

SuperSIPs Structural Insulated Panels

Dimensions

Widths: 300 — 1200 mm.
Lengths: 2.4, 2.7, 3.0 mtr
Thickness:
100, 125, 150, 225 250 mm

Facings:

Thickness std 11 mm OSB3
Available in OSB & CPB facings up to
40 mm thick. Other facing materials Plastic,
Steel, Plywood, Aluminum, etc, on request.

Thermal Conductivity

PU core Conductivity λ 0.023w/m²k (aged k)

U Value

SIP100 - 0.27w/m ² k	SIP175 - 0.14w/m ² k
SIP125 - 0.21w/m ² k	SIP200 - 0.12w/m ² k
SIP150 - 0.17w/m ² k	SIP225 - 0.11w/m ² k

Fire Performance BS EN 476

3mtr x 3mtr OSB panel plasterboard faced
loaded to 35knm, Passed 1 hour 10 mins +
when lined internally with 12.5 mm plasterboard.

Construction Recommendations.

Internal Walls: BS EN ISO 717/1

(Based on SIP100 panel)

With 12.5 mm Acoustic plasterboard on each side
Fire resistance = ½ hour. Acoustic value +/- 45db

With 1 layer 12.5mm sound block & 1 layer
12.5 mm plasterboard = Fire resistance, 1 hour.
Acoustic value up to 68db

External Walls (in accordance with EN520)

The ultimate wall is SuperSIPs 250 with external
brick skin; this combination creates a virtual
zero energy loss walls. Low cost wall using the
100mm panel + external facing, more than
meets UK building regulations.

Roofs

All thicknesses of SuperSIPs panels
are suitable for roofing any building

Loading Capacity Walls

100 mm SIP (our weakest panel)

Axial BS 5268 / EN594

225 kn/m Safety Factor 3 = 75 kn/m

Eccentric BS 5268 / EN 594

122.82 kn/m Safety Factor 3 = 40.94 kn/m

Racking BS 5268 / EN 594

3.10 K nm

Concentrated Load BS 6399

On centre of panel = 7.1 KN

Mid span on Joint = 7.9 KN

Hard Impact BS EN 596, passed

Soft Impact BS 8200, passed

Lateral UDL BS 6399, 23.5 knm²

SuperSIPs 150mm Roofing SIPS

30 mm deflection $\dot{A}/200$ @ 4.2knm
Loaded to 21kn/m² test rig bent

Condensation Walls and Roof

Risk Minimum

Vapor diffusion Polyurethane
= μ 23 & OSB μ 50

Interstitial Condensation

Risk: minimal when used with vapor
checked plasterboard.

SuperSIP Cladding Panels

Suitable for Steel & Concrete Framed
multi storey buildings. Sips are also used
for cladding or infill on Green Oak structures
these Sips are produced in all thickness
and sizes to meet clients specs.