



Beam and Block Separating Floors **robust** details Part E

Resistance to the passage of sound

Longley Concrete Floors, as one of the founder members of the Beam and Block Alliance have been at the forefront of the development and testing of the modified Beam and Block Floor.



There are two robust details for Beam and Block Flooring:

E-FC-6 Beam and block floor with precast or in-situ edge beams with screed laid on Regupol® E48 resilient layer system.

E-FC-7 Beam and block floor with precast or in-situ edge beams using floating floor treatment

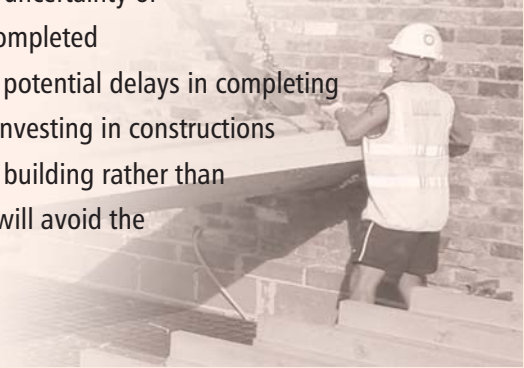
What are Robust Details?

Robust details are construction solutions which provide an alternative to pre-completion sound testing (PCT) as a method of complying with Part E (resistance to the passage of sound) of the Building Regulations (England and Wales). 2003 Edition.

What are the benefits of using robust details?

The benefits are clear. Using robust details avoids the need to carry out PCT. This eliminates the risk and uncertainty of remedial action being required on completed

floors; which may lead to potential delays in completing the property. You will be investing in constructions that add real value to the building rather than paying test fees and you will avoid the uncertainties of PCT.





Guidance Notes

The following notes are offered as general guidance on workmanship:

- Butt floor blocks tightly together
- Ensure that concrete does not enter the cavity and bridge the two leaves
- Ensure in-situ concrete downstand is at least 75mm wide
- Ensure floor is isolated from both walls and skirtings
- Ensure depth from top of beams to ceiling is min 300mm
- Ensure mineral fibre quilt is installed over whole ceiling board area

Key Features

- A precast or in-situ edge beam, min 300mm wide is required where floor beams run parallel with flanking walls
- Infill Tray Blocks will sit below the top of the floor beams to enable a 50mm concrete topping, min strength class C20
- In-situ concrete infill is required to all bearing ends
- All flanking walls to be constructed from dense aggregate blocks (1850-2300kg/m³)



E-FC-6

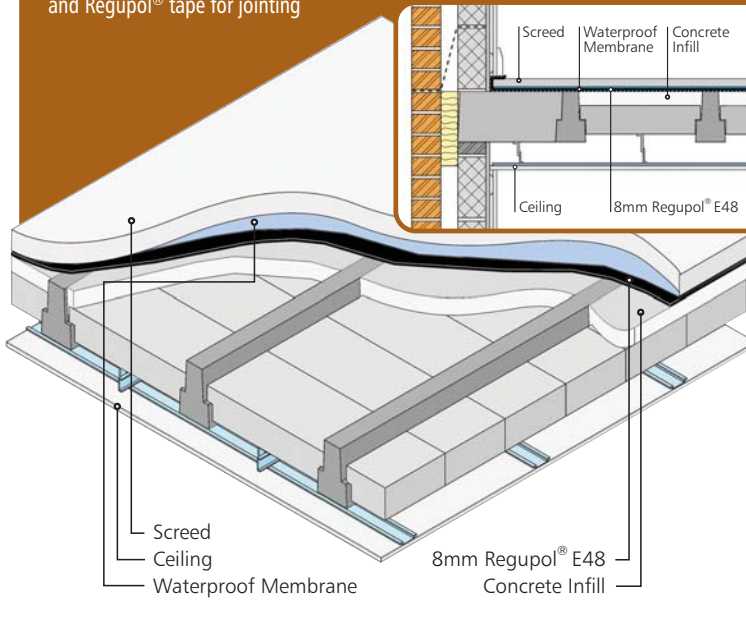
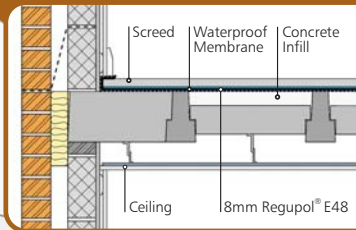
Screed - 65mm (min) cement: sand screed or 40mm (min) proprietary screed, nominal 80 kg/m mass per unit area

DPM - 0.2mm (min) waterproof membrane

Resilient Layer - 8mm Regupol® E48, dimple side down, fully lapped up walls and Regupol® tape for jointing

Structural Floor - Beam and block floor 100mm (min) thick dense aggregate infill blocks, 50mm (min) concrete topping, min strength class C20. 300kg/m² (min) combined mass per unit area

Ceiling - Metal frame ceiling system 300mm (min) between top of beam and ceiling board with 50mm (min) mineral fibre quilt (min 10kg/m³) in the ceiling void. One layer of nominal 10kg/m² gypsum-based board



Concrete - Beam and block with screed laid on Regupol® E48 resilient layer.

E-FC-7

Floating Floor

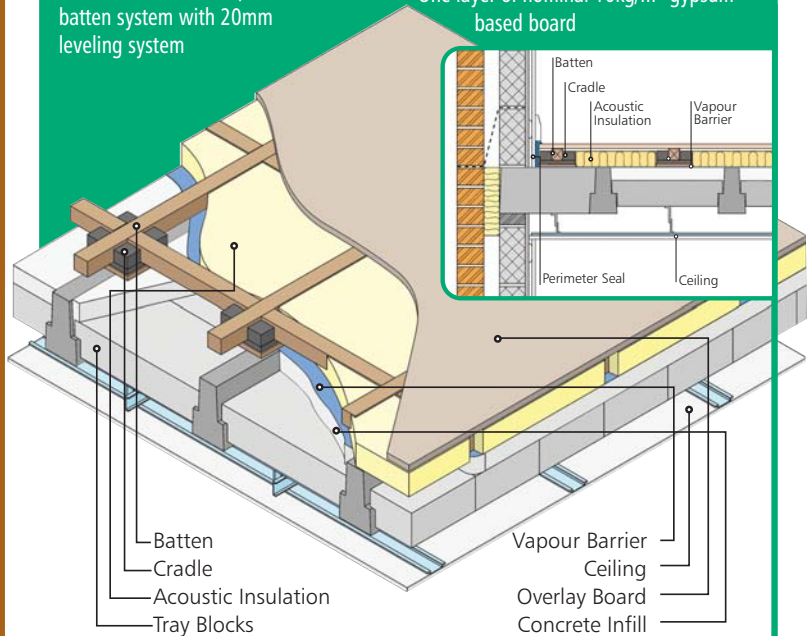
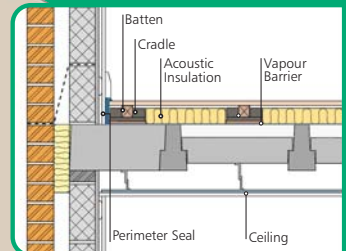
FFT 1 - Resilient composite deep batten system with 20mm leveling Screed

FFT 2 - Resilient cradle and batten system with 25mm mineral fibre quilt (min 10kg/m³)

FFT 3 - Resilient composite standard batten system with 20mm leveling system

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Ceiling - Metal frame ceiling system 300mm (min) between top of beam and ceiling board with 50mm (min) mineral fibre quilt (min 10kg/m³) in the ceiling void. One layer of nominal 10kg/m² gypsum-based board



Concrete - Beam and block with floating floor treatment.



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