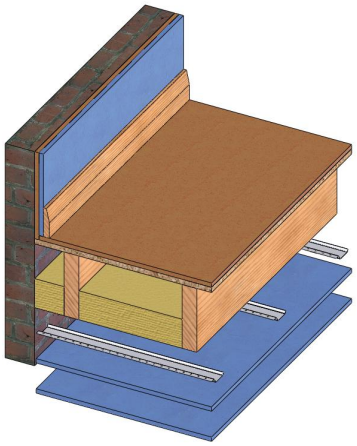
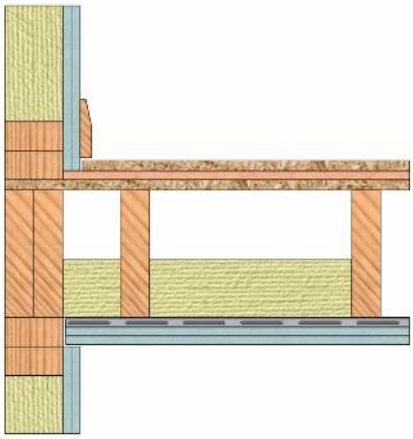
Soundproofing Timber Floors

PhoneStar

Acoustic Insulation

Results Achieved by Using PhoneStar on Timber Floors
(previously branded as Phonewell)





Recommended Construction From Top Down to Pass Building Regulations for Sound:

- Any Floor Covering e.g. Laminate, Solid Wood, Tiles, Carpet, Linoleum
- 15mm PhoneStar Acoustic Insulation
- Sub-deck e.g. OSB Board or floorboards
- Timber Joists
- **Optional** - Thermal Insulation in Cavity (mineral wool, rockwool or Pavaflex wood fibre)
- 16mm x 3M Resilient Bars
- 1 or 2 Layers of Acoustic Plasterboard 12.5 or 15mm

Results from Sound Research Laboratory (SRL)

Note: The Ctr (Correction) values (in brackets) are a low frequency correction factor.

	Description of Floor Construction	Airborne Rw (-Ctr)	Impact Ln,w
Test 1 Upgraded Floor using PhoneStar	15mm **PhoneStar** 15mm T&G OSB Board 235 x 50mm Timber Joists on Hangers 10kg/M³ insulation between joists - 100mm 16mm Resilient Bars 2 x 12.5mm Acoustic Plasterboard	**59 (-6) dB (Pass)** 19dB Improvement On Bare Test Floor	**56 dB (Pass)** 19dB Improvement On Bare Test Floor
Test 2 Upgraded Floor using PhoneStar	As Above, but with 18mm T&G OSB on top of **PhoneStar**	**60 (-6) dB (Pass)** Further 1dB Improvement On Above Floor	**53 dB (Pass)** Further 3dB Improvement On Above Floor

COMPARED TO: Test 3 Bare Test Floor Without PhoneStar	15mm T&G OSB Board 235 x 50mm Timber Joists on Hangers 10kg/M³ insulation between joists - 100mm 2 x 12.5mm Acoustic Plasterboard	**41 (-7) dB (Fail)** **Note:** The higher the result the better	**75 dB (Fail)** **Note:** The lower the result the better
England & Wales Building Regulations for Sound - Document E	Separating Floors & Stairs - New Build Dwelling Houses & Flats - Conversions or Change of Use	Airborne DnT,w (-Ctr) 45dB minimum 43dB minimum	Impact L'nT,w 62dB maximum 64dB maximum

www.acaraconcepts.com
info@acaraconcepts.com

Tel UK: +44 (0)20 7998 1690
Tel Ireland: +353 (0)1 8409 286