

The use of timber frame construction is growing rapidly in the UK due to the benefits that it brings in terms of speed of build quality and environmental benefits. Screedflo dB is ideal for use with timber frame construction. Its use enhances the benefits of timber frame, while having minimal impact on the design or erection of the frame. Screedflo dB allows timber structures to benefit from thermal mass.

## How does Screedflo dB work in timber

- **Wall & ceiling finishes:**

Screedflo dB works in conjunction with existing Robust Detail ceiling and wall finishes, providing robust detail acoustic performance. See Fig. 1.

- **Services:**

Services may be run through the joist zone, or more commonly in an optional service void below the standard ceiling.

- **Partitions:**

Non-loadbearing partitions can be fitted prior to installation of the Screedflo dB system, (See Fig. 3) or built off the Screedflo finished surface. See Fig. 2.

- **Design loads:**

As the improved floor performance is partially due to the increased mass of the screed, this load needs to be accommodated in the design of the floors and frame (See Screedflo dB design data sheet). This typically has minimal impact on the overall frame design.

- **Joist types:**

Screedflo dB is certified for use with JJI, BCI, PSI & FJI joists. These can be supplied loose or in prefabricated cassettes. Lifting holes in cassettes of less than 50mm x 50mm need no treatment prior to installing Screedflo dB. Larger openings should be filled from the underside, leaving a flat upper surface.

- **Construction:**

The Screedflo dB system should only be installed once the roof and windows are in place and the frame is weathertight. Ideally, any services which penetrate the floor zone should also be installed to allow them to be isolated acoustically.

- **Drying period:**

The screed takes 48 hours to cure sufficiently to be walked on. During this period, windows should be kept shut to prevent too rapid drying. After 48 hours, some windows should be opened to provide ventilation. The screed will then dry at a rate of nearly 1.4mm per day, a typical floor will fully dry over a 4 week period. Floor finishes, including tiles, can then be applied. There will be insufficient moisture to have any impact on the timber frame.

- **Underfloor heating:**

The use of Screedflo dB allows either electric or water based underfloor heating to be used efficiently on upper floors in timber frame. Either system should be installed above the slip membrane with a tracking rail system attached with short screws into, but not through to the dBoard. The screed will then fully encapsulate the heating elements. 30mm of coverage is required above the underfloor heating pipes.

- **Depth of floor:**

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 level, but it can also be beneficial where the timber frame is approaching the 18m threshold for 90 minute fire rating.



- **Floor finishes:**

Any floor finish can normally be used with Screedflo dB 4 weeks after pouring. 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.

Primers – When applying adhesives or cement based products such as levelling screeds and grouts, the screed surface must first be primed with an appropriate primer as recommended by the manufacturer. Most manufacturers will only guarantee their finishes when used in conjunction with their own products.

