

AIMcoustic Floor Slab

High Density Tissue Faced Rockwool Floor Slab (with optional rebated edges)



AIMcoustic Floor Slab has been developed to thermally insulate ground floors and to provide acoustic and thermal insulation to upper floors. AIMcoustic Floor Slab may be used with ground, timber, beam and block or concrete suspended floors.

Specification

Thickness:

25, 30, 40, 50, 60, 70, 75, 80, 90, 100mm*

(* Material may be double layered for greater thickness)

- High compressive strength
- Optional four edge rebated
- Thermal & acoustic insulation
- Complies with Part E of Building Regulations
- 1 hour fire rating for timber floor when used with AIM FireFloor System 2
- Global warming potential = zero
- Slab size 1200x1000mm

Applications

AIMcoustic Floor Slab may be used under a fine concrete screed in 'wet' construction, or under flooring grade chipboard in 'dry' construction. The tissue facing allows the laying of wet screed directly to AIMcoustic Floor Slab without building paper. Rebated edges, if chosen, help prevent grout leakage and thermal/ acoustic bridging.

P/A ratios for on ground floors to achieve 0.25 W/m²K U value, with AIMcoustic Floor Slab

AIMcoustic Thickness (mm)	Concrete beam and block floor		Reinforced Concrete slab 150mm thick	
	P/A RATIO	P/A RATIO	P/A RATIO	P/A RATIO
	Ventilation opening area per unit perimeter of underfloor space m ² /m			
25	0.13	0.12	0.13	0.12
30	0.14	0.13	0.14	0.13
40	0.16	0.15	0.16	0.14
50	0.18	0.17	0.18	0.16
60	0.22	0.20	0.21	0.19
70	0.26	0.24	0.25	0.23
75	0.29	0.27	0.28	0.26
80	0.34	0.31	0.32	0.29
90	0.44	0.41	0.42	0.38
100	0.64	0.57	0.59	0.52
150	1.00	1.00	1.00	1.00

P/A ratios for on ground floors to achieve 0.25 W/m²K U value, with AIMcoustic Floor Slab

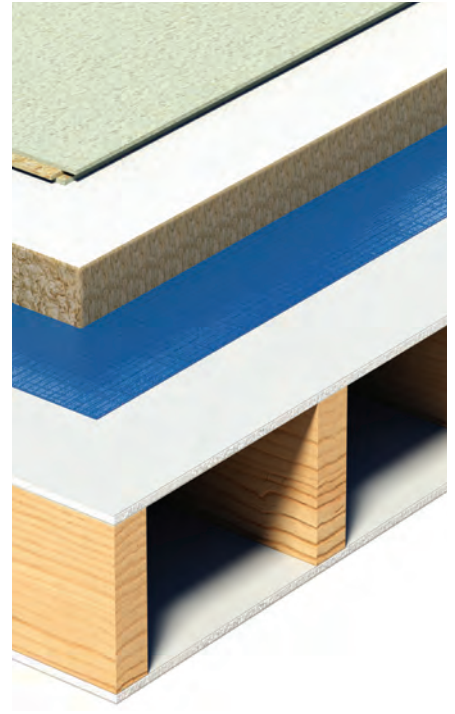
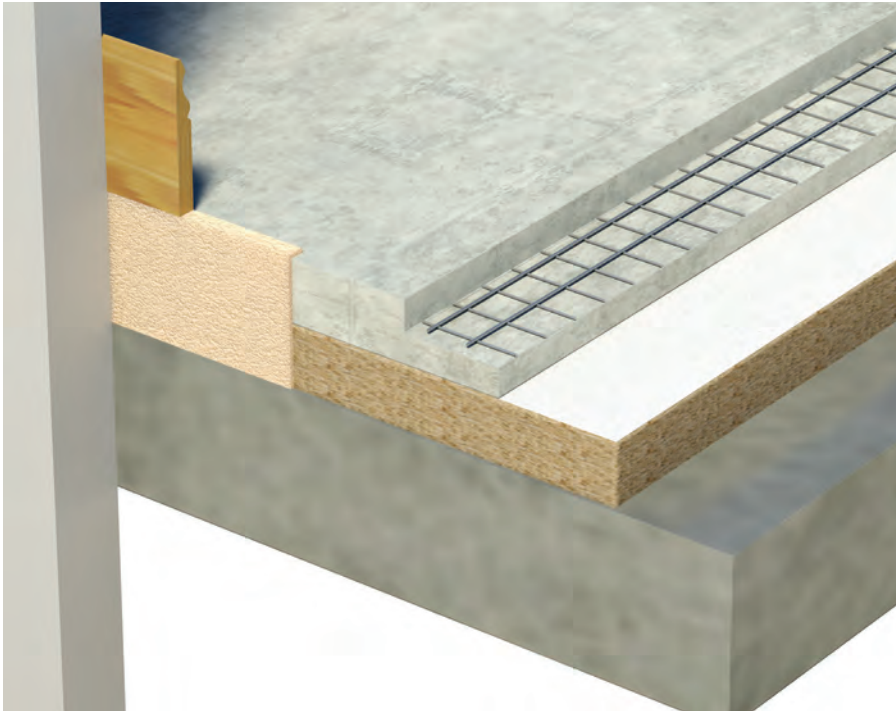
AIMcoustic Thickness (mm)	25	30	40	50	60
P/A RATIO	0.15	0.15	0.20	0.2	0.25
AIMcoustic Thickness (mm)	70	75	80	90	100
P/A RATIO	0.3	0.35	0.35	0.45	0.6

