



# NSAI

## CERTIFICATE OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

0050 - CPR - 1035

System 2+

In compliance with the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, it has been stated that the construction product:

**Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction. Specification for masonry units - Part 3: Aggregate concrete masonry units (Dense and lightweight aggregates) in accordance with Annex ZA of the following:**

I.S. EN 771-3:2011+A1:2015

Placed on the market by:

**Roadstone Ltd  
Mallow  
Co. Cork  
P51 K499**

and produced in the factory:

**Roadstone Ltd  
Mallow  
Co. Cork  
P51 K499**

is submitted by the manufacturer to the initial type-testing of the product and its factory production control and that the approved body – National Standards Authority of Ireland – has performed the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

This certificate attests that all provisions concerning the attestation of factory production control described in Annex ZA of the standards listed above were applied.

This certificate was first issued on 30 June 2013 and remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly.

Signed:

Kevin D. Mullaney – Director of Certification



**File Number:** 1.116.033  
**Approval Date:** 30 June 2013  
**Last Amended Date:** 13 December 2023  
**Expiry Date:** 31 October 2024  
**Issued by:** NSAI, 1 Swift Square, Northwood Business Park, Santry, Dublin 9

# DECLARATION OF PERFORMANCE

## No.B1 Category 1 Aggregate Concrete Masonry Unit – Standard Solid

### 1. Unique identification code of the product type:

| Code    | Description               | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) |
|---------|---------------------------|-------------------------------|-------------|------------|-------------|
| 1230002 | 100mm Solid Standard S7.5 | 7.5                           | 440         | 100        | 215         |
| 1230003 | 140mm Solid Standard S7.5 | 7.5                           | 440         | 140        | 215         |
| 1230001 | 65mm Solid Standard S7.5  | 7.5                           | 440         | 65         | 215         |
| 1230004 | 100mm Solid Standard S13  | 13.0                          | 440         | 100        | 215         |
| 1230008 | 140mm Solid Standard S13  | 13.0                          | 440         | 140        | 215         |
| 1230006 | 100mm Solid Standard S18  | 18.0                          | 440         | 100        | 215         |
| 1230005 | 100mm Solid Standard S24  | 24.0                          | 440         | 100        | 215         |

Table 1. Production details can be traced via dispatch docket & number on strap

**2. Intended use** -as a **common** masonry unit and internal walls in load bearing or non-load bearing building and civil engineering applications (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

### 3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)

Roadstone Ltd.  
Fortunestown  
Dublin 24



### 4. N/A

### 5. System of AVCP System 2+


### 6. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

#### Notified certification body:

National Standards Authority of Ireland (NB 0050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance

| Characteristic              | Declared Performance  | Technical Specification  |
|-----------------------------|---|--|
| Dimensional Tolerance       | D1 (+3mm, -5mm)   | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>  |
| Configuration               | Category 1 to EN 1996-1-1 Group 1<br><br>Normal Configuration Vertical   | <b>I.S. EN 1996-1-1 + NA</b><br><i>*Annex C.5 of S.R. 325:2013+A2:2018</i>   |
| Gross Density               | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b><br><i>*Building Regulation—Part E (Sound)NDP</i>   |
| Net Density                 | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
| Compressive Strength (Mean) | As shown in Table 1 above,<br>in vertical orientation   | <b>I.S. EN 772-1</b> (7.3.2 Air Dry, Mortar Capped)<br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018 Building Regulations - Part A (Structure) NDP</i>   |
| Thermal Conductivity        | 1.01 - 1.19 W/mK (λ10, dry)   | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>   |
| Durability (freeze/thaw)    | <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p><b>Masonry Conditions/Situations A1 and A2 (Work below or near external ground level) and D (Rendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Classes MX2.1/2.2/3.1:</b><br/>Category 1, Group 1:</p> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 7.5N/mm<sup>2</sup> or a declared normalised compressive strength of ≥ 10.5 N/mm<sup>2</sup></li> <li>mortar strength class: M4 (A1 / MX2.1/2.2/3.1), M6 (A2 / MX2.2)</li> </ul> <p><b>Masonry Conditions/Situations A3 (Work below or near external ground level) and C1 and C2 (Unrendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Class MX3.2:</b><br/>Category 1, Group 1:</p> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup> and a declared normalised compressive strength of ≥ 18 N/mm<sup>2</sup></li> <li>mortar strength class: M12</li> </ul> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/>Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> <li>A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1)</li> <li>A2 - High Risk of Saturation Without Freezing (MX2.2)</li> <li>A3 - High Risk of Saturation with Freezing (MX3.2)</li> <li>C1 - Low Risk of Saturation (MX3.1)</li> <li>C2 - High Risk of Saturation (MX3.2)</li> </ul> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |

|  |   |  |
|--|---|--|
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br>All strengths: not to be used as a DPM. | <b>I.S. EN 772 – 11</b>  |
| Moisture Movement                        | < 0.6 mm/m  | <b>I.S. EN 772-14</b><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)<br>*Annex C.6 of S.R. 325:2013+A2:2018 & Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP |
| Water Vapour Permeability                | 5/15 $\mu$  | <b>I.S. EN 1745 Annex A(Tabulated)</b>   |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br>*Building Regulations Part B—Fire Safety           |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012   |
| Dangerous Substances                     | None  | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance   |

\*Reference to National Provisions / NDP = National Defined Parameter

The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

**Signed for and on behalf of the manufacturer by:** Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function)

Belgard, 28/03/2022

(Place and Date of Issue)

*Alan Lowe*

(Signature)



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Roadstone Ltd.  
Fortunestown  
Dublin 24



**Certification Body NSAI 050**  
**RL DoP-B1**

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit - B1 Standard/Common Solid Block

**Dimensions:** Length (440mm), Width (65mm,100mm,140mm) Height (215mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 1 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 7.5N/mm<sup>2</sup>, 13N/mm<sup>2</sup>, 18N/mm<sup>2</sup>, 24N/mm<sup>2</sup> (Refer to Docket)

| Code    | Description               |
|---------|---------------------------|
| 1230002 | 100mm Solid Standard S7.5 |
| 1230003 | 140mm Solid Standard S7.5 |
| 1230001 | 65mm Solid Standard S7.5  |
| 1230004 | 100mm Solid Standard S13  |
| 1230008 | 140mm Solid Standard S13  |
| 1230006 | 100mm Solid Standard S18  |
| 1230005 | 100mm Solid Standard S24  |

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1)

**Durability against freeze-thaw:** Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Refer to DoP Table 8 Declared Performance**

**Dangerous substances:** None

# DECLARATION OF PERFORMANCE

## No.B2 Category 1 Aggregate Concrete Masonry Unit – Group 4 Cavity (Horizontal Cavity)

### 1. Unique identification code of the product type:

| Code    | Description                | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) |
|---------|----------------------------|-------------------------------|-------------|------------|-------------|
| 1231001 | 215mm Hollow Standard H3.0 | 3.0                           | 440         | 215        | 215         |

