

MC250 Vitri-Flex

Date: 20 July 2016

Fact Sheet No.: D56287S

YOUR SMART ADVANTAGES

- **Polymer modified for use with porcelain and fully vitrified tiles**
- **For use with under-tile heating systems**
- **Sets in 2 hours**

USES

Bostik Vitri-Flex is a one part polymer enhanced adhesive which is ideal for fixing most types of porous and non porous tiles and stone and only requires the addition of water for use. Bostik Vitri-Flex is formulated for fast-track tiling installations of fully vitrified, porcelain and ceramic tiles and mosaics, natural stone, terrazzo, concrete tiles etc. on mature concrete, cement based screed, sand blinded asphalt (interior only), WBP plywood and other substrates subject to limited vibration or movement

BOSTIK MC250 Vitri-Flex is a Grey (or white) fast setting cement-based, thin-bed ceramic tile adhesive, which conforms to BS EN 12004 Type C, Class 2FT. It is intended for fixing all types of ceramic floor and wall tiles including porcelain, mosaics & glass tiles onto many typical surfaces including plywood and impermeable substrates.

BOSTIK MC250 Vitri-Flex is polymer modified to give improved adhesion strength, and is suitable where under-floor heating is installed.

PRODUCT CHARACTERISTICS

Colour	Grey or White
Form	Powder
Specific Gravity	1.1 dry, 1.8 when mixed as directed
Composition	Portland cement blend
Product Codes	30810459 (GREY)& 30811618 (WHITE)
Storage/Shelf Life	Store for up to 12 months from date of manufacture in original, unopened packaging under cool, dry, conditions within the temperature range of +5°C to +30°C and out of direct sunlight. Protect from frost.

TYPICAL PERFORMANCE DATA (Approx.)

Application Temperature	+5°C to +25°C
Service Temperature	-15°C to +70°C
Coverage	Will cover at a rate of about 4.0kg per sq. meter for floor tile fixing and at about 2.5 kg per sq. meter. When fixing wall tiles using the appropriate notched trowel in each case.
Drying Times	Open time is 30 minutes & initial set is 2 hours

DIRECTIONS FOR USE

IMPORTANT: Before using BOSTIK MC250 Vitri-Flex refer to the relevant Health & Safety Data Sheet, available at www.bostik.ie

PREPARATION

1. The receiving substrates must be clean, firm and free of dust, dirt, oil, grease and loose flaking coatings. They must also be structurally sound and strong enough to support the weight of the tiles being fixed.
2. BOSTIK MC250 Vitri-Flex can be applied to dry or damp surfaces however moisture sensitive materials must be dry and remain dry after fixing. Worn or porous masonry surfaces should be sealed with BOSTIK FLEXIBOND diluted as 1 to 3 with water.
3. Wood -based surfaces, such as 15mm WBP waterproof rated plywood and panel-boards should be dry, sealed on all exposed faces and edges and primed using BOSTIK FLEXIBOND. They must always be rigidly braced and screw fixed at 300mm centres to provide a dimensionally stable background as described in BS 5385.
4. Do not apply onto bare, un-sealed gypsum plaster or anhydrite floor screeds before first sealing this type surface with two coats of BOSTIK PRIMER.

APPLICATION

1. BOSTIK MC250 Vitri-Flex should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a soft, slump-free, easily worked mortar. The recommended mixing proportions by volume are 1 part water to 3 parts powder (approx. 5 litres per 20kg sack). The consistency of the paste can be adjusted with slight additions of water or powder at the initial mixing stage however part-used adhesive should never be "freshened up" with later water additions.

2. BOSTIK MC250 Vitri-Flex will remain useable for about 40 minutes and should not be applied in temperatures below 5°C. In ideal conditions (20°C), this thin-bed adhesive will set after about 2 to 3 hours. Expansion joints should be planned and installed in large floor areas in accordance with BS 5385.
3. For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed on the substrate of no more than 6mm, into which the tiles are firmly bedded with a twist and slide action to ensure full contact.
4. Use a 6mm x 6mm notch at 10mm centres for general wall tiling and 10mm x 10mm notch at 16mm centres for floor tiling. The position of the tiles can be adjusted up to 10 minutes after initial fixing.
5. Open time of the exposed mortar bed is approximately 20 minutes, depending on surface porosity and site conditions. It is recommended that tiles with raised or studded back profiles, (or in situations where dampness is likely after tiling), should be buttered to ensure solid bed fixing.
6. Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period. Surfaces that are rough or uneven may first be levelled with a SELF-LEVELLING COMPOUND and when sufficiently firm (24 – 48 hours later), is followed by an application of BOSTIK MC250 Vitri-Flex adhesive with a final bed depth of 2 to 3mm thickness.
7. Maximum recommended bed depth is 6mm. When fixing moisture sensitive light coloured natural stone, white MC250 Vitri-Flex adhesive should be used to promote early drying & strength development

SURFACE CONSIDERATIONS

FLOORS

New concrete

Before covering and after curing, concrete should be left to dry out by exposure to air for at least 6 weeks. Any falls required in the system should be formed in the new concrete and not the tiling layer.

