

Acoustic Batten JCW 50C

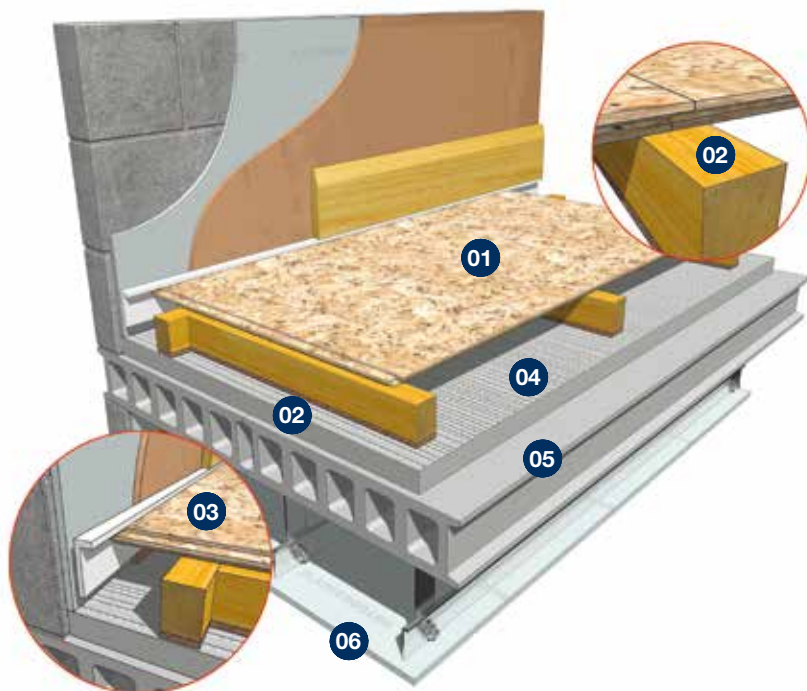
CONCRETE FLOOR BATTEN



n5Plus



Datasheet 21



- 01** 18mm t&g chipboard @ 400mm centres or 22mm t&g chipboard at 600mm centres
- 02** Acoustic Batten JCW 50C
- 03** JCW L Shaped or Flat Perimeter Edging Strip detail
- 04** 40mm min directly applied sand & cement or proprietary screed (min 80kg/m²)
- 05** 150mm (min) Concrete Floor
- 06** Metal Ceiling System with 100mm (min) void and 1 layer of 8kgs/m² gypsum based board

Note: No mineral fibre quilt required between Battens on FFT-3 concrete floor types as illustrated, E-FC-1, E-FC-2, E-FC-7 & E-FS-1.

Product Code: 1474

FFT-3 Resilient Composite Standard Batten: Timber Batten laminated to a 9mm acoustic resilient layer

Robust Detail (Registered Sites)

- Verified independent UKAS accredited laboratory test data that meets the Robust Detail requirements. Pre-completion testing is not required
- Acoustic Batten JCW 50C = FFT-3 Floating Floor Types; E-FC-1,2,7 and E-FS-1 (screed layer varies based on floor type. Refer to Robust Details Handbook for full specification)

PCT/PT & Refurbishment

- Verified independent UKAS accredited laboratory test data is based on the floor structure illustrated above
- It is essential all components are correctly installed and detailed to meet the requirements where Pre-completion Sound Testing is required
- Raised floor space can be used for installing services (services between battens must not penetrate resilient layer)
- Ideal for good impact sound improvement where height permits
- In Refurbs: Overlaid onto flat timber or concrete floors

Size: 50mm x 42mm x 1800mm **Weight:** 1.2 kgs - Other batten sizes are available on request

Robust Detail Performance: Reduction in Impact Sound Transmission: $rd \Delta L_w = 28$ dB

Tests were carried out by Building Research Establishment Ltd, UKAS accredited test laboratory No. 0578 on December 3rd 2013. Test Report No. 291911.

Method of Compliance

Robust Detail, PCT/PT (Scotland)

Ancillary Products

1130 JCW Flat Edging Strip (50 Lm x 150mm x 5mm)
1170 JCW Universal L Shaped Strip (2 Lm x 53mm x 23mm)
1196 JCW Waterproof PVA Adhesive (1 Litre)
1027 JCW Acoustic Sealant (310ml)

Preparation

Ensure the building is watertight and completely dried out before installing the floor.

JCW Acoustic Battens should only be installed when conditioned to their environment and ideally their moisture content should be the same as can be expected when in service.

JCW Acoustic Battens are designed for installation onto flat sub-floors of Timber or Concrete construction. (Note: If Concrete floors are not flat the alternative is to use JCW Acoustic Cradles & Packers to enable batten levelling) The purpose of the flooring system is the reduction of sound and is not intended to provide additional structural support or thermal insulation.

The capacity of existing joists to carry the weight of JCW Acoustic Battens and associated panels must be checked prior to installation.

Any decking on which JCW Acoustic Battens are to be laid should be flat and dry.

To reduce airborne sound it is vital to block any air passage in the structural floor, at the perimeter of the floor and wherever the floor is penetrated.