Table 1. Production details can be traced via dispatch docket & number on strap

2. **Intended use** -as a **common** masonry unit and internal walls in **non-load bearing walls** (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

3. **Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)**

4. Roadstone Ltd.  
Fortunestown  
Dublin 24



5. N/A

6. **System of AVCP** System 2+

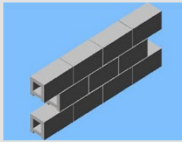
7. **Harmonised Standard:** I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

### Notified certification body:

National Standards Authority of Ireland (NB 0050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location  | FPC Cert No. |
|----------------|---------------|-----------|--------------|
| Ballyknockane  | 0050-CPR-0141 | Castlebar | 0050-CPR-157 |
| Bunratty       | 0050-CPR-0135 | Galway    | 0050-CPR-156 |
| Classis        | 0050-CPR-923  |           |              |
| Joseph Hogan's | 0050-CPR-346  |           |              |
| Mallow         | 0050-CPR-137  |           |              |
| Kilmacow       | 0050-CPR-0216 |           |              |
|                |               |           |              |

## 8.Declared Performance

| Characteristic                           | Declared Performance  | Technical Specification  |
|--|---|--|
| Dimensional Tolerance                    | D1 (+3mm, -5mm)   | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>  |
| Configuration                            | Category 1 to EN 1996-1-1 Group 4 Normal Configuration Vertical<br>  | <b>I.S. EN 1996-1-1 + NA</b><br><br><i>*Annex C.5 of S.R. 325:2013+A2:2018</i>   |
| Gross Density                            | >1200kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b><br><br><i>*Building Regulation—Part E (Sound)NDP</i>   |
| Net Density                              | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
| Compressive Strength (Mean)              | As shown in Table 1 above,<br>in vertical orientation<br><b>Non- Structural applications</b>  | <b>I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped)</b><br><br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018 Building Regulations - Part A (Structure) NDP</i>   |
| Thermal Conductivity                     | 1.01 - 1.19 W/mK (λ10, dry)   | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>   |
| Durability (freeze/thaw)                 | Group 4 Cavity blocks are not listed in TGD part A or S.R. 325:2013+A2:2018 for use in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018<br><br>Exposed Blockwork<br>Sheltered to Moderate= Two coat render system<br>Moderate to Severe = Three coat render with rough cast finish i.e. Dashing or Terylene<br>(Scud coat cannot be considered as a coat unless >3mm thickness and covering the full exposed surface of the wall)<br><br>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete) | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |
| Water Absorption due to Capillary Action | ≤20 g/(m <sup>2</sup> *s)<br><br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br><br>All strengths: not to be used as a DPM.   | <b>I.S. EN 772 – 11</b>  |
| Moisture Movement                        | < 0.6 mm/m  | <b>I.S. EN 772-14</b><br><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325<br>(or as specified by competent person)<br><br><i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i>   |
| Water Vapour Permeability                | 5/15μ   | <b>I.S. EN 1745 Annex A(Tabulated)</b>   |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br><br><i>*Building Regulations Part B—Fire Safety</i>  |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br><br><i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i>  |

|                      |      |  |
|----------------------|------|--|
| Dangerous Substances | None | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance |
|----------------------|------|--|

\*Reference to National Provisions / NDP = National Defined Parameter

The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

**Signed for and on behalf of the manufacturer by:** Alan Lowe, Senior Technical Manager, Roadstone Ltd.



(Name and Function)

Belgard, 28/03/2022

(Place and Date of Issue)

*Alan Lowe*

(Signature)

|   |                            |           |  |                |              |      |             |         |                            |
|--|----------------------------|-----------|--|----------------|--------------|------|-------------|---------|----------------------------|
| <b>13</b>  |                            |           |  |                |              |      |             |         |                            |
| Roadstone Ltd.<br>Fortunestown<br>Dublin 24  |                            |           |  |                |              |      |             |         |                            |
| <b>Certification Body NSAI 050<br/>RL DoP-B1</b>   |                            |           |  |                |              |      |             |         |                            |
| Location   | FPC Cert No.               | Location  | FPC Cert No.   | Location       | FPC Cert No. |      |             |         |                            |
| Ballyknockane  | 0050-CPR-0141              | Castlebar | 0050-CPR-157   | Classis        | 0050-CPR-923 |      |             |         |                            |
| Bunratty   | 0050-CPR-0135              | Galway    | 0050-CPR-156   | Joseph Hogan's | 0050-CPR-346 |      |             |         |                            |
| Mallow   | 0050-CPR-137               | Kilmacow  | 0050-CPR-0216  |                |              |      |             |         |                            |
| <p><b>EN 771-3:2011 + A1:2015</b> Category I, Group 1 Aggregate Concrete Masonry Unit – Group 4 Cavity</p> <p><b>Dimensions:</b> Length (440mm), Width (315) Height (215mm)</p> <p><b>Dimensional tolerances:</b> Category: D1</p> <p><b>Configuration:</b> Group 4 unit to EN 1996-1-1 horizontal</p> <p><b>Compressive strength:</b> Mean Air-Dry Mortar Capped 3N/mm<sup>2</sup>, .. <b>Non -Structural</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="background-color: #f4a460;">Code</th> <th style="background-color: #f4a460;">Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1231001</td> <td style="text-align: center;">215mm Hollow Standard H3.0</td> </tr> </tbody> </table> <p><b>Dimensional stability:</b> Moisture Movement: 0.6 mm/m</p> <p><b>Shear bond strength:</b> Fixed value 0.15(N/mm<sup>2</sup>)</p> <p><b>Flexural bond strength:</b> NPD</p> <p><b>Reaction to fire:</b> Euroclass A1</p> <p><b>Water absorption:</b> ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).</p> <p><b>Water vapour diffusion coefficient:</b> 5/15μ</p> <p><b>Direct airborne sound insulation:</b> Gross dry density &gt;1900 kg/m<sup>3</sup></p> <p><b>Thermal conductivity:</b> 1.01 - 1.19 W/mK (λ10, dry, unit, S1)</p> <p><b>Durability against freeze-thaw:</b> Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325 :2013+A2:2018-- <b>Group 4 Block not cover by National Provisions</b> – Rendered in all exposed use</p> <p><b>Refer to DoP Table 8 Declared Performance</b></p> <p><b>Dangerous substances: None</b></p> |                            |           |  |                |              | Code | Description | 1231001 | 215mm Hollow Standard H3.0 |
| Code   | Description                |           |  |                |              |      |             |         |                            |
| 1231001  | 215mm Hollow Standard H3.0 |           |  |                |              |      |             |         |                            |



