TECHNICAL DATA SHEET



CMI® BASE MORTAR SP

Updated June'23



DESCRIPTION

CMI® Base Mortar SP is a premium quality polymer modified water-resistant cement-based skim coat, specially formulated for concrete wall or ceilings at internal and external application. It is also good for surface improvement works to block wall and concrete wall surfaces. It is certified with Singapore Green Label by Singapore Environmental Council.

CMI® Base Mortar SP have a characteristic of better adhesion, flexural strength with improved water and weather resistance for exterior finishing application.

USES

- Skim coat for undercoat on concrete surfaces and block walls, surface improvement on rendered surfaces, for both interior and exterior application.
- Highly recommended for project with QLASSIC / CONQUAS / BQUAS requirement.
- IT SHOULD NOT BE USE ON PAINTED SURFACES.

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, less labour intensive.
- High bonding strength for direct application onto concrete surfaces.
- Good weather resistance, suitable for both interior and exterior application.
- Good workability and water retentivity, promoting good surface improvement.
- Eco-friendly cementitious skim coat, certified with Singapore Green Label by Singapore Environment Council.

Product Type	Product Code	Pack Size	Finishing	Color	Substrate
Skim Coat	381 SP	25kg / 40kg	Semi-smooth	White	AAC block,
(Base/Top)	781 SP	25kg / 40kg		Grey	concrete

Technical Data

Appearance	White or Grey Powder	
Bond Strength @ 28 days	≥ 0.6 N/mm²	
Wet Density	1800 – 1900 kg/m³	
Dry Density	1600 – 1700 kg/m³	
Pot Life @ 30°C	Approx. 2 hours	
Recommended Thickness	2 – 3mm per coat	
Mixing Ratio	Approx. 30% water on dry material	



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Recommended Total Coating & Construction System

SEMI-EXPOSED WALL SYSTEM

(I) Brick Wall

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Bricklaying	: CMI® Masonry Mortar 086	: 10mm
Plaster / Render	: CMI® Masonry Mortar 086	: 20mm
Skim Coat (Base Coat)	: CMI® Base Mortar 381 SP / 781 SP	: 2-3mm
Skim Coat (Top Coat) - Optional	: 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

(I) Block Wall / Concrete Wall

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Skim Coat (Base Coat)	: CMI® Base Mortar 381 SP / 781 SP	: 2-3mm
Skim Coat (Top Coat) - Optional	: 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

SEMI-EXPOSED CEILING SOFFIT SYSTEM

(II) Concrete Soffit

TYPES PRODUCT NAME		NOMINAL THICKNESS
Skim Coat (Base Coat)	: CMI® Base Mortar 381 SP	: 2-3mm
Skim Coat (Top Coat)	: CMI® Wallskim 281 SP	: 1-2mm
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. Use **CMI® Render** for patching of surface defects exceeding 5mm. Damp the substrate for dry or high absorbing substrates prior to application of **CMI® Base Mortar SP**.

Mixing

Mix 25kg bag of **CMI® Base Mortar SP** with approximately 7.5 - 8.0 liters of clean water (OR) mix 40 kg of **CMI® Base Mortar** with approximately 12.0-12.5 liters of clean water (Do not add cement or lime 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

Apply the mixture onto receiving surface using steel trowel. If more than one coat is required due to surface flatness, allow the underlying coat to achieve partial cure or touch dry before applying the subsequent coat.



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Coverage

Approx. 1.3 kg/m²/ mm 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.