

HIGHFLOW S

READY TO USE FLOWING FLOOR SCREED

HIGHFLOW S

Highflow S is a calcium sulfate based flowing floor screed that is delivered ready-to-use in truck mixers and then pump placed. In common with other floor screeding systems Highflow S is not intended as a wearing surface and should not be used in areas that are regularly wetted (shower rooms and swimming pools etc.)

Highflow S complies with the requirements of:

- European standard BS EN 13813:2002
- It is available in strength classes from C10 to C30 (BS EN 13813:2002)
- British Standard BS8204-Pt 7:2003 Screeds, bases and in situ Floorings

DESIGN CONSIDERATIONS

All ducts and services should be sealed against the loss of Highflow S and it should be laid on a membrane - polyethylene sheeting (min. 500 gauge, 120 micron) that is taped or sealed.

The membrane should not be doubled or allowed to ripple. The perimeter of the area to receive Highflow S needs to be fitted with a 5-10 mm closed cell polyethylene expansion strip. A perimeter expansion strip using 10mm closed cell polyethylene should be utilised with under-floor heating.

Highflow S can be laid without joints up to 1500m² providing the aspect ratio of the room does not exceed 6:1 excepting when used in conjunction with under-floor heating when the bay size should then not exceed 300m².

The building must be weather tight/watertight to prevent water ingress and air movement.

HEATED SYSTEMS

Under floor piped water heating systems require a minimum of 25mm cover over pipes in accordance with the recommendations of BS8204-7:2003 Screeds, bases and in situ Floorings. Under floor heating should be commissioned in accordance with the instructions of the manufacturer, and may be used to speed the drying of the screed from 7 days after installation.

HEATED SYSTEMS

For rapid drying the following procedure should be adopted:-

- Wait 7 days after laying screed at a typical temperature of 20⁰C
- Run the under floor heating at an input temperature of 25⁰C
- Increase the water temperature by 5⁰C per day until the planned maximum input temperature is reached (not exceeding 55⁰C)
- Keep the planned input temperature constant for a minimum 3 days (typically 7 days for force drying) without reduction
- Reduce by 5⁰C per day down to 25⁰C and turn off the under floor heating
- Allow to cool for 48 hours prior to checking for moisture content by the floor layer prior to installing floor covering

UNBONDED SYSTEMS

Screed to a clean and sound prepared base in accordance with the recommendations of BS8204-7:2003 Screeds, bases and in situ Floorings.

FLOATING SYSTEMS

Highflow S to be installed on a membrane - polyethylene sheeting (min. 500 gauge, 120 micron), over thermal insulation or polyethylene sheets either taped or sealed over a clean and sound prepared base in accordance with the recommendations of BS8204-7:2003 Screeds, bases and in situ Floorings.

POST INSTALLATION

WEAR AND TEAR

Highflow S once installed has a resilient surface that can withstand foot traffic after 48 hours. In common with most screeds Highflow S is not intended as a permanent wearing surface.

CURING

No curing is required but the floor area should not be subjected to severe drafts, direct sunlight or heating for the first 72 hours.

DRYING TIMES

Highflow S drying times are approximately 1mm per day for thicknesses up to 40mm in ambient drying conditions - air humidity of 60% relative humidity or less at a temperature of 20°C.

Highflow S with a thickness of greater than 40mm then 2 days per mm should be assumed.

Once the Highflow S has hardened, typically after 48 hours, the un-combined mixing water needs to be lost to the ambient air. This is best achieved by ensuring good ventilation by opening all windows and doors. Windows and doors must be closed at night to avoid condensation. This daily routine must be carried out until the Highflow S has dried completely.

Windowless rooms and enclosed areas may require the use of electric fans, if appropriate, or dehumidifiers.

FLOOR FINISHES

Prior to installation of floor finishes, the screed may require light sanding to remove any surface laitance.

Floor finishes must not be applied to Highflow S unless the screed has been determined as dry. Dry is identified as having a moisture content of less than 1% if a permeable covering such as carpet is to be applied and less than 0.5% for all impermeable coverings e.g. vinyl.

These values equate approximately to 75% relative humidity. Highflow S generally finishes to surface regularity SR2, suitable to receive floor finishes direct.

Where a thin flooring is to be laid, applicators will recommend a smoothing compound even to a well finished floor.

Direct contact of cement based smoothing compounds or adhesives with Highflow S must be avoided unless the dry Highflow S has been primed in accordance with a calcium sulphate compatible primer in accordance with the manufacturer's recommendations.

HIGHFLOW VIDEO

Our Highflow video showing a typical installation is available on Youtube using the search term - "aggregate industries highflow"

For further information or assistance please contact our:-

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