# DECLARATION OF PERFORMANCE

No. B3 Category 1 Aggregate Concrete Masonry Unit – Standard Group 2 Cavity

## 1. Unique identification code of the product type:

| Code    | Description                                  | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) | Shell Side (mm) | Shell End (mm) | Web (mm) |
|---------|--|-------------------------------|-------------|------------|-------------|-----------------|----------------|----------|
| 1231005 | 215mm Twin Pot Cavity H5.0                   | 5.0                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1231008 | 215mm Single Pot Cavity H5.0 Half (Football) | 5.0                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1231006 | 215mm Twin Pot Cavity H7.5                   | 7.5                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1231016 | 215mm Single Pot Cavity H7.5 Half (Football) | 7.5                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1231004 | 215mm Twin Pot Cavity H13                    | 13                            | 440         | 140        | 215         | 30              | 30             | 60       |
| 1231007 | 215mm Single pot Cavity H13 Half (Football)  | 13                            | 215         | 215        | 215         | 38              | 38             |          |

Table 1. Production details can be traced via dispatch docket & Number on strap

**2. Intended use** -as common Group 2 masonry unit and internal walls in load bearing or non-load bearing building and civil engineering applications (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

## 3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5):

Roadstone Ltd.  
Fortunestown  
Dublin 24



4. N/A

5. System of AVCP System 2+

6. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

## Notified certification body:

NSAI (identification No. 050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance


| Characteristic              | Declared Performance  | Technical Specification  |
|-----------------------------|---|--|
| Dimensional Tolerance       | D1 (+3mm, -5mm)   | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>  |
| Gross Density               | >1200kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b><br><i>*Building Regulation—Part E (Sound)NDP</i>   |
| Net Density                 | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
| Compressive Strength (Mean) | As shown in Table 1 above,<br>in vertical orientation   | <b>I.S. EN 772-1</b> (7.3.2 Air Dry, Mortar Capped)<br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018 Building Regulations - Part A (Structure) NDP</i>   |
| Thermal Conductivity        | 1.01 - 1.19 W/mK (λ10, dry)<br>(215mm cavity Block Thermal resistance<br>0.210 m <sup>2</sup> K/W)  | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>   |
| Durability (freeze/thaw)    | <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents A, C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p><b>5N/mm<sup>2</sup> Category 1, Group 2 Not Reference in Table 14 Durability of masonry in finished construction of SR 325</b></p> <p><b>Masonry Conditions/Situations:</b><br/> <b>D</b> *Rendered external walls, (other than chimneys, capping, copings, parapets, sills).<br/> <b>E</b> Internal walls and inner leaves of cavity, MX1</p> <p><b>J1</b> *Rendered <b>Freestanding boundary and screen walls</b> with coping or capping min. 40mm overhang, <b>Classes</b> MX3.1, MX3.2</p> <p>Category 1, Group 2<br/> <ul style="list-style-type: none"> <li>declared mean compressive strength ≥ 7.5N/mm<sup>2</sup></li> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>D &amp; E mortar strength class: M4</li> <li>J1 mortar strength class: M6</li> </ul> </p> <p>Masonry Conditions/Situations as above D, E, J1 and J2 <b>Freestanding boundary and screen walls with coping or capping min. 40mm overhang Classes</b> MX3.1, MX3.2</p> <p>Category 1, Group 2:<br/> <ul style="list-style-type: none"> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup></li> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>mortar strength class: M6 or M12 Dependant on design/ Exposure class – as advised by engineers.</li> </ul> </p> <p>Generally, for use in <b>Sheltered/Moderate Exposure</b>, *render system must prevent the passage of moisture to the inside of the building or damage to the fabric of the building including the walls from excessive moisture. To prevent excessive cracking in the render system and masonry external walls, the walls should be designed with adequate movement joints.</p> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/> Masonry Conditions/Situations:<br/> <ul style="list-style-type: none"> <li>D - * Rendered external walls as in A1</li> <li>E - Internal walls and inner leaves of cavity walls MX1 as in A1</li> <li><b>J1</b> *Rendered <b>Freestanding boundary and screen walls</b> with coping or capping 40mm overhang, <b>Classes</b> MX3.1, MX3.2</li> <li><b>J2 Freestanding boundary and screen walls with cappings 40mm overhang Classes</b> MX3.1, MX3.2</li> </ul> </p> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b><br/> <ul style="list-style-type: none"> <li>MX1 – In dry conditions</li> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> </p> <p>*For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |

|  |   |   |
|--|---|---|
| Configuration                            | Category 1 to EN 1996-1-1 Group 2 Normal Configuration Vertical<br>Use widest web on top for optimum mortar bed   | <b>I.S. EN 1996-1-1 + NA</b><br><br><i>*Annex C.5 of S.R. 325:2013+A2:2018</i>  |
|  |   |   |
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br>All strengths: not to be used as a DPM. | <b>I.S. EN 772 – 11</b>   |
| Moisture Movement                        | $< 0.6 \text{ mm}/\text{m}$   | <b>I.S. EN 772-14</b><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)<br><i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i> |
| Water Vapour Permeability                | 5/15 $\mu$  | <b>I.S. EN 1745 Annex A(Tabulated)</b>  |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br><i>*Building Regulations Part B—Fire Safety</i>               |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br><i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i>   |
| Dangerous Substances                     | None  | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance  |

**Signed for and on behalf of the manufacturer by:**

Alan Lowe, Senior Technical Manager, Roadstone Ltd.  
(Name and Function)

Belgard, 10/01/2022  
(Place and Date of Issue)

  
(Signature)



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Roadstone Ltd.  
Fortunestown  
Dublin 24



Certification Body NSAI 050  
RL DoP-B1

| Location      | FPC Cert No.  |
|---------------|---------------|
| Belgard       | 0050-CPR-0165 |
| Carrigtwohill | 0050-CPR-0423 |
| Gooig         | 0050-CPR-0138 |
| Slane         | 0050-CPR-0164 |
| Tullamore     | 0050-CPR-0185 |

EN 771-3:2011 + A1:2015 Category I, Group 1 Aggregate Concrete Masonry Unit-- **Standard Group 2 Cavity**

**Dimensions:** Length (440mm), Width (65mm,100mm,140mm) Height (215mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 2 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 7.5N/mm<sup>2</sup>, 13N/mm<sup>2</sup>, (Refer to Docket)

| Code    | Description                                  | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) | Shell Side (mm) | Shell End (mm) | Web (mm) |
|---------|--|-------------------------------|-------------|------------|-------------|-----------------|----------------|----------|
| 1231005 | 215mm Twin Pot Cavity H5.0                   | 5.0                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1231008 | 215mm Single Pot Cavity H5.0 Half (Football) | 5.0                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1231006 | 215mm Twin Pot Cavity H7.5                   | 7.5                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1231016 | 215mm Single Pot Cavity H7.5 Half (Football) | 7.5                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1231004 | 215mm Twin Pot Cavity H13                    | 13                            | 440         | 140        | 215         | 30              | 30             | 60       |
| 1231007 | 215mm Single pot Cavity H5.0 Half (Football) | 13                            | 215         | 215        | 215         | 38              | 38             |          |

