

**Ultracem® is a Portland cement based, pump applied, liquid floor screed.**

**COMPLIANCE:**

Ultracem® has been designed to comply with BS EN 13813:2002, screed material and floor screeds - Screed material – properties and requirements.

**APPLICATION:**

Sub-floor levelling.  
Unbonded, bonded and floating floor constructions. Suitable for both residential and commercial floors.  
Suitable for use with under-floor heating systems.

**COMPACTION:**

The flowing characteristics of Ultracem® means that it is self-compacting, thus voids and poor compaction are virtually eliminated.

**DURABILITY:**

As with virtually all screeds, Ultracem® is not a wearing surface and it therefore requires a suitable floor covering. Ultracem® can be used with all standard floor coverings i.e. tiles, wood, carpet, vinyl.

**TECHNICAL PROPERTIES:**

Flow (DIN 1060 Test)	230-260 mm
Plastic Density	2060-2130 kg/m <sup>3</sup>
Dry Density	1950-2050 kg/m <sup>3</sup>
BRE Impact Test	Less than 2 mm
Flexural Strength	> 5 N/mm <sup>2</sup>
Compressive Strength	> 20 N/mm <sup>2</sup>
Fire Rating	Non-combustible
Thermal Conductivity	1.8-2.6 W/mk
Drying Shrinkage	Less than 0.05%

**MINIMUM APPLICATION THICKNESS:**

Bonded	25 mm
Unbonded	30 mm
Floating	40 mm
Under-floor heating	25 mm (min to cover pipes)



**KEY FEATURES**

- Increased productivity - 1000m<sup>2</sup> per day can be easily achieved.
- Significantly reduced thickness when compared to traditional sand: cement screeds.
- Reduced depth means reduced weight and drying times.
- Increased efficiency of under-floor heating system.
- Faster heat response time with under-floor heating.

**SANDING**

Ultracem<sup>®</sup> requires no sanding prior to the application of floor finishes, however industry guidance suggests all screeds should be lightly abraded prior to the application of floor finishes. Ultracem<sup>®</sup> is compatible with all types of primers, grouts and adhesives. Ultracem<sup>®</sup> is not intended to be a wearing screed.

**JOINTING**

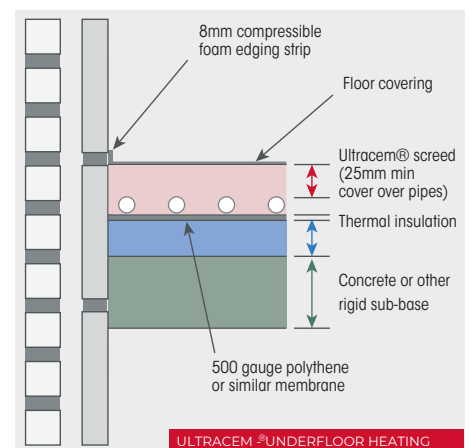
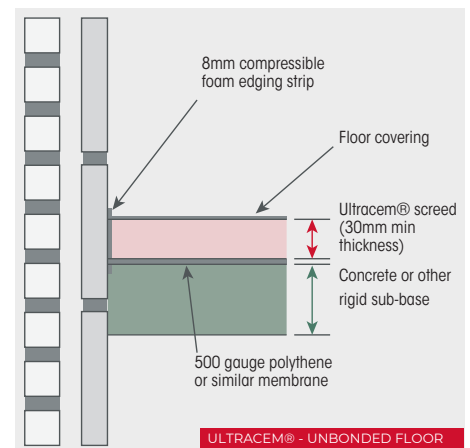
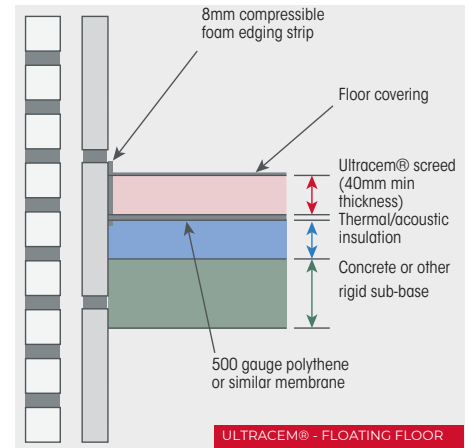
Bay Sizes - maximum bay size 100m<sup>2</sup>. This is dependent on length to width ratio and shape of area to be poured. Please note that larger areas may require the use of an alternative curing agent. Please consult with the RTU Technical Department for advice as required. Consideration should always be made for the placing of joints when the length to width aspect ratio exceeds 2:1, across doorway thresholds, where there are columns, pipes etc. projecting through the screed and where there is a change in the underfloor heating zone (if applicable). A minimum 8mm isolation joint must be installed around all perimeters.

**PLACING AND CURING**

The building should be fully weather proof before pouring commences. Where applicable, especially on ground floors, there must be a damp-proof membrane below the screed or base. Ultracem<sup>®</sup> should be used and installed in accordance with the recommendations given in the Code of Practice: BS 8204. The freshly poured Ultracem<sup>®</sup> screed is levelled using a dappling bar, ensuring two passes are undertaken at 90 degrees to each other, The floor should not be subjected to draughts, direct sunlight or heating for the first 24-48 hours to prevent rapid drying during this important early stage. After placing, the room in which the screed has been laid should be sealed for a minimum of 24 hours. The screed will normally be suitable for light foot traffic after 48 hours and can be worked on after 72 hours.

**DRYING**

The ambient conditions must be suitable for the drying of the screed with low air humidity (preferably 60% RH or less) and good ventilation. Before floor finishes are laid the moisture content of the screed should be ascertained to be at, or below the required level. Forced drying of Ultracem<sup>®</sup>, is possible if required; after seven days heaters and dehumidifiers may be used to improve drying conditions. Underfloor heating can be commissioned after 10 days and can also be used to speed up the drying time.



For more information, contact our Technical Department on (028) 9085 1441.