Certificate of Conformity of the Factory Production Control 1029 – CPR – GB23/0000360



In compliance with Regulation 305/2011/EU 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

Aggregate concrete masonry units (dense and lightweight aggregates).

placed on the market under the name or trade mark of

Roadstone Ltd

Fortunestown, Belgard, Dublin, Ireland

and produced in the manufacturing plant

Roadstone Ltd

Fortunestown, Belgard, Dublin, Ireland

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(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 is valid from 23 October 2023 until 22 October 2026

and will remain 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

Issue 1. Certified with SGS since 23 October 2023

Organization certified since 10 December 2013 and first certified by SGS on 23 October 2023.

Authorised by

Luis Neves

Certification Management

Authorised by Luis Santos

Certification Management

SGS ICS - Serviços Internacionais de Certificação, Lda, Notified Body 1029

Polo Tecnológico de Lisboa, Rua Cesina Adães Bermudes, lote 11, nº 1, 1600-604 Lisboa – Portugal

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Pac acreditação

> C0001 ISO/IEC 17065 Produtos

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DECLARATION OF PERFORMANCE

No.B10 Category 1 Aggregate Concrete Masonry Unit -7.5N Liteblock

1. Unique identification code of the product type:

Code	Description	Strength (N/mm²)	Length (mm)	Width (mm)	Height (mm)
1239003	Thermal Liteblock 100mm Solid	7.5	440	100	215
1239033	Thermal Liteblock 100mm Soapbar	7.5	440	100	100
1239034	Thermal Liteblock 100mm Stock Brick	7.5	215	100	65
1239035	Thermal Liteblock 140mm Solid	7.5	440	140	215
1239036	Thermal Liteblock 140mm Soapbar	7.5	440	100	140
1239037	Thermal Liteblock 100mm L Block	7.5	440	100 (175)	215
1239038	Thermal Liteblock 100mm L Block	7.5	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)
- 4. Roadstone Ltd. Fortunestown Dublin 24



- 5. N/A
- 6. System of AVCP System 2+
- 7. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

Notified certification body:

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

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				

8. Declared Performance

Characteristic	Declared Performance	Technical Specification	
Dimensional Tolerance	D1 (+2mm Emm)	I.S. EN 772-16	
Differsional Tolerance	D1 (+3mm, -5mm)	*Annex C.3 of S.R. 325:2013+A2:2018	
	Category 1 to EN 1996-1-1 Group 1	I.S. EN 1996-1-1 + NA	
Configuration	Normal Configuration Vertical	*Annex C.5 of S.R. 325:2013+A2:2018	
Gross Density	42501-7-3	I.S. EN 772-13	
	≤1250kg/m³	*Building Regulation—Part E (Sound)NDP	
Net Density	≤1250kg /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	
		I.S. EN 1745 Annex A (Tabulated)	
Thermal Conductivity	0.33 W/mK (λ _{10,dry})	Compatible with Part L requirements, published Psi values avaialble at roadstone.ie/product/thermal- liteblock/#thermal-bridging-details	
		*Building Reg.—Part L (Cons. of Fuel and Energ	
	Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R.	Irish Building Regulations (including Technical Guidance Documents C & D) Eurocodes I.S. EN 1996-1-1:2005 (Eurocode 6: Design of mason structures. General rules for reinforced and unreinformasonry structures (+A1:2012) (including Irish Nation: Annex +A1:2014)) I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materiand execution of masonry (includes Irish National Annen NA:2010)) S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusiof 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:	
Durability (freeze/thaw)	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	See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005 E Internal walls & inner leaves of cavity walls Table A.1 (Classification of micro conditions of exposofof completed masonry) of I.S. EN 1996-2:2006:	
	 declared mean compressive strength ≥ 7.5N/mm² or a declared normalised compressive strength of ≥ 10.5 N/mm² mortar strength class: M4 or M6 to Engineers spec. Units produced with aggregate in accordance with I.S. EN 13055-1:2002 lightweight aggregates -part 1:lightweight aggregate s for concrete, mortar and grout. 	 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 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 source 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 significal 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 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 freez 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, 	
Water Absorption due to Capillary Action	133.13g/m ² .s 7.5N Not to be left unrendered in Exposed conditions. Refer to the clause Above.	thickness and number of coats and correct detailing I.S. EN 772 – 11	

	All strengths: not to be used as a DPM.	
		I.S. EN 772-14
Moisture Movement	< 0.6 mm/m	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)
		Based on Commission Decision 200/605 EC amending 96/603 EC
Reaction to Fire	Class A1	(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
		I.S. EN 998-2(Tabulated)
Shear Bond Strength	0,15N/mm² (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)

(Name and Function)

Belgard, 15/01/2024

(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.



Roadstone Ltd. Fortunestown Dublin 24



SGS ICS – Serviços Internacionais de Certificação, Lda, Notified Body 1029 – Audited and Certified The Belgard Plant 2023/2024 **RL DoP-B10**

Location	FPC Cert No.	Location	FPC Cert No.	Location	FPC Cert No.
Belgard	1029 - CPR - GB23/00000360				

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

Code	Description	Strength (N/mm²)	Length (mm)	Width (mm)	Height (mm)
1239003	Thermal Liteblock 100mm Solid	7.5	440	100	215
1239033	Thermal Liteblock 100mm Soapbar	7.5	440	100	100
1239034	Thermal Liteblock 100mm Stock Brick	7.5	215	100	65
1239035	Thermal Liteblock 140mm Solid	7.5	440	140	215
1239036	Thermal Liteblock 140mm Soapbar	7.5	440	100	140
1239037	Thermal Liteblock 100mm L Block	7.5	440	100 (175)	215
1239038	Thermal Liteblock 100mm L Block	7.5	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,

