

# TECHNICAL DATA SHEET

# ECOBOND

SINGLE COMPONENT POLYMER MODIFIED CEMENTITIOUS ADHESIVE

## DESCRIPTION

ECOBOND is a water-resistant cement based, polymer modified cementitious adhesive (C) with no vertical slip or sagging (T). It is suitable for interior and exterior use, floors & walls and ideal for tiling showers, kitchens, wet areas and swimming pools.

ECOBOND bonds most types of natural stone, ceramic, vitrified/ non- vitrified tiles & mosaics. It can be used for thin and solid bed applications.

## FEATURES & BENEFITS

- Complies with ANSI A118.4
- Suitable for floors and walls
- Can be applied on different substrates such as screed, cement block and AAC block.
- Can be applied up to 12mm for floor application only
- Water resistant, ideal for showers and swimming pools
- Exterior or interior use
- Excellent adhesion to porcelain\*, glazed and unglazed ceramic tiles, natural stone, mosaics etc.

## TECHNICAL DATA

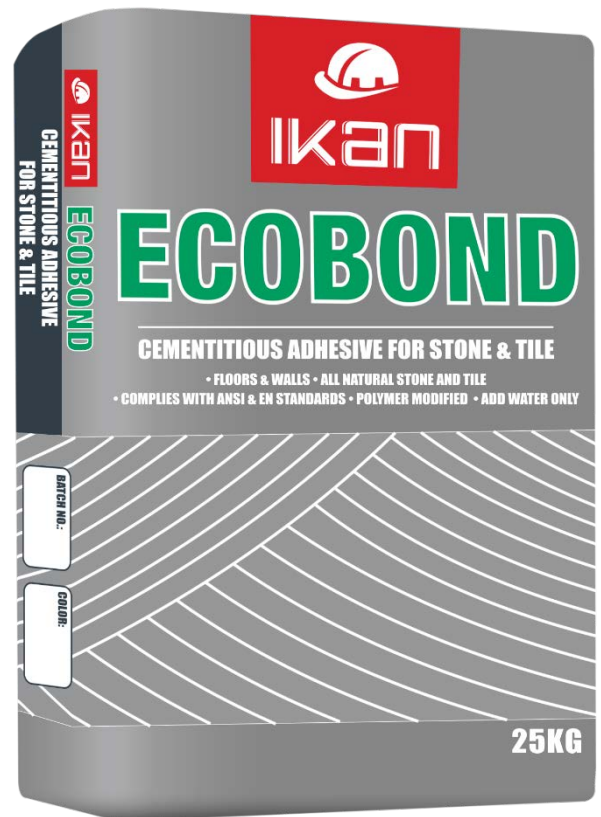
WORKING PROPERTIES (at 23°C)

Open Time	20 minutes
Pot Life	Approx.2 hours
Time to light traffic	24 hours
Water mixing ratio	5- 5.5L per 25kg bag
Yield	Approx. 17 L of mixed adhesive

## TECHNICAL RECOMMENDATION

For improvement in the overall properties of the bonding strength, water resistance, and flexibility performance. Polycrete can be mixed with the water required for one bag e.g. (4 liters of water +1.5 liters of Polycrete).

Back buttering is highly recommended for fully vitrified tile especially the Porcelain tile. Back buttering can be achieved by applying a thin layer of the mixed adhesive on the backside of the tile using the flat side of a trowel to fill the back-pattern voids.



## METHOD OF APPLICATION

### SURFACE PREPARATION

Surfaces must be sound, clean, cured & dry and free from oil, grease, dust and other loose material or contaminants that could reduce or deteriorate the adhesion. The substrate should not be subject to movement and dimensionally stable. The concrete slabs should be cured and 28 days old before application. Porous surfaces and all types of paper faced plaster boards should be primed with 2 coats of Ikan Polycrete to reduce suction of the substrate.

### MIXING

ECOBOND should be added slowly to clean & cold water with normal temperature approx. 5 to 5.5 liters per 25 kg bag, stirring continuously by a forced action mixer to achieve a creamy lump free consistency and allow to stand for 3 mins. Remix again with a slow speed mixer to achieve a smooth, trowelable consistency. The adhesive mixture should be used within its pot life of approx. 2 hours (23°C). No water should be added into the mixing bucket after the original mixing process. Any of the adhesive mixture not used within its pot life should be disposed.

### PERFORMANCE PROPERTIES

TEST	TEST METHOD	SPECIFICATION	RESULT
Determination of open time at 5 minutes by tensile adhesion strength	ANSI A118.4	$\geq 1.0 \text{ N/mm}^2$	Complies with standard values
Determination of open time at 20 minutes by tensile adhesion strength	ANSI A118.4	$\geq 0.5 \text{ N/mm}^2$	
Determination of slip or sag on vertical	ANSI A118.4	$\leq 0.5 \text{ mm}$	
Shear strength (porcelain mosaic tile, 28 days)	ANSI A118.4	$> 200 \text{ psi}$	

*Note: the above technical information is based on controlled laboratory conditions. However, there may be some variation in yield and coverage depending on the ambient weather and site conditions.*

### APPLICATION

The application process should be wet on wet application by prewetting the clean substrate by wet sponge. Apply the mixed adhesive (ECOBOND) to the substrate with the flat side of the trowel then use the notch trowel side and pressing firmly to achieve a uniform thickness of the required adhesive bed. Spread only as much adhesive as can be tiled before the product skins over. Open time may vary depending on jobsite conditions. Place & fix tiles into the adhesive bed and use rubber mallet to compact & adjust the tile level. Back butter large tiles to provide full contact with bedding adhesive and firm support. Before the adhesive sets, clean excessive adhesive from the joints using a scrubber & damp cloth. Tools and equipment should be cleaned with water before the adhesive sets on them.

