

DESCRIPTION:

Metz HSA is a high performance powder with special additives that is mixed with water to produce a flexible, multi-purpose thin-bed tile adhesive. Metz HSA conforms to Australian Standard AS ISO 13007.1-2013 for a C2 (improved performance cementitious adhesive) with special characteristics of non slump (T) and extended open time (E). 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 after suitable preparation. Metz HSA meets the Green Building Council of Australia Green Star requirements for Ceramic Tile Adhesives.

FEATURES AND BENEFITS:

- Conforms to AS ISO 13007.1-2013 **C2TES1** adhesive - Cementitious adhesive with improved characteristics, deformable, slip resistance and extended open time
- Meets the Green Building Council of Australia Green Star requirements for Ceramic Tile Adhesives
- 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
- Long open time - at least 30 minutes at 23°C and 50% relative humidity
- Easy to use - just add water
- Can be used to bond to green sand/cement screeds - refer Metz for details
- Quality Accreditation - The management system governing the development and manufacture of this product is proudly ISO9001:2015 certified

RECOMMENDED:

As a thin-bed adhesive for bonding:

- Ceramic tiles, including highly vitrified and porcelain tiles
- Natural stone including marble, slate etc.
Note: Natural stone should be tested with Metz HSA prior to use to ensure staining does not occur.

To the following substrates:

- Concrete
- Sand/cement screeds and renders
- Fibre cement sheet
- Many other surfaces (refer Metz for details)
- Compatible with Metz 22 and Metz 27M membranes

NOT RECOMMENDED:

- For bed thicknesses above 6mm
- For swimming pools, refer Metz 27
- For areas subjected to acids and other strong chemicals
- For metal or similar substrates
- For substrates subject to shrinkage and other movement such as timber
- For smooth surfaces and tile on tile application without any preparation
- For mosaic tiles in immersion conditions, refer Metz 17M

PHYSICAL PROPERTIES: (Typical Values)

Density g/cm³ (when mixed with water) 1.40 - 1.60

Following properties tested in accordance with AS ISO 13007.2-2013

Characteristic	Requirement	Result
Tensile adhesion strength	≥ 1 N/mm ²	Complies
Tensile adhesion strength after water immersion	≥ 1 N/mm ²	Complies
Tensile adhesion strength after heat ageing	≥ 1 N/mm ²	Complies
Adhesion strength after freeze-thaw cycle	≥ 1 N/mm ²	Complies
Open time: tensile adhesion test	≥ 0.5 N/mm ² after not less than 20 minutes	Complies

Special Characteristic	Requirement	Result
Slip (T)	≤ 0.5mm	Complies
Extended Opentime (E) after 30 minutes	≥ 0.5 N/mm ²	Complies

COVERAGE:

Theoretical quantities (allow for wastage):

1 x 20kg bag will cover 11m² with a 6 x 6mm notched trowel.

1 x 20 kg bag will cover 7m² with a 10 x 10mm notched trowel.

INSTRUCTIONS FOR USE

1. Temperature of Working Area

Maintain a temperature of between 5 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 5°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 7 days old and achieved a minimum of 20MPa. Renders and bonded screeds should have cured at least 24 hours prior to tiling.

3. Mixing

a) Equipment

Mechanical mixing is recommended. Use high speed mixers to ensure thorough mix.

b) Mixing Proportions

Metz HSA Powder: 1 x 20kg bag

Water: 5 - 6 Lts

(Water must be clean, cool and of drinking quality.)

c) Mixing Procedures

Place water in mixing container. Add powder gradually while stirring the mix rigorously until a thick creamy, lump-free consistency is achieved. After mixing is complete, allow to stand for 3 minutes, restir and use.

Note: Ensure you have the latest mixing instructions, refer www.metz.net.au for current data sheet version.

d) Pot Life

3 hours at 23°C with 50% relative humidity.

e) Open Time (time after application of adhesive during which tiles can be laid)

Approx. 30 minutes at 23°C and 50% relative humidity. Note that this time will decrease with increase in temperature or decrease in humidity.

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

4. Application

Spread only sufficient adhesive to cover an area that can be tiled within the open time of the product (30 minutes at 23°C and 50% relative humidity). Do not lay tiles over adhesive that has skinned. For mosaics and flat back tiles having dimensions less than 200 x 200mm, use 6 x 6mm notched trowel. For larger tile sizes the following notched trowel sizes are recommended: (refer AS3958.1-2007)

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

For keyed back tiles, fill keys with adhesive prior to laying.

Clean off any excess adhesive with water before it begins to set. Clean tools with water immediately after use.

Grouting may commence after the adhesive has hardened. Allow a minimum of 24 hours at 23°C and 50% relative humidity.

5. Setting/Curing

Setting time: Overnight at 20°C

Full cure: 7 Days at 20°C

6. Storage

Keep bags sealed and store in a cool, dry environment. Under these conditions, minimum shelf life is 12 months.

7. Standard Pack Size

20kg bag

8. Safety Precautions

Avoid contact with skin and eyes. Avoid breathing dust.

For full safety precautions refer to Safety Data Sheet.

Always ensure you have the latest data sheet version, refer www.metz.net.au

1. The customer must comply strictly with the instructions contained in this product data sheet. Metz is not responsible for any advice or variations to this data sheet which are not confirmed in writing.
2. If the customer has a claim against Metz in respect of any product supplied to the customer by Metz whether due to a fault in the product or the negligence or breach of contract by Metz or for any other reason:
 - a) Metz shall not be liable for any loss or damage including consequential loss or damage or loss of profits arising thereby;
 - b) Metz may at its option replace the defective product free of charge to the customer or refund all payments made to it by the buyer in respect of the defective product; and the maximum liability of Metz shall be the cost of replacing the defective product.