PREDICTED ENERGY ASSESSMENT

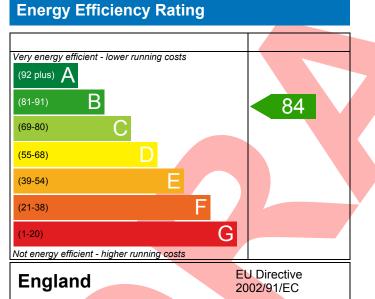


Plot 234, 3 Bed, K, WC, B, ES Dwelling type: Date of assessment: Produced by: Total floor area:

House, Mid-Terrace 02/11/2020 Silvio Junges 71.56 m²

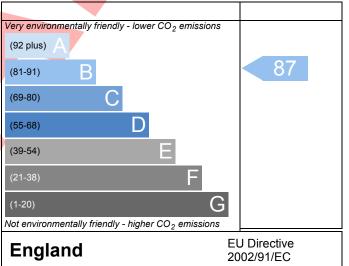
This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance 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 (CO₂) 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.

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



Environmental 87 B % DER 2.31 CO_Emissions (t/year) 1.04 DFEE 42.58 TFEE 47.07 General Requirements Compliance Pass % DEE 9.53 Assessor ID P637-000 Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Junges, Tel: 01884 242050, silvo Junges, Silvio Jun	Assessment	234				Prop Type Ref	Emmett - Mid (As)	
SAP Rating 84 B DER 17.57 TER 17.99 Environmental 87 B % DER 42.58 TFEE 47.07 General Requirements Compliance Pass % DFEE 42.58 TFEE 47.07 General Requirements Compliance Pass % DFEE 9.53 45555000000000000000000000000000000000								
Environmental 87.8 % DER <ter 2.31<br="">CO2 Emissions (L/year) 1.04 DEEE 42.58 TEE 47.07 General Requirements Compliance Pass % DEEE<7FE 9.53 Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, silvio.junges@aessouthern.co.uk Client UMARY FOR INPUT DATA FOR New Build (As Designed) riterion 1 – Achieving the TER and TEEE rate a TER and DER Fuel for main heating Mains gas Fuel factor 1.00 (mains gas) Target Carbon Dioxide Emission Rate (TER) 17.99 kgCO₂/m² 0.42 (2.3%) kgCO₂/m² b TEEE and DEEE Target Fabric Energy Efficiency (TFEE) 42.58 kWh/m²/yr Dwelling Fabric Energy Efficiency (TFEE) 42.58 kWh/m²/yr a, 5 (-9.6%) kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (TFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (DFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (DFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (DFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (DFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Energy Efficiency (DFEE) 42.58 kWh/m²/yr b TEEE and DEEE Target Fabric Standards 2 Fabric U-values Element Average Highest External wall 0.25 (max. 0.30) 0.25 (max. 0.70) Pass Roof 0.16 (max. 0.20) 0.16 (max. 0.70) Pass Roof 0.18 (max. 0.20) 0.21 (max. 0.35) Pass Chermal bridging Thermal bridging Thermal bridging Calculated from linear thermal transmittances for each junction 3 Air permeability Air permeability 450 pascals 5.01 (design value) m³/(h.m²) @ 50 Pa Pass Maximum 10.0 m³/(h.m²) @ 50 Pa Pass</ter>	Property	Plot 234, 3 Bed, K,	WC, B, ES					
