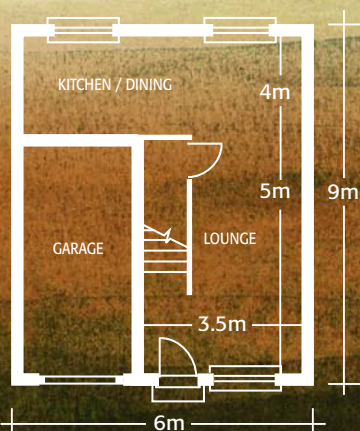


BUILDING A SUSTAINABLE FUTURE

**WALLS - MAIN**

102mm Facing Brick  
100mm STD Insulation  $k = 0.037$   
100mm **Plasmor Fibolite Block**  
 $3.6N/mm^2$   
12.5mm Plasterboard on dabs

**Garage** (external not Insulated)  
100mm **Plasmor Fibolite Block**  
 $3.6N/mm^2$   
100mm STD Insulation  $k = 0.037$   
100mm **Plasmor Fibolite Block**  
 $3.6N/mm^2$   
12.5mm Plasterboard on dabs

**HEATING**

90.1% Efficient Gas Combi Boiler  
**Controls**  
Thermostatic Radiator Valves  
- Room Stat and Programmer  
**No Secondary Heating**

**FLOOR**

**Ground Block and Beam**  
100mm **Stranlite JB1 Flooring Block**  
60mm Board  $k = 0.023$   
50mm Screed  
**Above Garage**  
19mm Chipboard  
200mm Roll between Joists  $k = 0.040$   
12.5mm Plasterboard

**FIBOLITE**<sup>®</sup>

ULTRA LIGHTWEIGHT AGGREGATE BLOCKS

with **STRANLITE**<sup>®</sup> Party Wall

Shown here is a SAP 2005 calculation for a typical **3 bedroom semi detached house** with integral garage, which demonstrates compliance with the new Part L requirements. By incorporating **FIBOLITE** 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** =  $12.5m^2$
- **Total Opening** of floor area =  $18\%$
- **4 x Low Energy Lights** minimum required
- **Windows** UPVC or Wood, Low E Glass /16mm air gap to achieve  $U = 1.80$
- **Glazing** =  $17.22m^2$ 
  - 5 x  $1.2m^2$  x  $1.35m^2$
  - 1 x  $1.77m^2$  x  $2.1m^2$
  - 1 x  $0.9m^2$  x  $2.1m^2$
  - 2 x  $0.9m^2$  x  $1.35m^2$
  - 1 x  $1.05m^2$  x  $1.05m^2$
- **Air Pressure** set to  $10Pa/m^2$

**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**

150mm Roll  $k = 0.040$  over  
100mm Roll  $k = 0.040$  between  
12.5mm Plasterboard

**TYPICAL RESULT****TER 21.97****DER 21.97**

Where  $DER \leq TER$  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

**Plasmor**  
CONCRETE PRODUCTS

**FIBOLITE®**

ULTRA LIGHTWEIGHT AGGREGATE BLOCKS

with **STRANLITE® Party Wall**

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

- Use Argon Filled Glazing
- Use High Performance Cavity Insulation **k = 0.032**
- Increase Floor Insulation to 100mm Higher Performance **k = 0.032**
- Change Boiler to a Standard from a Combi
- Use Solar Panels (approximately 6.75m<sup>2</sup>) to heat water
- Use Full Zone Control for heating
- Specify a Modern Gas Fire as secondary heating

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 = 21.97**

**DER = 16.44**

Where DER < TER and General Requirements Compliant

**= PASS**

**25% IMPROVEMENT**

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



### SAP ENERGY RATING SERVICE

Using government approved computer software, our fully trained technical support staff can work with you to produce SAP rating certificates for your projects - contact our technical/sales offices to discuss our service and charges.