

Die revolutionäre Schall- und Wärmedämmung

# PHONEWELL



## Sound Insulation the Natural Way

WINNER of the 'Most Innovative Construction Product Award' for 2007

**36dB (R<sub>w</sub>, -4Ctr) Airborne and 21dB (ΔL<sub>w</sub>) Impact Sound Insulation**

### The Phonewell® Benefits:



- **36dB Airborne** and **21dB Impact** Sound Insulation in a single product
- For walls, floors and ceilings whether constructed from wood, steel or solid substrates
- For commercial and domestic properties regardless of the substrate
- For new builds, conversions, refurbishments and remedial work
- Comparable performance to the Robust Detail Structure but is only 15mm thick, compared to the 107mm floating floor
- DIBt German Agrément awarded
- BBA Agrément Certification in draft stage
- Speed of installation time and low cost labour
- Simple fitting, easy butt joints, no taping joints, no flanking strips and can be cut with a knife or jigsaw
- Self load supporting for easy wall fixing
- Minimal 15mm thickness avoids problems associated with door thresholds and re-fitting skirting in refurbishments
- Performance actually improves by up to 3dB when a hard surface is added e.g. noisy laminate flooring
- Gives excellent results at low frequencies
- Withstands 5kN/m<sup>2</sup> loading for partition construction
- Gives a solid floor feel underfoot similar to a screeded floor and unlike all the 'spongy' systems on the market
- Provides Thermal Mass to lightweight framed structures
- Excellent with under-floor heating
- The product is natural, breathable, pollutant free and odourless

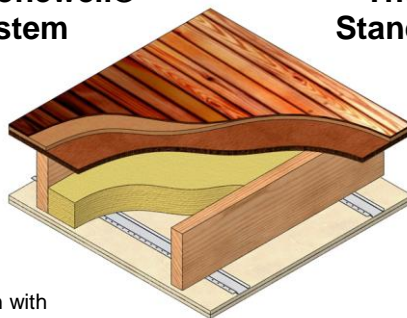
### Ideal for Timber Frame and Steel Frame Offsite Modern Methods of Construction

Phonewell® can be fitted to acoustic floor cassettes offsite or onsite.

A Phonewell® system feels like a solid floor and can be loaded up to 5kN/m<sup>2</sup>.

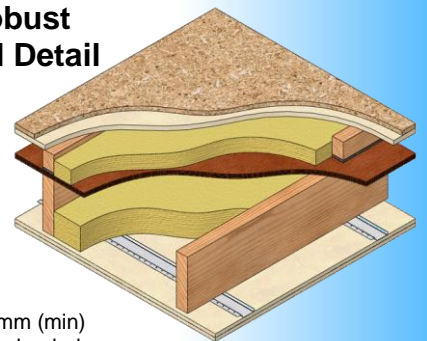
The acoustic performance of 15mm thick Phonewell® rivals that of Robust Standard Detail Floating Floors which have a minimum height of 107mm when loaded, providing a huge saving in total build cost.

#### The Phonewell® System

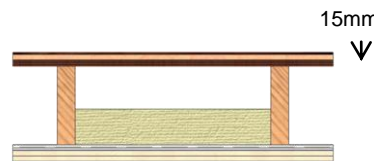


(Shown with laminate finish)

