



# NSAI

## CERTIFICATE OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

**0050 - CPR - 0176**

**System 2+**

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

**Aggregate Concrete Masonry Units in accordance with Annex ZA of the following:**

<b>I.S. EN 771-3:2011+A1:2015</b>	<b>Specification for masonry units – Part 3: Aggregate concrete masonry units (dense and lightweight aggregates)</b>
-----------------------------------	--

Placed on the market by:

**Roadstone Ltd**  
**Huntstown**  
**Finglas**  
**Dublin 11 D11 A337**

And produced in the factory:

**Roadstone Ltd**  
**Huntstown**  
**Finglas**  
**Dublin 11 D11 A337**

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

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

This certificate was first issued on 06/12/2013 and remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly.

**File no:** 1.116.018  
**Approval Date:** 06/12/2013  
**Last amended Date:** 01/09/2022  
**Expiry Date:** 31/10/2023

**Signed:**

Seán Balfé – Director of Sustainability & the Built Environment

# DECLARATION OF PERFORMANCE

No.FC15 Category 1 Aggregate Concrete Masonry Unit

Hunstown Brick

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

Code	Description	Strength (N/mm <sup>2</sup> )	Length (mm)	Width (mm)	Height (mm)
2060001	Smooth Natural HT Brick	20	215	100	65
2060002	Smooth Charcoal HT Brick	20	215	100	65
2060003	Smooth Terracotta HT Brick	20	215	100	65
2060009	Smooth Straw HT Brick	20	215	100	65
2060013	Smooth Umber HT Brick	20	215	100	65
2060014	Smooth Turf Brown HT Brick	20	215	100	65
2062033	Smooth Russet Blend HT Brick	20	215	100	65
2062036	Smooth Georgian Blend HT Brick	20	215	100	65
2061030	Split Autumn Blend HT Brick	20	215	107.5	65
2061033	Split Russet Blend HT Brick	20	215	107.5	65
2063003	Split Terracotta HT Brick	20	215	107.5	65
2063009	Split Straw HT Brick	20	215	107.5	65
2066001	Rumbled Red Multi HT Brick	20	215	100	65
2066002	Rumbled Golden Multi HT Brick	20	215	100	65
2066003	Rumbled Georgian Blend HT Brick	20	215	100	65
2066004	Rumbled Harvest Blend HT Brick	20	215	100	65

**Table 1.** Production details can be traced via dispatch docket & details on bail

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

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

Roadstone Ltd.  
 Fortunestown  
 Dublin 24



**4. N/A**

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

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

**Notified certification body:**

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

Location	FPC Cert No.	Location	FPC Cert No.	Location	FPC Cert No.
		Huntstown	0050-CPR-176		

