

METZ HSA HIGH STRENGTH CERAMIC TILE ADHESIVE



DESCRIPTION:

METZ HSA is a powder with special additives that is mixed with water to produce a flexible, multi-purpose thin-bed tile adhesive. This adhesive can be used to bond a wide range of ceramic tile and natural stone to various backgrounds, including concrete, sand/cement screed, fibre cement and other tiles.

FEATURES AND BENEFITS:

- High bond strength to a wide range of materials. Meets AS4992 (Int) for tensile adhesion strength.
- Can be used to bond highly vitrified or porcelain tiles.
- Flexible. Can take up minor substrate movements caused by expansion, vibration, thermal stress or other factors.
- Non-slump. Can be used to fix large format tiles to vertical surfaces.
- Strongly water repellant.
- Easy to use. Just add water.

RECOMMENDED:

As a thin-bed adhesive for bonding:

- · Ceramic tiles, including highly vitrified and porcelain tiles
- Natural stone including marble, slate etc.
- To the following substrates:
- Concrete
- Sand/cement screeds and renders
- Fibre cement sheet
- Many other surfaces (refer Metz for details)

NOT RECOMMENDED:

• For bed thicknesses above 6 mm.

For bonding to glazed tiles (refer Metz 27)

• For areas subjected to acids and other strong chemicals (refer Metz for alternate materials)

PHYSICAL PROPERTIES:

(Typical Values)

Density g/cm³ (when mixed with water) Adhesion: Standard AS4992.1 (a) Normal Setting Adhesives Tensile adhesion strength (28 days dry): Colour: Off White

2.02 MPa (requirement 0.5 MPa)

1.65 - 1.75

COVERAGE:

Theoretical quantities (allow for wastage):

- 1 x 20 kg bag will cover 7 m² with a 6 x 6 mm notched trowel.
- 1 x 20 kg bag will cover 4.5 m^2 with a 10 x 10 notched trowel.

APPLICATION TEMPERATURE:

The recommended temperature range for application is 10° C to 35° C. At temperatures below 10° C, curing may be inhibited and final technical properties may be altered. At temperatures above 35° C, pot life and open time will be affected.





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INSTRUCTIONS FOR USE

1. Temperature of Working Area

Maintain a temperature of between 10 and 35°C on METZ HSA powder, tiles, substrate and air during mixing, application and cure. Use cool, potable water for mixing. At temperatures below 10°C, METZ HSA may not cure fully. At temperatures above 35°C, initial set will take too rapidly and open time will be greatly reduced. This difficulty can be overcome by mixing in a cooler area, cooling components and mixing equipment with ice water and ensuring mixing water is cold.

2. Surface Preparation

All surfaces must be clean and dry. Remove all oil, grease and other contaminants that may inhibit bond. Concrete surfaces must be free from laitance, form oils and curing compounds and be at least 14 days old.

3. Mixing

 a) Equipment Mechanical mixing is recommended. A low speed mixer should be used. High speed mixers can break down components in the material and cause air entrapment.

 b) Mixing Proportions METZ HSA Powder: 1 x 20 kg bag Water: 5.3 - 5.8 Lts Water must be clean, cool and of drinking quality.

- c) Mixing Procedures Place water in mixing container. Add powder gradually with constant stirring. Mix for at least 3 minutes until a smooth, lump-free paste is obtained. After mixing is completed, allow to stand for 2 minutes, restir and use.
- d) Pot Life

3 - 4 hours at 20°C.

e) Open Time

Approx. 20 minutes at 20°C. (Time after application of adhesive during which tiles must be laid).

Note: Increase in temperature will reduce both pot life and open time. Every 10° C will approximately halve both times. Wind and humidity may also affect open time.

4. Application

Spread only sufficient adhesive to cover an area that can be tiled within the open time of the product (20 minutes at 20° C). Do not lay tiles over adhesive that has skinned. For Mosaics and flat back tiles having dimensions less than 200 x 200 mm use 6 x 6 mm notched trowel. For larger tile sizes the following notched trowel sizes are recommended: - refer AS4922 (Int)

- 200 x 200 mm 8 mm notched trowel
- 250 x 250 mm 10 mm notched trowel
- 300 x 300 mm 12 mm notched trowel
- 400 x 400 mm and above 12 mm notched trowel plus buttering of the tile.

In all cases aim to achieve 100% tile coverage with Metz HSA. Keyed back tiles: Fill keys with adhesive prior to laying. Clean off any excess adhesive with water before it begins to set.

5. Setting/Curing

Setting time: Overnight at 20°C Full cure: 7 Days at 20°C

6. Storage

Store in dry, cool place. Protect bags from moisture.

7. Safety Precautions

Avoid contact with skin and eyes. Avoid breathing dust. For full safety precautions refer to Material Safety Data Sheet.

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