## PREDICTED ENERGY ASSESSMENT

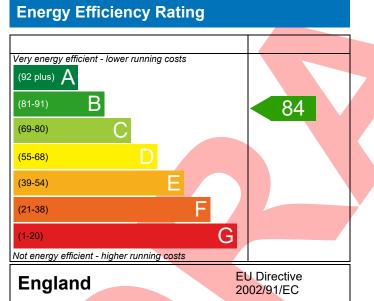


Plot 31, Land off Hawks Road, Welton, Lincoln, LN2 3BS Dwelling type: Date of assessment: Produced by: Total floor area:

House, Semi-Detached 19/07/2022 Jake Eaton 81.47 m<sup>2</sup>

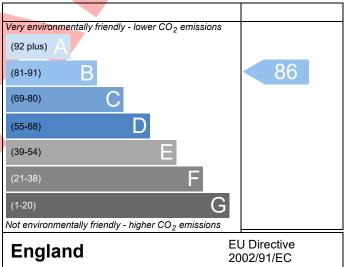
This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance Certificate will be created for the property. This will include more detailed information about the energy performance of the completed property.

The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide  $(CO_2)$  emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide  $(CO_2)$  emissions. The higher the rating the less impact it has on the environment.

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.



Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r19

## **BUILDING REGULATION COMPLIANCE** Calculation Type: New Build (As Designed)



Reference         Plot 31, Land off Hawks Road, Welton, Lincoln, LN2 3BS           AP Rating         84 B         DER         18.03         TER         18.89           AP Rating         84 B         DER         18.03         TER         18.89           CO, Emissions (L/year)         1.29         DFEE         46.99         TFEE         54.75           Seneral Requirements Compliance         Pass         % DER         46.99         TFEE         54.75           Beneral Requirements Compliance         Pass         % DER         46.99         TFEE         54.75           Beneral Requirements Compliance         Pass         % DER         46.99         TFEE         54.75           Deneral Requirements Compliance         Pass         % DER         46.99         TFEE         54.75           UMARY FOR INPUT DATA FOR New Build (As Designed)         riterion 1 - Achieving the TER and TEE rate         4         4         56           Grad Carbon Dioxide Emission Rate (TER)         18.03         kgC0.3/m²         Pass         6.86 (4.6%)         kgC0.3/m²         Pass           Dwelling Carbon Dioxide Emission Rate (TER)         54.75         kWh/m²/yr         7.8 (-14.2%)         kWh/m²/yr         Pass           Target Fabric Energy Efficiency (TFEE)         54.	Property Reference	LN2 3BS Plot 31				Issued on Date	19/07/2022
Property         [Plot 31, Land off Hawks Road, Welton, Lincoln, LN2 3BS           APR Rating         84 B         DER         18.03         TER         18.89           SAP Rating         84 B         DER         18.03         TER         18.89           Schwirten Mark         86 B         % DER         18.03         TER         18.89           Schwirten Mark         86 B         % DER         46.99         TFEE         54.75           Schwirten Mark         Compliance         Pass         % DEE         46.99         TFEE         54.75           Schwirten Mark         Mark Eaton, Jake Eaton, Tel: 01400283471, Jake@aeratech.co.uk         Assessor ID         P711-0001           Litent         UMARY FOR INPUT DATA FOR New Build (As Designed)         Mains gas         Target For I         Assessor ID         P711-0001           UMARY FOR INPUT DATA FOR New Build (As Designed)         Mains gas         I         I         I         I           UMARY FOR INPUT DATA FOR New Build (As Designed)         Mains gas         I </td <td>Assessment</td> <td>001</td> <td></td> <td>Pro</td> <td>op Type Ref</td> <td>Greenwich (Type B)</td> <td></td>	Assessment	001		Pro	op Type Ref	Greenwich (Type B)	
