

VARAFOAM PB FOAMING AGENT FOR LIGHT WEIGHT CONCRETE

DESCRIPTION

VARAFOAM PB is colourless to brown liquid instantly miscible with water. **VARAFOAM PB** is used to produce light weight concrete mixes, with or without aggregates.

USES

- ◆ Flat roof insulation screeds including the provision of drainage "falls".
- ◆ Insulated floor screeds (under rigid floor finishes).
- ◆ Fire protection of timber floors and structural steel works.
- ◆ Soil replacement for back filling and ground stabilization.
- ◆ Fabrication of lightweight beams, blocks and panels.
- ◆ Fire barrier especially in service voids, fire, walls and doors.
- ◆ Filling of old underground pipes, tunnels, sewers, storage tanks, shelters and basements.
- ◆ Trench reinstatement and road works.

ADVANTAGES

- ◆ Easy to use even in cold weather.
- ◆ May be used with all types of Portland Cement.
- ◆ Excellent stability over a wide range of temperature and quality of water.
- ◆ Give excellent lightweight and thermal insulation.

STANDARDS

VARAFOAM PB is designed to comply with requirements of **ASTM C-869**.

TYPICAL PROPERTIES

Appearance: Translucent, light brown liquid.

Specific Gravity: 1.02 at 20° C.

Water Solubility: Infinite.

pH 1% Solution: 7 ± 0.5

Freezing Point: 3° C to 5° C. Recovers after freezing.

Chloride Content: Nil to **BS 5075**.

Shelf Life: In excess of two years.


Mix Ratio: Typical mix batches to produce approximately one M³ of foamed cement and mortar:

Dry Density Kg/M ³	Sand Kg.	Cement Kg.	Water Kg.	VARAFOAM PB kg.
1200	750	350	140	0.29
1000	500	400	160	0.31
820	360	360	144	0.33
800	-	600	240	0.21
600	-	450	180	0.30
400	-	310	124	0.65

The above batches involved the use of a prefoaming solution of 1 part of **VARAFOAM PB** with 100 parts of clean water.

INSTRUCTION FOR USE

Pre-foaming method: Mix thoroughly before use, Prepare 1% solution of **VARAFOAM PB** foaming agent in water (1 litre per 100 Litres of water). The concentrate must be fully dispersed in the water.



Pass this pre-foaming solution through the foam generating machine which produces a uniform and stable foam having a volume of 40 to 50 times that of the original solution. (Alternatively, the water and foaming agent can be fed separately into the foam generator which mixes them in the correct ratio).

Feed this foam into the cement or sand/cement slurry within a suitable concrete mixer.

FORCED MIXING METHOD

This is the simplest method of air entertainment. All the materials, including the foaming agent are loaded into the mixer. For best results, load half the sand into the mixing water and foaming agent and mix for one minute and then add the cement and the rest of the sand.

High Speed, vigorous mixing is essential so a forced action mixer should be used rather than the simple tumble action type.

Important:

Since the performance of concrete admixture is dependent on local conditions and on the quality of the other materials in the mix, it is strongly recommended that the site trials are conducted.

PACKAGING

VARAFOAM PB is supplied in 50 Kg plastic carbuoys & 200 Kg drum.

PRECAUTIONS

VARAFOAM PB is essentially harmless. Easily washes off with water.

Fire: **VARAFOAM PB** is non flammable.