

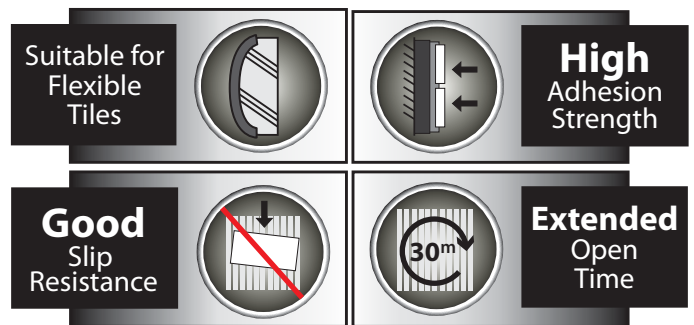


DESCRIPTION

Ezi BOND FLEX 220 is a high performance, single-part, flexible, latex modified, improved cement-based adhesive (C2); with special attributes of Low Vertical Slip (T) and Extended Open Time (E).

Conform to the requirements of ISO 13007-1 as Class C2TE Improved Cement-Based Adhesive.

MAIN CHARACTERISTICS



PRODUCT INFORMATION

Name	: Ezi BOND FLEX 220
Packing	: 25 KG
Classification	: ISO 13007-1 Class C2 TE
Shelf Life	: 6 Months in Dry Condition
Appearance	: Grey Fine Powder
Dry Solid Content	: 100%
pH Value	: Alkaline
Toxicity Hazard	: No
Flammability	: No

APPLICATION DATA (Tested at approx. 25 °C)

Mixing Ratio	: Approx. 25-27 pbw of Water to 100 pbw of Powder (6.25 - 6.75 litre of water for 25kg of Powder)
Consistency of Mix	: Non-Slump Creamy Paste
Coverage	: At 3mm Trowel Bed: Approx. 8m ² / bag At 6mm Trowel Bed: Approx. 4.2m ² / bag At 9mm Trowel Bed: Approx. 2.8m ² / bag At 12mm Trowel Bed: Approx. 2.0m ² / bag
Bed Thickness	: 3 - 6mm (Finish Bed Thickness)
Slip Resistance	: Excellent
Workability	: Good (Smooth and Non-Slump)
Open Time	: Approx. 20 - 30 minutes
Adjustability Time	: Approx. 20 minutes
Pot Life	: Approx. 2 - 3 hours
Light Foot Traffic	: 24 hours
Setting Time	: 24 - 48 hours
Application Temperature	: +5°C to normal ambient temperature

TECHNICAL DATA (Tested at approx. 25 °C)

	Result	Requirement
Tensile Adhesion Strength (After 28 days)		
Air Dry	1.90 ± 0.10 N/mm ²	≥ 1.0 N/mm ²
Water Immersion	1.10 ± 0.10 N/mm ²	≥ 1.0 N/mm ²
Heat Aging	1.30 ± 0.10 N/mm ²	≥ 1.0 N/mm ²
Extended Open Time (After not less than 30 mins)	0.70 ± 0.10 N/mm ²	≥ 0.5 N/mm ²
Slip Resistance	0.1mm	≤ 0.5 mm
Resistance to Heat	100°C	
Resistance to Frost	- 5 °C	
Resistance to Water	Good	
Resistance to Alkali	Good	
Resistance to Acid	Poor	
Resistance to Oil & Solvent	Fair	

Tested in accordance to the requirements of ISO 13007-1 Type C2 TE

USAGE

Suitable to use for:

- Installation of PHOMI range of Flexible Tiles.
- Applicable to finish bed thickness of 3 - 6mm; to bed PHOMI range of Flexible Tiles.
- Can be applied onto a variety of substrate (Refer to SUITABLE SUBSTRATES)
- Applicable for use at dry or wet, wall and internal or external areas.

Note: Always request & refer to an official Ezi Method Statement for the most appropriate, complete & effective solution.

Where external wall area installation is concern; ideally the properties & performance of Ezi BOND FLEX 220 can be improved by mixing it with an approved Ezi Latex Admixture to replace gauging water.

COMPOSITION AND PERFORMANCE

Ezi BOND FLEX 220 consist of grey Portland Cement, graded Silica Sand, Re-Dispersible Polymer Powder & related Chemical Additives.

Ezi BOND FLEX 220 offers the following benefits when mixed with Clean Water (or Latex Admixture in special conditions):

- High Adhesion Strength
- Good Flexural Strength
- Extended Open Time
- Low Vertical Slip
- User Friendly
- Good Workability
- Non-Slump Property
- Avoids mixing errors on-site
- Water Resistant Property
- Reduced Drying Shrinkage
- Improved Durability
- Reduces Water Permeability

SUITABLE SUBSTRATES

Concrete: It must be aged for at least 6 weeks. Direct fixing may be adopted provided the surface is flat, true, well cured & free of contaminants. A surface primer may be required for direct fixing.

Brick Wall or Light Weight Hollow Blocks: It must be aged for 4 weeks and levelled with Cement-Sand Mortar; prior to fixing PHOMI Flexible Tiles. Direct fixing is not recommended.

Autoclaved Aerated Concrete Blocks (AAC): It must be aged for 4 weeks. Direct fixing of PHOMI Flexible Tiles; using Ezi BOND FLEX 220 can be done on surfaces that are flat & true. A surface primer may be required depending on type of AAC Block.

Cement-Sand Render: Allow Cement-Sand Render to cure for between 1 - 2 weeks; before fixing PHOMI Flexible Tiles. The Cement to Sand ratio for rendering mortar should ideally be at ratio of 1 : 3 - 4 parts by volume.

