Terrix® AD-AB

base coat/adhesive (EPS/PUR)

main properties:

- Can be used as an adhesive or base coat.
- Reinforced with micro fibres to provide very high crack resistance.
- Low water absorption.
- Full vapour permeability.
- Very high adhesion to EPS and substrate.
- Very high "early grip" value.
- Incombustible

product description and areas of application:

Dry, frost resistant, mineral adhesive/ base coat based on polymer modified Portland cement, polyurethane fillers, selected aggregates for manual or machine application. It is especially recommended as a part of TERRIX® EWI 1, EWI2, EWI3 external wall insulation system. It may be applied on all typical mineral substrates such as, e.g. concrete, light weight concrete, expanded clay aggregate, ceramic brick and silicate brick as well as porous ceramics.
Designed to be used as a part of EWI (external wall insulation) with EPS insulation boards.

technical data:

Base binder: Portland cement;
Colour: light grey;
Mixing ratio: 6 litres of water per 25 kg of mortar;
Application time after adding water: not less than 2 hours;
Consumption: ca. 1 kg/m2 per each 1 mm of the layer thickness;
Base coat thickness: 4 mm;
Bulk density:1.5-1.6 g/cm3;
Open time: ≥ 20min;
Temperature of application (air and substrate): from +5°C to +25°C;
Reaction to fire: class A1;
Packaging: Disposable paper bags containing 25 kg of product;
Storage: The product should be stored in its original sealed packaging, in a dry frost-protected room. Note: The product must be kept out of the reach of children;
Shelf life: 12 months from manufacture date specified on the packaging, provided that the storage requirements are observed;

application:

SUBSTRATE PREPARATION:

Apply to a sound and clean substrate (without cracks and delaminations), degreased, even and dry, and free of biological contamination or chemical efflorescence. The substrate should be free of algae/ fungi growth. In case of microbial contamination, the substrate should be cleaned with a power washer. Terrix® RN-AR to be applied as per product manual. The substrate must be protected against capillary action, moisture intake and precipitation. Any loose layers not bound to the substrate (i.e. loose render or flaked coatings) should be removed. Old and/or dirty substrates should be washed off and degreased with water and Terrix® RN-AR cleaning agent. If any substrate unevenness exceeds 1 cm, use a levelling compound first. Absorbent substrates should be primed with Terrix®PR-AC-P before levelling compound application. Before fixing EPS boards to uncertain substrates, it is necessary to perform an adhesion test. The test involves fixing a few (8-10) EPS samples of 10 x 10 cm dimensions in various places of the facade and then tearing them off after 3 days. The substrate load-bearing capacity is sufficient when the tearing happens in the EPS layer. If the whole sample including adhesive and substrate layer is torn off, then it is necessary to remove the poorly bound layer from the substrate and prime it with Terrix®PR-AC-P. When the primer dries, the adhesion test must be performed again. If the test gives a negative result, it is necessary to consider additional mechanical fixing or special substrate preparation.

PRODUCT PREPARATION:

Gradually pour the contents of the packaging into a container with a measured amount of clean and cold water (approx. 6 liters) while continuously mixing the mass (with a low-speed mixer fitted with a basket stirrer) until homogeneous mixture is obtained. After waiting for 5 minutes and remixing, the mortar is ready for use. After adding water, the mortar must be used up within approx. 2 hours (at an ambient temperature of +20°C).

FIXING OF EPS BOARDS:

Notch trowel method may be used to fix EPS to even substrates. Put some cement mortar on the slab with trowel and using the edge of it, spread evenly all over to create a thin coat. While being spread, the mortar should be pressed to the surface of the slab. Subsequently, an additional amount of mortar should be spread on the slab by using a notched trowel (minimum notch size: 10 x 10 mm). Once the mortar is applied, the slab must be immediately put onto the wall in its appropriate place and pressed to flush it with the neighbouring boards. Boards must be tightly fitted next to each other using staggered method. Excess mortar coming out from EPS board joints must be removed so that no mortar is left on the slab edges. Properly applied mortar should cover the whole slab surface, and its thickness after attaching the slab should not exceed 1 cm. After allowing sufficient time to cure (at least 48 hours), the boards should be fixed by means of applicable mechanical fixings pursuant to the thermal insulation project. In order to get an even surface of all the fitted boards, the whole surface of the EPS board should be sanded with a suitable thick gauge of sandpaper. When fixing EPS boards on uneven substrates, the cement mortar should be applied on boards by means of the ribbon and dab method. The ribbon should be 3÷6 cm wide, and should be applied onto the perimeter of the slab. In addition, 6 to 8 dabs of adhesive (approx. 10÷12 cm diameter) should be evenly placed on the remaining part of the slab. The ribbon must be formed in a prism shape. To do so, spread it with a trowel set at an angle of 45° towards the slab surface. Once the mortar is applied, the slab must be immediately put onto the wall in its appropriate place and pressed to flush it with the neighbouring boards. Boards must be tightly fitted next to each other using staggered method. Excess mortar coming out from EPS board joints must be removed so that no mortar is left along the slab edges. Properly applied mortar must cover not less than 40% of the slab surface, and the adhesive layer thickness should not exceed 1 cm. After sufficient curing time (at least 48 hours), the boards should be fixed by means of applicable mechanical fixings pursuant to the thermal insulation project. In order to get an even surface of all the fitted boards, the whole surface of the EPS board should be sanded with a suitable thick gauge of sandpaper.

BASE COAT / REINFORCING MESH APPLICATION:

First the edges of window and door openings should be reinforced by means of fixing to their corners diagonally running (i.e., at an angle of 45°) fibreglass mesh (with the dimensions of 25 x 30 cm) by using Terrix® AD-AB base coat mortar. The reinforcing coat (base coat + reinforcing mesh) must be applied on even, clean and previously sanded surfaces of EPS boards, not earlier than 3 days from the date of board installation. Apply a continuous and even layer of the base coat mortar onto the substrate (with the thickness of approx. 3÷4 mm) as wide as the reinforcing mesh is. Spread the base coat mortar with a notched trowel and immediately dip fibreglass reinforcing mesh into it. The reinforcing mesh should be evenly stretched and completely immersed in the base coat mortar. If necessary, in order to make the surface more even, an additional thin layer of base coat can be applied. The neighbouring mesh stripes must overlap not less than 10 cm. Any trowel marks should be sanded down with a sandpaper. The thickness of the reinforcing coat (base coat + one layer of reinforcing mesh) should be between 3-5 mm.

DRYING:

It is assumed that the mortar initial setting period is min. 3 days (typical drying conditions 20°C, 65% RH).
Note: Low temperature and high relative humidity essentially prolong mortar drying time.

USEFUL HINTS:

To be applied on dry days at temperatures between 5-25°C. Avoid working on surfaces directly exposed to sun and in strong winds. Note: The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing (PPE) must be worn while carrying out any installation work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.