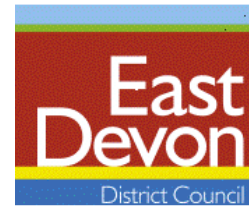


BUILDING CONTROL

GUIDANCE NOTE 3



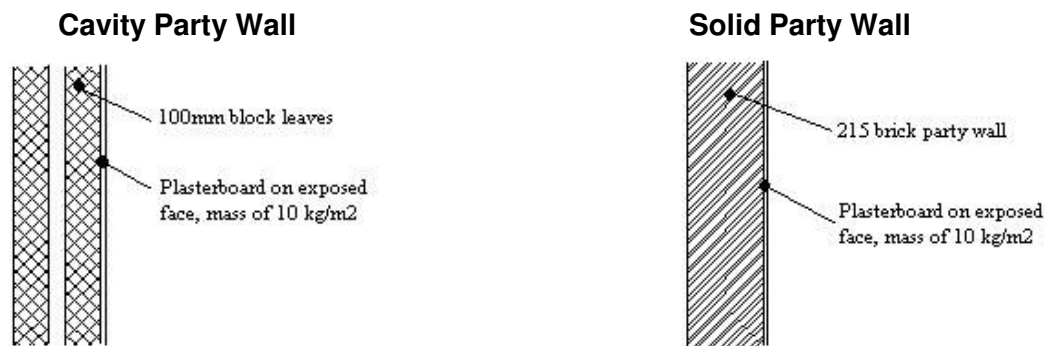
GUIDANCE NOTES FOR CONSTRUCTION PROFESSIONALS ON LOFT CONVERSIONS AND SOUND INSULATION REQUIREMENTS (PART E)

Approved document E was revised and came into effect on 1 July 2003 and deals with resistance to the passage of sound. When constructing loft conversions, some elements have to provide a degree of sound insulation. Party walls, some internal walls and new floors need to provide adequate resistance to airborne sound transmission.

Party Walls

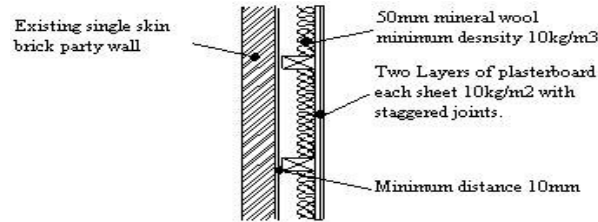
The party wall between the proposed loft conversion and adjoining properties may generally require remedial work in order to provide the degree of sound insulation required under the new Part E. The construction of the party wall should be ascertained, as this will affect the degree of remedial work required. In most cases the bond of the brickwork to the wall will provide guidance on how the party wall is constructed. However in cases where the construction cannot be ascertained it should be assumed that the wall is constructed from 100mm single skin brick or blockwork.

In cavity and 225mm solid party walls it will be necessary to apply plasterboard with a mass of 10kg/m^2 or greater to the exposed face of the wall. The plasterboards specified on table A provide guidance on thickness of plasterboard required.



100mm Single Skin Party Walls

In the case of single skin party walls it will be necessary to construct an independent studwork lining, leaving a gap of 10 mm between the wall and the inner face of the studwork. This is to ensure that airborne sound transmission is reduced.

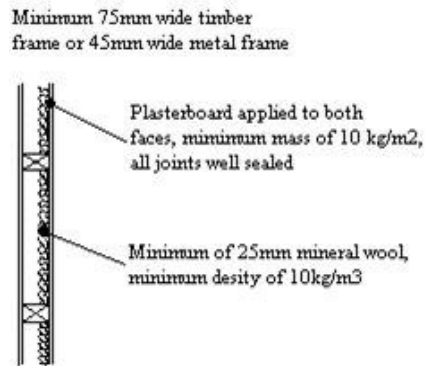


Internal Walls

Internal walls are required to provide a degree of insulation against airborne sound transmission, in the following circumstances.

- Between bedrooms and any other rooms
- between rooms containing WC's and Other, unless the WC is ensuite or the wall in question has a door in it.

The example below suggests how this can be met, using table A for suggested plasterboard thickness.



Internal Floor

The internal floor between the new loft conversion and the existing first floor is also required to protect against airborne sound transmission. In most cases the floor to a loft conversion is built above the existing ceiling and it is therefore possible to amalgamate fire and sound protection measures into the new floor. 100mm Mineral wool laid between the new floor joists over wire mesh will increase the fire protection that the floor provides and reduce sound transmission. The new floor decking (where chipboard) is also required to be a minimum of 22mm thick tongued and grooved board in order to provide a density of 15kg/m².

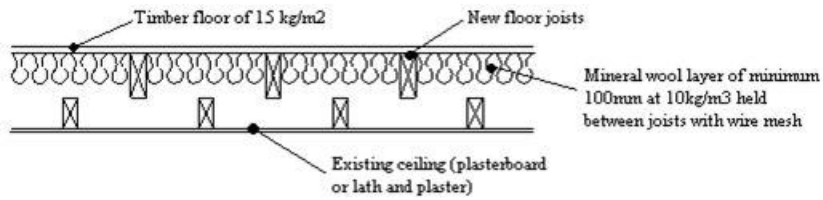


Table A Minimum thickness of plasterboards required to achieve a minimum mass of 10kg/m².

Gyproc Plasterboard

Product	Thickness (mm)	Mass (Kg/m ²)
Wallboard and Duplex	15	10
Duraline & Duraline Severe	13	11.5
Fireline, Fireline MR & Fireline Duplex	12.5	10
Handiboard	12.5	10
Industrial grade	12.5	9.5 to 12
Moisture resistant	15	11
Plank	19	15
Profile board	15	11.5
Sound Bloc	12.5	10.5
Triline	32	11
Thermaline Plus, Basic,	Not acceptable	Under 10

Lafarge Plasterboard

Product	Thickness (mm)	Mass (Kg/m ²)
Standard wall board	15	10
Sound resistant board	12.5	10.2
Fire-Check wall board	12.5	10
Vapour-Check wall board	15	10

Knauf Plasterboards

Product	Thickness (mm)	Mass (Kg/m ²)
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Wallboard	15	10.2
Plank	13.2	Over 10
Vapourshield	15	Over 10
Fireshield	15	Over 10
Fire Mosituershield	15	Over 10
Core board	16	Over 10
Denseshield	12.5	Over 10
Soundshield	12.5	Over 10

Table B Minimum thickness of Flooring Materials required to achieve a minimum mass of 15kg/m².

Grade / Type of board	Thickness (mm)	Mass (Kg/m ²)
MFC	23	Over 15
MDF	20	Over 15
Chipboard P5	22	15.2
Chipboard P6	21	Over 15
Chipboard P7	21	Over 15
Weyroc Protect	22	15.4
Plywood (Generally)	22	Over 15