

# STANDARDS REQUIRED TO BUILD A CONCRETE MASONRY WALL IN IRELAND

Produced to: I.S. EN 771-3 – 2011 Aggregate Concrete Masonry Units (Dense and Lightweight)

Level of conformity: CE Level 2+ Externally certified by a notified body (i.e. NSAI)

**Intended use:** As common, facing or exposed masonry in load bearing or non-load bearing building and civil engineering applications when designed and built in accordance with the current Irish Building Regulations:

TGD Part A Structure

TGD Part B Fire Safety: class A1

TGD Part E Sound: Density > 1900kgs

TGD Part L Energy: Roadstone Thermal Liteblock reduce the thermal bridging at key junctions & air leakage

# **Designed to: Eurocode 6**

I.S. EN 1996-1-1 General rules for reinforced and unreinforced masonry structures + National Annex

I.S. EN 1996-1-2 General rules. Structural fire design + National Annex

I.S. EN 1996-2:2006 Design considerations, selection of materials and execution of masonry

+ National Annex

#### **Exposure/Durability tables and recommended Details:**

S.R. 325: 2014 Recommendations for the design of Masonry structures in Ireland to Eurocode 6.

#### **Mortars and Plasterers:**

I.S. EN 998-1 Specification for mortar for masonry - Part1: Rendering and plastering Mortar

I.S. EN 998-1 Specification for mortar for masonry – Part2: Masonry Mortar

### **Rendering and Plastering:**

I.S. EN 13914: 2005 Pt. 1- Design preparation and application of external rendering and internal plastering – External Rendering

I.S. EN 13914: 2005 Pt. 2- Design preparation and application of external rendering and internal plastering – Internal Plastering

#### **Materials:**

Cement: I.S. EN 197-1: 2011

Aggregates: I.S. EN 12620 & SR 16 Guidance on the use of I.S. EN 12620 Aggregates for Concrete

Sands: I.S. EN13139 & SR 18 Guidance on the use of I.S. EN 13139 Aggregates for Mortar

Admixtures: I.S. EN 934-2

Water: I.S. EN 2008 Mixing water for concrete

## **Ancillary components:**

I.S. EN 845-1 Specification for ancillary components for masonry –Part 1: Ties, tension straps hangers and brackets

I.S. EN 845-2 Specification for ancillary components for masonry –Part 2: Lintels

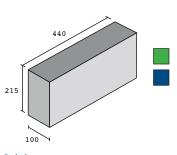
I.S. EN 845-3 Specification for ancillary components for masonry –Part 3: Bed Joint

Reinforcement of steel meshwork

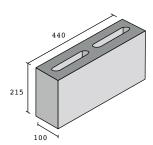


# **450 RANGE**

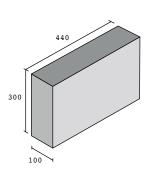
Co-ordinating face size 450mm x 225mm - 9.88 blocks per sq. metre.



**Solid** 440 x 215 x 100mm 20kg. (7.5N/mm<sup>2</sup>)



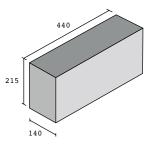
**Solid - 25% Void** 440 x 215 x 100mm 14kg. (7.5N/mm²)



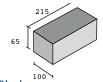
440 x 215 x 65mm 13kg. (7.5N/mm<sup>2</sup>)

Solid

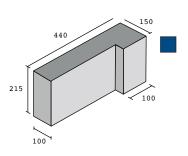
**Solid** 440 x 300 x 100mm 28kg. (7.5N/mm²)



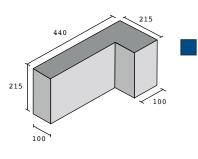
Solid 440 x 215 x 140mm 27kg. (7.5N/mm<sup>2</sup>)



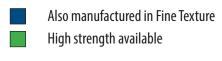
Filler Block 215 x 65 x 100mm 3kg. (18N/mm<sup>2</sup>)



**Cavity Closer** 440 x 215 x 100/150mm 23kg. (7.5N/mm<sup>2</sup>)

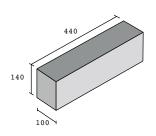


Cavity Closer 440 x 215 x 100/215mm 25kg. (7.5N/mm²)

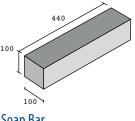


For Modular 400 Range and Specials in 450 Range please refer to the Forticrete Masonry Range

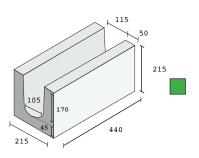




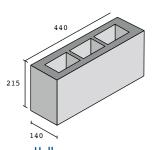
Soap Bar 440 x 140 x 100mm 13kg. (7.5N/mm²)



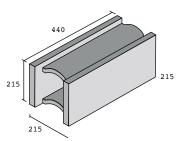
**Soap Bar** 440 x 100 x 100mm 9kg. (7.5N/mm²)



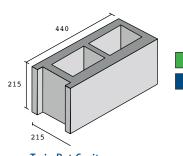
U Block 440 x 215 x 215mm 22kg. (5N/mm²)



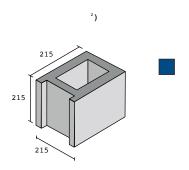
**Hollow** 440 x 215 x 140mm 18kg. (4.5N/mm²)



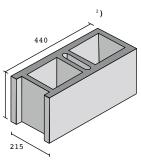
Hollow - Group 4 440 x 215 x 215mm 27kg. (3N/mm<sup>2</sup>)



Twin Pot Cavity 440 x 215 x 215mm 25kg. (4.5N/mm²)



Half Hollow 215 x 215 x 215mm 12.6kg. (4.5N/mm²)



Double Half Hollow 2/215 x 215 x 215 mm Each 13kg. (4.5N/mm²)

Roadstone is the single largest producer of concrete blocks in Ireland. Manufactured in two ranges with a choice of standard or fine textured finish, they comply with the Irish Standard Specification I.S. EN 771-3 and NSAI quality management system IS EN ISO 9001.

The minimum strength for the use of solid masonry units (Dense and Lightweight) in Ireland is 7.5N/mm<sup>2</sup> in line with the Current building regulations Technical Guidance Documents part A – Please refer to Clause 1.1.3.5

Concrete block strength descriptions have been updated in line with IS EN 771-3. The relevant testing method is now mortar capped and dry tested. Block strength descriptions are now displayed as follows:

Solids:	<b>Hollows:</b>
7.5N	4.5N
13N	13N
18N	18N
24N	24N
36N	









