

# Howe Park PassivHaus

Alan Budden RIBA

Director

eco design consultants

[www.ecodesignconsultants.co.uk](http://www.ecodesignconsultants.co.uk)

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Air changes per hour  $N_{50}(\text{ACH})=0.6\text{h}^{-1}$  @50Pa



**Our Results: 0.07**

Effective leakage area  $0.002\text{m}^2$   
44mm x 44mm

**Best in UK previously 0.12**

**Best in Germany 0.05**



# Certificate of Air Test

Issued By Stroma Technology Ltd



2731

## Details of Test

Dwelling tested:	Howe Park Wood, Hengistbury Lane, Tattenhoe, Milton Keynes, MK4 3DB	Nett Floor Area, $A_F$ :	72.70 m <sup>2</sup>
		Envelope Area, $A_E$ :	400.34 m <sup>2</sup>
		Volume, $V$ :	497.33 m <sup>3</sup>
On behalf of:	Parkway Construction	Geometry Prepared by:	Jonathon Teale of Stroma
Test Date:	23 <sup>rd</sup> May 2012	Geometry Verified by:	Barry White of Parkway Construction
Certificate Date:	24 <sup>th</sup> May 2012	Certificate No.:	PW 05-12-28691 T1

## Test Conditions and Temporary Sealing at the Time of Both Tests

	Response
All external doors and windows closed?	Yes
All internal doors open?	Yes
All extracts sealed? Inc. kitchen and bathroom(s) extracts and the oven hood.	Yes
Temporary seals to drains, plugs, or overflows?	No
Combustion appliances turned off, and sealed? If located in the conditioned space of the dwelling and it is not a balanced?	Yes
Trickle vents and/or passive ventilation temporary sealed?	No
Fireplace temporary sealed?	N/A
All building works completed to the air boundary envelope?	Yes

## Deviation(s) from ATTMA TS1

None

## Test Result and Performance Characteristics

This is to certify that the above named building has been tested for air permeability in accordance with ATTMA TS1 undertaken with the conditions stated above.

The Key Leakage Characteristics of the dwelling are:

	Depressurisation	Pressurisation
Air Change Rate, $n_{50}$ :	0.07 h <sup>-1</sup> @ 50 Pa	0.06 h <sup>-1</sup> @ 50 Pa
Air Permeability, $AP_{50}$ :	0.09 m <sup>3</sup> h <sup>-1</sup> . m <sup>-2</sup> @ 50 Pa	0.09 m <sup>3</sup> h <sup>-1</sup> . m <sup>-2</sup> @ 50 Pa
Effective Leakage Area:	0.002 m <sup>2</sup> @ 50 Pa	0.002 m <sup>2</sup> @ 50 Pa
Correlation of results, $r^2$ :	0.9974	0.9865
Slope, $n$ :	0.60	0.67
Air Flow Coefficient, $C_{env}$ :	3.50 m <sup>3</sup> h <sup>-1</sup> . Pa <sup>-n</sup>	2.29 m <sup>3</sup> h <sup>-1</sup> . Pa <sup>-n</sup>
Intercept, $C_L$ :	3.49 m <sup>3</sup> h <sup>-1</sup> . Pa <sup>-n</sup>	2.28 m <sup>3</sup> h <sup>-1</sup> . Pa <sup>-n</sup>

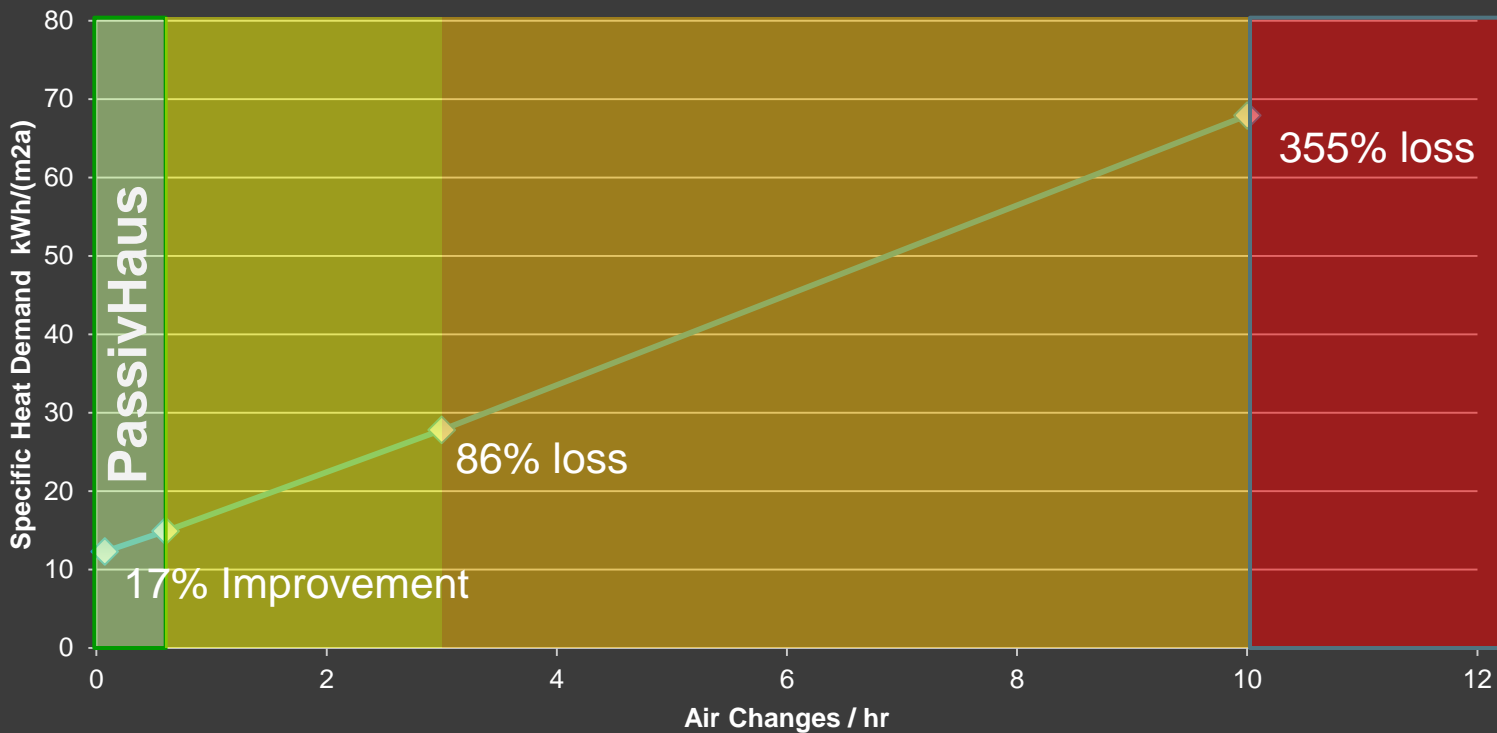
Signed:

Name: Peter Williams

Position: Engineer

On Behalf of Stroma Technology Ltd.

# Airtightness accounts significantly to heat losses













# Great crested Newts





# Great crested Newts







































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