

# ACOUSTIC FLOOR SYSTEMS

Enhance your living environment

  
**JUNCKERS**  
Walking on Danish design

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# SIMPLE SOLUTIONS FOR QUIETER BUILDINGS

How a Junckers acoustic floor system can enhance your living environment

We all expect a comfortable living environment and control of the noise levels in our homes and work places is an important part of this. The Building Regulations for each region of the UK and Ireland set out minimum standards for impact and airborne sound in apartments and buildings that have multiple occupants. In England, Wales and Ireland the regulations for sound are published as "Document E"; each with their own regional variations, In Northern Ireland the rules are contained in Technical Booklet G, and in Scotland; Section 5 of the Building Standards Technical Handbook.

In order to control the transmission of impact sound through floors from one dwelling into another it is crucial to have the right acoustic floor.

Junckers is Europe's premier manufacturer of solid hardwood floor systems and we offer a range of acoustic systems that will help designers to comply with the Building Regulations, for use in refurbishments, new build and for different types of subfloor.

The Building Regulations apply to residential buildings, and buildings that are converted to new uses. They also apply to hotels, care homes and student accommodation.

The floor finish will usually act in combination with other elements of the building to achieve the target levels of sound insulation. The design of the subfloor and ceiling beneath play an important role as does the way that the floor finish may need to be isolated from the walls that surround it.



## **ROBUST DETAILS AND SCOTTISH TYPE APPROVAL SCHEME**

In order to help builders and designers comply, the Regulations often allow standard design details to be used. For example in England these are contained in the information offered by Robust Details Ltd, a not for profit organisation. In Scotland a similar scheme exists through the Scottish Type Approval Scheme.

## **JUNCKERS ACOUSTIC FLOOR SYSTEMS**

It is often a requirement that where the separating floor includes a concrete structural slab with a minimum density of 365kg/m<sup>3</sup> the floor finish must provide at least 17dB impact sound reduction. Junckers acoustic floor systems have been independently tested to show their suitability for these applications.

Copies of test reports are available upon request. For other Junckers systems we can provide indicative impact sound reduction values, see page 7.



# JUNCKERS NEW ERA ACOUSTIC SYSTEM

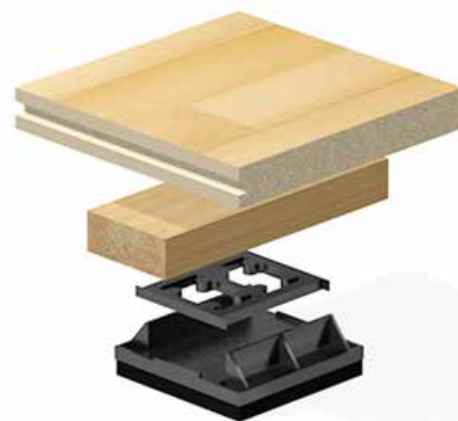
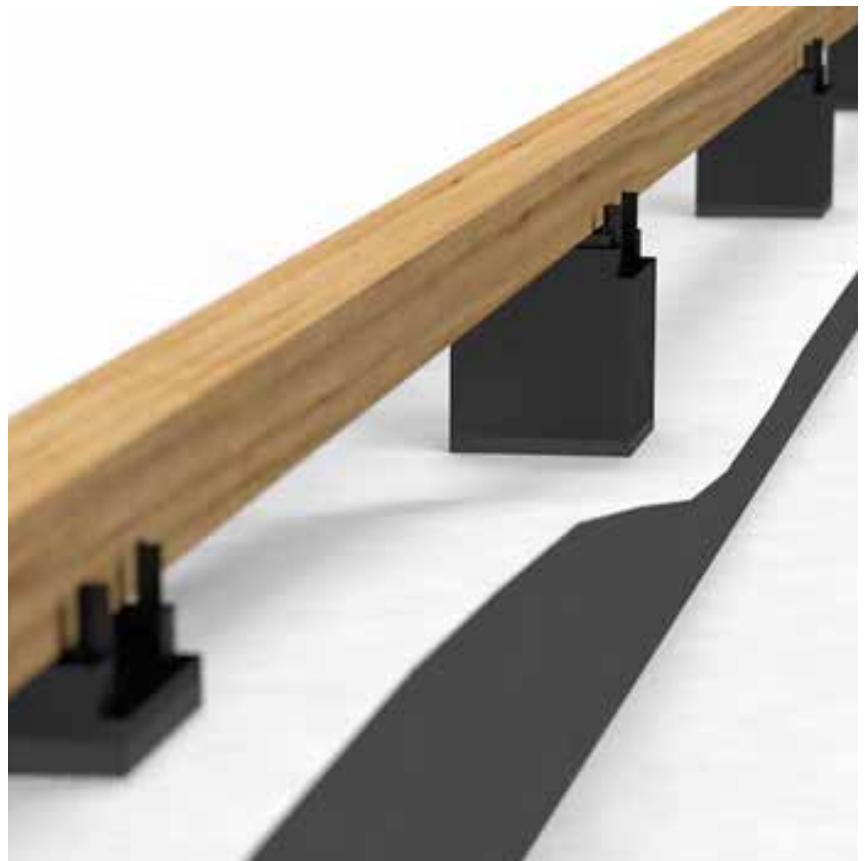
Junckers New Era Acoustic System using 36mm thick battens achieves an impact sound reduction ( $L_{n,w}$ ) of 27dB, and with 48mm thick battens; 28dB.

