

## House Type Approval Certificate

Certificate No: **STAS/17/056/DM69/04**

Date: **29 September 2017**

|          |  |  |
|----------|--|--|
| <b>A</b> | <b>Certificate Holder:</b>   |  |
|          | Barratt Homes North Scotland, Blairton House, Old Aberdeen Road, Balmedie, Aberdeenshire, AB23 8SH<br>E-mail: <a href="mailto:barry.mitchell@barratthomes.co.uk">barry.mitchell@barratthomes.co.uk</a> Tel: 01358 741349 |  |

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| <b>B</b> | <b>House Type Titles:</b>          |   |
|          | Description: <b>2016 Standards</b> | <b>BONNYTON HOUSE TYPE – 2017/S/BON</b> |

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

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| <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, $V_e$ =<br>For maximum effective height =<br>Has funnelling been considered?   | <b>41.4 m/s<br/>8.5 m<br/>NO</b>                    |
|          | <b>Wind:</b> (as defined in CP3: Chapter V)  | Design wind speed, $V_s$ =<br>(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, $S_o$ =<br>Influenced by adjacent buildings?  | <b>0.64 Kn/m2<br/>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:<br>Exposure to sea spray (i.e. coastal region) or de-icing salts?<br>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<br/><br/>Yes/No</b> |
|          | <b>Design Life:</b> (per BS 7543 – Durability of buildings and building elements, products and components)                                 | Category of building design life =<br>Design life of primary building envelope  | <b>60 years<br/><br/>60 years</b>                   |

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| <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 2016.</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>Fairhurst letter dated 18 April 2017 reference 100982 STAS.ltr04 Standard House Types – Bonnyton.lb 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.</li> </ol> |

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

| F                                    | Drawing Number:                          | Description:                   |
|--------------------------------------|--|--------------------------------|
|                                      | 2017/S/BONDS1                            | Data Sheet                     |
|                                      | 2017/S/BON01B                            | Planning Drawings              |
|                                      | 2017/S/BON02B                            | Elevations                     |
|                                      | 2017/S/BON03A                            | Ground Floor Plan              |
|                                      | 2017/S/BON04A                            | First Floor Plan               |
|                                      | 2017/S/BON05A                            | Foundation Plan                |
|                                      | 2017/S/BON06A                            | Joist Plan                     |
|                                      | 2017/S/BON07B                            | Roof Plan                      |
|                                      | 2017/S/BON08A                            | Section A-A                    |
|                                      | 2017/S/BON09A                            | Kitchen Plan                   |
|                                      | 2017/S/BON10                             | Bedroom 3 Activity Space       |
|                                      | 2017/S/BON11A                            | Future Shower Room             |
| <b>Structural Engineers Drawings</b> |  |                                |
|                                      | 100982-3188A                             | Foundation                     |
|                                      | 100982-4622                              | Timber Kit Appraisal           |
|                                      | 100982-4702A                             | Ex Lintels & Movement Joints   |
|                                      | 100982-STAS.ltr04                        | Letter re: Design Calculations |
| <b>Coates Design Drawings</b>        |  |                                |
|                                      | 17/008-025A                              | Heating Installation – GF      |
|                                      | 17/008-026A                              | Heating Installation – FF      |
|                                      | 17/008-027A                              | Hot and Cold Water – GF        |
|                                      | 17/008-028A                              | Hot and Cold Water – FF        |
| <b>Eco2Solar Drawings</b>            |  |                                |
|                                      | Solar PV – Bonnyton HT – Front Elevation |                                |
|                                      | Solar PV – Bonnyton HT – Rear Elevation  |                                |

| G | Certification  |   |
|---|--|---|
|   | Statement of Structural Adequacy                           | Fairhurst letter dated 18 April 2017 reference 100982 STAS ltr.04 – Bonnyton.lb |
|   | DER SAP Version 9.92 Worksheet                             | BONNYTON EOT BBYN 017E -18 April 2017   |
|   | DER SAP Version 9.92 Worksheet                             | BONNYTON MID TERR BBYN 017I – 18 April 2017                                     |
|   | TER SAP Version 9.92 Worksheet                             | BONNYTON EOT BBYN 017E - 18 April 2017  |
|   | TER SAP Version 9.92 Worksheet                             | BONNYTON MID TERR BBYN 017E – 18 April 2017                                     |
|   | Section 6: Regulations Compliance Report: SAP Version 9.92 | BONNYTON EOT BBYN 017E - Regulations Compliance Report – 18 April 2017          |
|   | Section 6: Regulations Compliance Report SAP Version 9.92  | BONNYTON MID TERR BBYN 017I – Regulations Compliance Report – 18 April 2017     |
|   | BDW Scotland 2015 Regulations – Red Specification – TF V1  | Scotland Timber Frame 2015 Specification – FINAL 16 February 2017               |
|   | Section 6 2015 – RGB CALEDONIA SPECIFICATION               | North Facing Timber Frame – Red Spec  |

| H | Specification            |   |
|---|--------------------------|---|
|   | Barratt Developments PLC | Specification for Scotland – Caledonia & Alba Range – 2015 Standards - Detached and Semi-Detached Two & Three Storey Timber Frame Houses – 24-page Document dated 4 September 2017 Reference Revision B |

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