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1200 kg/m<sup>3</sup> Net Density > 1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m<sup>2</sup>K/W)

**Durability against freeze-thaw:** 7.5N D, E and J1, ≥13N D, E, J1 & J2 Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Refer to DoP Table 8 Declared Performance**

**Dangerous substances: None**

# DECLARATION OF PERFORMANCE

## No.B4 Category 1 Aggregate Concrete Masonry Unit – Fine Texture Solid

### 1. Unique identification code of the product type:

| Code    | Description                    | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) |
|---------|--------------------------------|-------------------------------|-------------|------------|-------------|
| 1230024 | 100mm Solid Paint Quality S7.5 | 7.5                           | 440         | 100        | 215         |
| 1232007 | 100mm Solid Fine Texture S7.5  | 7.5                           | 440         | 100        | 215         |
| 1232011 | 65MM Solid Fine Texture S7.5   | 7.5                           | 440         | 65         | 215         |
| 1232005 | 100mm Solid Fine Texture S13   | 13                            | 440         | 100        | 215         |
| 1232002 | 140mm Solid Fine Texture S7.5  | 7.5                           | 440         | 140        | 215         |

Table 1. Production details can be traced via dispatch docket & number on strap

**2. Intended use** -as a **facing** masonry unit as **internal walls** in load bearing or non-load bearing building and civil engineering applications (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

### 3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)

Roadstone Ltd.  
Fortunestown  
Dublin 24



### 4. N/A

### 5. System of AVCP System 2+


### 6. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

#### Notified certification body:

National Standards Authority of Ireland (NB 0050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance

| Characteristic                           | Declared Performance   | Technical Specification   |
|--|--|---|
| Dimensional Tolerance                    | D1 (+3mm, -5mm)  | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>   |
| Configuration                            | Category 1 to EN 1996-1-1 Group 1<br><br>Normal Configuration Vertical  | <b>I.S. EN 1996-1-1 + NA</b><br><i>*Annex C.5 of S.R. 325:2013+A2:2018</i>  |
| Gross Density                            | >1900kg/m <sup>3</sup>   | <b>I.S. EN 772-13</b><br><i>*Building Regulation—Part E (Sound)NDP</i>  |
| Net Density                              | >1900kg/m <sup>3</sup>   | <b>I.S. EN 772-13</b>   |
| Compressive Strength (Mean)              | As shown in Table 1 above,<br>in vertical orientation  | <b>I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped)</b><br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018</i><br><i>Building Regulations - Part A (Structure) NDP</i>  |
| Thermal Conductivity                     | 1.01 - 1.19 W/mK (λ <sub>10</sub> , dry)   | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>  |
| Durability (freeze/thaw)                 | <p>Not to be used as exposed Masonry – if used in external walls Render exposed faces as per guidance below.</p> <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p><b>Masonry Conditions/Situations E Internal walls and inner leaves of cavity walls Classes MX1</b><br/>Category 1, Group 1:</p> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 7.5N/mm<sup>2</sup> or a declared normalised compressive strength of ≥ 10.5 N/mm<sup>2</sup></li> <li>mortar strength class: M4</li> </ul> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/>Masonry Conditions/Situations:<br/>E Internal walls &amp; inner leaves of cavity walls</p> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX1 – In dry conditions</li> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914 2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |
| Water Absorption due to Capillary Action | ≤20 g/(m <sup>2</sup> *s)<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.   | <b>I.S. EN 772 – 11</b>   |

|                           |   |  |
|---------------------------|---|--|
|                           | All strengths: not to be used as a DPM. |  |
| Moisture Movement         | < 0.6 mm/m                              | <p><b>I.S. EN 772-14</b></p> <p>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)</p> <p><i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i></p> |
| Water Vapour Permeability | 5/15 $\mu$                              | <b>I.S. EN 1745 Annex A(Tabulated)</b>   |
| Reaction to Fire          | Class A1                                | <p><b>Based on Commission Decision 200/605 EC amending 96/603 EC</b></p> <p>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 &amp; 3.3 for fire ratings of wall constructed with Class A1 Units)</p> <p><i>*Building Regulations Part B—Fire Safety</i></p>           |
| Shear Bond Strength       | 0,15N/mm <sup>2</sup> (Tabulated)       | <p><b>I.S. EN 998-2(Tabulated)</b></p> <p><i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i></p>   |
| Dangerous Substances      | None                                    | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance   |

*\*Reference to National Provisions / NDP = National Defined Parameter*

The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

**Signed for and on behalf of the manufacturer by:** Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function)

Belgard, 28/03/2022

(Place and Date of Issue)

*Alan Lowe*

(Signature)



13

**Roadstone Ltd.**  
**Fortunestown**  
**Dublin 24**



**Certification Body NSAI 050**  
**RL DoP-B1**

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit

**Dimensions:** Length (440mm), Width (65mm,100mm,140mm) Height (215mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 1 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 7.5N/mm<sup>2</sup>, 13N/mm<sup>2</sup>, (Refer to Docket)

| Code    | Description                    |
|---------|--------------------------------|
| 1230024 | 100mm Solid Paint Quality S7.5 |
| 1232007 | 100mm Solid Fine Texture S7.5  |
| 1232011 | 65MM Solid Fine Texture S7.5   |
| 1232005 | 100mm Solid Fine Texture S13   |
| 1232002 | 140mm Solid Fine Texture S7.5  |
|         |                                |
|         |                                |

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1)

**Durability against freeze-thaw:** Not to be used as exposed Masonry – if used in external walls Render exposed faces as per guidance below. Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Refer to DoP Table 8 Declared Performance**

**Dangerous substances:** None



# DECLARATION OF PERFORMANCE

No. B3 Category 1 Aggregate Concrete Masonry Unit – Fine Texture Group 2 Cavity

**1. Unique identification code of the product type:**

| Code             | Description                                    | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) | Shell Side (mm) | Shell End (mm) | Web (mm) |
|------------------|--|-------------------------------|-------------|------------|-------------|-----------------|----------------|----------|
| 1233006          | 215mm Twin Pot Cavity Fine-Texture H5.0        | 5.0                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233007 /1233009 | 215mm Single Pot Cavity Fine-Texture H5.0 Half | 5.0                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1233008          | 215mm Twin Pot Cavity Fine-Texture H7.5        | 7.5                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233015          | 215mm Single Pot Cavity Fine-Texture H7.5 Half | 7.5                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1233010          | 215mm Twin Pot Cavity Fine-Texture H13         | 13.0                          | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233018          | 215mm Single Pot Cavity Fine-Texture H13Half   | 13.0                          | 215         | 215        | 215         | 38              | 38             | -        |
| 1232010          | 215mm Twin Pot Cavity Fine-Texture H18         | 18.0                          | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233012          | 215mm Single Pot Cavity Fine-Texture H13Half   | 18.0                          | 215         | 215        | 215         | 38              | 38             | -        |

