

BUILDING A SUSTAINABLE FUTURE



# AGLITE®

LIGHTWEIGHT AGGREGATE BLOCKS  
with **STRANLITE® Party Wall**

Shown here is a SAP 2005 calculation for a typical **3 bedroom mid terrace house** which demonstrates compliance with the new Part L requirements. By incorporating **AGLITE** and **STRANLITE** blocks into the calculations, compliance is straightforward and Plasmor concrete blocks also provide extra benefits - excellent sound insulation, fire resistance, durability and a cost effective choice for all types of construction.

## FACTORS EMPLOYED IN ACHIEVING TYPICAL COMPLIANCE

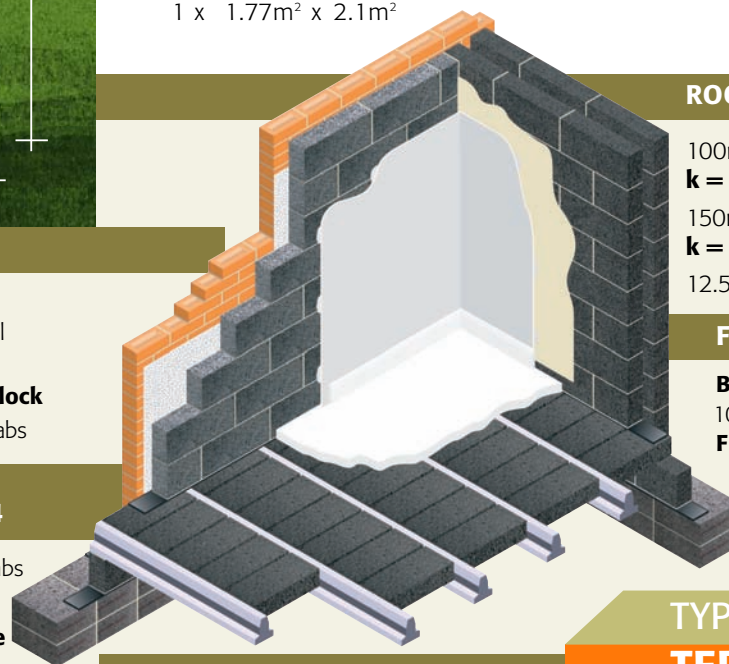
- **1 Door** UPVC or Wood, semi glazed to achieve **U = 2.40**
  - **Warm Living Area** = **25m<sup>2</sup>**
  - **Windows** UPVC or Wood, Low E Glass /16mm air gap to achieve **U = 1.80**
  - **Total Opening** of floor area = **15.70%**
  - **Glazing** = **11.00m<sup>2</sup>**
  - **3 x Low Energy Lights** minimum required
  - **Air Pressure** set to **10Pa/m<sup>2</sup>**
- 6 x 0.9m<sup>2</sup> x 1.35m<sup>2</sup>  
1 x 1.77m<sup>2</sup> x 2.1m<sup>2</sup>

### WALLS - MAIN

- 102mm Facing Brick
- 100mm Injected Cavity Wall Insulation **k = 0.040**
- 100mm **Plasmor Aglite Block**
- 12.5mm Plasterboard on dabs

### ROBUST DETAILS PARTY WALL EWM-4

- 12.5mm Plasterboard on dabs
- 8mm Scratch Finish
- 100mm **Plasmor Stranlite**
- 75mm Clear Cavity
- 100mm **Plasmor Stranlite**
- 8mm Scratch Finish
- 12.5mm Plasterboard on dabs
- Using Approved Document E Wall Ties 'Tie Type A' Butterfly Ties



### ROOF

- 100mm Standard Insulation **k = 0.043** between
- 150mm Standard Insulation **k = 0.043** over
- 12.5mm Plasterboard

### FLOOR

- Block and Beam**
- 100mm **Stranlite JB1 Flooring Block**
- 60mm Insulated Board **k = 0.022**
- 50mm Screed

### HEATING

- 90.1% Efficient Gas Combi Boiler
- Controls**
- Thermostatic Radiator Valves
- Room Stat and Programmer
- Secondary Heating**
- 85% Efficient Condensing Gas Fire

### TYPICAL RESULT

**TER 22.02**

**DER 22.02**

Where DER = < TER and General Requirements Compliant

**= PASS**

**FOR 25% IMPROVEMENT** see over

**Robust Details Wall Type EWM-2** is applicable with this construction type using lightweight plaster. TER & DER will need re-calculating

TECHNICAL HELPLINES: 01977 673221 ■ 01767 314545



## OPTIONS TO IMPROVE YOUR PASS BY 25% AND REDUCE YOUR CARBON FOOTPRINT

- Change Windows to a Bereco Style Casement Window
- Inject Cavity with High Specification Insulation **K = 0.033**
- Modern Condensing Gas fire
- Air pressure set to 8pa
- Use Full Zone Control for Heating System
- Increase Floor Insulation to 100mm
- Increase Loft Insulation to 150mm between /150mm over **K = 0.040**
- 90.1% Efficient Gas Standard Boiler with 6.5m<sup>2</sup> Solar Panels with a 150 litre Cylinder for Heating and 110 litre for Hot Water from Standard Boiler

The list shows examples of how 'improvements' can be easily made to a dwelling. This data sheet cannot be used to show compliance with SAP and must be calculated on an independent basis by an authorised assessor.

### TYPICAL RESULT

**TER = 22.02**

**DER = 16.43**

Where DER < TER and General Requirements Compliant

**= PASS**

**25% IMPROVEMENT**

This level of improvement will achieve **Code For Sustainable Homes Level 3** compliance

