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

Certificate of conformity of the factory production control,

0050 - CPR - 0436

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
Toonagh Quarry, Ennis, Co. Clare

and produced in the manufacturing plant:

Roadstone Ltd
Toonagh Quarry, Ennis, Co. Clare

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 11 November 2015 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.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:	1.116.083
Approval Date:	11 November 2015
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.nsai.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+

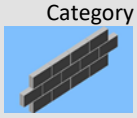
6. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

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** **Annex C.3 of S.R. 325:2013+A2:2018*
Configuration	Category 1 to EN 1996-1-1 Group 1  Normal Configuration Vertical	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
Gross Density	>1900kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 **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: • 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) **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: • 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 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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) See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** • 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 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 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

Water Absorption due to Capillary Action	≤25 g/(m²*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	5/15µ	**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/mm² (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)

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.

CE

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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/mm^2, 18N/mm^2, 24N/mm^2 (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^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^{2}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^3
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:

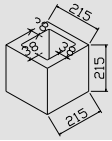
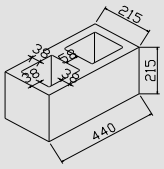
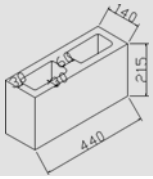
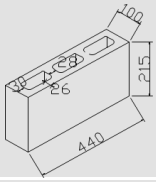
NSAI (identification No. 050) performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control.

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** **Annex C.3 of S.R. 325:2013+A2:2018*
Gross Density	>1200kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry) (215mm cavity Block Thermal resistance 0.210 m²K/W)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 A, C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018 5N/mm² Category 1, Group 2 Not Reference in Table 14 Durability of masonry in finished construction of SR 325 **Masonry Conditions/Situations:** **D** *Rendered external walls**, (other than chimneys, capping, copings, parapets, sills).** **E** Internal walls and inner leaves of cavity, MX1 **J1 ***Rendered ***Freestanding boundary and screen walls*** with coping or capping min. 40mm overhang, ***Classes*** MX3.1, MX3.2 Category 1, Group 2 • declared mean compressive strength ≥ 7.5N/mm² • net density ≥ 1,500 kg/m³ • D & E mortar strength class: M4 • J1 mortar strength class: M6 Masonry Conditions/Situations as above D, E, J1 and J2 *Freestanding boundary and screen walls with cooping or capping min. 40mm overhang Classes* MX3.1, MX3.2 Category 1, Group 2: • 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. 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. 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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 See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** • 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 *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

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** **Annex C.5 of S.R. 325:2013+A2:2018*
   		
Water Absorption due to Capillary Action	≤20 g/(m²*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	5/15µ	**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/mm² (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)

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.

CE 13	Roadstone Ltd. Fortunestown Dublin 24	roadstone A CRH COMPANY

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/mm^2, (Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m
Shear bond strength: Fixed value 0.15(N/mm^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^2s (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^3 Net Density> 1900 kg/m^3
Thermal conductivity: 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m^2K/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

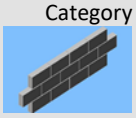
5. System of AVCP System 2+

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** **Annex C.3 of S.R. 325:2013+A2:2018*
Configuration	Category 1 to EN 1996-1-1 Group 1  Normal Configuration Vertical	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
Gross Density	>1900kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 **Masonry Conditions/Situations E Internal walls and inner leaves of cavity walls Classes MX1** Category 1, Group 1: • 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. 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: **E** Internal walls & inner leaves of cavity walls See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** • 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 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

Water Absorption due to Capillary Action	≤20 g/(m²*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	5/15µ	**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/mm² (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) (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.

