

CMI® TILEFLEX 186

Updated June'23



DESCRIPTION

CMI® Tileflex 186 is a premium grade, single component polymer modified flexible cement-based tile adhesive for tiling of large format fully vitrified tiles, marble & granite. It is ready to use by just adding water for internal & external tiling.

It is classified as **C2TES1** in accordance to EN12004.

USES

- Cement-sand screed & render
- Fixing small to large format tiles, glass mosaic, marble & granite onto concrete slab, screed/ render, RC walls, block wall
- Suitable for interior dry area & external area including swimming pool
- Suitable for drywall system i.e fibre cement board and plasterboard (to prime with CMI Bonding Agent)
- IT SHOULD NOT BE USED ON SKIM COATED OR PAINTED SURFACES.

CHARACTERISTICS / ADVANTAGES

- High bonding performance and deformability
- Build-in flexibility to absorb vibration, shrinkage and deflection of substrates
- Enhanced adhesion of low-porosity tiles to dense impervious substrates
- No mixing error – just add water

Product Type	Product Code	Pack Size	Color	Substrate
Cementitious Tile Adhesive	186	25kg	Grey	Concrete, block, screed/ render

Technical Data

Appearance	Grey Powder
Tensile Adhesion Strength	Standard condition $\geq 1.0 \text{ N/mm}^2$ Water immersion $\geq 1.0 \text{ N/mm}^2$ Heat aging $\geq 1.0 \text{ N/mm}^2$
Transverse Deformation	$2.5\text{mm} \leq \text{S1 Classification} \leq 5.0 \text{ mm}$, Classified as S1
Slip Resistance	$\leq 0.5\text{mm}$
Open Time	$\geq 0.5 \text{ N/mm}^2$ at 30 minutes (at 23°C)
Wet Density	1550 - 1600 kg/m ³
Dry Density	1450 - 1500 kg/m ³
Pot Life @ 30°C	Approx. 1 – 1.5 hours
Mixing Ratio	Approx. 24 - 26% water on dry material

Recommended Total Coating & Construction System
TILING SYSTEM
General Interior Areas

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
CMI® Tileflex 186	Glass mosaic, Lampang Tiles	50mm x 50mm <i>(Very small size)</i>	3mm thick
	Ceramic Tiles	≤ 300mm x 300mm <i>(Medium-size)</i>	3-6mm thick
	Homogeneous / Porcelain Tiles	≥ 600mm x 600mm <i>(Large size)</i>	6-10mm thick

(I) Exterior Areas

TILE ADHESIVES	TILES TYPE	TILE SIZE	BEDDING THICKNESS
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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.
- For installing large format tiles on vertical surface, mechanical fixing might be required to secure the tiles.

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® Tileflex 186**.

Mixing

Mix 25kg bag of **CMI® Tileflex 186** with approximately 6.0 – 6.5 litres 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. 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 30 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.