Fig 1: External wall junction

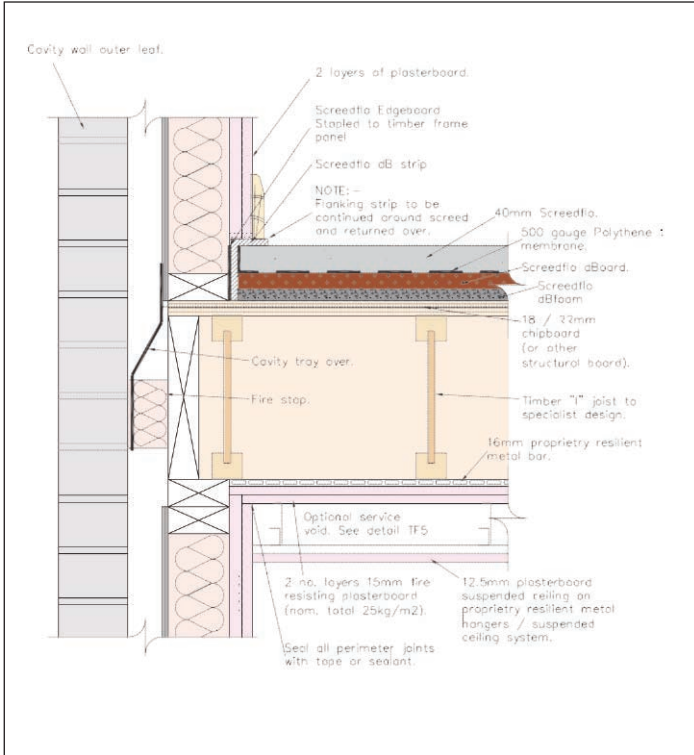


Fig 3: Load bearing wall

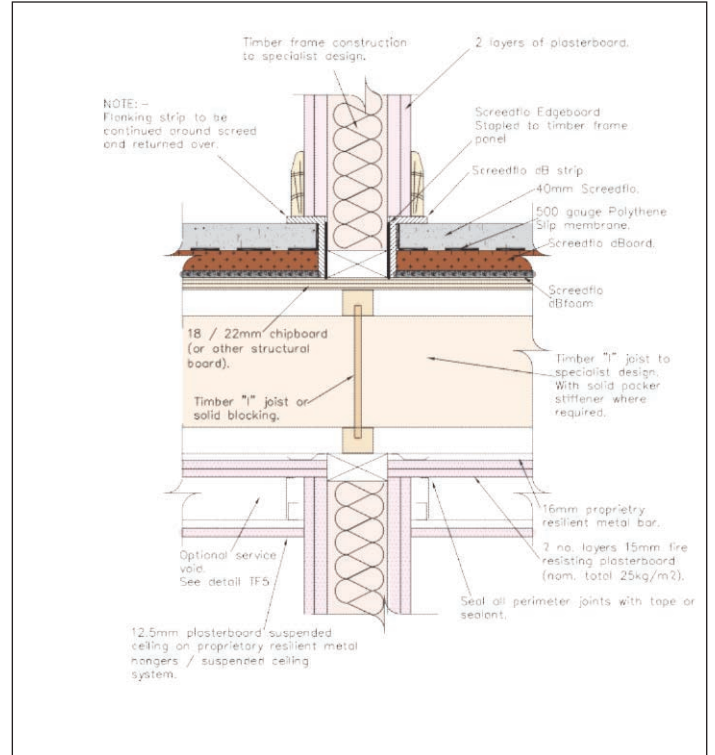


Fig 2: Non-load bearing partition

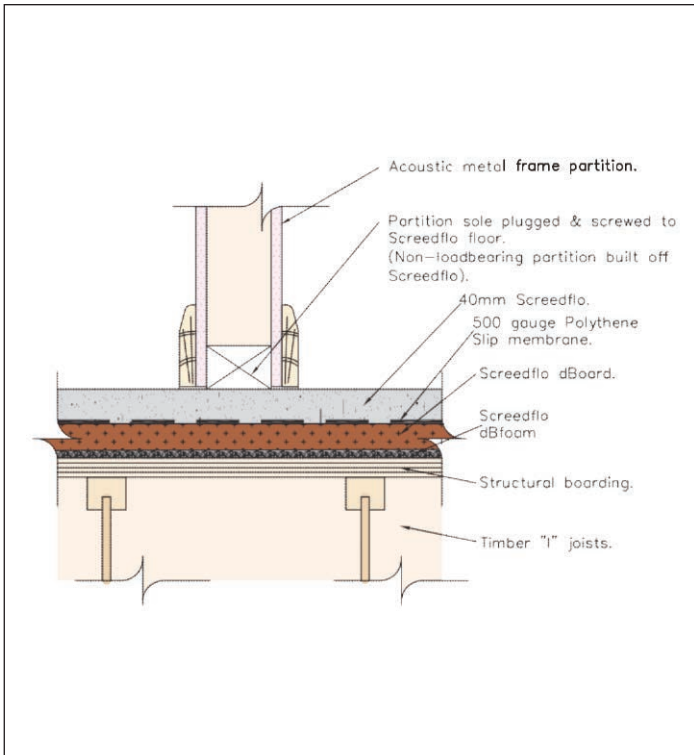


Fig 4: Door thresholds

