NIPPON PAINT | SMI®

TECHNICAL DATA SHEET

Updated Mar'22

CMI® BLOCKFIX 187



DESCRIPTION

CMI® Blockfix 187 is a water-resistant, cement-based thin-bed adhesive specially formulated for jointing/ bonding of AAC (autoclaved aerated concrete) or ALC (aerated lightweight concrete) blocks, panels and lintels. Its high adhesion and flexural strength ensure higher load carrying capacity thus minimizing the occurrence of cracking to walls or joint area in interior and exterior conditions.

USES

 Block Jointing Adhesive for ALC and AAC blocks, suitable for both interior and exterior use.

ADVANTAGES

- Premixed with good and consistent quality.
- User friendly, just need to mix with water and apply.
- Pre-packed, complementing IBS construction to achieve good construction quality and less labour intensive.
- High adhesion and fast setting, promoting speedier ALC / AAC block wall construction.
- Durable and good weather resistance.

Product Type	Product Code	Pack Size	Color	Substrate
Block Jointing Adhesive	187	40kg	Grey	ALC / AAC block units

Technical Data

Appearance	Grey Powder	
Specific Gravity	1.60	
Wet Density	1.72 g/cm³	
рН	12	
Recommended Thickness	2 – 5 mm	
Mixing Ratio	Approx. 26 – 28% water on dry material	
Open Time	Approx. 15 minutes. May vary depending on porosity of substrate and ambient temperature.	
Pot Life	Approx. 2 hours	
Setting Time	8 hours	
Adhesion Strength	> 0.6 N/mm² @ 7days	
Flexural Strength	>1 N/mm²	
Compressive Strength	>25 N/mm²	



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Recommended Total Coating & Construction System

COMPLETE BLOCK WALL SYSTEM

(I) Block Work

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Block Jointing Adhesive	: CMI® BlockFix 187	: 2-3mm

(II) Interior Wall System

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Skim Coat (Base Coat)	: CMI® BlockSkim 782 / 782 SP	: 3-5 mm
Skim Coat (Top Coat)	: CMI® Wallskim 281 / 681 / 488	: 1-2mm
Paint (Sealer/Primer)	: Nippon Paint Interior Sealer Range	: 1 coat
Paint (Finishing Coat)	: Nippon Paint Interior Finishing Range	: 2 coats

(III) <u>Semi-Exposed Wall System</u>

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Surface enhancement - Optional	: CMI® Mortar Bond 330	: 1 coat
Skim Coat (Base Coat)	: CMI® BlockSkim 782 SP / 782	: 3-5 mm
Skim Coat (Top Coat)	: CMI® Wallskim 281 SP / 681 SP / 488 SP	: 1-2mm
Paint (Sealer/Primer)	: Nippon Paint Exterior Sealer Range	: 1 coat
Paint (Finishing Coat)	: Nippon Paint Exterior Finishing Range	: 2 coats

(IV) <u>Exterior Wall System</u>

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Plaster / Render	: CMI® Render 081 SP / 082 SP / 083 SP	: 10-12mm
Skim Coat (Top Coat) - Optional	: CMI® Base Mortar Grey EX-981	: 3-5 mm
Paint (Sealer/Primer)	: Nippon Paint Exterior Sealer Range	: 1 coat
Paint (Finishing Coat)	: Nippon Paint Exterior Finishing Range	: 2 coats

Note:

- 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.

Mixing

Mix 40kg bag of **CMI® Blockfix 187** to approximately 10.5 - 11.0 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

• Spread the adhesive to fixing surfaces of blocks with a thin bed solid bed notched trowel at bed thickness between 3 to 6 mm.



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- Work in a small area at a time and fix blocks immediately to avoid skin over of adhesive bed. Re-trowel if the adhesive bed surface had skin over.
- Use a rubber mallet to tap and adjust the blocks firmly on the adhesive bed to ensure good contact and alignment is achieved.
- Remove excess adhesive before it sets or hardens.
- Allow adhesive bed to set for 24 hours before any subsequent works.

Coverage

Approx. 3.5 kg/m² at 2 mm 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 in its original packing.

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.