CO2 Emissions (L/year) 1.04 DFEE 42.58 TFEE 47.07 Seneral Requirements Compliance Pass % DFEE 9.53 Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, silvio junges@aessouthern.co.uk Assessor ID P637-000 Client UMARY FOR INPUT DATA FOR New Build (As Designed) Assessor ID P637-000 Viterion 1 - Achieving the TER and TFEE rate a TER and DER Fuel for main heating Mains gas Fuel for main heating 1.00 (mains gas) rarget Carbon Dioxide Emission Rate (TER) 17.57 kgC0 ₂ /m ² Pass b TEE and DEE 0.42 (-2.3%) kgC0 ₂ /m ² Pass pass kWh/m ² /yr b TEE and DEE 47.07 kWh/m ² /yr Pass kgC0 ₂ /m ² Pass b TEE and DFEE 47.07 kWh/m ² /yr Pass kgC0 ₂ /m ² Pass cherion 2 - Limits on design flexibility 42.58 kWh/m ² /yr Pass b TeE and DFE 0.25 (max. 0.30) 0.25 (max. 0.70) Pass cherion 2 - Limits on design flexibility 0.00 (max. 0.20) - Pass Limiting Fabric Standards 2	SAP Rating			84 B	DER	17.57	TER	17.99
Seneral Requirements Compliance Pass % DFEE 9.53 Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, silvio junges@aessouthern.co.uk Assessor ID P637-000 Client VMARY FOR INPUT DATA FOR New Build (As Designed) Press # Seessor ID P637-000 UMARY FOR INPUT DATA FOR New Build (As Designed) Press # Seessor ID P637-000 riterion 1 – Achieving the TER and TFEE rate a TER and DER Press # Seessor ID P637-000 Fuel factor 1.00 (mains gas) Itages Pass # Seessor ID Pass Target Carbon Dioxide Emission Rate (TER) 17.99 kgC0 ₂ /m ² Pass 0.42 (-2.3%) kgC0 ₂ /m ² Pass b TFEE and DFEE 17.57 kgC0 ₂ /m ² Pass -0.42 (-2.3%) kWh/m ² /yr Pass b TFEE and DFEE 17.57 kgC0 ₂ /m ² Pass -0.42 (-2.3%) kWh/m ² /yr Pass b TFEE and DFEE 17.97 kWh/m ² /yr -4.5 (-9.6%) kWh/m ² /yr Pass triper abir Standards 2 2 - - Pass 2 Eabric U-values 0.25 (max. 0.30) 0.25 (max	Environmental			87 B	% DER <ter< td=""><td></td><td>2.31</td><td></td></ter<>		2.31	
Assessor Details Mr. Silvio Junges, Silvio Junges, Tel: 01884 242050, Silvio, Junges@aessouthern.co.uk Litent 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 Fuel for main heating Fuel factor Target Carbon Dioxide Emission Rate (TER) Dwelling Carbon Dioxide Emission Rate (DER) Target Carbon Dioxide Emission Rate (DER) Target Fabric Energy Efficiency (TFEE) Dwelling Fabric Energy Efficiency (DFEE) At 25 (-9.6%) Filter and DFEE Element Element External wall 0.00 (max. 0.20) Party wall 0.00 (max. 0.25) 0.16 (max. 0.70) Party wall 0.00 (max. 0.20) 0.21 (max. 0.35) Party Roof 0.18 (max. 0.20) 0.21 (max. 0.35) Design Calulated from linear thermal transmittances for each junction 3 Ar permeability Ar permeability at 50 pascals Maximum 10.0 m ³ /(h.m ²) @ 50 Pa Pass	CO₂ Emissions (t/year)			1.04	DFEE	42.58	TFEE	47.07
silvio junges@aessouthern.co.uk JMARY FOR INPUT DATA FOR New Build (As Designed) titerion 1 - Achieving the TER and TFEE rate a TER and DER Fuel for main heating Mains gas Fuel for main heating Target Carbon Dioxide Emission Rate (TER) Dwelling Carbon Dioxide Emission Rate (DER) Out 2.2 (2.3%) Low (Drefe) Target Fabric Energy Efficiency (TFEE) After on design flexibility Limitis on design flexibility Limiting Fabric Standards 2 flement Average Highest Element Average Highest External wall 0.25 (max: 0.30) 0.25 (max: 0.70) Pass Roof 0.18 (max: 0.20) - Pass Limiting Fabric Energy Efficiency (Max: 0.20) - Pass Roof								

