

**Thin Bed Floor Tile Adhesive - Premium**

# **SILICA MIX**

**FOUNDATION TO FINISH**

**JUST ADD  
WATER !!!**

**READY-MIX**

## **TECHNICAL DATA SHEET**

We supply Ready-Mix Products  
of different variants in  
Waterproof bags!

## **INDEX**

### **1. GENERAL INFORMATION**

- a) Product Information
- b) Product Variants
- c) Availability

### **2. SPECIFICATIONS**

- a) Application Area
- b) Appearance
- c) Suitable substrates/ where to use
- d) Application Coat & Application Thickness
- e) Coverage
- f) Water Demand W/W
- g) Ingredients
- h) Packaging
- i) Storage
- j) Shelf-Life

### **3. TECHNICAL DATA**

- a) Technical Data
- b) Referred Relevant Standards
- c) Technical Support & Initial Training/Demonstrations

### **4. APPLICATION INSTRUCTIONS**

- a) Surface preparation
- b) Mixing
- c) Application & Curing

### **5. TIPS FOR IDEAL RESULTS**

### **6. RECOMMENDED TOOLS**

### **7. SAFETY & PRECAUTIONS**

### **8. WARRANTY**

### **9. DISCLAIMER**

## **ADDITIONAL CONTENT:**

### **PRACTICAL BENEFITS OF USING READY-MIX THIN BED FLOOR TILE ADHESIVE PREMIUM**

## **GENERAL INFORMATION**

### **Product Information**

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SilicaMix Thin-Bed Floor Tile Adhesive Premium is grey cement ready-mix tile adhesive manufactured with fine quality graded sand, 53 grade cement, polymers and additives that enable thin bed application for Large Size Tiles.

All ingredients are blended in a controlled environment to deliver consistent quality.

## **Tile Adhesive Product Variants**

**Factory Mixed in accurate proportion of sand, cement, polymers and binders as per industry standard proportions to give excellent bond strength, flexibility and durability.**

### **1. Floor Tile Adhesive Regular**

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**Factory Mixed in accurate proportion of cement, sand and binders as per industry standard proportions for small and medium size tiles**

**Benefits:**

- a) Single component grey cement based, just add water at site.
- b) For Internal Floors and Walls
- c) No Hollow Sound or Cracking of Tiles
- d) Non Slip, moisture resistance Adhesive
- e) Greater Flexibility, Extended Pot Life and Higher Bond Strength
- f) Self-Curing

### **2. Floor Tile Adhesive Premium**

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**Factory Mixed in accurate proportion of cement, sand and binders as per industry standard proportions for large size tiles**

**Benefits:**

- a) Single component grey cement based, just add water at site.
- b) For Internal Floors and Walls
- c) No Hollow Sound or Cracking of Tiles
- d) Non Slip, moisture resistance Adhesive
- e) Greater Flexibility, Extended Pot Life and Higher Bond Strength
- f) Self-Curing

### **3. Wall Tile Adhesive Regular**

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**Factory Mixed in accurate proportion of cement, sand and binders as per industry standard proportions for small to medium size tiles**

**Benefits:**

- a) Single component grey cement based, just add water at site.
- b) For Internal Floors and Walls
- c) No Hollow Sound or Cracking of Tiles
- d) Non Slip, moisture resistance Adhesive
- e) Greater Flexibility, Extended Pot Life and Higher Bond Strength
- f) Self-Curing

### **4. Wall Tile Adhesive Premium**

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**Factory Mixed in accurate proportion of cement, sand and binders as per industry standard proportions for large size tiles**

**Benefits:**

- a) Single component grey cement based, just add water at site.
- b) For Internal Floors and Walls
- c) No Hollow Sound or Cracking of Tiles
- d) Non Slip, moisture resistance Adhesive
- e) Greater Flexibility, Extended Pot Life and Higher Bond Strength
- f) Self-Curing

## Availability

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SilicaMix Thin-Bed Wall Tile Adhesive Premium bags are available in and around Karnataka

For more information:

+91 96061 38202, +91 96061 38303

sales@smminfra.in

## SPECIFICATIONS

### Application Area

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For all kind dry Internal Wall and Floor application with ceramic tiles, terracotta tiles, vitrified tiles, brick and natural stones

### Appearance

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**Single component, premixed, greyish adhesive** ready-to-mix with clean water and apply instantly

### Suitable substrates/where to use

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1. Concrete
2. BrickWork
3. Plaster Wall
4. Other Concrete Surfaces
5. Natural Stone Surface

Don't use on gypsum plaster walls, fibre cement boards, plywood, chipboard, particle board, metal sheets.

