

MasterTile® FLX 424

Deformable multipurpose grey colored tile adhesive for all ceramic coverings, porcelain, non-moisture sensitive natural stones and substrates

DESCRIPTION

MasterTile FLX 424 is a grey colored, polymer enriched, cementitious flexible tile adhesive with extended open time and reduced slip for thin bed fixing of fully vitrified ceramic tiles and porcelain mosaic tiles, stones in interior or exterior situations, especially those exposed to permanently wet conditions or substrates subject to deformations

RECOMMENDED USES

MasterTile FLX 424 is the adhesive of choice for demanding substrates and demanding situations. Typical application Areas include:

- Suitable for Ceramic tiles, Semi Vitrified tiles, Vitrified tiles, mosaic, stones conforming to IS13712(2006) type Ia, Ib, IIa, IIb tiles
- Wet areas including kitchen, bathrooms & Showers in domestic, institutional, commercial and industrial location
- Tile on tile application.
- For internal & external applications
- For Floors, Walls, Podium decks, roofs including large format tiles.
- For laying non-moisture sensitive natural stone
- For Laying Ceramic, Porcelain, Fully vitrified tiles and brick tiles.
- Large format tiles & stones
- For Swimming pools, pool surrounds, wet rooms and cold storage depots
- For substrates such as cement screeds, precast concrete elements, aerated concrete, heated screeds, plaster and existing floors and walls
- For fixing tiles on bonded waterproofing membranes such as MasterSeal 561.
- On cementitious screeds, ground anhydrite and/or gypsum based floated screeds, precast concrete elements, aerated concrete, heated screeds, plasterboards, gypsum fibre boards, dry screeds, plaster, masonry, old ceramic tiles.

FEATURES AND BENEFITS

- **High Performance(C2)** – Can be used for Non-porous ceramic tiles with minimal water absorption
- **Non-slip & Excellent grab(T)** – Versatile can be used for horizontal and vertical applications

- **Extended Open Time(E)** – Allows longer working time and Faster progress
- **Deformable Adhesive (S1)** – Non sag, no need for battens and spacers
- **Waterproof** – immersion will not affect adhesion
- **Thin or Thick bed** - multi-purpose
- **High adhesive bond strength** –suitable for large tiles
- **Resistant to temperatures** from -30°C to +80°C, multi-purpose use indoors and out, on walls and floors.
- **Flexible** – compensates changes in temperature and elongations of the substrate.

PROPERTIES

Typical Properties

Aspect	Free flowing grey powder
Material base	Powder mixture with elastomeric polymers.
Shelf Life	12 months
Packaging	20 Kg bag
Product class according to EN 12004	C2TES1
APPLICATION	
Water/Powder ratio by weight	0.24-0.25
Temperature Range for Application	from +5 °C to +35 °C
Slake time	approx. 3 minutes
Working time **	min 1 hr.
Maximum Thickness of adhesive bed	≤ 10 mm
Curing times** (on slightly absorbent substrates)	Approximately 24 hours Approximately 24 hours Approximately 7 days
- Walked on after	
- Groutable after	
- Able to bear weight after	
Temperature resistance	Up to 80°C

ADHESIVE CERTIFICATION TO EN 12004 STANDARDS (C2TES1)

Open Time – EN 1346	30 minutes
Tensile adhesion strength after dry	≥ 1.0 N/mm ²

MasterTile®FLX 424

storage, (28 days)-EN 1348	
Tensile adhesion strength after water immersion- EN 1348	≥ 1.0 N/mm ²
Tensile adhesion strength after heat ageing- EN 1348	≥ 1.0 N/mm ²
Slip – EN 1308	≤ 0.5 mm
Deformable Adhesive: Transverse deformation – EN 12002	≥2.5mm & <5mm

STANDARDS

MasterTile FLX 424 meets the requirements of **Class C2TES1** as specified in **EN 12004-2007 “Adhesives for Tiles – Requirements, Evaluation of Conformity, Classification and Design”**

MasterTile FLX 424 meets the requirements of **class Type IV ‘T’S1’** as specified in **IS 15477:2019 “Adhesives for use with Ceramic, Mosaic and Stone Tiles - Specification”**

APPLICATION

Surface preparation

The substrate must be solid, clean and load-bearing. Oil stains, bond-inhibiting surfaces and contaminations must be thoroughly removed. Irregularities on walls are to be leveled with **MasterEmaco N303** or polymer modified mortar using **MasterEmaco S 348**.

Highly absorbent cement-based substrate and aerated concrete are to be primed with **MasterSeal 399**. Allow primer to dry.

Freshly installed cement screeds must not have residual moisture content above 5 %.

Concrete, screeds, renders, and block work should be cured sufficiently to allow for most of the shrinkage movements.

Tiles must be dry, and their surfaces free of contaminants that could impair adhesion. Do not soak tiles in water before laying.

Mixing

Place gauging water in a clean mixing vessel. Add powder and mix with a suitable mechanical stirrer until a plastic, lumps free consistency is achieved. Required water for 20 Kg bag is 4.8 – 5 litres depending on consistency.

Placing

Apply thin (3 to 6 mm thick) bond coat to the substrate with the straight edge of the notched trowel. Then comb mortar on to the fresh bond coat with the notched edge of the trowel working in the direction, if possible.

Only apply as much mortar as can be covered with tiles within the open time. Check the open time by touching the adhesive bed with your fingertip. Apply mixed material in perpendicular direction with respect to grooves on the back of tile.

Position tiles in the adhesive bed and align with a slightly pushing motion, ensuring the tile back achieves full contact with the adhesive.

MasterTile FLX 424 is strongly recommended to additionally be buttered on the backs of the tiles to ensure full adhesive contact for large tiles (Area > 900 cm²). Ceramic tiles should never be butt jointed. Leave a minimum of 2mm around tiles.

Adjustments to tiles should be made during the adhesive open time. Remove excess adhesive from face of the tile with a damp sponge or cloth before it sets and rake out joint for subsequent grouting before the adhesive sets.

Leave for a minimum of 24 hrs before grouting.

ESTIMATING DATA

Approximately 0.93 kg/m² for 1mm thickness

** The consumption rates of dry powder are based on lab trials and might vary subject to variation of subfloor level and surface regularity. The reverse profile of the used ceramic and the surface structure of the substrate to be covered are also important factors, besides the tile size, for the consumption of mortar.

PACKAGING

MasterTile FLX 424 is available in 20 Kg pack.

SHELF LIFE

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.

PRECAUTIONS

It is highly recommended to use necessary PPE (Gloves, mask etc..) during installation of the product. In case of Incidents of direct inhalation, causing dizziness/giddiness, loss of consciousness, contact

MasterTile® FLX 424

with eyes etc, seek immediate medical advice. The requirements may vary depending on the application areas. Please ensure to have proper ventilation while working in confined areas. Contact Master Builders Solutions representative in case you need further

details or refer to the material safety datasheet of the product to know more.

TDS Ref: MasterTileFLX424/04/09/2021

® = registered trademark of a MBCC Group member in many countries of the world

STATEMENT OF RESPONSIBILITY (Disclaimer)	The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.
NOTE	Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.