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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: **L**ength (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/mm^2, (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/mm^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1
Water absorption: ≤20g/m^{2}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^3
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 ≥13N/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

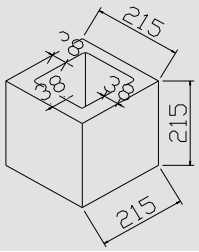
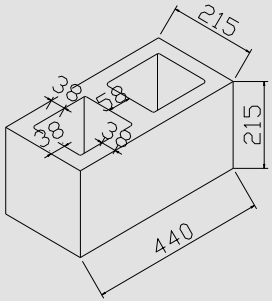
5. System of AVCP System 2+

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** **Annex C.3 of S.R. 325:2013+A2:2018*
Gross Density	>1200kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry) (215mm cavity Block Thermal resistance 0.210 m²K/W)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 A, C & D), Eurocodes, I.S. EN 13914 - 1 & 2: 2016 and S.R. 325:2013+A2:2018 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 **Masonry Conditions/Situations:** **D** *Rendered external walls**, (other than chimneys, capping, copings, parapets, sills).*** **E** Internal walls and inner leaves of cavity, MX1 Category 1, Group 2 • declared mean compressive strength ≥ 7.5N/mm² • net density ≥ 1,500 kg/m³ • D & E mortar strength class: M4 Masonry Conditions/Situations as above D, E, J1 and J2 *Freestanding boundary and screen walls with cooping or capping min. 40mm overhang Classes* MX3.1, MX3.2 Category 1, Group 2: • 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. 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. For exposed Blockwork for use in buildings refer to our Masonry range 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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 See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** • 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 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

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** **Annex C.5 of S.R. 325:2013+A2:2018*
 		
Water Absorption due to Capillary Action	≤20 g/(m²*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	5/15µ	**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/mm² (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

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.

CE

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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 – GB23/00000360	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)	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/mm^2, 13N/mm^2, 18N/mm^2 (Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m
Shear bond strength: Fixed value 0.15(N/mm^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^2s (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^3 Net Density> 1900 kg/m^3
Thermal conductivity: 1.01 - 1.19 W/mK (λ10, dry, unit, S1) (215mm cavity Block Thermal resistance 0.210 m^2K/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

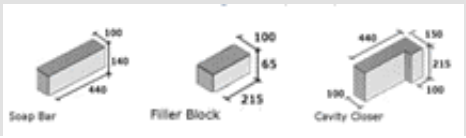
5. System of AVCP System 2+

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** **Annex C.3 of S.R. 325:2013+A2:2018*
Configuration	Category 1 to EN 1996-1-1 Group 1 Normal Configuration Vertical  	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
Gross Density	>1900kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 **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: • 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) **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: • 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 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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) See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** • 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 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

Water Absorption due to Capillary Action	≤20 g/(m²*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	5/15µ	**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/mm² (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)

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.

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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/mm^2, 18N/mm^2 (Refer to Docket)

Dimensional stability: Moisture Movement: 0.6 mm/m
Shear bond strength: Fixed value 0.15(N/mm^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^2s (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^3
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.B8 Category 1 Aggregate Concrete Masonry Unit –Aristocrat Solid

1. Unique identification code of the product type:

Code	Description	Strength (N/mm²)	Length (mm)	Width (mm)	Height (mm)
1250010	D1 Aristocrat 100mm Solid Full S7.5	7.5	440	100	215
1250009	D1 Aristocrat 100mm Solid Full S13	13.0	440	100	215
1250048	D1 Aristocrat 100mm Solid Full S18	18.0	440	100	215
1250040	D1 Aristocrat 100mm Solid Full S24	24.0	440	100	215
1250002	Aristocrat 65mm Solid S7.5	7.5	440	65	215
1250088	H1 Aristocrat 140mm Solid Full S18	18	440	140	215
1250080	Aristocrat 65mm Solid S18	18	440	65	215
1250019	450 Range –D17 Aristocrat – 100mm Cavity Closer	13	440	100/215[a]	215

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

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) for information on wind driven rain, durability and other National defined provisions and parameters. Also Used for Air leakage control application < 3 m³ / h / m² @ 50 Pascal's

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

Roadstone Ltd.
Fortunestown
Dublin 24

3. N/A

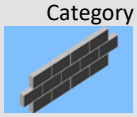
4. System of AVCP System 2+

5. 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	Gooig	0050-CPR-138
Ryan's	0050-CPR-436				

