

Regulations Compliance Report

Approved Document L1A, 2013 Edition, England assessed by Stroma FSAP 2012 program, Version: 1.0.5.50
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Project Information:

Assessed By: Robert Stubbings (STRO035952)

Building Type: Detached House

Dwelling Details:

NEW DWELLING DESIGN STAGE

Total Floor Area: 533.18m²

Site Reference : 40827

Plot Reference: Norbrook House

Address : Norbrook House, Caversham, Reading, RG4 7EB

Client Details:

Name:

Address :

**This report covers items included within the SAP calculations.
It is not a complete report of regulations compliance.**

1a TER and DER

Fuel for main heating system: Electricity

Fuel factor: 1.55 (electricity)

Target Carbon Dioxide Emission Rate (TER)

21.48 kg/m²

Dwelling Carbon Dioxide Emission Rate (DER)

10.45 kg/m²

OK

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)

64.5 kWh/m²

Dwelling Fabric Energy Efficiency (DFEE)

60.3 kWh/m²

OK

2 Fabric U-values

Element

Average

Highest

External wall

0.15 (max. 0.30)

0.20 (max. 0.70)

OK

Floor

0.11 (max. 0.25)

0.11 (max. 0.70)

OK

Roof

0.14 (max. 0.20)

0.17 (max. 0.35)

OK

Openings

1.80 (max. 2.00)

1.80 (max. 3.30)

OK

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals

3.00 (design value)

Maximum

10.0

OK

4 Heating efficiency

Main Heating system:

Heat pumps with radiators or underfloor heating - electric
Mitsubishi Electric Ecodan 14.0 kW

Secondary heating system: None

5 Cylinder insulation

Hot water Storage:

Measured cylinder loss: 3.92 kWh/day
Permitted by DBSCG: 3.92 kWh/day

OK

Primary pipework insulated:

Yes

OK

Regulations Compliance Report

6 Controls

Space heating controls	TTZC by plumbing and electrical services	OK
Hot water controls:	Cylinderstat	OK
	Independent timer for DHW	OK
Boiler interlock:	Yes	OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100.0%	
Minimum	75.0%	OK

8 Mechanical ventilation

Continuous supply and extract system		
Specific fan power:	1.06	
Maximum	1.5	OK
MVHR efficiency:	93%	
Minimum	70%	OK

9 Summertime temperature

Overheating risk (Thames valley):

Based on:

Overshading:	Average or unknown
Windows facing: South	2.14m ²
Windows facing: South	2.14m ²
Windows facing: South	2.14m ²
Windows facing: South	2.14m ²
Windows facing: East	2.6m ²
Windows facing: East	2.6m ²
Windows facing: South	3.17m ²
Windows facing: West	2.6m ²
Windows facing: West	2.6m ²
Windows facing: West	2.6m ²
Windows facing: East	0.92m ²
Windows facing: East	0.92m ²
Windows facing: East	0.92m ²
Windows facing: East	0.92m ²
Windows facing: East	0.92m ²
Windows facing: North	13.71m ²
Windows facing: West	5.6m ²
Windows facing: North	4.29m ²
Windows facing: North	4.29m ²
Windows facing: North	4.29m ²
Windows facing: North	4.29m ²
Windows facing: East	2.14m ²
Windows facing: North	5.19m ²
Windows facing: North	5.19m ²
Windows facing: North	5.19m ²
Windows facing: North	5.19m ²
Windows facing: North	1.91m ²
Windows facing: West	1.15m ²
Windows facing: South	1.9m ²

Regulations Compliance Report

Windows facing: South	1.9m ²
Windows facing: South	1.17m ²
Windows facing: South	1.9m ²
Windows facing: South	1.9m ²
Windows facing: South	1.62m ²
Windows facing: North	1.16m ²
Windows facing: North	1.16m ²
Windows facing: North	1.9m ²
Windows facing: North	1.9m ²
Windows facing: North	1.9m ²
Windows facing: North	1.9m ²
Windows facing: North	1.9m ²
Windows facing: West	0.92m ²
Windows facing: South	1.17m ²
Windows facing: South	1.17m ²
Windows facing: North	1.17m ²
Windows facing: North	1.17m ²
Windows facing: North	1.17m ²
Roof windows facing: Horizontal	0.7m ²
Roof windows facing: Horizontal	0.58m ²
Roof windows facing: Horizontal	3.86m ²
Roof windows facing: Horizontal	3.86m ²
Ventilation rate:	4.00

10 Key features

Air permeability	3.0 m ³ /m ² h
Floors U-value	0.11 W/m ² K