



NSAI

NSAI, 1 Swift Square, Northwood, Dublin 9, Ireland, D09 A0E4

Certificate of conformity of the factory production control, 0050 - CPR - 0141

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product(s):

Specification for masonry units – Part 3: Aggregate concrete masonry units (dense and lightweight aggregates)

Placed on the market under the name of:

**Roadstone Ltd
Ballyknockane, Co. Tipperary**

and produced in the manufacturing plant:

**Roadstone Ltd
Ballyknockane, Co. Tipperary**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

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

under system 2+ are applied and that

the factory production control is assessed to be in conformity with the applicable requirements

This certificate was first issued on 16 August 2013 and remains valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

File Number: 1.116.037
Approval Date: 16 August 2013
Last Amended Date: 19 September 2024
Expiry Date: 31 October 2025

Signed:

Mr. Kevin D. Mullaney
Director of Certification, NSAI



All valid NSAI certifications are listed on NSAI's website – www.nsa.ie. The continued validity of this certificate may be verified under "Certified Company Search"



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 ²) | 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 strapping.

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.

SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR -1310 | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|---|--|
| Dimensional Tolerance | D1 (+3mm, -5mm) | I.S. EN 772-16 <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 | I.S. EN 1996-1-1 + NA <i>*Annex C.5 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1900kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>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: Category 1, Group 1:</p> <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 7.5N/mm² or a declared normalised compressive strength of ≥ 10.5 N/mm² mortar strength class: M4 (A1 / MX2.1/2.2/3.1), M6 (A2 / MX2.2) <p>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: Category 1, Group 1:</p> <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 13N/mm² and a declared normalised compressive strength of ≥ 18 N/mm² mortar strength class: M12 <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"> Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1) A2 - High Risk of Saturation Without Freezing (MX2.2) A3 - High Risk of Saturation with Freezing (MX3.2) C1 - Low Risk of Saturation (MX3.1) C2 - High Risk of Saturation (MX3.2) <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals 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 MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals <p>For Render (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)). Note: 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, the micro and macro exposure conditions of the site should be accessed by the designer. Performance & 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 | $\leq 25 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | < 0.6 mm/m | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) *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 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) *Building Regulations Part B—Fire Safety |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) *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, 30/09/2024

(Place and Date of Issue)

(Signature)

Alan Lowe

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



13

Roadstone Ltd.
Fortunestown
Dublin 24



**Certification Body NSAI 050 (Belgard SGS 1029)
RL DoP-B1**

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR -1310 | | |

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/mm², 13N/mm², 18N/mm², 24N/mm² (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/mm²)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³

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. B3 Category 1 Aggregate Concrete Masonry Unit

Standard Group 2 Cavity

1. Unique identification code of the product type:

| Code | Description | Strength (N/mm ²) | 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 |
| 1231009 | 100mm Three Pot Cavity H5.0 | 5.0 | 440 | 215 | 215 | 26 | 30 | 28 |
| 1231007 | 215mm Single pot Cavity H13 Half (Football) | 13 | 215 | 215 | 215 | 38 | 38 | |
| 1231012 | 140mm Twin Pot Cavity H5.0 | 5.0 | 440 | 140 | 215 | 30 | 30 | 60 |
| 1231014 | 140mm Twin Pot Cavity H13 | 13 | 440 | 140 | 215 | 30 | 30 | 60 |

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

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.

SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|---------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050=CPR 1310 | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|--|---|
| Dimensional Tolerance | D1 (+3mm, -5mm) | I.S. EN 772-16 <i>*Annex C.3 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1200kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) (215mm cavity Block Thermal resistance 0.210 m ² K/W) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>5N/mm² Category 1, Group 2 Not Reference in Table 14 Durability of masonry in finished construction of SR 325</p> <p>Masonry Conditions/Situations: D *Rendered external walls, (other than chimneys, capping, copings, parapets, sills).</p> <p>E Internal walls and inner leaves of cavity, MX1</p> <p>J1 *Rendered Freestanding boundary and screen walls with coping or capping min. 40mm overhang, Classes MX3.1, MX3.2</p> <p>Category 1, Group 2</p> <ul style="list-style-type: none"> declared mean compressive strength ≥ 7.5N/mm² net density ≥ 1,500 kg/m³ D & E mortar strength class: M4 J1 mortar strength class: M6 <p>Masonry Conditions/Situations as above D, E, J1 and J2 Freestanding boundary and screen walls with coping or capping min. 40mm overhang Classes MX3.1, MX3.2</p> <p>Category 1, Group 2:</p> <ul style="list-style-type: none"> declared mean compressive strength ≥ 13N/mm² net density ≥ 1,500 kg/m³ mortar strength class: M6 or M12 Dependant on design/ Exposure class – as advised by engineers. <p>Generally, for use in Sheltered/Moderate Exposure, *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"> Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> D - * Rendered external walls as in A1 E - Internal walls and inner leaves of cavity walls MX1 as in A1 J1 *Rendered Freestanding boundary and screen walls with coping or capping 40mm overhang, Classes MX3.1, MX3.2 J2 Freestanding boundary and screen walls with cappings 40mm overhang Classes MX3.1, MX3.2 <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX1 – In dry conditions MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals <p><i>*For Render</i> (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)). Note: 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. the micro and macro exposure conditions of the site should be accessed by the designer. Performance & 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 | I.S. EN 1996-1-1 + NA |
| | 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 | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | < 0.6 mm/m | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) <i>*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</i> |
| Water Vapour Permeability | 5/15 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) <i>*Building Regulations Part B—Fire Safety</i> |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) <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, 30/09/2024