6. Declared Performance

Characteristic	Declared Performance	Technical Specification
Dimensional Tolerance	D1 (+3mm, -3mm)	**I.S. EN 772-16** **Annex C.3 of S.R. 325:2013+A2:2018*
Configuration	Category 1 to EN 1996-1-1 Group 1  Normal Configuration Vertical	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
Gross Density	>1900kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (freeze/thaw)	Aristocrat Blocks are generally used in internal Facing Fairfaced or painted walls, if used in Exposed conditions/situations refer to the information 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 **Masonry Conditions/Situations E Internal walls & inner leaves of cavity walls** Category 1, Group 1: • net density ≥ 1,500 kg/m³ • declared mean compressive strength ≥ 7.5N/mm² or ≥ 13N/mm² declared normalised compressive strength of ≥ 10.5 N/mm² or ≥ 18 N/mm² • mortar strength class: M4, M6 or M12 to Engineers spec. (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. 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) Preferred product for use as masonry in unrendered external walls of buildings is Forticrete as it is designed for this use	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: E Internal walls & inner leaves of cavity walls See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:** MX1 - In a dry environment Generally, built as internal walls but if Rendered for guidance (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
Water Absorption due to Capillary Action	≤20 g/(m²*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. 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	5/15µ	**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/mm² (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)

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.

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Roadstone Ltd.
Fortunestown
Dublin 24

roadstone
A CRH COMPANY

Certification Body NSAI 050(Belgard SGS 1029)
RL DoP-B8

Location	FPC Cert No.
Belgard	1029 – CPR – GB23/00000360
Ryan's	0050-CPR-436
Gooig	0050-CPR-138
Huntstown	0050-CPR-176

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

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/mm^2, 18N/mm^2, 24N/mm^2 (Refer to Docket)

Code	Description	Strength (N/mm^2)	Length (mm)	Width (mm)	Height (mm)
1250010	D1 Aristocrat 100mm Solid Full S7.5	7.5	440	100	215
1250009	D1 Aristocrat 100mm Solid Full S13	13.0	440	100	215
1250048	D1 Aristocrat 100mm Solid Full S18	18.0	440	100	215
1250040	D1 Aristocrat 100mm Solid Full S24	24.0	440	100	215
1250002	Aristocrat 65mm Solid S7.5	7.5	440	65	215
1250088	H1 Aristocrat 140mm Solid Full S18	18	440	140	215
1250080	Aristocrat 65mm Solid S18	18	440	65	215
1250019	450 Range –D17 Aristocrat – 100mm Cavity Closer	13	440	100/215[a]	215

Dimensional stability: Moisture Movement: 0.6 mm/m
Shear bond strength: Fixed value 0.15(N/mm^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^{2}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^3
Thermal conductivity: 1.01 - 1.19 W/mK (λ10, dry, unit, S1)
Durability against freeze-thaw: Aristocrat Blocks are generally used in internal Facing Fairfaced or painted walls,

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.B9 Category 1 Aggregate Concrete Masonry Unit –Aristocrat Group 2 Cavity

1. Unique identification code of the product type:

Code	Description	Strength (N/mm^2)	Length (mm)	Width (mm)	Height (mm)
1250013	F10 Aristocrat 215mm Cavity Half	5.0	215	215	215
1250014	F3 Aristocrat 215mm Cavity Full	5.0	440	215	215
1250013	F10 Aristocrat 215mm Cavity Half	7.5	215	215	215
1250049	F3 Aristocrat 215mm Cavity Full	7.5	440	215	215
1250016	F3 Aristocrat 215mm Twin Pot Cavity	13.0	440	215	215
1250039	F10 Aristocrat Half Single Pot Cavity	13.0	215	215	215
1250082	F3 Aristocrat 215mm Twin Pot Cavity	18.0	440	215	215
1250015	F28 Aristocrat Lintel/ U Block	13.0	440	215	215
1250011	Aristocrat 140mm Cavity	5.0	440	140	215

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

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) for information on wind driven rain, durability and other National defined provisions and parameters. Also Used for Air leakage control application < 3 m^3 / h / m^2 @ 50 Pascal's

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+

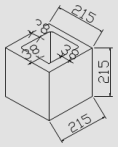
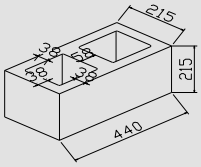
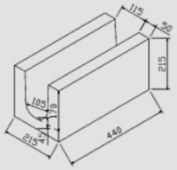
6. **Harmonised Standard:** I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

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	Gooig	0050-CPR-138
Ryan's	0050-CPR-436				

