

## House Type Approval Certificate

Certificate No: **STAS/17/052/DM74/09a**

Date: **13 November 2017**

<b>A</b>	<b>Certificate Holder:</b>	
	<b>CALA Homes Ltd</b> <b>Cairnlee House, Callendar Business Park, Callendar Road, Falkirk, FK1 1XE</b> <b>E-mail: FWalsh@Cala.co.uk</b>	<b>Tel: 01324 600140</b>

<b>B</b>	<b>House Type Titles:</b>	
	Description:	<b>LOWTHER BE</b>

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

<b>D</b>	<b>Climatic conditions:</b> The design may be built in areas where the climatic conditions are equal to or less than those detailed below:		
	<b>Wind:</b> (as defined in BS 6399-2)	<i>Standard effective wind speed, <math>V_e</math> =</i> For maximum effective height = Has funnelling been considered?	<b>47.5 m/s</b> <b>9m to ridge</b> <b>No</b>
	<b>Wind:</b> (as defined in CP3: Chapter V)	<i>Design wind speed, <math>V_s</math> =</i> (relevant to the building frame, at a height of 3m or less)	<b>N/A</b>
	<b>Snow:</b> (as defined in BS 6399-3)	<i>Site snow load, <math>S_o</math> =</i> Influenced by adjacent buildings?	<b>0.75 kN/m<sup>2</sup></b> <b>No</b>
	<b>Resistance to moisture/durability of exposed elements:</b>	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)	<b>Exposure Zones 1, 2, 3 and 4</b>  <b>No</b> <b>None</b>
	<b>Design Life:</b> (per BS 7543 – Durability of buildings and building elements, products and components)	Category of building design life =  Design life of primary building envelope	<b>60 years</b>  <b>60 years</b>

<b>E</b>	<b>Conditions of certification:</b>
	<ol style="list-style-type: none"> <li>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 1 July 2017.</li> <li>The certificate shall be valid until invalidated by formal notice by the Local Authority Building Standards Scotland</li> <li>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.</li> <li>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 date of this certificate.</li> <li>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</li> <li>The Harley Haddow Consulting Engineers Statement of Structural Adequacy referenced here under Section G, confirm that a structural appraisal has been carried out. It confirms that further site specific information <b>MUST BE</b> 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 <b>entire completed building</b> shall be provided by a registered engineer to the local authority within whose area the site specific dwelling is to be built.</li> </ol>

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

<b>F</b>	<b>Drawing Number:</b>	<b>Revision:</b>	<b>Description:</b>
	<b>CALA plans:</b>		
	LOW-WD1-BE	N	GENERAL ARRANGEMENT - PLANS AND ELEVATIONS
	LOW-WD2	E	UNDERBUILDING - GROUND BEARING SLAB
	LOW-WD2.1	E	UNDERBUILDING - SUSPENDED SLAB
	LOW-WD2.2-BE&X		SECTIONS A-A, B-B AND C-C - ROOF TRUSS PROFILES
	LOW-WD6	A	STAIR DETAILS - PLANS AND SECTIONS
	<b>Harley Haddow plans:</b>		
	30722-LOW-BE-01	B	FOUNDATION & GROUNDBEARING SLAB LAYOUT & SECTIONS
	30722-LOW-BE-02	B	FOUNDATION & SUSPENDED SLAB LAYOUT & SECTIONS
	30722-LOW-BE-03	H	GROUND AND FIRST FLOOR LAYOUTS
	30722-LOW-BE-04	B	ROOF LAYOUT AND DETAILS
	30722-LOW-BE-05	B	TIMBER FRAME CONSTRUCTION DETAILS
	30722-LOW-BE-07		JULIET BALCONY FIXING DETAIL
	<b>NC Designs plans:</b>		
	Lowther BE D228:		
	11122/M41		GROUND FLOOR SPACE HEATING DESIGNS (SINGLE ZONE)
	11122/M42		FIRST FLOOR SPACE HEATING DESIGNS (SINGLE ZONE)
	11122/M43		EQUIPMENT SCHEDULE (SINGLE ZONE)
	11122/M44		GROUND FLOOR DHW DESIGNS
	11122/M45		FIRST FLOOR DHW DESIGNS
	<b>Drainage plans:</b>		
	Lowther BE 6506-16	B	ABOVE GROUND DRAINAGE ISOMETRIC
	<b>Ventilation plans:</b>		
	Lowther BE GF DMEV-61	C	GROUND FLOOR DECENTRALISED MECHANICAL EXTRACT VENTILATION
	Lowther BE FF DMEV-62	C	FIRST FLOOR DECENTRALISED MECHANICAL EXTRACT VENTILATION

<b>G</b>	<b>Certification</b>
	CALA Homes Light and Space House Type Range STAS Approval Statement Of Structural Adequacy
	Harley Haddow (Edinburgh) Ltd dated 16 Nov 2016

<b>H</b>	<b>Specification</b>
	CALA Homes Scottish Standard Construction Specification - Houses, July 2017 (REV C)
	Elmhurst Energy U-Values and Condensation Risk Analysis, 10 Oct 2016
	CALA Homes Light and Space Collection Standard Details - Houses, 2015 Regs Scotland
	Briary Energy Consultants Stroma FSAP 2012 Energy Calculations

<b>I</b>	<b>Authority:</b>
	This system type approval certificate consisting of 2 pages is authorised by:
	Signature:
	<b>Robert A Renton, Secretary to STAS</b> on behalf of the Local Authority Building Standards Scotland (LABSS)