(Place and Date of Issue)

(Signature)

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



Roadstone Ltd.
Fortunestown
Dublin 24



**Certification Body NSAI 050 (Belgard SGS 1029)
RL DoP-B3**

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|---------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR 1310 | | |

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

| Code | Description | Strength (N/mm ²) | 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 | |
| 1231007 | 215mm Single pot Cavity H13 Half (Football) | 13 | 215 | 215 | 215 | 38 | 38 | |
| 1231012 | 140mm Twin Pot Cavity H5.0 | 5.0 | 440 | 140 | 215 | 30 | 30 | 60 |
| 1231014 | 140mm Twin Pot Cavity H13 | 13 | 440 | 140 | 215 | 30 | 30 | 60 |

Compressive strength: Mean Air-Dry Mortar Capped 7.5N/mm², 13N/mm², (Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m

Shear bond strength: Fixed value 0.15(N/mm²)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³ Net Density > 1900 kg/m³

Thermal conductivity: 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m²K/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 ²) | 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 |
| 1232009 | 65MM Solid Fine Texture S13 | 13 | 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 |
| 1232001 | 100mm Solid Fine Texture S18 | 18 | 440 | 100 | 215 |

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

2. Intended use -General use as a **facing** masonry unit as **internal walls** in load bearing or non-load bearing building and civil engineering applications, units greater than 7.5N can be used in exposed freestanding wall when the micro and macro site conditions are considered by the designer (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). Refer to Declared properties.

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.

SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|---------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR-1310 | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|--|---|
| Dimensional Tolerance | D1 (+3mm, -3mm) | I.S. EN 772-16 <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 | I.S. EN 1996-1-1 + NA <i>*Annex C.5 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1900kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>Masonry Conditions/Situations E Internal walls and inner leaves of cavity walls Classes MX1 Category 1, Group 1: <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 7.5N/mm² or a declared normalised compressive strength of ≥ 10.5 N/mm² mortar strength class: M4 (C) Unrendered external walls (other than chimneys, cappings, copings, parapets, sills) C1 & C2 (MX 3.1 & 3.2) units greater than 7.5N can be used in exposed freestanding walls when the micro and macro site conditions are considered by the designer.</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"> Irish Building Regulations (Including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations: E Internal walls & 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>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX1 – In dry conditions MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals <p>For Render (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)). Note: 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, the micro and macro exposure conditions of the site should be accessed by the designer. Performance & 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 | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. (units greater than 7.5N can be used in exposed freestanding walls when the micro and macro site conditions are taken into account by the designer.) All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | < 0.6 mm/m | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) *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 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) *Building Regulations Part B—Fire Safety |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) *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, 08/01/2023

(Place and Date of Issue)

Alan Lowe

(Signature)

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



13

Roadstone Ltd.
Fortunestown
Dublin 24



**Certification Body NSAI 050 (Belgard SGS 1029)
RL DoP-B4**

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR- 1310 | | |

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 (+3-3mm)

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

Compressive strength: Mean Air-Dry Mortar Capped 7.5N/mm², 13N/mm², (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 |
| 1232009 | 65MM Solid Fine Texture S13 |
| 1232005 | 100mm Solid Fine Texture S13 |
| 1232002 | 140mm Solid Fine Texture S7.5 |
| 1232001 | 100mm Solid Fine Texture S18 |

Dimensional stability: Moisture Movement: 0.6 mm/m

Shear bond strength: Fixed value 0.15(N/mm²)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³

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

Durability against freeze-thaw: Generally 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 (units greater than 7.5N can be used in exposed freestanding walls when the micro and macro site conditions are considered by the designer.)