Only an appropriate acoustic sealant should be used to seal perimeter gaps in order to maintain the acoustic integrity of the structure.

Any flooring components exposed to wet conditions such as ingress of rain or plumbing leaks should be discarded and replaced.

Please note that we strongly recommend that all drylining and skimming works are carried out prior to installing our acoustic floor.

This sequencing reduces the risk of the acoustic floating floor being damaged as a result of overloading with pallets of plasterboard.

Services

The provision of access to services is most successful if the location of services is detailed at an early stage.

Services should be kept at least 150mm away from walls and door-ways to allow for perimeter support battens.

We recommend a gap of around 20mm is allowed above the height of the services to cater for clearance and deflection of the resilient layer.

Step by step guide:

1. Sweep floor clear of debris
2. Position JCW Perimeter Edging Strip at the base of all perimeter walls (this will be trapped in place by the plasterboard plank and chipboard flooring sheets)
3. Lay a continuous run of JCW Acoustic Battens, foam side down, around the floor perimeter, leaving a 50mm gap between the battens and the walls
4. JCW Acoustic Battens are laid, foam side down, at maximum 400mm centres for 18mm chipboard and maximum 600mm centres for 22mm chipboard. Lightweight internal partitions can be erected directly on to the finished floor – but the layout must be carefully planned to provide double battens under the partition for (Areas of Heavy Loading: see below)
5. Lay 25mm or 60mm (10-36kgs/m³ density) mineral wool quilt between the battens
6. Lay the plasterboard plank to the battens, staggering the joints and ensuring that all short edges of plank rest centrally on a batten. Butt the plasterboard plank up to the perimeter edging strip
7. Lay the chipboard flooring sheets with the long edge across the battens. Short joints should be staggered and supported by extra sections of batten. Screw fix (using No.8 screws) through the chipboard sheets, plasterboard plank and into the battens at 300mm centres, ensuring that no screws penetrate into the battens resilient foam layer. To ensure tight jointing, each tongue and groove is glued with JCW Waterproof PVA Adhesive. Chipboard can also be spot bonded to the layer of plank.
8. Remove tongues and grooves from chipboard sheets at the perimeter to ensure that only square cut edges butt up to the JCW Perimeter Edging Strip
9. Any unavoidable gaps are filled with JCW Acoustic Sealant
10. The JCW Perimeter Edging Strip is folded over the chipboard floor and trapped under the skirting board – the excess is then trimmed to finish flush to the skirting board
11. The completed floor should not be walked on for at least 48 hours to ensure the adhesive has fully cured
12. Decorative Floor Finishes: Specialist advice is required when **a)** installing Tiling and **b)** Sheet & Tile Vinyl/Rubber etc type flooring onto floating chipboard surfaces.



Threshold Detail



Support of Non-Load Bearing Partitions



Internal Wall Junction (Loadbearing)



Internal Wall Junction Loadbearing (Rip Liner alternative detail)

Areas of Heavy Loading

In areas where heavy loadings are anticipated, such as kitchens and bathrooms, battens centres should be reduced to 300mm to provide additional support.

Floor Loadings: JCW Acoustic Battens fully comply with BS 6399-1 for commercial floor loadings; 4 kN per m² uniformly distributed load.

Corridors

Where wood chipboard is used, the width of the expansion gap should be increased all round by an amount equal to 1mm for every metre above 12 metres of the width or breadth of the floor.

How to satisfy Building Regulations requirements for sound transmission through intermediate party floors

The Building Regulations require that certain types of property must be designed to provide reasonable resistance to sound from other parts of the same building and from adjoining buildings.

Building Regulations Doc: E (England & Wales)

	Airborne Sound Insulation DnT,w + Ctr dB (minimum)	Impact Sound Insulation L'nT,w dB (maximum)
New Build	45	62
Material Change of Use	43	64

Section 5 Scotland Performance Standards

	Airborne Sound Insulation DnT,w + Ctr dB (minimum)	Impact Sound Insulation L'nT,w dB (maximum)
New Build (mean values)	52	61
Change of Use	52	61

Design Considerations

There are three main approaches you can follow when designing floor and ceiling constructions:

1. Follow the guidance/specified constructions shown in Approved Document E 2003 (England & Wales) and in Section 5 of the Technical Handbooks (Scotland)
2. Design your own construction
3. Register and construct a design operated by Robust Details Ltd. (England & Wales) Pre-Completion acoustic testing will be required for a number of these approaches.

Guide to the site testing regime

Design Approach	Testing Requirements (England & Wales)	Testing Requirements (Scotland)
Guidance/ Specified Construction	Compulsory testing	Testing at discretion of Building Control
Own Design	Compulsory testing	Compulsory testing
Robust Detail	Exempt from testing	Testing at discretion of Building Control

More information about Robust Detail can be found at www.robustdetails.com

Advice and Technical Assistance

If in any doubt that a floor construction will meet Building Regulations, please contact us for technical support and advice or for more information about any of our acoustic products and solutions.

Disclaimer: The product and installation information contained in this Data Sheet and General Installation Guide is to the best of our knowledge correct. Please contact us direct, prior to starting works, for the latest information to enable confirmation of the specification.