

# TECHNICAL INFORMATION

## UNDERFLOOR HEATING TOPFLOW SCREED A

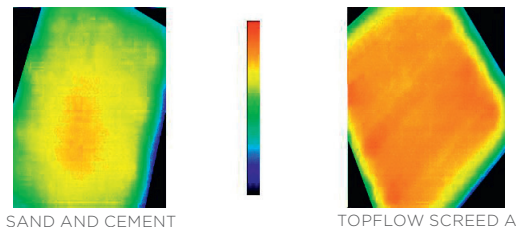
### USES

Topflow Screed A is a blend of synthetic Calcium Sulphate binder, special additives and selected aggregates mixed with clean potable water to produce a flowing pumpable screed (manufactured to BSEN 13813:2002) which is ideal for application over warm water and electric underfloor heating systems. Topflow Screed A is ideally suited for underfloor heating, it fully envelopes the heating element, eliminating air voids and honeycombing. This enhances heat transfer between the pipework and screed giving higher thermal conductivity (2.0w/mK +/- 0.2) nominal covering to the pipe (30mm) results in improved reaction times at reduced flow temperatures.

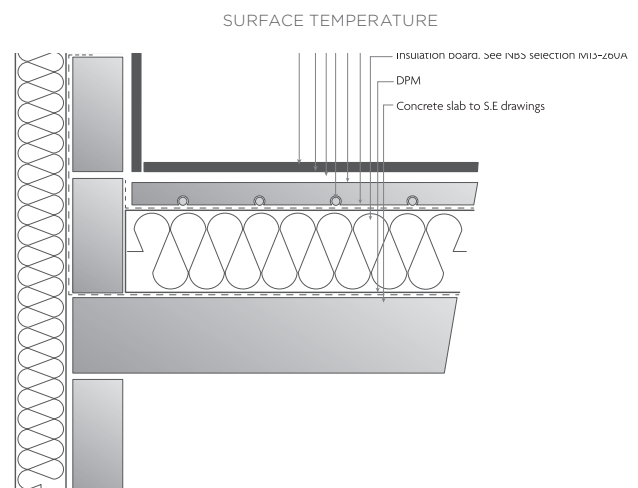
### SPECIFIC FEATURES

- Fully encapsulates heating conduits
- Elimination of voids and maximised thermal efficiency
- Rapid response and controllability
- Reduced depth allows more insulation

Temperature across screed surface 80 mins after turning underfloor heating on.



### TYPICAL SCHEMATIC INSTALLATION

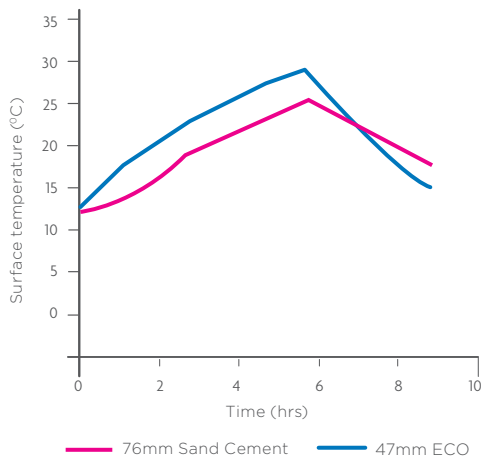


### KEY INSTALLATION POINTS

Pipes or cables must be securely fixed to prevent floatation and lifting during application of the screed  
Pipes should be pressurised in accordance with BS 1264:2001:4  
Nominal cover to pipes 30mm  
Nominal cover to cables 40mm  
If required surface laitance must be removed prior to commissioning of underfloor heating

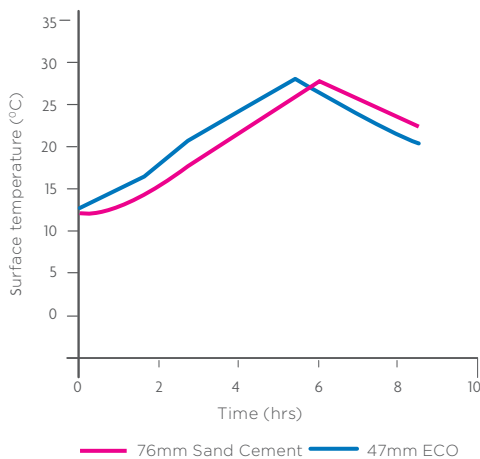
### HEATING PERFORMANCE DATA

Comparison of surface temperature between Topflow Screed A and sand and cement.



150mm underfloor heating pipe centres to each test bay. Data recorded from midpoint between underfloor heating pipe.

Comparison of surface temperature of Topflow Screed A at 200mm pipe spacing against sand and cement at 160mm pipe spacing

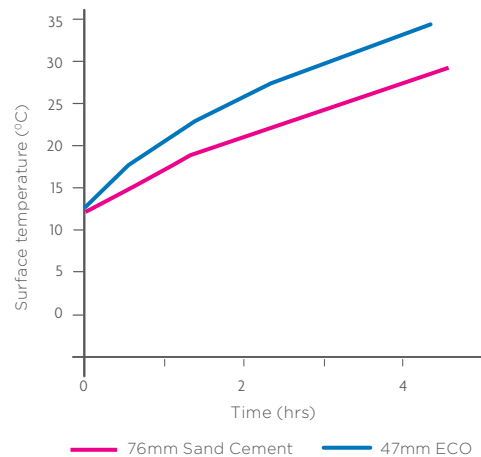


It can provide a higher performing floor with a wider UFH pipe spacing vs sand and cement

Heating must be commissioned and run in accordance with manufacturer's instructions prior to application of the floor finish.

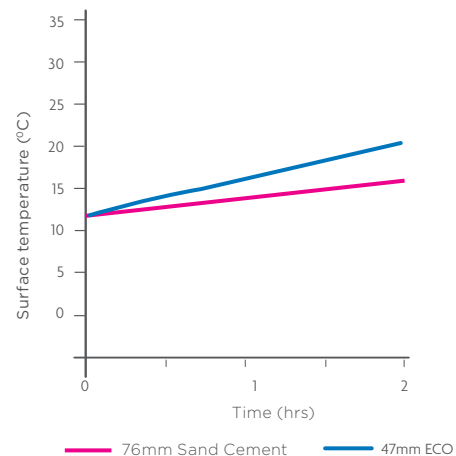
Expansion joints should be used between different heating zones and at door thresholds. (Refer to relevant data sheet for bay sizes and aspect ratios, or contact your local Tarmac representative for advice). For drying procedures please refer to Drying Data sheet.

Maximum surface temperature of Topflow Screed A and sand and cement.



Surface temperature recorded from above pipe on both test beds

Surface response of Topflow Screed A vs sand and cement over the first 2 hours



After 105 minutes from initial temperature of 12 degrees it will have a surface temperature of 20C vs sand and cement 16.5C