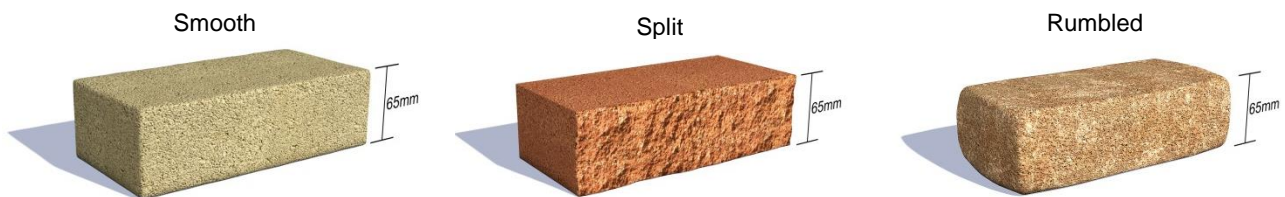
**7. Declared Performance**

Characteristic	Declared Performance	Technical Specification
Dimensional Tolerance	D1 (+3mm, -3mm)	<b>I.S. EN 772-16</b> <i>*Annex C.3 of S.R. 325:2013+A2:2018</i>
Configuration	Category 1 to EN 1996-1-1 Group 1 Normal Configuration Vertical Refer to drawings below	<b>I.S. EN 1996-1-1 + NA</b> <i>*Annex C.5 of S.R. 325:2013+A2:2018</i>
Gross Density Group1	>1900kg/m <sup>3</sup>	<b>I.S. EN 772-13</b> <i>*Building Regulation—Part E (Sound)NDP</i>
Net Density	>1900kg/m <sup>3</sup>	<b>I.S. EN 772-13</b>
Compressive Strength (Mean)	As shown in Table 1 above, in vertical orientation	<b>I.S. EN 772-1</b> (7.3.2 Air Dry, Mortar Capped) <i>*Annex C.4 and C.5 of S.R.325:2013+A2:2018 Building Regulations - Part A (Structure) NDP</i>
Thermal Conductivity	1.01 - 1.19 W/mK (λ10, dry)	<b>I.S. EN 1745 Annex A (Tabulated)</b> <i>*Building Reg.—Part L (Cons. of Fuel and Energy)</i>
Durability (freeze/thaw)	<p>Masonry Conditions/Situations in Table 14 (Durability of masonry in finished construction) of S.R. 325:2013+A2:2018 and used in accordance with Irish Building Regulations (including Technical Guidance Documents C &amp; D), Eurocodes, and S.R.325:2013+A2:2018</p> <p><b>Masonry Conditions/Situations A1, A2 , A3 (Work below or near external ground level) , C1 and C2 (Unrendered external walls (other than chimneys, cappings, copings, parapets, sills)) – Class MX3.2: F20 &amp; F21 Masonry Conditions/Situations I Capping’s, copings and sills MX3.1, MX3.2</b></p> <p>Category 1, Group 1:</p> <ul style="list-style-type: none"> <li>net density ≥ 1,500 kg/m<sup>3</sup></li> <li>declared mean compressive strength ≥ 13N/mm<sup>2</sup> and a declared normalised compressive strength of ≥ 18 N/mm<sup>2</sup></li> <li>mortar strength class: M6 or M12 Dependant on Exposure &amp; Design/protection by overhangs</li> </ul> <p>• 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/F2 – Suitable for use in severe exposure</p> <p>All masonry units produced with aggregate in accordance with I.S. EN 12620 (Aggregates for concrete) and S.R. 16:2016 (Guidance on the use of I.S. EN 12620, Aggregates for concrete)</p>	<ul style="list-style-type: none"> <li>Irish Building Regulations (including Technical Guidance Documents C &amp; D)</li> <li>Eurocodes</li> <li>I.S. EN 1996-1-1:2005 (Eurocode 6: Design of masonry structures. General rules for reinforced and unreinforced masonry structures (+A1:2012) (including Irish National Annex +A1:2014))</li> <li>I.S. EN 1996-2:2006 (Eurocode 6: Design of masonry structures. Design considerations, selection of materials and execution of masonry (includes Irish National Annex - NA:2010))</li> <li>S.R. 325:2013+A2:2018 (including Clause 5.5 (Exclusion of moisture), Clause 5.6 (Durability) &amp; Table 14)</li> <li>I.S. EN 13914 - 1 &amp; 2: 2016</li> </ul> <p><b>Table 14 of S.R. 325:2013+A2:2018:</b> Masonry Conditions/Situations:</p> <ul style="list-style-type: none"> <li>A1 - Low Risk of Saturation (1) Without Freezing (MX2.1, MX2.2) (2) With Freezing (MX3.1)</li> <li>A2 - High Risk of Saturation Without Freezing (MX2.2)</li> <li>A3 - High Risk of Saturation with Freezing (MX3.2)</li> <li>C1 - Low Risk of Saturation (MX3.1)</li> <li>C2 - High Risk of Saturation (MX3.2)</li> </ul> <p>See masonry mortar strength classes in Table NA.3 of National Annex in I.S. EN 1996-1-1:2005</p> <p><b>Table A.1 (Classification of micro conditions of exposure of completed masonry) of I.S. EN 1996-2:2006:</b></p> <ul style="list-style-type: none"> <li>MX2.1 - Exposed to moisture but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX2.2 - Exposed to severe wetting but not exposed to freeze/thaw cycling or external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.1 - Exposed to moisture or wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> <li>MX3.2 - Exposed to severe wetting and freeze/thaw cycling but not exposed to external sources of significant levels of sulfates or aggressive chemicals</li> </ul>

