

MULTI FOAMCRETE

Lightweight cellular Mortar/ Concrete

Description

MULTI FOAMCRETE a lightweight cellular cementitious mortar produced by mixing the pre-blended powder with a fixed volume of water. A foam is readily produced when the slurry is fed through a purpose designed foam grouting pump.

Typical Applications

- * As a cavity/ void filling grout
- * It may be used for cast-in-place construction or for producing precast elements in the broad density range 250kg - 800kg per cubic metre
- * Lightweight barriers for ventilation control
- * Roofdecking

Advantages

- * Low cost
- * Hanging walls and stopes can compress the product without destruction
- * Remote placement of product up to 150 m from the pump
- * Will not burn or support combustion
- * Non-toxic
- * Complete resistance to attack by rotting, termites, fungi and vermin and is no more corrosive to embedment than ordinary concrete
- * High yield mortar/ concrete
- * High stability of the foam permits precise control of the density of MULTI FOAMCRETE. This in turn, determines the structural strength and the thermal and acoustical insulating properties.
- * **Workability:** Due to its low water absorption, it is less affected by exposure to weather than other monolithic deck materials

Typical Properties: Compressive Strength

The compressive strength of low density mortar/ concrete is not critical when used for non-structural purposes. Requirements for strength are used for quality control of the mortar/ concrete.

Compressive strength (Mpa) at 28 days	Oven dry unit weight kg/m ³
0.4-0.6	320-400
0.7-1.0	400-480
1.6-2.5	480-560
2.5-3.2	560-640
3.2-5.3	640-800

Shrinkage

The shrinkage of low density concrete is not usually critical when used for insulation or fill, except that excessive shrinkage can cause curling.

Type of concrete

Perlite
Vermiculite
Cellular

Usual rate of shrinkage at 180 days

0.1-0.3-
0.2-4.5
0.2-6.0

High Insulating Value

The high insulating value of MULTI FOAMCRETE effectively reduces heat penetration within a structure resulting in a decrease in the size of air-conditioning plant required.

Mixing Instructions

The MULTI FOAMCRETE powder and water is fed together through a continuous mixer which feeds into a mono pump. Air is entrained through the fractional drag that is set up between the slurry and steel wall of a 100 m discharge hose when producing MULTI FOAM CRETE. The pumping distance will depend on the water content, the mix temperature and hose capacity. The minimum length of the discharge hose must be 100 metres.

Yield

Dependent upon the density of the MULTI FOAMCRETE required as little as 5 bags produces a cubic metre of low strength cellular grout.

Packaging

Supplied in 25kg woven polypropylene bags with inner plastic liners

Quality Assurance

MCC LIMPOPO's production and testing programmes comply with local testing standards.

Updates

This data sheet supersedes all previous issues prior to this date: 31/05/97.