AP Rating         84 B         DER         18.03         TER         18.89           CO_Emissions (t/year)         1.29         DFEE         46.99         TFEE         54.75           Seneral Requirements Compliance         Pass         % DER         4.55         14.18           Assessor Details         Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, jake@aeratech.co.uk         Assessor ID         P711-0001           Client         Pass         % DFE         14.18         14.18           UMARY FOR INPUT DATA FOR New Build (As Designed)         Assessor ID         P711-0001           riterion 1 - Achieving the TER and TFEE rate         a TER and DER         480.9         kgC02/m²           Fuel for main heating         Mains gas         480.9         kgC02/m²         Pass           Fuel for Cor         1.00 (mains gas)         kgC02/m²         Pass         -0.86 (-4.6%)         kgC02/m²         Pass           Dwelling Carbon Dioxide Emission Rate (DER)         18.03         kgC02/m²         Pass         -0.86 (-4.6%)         kgC02/m²         Pass           Target Fabric Energy Efficiency (TFEE)         54.75         kWh/m²/yr         v.8 (-14.2%)         kWh/m²/yr         Pass           Dwelling Fabric Energy Efficiency (DFEE)         54.75         kWh/m²/yr         v.8							]
invironmental          86 B       % DER       4.55         CO2 Emissions (t/year)       1.29       DFEE       46.99         Seneral Requirements Compliance       Pass       % DFE       14.18         Assessor Details       Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, jake@aeratech.co.uk       Assessor ID       P711-0001         Client       Image: Compliance       Pass       % DFE       14.18         UMARY FOR INPUT DATA FOR New Build (As Designed)       Assessor ID       P711-0001         riterion 1 – Achieving the TER and TFEE rate       Image: Compliance       Pass         a TER and DER       Image: Compliance       Image: Compliance         Fuel for main heating       Image: Compliance       Pass         Fuel for main heating       Image: Compliance       Pass         Fuel for Dioxide Emission Rate (TER)       Image: Compliance       Pass         Dwelling Carbon Dioxide Emission Rate (DER)       Image: Compliance       Pass         -0.86 (-4.6%)       kgCO2/m <sup>2</sup> Pass         b TFEE and DFEE       S4.75       kWh/m <sup>2</sup> /yr         Target Fabric Energy Efficiency (TFEE)       S4.75       kWh/m <sup>2</sup> /yr         Dwelling Fabric Standards       Element       Average       Highest         Element       O.19 (max. 0.30)       O.19	Property	Plot 31, Land off Hawks	Road, Welton, L	Incoln, LN2 3BS			
CO2 Emissions (t/year)       1.29       DFEE       46.99       TFEE       54.75         General Requirements Compliance       Pass       % DFEE       14.18         Assessor Details       Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, jake@aeratech.co.uk       Assessor ID       P711-0001         Signed State       Prise       1.00       Prise       Prise       Prise         UMARY FOR INPUT DATA FOR New Build (As Designed)       Prise       Prise       Prise       Prise         Fuel for main heating       Mains.gas       Prise       Prise       Prise       Prise         Fuel for main heating       1.00 (mains.gas)       Prise       Prise       Prise       Prise         Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²       Pass       Pass         -0.86 (-4.6%)       kgCO2/m²       Pass       -0.86 (-4.6%)       kgCO2/m²       Pass         b TFEE and DFEE       54.75       kWh/m²/yr       Pass       -7.8 (-14.2%)       kWh/m²/yr       Pass         riterion 2 - Limits on design flexibility       1.100 (max.0.30)       0.19 (max.0.70)       Pass         Limiting Fabric Standards       2 Fabric U-values       Highest       Element       Average       Highest         Party wall	SAP Rating		84 B		18.03	TER	18.89
Seneral Requirements Compliance       Pass       % DFEE       14.18         Assessor Details       Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, jake@aeratech.co.uk       Assessor ID       P711-0001         Lient       UMARY FOR INPUT DATA FOR New Build (As Designed)       riterion 1 – Achieving the TER and TFEE rate       a         a TER and DER       Fuel for main heating       Mains.gas           Fuel for main heating       1.00 (mains.gas)         Pass         Target Carbon Dioxide Emission Rate (TER)       18.89       kgCO2/m²       Pass         bwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²       Pass         -0.86 (-4.6%)       kgCO2/m²       Pass          b TFEE and DFEE       54.75       kWh/m²/yr       Pass         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m²/yr       Pass         viterion 2 - Limits on design flexibility       46.99       kWh/m²/yr       Pass         triterion 2 - Limits on design flexibility       Limiting Fabric Standards       2 Fabric U-values       Highest         Element       Average       Highest       Pass       Pass         Floor       0.14 (max. 0.20)       0.14 (max. 0.70)       Pass         Roof       0.11	Environmental						
