

# M 23 HP (Previously known as Botament M 21 Premium) Flexible Power Adhesive

## **Product Properties**

- exceeds EN 12004 requirements
- C2 TE S1 according to EN 12004
- no additive or latex required
- excellent adhesion and workability
- thixotropic consistency and highly flexible
- for interior or exterior use, swimming pools and pool decks
- for tile-on-tile refurbishment
- for almost every kind of tiles

# Area of Application

M 23 HP is used for installing ceramic, homogeneous, porcelain stoneware, terracotta or mosaic tiles for floors and walls. It can be used for fixing insulation or light-weight building boards, glass bricks as well as light-weight blocks. Its excellent workability also allows the efficient installation of large-format tiles.

It is especially designed to withstand the strains of permanently stressed areas such as swimming pools, pool decks, facades, balconies, terraces, kitchens in hotels and hospitals, laboratories, showrooms, automotive service centres, etc. M 23 HP is also suitable for tile-on-tile refurbishment.

# Application

## **Application:**

The processing time is approx. 90 minutes. Apply a thin contact layer onto the substrate with the flat side of a trowel. Right after this use the notched side of the trowel to spread the right amount of adhesive evenly.

Mosaic and glass mosaic up to a size of 50 mm x 50 mm requires a trowel with a notch size of 4 or 6 mm to spread the right amount of adhesive. For bigger sized tiles use a trowel with bigger notches to ensure sufficient amount and even distribution of adhesive underneath the tile.

The buttering-floating method (combined application of adhesive onto the tiles as well as onto the substrate) to create a cavity-free adhesive layer is recommended for external areas, wet areas or swimming pools.

After spreading the adhesive, the tiles should be placed immediately. Within 30 minutes the tile can be moved slightly to its final position. If a surface skin has formed, re-troweled the adhesive to produce a fresh surface. Avoid sprinkling water to moisten the adhesive.

## **Properties:**

M 2 HP is a highly flexible cementitious adhesive with very high pull-off strength and excellent workability. The material already contains dry polymers in powder form which makes the usage of additional latex unnecessary.

M 23 HP is certified as C2TES1 adhesive in accordance with EN 12004.

It is available in grey or white colour. The grey version is appropriate for standard tiles whereas the white version is recommended for sensitive materials like glass tiles or glass mosaic.

M 23 HP is the tile adhesive of the Swimming Pool System

#### Suitable Substrates:

M 23 HP adheres to almost all kinds of mineral substrates such as concrete, screed, render, brickwork, plaster boards, light-weight blocks, etc. Timber-based or non-absorbent substrates require the usage of the bonding primer D 15.

#### Substrate Requirement:

The substrate must be clean, solid, stable, free of any loose particles like dust and free of grease, oil, paint, cement lime, tar, bitumen or release agent which might affect the adhesion.



# Application

## Substrate Preparation:

For all absorbent substrates (cement render, screed, brickwork, gypsum, anhydrite screeds, etc.) the usage of deep penetrating primer D 11 is recommended to achieve best adhesion. The primer reduces the absorbency and reinforces the substrate.

For tile-on-tile refurbishment of dry areas, the usage of the contact primer D 15 is recommended. For tile-ontile refurbishment of wet areas, a scratch coat of MC-Proof 700 Flex onto the existing tile layer is recommended.

## Mixing:

Mix M 23 HP with only clean, potable water. For one 25 kg bag approx. 7.5 - 8.0 litres of water is required. Add gradually the powder to the water while mixing to achieve a lump-free mix. Use a slow speed drill mixer (400 - 500 rpm) and mix for a minimum of 3 minutes to produce a homogeneous consistency. After a maturity time of 5 minutes mix the material again for 1 minute to attain longer workability. Material which has set must not be re-tempered by mixing in additional water as this will affect the final properties.

## **General Remarks:**

Protect M 23 HP against adverse weather conditions until the material is completely set.

Avoid heavy mechanical stress during curing as this will affect the final bonding strength.

The datasheet of products used in conjunction with M 23 HP must be followed.

All technical data stated in this datasheet are based on test under laboratory conditions. Actual achieved data may vary due to different ambient conditions at job sites.

The Material Safety Data Sheet is available on request.

#### Setting time:

Tiles installed with M 23 HP can be walked on after approx. 24 hours. The grouting of the tile joints can be carried out after approx. 24 hours.

The drying times are approximate and will be affected by ambient conditions. High temperature and low humidity quicken the drying process whereas low temperature and high humidity retard the drying process.

#### **Consumption:**

The consumption varies with the application method as well as with the particular kind of notched trowel.

#### Material base:

Cementitious composite with minerals aggregates and dry powder dispersants

#### **Cleaning:**

With water while material is still wet, hardened material can onle be mechanically removed

Transverse deformation according to EN 12002: >2.5 mm



Technical Data for M 23 HP				
Characteristic	Unit	Value	Comments	
Colour			Grey, White	
Solvent			None	
Low Chromate Content			Yes	
pH-Value		11		
Mixing Ratio	liter	7.5 – 8.0	Of water	
Wet Density	kg/lit	~1.65		
Pot Life	minutes	ʻ~90	At 25+°C	
Open time EN 1346	minutes	~ 30	At 25+°C	
Consumption	mm: kg/m²	6 :3.9	Notched trowel	
		8: 5.2		
		10: 6.5		
Maximum layer thickness	mm	8	In one layer	
Tensile adhesion strength	N/mm²	≥ 2.0	Standard condition	
(according to EN 1348)		≥ 2.0	Heat aging	
		≥ 2.0	Water immersion	
Vertical Slip	mm	<0.5	according to EN 1308	
Application conditions	+°C	8-40		

Product Characteristics for M 23 HP		
Packaging	25 kg bag	
Storage	Keep cold and dry.	
Shelf Life	<b>9 months</b> if kept in original, unopened and undamaged sealed bags.	

#### Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 02/22. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.