

## House Type Approval Certificate

Certificate No:

**STAS/23/052/DM137/05**

Date:

**15 September 2023**

<b>A</b>	<b>Certificate Holder:</b>	
	CALA Homes Ltd Adam House, 5 Mid New Cutlins, Edinburgh EH11 4DU E-mail: SKelso@Cala.co.uk <span style="float: right;">Tel: 0131 453 0072</span>	

<b>B</b>	<b>House Type Titles:</b>	
	Description:	2023 Regulations <b>AVON ET1 2023</b>

<b>C</b>	The domestic type approval has been assessed on the following drawings and specifications:	
	See attached annexe to this certificate	

<b>D</b>	<b>Climatic conditions: The design may be built in areas where the climatic conditions are equal to or less than those detailed below:</b>		
	Wind: (as defined in BS 6399-2)	Standard effective wind speed, $V_e =$ For maximum effective height = Has funnelling been considered?	47.5 m/s 9m to ridge No
	Wind: (as defined in CP3: Chapter V)	Design wind speed, $V_s =$ (relevant to the building frame, at a height of 3m or less)	24.5m/s
	Snow: (as defined in BS 6399-3)	Site snow load, $S_o =$ Influenced by adjacent buildings?	0.75 kN/m <sup>2</sup> No
	Resistance to moisture/durability of exposed elements:	Max exposure (to wind driven rain) grading, as defined in BRE Report – Thermal Insulation: Avoiding Risks, Second Edition, 1994, to be exposure zone: Exposure to sea spray (i.e., coastal region) or de-icing salts? Other air contaminants or biological factors – please specify any enhanced resistance if applicable (refer to BS7543 for guidance)	Exposure Zones 1, 2, 3 and 4  No None
	Design Life: (per BS 7543 – Durability of buildings and building elements, products and components)	Category of building design life = Design life of primary building envelope	60 years  60 years

<b>E</b>	<b>Conditions of certification:</b>	
	1. The design shown and the specifications and materials referred to have been assessed and approved in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 5 June 2023.	
	2. The certificate shall be valid until invalidated by formal notice by the Local Authority Building Standards Scotland	
	3. The design shown and the materials specified shall not be changed without reference to the Local Authority Building Standards Scotland responsible for certifying the system.	
	4. Where reference is made on a plan or specification document to any Code of Practice, British or European Standard or manufacturer's instruction it shall be construed as a reference to such publication in the form in which it is in force at the material time at the point of construction.	
	5. This certificate should not be regarded as a formal approval under the building warrant process prescribed by the Building (Scotland) Act 2003 enacted from 1 May 2005	
	6. The Harley Haddow Consulting Engineers Statement of Structural Adequacy referenced here under Section G dated 21 September 2023, confirm that a structural appraisal has been carried out. It confirms that further site-specific information MUST BE made available when a site-specific building warrant is sought. Such additional information should take cognisance of Procedural Guidance on Certification including information to be submitted with a Building Warrant Application dated April 2010 Version 2 (January 2017). Confirmation of a holistic approach to structural adequacy of the <u>entire completed building</u> shall be provided by a registered engineer to the local authority within whose area the site-specific dwelling is to be built	
	7. This certificate confirms compliance with Mandatory Standard 6.1, based on example criteria with regards to orientation, shading, sheltering and resultant PV array efficiency. Site specific information will be required to confirm the actual DER and DDER for the STAS approved house type on each plot on a particular site.	
	8. This certificate confirms compliance with Mandatory Standard 3.28. This is based on actual 'worst case' criteria outlined within CIBSE TM59 'Design methodology for the assessment of overheating risk in homes' (2017). On this basis, further site-specific information is not necessary.	

Annexe of drawings, certificates and specification documents used in the assessment:

F	Drawing Number:	Description:	Revision	Page
	<b>CALA plans:</b>			
	AVN-WD1-ET1	GENERAL ARRANGEMENT - PLANS AND ELEVATIONS		
	AVN-WD2-ET1	UNDERBUILD LAYOUTS - EAVES TREATMENT PLAN		
	AVN-WD6	STAIR DETAILS - PLANS & SECTIONS		
	<b>Harley Haddow plans:</b>			
	310857-HAH-(AVO-ET1)-DR-S-00100	FOUNDATION & SUSPENDED SLAB LAYOUT	I01	
	310857-HAH-(AVO-ET1)-DR-S-00110	FOUNDATION SECTIONS	I01	
	310857-HAH-(AVO-ET1)-DR-S-00120	GROUND & FIRST FLOOR LAYOUT	I01	
	310857-HAH-(AVO-ET1)-DR-S-00130	ROOF LAYOUT	I02	
	310857-HAH-XX-XX-DR-S-00300	TIMBER FRAME CONSTRUCTION DETAILS	I01	
	310857-HAH-XX-XX-DR-S-00301	EXTERNAL MASONRY LEAF DETAILS	I01	
	<b>Vent-axia</b>			
	CAS 15100_12	GROUND AND FIRST FLOOR MVHR DESIGNS	D	
	<b>Wavin</b>			
	A23465-3	ABOVE GROUND DRAINAGE ISOMETRIC		
	<b>NC Designs</b>			
	13524/M5-1	GROUND FLOOR SPACE HEATING DESIGNS (ASHP)	C	
	13524/M5-2	FIRST FLOOR SPACE HEATING DESIGNS (ASHP)	C	
	13524/M5-6	GROUND FLOOR DHW DESIGNS (ASHP)	A	
	13524/M5-7	FIRST FLOOR DHW DESIGNS (ASHP)	A	
	13524/M5-3	EQUIPMENT SCHEDULE (DAIKIN)	C	
	13524/M5-4	EQUIPMENT SCHEDULE (MITSUBUSHI)	C	
	13524/M5-5	EQUIPMENT SCHEDULE (VAILLIANT)	C	
	13526/M5-1	GROUND FLOOR SPACE HEATING DESIGNS (BOILER/PV)	A	
	13526/M5-2	FIRST FLOOR SPACE HEATING DESIGNS (BOILER/PV)	A	
	13526/M5-3	EQUIPMENT SCHEDULE (BOILER/PV)	A	
	13526/M5-4	GROUND FLOOR DHW DESIGNS (BOILER/PV)		
	13526/M5-5	FIRST FLOOR DHW DESIGNS (BOILER/PV)		

G	Certification
	CALA Group Ltd Light And Space House Type Range Harley Haddow Statement of Structural Adequacy Reference 310857 dated 21 September 2023

H	Specifications
	<b>CALA documents</b>
	Avon ET1 SPEC DOC SAP/ENERGY COMPLIANCE REPORT (AIR SOURCE HEAT PUMP)
	Avon ET1 SPEC DOC SAP/ENERGY COMPLIANCE REPORT (GAS/PV)
	<b>STANDARD SUPPORTING DOCUMENTS</b>
	Refer to STAS/23/052/DM137/SD Standard Details
	Refer to STAS/23/052/DM137/SS Standard Specifications
	Refer to STAS/23/052/DM137/UCR U-values and Condensation Risk
	FES Group Overheating Assessments Covering letters and Compliance Reports

I	Authority:
	This system type approval certificate consisting of 2 pages is authorised by <b>West Lothian Council</b> on behalf on behalf of the Local Authority Building Standards Scotland (LABSS).