Assessor Details       Mr. Jake Eaton, Jake Eaton, Tel: 01400283471, jake@aefatech.co.uk       Assessor ID       P711-0001         Client       UMARY FOR INPUT DATA FOR New Build (As Designed)       riterion 1 – Achieving the TER and TFEE rate         a TER and DER       Fuel for main heating       Mains.gas       Image: Carbon Dioxide Emission Rate (TER)       Image: Carbon Dioxide Emission Rate (TER)       Image: Carbon Dioxide Emission Rate (DER)       Image: Carbon Dioxide Emission Rate			1		46.99		54.75
Client         UMARY FOR INPUT DATA FOR New Build (As Designed)         riterion 1 – Achieving the TER and TFEE rate         a TER and DER         Fuel for main heating       Mains gas         Fuel for colspan="2">Image: Second Colspan="2">Image: Second Colspan="2">Second Colspan="2"Second Colspan="2">Second Colspan="2"Second Colspan="2"Second Colsp	General Requirements	Compliance	Pass	% DFEE <tfee< td=""><td></td><td>14.18</td><td></td></tfee<>		14.18	
UMARY FOR INPUT DATA FOR New Build (As Designed)         riterion 1 – Achieving the TER and TFEE rate         a TER and DER         Fuel for main heating       Mains.gas         Fuel for or main heating       I.00 (mains.gas)         Target Carbon Dioxide Emission Rate (TER)       I8.89         Dwelling Carbon Dioxide Emission Rate (DER)       I8.03         FIEE and DFEE       KgCO2/m²         Target Fabric Energy Efficiency (TFEE)       54.75         Dwelling Fabric Energy Efficiency (DFEE)       54.75         Verage       KWh/m²/yr         -7.8 (-14.2%)       KWh/m²/yr         Pass         riterion 2 – Limits on design flexibility         Limiting Fabric Standards         2 Fabric U-values         Element       Average         Highest       0.19 (max. 0.30)       0.19 (max. 0.70)         Pass       0.19 (max. 0.20)       -         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Assessor Details Mr	. Jake Eaton, Jake Eaton,	Tel: 014002834	71, jake@aeratec	h.co.uk	Assessor ID	P711-0001
riterion 1 – Achieving the TER and TFEE rate a TER and DER Fuel for main heating Fuel factor Target Carbon Dioxide Emission Rate (TER) Dwelling Carbon Dioxide Emission Rate (DER) <b>18.03</b> <b>1.00 (mains gas)</b> <b>13.89</b> <b>13.03</b> <b>1.00 (mains gas)</b> <b>13.03</b> <b>1.00 (mains gas)</b> <b>13.03</b> <b>1.00 (mains gas)</b> <b>13.03</b> <b>1.00 (mains gas)</b> <b>13.03</b> <b>1.00 (mains gas)</b> <b>1.00 (mains distance of the second se</b>	Client						
a TER and DER         Fuel for main heating         Fuel factor         Target Carbon Dioxide Emission Rate (TER)         Dwelling Carbon Dioxide Emission Rate (DER)         18.03         -0.86 (-4.6%)         kgCO2/m²         Pass         r/d.42%)         kWh/m²/yr         Pass         riterion 2 - Limits on design flexibility         Limiting Fabric Standards         Z Fabric U-values         Element       Average         Katernal wall       0.19 (max. 0.30)         0.19 (max. 0.70)       Pass         Floor       0.14 (max. 0.25)         0.14 (max. 0.20)       <	SUMARY FOR INPUT DA	TA FOR New Build (As De	esigned)				
Fuel for main heating       Mains gas         Fuel factor       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       18.89       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²         De TFEE and DFEE       54.75       kWh/m²/yr         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       54.75       kWh/m²/yr         Varietron 2 - Limits on design flexibility       46.99       kWh/m²/yr         riterion 2 - Limits on design flexibility       Varage       Highest         Element       Average       Highest         External wall       0.19 (max. 0.30)       0.19 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Criterion 1 – Achieving t	he TER and TFEE rate					
