

## House Type Approval Certificate

Certificate No: **STAS/16/005/DM61/03**

Date: **15 January 2018**

|          |   |                          |
|----------|---|--------------------------|
| <b>A</b> | <b>Certificate Holder:</b>  |                          |
|          | Persimmon Homes, Unit 1, Wester Inch Business Park, Old Well Court, Bathgate, West Lothian, EH48 2TQ. |                          |
|          | E-mail: <a href="mailto:peter.Hacking@persimmonhomes.com">peter.Hacking@persimmonhomes.com</a>        | Tel: <b>0141 7662616</b> |

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| <b>B</b> | <b>House Type Titles:</b> |   |
|          | Description:              | <b>Newmore</b><br>Terraced two storey house (including mid and end terraced types, optional windows to end terrace and options to external fabric finishes) |

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

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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)   | <i>Standard</i> effective wind speed, $V_e =$<br>For maximum effective height =<br>Has funnelling been considered?  | 24 m/s<br>5m<br>NO               |
|          | <b>Wind:</b> (as defined in CP3: Chapter V)  | <i>Design wind speed</i> , $V_s =$<br>(relevant to the building frame, at a height of 3m or less)   | M/S                              |
|          | <b>Snow:</b> (as defined in BS 6399-3)   | <i>Site snow load</i> , $S_o =$<br>Influenced by adjacent buildings?  | 0.60 Kn/m2<br>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:<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) | Zone 1/ Zone 2/ Zone 3<br><br>NO |
|          | <b>Design Life:</b> (per BS 7543 – Durability of buildings and building elements, products and components)                                 | Category of building design life =  | 50 years                         |
|          |  | Design life of primary building envelope  | 50 years                         |

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| <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 Indev Consult Ltd statement dated 1/11/2016 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 entire completed building 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 national '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:

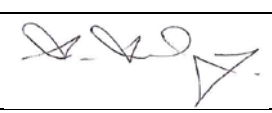
| F | Drawing Number:              | Description:   |
|---|------------------------------|--|
|   | V6-TF-0799t(15)001A<br>Rev D | Schedules & Electrical Legend Option A                 |
|   | V6-TF-0799t(15)001B<br>Rev C | Schedules & Electrical Legend Option B                 |
|   | V6-TF-0799t(15)001C<br>Rev C | Schedules & Electrical Legend Option C                 |
|   | V6-TF-0799t(15)001D<br>Rev C | Schedules & Electrical Legend Option D                 |
|   | V6-TF-0799t(15)101           | Foundation & Drainage Layout                           |
|   | V6-TF-0799t(15)102<br>Rev B  | Drainage Isometric                                     |
|   | V6-TF-0799t(15)201A<br>Rev E | Ground Floor Plan Option A Mid-Terrace Arrangement     |
|   | V6-TF-0799t(15)201B<br>Rev E | Ground Floor Plan Option B End Terraced Right Gable    |
|   | V6-TF-0799t(15)201C<br>Rev F | Ground Floor Plan Option C End Terraced Feature Window |
|   | V6-TF-0799t(15)201D<br>Rev D | Ground Floor Plan Option D End Terraced Left Gable     |
|   | V6-TF-0799t(15)202A<br>Rev B | First Floor Plan Option A Mid-Terrace Arrangement      |
|   | V6-TF-0799t(15)202B<br>Rev B | First Floor Plan Option B End Terraced Right Gable     |
|   | V6-TF-0799t(15)202C<br>Rev B | First Floor Plan Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)202D<br>Rev B | First Floor Plan Option D End Terraced Left Gable      |
|   | V6-TF-0799t(15)301<br>Rev A  | Section A-A  |
|   | V6-TF-0799t(15)302<br>Rev A  | Section Through future shower                          |
|   | V6-TF-0799t(15)401A<br>Rev B | Elevations - BF1 Option A Mid Terrace Arrangement      |
|   | V6-TF-0799t(15)401B<br>Rev B | Elevations - BF1 Option B End Terrace Right Gable      |
|   | V6-TF-0799t(15)401C<br>Rev C | Elevations - BF1 Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)401D<br>Rev B | Elevations - BF1 Option D End Terraced Left Gable      |
|   | V6-TF-0799t(15)402A<br>Rev B | Elevations – BF2 Option A Mid Terrace Arrangement      |
|   | V6-TF-0799t(15)402B<br>Rev B | Elevations – BF2 Option B End Terrace Right Gable      |
|   | V6-TF-0799t(15)402C<br>Rev C | Elevations – BF2 Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)402D<br>Rev B | Elevations – BF2 Option D End Terraced Left Gable      |
|   | V6-TF-0799t(15)403A<br>Rev B | Elevations – BF3 Option A Mid Terrace Arrangement      |
|   | V6-TF-0799t(15)403B<br>Rev B | Elevations – BF3 Option B End Terrace Right Gable      |
|   | V6-TF-0799t(15)403C<br>Rev C | Elevations – BF3 Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)403D<br>Rev B | Elevations – BF3 Option D End Terraced Left Gable      |
|   | V6-TF-0799t(15)404A<br>Rev B | Elevations – BF4 Option A Mid Terrace Arrangement      |
|   | V6-TF-0799t(15)404B<br>Rev B | Elevations – BF4 Option B End Terrace Right Gable      |
|   | V6-TF-0799t(15)404C<br>Rev C | Elevations – BF4 Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)404D<br>Rev B | Elevations – BF4 Option D End Terraced Left Gable      |
|   | V6-TF-0799t(15)405A<br>Rev B | Elevations – BF5 Option A Mid Terrace Arrangement      |
|   | V6-TF-0799t(15)405B<br>Rev B | Elevations – BF5 Option B End Terrace Right Gable      |
|   | V6-TF-0799t(15)405C<br>Rev C | Elevations – BF5 Option C End Terraced Feature Window  |
|   | V6-TF-0799t(15)405D<br>Rev B | Elevations – BF5 Option D End Terraced Left Gable      |