Water Absorption due to Capillary Action	$\leq 10 \text{ g}/(\text{m}^2 \cdot \text{s})$ not to be used as a DPM.	<b>I.S. EN 772 – 11</b>
Moisture Movement	$< 0.6 \text{ mm/m}$	<b>I.S. EN 772-14</b> Movement joints required at 7 Meter centres as per clause 5.4.3.4 of SR 325 (or as specified by competent person) <i>*Annex C.6 of S.R. 325:2013+A2:2018 &amp; Table NA.6 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012 NDP</i>
Water Vapour Permeability	5/15 $\mu$	<b>I.S. EN 1745 Annex A(Tabulated)</b>
Reaction to Fire	Class A1	<b>Based on Commission Decision 200/605 EC amending 96/603 EC</b> (Refer to I.S. EN 1996-1-2 National Annex Table NA. 3.1/3.2 & 3.3 for fire ratings of wall constructed with Class A1 Units) <i>*Building Regulations Part B—Fire Safety</i>
Shear Bond Strength	0,15N/mm <sup>2</sup> (Tabulated)	<b>I.S. EN 998-2(Tabulated)</b> <i>*Table NA.5 of NA:2010+A1:2014 to I.S. EN 1996-1-1:2005+A1:2012</i>
Dangerous Substances	None	Cement, Aggregate Water & Admixtures comply with Relevant EN's and National SR's which prohibit the use of Dangerous Substance

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

#### Normal Configuration (Vertical)



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, 06/01/2023

(Place and Date of Issue)

*Alan Lowe*  
(Signature)



13

Roadstone Ltd.  
Fortunestown  
Dublin 24



Certification Body NSAI 050  
RL DoP-B1

Location	FPC Cert No.	Location	FPC Cert No.	Location	FPC Cert No.
		Huntstown	0050-CPR-176		

**EN 771-3:2011 + A1:2015** Category I, Group 1 Aggregate Concrete Masonry Unit **Huntstown Brick**  
**Dimensions:** Length (390mm), Width (90mm) Height (190mm)  
**Dimensional tolerances:** Category: D1  
**Configuration:** Group 1 unit to EN 1996-1-1 Vertical

Code	Description	Strength (N/mm <sup>2</sup> )	Length (mm)	Width (mm)	Height (mm)
2060001	Smooth Natural HT Brick	20	215	100	65
2060002	Smooth Charcoal HT Brick	20	215	100	65
2060003	Smooth Terracotta HT Brick	20	215	100	65
2060009	Smooth Straw HT Brick	20	215	100	65
2060013	Smooth Umber HT Brick	20	215	100	65
2060014	Smooth Turf Brown HT Brick	20	215	100	65
2062033	Smooth Russet Blend HT Brick	20	215	100	65
2062036	Smooth Georgian Blend HT Brick	20	215	100	65
2061030	Split Autumn Blend HT Brick	20	215	107.5	65
2061033	Split Russet Blend HT Brick	20	215	107.5	65
2063003	Split Terracotta HT Brick	20	215	107.5	65
2063009	Split Straw HT Brick	20	215	107.5	65
2066001	Rumbled Red Multi HT Brick	20	215	100	65
2066002	Rumbled Golden Multi HT Brick	20	215	100	65
2066003	Rumbled Georgian Blend HT Brick	20	215	100	65
2066004	Rumbled Harvest Blend HT Brick	20	215	100	65

**Compressive strength:** Mean Air-Dry Mortar Capped 20N/mm<sup>2</sup>

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

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

**Flexural bond strength:** NPD

**Reaction to fire:** Euroclass A1

**Water absorption:** ≤10g/m<sup>2</sup>s (7.5N, not to be left unrendered in Exposed conditions. Refer to the Durability Below. All strengths: not to be used as a DPM).

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

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

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

**Durability against freeze-thaw:** Masonry Conditions/Situations A, C & I of 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**

• 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/F2 – Suitable for use in severe exposure

**Dangerous substances: None**