Fuel factor       1.00 (mains gas)         Target Carbon Dioxide Emission Rate (TER)       18.89       kgCO <sub>2</sub> /m <sup>2</sup> Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO <sub>2</sub> /m <sup>2</sup> Pass         -0.86 (-4.6%)       kgCO <sub>2</sub> /m <sup>2</sup> Pass <b>b TFEE and DFEE</b> -0.86 (-4.6%)       kWh/m <sup>2</sup> /yr         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m <sup>2</sup> /yr         Dwelling Fabric Energy Efficiency (DFEE)       46.99       kWh/m <sup>2</sup> /yr         -7.8 (-14.2%)       kWh/m <sup>2</sup> /yr       Pass         riterion 2 - Limits on design flexibility       2       Fabric Standards         2 Fabric U-values       Element       Average       Highest         External wall       0.19 (max. 0.30)       0.19 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	<u>1a TER and DER</u>						
Target Carbon Dioxide Emission Rate (TER)       18.89       kgCO2/m²         Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²         -0.86 (-4.6%)       kgCO2/m²       Pass         b TFEE and DFEE       -0.86 (-4.6%)       kgCO2/m²         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       54.75       kWh/m²/yr         Target Fabric Standards       2       Fabric Standards         2 Fabric U-values       Element       Average       Highest         External wall       0.19 (max. 0.30)       0.19 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.14 (max. 0.25)       0.14 (max. 0.35)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Fuel for main heating	5	Mains ga	IS			
Dwelling Carbon Dioxide Emission Rate (DER)       18.03       kgCO2/m²       Pass         -0.86 (-4.6%)       kgCO2/m²       Pass         b TFEE and DFEE       54.75       kWh/m²/yr         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       46.99       kWh/m²/yr         -7.8 (-14.2%)       kWh/m²/yr       Pass         riterion 2 - Limits on design flexibility       -7.8 (-14.2%)       kWh/m²/yr         Limiting Fabric Standards       2       Fabric U-values       Fabric U-values         Element       Average       Highest       Pass         Party wall       0.00 (max. 0.30)       0.19 (max. 0.70)       Pass         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Fuel factor		1.00 (ma	ins gas)			
-0.86 (-4.6%)       kgCO2/m²         b TFEE and DFEE       54.75       kWh/m²/yr         Target Fabric Energy Efficiency (TFEE)       54.75       kWh/m²/yr         Dwelling Fabric Energy Efficiency (DFEE)       46.99       kWh/m²/yr         •7.8 (-14.2%)       kWh/m²/yr       Pass         riterion 2 – Limits on design flexibility       14.2%)       V         Limiting Fabric Standards       2       Fabric U-values         Element       Average       Highest         External wall       0.19 (max. 0.30)       0.19 (max. 0.70)       Pass         Party wall       0.00 (max. 0.20)       -       Pass         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Target Carbon Dioxid	le Emission Rate (TER)	18.89				
b TFEE and DFEE         Target Fabric Energy Efficiency (TFEE)         Dwelling Fabric Energy Efficiency (DFEE)         46.99         -7.8 (-14.2%)         kWh/m²/yr         Pass         riterion 2 – Limits on design flexibility         Limiting Fabric Standards         2 Fabric U-values         Element       Average         External wall       0.19 (max. 0.30)       0.19 (max. 0.70)         Party wall       0.00 (max. 0.20)       -         Floor       0.14 (max. 0.25)       0.14 (max. 0.70)       Pass         Roof       0.11 (max. 0.20)       0.12 (max. 0.35)       Pass	Dwelling Carbon Dio	xide Emission Rate (DER)					Pass