Table 1. Production details can be traced via dispatch docket & Number on strap

**2. Intended use** -as Group 2 Facing masonry unit as internal walls in load bearing or non-load bearing building and civil engineering applications and free standing boundary walls in  $\geq 13\text{N/mm}^2$  (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

**3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5):**

Roadstone Ltd.  
 Fortunestown  
 Dublin 24



**4. N/A**

**5. System of AVCP System 2+**

**6. Harmonised Standard:** I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

**Notified certification body:**

NSAI (identification No. 050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance

| Characteristic              | Declared Performance  | Technical Specification   |
|-----------------------------|---|---|
| Dimensional Tolerance       | D1 (+3mm, -3mm)   | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>   |
| Gross Density               | >1200kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b><br><i>*Building Regulation—Part E (Sound)NDP</i>  |
| Net Density                 | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>   |
| Compressive Strength (Mean) | As shown in Table 1 above,<br>in vertical orientation   | <b>I.S. EN 772-1</b> (7.3.2 Air Dry, Mortar Capped)<br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018<br/>Building Regulations - Part A (Structure) NDP</i>  |
| Thermal Conductivity        | 1.01 - 1.19 W/mK (λ10, dry)<br>(215mm cavity Block Thermal resistance<br>0.210 m <sup>2</sup> K/W)  | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>  |
| Durability (freeze/thaw)    | <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents A, C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p>5N/mm<sup>2</sup> Category 1, Group 2 Not Reference in Table 14<br/>Durability of masonry in finished construction of SR 325 E Internal walls and inner leaves of cavity, MX1</p> <p><b>Masonry Conditions/Situations:</b><br/>D *Rendered external walls, (other than chimneys, capping, copings, parapets, sills).</p> <p>E Internal walls and inner leaves of cavity, MX1</p> <p>Category 1, Group 2</p> <ul style="list-style-type: none"> <li>declared mean compressive strength ≥ 7.5N/mm<sup>2</sup></li> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>D &amp; E mortar strength class: M4</li> </ul> <p>Masonry Conditions/Situations as above D, E, J1 and J2<br/><i>Freestanding boundary and screen walls with coping or capping min. 40mm overhang Classes MX3.1, MX3.2</i></p> <p>Category 1, Group 2:</p> <ul style="list-style-type: none"> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup></li> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>mortar strength class: M6 or M12 Dependant on design/ Exposure class – as advised by engineers.</li> </ul> <p>Generally, for use in <b>Sheltered/Moderate Exposure</b>, *render system must prevent the passage of moisture to the inside of the building or damage to the fabric of the building including the walls from excessive moisture. To prevent excessive cracking in the render system and masonry external walls, the walls should be designed with adequate movement joints.</p> <p>For exposed Blockwork for use in buildings refer to our Masonry range</p> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/>Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> <li>A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1)</li> <li>A2 - High Risk of Saturation Without Freezing (MX2.2)</li> <li>A3 - High Risk of Saturation with Freezing (MX3.2)</li> <li>C1 - Low Risk of Saturation (MX3.1) As in A3 (but Group 1 or Group 2 units)</li> <li>C2 - High Risk of Saturation (MX3.2) As in A3 (but Group 1 or Group 2 units)</li> <li>D - Rendered external walls As in A1 (but Group 1 or Group 2 units)</li> <li>E - Internal walls and inner leaves of cavity walls</li> <li>J1 - With coping MX3.1, MX3.2</li> <li>J2 - With capping MX3.1, MX3.2</li> </ul> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |

|  |   |   |
|--|---|---|
| Configuration                            | Category 1 to EN 1996-1-1 Group 2 Normal Configuration Vertical   | <b>I.S. EN 1996-1-1 + NA</b>  |
|  | Use widest web on top for optimum mortar bed  | <i>*Annex C.5 of S.R. 325:2013+A2:2018</i>  |
|  |   |   |
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br>All strengths: not to be used as a DPM. | <b>I.S. EN 772 – 11</b>   |
| Moisture Movement                        | < 0.6 mm/m  | <b>I.S. EN 772-14</b><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)<br><i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i> |
| Water Vapour Permeability                | 5/15 $\mu$  | <b>I.S. EN 1745 Annex A(Tabulated)</b>  |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA.3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br><i>*Building Regulations Part B—Fire Safety</i>                |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br><i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i>   |
| Dangerous Substances                     | None  | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance  |

**Signed for and on behalf of the manufacturer by:**

Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function)

Belgard, 10/04/2022

(Place and Date of Issue)

(Signature)



13

Roadstone Ltd.  
Fortunestown  
Dublin 24



**Certification Body NSAI 050**  
**RL DoP-B1**

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit

| Code             | Description                                    | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) | Shell Side (mm) | Shell End (mm) | Web (mm) |
|------------------|--|-------------------------------|-------------|------------|-------------|-----------------|----------------|----------|
| 1233006          | 215mm Twin Pot Cavity Fine-Texture H5.0        | 5.0                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233007 /1233009 | 215mm Single Pot Cavity Fine-Texture H5.0 Half | 5.0                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1233008          | 215mm Twin Pot Cavity Fine-Texture H7.5        | 7.5                           | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233015          | 215mm Single Pot Cavity Fine-Texture H7.5 Half | 7.5                           | 215         | 215        | 215         | 38              | 38             | -        |
| 1233010          | 215mm Twin Pot Cavity Fine-Texture H13         | 13.0                          | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233018          | 215mm Single Pot Cavity Fine-Texture H13Half   | 13.0                          | 215         | 215        | 215         | 38              | 38             | -        |
| 1232010          | 215mm Twin Pot Cavity Fine-Texture H18         | 18.0                          | 440         | 215        | 215         | 38              | 38             | 58       |
| 1233012          | 215mm Single Pot Cavity Fine-Texture H13Half   | 18.0                          | 215         | 215        | 215         | 38              | 38             | -        |

**Dimensions:** Length (440mm), Width (65mm,100mm,140mm) Height (215mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 2 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 5N/mm<sup>2</sup>, 13N/mm<sup>2</sup>, 18N/mm<sup>2</sup> (Refer to Docket)

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1200 kg/m<sup>3</sup> Net Density> 1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m<sup>2</sup>K/W)

**Durability against freeze-thaw:** Refer to DoP Table 8 Declared Performance 7.5N/mm<sup>2</sup>- E Internal walls and inner leaves of cavity walls, ≥13N/mm<sup>2</sup> C1 & C2 Work above ground level Unrendered external walls (other than chimneys, cappings, copings, parapets, sills), E Internal walls and inner leaves of cavity walls  
Refer to - Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Dangerous substances:** None

