

**HOMESURE**  
**TILE EX**

Tile Expert

**EX - 456 W**

**DEFORMABILITY EXPERT**

## TECHNICAL DATA SHEET

Homesure TileEx **EX - 456 W** is a high polymer-modified, flexible cementitious adhesive with enhanced properties including high bond strength, slip resistance and extended open time. Specially designed with rheology for any substrates (except metal & glass).

### SUBSTRATE

Suitable for concrete or plaster or drywall except metal & glass

### APPLICATION AREA

Interior & Exterior floor & wall applications

### PREFERRED TILES TYPE

Recommended for fixing large-format tiles, slim tiles and natural stones on vertical and horizontal surfaces



## FEATURES



Easy mixing, smooth application, good workability and wettability



Excellent bond to various building materials and substrates



Highly deformable adhesive, sustains for deformable substrates



Water & impact resistant - suitable for wet areas & commercial floor too



Extended open time- suitable for extra large format & external condition



Sustains heat ageing – Idea for external and high temperature applications



Low VOC - for healthy living



Highly polymer modified, excellent bond strength at different conditions



## PHYSICAL PROPERTIES

NATURE	White dry powder
COMPOSITION	Graded sand, cement, selected fillers and polymers
WATER DEMAND	32% ± 2%
POT LIFE	150 ± 30 minutes @temp 27°C
OPEN TIME	≥35 minutes @temp 27°C
ADJUSTMENT TIME	≥35 minutes @temp 27°C
APPLICATION TEMPERATURE	10°C to 40°C
SERVICE TEMPERATURE	-5°C to +70°C
GROUTING TIME	24 hours
TIME TO HEAVY FOOT TRAFFIC	24 hours

## APPLICATIONS

- Suitable for interior and exterior wall & floor applications
- Can be used for both new, old walls and tile on tile application

## APPLICATION PRECAUTIONS

- Do not add more water than recommended
- Maximum adhesive thickness 3 mm -15 mm
- Do not use directly on paint and metal
- Before tile-on-tile application, remove the glaze of the tile or apply primer to provide the required high strength bonding

## PERFORMANCE AGAINST STANDARD

### EN 12004 / ISO 13007 DATA

Test Method	Requirement	Typical Values
Tensile strength extended open time, N/mm <sup>2</sup>	≥0.50	1.00 ± 0.10
Slip resistance, mm	≤0.50	0.35 ± 0.10
<b>Tensile Adhesion Strength, N/mm<sup>2</sup></b>		
Initial	≥1.00	2.00 ± 0.30
After water immersion	≥1.00	1.60 ± 0.20
After heat ageing	≥1.00	1.50 ± 0.20
After freeze - thaw	≥1.00	1.40 ± 0.20
Transverse deformation, mm	<5.00	6.00 ± 0.50
The adhesive mortar conforms to EN 12004 / ISO 13007 as C2TES2		

### IS 15477 DATA

Test Method	Requirement	Typical Values
<b>Tensile Adhesion Strength, N/mm<sup>2</sup></b>		
Dry condition	≥ 1.50	2.00 ± 0.10
After water immersion	≥1.00	1.50 ± 0.10
<b>Shear Adhesion Strength, N/mm<sup>2</sup></b>		
Dry condition	≥1.50	1.70 ± 0.10
After water immersion	≥1.00	1.30 ± 0.10
Ageing heat ageing	≥1.00	1.30 ± 0.10
Slip resistance, mm	≤0.50	0.35 ± 0.10
Transverse deformation, mm	<5.00	6.00 ± 0.50
The adhesive mortar conforms to IS 15477:2019 as Type 4TS2		

## COVERAGE



(1.3 Kg - 1.5 Kg /mm/ M<sup>2</sup>) 50 - 55 Sq.Ft./ Bag (20 Kg) at 3 mm thickness on a plain surface (depending on substrate conditions).

## SURFACE PREPARATION

Ensure the substrate is dry, clean, and structurally sound



### Condition

Substrate must be stable, cured, compact. Free from dust, oils, grease and contaminants. There should be no rising damp, loose particles or flaky areas.

### Surface Stability

The surface must be free of cracks and imperfections, with no hygrometric shrinkage present. Any uneven areas should be smoothed with suitable products.

### Concrete

If applying to concrete, it should be cured for at least 28 days to prevent shrinkage after tile installation. For external applications or areas exposed to heavy traffic, ensure proper curing time.

### Gypsum and Anhydrite Surfaces

Use a suitable primer, if required, to reinforce gypsum board or anhydrite substrates.

## MIXING



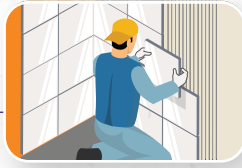
- Take 5.5L ± 0.5 L ml of clean water for 20 Kg of HomeSure TileEx EX - 456 W in a clean bucket. It is important to add material to water and not vice versa
- Stir continuously for 3-5 minutes by using mechanical stirrer to obtain a homogeneous lump - free paste
- Allow the resultant paste to stand for about 5 minutes for the additives to dissolve
- Re-mix again for about 2 minutes. The mixture is now ready for application

## GUIDANCE FOR APPLICATION

### APPLICABLE SUBSTRATES

- Cementitious substrates like plaster & concrete
- Gypsum boards & calcium silicate boards
- Fiber cement boards & medium density fiber boards
- Cement and asbestos boards
- Tiles and stone tiles on exterior substrate
- Wood and plywood substrates

## APPLICATION



- Dampen the surface to be plastered with clean water. Allow excess water to drain off
- Clean the backside of the tiles
- Apply the material with notch trowel, use 6 mm to 12 mm notched trowel as per size of tile
- Application should be angled between 45 to 60 degrees, using the right amount of pressure. Check for holes and gaps in the adhesive, spread it evenly
- Fix the tile in the place and press it sideways or tap gently with mallet from the center towards the outside. (for 600 x 600 mm and large tiles, use tile vibrator for better dispersion)
- Use a notched trowel to remove excess mixture from the tile and clean it with a damp cloth or sponge

## SHELF LIFE & STORAGE INSTRUCTIONS



- 12 months from the date of manufacturing when stored in unopened, original sealed and dry condition at a temperature range from +5°C to 40°C
- Store in dry and well-ventilated place away from heat source, direct sunlight, humidity, water source
- Avoid using partially used material; open bags with partially used material should be kept in a bag with its mouth tied tightly with string to prevent lump formation

## HEALTH & SAFETY INFORMATION



- Refer MSDS for information and advice on the safe handling, storage, and disposal of chemical products
- Use rubber hand gloves and safety goggles, while using product
- Avoid contact with skin/eyes and avoid swallowing. In case of contact with skin, wash with plenty of water
- Keep out of children's reach

## PACKING

Available in 20 Kg bag



## HOMESURE TILE EX RANGE OF PRODUCTS

Tile Expert



TA EX Version 1 - 26 Mar 2026