U' value (W/m²K) of suspended floor with AIMcoustic - internal unheated room underneath

AIMcoustic Thickness (mm)	Joisted timber with ceiling under	Concrete beam and block floor	Reinforced Concrete slab 150mm thick
0	1.24	2.08	2.38
25	0.63	0.79	0.83
30	0.58	0.71	0.75
40	0.50	0.60	0.63
50	0.45	0.52	0.54
60	0.40	0.46	0.47
70	0.36	0.41	0.42
75	0.35	0.39	0.40
80	0.33	0.37	0.38
90	0.31	0.34	0.35
100	0.28	0.31	0.32
150	0.21	0.22	0.23

Notes to all tables

Calculated in accordance with BS EN ISO 6946: 2007 and Approved Document L2 2002 The Building Regulations 2000. The calculations assume that there are no air gaps in the insulation layer. This means that the insulation must be installed so as to join tightly. P/A is the perimeter of the building divided by the area.



ROCKWOOL®

Installation

The sub floor must be structurally sound and level. AIMcoustic Floor Slab will accommodate minor imperfections of flatness and burrs of concrete but for more major unevenness, it will be necessary to lay a levelling screed, or sheathing ply over timber.

Damp Proof Membrane

A DPM is required under AIMcoustic Floor Slab when laid on ground floors or where the substrate hasn't fully dried.

Perimeter Strip

The perimeter of the floor should be lined with AIMcoustic PE Isolation Strip, to allow for acoustic isolation and expansion of chipboard surface layer (where used). The depth of the AIMcoustic PE Isolation Strip is to be the thickness of AIMcoustic Floor Slab plus the thickness of surface layer (i.e. screed or chipboard).

Laying AIMcoustic Floor Slab

Boards should be laid lengthwise to the longest wall (having removed the rebated edge where the slab abuts the wall), with staggered joints, tissue face upwards.

Chipboard Surface Layer

Flooring Grade P5 T&G Chipboard should be laid with staggered joints, the long edges being parallel with the longest wall. All tongue and groove joints should be glued with PVA adhesive. Temporary wedges should be used at the perimeter to hold the tongue and groove joints tight, whilst the adhesive sets. When the adhesive has set the wedges must be removed and damage to the Isolation Strip made good.

At door thresholds, or where a change in floor construction occurs, a timber batten of the same thickness as the insulation should be inserted to reinforce the edge. Skirting boards should finish approximately 5mm above floor level and be isolated from the chipboard with AIMcoustic PE Isolation Strip.

Screeded Surface Layer

The screed should be of fine concrete and a minimum depth of 65mm (75mm for non-domestic applications). A light wire mesh is required in the screed. An upstand of AIMcoustic PE Isolation Strip is required at perimeters.

