building design and construction methods recognise the likelihood of structural and material movements and allow for them to be managed through the placement of control joints (often called expansion joints) and the use of design features that hide or may even highlight these control joints or the areas where cracking is likely to occur.

Any building movement that results in visible cracking of the building claddings / linings will also be sufficient to cause cracking of the decorative finish – this is the case for both potential new and pre-existing building movement cracking.

Euromix® Architectural Finish products will not hide cracking caused by structural movement and / or shrinkage / expansion of substrates and may themselves be damaged by such cracking.

Follow the substrate manufacturer’s specifications and building designers directions for the management of material and building movement.

## 9. Handling, Storage & Transport:

Handling	Euromix® Universal Render is supplied in 20 Kg bags - recognised local safe lifting methods should be used.
Storage	Store in a cool / dry area. Protect product from excessive heat, frost, moisture and bag damage.
Shelf Life	Approximately 12 months in unopened bags.

## 10. Contact Point:

Supplier	Euroset Manufacturing Pty Ltd
Address	13 / 65 Elizabeth Street Wetherill Park NSW 2164
Telephone	(02) 9002 5820
Fax	(02) 9002 5824
Email	admin@euromix.com.au

*The information contained in this product data sheet is typical and does not constitute a full specification, as conditions and specific requirements will vary from project to project. All purchasers and intending users of the products covered in this document must, prior to use, assess and control the risks arising from use of the products, as they relate to their project.*

*It is recommended that the products covered in this document be applied by building contractors and trades people with the appropriate skill, knowledge and experience to carry out those works, as may be necessary to meet the requirements of the project.*

*For further information please contact Euroset, via the contact details listed above.*