Refer to DoP Table 8 Declared Performance

Dangerous substances: None

DECLARATION OF PERFORMANCE

No. B5 Category 1 Aggregate Concrete Masonry Unit – Fine Texture Group 2 Cavity

1. Unique identification code of the product type:

| Code | Description | Strength (N/mm ²) | 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. SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR -1310 | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|---|--|
| Dimensional Tolerance | D1 (+3mm, -3mm) | I.S. EN 772-16 <i>*Annex C.3 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1200kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) (215mm cavity Block Thermal resistance 0.210 m ² K/W) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>5N/mm² Category 1, Group 2 Not Reference in Table 14 Durability of masonry in finished construction of SR 325 E Internal walls and inner leaves of cavity, MX1</p> <p>Masonry Conditions/Situations: 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"> declared mean compressive strength ≥ 7.5N/mm² net density ≥ 1,500 kg/m³ D & E mortar strength class: M4 <p>Masonry Conditions/Situations as above D, E, J1 and J2 <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"> declared mean compressive strength ≥ 13N/mm² net density ≥ 1,500 kg/m³ mortar strength class: M6 or M12 Dependant on design/ Exposure class – as advised by engineers. <p>Generally, for use in Sheltered/Moderate Exposure, *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"> Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1) A2 - High Risk of Saturation Without Freezing (MX2.2) A3 - High Risk of Saturation with Freezing (MX3.2) C1 - Low Risk of Saturation (MX3.1) As in A3 (but Group 1 or Group 2 units) C2 - High Risk of Saturation (MX3.2) As in A3 (but Group 1 or Group 2 units) D - Rendered external walls As in A1 (but Group 1 or Group 2 units) E - Internal walls and inner leaves of cavity walls J1 - With coping MX3.1, MX3.2 J2 - With capping MX3.1, MX3.2 <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals <p>For Render (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)). Note: 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 the micro and macro exposure conditions of the site should be accessed by the designer. Performance & 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 Use widest web on top for optimum mortar bed | I.S. EN 1996-1-1 + NA <i>*Annex C.5 of S.R. 325:2013+A2:2018</i> |
| | | |
| Water Absorption due to Capillary Action | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | < 0.6 mm/m | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) <i>*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</i> |
| Water Vapour Permeability | 5/15 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) <i>*Building Regulations Part B—Fire Safety</i> |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) <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, 30/09/2024

(Place and Date of Issue)

(Signature)

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



13

Roadstone Ltd.
Fortunestown
Dublin 24



**Certification Body NSAI 050 (Belgard SGS 1029)
RL DoP-B5**

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|---------------------------|---------------|-----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/0000360 | 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 | Ballintra | 0050-CPR - 1310 | | |

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

| Code | Description | Strength (N/mm ²) | 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 (+3-3mm)

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

Compressive strength: Mean Air-Dry Mortar Capped 5N/mm², 13N/mm², 18N/mm² (Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m

Shear bond strength: Fixed value 0.15(N/mm²)

Flexural bond strength: NPd

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³ Net Density > 1900 kg/m³

Thermal conductivity: 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m²K/W)

Durability against freeze-thaw: Refer to DoP Table 8 Declared Performance 7.5N/mm²- E Internal walls and inner leaves of cavity walls, ≥13N/mm² 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.B6 Category 1 Aggregate Concrete Masonry Unit – Standard Solid Specials

1. Unique identification code of the product type:

| Code | Description | Strength (N/mm ²) | 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)

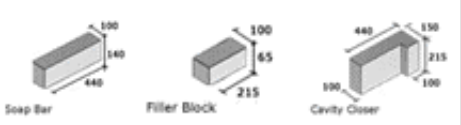
Notified certification body:

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.

SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR -1310 | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|---|--|
| Dimensional Tolerance | D1 (+3mm, -5mm) | I.S. EN 772-16 <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  | I.S. EN 1996-1-1 + NA <i>*Annex C.5 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1900kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>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: Category 1, Group 1: <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 7.5N/mm² or a declared normalised compressive strength of ≥ 10.5 N/mm² mortar strength class: M4 (A1 / MX2.1/2.2/3.1), M6 (A2 / MX2.2) </p> <p>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: Category 1, Group 1: <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 13N/mm² and a declared normalised compressive strength of ≥ 18 N/mm² mortar strength class: M12 </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"> Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations: <ul style="list-style-type: none"> A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1) A2 - High Risk of Saturation Without Freezing (MX2.2) A3 - High Risk of Saturation with Freezing (MX3.2) C1 - Low Risk of Saturation (MX3.1) C2 - High Risk of Saturation (MX3.2) </p> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulphates or aggressive chemicals MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulphates or aggressive chemicals <p>For Render (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)). Note: 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, the micro and macro exposure conditions of the site should be accessed by the designer. Performance & 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 | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | $< 0.6 \text{ mm}/\text{m}$ | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) <i>*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</i> |
| Water Vapour Permeability | 5/15 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) <i>*Building Regulations Part B—Fire Safety</i> |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) <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, 30/09/2024