7. Declared Performance

Characteristic	Declared Performance	Technical Specification
Dimensional Tolerance	D1 (+3mm, -3mm)	**I.S. EN 772-16** **Annex C.3 of S.R. 325:2013+A2:2018*
Gross Density	>1400kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>2000kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry) (215mm cavity Block Thermal resistance 0.210 m²K/W)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (freeze/thaw)	Aristocrat Blocks are generally used in internal Facing Fairfaced or painted walls, if used in Exposed conditions/situations refer to the information 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 **Masonry Conditions/Situations E Internal walls & inner leaves of cavity walls** Category 1, Group 1: • net density ≥ 1,500 kg/m³ • declared mean compressive strength ≥ 7.5N/mm² or ≥ 13N/mm² declared normalised compressive strength of ≥ 10.5 N/mm² or ≥ 18 N/mm² • mortar strength class: M4, M6 or M12 to Engineers spec. 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) .	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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) See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure ofof completed masonry) of I.S. EN 1996-2:2006:** • 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 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

Water Absorption due to Capillary Action	≤20 g/(m²*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**
Configuration	Category 1 to EN 1996-1-1 Group 2 Normal Configuration Vertical	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
		
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	5/15µ	**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/mm² (Tabulated)	**I.S. EN 998-2(Tabulated)**
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.

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Roadstone Ltd.
Fortunestown
Dublin 24

roadstone
A CRH COMPANY

Certification Body NSAI 050(Belgard SGS 1029)
RL DoP-B9

Location	FPC Cert No.
Belgard	1029 – CPR – GB23/00000360
Ryan's	0050-CPR-436
Gooig	0050-CPR-138
Huntstown	0050-CPR-176

EN 771-3:2011 + A1:2015 Category I, Group 2 Aggregate Concrete Masonry Unit – Aristocrat Cavity

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/mm^2, 18N/mm^2, 24N/mm^2 (Refer to Docket)

Code	Description
1250013	F10 Aristocrat 215mm Cavity Half
1250014	F3 Aristocrat 215mm Cavity Full
1250013	F10 Aristocrat 215mm Cavity Half
1250049	F3 Aristocrat 215mm Cavity Full
1250016	F3 Aristocrat 215mm Twin Pot Cavity
1250039	F10 Aristocrat Half Single Pot Cavity
1250082	F3 Aristocrat 215mm Twin Pot Cavity
1250015	F28 Aristocrat Lintel/ U Block
1250011	Aristocrat 140mm Cavity

Dimensional stability: Moisture Movement: 0.6 mm/m

Shear bond strength: Fixed value 0.15(N/mm^2)

Flexural bond strength: NPD

Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^{2}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^3

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

Durability against freeze-thaw: Aristocrat Blocks are generally used in internal Facing Fairfaced or painted walls.
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** **Annex C.3 of S.R. 325:2013+A2:2018*
Configuration	Category 1 to EN 1996-1-1 Group 1 Test Configuration Vertical	**I.S. EN 1996-1-1 + NA** **Annex C.5 of S.R. 325:2013+A2:2018*
Gross Density	>1900kg/m³	**I.S. EN 772-13** **Building Regulation—Part E (Sound)NDP*
Net Density	>1900kg/m³	**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) **Annex C.4 and C.5 of S.R.325:2013+A2:2018* *Building Regulations - Part A (Structure) NDP*
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	**I.S. EN 1745 Annex A (Tabulated)** **Building Reg.—Part L (Cons. of Fuel and Energy)*
Durability (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 **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: • 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. When used in rising walls/footings use Annex E SR21 Type T.2 Permeable/free draining backfill, footpath and rendered plinth 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)	• 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 **Table 14 of S.R. 325:2013+A2:2018:** Masonry Conditions/Situations: • 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) See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 **Table A.1 (Classification of micro conditions of exposure ofof completed masonry) of I.S. EN 1996-2:2006:** • 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 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

Water Absorption due to Capillary Action	≤20 g/(m²*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	5/15µ	**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/mm² (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, 08/01/2024

(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.

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Roadstone Ltd.
Fortunestown
Dublin 24

roadstone
A CRH COMPANY

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/mm^2 (Normalized strength 18N/mm^2 (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^2)
Flexural bond strength: NPD
Reaction to fire: Euroclass A1

Water absorption: ≤20g/m^{2}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^3
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