



CONSTRUCTION

Typically minimum 140mm-deep structural frame with timber studs at maximum 600mm centres, clad internally with a layer of 12.5mm thick plasterboard (with vapour barrier). Insulation installed between the studwork, of suitable thickness and density to achieve the required U value (W/m^2K). The external build-up comprises of a layer of minimum 9mm structural sheathing board (e.g. OSB), together with a layer of 9mm SUPALUX® (if mineral wool infill used), or 12mm SUPALUX® if alternative insulation material (e.g. phenolic, PIR, PUR) is used. Please note: that Promat does not advocate use of polystyrene type insulations in fire resistant constructions.

A breather membrane is applied to the outside of the SUPALUX®. The cavity between the SUPALUX® and the external cladding is present to allow ventilation. (The requirement for a cavity will depend on permeability of external leaf, and results from resultant dew point calculation).

An external grade cladding board or system should be fixed either through to timber studwork, or into the timber battens. Sand cement render cannot be directly applied onto the surface of SUPALUX®. If a sand cement render finish is required, then the render should be applied onto expanded metal lath, with expanded metal lath fixed to timber battens to space it away from the SUPALUX® (and to ensure that the SUPALUX® boarding does not support the weight of the render finish).

OVERALL THICKNESS

Nominal 170mm (based on construction above, excluding external cladding).

MAXIMUM HEIGHT

3000mm

NOMINAL WEIGHT

55kg/m²

FIRE PERFORMANCE

30 minutes integrity and insulation

U VALUE

0.27 W/m^2K (based on construction above, rock wool insulation $\lambda = 0.035 W/mK$)

IMPORTANT NOTE:

All timber frame members should be designed in accordance with the requirements of BS 5268 (Structural use of timber).

Thickness and type of structural sheathing board to be advised by structural engineer.

AUTHORITY: PROMAT RECOMMENDATION - BASED ON IN-HOUSE KNOWLEDGE AND TECHNICAL EXPERIENCE