### Coverage

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20kg Bag Floor Tile Adhesive can cover approximately 50-60 Sqft, using 1/4x 1/4(6mm x 6mm) square notched trowel for a thin bed application of 3mm. Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness.

### Water Demand W/W

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5 to 6 litres of clean water is required for 20kg tile adhesive mortar. Mortar should be mixed thoroughly as it contains binders and admixture.

### Ingredients

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1. Graded sand of high quality
2. OPC 53 Grade Cement
3. Construction Chemicals which improve qualities of concreting and water requirement.
4. Performance additives that provide very good workability to the mix.

### Packaging

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SilicaMix Thin-Bed Floor Tile Adhesive is supplied in 20kg and 40kg HDPE Laminated waterproof bags

## Storage

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1. Keep in a place that is dry, cool, free from moisture and water.
2. Do not keep the bags open and exposed to air
3. Do not use any piercing objects and drag the bags while unloading. Use sufficient labour and proper methods for unloading. Holes in the bags may expose the material to moisture in the air affecting the shelf life

## Shelf Life

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SilicaMix Thin-Bed Floor Tile Adhesive carries a shelf life of 6 months from the date of originally sealed packaging, when stored in cool and dry place, which may vary depending on storing environment, humidity, temperature and other parameters.

## TECHNICAL DATA

### Technical Data – Applicable To the variant “Floor Tile Adhesive Premium”

|                                    |                                                          |
|------------------------------------|----------------------------------------------------------|
| 1. Pot Life                        | 90 to 120 minutes under normal climatic conditions       |
| 2. Open Time                       | 30 Minutes (IS 15477: 2019)                              |
| 3. Adjustability                   | 25 Minutes (IS 15477: 2019)                              |
| 4. Water Requirement               | 5 to 6 liters for 20kg bag                               |
| 5. Specification                   | Meets EN/ISO C2T classification<br>IS 15477:2019 Type 2T |
| 6. Tensile Adhesion(Dry Condition) | 1.49 N/mm <sup>2</sup> (IS 15477: 2019)                  |
| 7. Tensile Adhesion(Wet Condition) | 1.09 N/mm <sup>2</sup> (IS 15477: 2019)                  |
| 8. Shear Adhesion (Dry Condition)  | 1.3 N/mm <sup>2</sup>                                    |
| 9. Shear Adhesion (Wet Condition)  | 1.17 N/mm <sup>2</sup>                                   |
| 10. Shear Adhesion (Heat Ageing)   | 1.0 N/mm <sup>2</sup>                                    |
| 11. Slip Resistance                | < 0.5N/mm <sup>2</sup>                                   |
| 12. Time To Traffic                | 24 Hours                                                 |

### Note

The above results are based on laboratory testing and controlled environment settings. Actual field performance will depend on site conditions and skill. Specifications are subject to change without notification.

## Referred Relevant Standards

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IS 15477:2019 Type C2T

## Technical Support & Initial Training/Demonstrations

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Initial training/demonstrations will be provided by us with our masonry teams and/or technical staff as may be deemed necessary

**Technical Support:** +91 72590 28536 & info@smminfra.in

## APPLICATION INSTRUCTIONS

### Surface Preparation

|                  |                                                                                                                                                                                                                                                                                                                                         |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Dry and clean | <ul style="list-style-type: none"><li>❖ All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion.</li><li>❖ Dry, dusty surfaces should be cleaned with water and let dry.</li></ul>                                                            |
| 2. Cured         | <ul style="list-style-type: none"><li>❖ New concrete slabs shall be damp cured and 28 days old before application which will reduce the shrinkage from tile fixing surface.</li><li>❖ Expansion joints to be provided &amp; filled with suitable sealant.</li><li>❖ Do not cover expansion joints with thin set tile adhesive</li></ul> |
| 3. Levelled      | <ul style="list-style-type: none"><li>❖ Ensure the surface is level, else you will need higher quantity of thin-set adhesive.</li><li>❖ If surface is uneven, use SILICAMIX screed or plaster to level the surface and cure for atleast 14 days before using SILICAMIX tile adhesive</li></ul>                                          |

### Mixing

1. Take a clean bucket and fill it up with clean and good quality 5-6 litre water. Pour 20kg bag tile adhesive mix.
2. Mix by hand or with a suitable mechanical stirrer or slow speed drills (50 - 100 rpm) to obtain smooth, trowel able consistency.
3. Adjust the water as per desired consistency.
4. Always mix required quantity, which can be consumed within pot life.
5. Leave mixture to slake for 5 minutes before use.