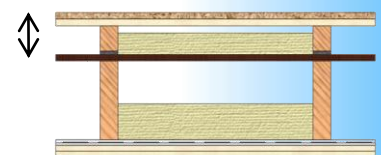
#### The Robust Standard Detail



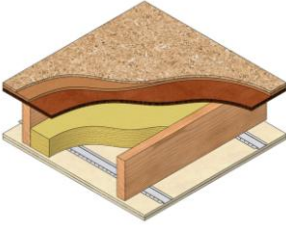
107mm (min) when loaded

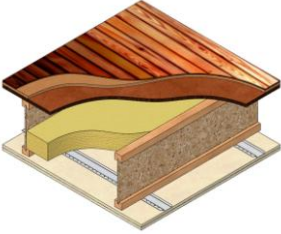


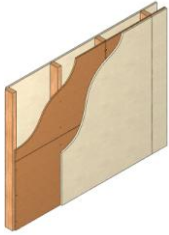
15mm




Test	Phonewell® (SRL Certified)	RD E-FT-2 (Avg Site Tests)	AD-E Regulations
Airborne R <sub>w</sub> + Ctr	54dB (R <sub>w</sub> = 60dB)	51dB	45dB min
Impact	53dB	52dB	62dB max

Solid Timber Joists	Construction	Airborne $R_w$ (Ctr) - dB	Impact $L_{nw}$ - dB
	18mm OSB (or 7mm laminate etc.) 15mm Phonewell® 18mm OSB 235mm Solid Timber Joists (100mm 10kg Mineral Wool Quilt) 16mm Resilient Bars 2 x 15mm Plasterboard	60 (-6)	53
	No top decking	59 (-6)	56

Timber I-Joists	Construction	Airborne $R_w$ (Ctr) - dB	Impact $L_{nw}$ - dB
	18mm OSB (or 7mm laminate etc.) 15mm Phonewell® 18mm OSB 300mm Timber I-Joists (100mm 45kg Mineral Wool Quilt) 16mm Resilient Bars 2 x 15mm Plasterboard	60 (-7)	55
	No top decking	58 (-8)	57

Single Leaf - Timber Stud	Construction	Airborne $R_w$ (Ctr) - dB	Impact $L_{nw}$ - dB
	1 x 15mm Plasterboard 1 x 15mm Phonewell® 100mm Timber Stud (no cavity insulation) 1 x 15mm Plasterboard	50 (-5)	-

Upgrade - Solid Block	Construction	Airborne $R_w$ (Ctr) - dB	Impact $L_{nw}$ - dB
	1 x 15mm Plasterboard 1 x 15mm Phonewell® 100mm 650kg/m <sup>3</sup> Lightweight Block Wall Opposite Side Bare (to upgrade)	48 (-5) (one side bare)  $R_w$ improvement = 6dB	-
	Upgrade: 1 x 15mm Plasterboard 1 x Phonewell on Resilient Bars	(call for test results)	

For additional Phonewell® solutions, including concrete floors, see our web site or contact our team

### Technical Specification

Data	Measurement	Verification
Length x Width x Depth	1200 x 800 x 15mm	
Weight	18.0 Kg/m <sup>2</sup>	
Density	1200 Kg/m <sup>3</sup>	
Airborne Sound Reduction	$R_w = 36dB$ (Ctr = -4)	DIN EN ISO 717-1
Impact Sound Reduction	$\Delta L_w = 21dB$	DIN EN ISO 717-2
Impact Sound Reduction	Up to 65dB	DIN EN ISO 717-2
Fire Behaviour	B2	DIN 4102
Thermal Conductivity	0.17 W/mK	DIN 52612
Pressure Solidity	5.0 kN/m <sup>2</sup>	DIN 1055: 2002
Areas of Application	1,2,3,4	DIN 1055: 1971
Areas of Application	A,B,C1,C2,C3,C4,C5,D1,D2	DIN 1055: 2002
Bending Tensile Strength	2107 N - Lengthwise	DIN EN 520
Bending Tensile Strength	2123 N - Widthwise	DIN EN 520

### Accreditation

The Phonewell® solutions have been tested to BS EN ISO 140 series and BS EN ISO 717 series, in the UKAS accredited laboratory at SRL, to meet the requirements of Approved Document E. However, small variances in performance on site may result, due to workmanship or other external factors.

With this in mind it is important to note there is no product, system, manufacturer or supplier that can offer any guarantee of performance on site, hence the requirement for spot check Pre-Completion Testing of Robust Details.