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| V6-TF-0799t(15)412A Rev B      | Elevations – SF2 Option A Mid Terrace Arrangement                       |
| V6-TF-0799t(15)412B Rev B      | Elevations – SF2 Option B End Terrace Right Gable                       |
| V6-TF-0799t(15)412C Rev C      | Elevations – SF2 Option C End Terraced Feature Window                   |
| V6-TF-0799t(15)412D Rev B      | Elevations – SF2 Option D End Terraced Left Gable                       |
| V6-TF-0799t(15)414A Rev B      | Elevations – SF4 Option A Mid Terrace Arrangement                       |
| V6-TF-0799t(15)414B Rev B      | Elevations – SF4 Option B End Terrace Right Gable                       |
| V6-TF-0799t(15)414C Rev C      | Elevations – SF4 Option C End Terraced Feature Window                   |
| V6-TF-0799t(15)414D Rev B      | Elevations – SF4 Option D End Terraced Left Gable                       |
| 16-098-TIMBERKITBASE-413 Rev D | Newmore Structural Layouts  |
| 16-098-TIMBERKITBASE-426       | Newmore Structural Details  |
| TF1885A/001 Rev B              | Newmore Layout – Option A Mid Terrace                                   |
| TF1885A/002 Rev B              | Newmore GF & FF Panel Elevations - Option A Mid Terrace                 |
| TF1885A/003                    | Lismore Apex Panels - Option A Mid Terrace                              |
| TF1885B/001 Rev B              | Newmore Layout – Option B End Terrace Right Gable                       |
| TF1885B/002 Rev B              | Newmore GF & FF Panel Elevations - Option B End Terrace Right Gable     |
| TF1885B/003                    | Lismore Apex Panels - Option B End Terrace Right Gable                  |
| TF1885C/001 Rev B              | Newmore Layout – Option C End Terraced Feature Window                   |
| TF1885C/002 Rev B              | Newmore GF & FF Panel Elevations - Option C End Terraced Feature Window |
| TF1885C/003                    | Lismore Apex Panels - Option C End Terraced Feature Window              |
| TF1885D/001 Rev B              | Newmore Layout – Option D End Terraced Left Gable                       |
| TF1885D/002 Rev B              | Newmore GF & FF Panel Elevations - Option D End Terraced Left Gable     |
| TF1885D/003                    | Lismore Apex Panels - Option D End Terraced Left Gable                  |
| JJI-NEWM-MT-OPT A              | JJI Layout Option A   |
| JJI-NEWM-ET-OPT B              | JJI Layout Option B   |
| JJI-NEWM-ET-OPT C              | JJI Layout Option C   |
| JJI-NEWM-ET-OPT D              | JJI Layout Option D   |
| F-DETAILS-001                  | JJI Joist Details and Notching Parameters                               |
| TF-D(1)01                      | Ground Bearing Slab Detail  |
| TF-D(1)02                      | Suspended Slab Detail   |
| TF-D(1)05 Rev A                | Level Access Threshold Detail   |
| TF-D(1)06                      | Stepped Access Threshold Detail   |
| TF-D(1)09 Rev B                | GB & Suspended Slab Separating Wall Detail                              |
| TF-D(1)10 Rev B                | Stepped Party Wall Detail   |
| TF-D(1)11                      | Dwarf Wall Detail   |
| TF-D(2)01                      | External Wall Make Up   |
| TF-D(2)02 Rev C                | Stepped Brick Soldier Course Cill Detail                                |
| TF-D(2)03 Rev C                | Brick Jamb Detail   |
| TF-D(2)04 Rev C                | Brick Head Detail   |
| TF-D(2)05 Rev C                | Precast Cill Detail   |
| TF-D(2)06 Rev C                | Precast Jamb Detail   |
| TF-D(2)07 Rev C                | Precast Head Detail   |
| TF-D(2)10                      | Expansion Joint Detail  |
| TF-D(2)11 Rev D                | Steel Goalpost Arrangements   |
| TF-D(2)12 Rev A                | Steel Lintel/beam fire protection                                       |
| TF-D(2)16 Rev A                | Steel post and beam connection  |
| TF-D(2)21 Rev A                | Separating Wall Junction - no service zone                              |
| TF-D(2)23                      | Steel Lintel/beam - External and WC                                     |
| TF-D(3)01                      | Standard Internal Wall Make Ups (Section)                               |
| TF-D(3)02                      | Standard Internal Wall Make Ups (Plan)                                  |
| TF-D(3)03                      | Acoustic Internal Wall Make Ups (Section)                               |
| TF-D(3)04                      | Accessible Sanitary Accommodation Grab Rails                            |
| TF-D(4)01 Rev A                | Standard Mid Floor Make-Up  |
| TF-D(4)02 Rev A                | Perpendicular Joist Mid Floor Junction at External Wall                 |

