

CMI® TILEFIX 181

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DESCRIPTION

Water-resistant cement-based tile adhesive for fixing ceramic glazed tiles for both floors and walls for internal applications.

It is classified as **C1** in accordance to EN12004.

It can be upgraded to high adhesion performance flexible cement-based tile adhesive when mixed with **CMI® Mortar Admix 380**, and be used for very large format tiles and exterior areas.

USES

- Cementitious Tile Adhesive for basic fixing of small size ceramic tiles onto concrete slab, screed / render, RC walls, block wall.
- Suitable for tile application at interior dry areas i.e., living room, bedroom, etc.
- When mixed with **CMI® Mortar Admix 380**, it can also be used for fixing small to large size ceramic, homogeneous, porcelain tiles, glass mosaic and stones for both interior and exterior areas.
- For other areas not specified, please consult **Nippon Paint / CMI®** Technical Representatives for more information.
- IT SHOULD NOT BE USED ON SKIM COATED OR PAINTED SURFACES.

ADVANTAGES

- Single-component, premixed with good and consistent quality.
- Pre-packed, user friendly, just need to mix with water and apply.
- Good bonding strength to suit for basic ceramic tile fixing needs.
- Versatile, specially designed for convenient upgrade to two-component system by pairing with **CMI® Mortar Admix 380**, to deliver high adhesion performance flexible grade cementitious adhesive, with good workability.
- Eco-friendly cementitious tile adhesive, certified with Singapore Green Label by Singapore Environment Council.

Product Type	Product Code	Pack Size	Color	Substrate
Cementitious Tile Adhesive	181	25kg	Grey, White	Concrete, block, screed/ render

Technical Data

Appearance	Grey/ White Powder
Bond Strength @ 28days	≥ 0.5 N/mm ²
Open Time	20 minutes
Wet Density	1400 – 1450 kg/m ³
Dry Density	1250 – 1300 kg/m ³
Pot Life @ 30°C	Approx. 1 – 1.5 hours
Mixing Ratio	Approx. 24% water on dry material

Recommended Total Coating & Construction System
SINGLE-COMPONENT (1K) TILING SYSTEM
(I) General Interior Areas

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
CMI® TileFix 181	Ceramic Tiles (High water absorption)	≤ 300mm x 300mm (Small-size)	3-6mm thick

TWO-COMPONENT (2K) TILING SYSTEM
(I) General Interior Areas (i.e., Living room / Bedroom / Bathroom / Shower Room / Wet Kitchen / Lift Lobby)

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
CMI® TileFix 181 + CMI® Mortar Admix 380	Glass mosaic, Lampang Tiles	50mm x 50mm (Very small size)	3mm thick
	Ceramic Tiles (High water absorption)	≤ 300mm x 300mm (Small-size)	3-6mm thick
	Homogeneous / Porcelain Tiles (Low water absorption)	≤ 600mm x 600mm (Large-format)	6-10mm thick
	Natural stones, marble, granite	> 600mm x 600mm (Very large-format)	8-12mm thick

*For direct tiling onto cementitious waterproofing or areas subjected to high movement, it is recommended to use CMI® TileFix 181 incorporated with CMI® Mortar Admix 380.

(I) Exterior Areas (i.e., Car Porch)

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
CMI® TileFix 181 + CMI® Mortar Admix 380	Ceramic Tiles (High water absorption)	≤ 300mm x 300mm (Small-size)	3-6mm thick
	Homogeneous / Porcelain Tiles (Low water absorption)	≤ 300mm x 600mm (Up to medium-size)	6-10mm thick

(II) Exterior Areas (i.e., Swimming Pool / Pool Deck / Water Feature / Fish Pond / Sauna / Jacuzzi)

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
CMI® TileFix 181 + CMI® Mortar Admix 380	Glass mosaic, Lampang Tiles	50mm x 50mm (Very small size)	3mm thick

Note:

- All grouting joints up to 3mm to be filled with **CMI® TILE JOINT FILLER**.
- Kindly refer to the respective technical datasheet for more information.
- For areas not specified, please consult **Nippon Paint / CMI®** Technical Representatives for more information.

Surface Preparation

All surfaces must be sound, clean and free from dirt, dust, grease and other contaminants which will inhibit proper bonding. Damp the substrate for dry, heated or high absorbing substrates prior to application of **CMI® TileFix 181**.

Mixing

SINGLE-COMPONENT (1K) TILING SYSTEM

Mix 25kg bag of **CMI® TileFix 181** with approximately 6.0 - 6.5L of clean water (Do not add cement into the mixture). Mix thoroughly for 3- 5 minutes using mechanical mixer until the homogenous paste is achieved and lump-free. Allow mixture to stand for 5 minutes and re-stir before use.

TWO-COMPONENT (2K) TILING SYSTEM

Mix 25kg bag of **CMI® TileFix 181** with approximately 6.0 - 6.5L of **CMI® Mortar Admix 380** (Do not add cement into the mixture). Mix thoroughly for 3- 5 minutes using mechanical mixer until the homogenous paste is achieved and lump-free. Allow mixture to stand for 5 minutes and re-stir before use.

Note: Re-mix if the mixture is left unattended for more than 30 minutes.

Application

- Soaking of tiles in water is unnecessary. However, if the backs are dusty, they should be wiped with clean damp cloth.
- Spread the adhesive onto substrate using notched trowel not more than 1 sq m at a time or at arm's length. The suitability of notched trowels depends on size of tiles.
- Press tiles firmly into position immediately with a twisting action.
- The open time in normal temperature and humidity is 20 minutes. However, in unfavorable weather conditions e.g. strong sun, windy, high temperature, or highly absorbent substrates may shorten the open time to just few minutes. Touch adhesive ribs periodically and if a skin has formed, re-trowel the adhesive to break the skin.
- Lift tiles occasionally to check that adequate contact between tile & adhesive bed is maintained and that there are no hollow areas.
- Leave minimum joints of 2mm for wall tiling & 3mm for floor tiling.
- Remove surplus adhesive from tile surface & joints with a damp cloth.
- Allow 24 hours drying time before grouting.

Coverage

Approx. 2.5 – 3.0 kg/m² at 3mm bed thickness

Approx. 5.0 – 6.0 kg/m² at 6mm bed thickness

Approx. 10.0 – 11.0 kg/m² at 10mm bed thickness

Cleaning

Clean up equipment with water immediately after use.

Safety Precautions

- Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid inhaling dust during handling or mixing of products.
- Use only in well-ventilated area.
- In case of inadequate ventilation wear respiratory protection. In case inhaled, remove patient to fresh air and allow to rest.
- In case swallowed, do not induce vomiting. Rinse mouth clear with water and drink two glasses of water.
- In case contact with eye, immediately rinse with plenty of water and seek medical advice.
- Remove splashes from skin by using soap or water.
- Products must always be stored in a cool, dry and well-ventilated area.

- When transporting products, care must be taken. Always keep products dry and avoid generating or accumulating dusts during handling.
- Disposal of product should always comply with local and national regulations.

Shelf Life & Storage

Six (6) months when stored in cool and dry condition.

Note

The information provided on this datasheet is not intended to be complete and is provided as general advise only. It is the user's responsibility to ensure that the product is suitable for its intended purpose. As we have no control over the treatment of the product, the standard of surface preparation, or other factors, we are not responsible for any damages or injury, including but not limited to special or consequential damages which may result from the use of our products, which includes any damages or injury caused by any failure of performance. The information contained in this datasheet may be modified by us from time to time, without any notice arising from our continuous product development activities.