Target Fabric Energy Efficiency (TFEE)54.75kWh/m²/yrDwelling Fabric Energy Efficiency (DFEE)46.99kWh/m²/yr-7.8 (-14.2%)kWh/m²/yrPassriterion 2 – Limits on design flexibilityLimiting Fabric Standards2 Fabric U-valuesHighestElementAverageHighestExternal wall0.19 (max. 0.30)0.19 (max. 0.70)PassParty wall0.00 (max. 0.20)-PassFloor0.14 (max. 0.25)0.14 (max. 0.70)PassRoof0.11 (max. 0.20)0.12 (max. 0.35)Pass			-0.86 (-4.	.6%)		kgCO <sub>2</sub> /m <sup>2</sup>	
Dwelling Fabric Energy Efficiency (DFEE)     46.99     kWh/m²/yr       -7.8 (-14.2%)     kWh/m²/yr     Pass       riterion 2 - Limits on design flexibility     Limiting Fabric Standards     2       2 Fabric U-values     Average     Highest       Element     0.19 (max. 0.30)     0.19 (max. 0.70)     Pass       Party wall     0.00 (max. 0.20)     -     Pass       Floor     0.14 (max. 0.25)     0.14 (max. 0.70)     Pass       Roof     0.11 (max. 0.20)     0.12 (max. 0.35)     Pass			<b>F</b> 4 <b>F</b> 5				
-7.8 (-14.2%)     kWh/m²/yr     Pass       riterion 2 - Limits on design flexibility     Limiting Fabric Standards       2 Fabric U-values     Highest       Element     Average     Highest       External wall     0.19 (max. 0.30)     0.19 (max. 0.70)       Party wall     0.00 (max. 0.20)     -       Floor     0.14 (max. 0.25)     0.14 (max. 0.70)       Roof     0.11 (max. 0.20)     0.12 (max. 0.35)							
riterion 2 – Limits on design flexibility Limiting Fabric Standards 2 Fabric U-values Element Average Highest External wall 0.19 (max. 0.30) 0.19 (max. 0.70) Pass Party wall 0.00 (max. 0.20) - Pass Floor 0.14 (max. 0.25) 0.14 (max. 0.70) Pass Roof 0.11 (max. 0.20) 0.12 (max. 0.35) Pass	Dweiling Fabric Energ	gy Emclency (DFEE)		20/1	7		Dass
Limiting Fabric Standards           2 Fabric U-values         Average         Highest           Element         0.19 (max. 0.30)         0.19 (max. 0.70)         Pass           Party wall         0.00 (max. 0.20)         -         Pass           Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass	Criterion 2 - Limits on d	esign flevihility	-7.8 (-14)	.270)		KVV11/111 / y1	Pass
Z Fabric U-values         Average         Highest           Element         0.19 (max. 0.30)         0.19 (max. 0.70)         Pass           Party wall         0.00 (max. 0.20)         -         Pass           Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass							
Element         Average         Highest           External wall         0.19 (max. 0.30)         0.19 (max. 0.70)         Pass           Party wall         0.00 (max. 0.20)         -         Pass           Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass							
External wall         0.19 (max. 0.30)         0.19 (max. 0.70)         Pass           Party wall         0.00 (max. 0.20)         -         Pass           Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass		Av.o	rago		ighost		
Party wall         0.00 (max. 0.20)         -         Pass           Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass			_		-	1)	Pass
Floor         0.14 (max. 0.25)         0.14 (max. 0.70)         Pass           Roof         0.11 (max. 0.20)         0.12 (max. 0.35)         Pass					10 (1107. 0.70	5)	
Roof 0.11 (max. 0.20) 0.12 (max. 0.35) Pass				0.	14 (max. 0.70	))	
							Pass
Openings 1.40 (max. 2.00) 1.40 (max. 3.30) Pass	Openings	1.40	) (max. 2.00)	1.	40 (max. 3.30	))	Pass
2a Thermal bridging	2a Thermal bridging						
Thermal bridging calculated from linear thermal transmittances for each junction	Thermal bridging	calculated from linear th	ermal transmitt	ances for each jur	nction		
3 Air permeability	<u>3 Air permeability</u>						
Air permeability at 50 pascals 7.00 (design value) m <sup>3</sup> /(h.m <sup>2</sup> ) @ 50 Pa	Air permeability a	at 50 pascals	7.00 (des	sign value)		m³/(h.m²) @ 50 Pa	l
Maximum         10.0         m³/(h.m²) @ 50 Pa         Pass	Maximum		10.0			m³/(h.m²) @ 50 Pa	Pass
Limiting System Efficiencies	Limiting System Effic	ciencies					
4 Heating efficiency	4 Heating efficiency						

