

### Zentrival PL-Flex-Type 2 'T'

# Flexible polymer based, hydraulically setting, ready to use tile adhesive.

#### **Product Properties**

- · Higher bonding and adhesion strengths
- · Quicker and cleaner work; avoids transport of materials like cement, sand etc. Neat and clean permanent bonding
- · Non saponifying type therefore no loss of strengths over passage of time
- Avoids fungus growth, non shrink
- Suitable for interior, exterior and underwater application
- · Allows correction of tiles within setting time
- Very economical on account of thin bed method
- · Better workability to enable quicker work rhythm leading to improved worked efficiency
- Avoids recurring maintenance costs
- · High flexibility to counteract thermal stresses
- Eliminates pre-wetting of tiles, marbles, stones, etc
- · Eliminates batting of tiles and therefore no breakage and wastage
- Avoids iron staining of marble slabs

#### **Areas of Application**

- Fixing tiles at all places where flexibility is required.
- · Fixing of ceramic and other tiles in bathrooms, kitchens and facades
- · Fixing tiles on floor, walls or overhead surfaces etc. Bonding of heavy marble, granite and stone slabs for exterior cladding
- · Laying of mosaic tiles, nature stones, marble tiles etc.
- Fixing of gas concrete blocks, insulation boards, polystyrene boards, gypsum boards etc.
- · Leveling and repairing of cementitious surfaces
- As a slurry coat before tiling on absorbent surfaces
- · Fixing of tiles on surfaces like plaster, marine plywood, cement bound boards and other absorbent surfaces
- Fixing of tiles on existing tiles
- Bonding of polystyrene and other insulation boards by thin bed method
- For fixing vitrified and, fully vitrified tiles, , mosaics tiles, glass mosaics and all type of Stones.

#### **Application Notes**

#### General

Zentrival PL-Flex is saponification resistant, hydraulically setting Tile and Board adhesive made flexible by using chosen polymers in the formulation. Zentrival PL-Flex is based on high quality cements and other polymer raw materials and therefore develops high adhesion strengths. Zentrival PL-Flex is the latest generation tile adhesive that can replace the conventional method of fixing the tiles

#### **Advantages**

Being saponification resistant, the strength of bed mortars is not lowered over a period of time. The strengths are about 3.5 to 4 times as compared to conventional tiling mortars. The tiles can be bonded by spot method. **Zentrival PL-Flex** does not shrink or crack. It is easy to work with and ordinary laborers can easily carry out the work quickly and easily. On account of its easy workability **Zentrival PL-Flex** enables quick spreading of the adhesive thereby increasing the labor efficiency. On the whole an over all economy can be achieved by usage of **Zentrival PL-Flex** taking into consideration the long-term benefits achieved.

#### Instructions for use

The surface should be structurally sound free from grease and remanants of Form oils and curing compounds.

The surfaces should be free from paints and surface laitance. If the surfaces are too rough, a smoothening plaster coat can be applied by adding **Nafufill** or **Putz-Dichtament** to plaster, to reduce the consumption of the material. The surfaces on whichthe tiles are to be applied are to be pre-wetted.

Add **Zentrival PL-Flex** to water and not the reverse. Mix until a paste like consistency of the mortar is formed. Let the paste stand for about 5 - 10 minutes before application to enable the polymers to react. Mix only small quantities that can be used within 20 to 25

Apply **Zentrival PL-Flex** to the prepared surfaces by a plain trowel in about a thickness of 1-2 mm. Use a notched trowel to roughen the surface and to save the material. Do not cover more than 1.5 square meter area at a time. The tiles can then be placed in position before the skin is formed. The position of tiles can be adjusted within about 8-10 minutes depending upon temperatures. If the **Zentrival PL-Flex** paste has hardened, do not add water to make it workable. The joints can be filled nextday using **Zentrival FM.** 

For Marbles, heavy tiles, etc use **Zentrival HS**, polymer based, ready to use tile adhesive. The thickness of layer should not exceed 5 mm. In case of adopting the spot bonding put atleast 8 spots of about 4cm diameter per square meter area. The tools can be cleaned with water.



