

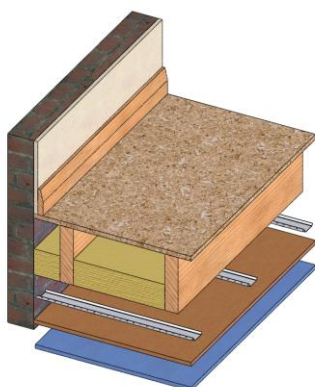


Improvement Expected when Upgrading Timber Joist Ceilings with PhoneStar

(Previously branded as Phonewell)

Option 1 - Upgraded Ceiling with Mineral Wool in the Cavity

Description of Floor / Ceiling Construction



15mm T&G OSB Board
235 x 50mm Timber Joists on Hangers
10kg/M³ insulation between joists - 100mm
With / Without Existing Plasterboard *
16mm Resilient Bars
15mm **PhoneStar Acoustic Insulation**
1 or 2 layers x 12.5mm Acoustic
Plasterboard

* **Note:** Subject to Local Building Fire Regulations
for Ceilings in Separating Dwellings

Expected Airborne DnT,w

57 - 59 dB (Pass)

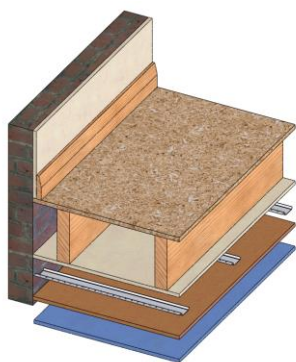
= 16 to 18 dB
Improvement
On Basic Test Floor /
Ceiling

Expected Impact L'nT,w

58 to 61 dB

= 14 to 17 dB
Improvement
On Basic Test Floor /
Ceiling

Option 2 - Upgraded Ceiling without any Mineral Wool in the Cavity



As Above, but without any mineral wool in
the cavity

Expected Airborne DnT,w

56 - 58 dB (Pass)

= 15 to 17 dB
Improvement
On Basic Test Floor /
Ceiling

Expected Impact L'nT,w

58 to 61 dB

= 14 to 17 dB
Improvement
On Basic Test Floor /
Ceiling

COMPARED TO:
Basic Test Floor / Ceiling
Without PhoneStar

Tested in Sound Research
Laboratory (SRL)

15mm T&G OSB Board
235 x 50mm Timber Joists on Hangers
100mm x 10kg/M³ insulation between
joists
2 x 12.5mm Acoustic Plasterboard

Airborne Rw

41 dB (Fail)

Note: The higher the
result the better

Impact Ln,w

75 dB (Fail)

Note: The lower the
result the better

Rep of Ire Building
Regulations 2014
T.G. Document E - Sound

Separating Floors (including Stairs
with a separating structure)

Airborne DnT,w

53dB minimum

Impact LnT,w

58dB maximum