

## House Type Approval Certificate

Certificate No: **STAS/17/083/DM67/03**  
Date: **26 July 2017**

<b>A</b>	<b>Certificate Holder:</b>	
	Dandara Ltd., Isle of Man Business Park, Cooil Road, Bradden, Isle of Man IM2 2SA per Dandara Ltd., 16 Beech Manor, Stoneywood, ABERDEEN AB21 9AZ E-mail: jmcintosh@dandara.com <span style="float: right;">Tel: 01224 713 713</span>	

<b>B</b>	<b>House Type Titles:</b>	
	Description:	<b>Laurel 4 Bed Detached 2-storey house types (with garage and underfloor heating options)</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)	Standard effective wind speed, $V_e =$ For maximum effective height = Has funnelling been considered?	<b>45.1 m/s</b> <b>9.0m</b> <b>NO</b>
	<b>Wind:</b> (as defined in CP3: Chapter V)	Design wind speed, $V_s =$ (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)	Site snow load, $S_o =$ Influenced by adjacent buildings?	<b>0.64 Kn/m2</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>Zone 1 / Zone 2 / Zone 3 / Zone 4</b> <b>To be determined by site to site basis</b> <b>To be determined by site to site basis</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>	
	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 1 October 2016.
	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 date of this certificate.
	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 A. Ramsay BSc(Hons) CEng MStructE MICE statement dated January 2017 referenced here under Section G, confirm that a structural appraisal has been carried out. 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. 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.	The issues referenced here under Appendix A shall be taken into account when constructing the wall which separates the integral garage from the house.

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

<b>F</b>	<b>Drawing Number:</b>	<b>Description:</b>
	STAS_LAU_300 JUN 17	Laurel Base Plans
	STAS_LAU_301 JUN 17	Laurel Base Plans (Handed)
	STAS_LAU_302 JUN 17	Laurel (No Garage) Base Plans
	STAS_LAU_303 JUN 17	Laurel (No Garage) Base Plans (Handed)
	STAS_LAU_350 JUN 17	Laurel Floor Plans
	STAS_LAU_351 JUN 17	Laurel Floor Plans (Handed)
	STAS_LAU_352 JUN 17	Laurel (No Garage) Floor Plans
	STAS_LAU_353 JUN 17	Laurel (No Garage) Floor Plans (Handed)
	STAS_LAU_354 JUN 17	Laurel Floor Plans with Underfloor Heating
	STAS_LAU_355 JUN 17	Laurel Floor Plans with Underfloor Heating (Handed)
	STAS_LAU_356 JUN 17	Laurel (No Garage) Floor Plans with Underfloor Heating
	STAS_LAU_357 JUN 17	Laurel (No Garage) Floor Plans with Underfloor Heating (Handed)
	STAS_LAU_400 JUN 17	Laurel Sections
	STAS_LAU_401 JUN 17	Laurel Sections (Handed)
	STAS_LAU_402 JUN 17	Laurel (No Garage) Sections
	STAS_LAU_403 JUN 17	Laurel (No Garage) Sections (Handed)
	STAS_LAU_450 JUN 17	Laurel Elevations – Option 1
	STAS_LAU_451 JUN 17	Laurel Elevations – Option 1 (Handed)
	STAS_LAU_452 JUN 17	Laurel (No Garage) Elevations – Option 1
	STAS_LAU_453 JUN 17	Laurel (No Garage) Elevations – Option 1 (Handed)
	STAS_LAU_454 JUN 17	Laurel Elevations – Option 2
	STAS_LAU_455 JUN 17	Laurel Elevations – Option 2 (Handed)
	STAS_LAU_456 JUN 17	Laurel (No Garage) Elevations – Option 2
	STAS_LAU_457 JUN 17	Laurel (No Garage) Elevations – Option 2 (Handed)
	STAS_LAU_458 JUN 17	Laurel Elevations – Option 3
	STAS_LAU_459 JUN 17	Laurel Elevations – Option 3 (Handed)
	STAS_LAU_460 JUN 17	Laurel (No Garage) Elevations – Option 3
	STAS_LAU_461 JUN 17	Laurel (No Garage) Elevations – Option 3 (Handed)

<b>G</b>	<b>Certification:</b>	
	<b>Statement of structural adequacy</b>	From A. Ramsay BSc(Hons) CEng MStructE MICE Consulting Engineer Ltd dated January 2017

<b>H</b>	<b>Specification:</b>	

<b>I</b>	<b>Authority:</b>		
	This system type approval certificate consisting of 3 pages is authorised by:	Signature:	<b>Gordon Spence</b>
		Lead Authority Building Standards Manager on behalf of the Local Authority Building Standards Scotland (LABSS)	

Regulation 9 Provisions on which an alternative approach is given	Decision
<p><b>Mandatory Standard 2.2</b></p> <p>Every building, which is divided into more than one area of different occupation, must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated.</p>	
<p><b>Guidance Clause 2.2.6 Combustibility</b></p> <p><i>Separating Walls - in a building with no storey at a height above 18m, separating walls may be constructed from combustible materials provided the appropriate fire resistance duration is maintained.</i></p> <p><i>To reduce the risk of a fire starting within a combustible separating wall or a fire spreading rapidly on or within the wall construction:</i></p> <ul style="list-style-type: none"> <li>• <i>insulation material exposed in a cavity should be constructed from materials which are non-combustible or of a low risk classification, and</i></li> <li>• <i>the internal wall linings should be constructed from materials which are non-combustible or of a low risk classification, and</i></li> <li>• <i>the wall should contain no pipes, wires or other services.</i></li> </ul> <p><i>Where an opening is created to allow services to pass through the wall, the opening should be constructed in accordance with the guidance in clause 2.2.9.</i></p>	<p>In this case, as the separating wall is not between different occupiers, it is considered that the insertion of electrical wiring located within the void between partition studs will not necessarily reduce the fire separation between the house and garage. However, the penetrations being made in the plasterboard sheeting, when installing light switches and sockets consisting of back boxes, will subsequently reduce the fire resistance of the overall wall. Therefore, to maintain the fire resistance, additional fire protection measures are required.</p> <p>As such, where flush-mounted electrical fittings are installed, either within the garage or the house and they penetrate the plasterboard sheeting, each fitting should be fitted with a back box that incorporates integral fire protection, or a proprietary fire protection pad, to maintain the short fire resistance for a separating wall of this description.</p>