F12
MASONRY MORTAR
VERSATILE & COST EFFECTIVE GENERAL PURPOSE MORTAR

PRODUCT DESCRIPTION

OPTIMIX F12 MASONRY MORTAR is a good quality premixed cementitious mortar. Designed for floor screeding, brick & block work laying and wall rendering.

OPTIMIX F12 MASONRY MORTAR replaces traditional on-site batching mortars with higher performance, better quality and improved consistency.

Importantly the large format packaging ensures large or small volumes can be available at location and on demand. This helps to reduce wastage, improve site organization and simplify site cleanup.

TYPICAL USAGE

- Masonry mortar for bricks, blocks and pointing
- Coupled with ***OPTIMIX PROCRETE*** for bonded levelling screed for rough and uneven concrete floor
- Coupled with ***OPTIMIX PROCRETE*** for basic rendering for concrete and block work wall
- Coupled with ***OPTIMIX PROCRETE*** for spatterdash application

FEATURES AND BENEFITS

- Consistent Quality
- Simple and Easy to Use
- Improve Surface Finish
- Improve Efficiency
- Reduce Risk of Delamination
- Better Application Control
- Environmentally Friendly

TECHNICAL DATA

Mixing [1)]

Water Demand	5.5 – 6.0 L per 40 kg powder
Mixing Method	Forced Action Mixer e.g. Pan Mixer or Low Speed (~500rpm) Drill & Paddle
Mixing Time	Mix for 5 minutes or until homogeneous and lump free

Pot Life [2)]

@ 20°C	> 120 min.
@ 28°C	~ 120 min.
@ 36°C	> 60 min.

Performance (Screed / Mortar Consistency) [2)]

Product Characteristics	*OPTIMIX F12*	Test Method
Workability (Flow) (mm)	~ 200	EN1015-3
Compressive Strength at 28 days (MPa)	~ 35.0	EN1015-11
Flexural Strength at 28 days (MPa)	~ 6.5	EN1015-11
Bond to Concrete at 28 days (MPa) (Procrete Bond Coat)	~ 1.5 [3)]	HKHA/MTS (14/16), Part D 2.1.15

Environmental Data

Volatile Organic Compounds (VOC)	≤ 10 g/L
Potential BEAM Points	Product is manufactured within 800km of Hong Kong project sites
Packaging Composition	Paper bags incorporating 40% recycled paper

Packaging & Yield [4)]

Wet Density (kg/m^3)	2,100
Powder Coverage (kg/mm/m^2)	1.8
Yield (per bag)	22 L (or ~0.4m^2 @ 50mm thick)
Packing (per bag)	40 kg
Shelf Life	12 months

Notes

1) Water addition may be reduced to 5.0 L or less if dry mix screed is required.
2) Typical results achieved in laboratory conditions and for reference only. Actual results on site will vary with ambient and substrate conditions.
3) In-Situ test.
4) Approximate figures make no account for wastage of any kind.

INSTALLATION GUIDE

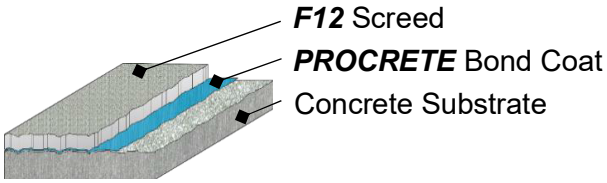
(Refer to Method Statement for more details)

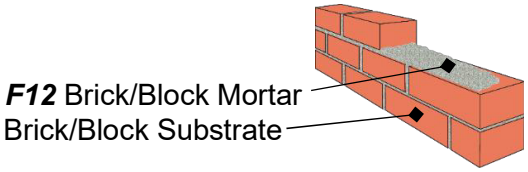
SURFACE PREPARATION

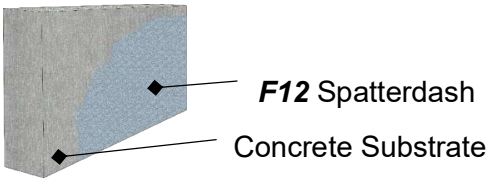
Substrate must be clean, free from loose particles, oil, grease and other contaminants.

For screeds and renders, it is recommended to pre-wet the substrate with potable water overnight or before application if the weather or surface is under a very dry condition.

For spatterdash application, new concrete surfaces should be allowed to cure for a minimum of 4 weeks or until excessive shrinkage movement has taken place before laying tiles.







MIXING

Masonry Mortar:

Pour 5.5 – 6.0 L potable water into a clean vessel. Slowly add ***OPTIMIX F12*** powder into the mixing vessel. Mix the mixture with a forced action mixer until all powder has been added. Mix the mixture for about 5 minutes or until a homogeneous state is achieved. The material is ready to use.

Screed Mortar:

As for Masonry Mortar, initial water addition may be reduced to 5.0 L or even less if a dry mix screed is required.

APPLICATION

Spatterdash Application:

Subject to the condition of substrate and workability of spatterdash, the general mix for spatterdash can be achieved according to the following table:

OPTIMIX F12	**Water**	**Procrete**
40 kg (1 bag)	4.0 L	2.4 – 4.0 L

FINISHING AND CURING

The screed, mortar or render can be directly applied and levelled by any suitable means such as shovel, rake, trowel or leveller.

Finishing can be achieved using a wooden float or steel trowel as desired. For the final surface, wait until the surface firms up then carefully strike off using one or two passes of a trowel cleaned with a damp cloth.

If required a traditional curing compound can be applied once the surface has hardened.

LIMITATIONS

The installation should be protected from significant drying influences such as direct sunlight, strong wind or high temperatures for at least 48 hours.

Avoid traffic or heavy use until sufficient strength has developed.

HEALTH AND SAFETY

OPTIMIX F12 is alkaline in nature and can cause irritations to persons with sensitive skin. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective gloves and masks while handling the product. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice. This product is non-toxic and is not flammable.

STORAGE

Store the products in a cool and dry place with the original unopened bags on pallets with plastic wrapping. Protect from direct sunlight, rainfall and exposure to high humidity conditions. Avoid excessive stacking of pallets. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging and reduce shelf life.

ALTERNATIVE PRODUCTS

- ***Procrete***