New sand/cement screeds

Before covering and after curing, screeds should be left to dry out by exposure to air for at least 3 weeks. It is recommended that screeds should have a relative humidity level of 75% as tested by an air hygrometer.

Existing concrete/screed bases

Existing cementitious substrates should be sound and dry. Any unsound areas should be removed, replaced and treated as a new screed or concrete.

PLYWOOD OVERLAY

Plywood should be of WPB external or marine grade. The minimum recommendation thickness is 15 - 18 mm. Plywood sheets must be dry, securely fixed and rigid. They should be screwed to the supporting joists at maximum 300 mm centres. It is imperative that the joints between boards are supported by either a joist or a noggin. Extra noggins may need to be inserted for this reason. The back and edges should be sealed with diluted Bostik Flexibond pre-diluted 1:2 with water to prevent the ingress of ambient moisture. Check suitability of sheets for the intended application with the manufacturer. This type of substrate is sensitive to water; care should be made to prevent water ingress. In this situation we would recommend tanking out the installation with Bostik Water-tite Tanking & Wet-room Kit. The method of fixing must be solid bed using the appropriate notched trowel. No voids should exist between the tile and substrate, minimum bed thickness 3 mm.

EXISTING FLOOR TILES

All loose tiles should be removed and hollows filled before tiling. Existing tiles should be thoroughly cleaned and degreased before tiling to remove all contaminants. Consideration should be given to mechanically abrading the tile surface, particularly with quarry tiles, to ensure a good bond can be formed.

VINYL TILE SHEET

Vinyl tiles should only be tiled if they are rigid and firmly fixed to their base. Any loose areas should be removed and the whole area thoroughly degreased before fixing. The surface must be sufficiently regular to receive an even bed thickness of adhesive. Prime with Bostik Flexibond pre-diluted 1:2 with water. Cushioned, soft types of flooring are not suitable and must be completely removed prior to tiling.

MASTIC ASPHALT

Asphalt must be rigid and solidly fixed. Only internal, flooring grade asphalt should be tiled. Never tile onto external roofing grade asphalt as this will be too soft to acceptably receive tiles. Prime with Bostik Flexibond pre-diluted 1:2 with water.

CLEANING

1. Uncured product may be removed using cloths lightly dampened with water after carefully scraping off the bulk of the adhesive paste.
2. Cured product can only be removed by mechanical means.

STORAGE

Store in un-opened bags clear of ground and in cool dry conditions. Protect from excessive draught and use within 6 months.

PRECAUTIONS IN USE

For any application not covered please contact Technical Services on +353 1 8624998 or visit www.bostik.ie for advice.

Recommendations and suggestions are for guidance only, since conditions of use are completely beyond our control.

For health and safety instruction, first aid measures and spillage and disposal instructions, see separate Health and Safety Data sheet, available at www.bostik.ie.

BOSTIK HOTLINE

Smart help +353 1 8624998



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BS EN ISO 9001:2008

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Technical Data & COSHH (MSDS) Data Sheets	Tel: 01 8624900	Fax: 01 8402186	



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DECLARATION OF PERFORMANCE

In accordance with Annex III of Regulation (EU) No 305/2011
(Construction Products Regulation)

Product Description:	Bostik Vitriflex Grey / White
Product Barcode(s):	5010591068612, 5010591068735
Intended Use:	Improved fast setting cementitious adhesive for internal and external tiling on floors and walls.
Manufacturer:	Bostik Industries Limited
Contact Address:	Newtown, Swords, Co. Dublin, Ireland Tel: 00 353 1 8624900 www.bostik.ie
System of Assessment:	System 3
Harmonised Standard:	BS EN 12004:2014 / 1 & 2
Notified Body:	1289

Essential Characteristics	Performance	Harmonised technical specification
Bond strength as: - Early Tensile adhesion strength - Initial Tensile adhesion strength	>0.5 N/mm ² >1.0 N/mm ²	EN 12004-2, 8.3 EN 12004-2, 8.3
Extended open time tensile adhesion strength: Tensile strength after 20 minutes open time	>0.5 N/mm ²	EN 12004-2, 8.1
Durability for: - Tensile adhesion strength after heat ageing - Tensile adhesion strength after freeze thaw cycles - Tensile adhesion strength after water immersion	>1.0 N/mm ² >1.0 N/mm ² >1.0 N/mm ²	EN 12004-2, 8.3 EN 12004-2, 8.3 EN 12004-2, 8.3
Reduced Slip	<0.5 mm	EN 12004-2, 8.2
Reaction to Fire	NPD	
Release of dangerous substances	See MSDS	

This declaration of performance is issued under the sole responsibility of Bostik Ireland Ltd.

Signed for and on behalf of Bostik Ireland Ltd by:-

Name : Brian Monaghan

Signature: 

Date: May 2016

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In accordance with Annex III of Regulation (EU) No 305/2011
(Construction Products Regulation)