(Place and Date of Issue)

Alan Lowe

(Signature)

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



13

Roadstone Ltd.
Fortunestown
Dublin 24



Certification Body NSAI 050 (Belgard SGS 1029)
RL DoP-B6

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|----------------------------|---------------|----------------|------------|---------------|
| Belgard | 1029 – CPR – GB23/00000360 | 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 | Ballintra | 0050-CPR -1310 | | |

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

| Code | Description | Strength (N/mm ²) | 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/mm², 13N/mm², 18N/mm²(Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m

Shear bond strength: Fixed value 0.15(N/mm²)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³

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 ²) | 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 ² | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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. |
|----------------|---------------|---------------|--------------|------------|---------------|
| | | | | 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 | | |
| Mallow | 0050-CPR-137 | | | | |

7. Declared Performance

| Characteristic | Declared Performance | Technical Specification |
|-----------------------------|---|--|
| Dimensional Tolerance | D1 (+3mm, -5mm) | I.S. EN 772-16 <i>*Annex C.3 of S.R. 325:2013+A2:2018</i> |
| Configuration | Category 1 to EN 1996-1-1 Group 1 Test Configuration Vertical | I.S. EN 1996-1-1 + NA <i>*Annex C.5 of S.R. 325:2013+A2:2018</i> |
| Gross Density | >1900kg/m ³ | I.S. EN 772-13 <i>*Building Regulation—Part E (Sound)NDP</i> |
| Net Density | >1900kg/m ³ | I.S. EN 772-13 |
| Compressive Strength (Mean) | As shown in Table 1 above, in vertical orientation | I.S. EN 772-1 (7.3.2 Air Dry, Mortar Capped) <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) | I.S. EN 1745 Annex A (Tabulated) <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 & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018</p> <p>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: Category 1, Group 1:</p> <ul style="list-style-type: none"> net density ≥ 1,500 kg/m³ declared mean compressive strength ≥ 13N/mm² and a declared normalised compressive strength of ≥ 18 N/mm² mortar strength class: M6 or M12 to Engineers spec. <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"> Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes 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)) 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)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) & Table 14) I.S. EN 13914 - 1 & 2: 2016 <p>Table 14 of S.R. 325:2013+A2:2018: Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1) A2 - High Risk of Saturation Without Freezing (MX2.2) A3 - High Risk of Saturation with Freezing (MX3.2) C1 - Low Risk of Saturation (MX3.1) C2 - High Risk of Saturation (MX3.2) <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</p> <ul style="list-style-type: none"> MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals 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 MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals <p>For Render (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)). Note: 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 | $\leq 20 \text{ g}/(\text{m}^2 \cdot \text{s})$ 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above. All strengths: not to be used as a DPM. | I.S. EN 772 – 11 |
| Moisture Movement | < 0.6 mm/m | I.S. EN 772-14 Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) <i>*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</i> |
| Water Vapour Permeability | 5/15 μ | I.S. EN 1745 Annex A(Tabulated) |
| Reaction to Fire | Class A1 | Based on Commission Decision 200/605 EC amending 96/603 EC (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) <i>*Building Regulations Part B—Fire Safety</i> |
| Shear Bond Strength | 0,15N/mm ² (Tabulated) | I.S. EN 998-2(Tabulated) <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*

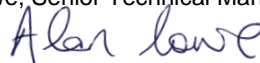
The performance of the product identified above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Roadstone Ltd.

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

(Name and Function)

Belgard, 08/01/2024

(Place and Date of Issue)



(Signature)

This certificate is valid from 8th January 2024 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. Or unless suspended or withdrawn by the notified factory production control certification body.



13

Roadstone Ltd.
Fortunestown
Dublin 24



**Certification Body NSAI 050
RL DoP-B12**

| Location | FPC Cert No. | Location | FPC Cert No. | Location | FPC Cert No. |
|----------------|---------------|---------------|--------------|------------|---------------|
| | | | | 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 | | |
| 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/mm² (Normalized strength 18N/mm² (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/mm²)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m²s (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/m³

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