

## A flexible industry solution

Screedflo dB is the product of an intensive industry wide development programme, jointly funded by the major joist manufacturers and Screedflo Ltd, to provide a high quality, cost effective, acoustic solution for party floors

Using Screedflo dB gives the customer the ease of specifying the same acoustic floor system across all of their new build and renovation projects, regardless of construction method. Screedflo dB can be used with both I beams and steel lattice joists in masonry or timber frames and with solid timber in renovation work.

## Comparing Screedflo dB System and a Traditional Floating Floor

Screedflo dB system is supplied by one material supplier via one installer. In comparison floating floors comprise of up to 4 material suppliers and 2 installers, greatly increasing the likelihood of system failure or labour related failures and making traceability of issues much harder.

40mm of screed results in a build-up of only 74mm from sub-deck to finished surface, a Screedflo dB floor can be as much as 63mm shallower than the Robust Detail E-FT-1. Not only can this allow the removal of a course of brickwork at each floor level, but it can also be beneficial where the timber frame is approaching the 18m building height threshold for 90 minute fire rating.

Screedflo dB creates a single floor slab with much greater point, UDL and edge loadings, whereas floating floors rely heavily on acoustic battens and multi-layer make-ups leading to lower loading ability.

Screedflo dB offers a C35/F7 screed solution capable of accepting all floor finishes without issue. Floating timber can require specialist treatment for vinyl/tiled solutions and can be problematic long term due to increased flexibility, settlement and movement causing either ridging or cracking in the finishes.

Screedflo dB is ideally installed before dry lining as it requires a drying time prior to installation of floor coverings. Whilst there

### There are three main elements in Screedflo dB:

- a rapid-drying 40mm Screedflo Anhydrite screed.
- a two part acoustic layer, consisting of Screedflo dBoard, a high density, moisture proof fibreboard, and dBfoam, a compression-resistant foam.
- an edge isolation system incorporating a unique combination of edgeboard shuttering and specially developed Screedflo edgestrip.

The result is a floor which performs like a solid concrete floor in a lightweight structure.

is no drying time required with a floating floor the install time is often far greater and the drying time associated with the dB screed is very similar to that of the second fix process.

Screedflo dB offers a more robust and durable floor with a concrete feel to timber frame. Floating floors can degrade over time due to degradation of the plasterboard layer and compressible foams.

Screedflo dB is fully tested and is Trada approved and Q Marked. Composite systems will have not been tested for these aspects and will be at the client and specifiers discretion. Screedflo dB can eliminate various acoustic bridging issues associated with floating floors.

Screedflo dB can accommodate UFH in the screed layer without detriment to acoustic performance. Acoustic data is for the complete system rather than acoustic data being supplied by the batten supplier based on either laboratory results or assumption of the other components performances.

In the past specifications have moved away from the Screedflo acoustic floor system to floating floor due to a lack of understanding around the engineering, costs or installation process. As you can see there are various benefit to the developer, contractor and client and if installed correctly there is no major up lift in cost when all points are considered.

## Ordering Screedflo dB

Because of the changes to the depth and mass of your floor, the structural elements of your building such as the joists, must be designed to work with the Screedflo dB system. The project specifier must inform the floor designer/timber frame company that they intend to use Screedflo dB. The designer can then obtain technical support from their joist supplier or direct from Screedflo Ltd

A quotation for installing Screedflo dB can be obtained from one of the approved Screedflo dB installers or directly from Screedflo Ltd.



**Step 1:**

dBfoam, a compression-resistant foam is laid onto the structural sub-deck. A unique edge isolation system incorporating a combination of edgeboard shuttering and specially developed Screedflo edgestrip is then applied around all the wall surfaces.



**Step 2:**

Screedflo dBoard, a high density, moisture proof fibreboard is then laid on top of the dBfoam.



**Step 3:**

A polythene tanking membrane is laid on top of the dBoard. If specified, under floor heating is laid on top of this membrane.

**Step 4:**

Precision checks are made ensuring a quality end result.



**Step 5:**

National coverage is achieved using Screedflo's mobile batching vehicle.

**Step 6:**

The Screedflo Anhydrite screed is pumped into the development using a sophisticated computer controlled batching system.

**Step 7:**

A rapid-drying 40mm Screedflo anhydrite screed is laid onto the polythene membrane and underfloor heating. A minimum of 30mm of Screedflo must be above the underfloor heating pipes.



**Step 8:**

The finished product!

Screedflo dB comes as a complete package, with one company supplying every component in the system. To give additional confidence, Screedflo dB is the only system of its type where every component, including the screed, is CE marked.

## Benefits with Screedflo dB

### Improved acoustic performance:

Screedflo dB easily achieves Robust Detail standard performance allowing you to obtain 2 Eco-points. However, the inclusion of an optional acoustic quilt also allows you to achieve the 5dB level required in the Code for Sustainable Homes, and obtain 3 Eco-points.

