

# BASIC COMPLIANCE REPORT

## Calculation Type: New Build (As Built)



<b>Property Reference</b>	30093-0002		<b>Issued on Date</b>	18/10/2022	
<b>Assessment Reference</b>	001	<b>Prop Type Ref</b>			
<b>Property</b>	Elmtrees, Hanbury Road, Stoke Prior, BROMSGROVE, B60 4AF				
<b>SAP Rating</b>	84 B	<b>DER</b>	16.55	<b>TER</b>	28.55
<b>Environmental</b>	85 B	<b>% DER&lt;TER</b>	42.03		
<b>CO<sub>2</sub> Emissions (t/year)</b>	1.62	<b>DFEE</b>	61.18	<b>TFEE</b>	65.62
<b>General Requirements Compliance</b>	Pass	<b>% DFEE&lt;TFEE</b>	6.76		
<b>Assessor Details</b>	Mr. Erik Sullivan, Triskele Energy Assessors LLP, Tel: 03301138894, esullivan@triskele-energy.co.uk			<b>Assessor ID</b>	Y448-0001
<b>Client</b>					

### SUMMARY FOR INPUT DATA FOR New Build (As Built)

#### Criterion 1 – Achieving the TER and TFEE rate

##### 1a TER and DER

Fuel for main heating	Electricity		
Fuel factor	1.55 (electricity)		
Target Carbon Dioxide Emission Rate (TER)	28.55	kgCO <sub>2</sub> /m <sup>2</sup>	
Dwelling Carbon Dioxide Emission Rate (DER)	16.55	kgCO <sub>2</sub> /m <sup>2</sup>	Pass
	-12.00 (-42.0%)	kgCO <sub>2</sub> /m <sup>2</sup>	

##### 1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	65.62	kWh/m <sup>2</sup> /yr	
Dwelling Fabric Energy Efficiency (DFEE)	61.18	kWh/m <sup>2</sup> /yr	
	-4.4 (-6.7%)	kWh/m <sup>2</sup> /yr	Pass

#### Criterion 2 – Limits on design flexibility

##### Limiting Fabric Standards

##### 2 Fabric U-values

Element	Average	Highest	
External wall	0.24 (max. 0.30)	0.25 (max. 0.70)	Pass
Floor	0.14 (max. 0.25)	0.14 (max. 0.70)	Pass
Roof	0.17 (max. 0.20)	0.20 (max. 0.35)	Pass
Openings	1.50 (max. 2.00)	1.52 (max. 3.30)	Pass

##### 2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

##### 3 Air permeability

Air permeability at 50 pascals	5.52 (measured in this dwelling)	
Maximum	10.0	Pass

##### Limiting System Efficiencies

##### 4 Heating efficiency

Main heating system	Heat pump with radiators or underfloor - Electric Samsung Electronics AE080RXYDEG	
Secondary heating system	None	

##### 5 Cylinder insulation

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Hot water storage	Measured cylinder loss: 1.80 kWh/day Permitted by DBSCG 2.24	Pass
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Primary pipework insulated	Yes	Pass
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### 6 Controls

Space heating controls	Programmer and at least two room thermostats	Pass
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Hot water controls	Cylinderstat	Pass
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	Independent timer for DHW	Pass
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### 7 Low energy lights

Percentage of fixed lights with low-energy fittings	100	%	
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Minimum	75	%	Pass
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### 8 Mechanical ventilation

Not applicable

## Criterion 3 – Limiting the effects of heat gains in summer

### 9 Summertime temperature

Overheating risk (Midlands)	Slight	Pass
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Based on:

Overshading	Average
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Windows facing North	5.16 m <sup>2</sup> , No overhang
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Windows facing South	13.18 m <sup>2</sup> , No overhang
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Air change rate	3.00 ach
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Blinds/curtains	None
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## Criterion 4 – Building performance consistent with DER and DFEE rate

### Air permeability and pressure testing

#### 3 Air permeability

Air permeability at 50 pascals	5.52 (measured in this dwelling)
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Maximum	10.0	Pass
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### 10 Key features

None	N/A
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*This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.*