Dimensional stability: Moisture Movement: 0.6 mm/m

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

Flexural bond strength: NPD Reaction to fire: Euroclass A1

Water absorption: 133.13g/m².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 ≤1250kg /m³

 $\textbf{Thermal conductivity: } 0.35 \text{ W/mK } (\lambda_{10,dry} \text{ Compatible with Part L requirements, published Psi values } \text{ avaiable at } 1.00 \text{ Available at } 1.$

roadstone.ie/product/thermal-liteblock/#thermal-bridging-details

Durability against freeze-thaw: Masonry Conditions/Situations: E Internal walls & inner leaves of cavity walls

Refer to DoP Table 8 Declared Performance

Dangerous substances: None



DECLARATION OF PERFORMANCE

No.B11 Category 1 Aggregate Concrete Masonry Unit –13N Liteblock

1. Unique identification code of the product type:

Code	Description	Strength (N/mm²)	Length (mm)	Width (mm)	Height (mm)
1239039	Thermal Liteblock 100mm Solid	13.0	440	100	215
1239043	Thermal Liteblock 100mm Soapbar	13.0	440	100	100
1239044	Thermal Liteblock 100mm Stock Brick	13.0	215	100	65
1239040	Thermal Liteblock 140mm Solid	13.0	440	140	215
1239042	Thermal Liteblock 140mm Soapbar	13.0	440	100	140
1239045	Thermal Liteblock 100mm L Block	13.0	440	100 (175)	215
1239041	Thermal Liteblock 100mm L Block	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



- 5. N/A
- 6. System of AVCP System 2+
- 7. Harmonised Standard: I.S. EN 771-3 2011 + A1 2015 Aggregate Concrete Masonry Units (Dense and Lightweight)

Notified certification body:

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				

8. Declared Performance

Characteristic	Declared Performance	Technical Specification
Dimensional Tolerance	D1 (+3mm, -5mm)	I.S. EN 772-16
Difficusional Poterance	DI (13mm, 3mm)	*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	4250lm/m3	I.S. EN 772-13
	≤1250kg/m³	*Building Regulation—Part E (Sound)NDP
Net Density	≤1250kg /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	0.35 W/mK (λ _{10,dry})	I.S. EN 1745 Annex A (Tabulated) Compatible with Part L requirements, published Psi values avaialble at roadstone.ie/product/thermalliteblock/#thermal-bridging-details *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, E Internal walls & inner leaves of cavity walls and D Rendered external walls (other than chimneys, cappings, copings, parapets, sills) Category 1, Group 1: • 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 • No Current European or National Test Method for concrete masonry, when tested to EN 772-22. Methods of test for masonry units. Determination of freeze/thaw resistance of clay masonry units. The units can be classified as Freeze/Thaw Resistance Category MX3. 2 Units produced with aggregate in accordance with I.S. EN 13055-1:2002 lightweight aggregates -part 1:lightweight aggregates for concrete , mortar and grout.	 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 (MX3.1) C2 - High Risk of Saturation (MX3.2) D- Rendered external walls (other than chimneys, cappings, copings, parapets, sills) E- 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 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 MX3.2 - 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 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 MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of

Water Absorption due to Capillary Action	133.13g/m ² .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		
		I.S. EN 772-14 Movement joints required at 7 Meter centres as per		
Moisture Movement	< 0.6 mm/m	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)		
		Based on Commission Decision 200/605 EC amending 96/603 EC		
Reaction to Fire	Class A1	(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		
		I.S. EN 998-2(Tabulated)		
Shear Bond Strength	0,15N/mm² (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

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

(Name and Function)

(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.

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.



Roadstone Ltd. **Fortunestown Dublin 24**



SGS ICS - Serviços Internacionais de Certificação, Lda, Notified Body 1029 - Audited and Certified The Belgard Plant 2023/2024 **RL DoP-B11**

Location	FPC Cert No.	Location	FPC Cert No.	Location	FPC Cert No.
Belgard	1029 - CPR - GB23/00000360				

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

Code	Description	Strength (N/mm²)	Length (mm)	Width (mm)	Height (mm)
1239039	Thermal Liteblock 100mm Solid	13.0	440	100	215
1239043	Thermal Liteblock 100mm Soapbar	13.0	440	100	100
1239044	Thermal Liteblock 100mm Stock Brick	13.0	215	100	65
1239040	Thermal Liteblock 140mm Solid	13.0	440	140	215
1239042	Thermal Liteblock 140mm Soapbar	13.0	440	100	140
1239045	Thermal Liteblock 100mm L Block	13.0	440	100 (175)	215
1239041	Thermal Liteblock 100mm L Block	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 13N/mm²,

Dimensional stability: Moisture Movement: 0.6 mm/m

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

Flexural bond strength: NPD Reaction to fire: Euroclass A1

Water absorption: 133.13g/m².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 ≤1250kg /m³

 $\textbf{Thermal conductivity: } 0.35 \text{ W/mK } (\lambda_{10,dry} \text{ Compatible with Part L requirements, published Psi values } \text{ avaiable at } \lambda_{10,dry} \text{ Compatible with Part L requirements} = \lambda_{$

roadstone. ie/product/thermal-liteblock/#thermal-bridging-details

Durability against freeze-thaw: Masonry Conditions/Situations A3 (Work below or near external ground level, E Internal walls & inner leaves of cavity walls and D Rendered external walls (other than chimneys, cappings, copings, parapets, sills)

Refer to DoP Table 8 Declared Performance

Dangerous substances: None