# DECLARATION OF PERFORMANCE

## No.B1 Category 1 Aggregate Concrete Masonry Unit – Standard Solid Specials

### 1. Unique identification code of the product type:

| Code    | Description                               | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) |
|---------|---|-------------------------------|-------------|------------|-------------|
| 1230016 | 100mm Cavity Closer Standard S7.5 (Nib-J) | 7.5                           | 440         | 100/150    | 215         |
| 1234003 | Filler Block 18N (450 Range)              | 18.0                          | 215         | 100        | 65          |
| 1235003 | 100mm Soapbar Standard S7.5               | 7.5                           | 440         | 100        | 100         |
| 1235010 | 100mm Soapbar Standard S13                | 13.0                          | 440         | 100        | 100         |
| 1235004 | 100mm Cavity Closer Standard S7.5 (L:D&P) | 7.5                           | 440         | 100/150    | 215         |
| 1235005 | 140mm Soapbar Standard S7.5               | 7.5                           | 440         | 100        | 140         |
| 1236001 | 140mm Soapbar Standard S13                | 13.0                          | 440         | 100        | 140         |
| 1235006 | 65mm Soapbar Standard S7.5                | 7.5                           | 440         | 100        | 65          |
| 1230011 | 65mm Solid Standard S13                   | 13.0                          | 440         | 215        | 65          |
| 1235007 | 100mm Cavity Closer Standard S13 (L:D&P)  | 13.0                          | 440         | 100/150    | 215         |

Table 1. Production details can be traced via dispatch docket & number on strap

**2. Intended use** -as a **common** masonry unit and internal walls in load bearing or non-load bearing building and civil engineering applications (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6).

### 3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)

Roadstone Ltd.  
Fortunestown  
Dublin 24



### 4. N/A

### 5. System of AVCP System 2+

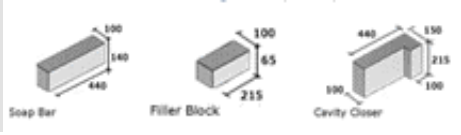
### 6. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

#### Notified certification body:

National Standards Authority of Ireland (NB 0050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance

| Characteristic              | Declared Performance  | Technical Specification  |
|-----------------------------|---|--|
| Dimensional Tolerance       | D1 (+3mm, -5mm)   | <b>I.S. EN 772-16</b><br><i>*Annex C.3 of S.R. 325:2013+A2:2018</i>  |
| Configuration               | Category 1 to EN 1996-1-1 Group 1 Normal Configuration Vertical<br>  | <b>I.S. EN 1996-1-1 + NA</b><br><br><i>*Annex C.5 of S.R. 325:2013+A2:2018</i>   |
| Gross Density               | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b><br><i>*Building Regulation—Part E (Sound)NDP</i>   |
| Net Density                 | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation  | <b>I.S. EN 772-1</b> (7.3.2 Air Dry, Mortar Capped)<br><i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018 Building Regulations - Part A (Structure) NDP</i>   |
| Thermal Conductivity        | 1.01 - 1.19 W/mK (λ10, dry)   | <b>I.S. EN 1745 Annex A (Tabulated)</b><br><i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>   |
| Durability (freeze/thaw)    | <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p><b>Masonry Conditions/Situations A1 and A2 (Work below or near external ground level) and D (Rendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Classes MX2.1/2.2/3.1:</b><br/>Category 1, Group 1:<br/> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 7.5N/mm<sup>2</sup> or a declared normalised compressive strength of ≥ 10.5 N/mm<sup>2</sup></li> <li>mortar strength class: M4 (A1 / MX2.1/2.2/3.1), M6 (A2 / MX2.2)</li> </ul> </p> <p><b>Masonry Conditions/Situations A3 (Work below or near external ground level) and C1 and C2 (Unrendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Class MX3.2:</b><br/>Category 1, Group 1:<br/> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup> and a declared normalised compressive strength of ≥ 18 N/mm<sup>2</sup></li> <li>mortar strength class: M12</li> </ul> </p> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/>Masonry Conditions/Situations:<br/> <ul style="list-style-type: none"> <li>A1 - Low Risk of Saturation<br/>(1) Without Freezing (MX2.1, MX2.2)<br/>(2) With Freezing (MX3.1)</li> <li>A2 - High Risk of Saturation Without Freezing (MX2.2)</li> <li>A3 - High Risk of Saturation with Freezing (MX3.2)</li> <li>C1 - Low Risk of Saturation (MX3.1)</li> <li>C2 - High Risk of Saturation (MX3.2)</li> </ul> </p> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |

|  |   |   |
|--|---|---|
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br>All strengths: not to be used as a DPM. | <b>I.S. EN 772 – 11</b>   |
| Moisture Movement                        | $< 0.6 \text{ mm}/\text{m}$   | <b>I.S. EN 772-14</b><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)<br><i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i> |
| Water Vapour Permeability                | 5/15 $\mu$  | <b>I.S. EN 1745 Annex A(Tabulated)</b>  |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br><i>*Building Regulations Part B—Fire Safety</i>               |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br><i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i>   |
| Dangerous Substances                     | None  | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance  |

*\*Reference to National Provisions / NDP = National Defined Parameter*

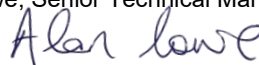
The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

**Signed for and on behalf of the manufacturer by:** Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function)

Belgard, 28/03/2022

(Place and Date of Issue)



(Signature)



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**Roadstone Ltd.**  
**Fortunestown**  
**Dublin 24**



**Certification Body NSAI 050**  
**RL DoP-B1**

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit

| Code    | Description                               | Strength (N/mm <sup>2</sup> ) | Length (mm) | Width (mm) | Height (mm) |
|---------|---|-------------------------------|-------------|------------|-------------|
| 1230016 | 100mm Cavity Closer Standard S7.5 (Nib-J) | 7.5                           | 440         | 100/150    | 215         |
| 1234003 | Filler Block 18N (450 Range)              | 18.0                          | 215         | 100        | 65          |
| 1235003 | 100mm Soapbar Standard S7.5               | 7.5                           | 440         | 100        | 100         |
| 1235010 | 100mm Soapbar Standard S13                | 13.0                          | 440         | 100        | 100         |
| 1235004 | 100mm Cavity Closer Standard S7.5 (L:D&P) | 7.5                           | 440         | 100/150    | 215         |
| 1235005 | 140mm Soapbar Standard S7.5               | 7.5                           | 440         | 100        | 140         |
| 1236001 | 140mm Soapbar Standard S13                | 13.0                          | 440         | 100        | 140         |
| 1235006 | 65mm Soapbar Standard S7.5                | 7.5                           | 440         | 100        | 65          |
| 1230011 | 65mm Solid Standard S13                   | 13.0                          | 440         | 215        | 65          |
| 1235007 | 100mm Cavity Closer Standard S13 (L:D&P)  | 13.0                          | 440         | 100/150    | 215         |