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.



Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r19

## **BUILDING REGULATION COMPLIANCE** Calculation Type: New Build (As Designed)



71		
Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Vaillant ecoFIT sustain 835 VUW 356/6-3 (H-GB) Combi boiler Efficiency: 89.3% SEDBUK2009 Minimum: 88.0%	Pass
Secondary heating system	None	
5 Cylinder insulation		
Hot water storage	No cylinder	
<u>6 Controls</u>		
Space heating controls	Programmer, room thermostat and TRVs	Pass
Hot water controls	No cylinder	
Boiler interlock	Yes	Pass
7 Low energy lights		
Percentage of fixed lights with low-energy fittings	100 %	
Minimum	75 %	Pass
8 Mechanical ventilation		
Not applicable		
riterion 3 – Limiting the effects of heat gains in su	ummer	
Summertime temperature		
Overheating risk (East Pennines)	Slight	Pass
ased on:		_
Overshading	Average	
	6.91 m <sup>2</sup> , No overhang	
Windows facing North		
Windows facing South	$4.54 \text{ m}^2$ , No overhang	
Windows facing South Windows facing West	1.45 m <sup>2</sup> , No overhang	
Windows facing South Windows facing West Air change rate	1.45 m <sup>2</sup> , No overhang 2.50 ach	
Windows facing South Windows facing West	1.45 m <sup>2</sup> , No overhang	
Windows facing South Windows facing West Air change rate Blinds/curtains	<ul> <li>1.45 m<sup>2</sup>, No overhang</li> <li>2.50 ach</li> <li>Light-coloured curtain or roller blind, closed 50% of daylight hours</li> </ul>	
Windows facing South Windows facing West Air change rate Blinds/curtains	<ul> <li>1.45 m<sup>2</sup>, No overhang</li> <li>2.50 ach</li> <li>Light-coloured curtain or roller blind, closed 50% of daylight hours</li> </ul>	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with	<ul> <li>1.45 m<sup>2</sup>, No overhang</li> <li>2.50 ach</li> <li>Light-coloured curtain or roller blind, closed 50% of daylight hours</li> </ul>	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls	<ul> <li>1.45 m<sup>2</sup>, No overhang</li> <li>2.50 ach</li> <li>Light-coloured curtain or roller blind, closed 50% of daylight hours</li> <li>DER and DFEE rate</li> </ul>	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type	1.45 m <sup>2</sup> , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing	1.45 m <sup>2</sup> , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains Titerion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing	1.45 m <sup>2</sup> , No overhang 2.50 ach Light-coloured curtain or roller blind, closed 50% of daylight hours DER and DFEE rate U-value	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains Titerion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability	1.45 m², No overhang         2.50 ach         Light-coloured curtain or roller blind, closed 50% of daylight hours         DER and DFEE rate         U-value         0.00       W/m²K	Pass
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum	1.45 m², No overhang         2.50 ach         Light-coloured curtain or roller blind, closed 50% of daylight hours         DER and DFEE rate         U-value         0.00       W/m²K         7.00 (design value)       m³/(h.m²) @ 50 Pa	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum	1.45 m², No overhang         2.50 ach         Light-coloured curtain or roller blind, closed 50% of daylight hours         DER and DFEE rate         U-value         0.00       W/m²K         7.00 (design value)       m³/(h.m²) @ 50 Pa	
Windows facing South Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum O Key features	1.45 m², No overhang         2.50 ach         Light-coloured curtain or roller blind, closed 50% of daylight hours         DER and DFEE rate         U-value         0.00       W/m²K         7.00 (design value)       m³/(h.m²) @ 50 Pa         10.0       m³/(h.m²) @ 50 Pa	

This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.



Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r19