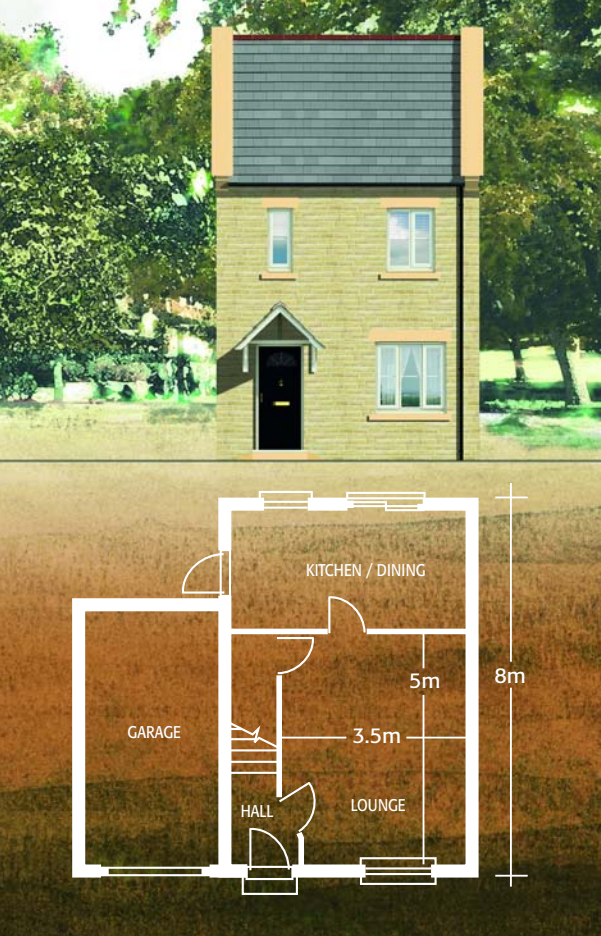


BUILDING A SUSTAINABLE FUTURE

**FIBOLITE**<sup>®</sup>

ULTRA LIGHTWEIGHT AGGREGATE BLOCKS

Shown here is a SAP 2005 calculation for a typical **3 bedroom detached house**, with or without adjoining 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**

- **2 Doors** UPVC or Wood, semi glazed to achieve **U = 2.40**
  - **Warm Living Area** = **18m<sup>2</sup>**
  - **Windows** UPVC or Wood, Low E Glass /16mm air gap to achieve **U = 1.80**
  - **Total Opening** = **17.3%** of floor area
  - **Glazing** = **11.82m<sup>2</sup>**
  - **4 x Low Energy Lights** minimum required
  - **Air Pressure** set to **10Pa/m<sup>2</sup>**
- 4 x 1.2m<sup>2</sup> x 1.2m<sup>2</sup>  
 1 x 1.2m<sup>2</sup> x 1.5m<sup>2</sup>  
 1 x 1.77m<sup>2</sup> x 2.1m<sup>2</sup>  
 1 x 0.63m<sup>2</sup> x 0.9m<sup>2</sup>

**WALL**

102mm Facing Brick  
 100mm Cavity Wall Batts **k = 0.037**  
 100mm **Plasmor Fibolite 3.6N/mm<sup>2</sup>**  
 12.5mm Plasterboard on dabs

**FLOOR**

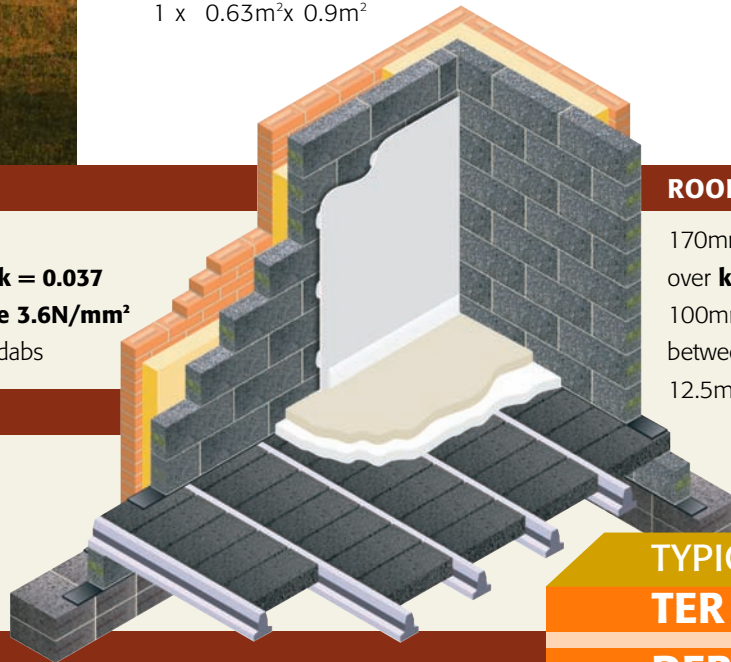
100mm **Stranlite JB1 Flooring Block**  
 85mm Thermal Board **k = 0.023**  
 50mm Screed

**HEATING**

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

**ROOF**

170mm Mineral Wool Roll over **k = 0.040**  
 100mm Mineral Wool Roll between **k = 0.040**  
 12.5mm Plasterboard

**TYPICAL RESULT****TER 24.82****DER 24.79**

Where DER < TER and  
 General Requirements  
 Compliant

**= PASS****FOR 25% IMPROVEMENT** see over

# FIBOLITE®

ULTRA LIGHTWEIGHT AGGREGATE BLOCKS

## OPTIONS TO IMPROVE YOUR PASS BY 47% AND REDUCE YOUR CARBON FOOTPRINT

- Change the Gas Boiler to a 350% efficient Air to Water Heat Pump
- Under Floor Heating to be specified

Reduce the specification for cost saving purposes

- Change from 100mm Cavity to a 75mm Cavity k0.037
- Change Mineral Wool Roll Loft Insulation from 100/170mm to 100/100mm (200mm overall)
- Change Floor Thermal Board Insulation from 85mm to 60mm

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 = 35.28**

**DER = 18.67**

Where DER < TER and General Requirements Compliant

**= PASS**



### 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.

**47% IMPROVEMENT**

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