Existing Tiles or Natural Stone Slabs: Existing surface must be dry, sound & free of contaminants. Hollow sections should be removed and made good. Fix PHOMI Flexible Tiles using Ezi BOND FLEX 220 + EziMix STAR AD-1.

Existing Vinyl Tiles: Existing surface must be dry, sound & free of contaminants. Prime surface with EziMix SBR BOND; before fixing PHOMI Flexible Tiles using Ezi BOND FLEX 220 + EziMix STAR AD-1.

Building Boards: Building Boards eg. Plywood, Cement-Fibre Board, Gypsum Plaster Board etc.; must be appropriately erected and braced to provide a rigid substrate. Prime surface with EziMix SBR BOND; before fixing PHOMI Flexible Tiles using Ezi BOND FLEX 220 + EziMix STAR AD-1.

Painted Wall: Ideally painted wall should be removed prior to fixing PHOMI Flexible Tiles. Alternatively the painted wall may be keyed as close as possible to expose the backing render. Remove all loose particles and dust before installation of PHOMI Flexible Tiles using Ezi BOND FLEX 220 + EziMix STAR AD-1.

Note: Not recommended to fix tiles over skim coat plaster; or to install moisture sensitive materials.

For installation of PHOMI Flexible Tiles to highly demanding areas where greater adhesion strength, flexural strength, reduced water permeability & durability is required, Ezi Bond Flex 220 can be mixed with an approved Ezi Latex Admixture to replace gauging water.

INSTALLATION PROCESS

(1) Substrate Preparation

- Substrates must always be dry, sound, flat or true and free of contaminants eg. dust, grease, laitance, form release oil etc.
- For aging period & surface treatment; see Suitable Substrates.
- For substrate with high water suction or those heated by over exposure to sunlight; lightly dampen surface with water.

(2) Mixing Adhesive Mortar:

- Mix Ezi BOND FLEX 220 (with Clean Water or Latex Admixture) as per the recommended mixing ratio until a non-slump creamy paste consistency is attained. Mix using a slow speed mechanical stirrer.

(3) Application of Adhesive Mortar:

- Spread / Trowel adhesive mortar onto the substrate using appropriate Notched Trowel at trowel bed thickness between 3 - 6mm thick (May vary depending on tile size).
- For large format PHOMI Flexible Tiles; skim a thin coat of adhesive mortar to the tile back before fixing onto the spread adhesive bed to ensure Solid Bed Fixing ie. eliminate air voids or hollow sections.
- Spread adhesive mortar to no more than 1m² at a time to avoid Skin-Over of the adhesive mortar. Ensure that PHOMI Flexible Tiles is promptly fixed within its Open Time of 20 - 30 minutes.

Note: Unfavourable weather condition eg. extreme heat, strong wind, high temperature; or high absorbent substrate can drastically reduce Open Time.

(4) Installing PHOMI Flexible Tiles:

- Promptly place and firmly tamp PHOMI Flexible Tiles onto the spread adhesive bed.
- It is good on-site practice to slightly slide PHOMI Flexible Tiles to ensure that adhesive mortar is spread out and good transfer ie. Solid Bed Fixing is attained.
- Always install PHOMI Flexible Tiles onto spread adhesive bed within its recommended Open Time.
- As installation of PHOMI Flexible Tiles progresses; allocate joints of approx. 3mm wide between PHOMI Flexible Tiles.
- Remove surplus adhesive mortar from within the joints and PHOMI Flexible Tile surface before it hardens.
- Allow the adhesive mortar to cure for approx. 24 - 48 hours before grouting of tile joints commences.
- Protect PHOMI Flexible Tile installation from weathering (eg. rain, water, excessive heat etc.) and/or traffic for 24 hours; during its curing process. Proper shelter must be provided for external installation.

(5) Grouting:

- Fill PHOMI Flexible Tile joints as follow with ISO 13007-3 compliant Class CG1 Cement-Base Coloured Grout:

Internal Area: Ezi GROUT FINE + Clean Water.

External Area: Ezi GROUT FINE + EziMix GT-1 (Latex Admixture)

- Mix using a slow speed mechanical stirrer to obtain a uniform coloured creamy paste mortar.
- Mixing ratio is approx. 8 litre Water (or EziMix GT-1) to 20kg Ezi GROUT FINE.
- Apply & compact grouting mortar into joints using a grouting squeegee / grout float.
- Promptly remove residue grout from PHOMI Flexible Tile surfaces before it hardens; using a damp cloth or sponge.
- Allow grout to set for at least 24 - 48 hours; and a further 2 days before the tile finishes are subjected to normal service condition.

MATERIAL SAFETY INFORMATION

A non-toxic, cement-based product which is considered non-hazardous in normal usage. Avoid inhalation, ingestion, skin & eye contact. For more details please refer to Ezi Material Safety Data Sheet.

When working with this product, recommended to follow the safety precaution below:



WEAR DUST MASK



WEAR SAFETY GOGGLES



WEAR HAND GLOVES



WEAR SAFETY SHOES



KEEP AWAY FROM CHILDREN

COMPANY INFORMATION

MANUFACTURED BY : Ezi MOTARTECH SDN. BHD. (874800-D)

FACTORY / WAREHOUSE

PENANG : 1888 , Jln. Lahar Bubur, Kepala Batas, 13200, Penang.

PERAK : PT 990 , 2 ½ KM Off Jalan Simpang Pulau-Lahat, 31300 Kampung Kepayang , Perak.

SALES OFFICE

KL : Tel +603 6277 3709

Fax +603 6272 3760

PG : Tel +604 658 8817

Fax +604 658 8818

PR : Tel +605 357 5818

Fax +605 357 5818

Ezi TECHNICAL ADVIROSY CENTRE

Tel : + 6012 431 8221

E-mail : technical@ezi-fix.com

Website : www.ezi-fix.com