**Dimensions:** Length (440mm), Width (65mm,100mm,140mm) Height (215mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 1 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 7.5N/mm<sup>2</sup>, 13N/mm<sup>2</sup>, 18N/mm<sup>2</sup> (Refer to Docket)

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1)

**Durability against freeze-thaw:** Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R.

325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Refer to DoP Table 8 Declared Performance**

**Dangerous substances:** None



# DECLARATION OF PERFORMANCE

No.B12 Category 1 Aggregate Concrete Masonry Unit

Standard Solid Foundation block

**1. Unique identification code of the product type:**

| Code    | Description                          | Strength (N/mm <sup>2</sup> )           | Length (mm) | Width (mm) | Height (mm) |
|---------|--------------------------------------|---|-------------|------------|-------------|
| 1230050 | 100mm Solid Standard S13 (300 x 450) | 13                                      | 440         | 100        | 300         |
| 1230003 | 100mm Solid Standard S13 (300 X 350) | 13                                      | 350         | 100        | 300         |
|         |                                      | Normalized strength 18N/mm <sup>2</sup> |             |            |             |
|         |                                      |   |             |            |             |
|         |                                      |   |             |            |             |
|         |                                      |   |             |            |             |
|         |                                      |   |             |            |             |

Table 1. Production details can be traced via dispatch docket & number on strap

**2. Intended use** -as a **common** masonry unit and internal walls in load bearing or non-load bearing building and civil engineering applications (see I.S. EN 771-3 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)) in accordance with Irish Building Regulations (including Technical Guidance Documents A, B,C,D,E & L), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 (Design, Preparation and Application of External Rendering and Internal Plastering) and 325:2013+A2:2018 (Recommendations for the design of masonry structures in Ireland to Eurocode 6). Generally used as a foundation block or cavity closer

**3. Name, registered trade name or registered trademark and contact address of the manufacturer as required under Article 11(5)**

Roadstone Ltd.  
Fortunestown  
Dublin 24



**4. N/A**

**5. System of AVCP** System 2+

**6. Harmonised Standard:** I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

**Notified certification body:**

National Standards Authority of Ireland (NB 0050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

## 7. Declared Performance

| Characteristic              | Declared Performance  | Technical Specification  |
|-----------------------------|---|--|
| Dimensional Tolerance       | D1 (+3mm, -5mm)   | <b>I.S. EN 772-16</b>  |
|                             |   | <i>*Annex C.3 of S.R. 325:2013+A2:2018</i>   |
| Configuration               | Category 1 to EN 1996-1-1 Group 1<br>Test Configuration Vertical  | <b>I.S. EN 1996-1-1 + NA</b>   |
|                             |   | <i>*Annex C.5 of S.R. 325:2013+A2:2018</i>   |
| Gross Density               | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
|                             |   | <i>*Building Regulation—Part E (Sound)NDP</i>  |
| Net Density                 | >1900kg/m <sup>3</sup>  | <b>I.S. EN 772-13</b>  |
|                             |   | <i>*Building Regulation—Part E (Sound)NDP</i>  |
| Compressive Strength (Mean) | As shown in Table 1 above,<br>in vertical orientation   | <b>I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped)</b>  |
|                             |   | <i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018<br/>Building Regulations - Part A (Structure) NDP</i>  |
| Thermal Conductivity        | 1.01 - 1.19 W/mK (λ10, dry)   | <b>I.S. EN 1745 Annex A (Tabulated)</b>  |
|                             |   | <i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>  |
| Durability (freeze/thaw)    | <p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, I.S. EN 13914 - 1 &amp; 2: 2016 and S.R. 325:2013+A2:2018</p> <p><b>Masonry Conditions/Situations A3 (Work below or near external ground level) and C1 and C2 (Unrendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Class MX3.2:</b><br/>Category 1, Group 1:</p> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup> and a declared normalised compressive strength of ≥ 18 N/mm<sup>2</sup></li> <li>mortar strength class: M6 or M12 to Engineers spec.</li> </ul> <p>When used in rising walls/footings use Annex E SR21 Type T.2 Permeable/free draining backfill, footpath and rendered plinth</p> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p> | <ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b><br/>Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> <li>A1 - Low Risk of Saturation<br/>(1) Without Freezing (MX2.1, MX2.2)<br/>(2) With Freezing (MX3.1)</li> <li>A2 - High Risk of Saturation Without Freezing (MX2.2)</li> <li>A3 - High Risk of Saturation with Freezing (MX3.2)</li> <li>C1 - Low Risk of Saturation (MX3.1)</li> <li>C2 - High Risk of Saturation (MX3.2)</li> </ul> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul> <p>For <b>Render</b> (including mix, thickness and number of coats), see S.R. 325:2013+A2:2018 (including Clause 5.5.3.2.1 (Applied external surface finishes), Annex E (Specification for mortar for masonry - I.S. EN 998-1 and 2) and Annex F (National guidance to I.S. EN 13914-1:2016)) and I.S. EN 13914-1:2016 (including Clauses 5 (Materials), 6 (Design considerations) and 7 (Work on site, preparation and application of renderings)). <b>Note:</b> Rendering is affected by the combined action of freeze thaw cycles, wind, sun and rain, and their effects will depend upon the degree of exposure. Durability of render will depend on the correct choice of mix, thickness and number of coats and correct detailing</p> |

|  |   |  |
|--|---|--|
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$<br>7.5N Not to be left unrendered in Exposed conditions.<br>Refer to the clause Above.<br>All strengths: not to be used as a DPM. | <b>I.S. EN 772 – 11</b>  |
| Moisture Movement                        | < 0.6 mm/m  | <b>I.S. EN 772-14</b><br>Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person)<br>*Annex C.6 of S.R. 325:2013+A2:2018 & Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP |
| Water Vapour Permeability                | 5/15 $\mu$  | <b>I.S. EN 1745 Annex A(Tabulated)</b>   |
| Reaction to Fire                         | Class A1  | <b>Based on Commission Decision 200/605 EC amending 96/603 EC</b><br>(Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units)<br>*Building Regulations Part B—Fire Safety           |
| Shear Bond Strength                      | 0,15N/mm <sup>2</sup> (Tabulated)   | <b>I.S. EN 998-2(Tabulated)</b><br>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012   |
| Dangerous Substances                     | None  | Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance   |

\*Reference to National Provisions / NDP = National Defined Parameter

The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

**Signed for and on behalf of the manufacturer by:** Alan Lowe, Senior Technical Manager, Roadstone Ltd.

(Name and Function)

Belgard, 28/03/2022

(Place and Date of Issue)

*Alan Lowe*

(Signature)



