







# Description:

This is lightweight concrete that is produced by the addition of a synthetic or protein based air entrainer which is added to the concrete with the use of a foam generator. The admixture entrains an inert bubble in the concrete thus reducing the density of the concrete.

The foam can be added at the plant if traveling time is less than 30 minutes or on site – it is however, preferable to add the foam on site. If adding on site water and electricity must be available.

### Where to use:

Foam concrete can be used in the following applications:

- Filling of trenches in roadways.
- Filling of disused tanks.
- Void filling.
- Backfill below under floor heating.
- Lightweight topping and slopping layer.
- Insulation.
- Arrestor beds, particularly airports.

#### Advantages:

- Quick setting (can be accelerated to allow for black-topping within 4 hrs.
- Low density.
- High workability.
- No compaction required.
- Super insulation properties, thermal conductivity (0.1-0.3)W/m.k
- In case of trench re-instatement-no sagging afterwards.
- Flowable.
- Overall lower maintenance costs.
- Cost effective solution.
- Time saving with backfilling.
- For specific strength and densities enable application of water proof membranes directly without screed protection

# Minimum standards for foam concrete

Specified by Dry Density/compression strength	400 kg/m3 /0.5 MPa 600 kg/m3 /1.0 MPa 800 kg/m3 /1.5-2.0 MPa 1000 kg/m3 /4.0 MPa
Cement Type	Any combination
Aggregate Size	No stone is added to this mix-only sand
Slump	Collapse

• Higher class of strength and or density can be achieved upon request.

#### Important recommendations:

Ultra foam concrete is not suitable for structure that may undergo chronic movement.

Construction joints and tie holes require additional application. Details can be received from your Lafarge representative.

Before ultra foam concrete is used a detailed investigation must be undertaken to ensure that the structure will be waterproof. This must be done in conjunction with the consulting Engineer as certain design changes may be required.

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## **General Guide lines**

#### Note :

• Have to organize foam generator before (48 Hr notice required Can be pumped due to low pump pressure

(48 Hr notice required) – maximum hight of pumping should discussed.

- This solution cannot be used as a wearing course and will need to be covered afterwards with a screed, or water proofing membrain.
- Foam concrete should be cured for 3 days with water after pouring.

Safety reactions:

• The use of safety goggles and gloves is recommended when placing concrete.



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