#### **Further Instructions / Precautions**





### Spreading Zentrival PL-Flex Using Notched Trowel



#### **Buttering Method**



#### **Application of Tile**



| Characteristic           | Unit              | Value*       | Comments  |
|--------------------------|-------------------|--------------|---|
| Color                    |                   | Grey/White   |   |
| Consistency              |                   | Pasty        |   |
| W/P Ratio                |                   | 0.24-0.25    | W/P Ratio can be adjusted depending Upon Required Consistency |
| Quantity of Water        | Litres            | 7.2-7.5      | Per 30 Kg Bag   |
| Bulk Density of Powder   | Kg/L              | 1.3-1.5      |   |
| Mixed Density @0.25W/P   | Kg/L              | 1.7          | ±0.2  |
| Maximum Grain Size       | mm                | 0.6          |   |
| Consumption/Coverage     | Kg/m <sup>2</sup> | 3.5-4.0      | With 6mm Notch Trowel (3mm Thickness)                         |
|                          |                   | 5.0-5.5      | With 8mm Notch Trowel (4mm Thickness)                         |
|                          |                   | 6.5-7.0      | With 10mm Notch Trowel (5mm Thickness)                        |
| Yield                    | Litres            | 21.5         |   |
| Layer Thickness(Minimum) | mm                | 3            |   |
| Maturing Time            | Minutes           | Apparx 5     | @ 25°C Temperature and 50% Humidity                           |
| Pot Life @ 25°C          | Minutes           | ≥90          |   |
| Application Temperatures | °C                | +5 To + 40   |   |
| Grouting Time            | Hrs               | After 24 Hrs |   |
| Light Foot Traffic       | Hrs               | After 24 Hrs |   |
| Full Cure                | days              | 14           |   |

## Properties As Per IS 15477 Type 2 Category with Special Characteristic T for Slip Resistance Mixing Done @ 0.25 W/P Ratio

| Tensile Adhesion A) Dry Condition B) Wet Condition             | N/mm²<br>N/mm²          | 1.38<br>1.04         | Minimum Requirement 1.0 N/mm <sup>2</sup> Minimum Requirement 1.0 N/mm <sup>2</sup>  |
|--|-------------------------|----------------------|--|
| Shear Adhesion A) Dry Comdition B) Wet Condition C) Heat Aging | N/mm²<br>N/mm²<br>N/mm² | 1.47<br>1.39<br>1.46 | Minimum Requirement 1.25 N/mm <sup>2</sup> Minimum Requirement 1.0 N/mm <sup>2</sup> Minimum Requirement 1.0 N/mm <sup>2</sup> |
| Open Time  | Minutes                 | 25                   | Requirement Not Specified in Standard  |
| Adjustability  | Minutes                 | 30                   | Requirement Not Specified in Standard  |
| Slip   | mm                      | 0.42                 | Requirement ≤ 0.5mm  |
| Tile Specifications  |                         |                      |  |

1.Type=Vitrified Tiles
2.Porosity=≤3%

Requirement=Vitrified Tiles
Requirement= ≤ 3%

CONCLUSION: Zentrival PL Flex Tile Adhesive Conforms to the Requirements of Type 2 'T' Tile Adhesive as Per IS 15477-2019

| Product Characteristics for Zentrival PL-Flex |   |  |  |
|---|---|--|--|
| Type of Product                               | Flexible Polymer modified Tile Adhesive                                     |  |  |
| Form  | Powder  |  |  |
| Colour  | Grey, white   |  |  |
| Shelf Life                                    | 6 months from date of Manufacture   |  |  |
| Delivery                                      | 30 Kg Sacks   |  |  |
| Storage                                       | In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost   |  |  |
| Disposal                                      | Empty packs completely and dispose off carefully to protect our Environment |  |  |

**Note:** The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees, which may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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