



# Jabfloor High Performance + (HP) 70 and 100 Floor insulation – over precast concrete suspended floor

Jabfloor HP + is a closed cell expanded polystyrene (EPS) insulation board for use in all floor constructions.

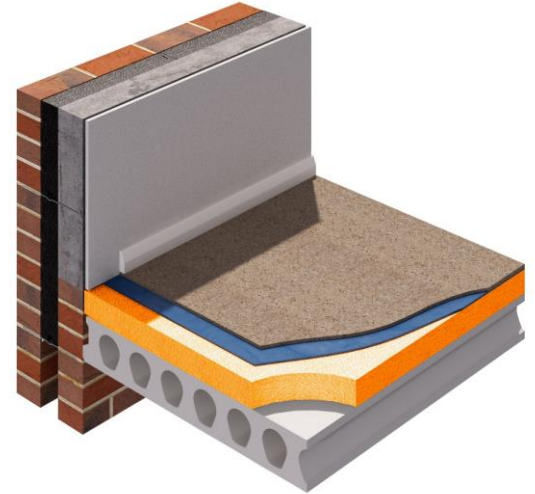
Jabfloor HP + is grey in colour due to the carbon additive which acts within the boards to disperse and reflect heat radiation. This gives the boards an improvement in thermal performance compared to white EPS.

A range of compressive strengths are available to suit all building types from domestic to commercial.

Jabfloor HP + insulation has been tested and approved by the British Board of Agrément (BBA) as Jablite Floor Insulation High Performance covering Grades 70 and 100. Certificate number 87/1796 Product Sheet 4.

Jabfloor HP + can be used in temperatures up to 80°C. It is therefore suitable for use with underfloor heating systems.

Jabfloor HP + is lightweight and easy to install. There are no requirements for special PPE when installing or cutting Jabfloor. (full installation details are shown later)



## Dimensions

<b>Standard Size</b>	2400 x 1200mm
<b>Standard Thickness</b>	25, 30, 40, 50, 60, 75, 100, 120, 150 and 200mm (Other thicknesses available to order)

## Properties :

Grade	Thermal Conductivity (Lambda) (W/mK)	Design load at 1% nominal compression (kPa)	Design load at 10% nominal compression (kPa)
Jabfloor HP + 70	0.030	20	70
Jabfloor HP +100	0.030	45	100

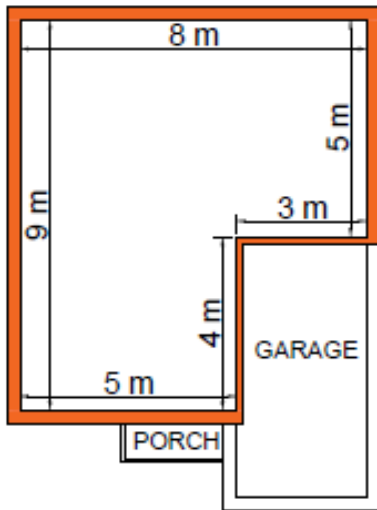
More detailed physical properties are shown on our EPS Datasheet.





## U VALUES

The calculation of heat loss or U value through a floor is based on the ratio of the external perimeter to the area of the floor (P/A Ratio). Example of how to calculate the P/A ratio is shown below.



The perimeter and area are measured to the internal wall finishes as shown on the diagram.

### Example Detached House

$$\text{Perimeter (P)} = 8 + 5 + 3 + 4 + 5 + 9 = 34$$

$$\text{Area (A)} = (5 \times 4) + (8 \times 5) = 60$$

$$\text{P/A Ratio} = 34 \div 60 = 0.57$$

**Note:** The exposed perimeter includes any edges where heat loss may occur. i.e. external walls and those into an unheated space such as a porch or garage.

The table below shows the required thicknesses of Jabfloor HP + 70, 100 and 150 to meet U-values of 0.25, 0.22, 0.20, 0.18, 0.15 and 0.10 W/m<sup>2</sup>K.

The calculations have been based on a suspended concrete beam floor with 100mm thick dense concrete block infill, Jabfloor 70 HP + laid over with 18mm chipboard finish. The calculations have been carried out in accordance with BS EN ISO 13370.

Thickness (mm) Jabfloor HP + 70 and 100						
P/A Ratio	U-values (W/m <sup>2</sup> K)					
	0.25	0.22	0.20	0.18	0.15	0.10
1.00	80	100	110	125	160	250
0.90	80	95	110	125	155	250
0.80	80	95	105	125	155	245
0.70	75	90	105	120	150	245
0.60	75	90	105	120	150	240
0.50	70	85	100	115	145	240
0.40	65	80	90	105	140	230
0.30	55	70	80	100	130	220
0.25	45	60	75	90	120	215
0.20	35	50	65	80	110	205
0.15	25	35	45	60	95	185

NB: Thickness indicated may be obtained using one or two layers of standard thickness product