### Speed of construction:

While Screedflo dB is significantly faster to install than current acoustic floor systems, the realities of site mean that typically only a proportion of any block of apartments can be released for work at any one time. Consequently, a normal phase will be around 300m<sup>2</sup> to 500m<sup>2</sup> at a time, or 5 to 8 flats. This would take approximately 3 days to complete.

### Programming:

Screedflo dB is installed as soon as the building is weathertight, so there is no plasterboard or other materials to damage during installation. The screed can be walked on 48 hours after being poured, with heavy traffic allowed seven days later. Depending on the required floor covering it may occasionally be necessary to remove surface laitance. This can usually be accomplished by brushing with a stiff broom but in some instances may require an industrial sander. This can be carried out 1 - 2 weeks after the screed has been laid depending on site conditions.

### Underfloor heating:

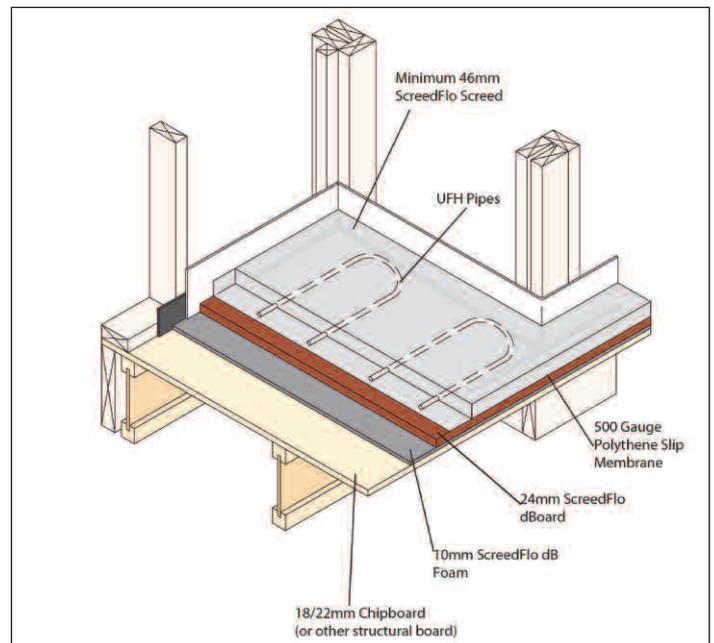
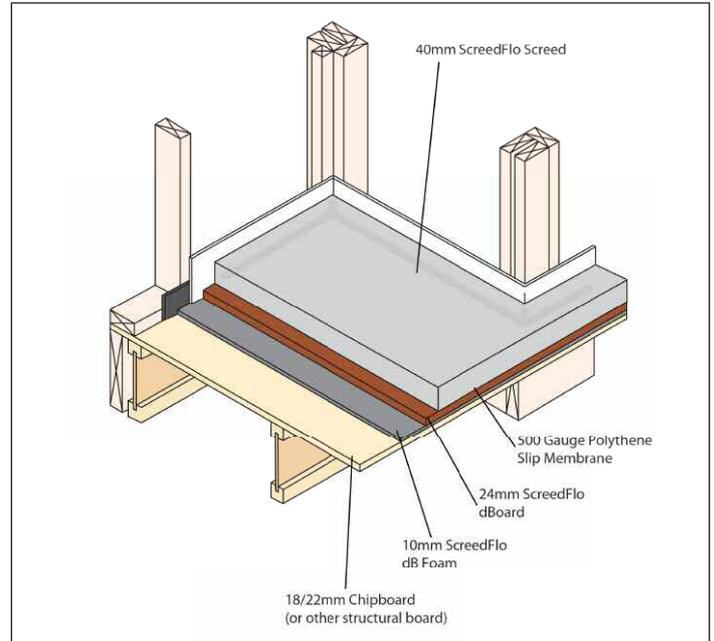
The sales appeal and environmental credentials of underfloor heating make it an increasingly popular option for developers. However, it is not at its most effective in timber floors. Screedflo dB allows both electric and water based underfloor heating systems to be cast into the screed as currently done on ground floors. Dependant on the bore of the piping systems, this can, often be achieved with no increase in screed depth.

### Improved customer appeal:

The use of screed in the acoustic floor, even in timber frame buildings, results in prospective buyers feeling that they are walking on solid floors. Screedflo dB minimises any sensation of movement within the floor, and virtually does away with any noise resulting from that movement.

