

IRISH STANDARD SPECIFICATION

CALCIUM SILICATE BUILDING BRICKS

I.S. 190 : 1974

Price £1·40

INSTITUTE FOR INDUSTRIAL RESEARCH AND STANDARDS
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DECLARATION

OF

SPECIFICATION

ENTITLED

CALCIUM SILICATE BUILDING BRICKS

AS

THE IRISH STANDARD SPECIFICATION FOR
CALCIUM SILICATE BUILDING BRICKS

The Institute for Industrial Research and Standards in exercise of the power conferred by section 20 of the Industrial Research and Standards Act, 1961 (No. 20 of 1961), and with the consent of the Minister for Industry and Commerce hereby declares as follows:

1. This instrument may be cited as the Standard Specification (Calcium Silicate Building Bricks) Declaration, 1974.
2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Calcium Silicate Building Bricks.
(2) The said standard specification may be cited as Irish Standard 190 : 1974 or as I.S. 190 : 1974.

SCHEDULE

Calcium Silicate Building Bricks

1. SCOPE

This specification covers precast solid calcium silicate bricks of all classes made of the materials and by the processes described in Clause 3. The specification is divided into two parts as follows:

Part 1: Calcium silicate bricks—General;

Part 2: Additional requirements for facing bricks.

Note: Recommendations on the suitability of the respective classes for different uses and on appropriate types of mortar are included in Appendix E.

PART 1: CALCIUM SILICATE BRICKS—GENERAL

2. DEFINITIONS

For the purpose of this specification the following definitions apply:

2.1 *Brick*. A walling unit not exceeding 338 mm in length, 225 mm in width or 150 mm in height.

2.2 *Co-ordinating size*. The size of the space allocated for the brick, including allowance for joints and tolerances. (See Notes to Users, 'Bricks in the context of modular co-ordination').

2.3 *Work size*. The size of a brick specified for its manufacture and to which the actual size should conform subject to specified tolerances (See Clause 5).

2.4 No part of any frog, hole or perforation shall be within 15 mm of any edge of any brick.

3. DESCRIPTION

3.1 The bricks shall consist essentially of an intimate and uniform mixture of sand or uncrushed siliceous gravel or crushed siliceous gravel or rock or a combination of such materials, with a lesser proportion of lime, and water, mechanically pressed together and combined by the action of steam under pressure.

Where a natural sand only is used with the lime the bricks may alternatively be described as 'sandlime' bricks.

3.2 Additives or admixtures may be used during manufacture. Their quality and proportions shall be such as to have no deleterious effect on the finished product. Additives or admixtures may be:

3.2.1 Pigments, which shall comply with British Standard 1014* and, where appropriate shall also be suitable for use in a product which is steam cured at high pressure. British Standards are published by the British Standards Institution, 2 Park Street, London W1A 2BS.

3.2.2 Substances to control or adjust the set and hardening of the mix.

3.2.3 Substances to improve the workability of the mix and reduce the permeability of the product.

3.2.4 Waterproofing or hydrophobic compounds.

Note: It is not possible to specify either durability or uniformity of colour in reasonably simple terms. Where uniformity of colour is important the allowable limits of colour variations within and between batches shall be agreed in advance between the purchaser and manufacturer.

Note: It is not possible to specify precisely the quality of water. Water of drinking quality free from matter harmful to concrete, to reinforcement or to ties used in brickwork construction should be suitable.

4. CLASSIFICATION

Note: The manufacturer when designating bricks shall state whether strength was determined by testing bricks on face or on bed.

Bricks may be one of the following strength categories:

Average compressive strength

N/mm ²									
7	10	15A	15B	20A	20B	30	35	40	50

The purchaser shall specify in his enquiry and order the strength category of brick required, as defined above, and indicate whether the bricks are to be laid on face or on bed.

*British Standard 1014, 'Pigments for Cement, Magnesium Oxychloride and Concrete.

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