EWIPRO Render Systems

EWI-221

RAPID SET EPS BASECOAT

PRODUCT DATA SHEET



EWI-221 Rapid Set EPS Basecoat is a fast-setting, polymer-modified cementitious adhesive and reinforcing basecoat designed for use with expanded polystyrene (EPS) insulation systems. It can be used for bonding EPS insulation boards to suitable substrates and as a reinforced basecoat for embedding fibreglass mesh. Its accelerated setting characteristics make it particularly suitable for time-sensitive projects and cooler application conditions.

Intended Uses

EWI-221 Rapid Set EPS Basecoat is intended for bonding EPS insulation boards to suitable prepared substrates and for forming the reinforced basecoat layer over EPS insulation. When used as a reinforcing basecoat, fibreglass mesh is embedded into the freshly applied material to create a stable surface for subsequent compatible finishes. The product is suitable for EPS insulation boards only and should not be used for fixing XPS insulation boards or on bituminous substrates.

Technical Specification

Composition	Quartz sand, Portland cement, modifying supplements, polymers and microfibres
Quantity Per Unit	25kg
Consumption	Approx. 4.5kg/m²
Minimum / Maximum Thickness	4–6mm
Recommended Adhesive Thickness – EPS	4–6mm
Recommended Basecoat Thickness	6mm
Coverage Rate	Approx. 5.6m² per 25kg
Water Mix Proportions	Approx. 4.6L of clean water per 25kg dry mix
Dry Bulk Density	Approx. 1.45g/cm³

Application Temperature	0°C to +25°C
Working Time	Approx. 1–3 hours, depending on temperature and humidity
Hardening Time	Approx. 24 hours at temperatures above +5°C
Adhesion to Concrete (Air-Dry)	≥ 0.25MPa
Adhesion to Polystyrene	≥ 0.08MPa
Capillary Water Absorption	≤ 0.5kg/m²
Reaction to Fire	Class B
Soluble Chromium (VI) Concentration	≤ 0.0002%

Please note: Thickness, consumption and coverage figures are indicative only and may vary depending on the condition, profile and absorbency of the substrate, as well as the application method. Actual material requirements should be assessed on site before application.

Please see the reverse of this page for directions for use.

Directions for use

Substrate Preparation

The substrate must be sound, stable, clean, dry and free from dust, grease, loose material and other contaminants that may affect adhesion. Remove weak or poorly bonded areas before application. Where required, use a suitable primer according to the substrate type, condition and absorbency. When used as a reinforced basecoat, ensure the EPS insulation boards are securely fixed, level and free from contamination.

Product Preparation

Mix one 25kg bag of EWI-221 with approximately 4.6 litres of clean water using a suitable paddle mixer until smooth and lump-free. Do not add further water once the material has begun to set.

Application

When used as a bedding adhesive, apply EWI-221 to the rear of the EPS insulation board using a suitable trowel and application method for the substrate. Allow the adhesive to set sufficiently before installing mechanical fixings.

When used as a reinforced basecoat, apply the material evenly over the EPS insulation and embed alkali-resistant fibreglass mesh into the fresh material. Smooth the surface so the mesh is fully covered and overlap adjoining mesh sections appropriately.

Application Conditions

Apply between 0°C and +25°C. Do not apply if the substrate or material is frozen, or where temperatures are expected to fall below 0°C during setting. Protect freshly applied material from rain, high humidity and other adverse weather conditions until sufficiently hardened.

Clean-up

Clean tools and equipment with clean water immediately after use. Hardened material should be removed mechanically. Do not dispose of waste material into drainage systems or watercourses.

Packaging & Storage

Supplied in 25kg bags. Store unopened in the original packaging in a dry environment, off the ground and protected from moisture. Shelf life is up to 12 months from the date of manufacture when stored correctly.

Compliance with Standards

ETA 20/0186.

Safety Measures

Wear suitable protective gloves, protective clothing and eye protection during mixing and application, with suitable respiratory protection where dust may be generated. Wet mortar may irritate or burn the skin and eyes, so direct contact should be avoided. In the event of eye contact, rinse immediately and thoroughly with clean water and seek medical advice. Remove contaminated clothing promptly and wash affected skin thoroughly. Refer to the relevant Safety Data Sheet for full handling, first aid and disposal information.

General Information

This data sheet replaces all previous editions. The information provided is based on current knowledge and practical experience, and while it has been compiled with care, it is not guaranteed to be accurate, complete or suitable for all applications. It is the responsibility of the user to verify the product's suitability for their specific use case. No legal obligations are established by this document.

Data Sheet Revision Date: 27/10/2026

Address:
Unit 1-2 King George's Trading Estate,
Davis Road,
Chessington,
England,
KT9 1TT

Email:
info@ewipro.com

Phone:
0800 133 7072

EWIPRO

www.ewipro.com