Expanplast 112



Mortar plasticiser

USES

Improves workability and trowelling properties of sand/cement mortar mixes during application and increases frost resistance for bricklaying, pointing and rendering.

ADVANTAGES

- Eliminates use of lime in masonry applications. Saves
 Storage space and failures due to unsound lime.
- Improves moisture retention and bond strengths.
- Makes mortar frost resistant.
- Highly economical. Maximum yield of up to 20%
- Improves harsh sands.
- Can be used in colored mortars.

DESCRIPTION

EXPANPLAST 112 is supplied as a light brown coloured liquid, which mixes readily with water in any proportions. It is based on polymerized resins and is free from calcium chloride and similar salts.

When added to the mortar EXPANPLAST 112 entrains a controlled quantity of air, which imparts greater workability and cohesion to the mortar, and increases its durability once set. Use of EXPANPLAST 112 reduces thermal movement and drying shrinkage in the cured mortar.

STANDARDS

EXPANPLAST112 complies with BS4887. Mortar Plasticizers. It conforms to the recommendations of BRE Digest 160

PROPERTIES

Calcium chloride content: Nil. EXPANPLAST 112 can be used in conjunction with EXPANPLAST NC chloride free accelerator (see separate data sheet) to obtain acceleration of set during winter working. EXPANPLAST NC should be added first, followed by the EXPANPLAST 112.

Compatibility with other admixtures: EXPANPLAST 112 should not be mixed with any admixtures unless advised by our technical department.

Compatibility with cements: Can be used with any type of Portland, super sulphate or blast furnace cement. For advice on use with other types consult our technical department.

Setting time: There is no significant effect on the setting time of mortars.

Plasticizing action: EXPANPLAST 112 entrains a controlled amount of microscopic air bubbles which increase cohesion and provide' lubrication to the sand particles in the mix, thereby imparting improved workability to the mortar. The air bubbles hold the cement/water matrix at the contact surfaces which results in improved bond strengths.

Frost resistance: The air entrainment appreciably increases the frost resistance of the fully cured mortar. The use of an air entraining plasticizer also improves the frost resistance of fresh mortar and is recommended in BRE Digest 160.

PRECAUTIONS

Health & Safety

EXPANPLAST 112 is mildly alkaline. Avoid unnecessary contact with the skin Accidental splashes to eyes should be washed immediately with plenty of water and medical treatment sought.

INSTRUCTIONS FOR USE

Mixing

EXPANPLAST 112 may be added directly to the sand/cement/water mix or, where more convenient, may be pre-mixed with the gauging water. Mechanical mixing is to be preferred but thorough manual mixing gives acceptable results.

Dosage

EXPANPLAST 112 Drums

Direct to the mix 0.15-0.30 liters of EXPANPLAST 112 for each 50kg of cement to the gauging water 0.75 - 1.50 liters of EXPANPLAST 112 to 200 liters of water, the nature of the sand will determine the optimum amount necessary. A plastering grade will require less and a coarse washed sand more. Site trials are recommended to determine the practical dosage in each case Average dosage in 1:6 mix, 4.5 liters EXPANPLAST 112 is sufficient for 5000 bricks.

EXPANPLAST 112 Sachets

These contain a pre-measured quantity of EXPANPLAST 112, which should be added at the following typical rates. Direct to the mix 1 sachet per 50kg of cement. To the gauging water 5 sachets per 200 liters of water.

Overdosing

Overdosing of EXPANPLAST 112 will result in increased workability and air entrainment

Cleaning

Spillages of EXPANPLAST 112 should be removed with water

MIX DESIGN

| Application | Normal mix | | | Mix with EXPANPLAST 112 | | |
|---|------------|------|------|-------------------------|------|------|
| | Cement | Lime | Sand | Cement | Lime | Sand |
| For concrete bricks + blocks clay - bricks-blocks externally or internally Externally for high strength/low shrinkage sand-lime bricks Low strength for lightweight blocks and high shrinkage sand-lime bricks For high strength engineering bricks | 1 | 1 | 6 | 1 | - | 6 |
| | 1 | 2 | 9 | 1 | - | 8 |
| | 1 | 1-4 | 3 | 1 | - | 3 |
| General pointing of bricks & blocks | 1 | - | 2 | 1 | - | 3 |
| General rendering of bricks & blocks | 1 | 1 | 6 | 1 | - | 5-6 |

Storage

Minimum shelf life of 12 months provided the temperature range has not exceeded 2°C to 30°C. If these conditions have been exceeded in any respect the supplier should be contacted for advice.

PACKAGING

EXPANPLAST 112 - 25 liter and 210 liter drums

EXPANPLAST 112 - Plastic Sachets 50 per carton.

TECHNICAL SERVICE

The company provides a technical advisory service supported by a team of specialists in the field

ADDITIONAL INFORMATION

Technical data and guidance can be provided on a wide range of admixtures and concreting aids including plasticizer readers, waterproofers, mould release agents, surface retarders, workability aids and repair materials.

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