

## House Type Approval Certificate

Certificate No: **STAS/17/065/DM64/04**  
Date: **15 January 2018**

<b>A</b>	<b>Certificate Holder:</b>	
	Keepmoat, The Waterfront, Lakeside Boulevard, Doncaster, DN4 5PL.	
	E-mail: <a href="mailto:stu.king@keepmoat.com">stu.king@keepmoat.com</a>	Tel: <b>01709 263156</b>

<b>B</b>	<b>House Type Titles:</b>	
	Description:	<b>842 Culzean semi detached two storey house.</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:</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?	24.4 m/s 8.5m NO
	<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)	N/A
	<b>Snow:</b> (as defined in BS 6399-3)	<i>Site snow load, <math>S_o</math> =</i> Influenced by adjacent buildings?	0.75 Kn/m2 NO
	<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)	C3 Medium  NO
	<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	50 years  50 years

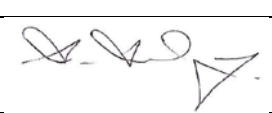
<b>E</b>	<b>Conditions of certification:</b>	
	1.	The design shown and the specifications and materials referred to have been assessed and approved in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 1 July 2017.
	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 Harry Turnbull Ltd statement dated 04/05/2017 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 (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. However, this is based on a notional 'worst case' criteria with regards to orientation, shading, sheltering and resultant PV array efficiency. Site specific information will be required to confirm the actual DER for the STAS approved house type on each plot on a particular site.

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

F	Drawing Number:	Description:
	2014/842-100	GA working drawing sheet 1 of 2
	2014/842-101	GA working drawing sheet 2 of 2
	10271-19	Heating layout, schedule of equipment and installation notes
	2008/SD/224	Internal doors – clear opening widths
	SD800 rev A	Timber frame junction with ground bearing slab
	SD801 rev B	Timber frame junction with suspended slab
	SD802 rev A	Timber frame junction with ground bearing slab – basic gas protection
	SD803 rev A	Timber frame junction with suspended slab – basic gas protection
	SD804 rev C	Threshold details
	SD805 rev B	Eaves and verge
	SD806 rev A	Eaves and verge – room in roof
	SD807 rev A	Ridge, hip and valley
	SD808 rev A	Roof – abutment and junction with gable
	SD809 rev B	Window – head, cill and jamb detail
	SD810 rev A	Intermediate floor details
	SD811 rev C	Wall type
	SD812	Boiler panel
	HVN 842 STAS	Oregon timber frame – first floor joist layout

G	Certification:	
	V-WT-2 Robust Detail	Separating wall – timber frame (semi-detached houses only)
	Statement of structural adequacy	From Harry Turnbull Ltd dated 4 May 2017

H	Specification:	
	Keepmoat – Scottish technical standards general building specification – rev J	Timber frame specification for all house types
	SAP ratings	For all house types
	U value calculations	For all elements
	Vent Axia Lo-carbon dMEV unit	Manufacturers information for ventilation system

I	Authority:	
	This system type approval certificate consisting of 2 pages is authorised by:	Signature: 
		Lead Authority Building standards Manager on behalf of the Local Authority Building Standards Scotland (LABSS)