*(Data obtained by laboratory testing)*

Junckers New Era Acoustic Cradle system complies with Robust Details FFT2.

New Era Acoustic is a height adjustable system suitable for use on structural concrete slabs, block and beam floors and almost any other type of sound, dry load-bearing base. Its height range is from 74mm to 449mm including the floor board. New Era Acoustic floors may also be used on flatter bases such as screeds where a non-standard or extended floor height is needed eg to accommodate services or underfloor heating.

The New Era Acoustic system comprises acoustic cradles with 10mm thick recycled rubber pads factory-fitted to the underside. The cradles are height adjustable using purpose-made packers and they support laminated timber battens. 50mm thick mineral wool insulation is placed between the battens. Junckers 22mm or 20.5mm thick solid hardwood floor boards are fixed to the battens to complete the installation.



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Junckers New Era UnoBat system (for sports and activity floors to EN 14904) achieves an impact sound reduction ( $L_{n,w}$ ) of 25dB

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# JUNCKERS CLIP SYSTEM; CA2 ACOUSTIC UNDERLAY

Junckers 14mm thick solid hardwood flooring laid on CA2 underlay provides an impact sound reduction ( $L_{n,w}$ ) of 19dB.

*(Data obtained by laboratory testing)*

For loadbearing flat, dry subfloors the Junckers Clip system provides a "floating floor" finish using any of our solid hardwood 2-strip or plank floor boards. The Clip system is typically used on a sand and cement screed or a structural timber deck such as plywood or chipboard. It is often a good choice for refurbishments where finished floor height may be restricted.

Enhanced acoustic performance is achieved using Junckers 5mm thick CA2 rubber composite underlay which is loose laid with the floor boards installed on top as a floating layer. No fixings are required to the subfloor with a Clip system floor.





# OTHER JUNCKERS SYSTEMS

As well as data obtained through testing by accredited laboratories, we can provide indicative impact sound reduction figures for many of our other floor systems including sports floors laid on battens and our standard Clip System underlays as shown below.

<b>FLOORS FOR RESIDENTIAL AND COMMERCIAL AREAS</b>	<b>dB</b>
22mm or 20.5mm Clip System on Junckers 2mm SylvaFoam or PolyFoam	16 dB
14mm or 15mm Clip System on Junckers 2mm SylvaFoam or PolyFoam	17 dB
<b>SPORTS FLOOR SYSTEMS</b>	
Junckers 22mm Clip System Sports Floor on 10mm ProFoam Underlay	17dB
Junckers 22mm Clip System Sports Floor on 5mm MultiFoam Underlay	15 dB
Junckers 22mm Sports Floor on DuoBat 120+ double battens	25 dB
Junckers 22mm Sports Floor on UnoBat 62+ batten system	21 dB
Junckers 22mm Sports Floor on UnoBat 45 battens	18 dB
Junckers 22mm Sports Floor on Blubat battens	17 dB



The mark of responsible forestry



## NBS CLAUSES FOR SPECIFIERS

Junckers floor system specifications are available on NBS Plus and draft NBS clauses are available upon request from our technical and specification teams. We also provide BIM objects for our systems. Junckers offers core curriculum RIBA CPDs including CPDs on line.

## WARRANTIES

Junckers solid hardwood floor systems are guaranteed for 25 years when installed by a Junckers approved contractor. Junckers approved Maintenance Contractors offer a care scheme where the client's floor is periodically inspected and maintained so as to keep the floor in good condition and to maximise its life.

For further information including Absorption Coefficients and general design approach see the Junckers Technical Information sheets:

- E 5.0 Sound; General Information
- E 5.1 Sound; Specifier's Information

These can be found under Technical Information on [www.junckers.co.uk](http://www.junckers.co.uk)

Ask Junckers for FSC® or PEFC™ certified products



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