### Application & Curing

1. Apply adhesive to the substrate with the flat side of the trowel.
2. Comb on additional adhesive with the notched side.
3. Use the proper sized notched trowel to ensure full bedding of the tile.
4. Tiles must be fixed within 15-20 minutes of adhesive being applied, depending on the porosity of the surface and atmospheric conditions.
5. Check the adhesive ribs periodically and if a skin has formed, remove the dried adhesive and apply fresh adhesive.
6. Press the tiles firmly into position with a slight twisting action, beat using rubber hammer or beating block to impregnate tile to adjust level.
7. Leave no voids behind tiles.
8. Adhesive can additionally be applied on the backs of the tiles.
9. Use suitable support along with adhesive for fixing tiles on vertical surfaces.
10. Clean off surplus adhesive from the tile face and between joints.
11. Clean tools and tile work with water while adhesive is fresh.

## GUIDELINES FOR IDEAL RESULTS

1. Read carefully all the instructions mentioned under “Application instructions”. Follow the instructions mentioned in all 4 sections of the instructions namely **Surface Preparation, Mixing, Application & Curing**

2. Make proper batches. Ideal batches would be of an approximate duration of 60 minutes each. Take only as much material as needed for the particular batch; mix and use. Batches can be decided depending on specific requirements. However, do not mix all at once which may affect the bonding since the material starts its plasticity once it is mixed with water.  
Try to mix and use as instantly as possible for best results
3. Surface should neither be too dry to absorb the water from the mix, nor be too moist. To avoid this, use the steps mentioned before under “Application Instructions”
4. Do not reuse the mixture by adding water again.
5. Once the mix has set, do not add additional water. Decide the thickness needed before mixing, apply water accordingly and mix. Do not try to alter or redo.
6. Do not mix material from 2 different batches as the plasticity of each batch would be different
7. Avoid concreting during extreme weather conditions in terms of cold, rains, winds and summer. In case of such extreme weather conditions, protect finished works until they are completely cured
8. Maintain a good speed of mixing. The speed should not be very less if it is manual; and should not be very high if it is done using concrete mixers
9. The setting times of Portland cement tile adhesive is retarded by low temperatures. Protect completed work for an extended time period.
10. The setting times of Portland cement tile adhesives is accelerated by hot, dry conditions. Apply to dampened surfaces and protect Freshly spread adhesive

## **SAFETY & PRECAUTIONS**

The main ingredients are sand, aggregates and Portland Cement. Hence Premium safety precautions which are to be followed in the usage of day to day Construction products shall be applicable.

Normal Construction field safety precautions that are required to be followed include the following:

1. Use safety accessories required to be used, would include:
  - a) Safety gloves
  - b) Safety goggles
  - c) Dust mask and nose mask
  - d) Helmet
  - e) Nose mask
2. Avoid contact with eyes; inhaling or taking internally
3. Keep the area as dust free as possible
4. After work, wash hands with soap or handwash
5. In case of accidental contact with eyes of either dry or wet mix, immediately wash your hands; make sure your hands are clean and then wash your eyes with clean water and if required, seek medical assistance

## **WARRANTY**

SILICAMIX extends warranty for its products against defects in manufacturing and quality of raw materials used for a period of 6 months from the date of original manufacture, subject to following of all instructions and guidelines prescribed in terms of usage, storing and other relevant aspects.

## DISCLAIMER

All the results and facts mentioned in this document are applicable under normal conditions and when the product is used as per the instructions provided and the guidelines are followed. The company does not assume any responsibility or liability for deviations and dissatisfactions attributable to environmental, climatic, temperature, humidity aspects, etc. and to the methods of usage followed by the customer.

## RECOMMENDED TOOLS

| Tool                                                    | Purpose                                  | Recommended Specifications                                                                                        |
|---------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 1. Buckets                                              | For mixing                               | ❖ Good Quality and Sturdy<br>❖ Around 20 liters capacity                                                          |
| 2. Utility knife                                        | To cut open the bags                     | We recommend using a good utility knife instead of tearing the bags open                                          |
| 3. Wire brush or Paint brush                            | To clean the surface                     |                                                                                                                   |
| 4. Trowel                                               | To apply the mortar                      | ❖ Good Quality<br>❖ Stainless Steel<br>❖ With a comfortable, evenly weighted handle.<br>❖ Size as per requirement |
| 5. Hawk/ Hand Board                                     | For holding additional mortar as needed. | ❖ Lightweight                                                                                                     |
| 6. Slow Speed Mixer<br>(If machine mixing is preferred) | For consistent and complete mixing       | ❖ Electrical or Diesel operated concrete mixer                                                                    |

**All the tools are to be spotlessly cleaned after using**



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# SILICA MINES & MINERALS

CONSTRUCTION MATERIALS - FOUNDATION TO FINISH

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