### Environment benefits:

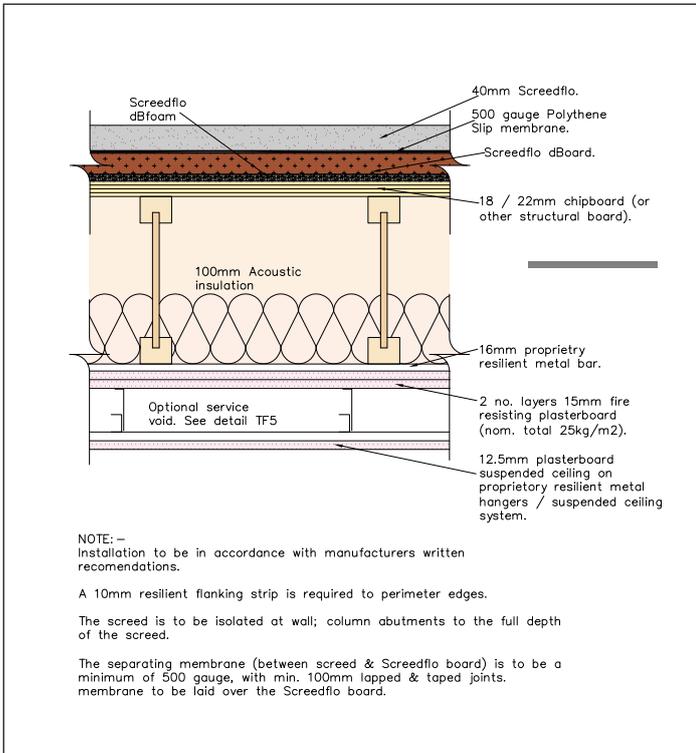
Screedflo dB helps the environment as well as building performance. Not only does the screed largely consist of recycled waste from industrial processes, but because of the unique batching process used with Screedflo, the screed also uses at least 30% less water than alternative screeds. The dBoard itself is also FSC certified.



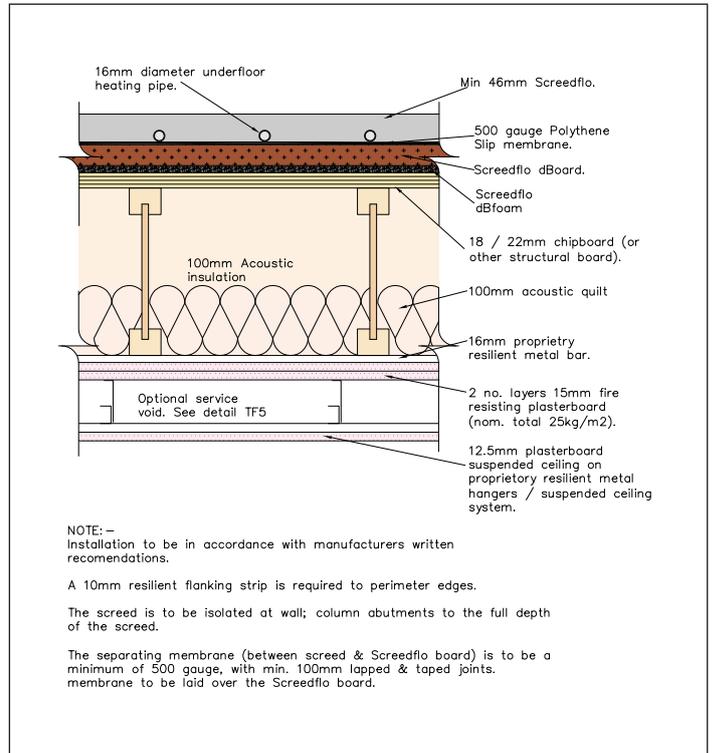
### Quality

Screedflo dB is the only system of its type to be certified with a BM TRADA Q-Mark, and to use a screed and binder that are CE marked. Additionally, all of our installers are individually trained using a TRADA approved training scheme.

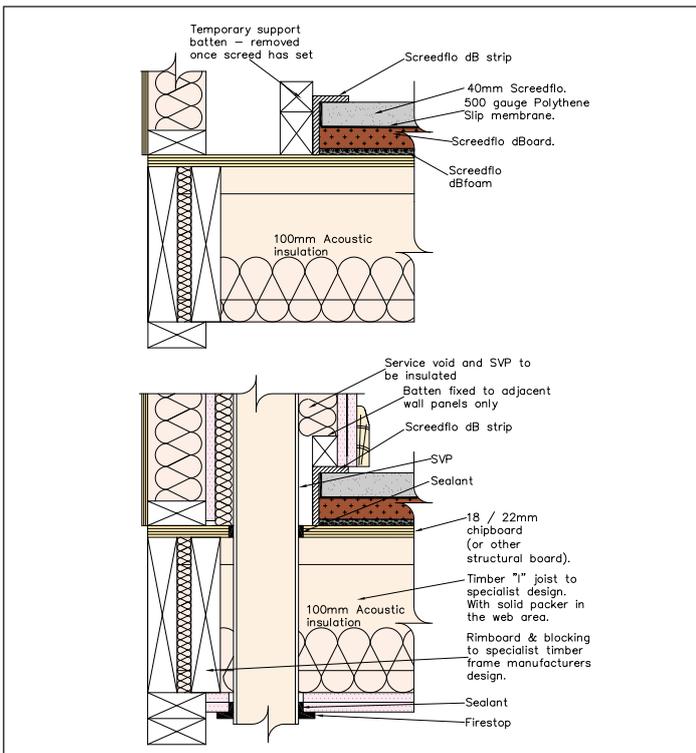
**Fig 1: External wall junction – Timber frame without underfloor heating**



**Fig 3: External wall junction – Timber frame with underfloor heating**



**Fig 2: Detailing around services**



**Fig 4: Door threshold**