13

**Roadstone Ltd.**  
**Fortunestown**  
**Dublin 24**



**Certification Body NSAI 050**  
**RL DoP-B1**

| Location       | FPC Cert No.  | Location      | FPC Cert No. | Location   | FPC Cert No.  |
|----------------|---------------|---------------|--------------|------------|---------------|
| Belgard        | 0050-CPR-165  | Huntstown     | 0050-CPR-176 | Castlemine | 0050-CPR-0192 |
| Ballyknockane  | 0050-CPR-0141 | Slane         | 0050-CPR-164 | Tullamore  | 0050-CPR-0185 |
| Bunratty       | 0050-CPR-0135 | Arklow        | 0050-CPR-163 | Laghy      | 0050-CPR-0183 |
| Classis        | 0050-CPR-923  | Carrigtwohill | 0050-CPR-423 | Kilmacow   | 0050-CPR-0216 |
| Killarney      | 0050-CPR-922  | Castlebar     | 0050-CPR-157 | Ryan's     | 0050-CPR-436  |
| Joseph Hogan's | 0050-CPR-346  | Galway        | 0050-CPR-156 | Gooig      | 0050-CPR-138  |
| Mallow         | 0050-CPR-137  |               |              |            |               |

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit - Foundation Block

**Dimensions:** Length (440mm or 350 ), Width (,100mm), Height (300mm)

**Dimensional tolerances:** Category: D1

**Configuration:** Group 1 unit to EN 1996-1-1 Vertical

**Compressive strength:** Mean Air-Dry Mortar Capped 13N/mm<sup>2</sup> (Normalized strength 18N/mm<sup>2</sup> (equiv. 100mm cube strength))

| Code    | Description                          |
|---------|--------------------------------------|
| 1230050 | 100mm Solid Standard S13 (300 x 450) |
| 1230003 | 100mm Solid Standard S13 (300 X 350) |
|         |                                      |
|         |                                      |
|         |                                      |
|         |                                      |
|         |                                      |

**Dimensional stability:** Moisture Movement: 0.6 mm/m

**Shear bond strength:** Fixed value 0.15(N/mm<sup>2</sup>)

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤20g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

**Water vapour diffusion coefficient:** 5/15μ

**Direct airborne sound insulation:** Gross dry density >1900 kg/m<sup>3</sup>

**Thermal conductivity:** 1.01 - 1.19 W/mK (λ10, dry, unit, S1)

**Durability against freeze-thaw:** Masonry Conditions/Situations A3 (Work below or near external ground level) and C1 and C2 (Unrendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Class MX3.2:

Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325 :2013+A2:2018

**Refer to DoP Table 8 Declared Performance**


**Dangerous substances:** None

# Roadstone Ltd.

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## Material Safety Data Sheet – Dense Aggregate Concrete Blocks

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|---|---|
| <p>1. (a) <b>Identification of Product</b></p> <p>Concrete Blocks for use in walling.</p> <p>(b) <b>Name of Company</b> Roadstone Dublin Ltd.<br/>Fortunestown, Dublin 24.</p> <p><b>Phone</b> (01) 4041200</p> <p>(c) <b>Application</b></p> <p>Use of Concrete Blocks should be in accordance with the relevant National / European Union codes of practice.</p> <p>2. <b>Composition of Ingredients</b></p> <p>Concrete blocks are a mixture of natural aggregates, cement and water. Admixtures may be added to modify the properties of the finished product.</p> <p>3. <b>Hazard Identification</b></p> <p>3.1 Concrete blocks are abrasive and typically weigh 20 to 30kg each, depending on shape and density and should be handled accordingly.</p> <p>3.2 Bales of concrete blocks may contain up to <b>96</b> blocks and can weigh up to <b>2.0</b> tonnes, depending on size, quantity and bale configuration.</p> <p>3.3 Strapping is only designed to facilitate handling during manufacture and should not be relied upon to provide stability of bales during transport, site</p> | <p>handling or storage. Strapping is sharp and tensioned and can cause injury when removing or otherwise handling it.</p> <p>3.4 Cutting, drilling or hammering of concrete blocks can create dust. If inhaled in excessive quantities over extended periods, respirable dust can constitute a long-term hazard. Cutting, drilling or hammering of concrete blocks, unless adequately controlled, can project particles at high velocity with consequent risk of impact damage and/or injury particularly to exposed areas of the body and eyes.</p> <p>4. <b>First Aid Measures</b> </p> <p>First Aid treatment is as follows:</p> <p>4.1 <b>Eye Contact</b></p> <p>Immediately rinse under running water and seek medical advice.</p> <p>4.2 <b>Cuts/Abrasions</b></p> <p>Cuts/abrasions from concrete blocks should be cleaned and treated using the normal First-Aid method. Wounds must receive prompt medical attention.</p> <p>In all cases of doubt or where symptoms persist medical advice must be obtained.</p> |
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### DISCLAIMER

This Material Safety Data Sheet has been prepared by the Irish Concrete Federation in consultation with its members and with technical assistance from the Industry's Safety Committee. Every care has been taken to ensure that the information contained herein is correct and accurate at the date of publication. However, the Irish Concrete Federation Ltd cannot accept any responsibility or liability for any errors, inaccuracies or omissions which may have occurred inadvertently.

5. **Fire Fighting Measures**

Not applicable.

Wear appropriate respiratory protection when cutting, drilling or hammering concrete blocks.

6. **Accidental Release Measures**

6.1 Avoid contact with skin.

8.5 **Footwear**

Wear footwear with protective toecaps when working with concrete blocks.

6.2 Tidy up debris from broken blocks.

7. **Handling & Storage**

8.6 **Head Protection**

7.1 Protect skin when handling concrete blocks.

Head protection to be worn with risk of falling blocks e.g. between stacks, elevated platforms, edges, etc.

7.2 Use suitable handling & transport equipment when handling bales of blocks.

9. **Physical & Chemical Properties**

Concrete blocks are usually grey in colour. The product is abrasive.

7.3 Before lifting always size up the load. Always follow safe lifting and manual handling procedures.

10. **Stability & Reactivity**

Ensure integrity and stability of bales whilst stored on site.

7.4 Ensure adequate load-bearing capacity of ground, floors or platforms when placing or storing bales of blocks on site.

7.5 Bales of blocks can become unstable over time and should not be stacked to excessive heights.

11. **Toxicological Information**

Not applicable.

8. **Exposure Controls/Personal Protection**

12. **Ecological Information**

Concrete blocks have no ecological effects.

8.1 **Hand Protection**

Wear suitable protective gloves.

13. **Disposal Considerations**

Concrete blocks may be recycled or placed in approved licensed landfill site.

8.2 **Skin Protection**

Avoid block and strap contact with skin as this can cause cuts and abrasions.

14. **Transport Information**

Ensure security and safety of load at all times.

8.3 **Eye Protection**

Wear goggles to prevent eye contact from flying particles when cutting, drilling or hammering concrete blocks, or from breaking straps.

15. **Regulatory Information**

Not applicable.

16. **Other Information**

None.

8.4 **Masks**

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