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| TF-D(4)03 Rev A | Parallel Joist Mid Floor Junction at External Wall    |
| TF-D(4)04 Rev B | Parallel & Perpendicular Joist Mid Floor at Sep. Wall |
| TF-D(4)06 Rev B | Stair Trimmer Detail                                  |
| TF-D(5)01 Rev B | Standard Eaves Detail                                 |
| TF-D(5)02 Rev B | Standard Eaves at Window Head Detail                  |
| TF-D(5)03 Rev B | Standard Verge Detail                                 |
| TF-D(5)04 Rev A | Standard Ridge Detail                                 |
| TF-D(5)06 Rev A | Standard Abutment Detail                              |
| TF-D(5)07 Rev B | Seperating Wall Detail                                |
| TF-D(5)08 Rev B | Stepped Seperating Wall Detail                        |
| TF-D(5)09 Rev A | Condensation trap to Eaves Detail                     |
| TF-D(5)10       | Stepped Wall Detail                                   |
| TF-D(5)13       | Door Head Canopy                                      |
| TF-D(5)14 Rev A | Stepped Seperating Wall Detail (FB Finish)            |
| TF-D(5)15       | Flexible Ducting Installation                         |
| TF-D(6)01       | SVP Box-In Detail                                     |
| TF-D(6)03       | Wet Floor Formation Detail                            |
| TF-D(6)04       | Drainage Pipe Backfill Detail                         |
| TF-D(6)05       | Wall Mounted Combi Boiler Detail                      |
| TF-D(6)06 Rev B | Service Zone for Low Level/Below Cills                |
| TF-D(6)08       | In Building Infrastructure Detail                     |
| TF-D(7)01       | Internal Door Jamb Detail                             |
| TF-D(7)02       | External & Internal Pass Door Clearances              |
| TF-D(7)03       | Canopy Post Detail                                    |
| TF-D(7)06       | Door at Stair Detail - Full Height Door Detail        |
| TF-D(7)07       | Shower Tray at Base detail                            |
| TF-D(7)08       | Downlight at shower upgrade detail                    |
| TF-D(7)09       | Pigs Ear' Handrail Detail                             |
| TF-D(7)14       | Bedroom Furniture Activity Spaces                     |

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| <b>G</b> | <b>Certification:</b>                                      |  |
|          | Statement of structural adequacy                           | From Indev Consult LTD dated 01/11/2016    |
|          | Osma Soil and vent Systems BBA Certificate No. 86/1643     | For AAV's                                  |
|          | Easy Trim Breather Membranes BBA Certificate No. 10/4753   | For Roof Membrane                          |
|          | Charlie Fleming Associates – Acoustical Consultants Report | For Fully Insulated Separating Wall Cavity |

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| <b>H</b>             | <b>Specification:</b>                                |  |
|                      | STR-TF C SPEC V6 Rev J                               | V6 Technical Specification Timber Frame – All House Types  |
|                      | STR-TF-DHDSPEC-V6                                    | Heating Design Specification                               |
|                      | JJI-Joist Technical Bulletin 38 Acoustic Performance | For Intermediate Floors                                    |
|                      | SRL Technical Report                                 | Sound Testing Results for Intermediate Floor               |
|                      | Acoustic Consultant Report                           | Sound Insulation of Separating Wall with Steel Post Detail |
|                      | SAP ratings  | For all house types  |
| U value calculations | For all elements                                     |  |

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| <b>I</b> | <b>Authority:</b>   |   |  |
|          | This system type approval certificate consisting of 4 pages is authorised by: | Signature:  |  |
|          |   | Lead Authority Building standards Manager<br>on behalf of the Local Authority Building Standards Scotland (LABSS) |  |