



# **CMI® MASONRY MORTAR 086**

**Updated June'23** 



# **DESCRIPTION**

**CMI®** Masonry Mortar 086 is a multipurpose pre-mixed mortar, that is designed specifically for bricklaying and plastering use. It is a superior substitution to traditional wet trades (i.e. job-site mix cement-sand mortars), particularly beneficial for construction trend that embrace Industrialized Building System (IBS) as a method of attaining better construction quality and productivity.

USES

- Versatile mortar for both bricklaying and brick wall plastering use, with superior shrinkage cracks control.
- Patching, rendering and surface improvement works on cement rendered surface, with very coarse texture preference.
- Suitable to be used for internal and external application.
- IT SHOULD NOT BE USED 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 and less labour intensive.
- High adhesion with good shrinkage cracks control.
- Durable and good weather resistance.

Product Type	Product Code	Pack Size	Finishing	Color	Substrate
Mortar	086	40kg	Coarse texture	Grey	Brick
Technical Data					

## **Technical Data**

Appearance	Grey Powder	
Tensile Adhesion Strength	≥ 0.5 N/mm²	
Compressive Strength	≥ 6 N/mm²	
Wet Density	1850 – 1950 kg/m³	
Dry Density	1700 – 1800 kg/m³	
Recommended Thickness	10 – 15mm (Bricklaying)	
	20 – 25mm (Plastering)	
Mixing Ratio Approx. 15 – 17% water on dry material		



# **Recommended Total Coating & Construction System**

## **BRICK WALL**

## (I) Interior Wall System

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

## (II) Exterior Wall System

TYPES	PRODUCT NAME	NOMINAL THICKNESS
Bricklaying	: CMI <sup>®</sup> Masonry Mortar 086	: 10mm
Plaster / Render	: CMI <sup>®</sup> Masonry Mortar 086	: 20mm
Skim Coat (Top Coat)* - Optional	: CMI <sup>®</sup> Base Mortar EX981	: 3-5mm
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**<sup>®</sup> 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 or high absorbing substrates prior to application of **CMI® Masonry Mortar 086**. For application on smooth concrete substrates, a key coat / splatter dash is recommended on the receiving surface prior to plastering.

## Mixing

Pour the 40 kg powder into a pail of 6.0 - 6.8 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. Re-mix if the mixture is left unattended for more than 30 minutes.

# Application

## BRICKLAYING

Apply **CMI® Masonry Mortar 086** onto the base with a steel brick trowel.

## **PLASTERING / RENDERING**

Apply onto the surface with a steel trowel. If application requires more than one layer due to surface unevenness, the underneath layers must be dry before applying the subsequent layers. Hardened surface can be further smoothened with CMI Skim Coat System.

## Coverage

Application	Coverage	
Bricklaying	Approx. 70 – 85 brick units or 1.2 – 1.5m2 wall per bag @ at 10mm thickness	
Plastering	Approx. 1.0 – 1.2m <sup>2</sup> per bag @ 20mm thickness	

## Cleaning

Clean up equipment with water immediately after use.

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#### **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.