Tiles should be left undisturbed for around 24 hours at 20°C, or longer if the temperature is lower.

Apply grout after the adhesive has set and cured.

Coverage: Approx. 6 m<sup>2</sup> per 25kg bag when using 6mm x 6mm notched trowel held at an angle of 45°

*Note: For more Application details, kindly refer to the method statement attached below.*

### PACKAGING/COLORS AVAILABLE

25 kg bag / White and grey

### HEALTH & SAFETY

This product contains cement and contact with skin may cause irritation. It should not be inhaled, and a properly designed and maintained face mask should be used whilst handling, pouring and mixing the powder. Avoid contact with the product by working carefully, using a barrier cream and wearing protective gloves. If any contact does occur, wash thoroughly with soap and water. Use eye protection. Avoid contact with eyes, if such contact occurs irrigate with water for 20 minutes and seek medical advice. If mistakenly ingested, drink plenty of clean water and seek medical advice.

# TECHNICAL DATA SHEET

# ECOBOND

SINGLE COMPONENT POLYMER MODIFIED CEMENTITIOUS ADHESIVE



## TECHNICAL SUPPORT

Application of the ECOBOND should be done according to the procedure mentioned in this technical data sheet. IKAN INC will not be held responsible for any claim arising out of non-performance of the product due to incorrect application procedure or usage of product for non-recommended purpose. Please contact IKAN INC. technical team for more details on application of ECOBOND for any purpose other than mentioned above or on surfaces with other special construction additives.



## DISCLAIMER

To the best of our knowledge and belief, this information is true and accurate, but as conditions of use and any labor involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our Representatives, Agents or Distributors. Products are sold subject to our Standard Conditions of Sale and the end user should ensure that he has consulted our latest literature.

# METHOD STATEMENT

# ECOBOND

SINGLE COMPONENT POLYMER MODIFIED CEMENTITIOUS ADHESIVE

IKAN

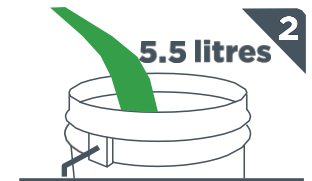
## EXECUTION STATEMENT FOR APPLICATION OF ECOBOND

### SURFACE PREPARATION

All surfaces should be structurally sound, clean and free of all dirt, oil, grease, dust and other loose material and should not be subject to movement. The application of mixed adhesive should be wet on wet application.



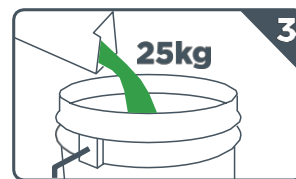
Clean surface of contaminants



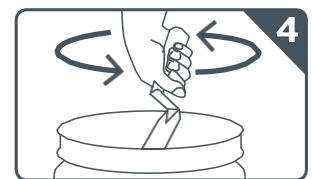
Add cool water

### APPLICATION

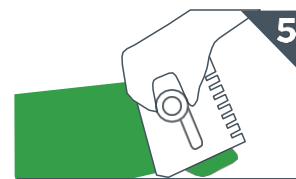
1. Thoroughly mix 5 to 5.5 Liters clean, cold water and 25 kg bag of Ecobond to a smooth, paste-like consistency.
2. Mix by mechanical forced action mixer with a low speed (150 - 200 RPM). Let it stand for approx. 3 minutes and remix again to use.
3. Stir occasionally to keep fluffy, but do not add more water. When properly mixed, troweled ridges will stand with no slump.
4. Pre-wet the substrate and apply by wet on wet method.
5. Using flat side of trowel, apply skim coat of the mixed adhesive. Apply additional layer of mixed adhesive with notched side of trowel held at a 45° angle to the surface, combing in one direction.
6. Press tile/stone firmly into place in a perpendicular motion across ridges, moving back and forth. Perpendicular pressing flattens ridges and closes valleys allowing maximum coverage.
7. With some tile like porcelain back buttering is highly recommended. Adjust tile promptly and beat in with rubber mallet.
8. Spread only as much mixed adhesive as can be tiled before the product skins over.
9. If material has skinned over (not sticky), recomb with notched trowel, if too dry, remove and replace with fresh material.
10. Wait 24 hours before using the surface.



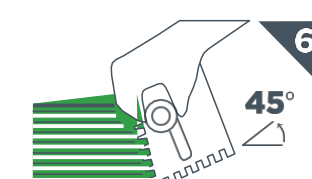
Add adhesive



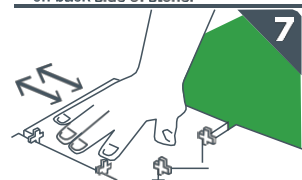
Mix adhesive into water stirring continuously to achieve a lump free consistency



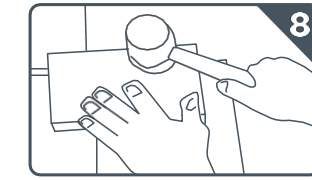
Apply skim coat with flat side of trowel on back side of stone.



Apply adhesive with notch trowel



Press tile firmly into place



Level tile surface with other tile



Lightly clean off excess adhesive with damp sponge



Wait 24 hours before using the surface