

# PENTENS HP MORTAR

High Performance Mortar

Product Data Sheet

## Description

PENTENS HP MORTAR is a ready-to-use, pre-mixed, dry shake high performance mortar specially designed for repairing works. Due to its chloride-free characteristic, it would not cause any corrosion on metal or steel bar, and it is easy to use. Add in clean water and mix it thoroughly before pouring into the formworks.

## Uses

- Elevates and grouts the manholes
- Bridge expansion joints
- Urgent repair works on inflexible road surfaces, plant floors, harbors, taxiways at the airport etc.

## Advantages

- High initial strength (compressive strength: 4000 psi in the first hour, 5000 psi in the second hour).
- Stable and durable strength: 7000 psi in 28 days.
- Chloride-free.
- Good stability of volume, no shrinkage and cracking.
- Excellent bonding strength, dense.
- Easy to apply, no wastage.

## Technical & Physical Data

Form	Powder	
Flow Test (ASTM C109)	> 250	
Slump (ASTM C143)	21.5cm	
Setting Time (ASTM C953)		
	Initial Set:	31 minutes
	Final Set:	41 minutes
Length Change (ASTM C157)		
	2 days:	0.0098%
	28 days:	0.0566%
Compressive Strength (ASTM C109)		
	1 hr:	280 kgf/cm <sup>2</sup>
	2 hr:	365 kgf/cm <sup>2</sup>
	3 hr:	405 kgf/cm <sup>2</sup>
	2 days:	450 kgf/cm <sup>2</sup>
	28 days:	595 kgf/cm <sup>2</sup>
Shelf Life	12 months in unopened condition	
Storage	Store in a dry, cool place	
Packaging	25 kg /bag	

\* Mixing ratio (by weight): PENTENS HP MORTAR: Water = 1: 0.125



## Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Apply only to clean surfaces which free from surface water and leakages.

Disclaimer. All representations and recommendations set forth are given in good faith and to the best of our knowledge. However due to varying conditions and applications, the buyer shall conduct its own tests of this product before use. Under no circumstances will the manufacturer be liable for any loss or damages caused by incorrect usages. The sale of this product shall be on terms and conditions set forth on Pentens order acknowledgement.

## Instruction for Use

### Surface Preparation

Concrete surfaces should be clean, sound and free from oil, grease, laitance and loosely adhering particles. All absorbent surfaces must be well saturated with clean water, but free from any surface water or puddles prior to the application of PENTENS HP MORTAR.

### Priming

Dilute 1 portion of PENTENS T-007 permeable primer with 3 portions of clean water and then apply directly on the surface in order to improve the bonding. (Primer: 0.20 kg/m<sup>2</sup>)

### Mixing

Place clean water in a container and gradually add PENTENS HP MORTAR and mix until the desired consistency is achieved.

### Mixing Ratio

1 bag of PENTENS HP MORTAR (25kg) with 3.75kg clean water.

### Application

After mixing, stir lightly with a spatula for a few seconds to release any entrapped air. The grout is then poured immediately into the prepared formwork. When carrying out baseplate grouting, ensure sufficient pressure head is maintained for uninterrupted mortar flow. For formwork repair, the prepared formwork must be firmly in place and kept watertight.

### Cleaning

Clean all tools and equipment with water immediately after use. Hardened mortar can only be mechanically removed.

### Safety

As cement is alkaline and may cause irritation, wear gloves and goggles when handling PENTENS HP MORTAR. In case of contact with eyes, rinse with plenty of water and seek medical advice if symptoms persist.



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