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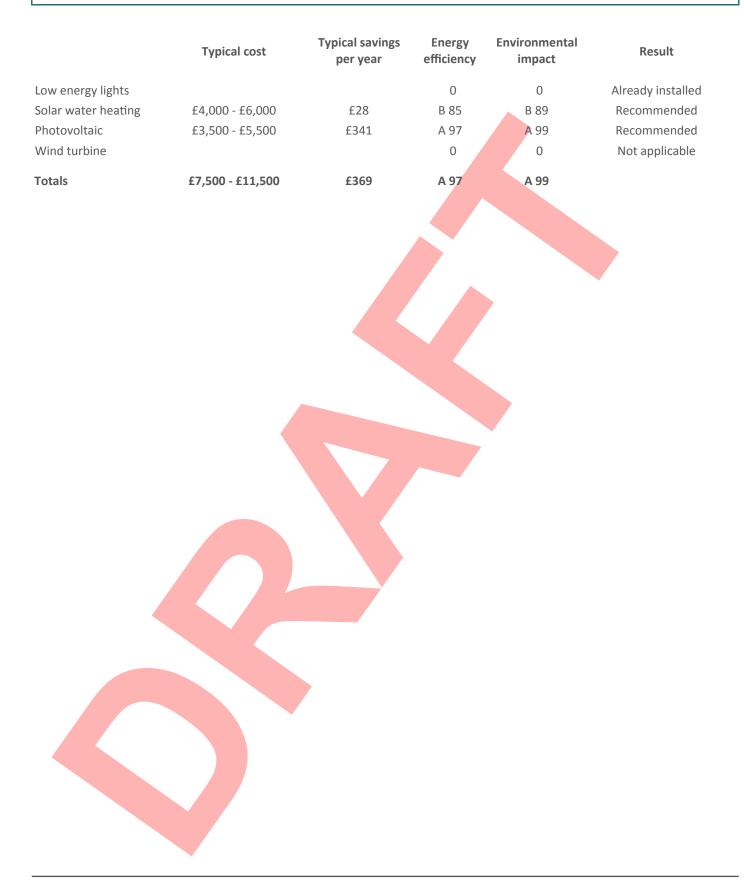
Main heating system	Boiler system with radiators or underfloor - Mains gas	Pass
	Data from database	
	Ideal LOGIC COMBI ESP1 30 Combi boiler	
	Efficiency: 89.6% SEDBUK2009	
	Minimum: 88.0%	
Secondary heating system	None	
5 Cylinder insulation		
Hot water storage	No cylinder	
<u>6 Controls</u>		
Space 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	100 %	
fittings		r
Minimum	75 %	Pass
8 Mechanical ventilation		
Not applicable		
iterion 3 – Limiting the effects of heat gains in su	mmer	
	mmer	
	mmer Medium	Pas
Summertime temperature Overheating risk (Thames Valley)		Pass
Summertime temperature Overheating risk (Thames Valley)	Medium Average	Pass
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East	Medium Average 7.29 m ² , No overhang	Pas:
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West	Medium Average 7.29 m ² , No overhang 3.94 m ² , No overhang	Pas:
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach	Pass
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None	Pas:
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None	Pass
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate	Pass
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type	Medium Average 7.29 m ² , No overhang 3.94 m ² , No overhang 4.00 ach None DER and DFEE rate U-value	
ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate	Pass
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains riterion 4 – Building performance consistent with Party Walls Type	Medium Average 7.29 m ² , No overhang 3.94 m ² , No overhang 4.00 ach None DER and DFEE rate U-value	
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains iterion 4 – Building performance consistent with Party Walls Type Filled Cavity with Edge Sealing Air permeability and pressure testing	Medium Average 7.29 m ² , No overhang 3.94 m ² , No overhang 4.00 ach None DER and DFEE rate U-value	
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East 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	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate U-value 0.00 W/m²K	 Pas
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains iterion 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	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate U-value 0.00 W/m²K 5.01 (design value) m³/(h.m²) @ 5	 Pas
Summertime temperature Overheating risk (Thames Valley) sed on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains iterion 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	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate U-value 0.00 W/m²K 5.01 (design value) m³/(h.m²) @ 5	 Pas
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East Windows facing West Air change rate Blinds/curtains iterion 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 Key features	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate U-value 0.00 W/m²K 5.01 (design value) m³/(h.m²) @ 5 10.0 m³/(h.m²) @ 5	 Pas
Summertime temperature Overheating risk (Thames Valley) ased on: Overshading Windows facing East 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 D Key features Party wall U-value	Medium Average 7.29 m², No overhang 3.94 m², No overhang 4.00 ach None DER and DFEE rate U-value 0.00 W/m²K 5.01 (design value) m³/(h.m²) @ 5 10.0 m³/(h.m²) @ 5 0.00 W/m²K	 Pas

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RECOMMENDATIONS





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