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Specifikacija za zidake - 5. del: Zidaki iz umetnega kamna

Specification for masonry units - Part 5: Manufactured stone masonry units

Festlegungen für Mauersteine - Teil 5: Betonwerksteine

Spécifications pour éléments de maçonnerie - Partie 5: Eléments de maçonnerie en pierre reconstituée

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Specification for masonry units - Part 5: Manufactured stone masonry units

Spécifications pour éléments de maçonnerie - Partie 5:
Éléments de maçonnerie en pierre reconstituée

Festlegungen für Mauersteine - Teil 5: Betonwerksteine

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Foreword

This document (FprEN 771-5:2010) has been prepared by Technical Committee CEN/TC 125 “Masonry”, the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 771-5:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

It also takes into account the general rules for unreinforced and reinforced masonry in Eurocode 6.

EN 771, *Specification for masonry units* consists of:

- *Part 1: Clay masonry units*
- *Part 2: Calcium silicate masonry units*
- *Part 3: Aggregate concrete masonry units (Dense and light weight aggregates)*
- *Part 4: Autoclaved aerated concrete masonry units*
- *Part 5: Manufactured stone masonry units*
- *Part 6: Natural stone masonry units*

1 Scope

This European Standard specifies the characteristics and performance requirements of manufactured stone masonry units for which the main intended uses are facing or exposed masonry in load bearing or non-load bearing building and civil engineering applications. The units are suitable for all forms of coursed or random masonry walling, including single leaf, cavity, partition, retaining and the external masonry to chimneys. They can provide fire protection, thermal insulation, sound insulation and sound absorption.

This standard covers concrete masonry units manufactured to resemble natural stone using casting or pressing techniques with or without textured surfaces produced, by casting, splitting, washing, blasting or tooling and with or without variable outline effects. It covers homogeneous masonry units and those consisting of different facing and backing concrete mixes, but excludes those manufactured with an adhesive bonded decorative face. This standard does not cover masonry units intended to conform to EN 771-3.

It defines the performance related to e.g. strength, density, dimensional accuracy, surface appearance and provides for the evaluation of conformity of the product to this European Standard. The marking requirements for products covered by this European Standard are also included.

This European Standard does not apply to storey height panels, masonry units used for chimney flues or units manufactured with an adhesive bonded decorative face. It does not include products intended to be used as a damp proof course nor does it specify standard sizes for manufactured stone masonry units or work dimensions and angles of specially shaped units. It does not cover units with an incorporated thermal insulation material bonded to the faces of the unit susceptible to be exposed to fire.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 772-1, *Methods of test for masonry units — Part 1: Determination of compressive strength*

EN 772-11, *Methods of test for masonry units — Part 11: Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units*

EN 772-13, *Methods of test for masonry units — Part 13: Determination of net and gross dry density of masonry units (except for natural stone)*

EN 772-14, *Methods of test for masonry units — Part 14: Determination of moisture movement of aggregate concrete and manufactured stone masonry units*

EN 772-16, *Methods of test for masonry units — Part 16: Determination of dimensions*

EN 772-20, *Methods of test for masonry units — Part 20: Determination of flatness of faces of aggregate concrete, manufactured stone and natural stone masonry units*

EN 1052-2, *Methods of test for masonry — Part 2: Determination of flexural strength*

EN 1052-3, *Methods of test for masonry — Part 3: Determination of initial shear strength*

prEN 1745, *Masonry and masonry products — Methods for determining thermal properties*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

FprEN 771-5:2010 (E)

EN ISO 12572, *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties (ISO 12572:2001)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

- 3.1 masonry unit**
prefomed component intended for use in masonry construction
- 3.2 facing masonry unit**
masonry unit intended for use with one or more faces visible in use which may or may not be exposed
- 3.3 exposed face**
face intended to be exposed to external climatic conditions
- 3.4 manufactured stone masonry unit**
facing masonry unit having at least one exposed face with a close structure formed from either one or two homogeneous mixtures of aggregate, cementitious binder and other materials moulded under pressure and/or vibration and with or without further processing, intended to resemble and be used as an alternative to natural stone
- 3.5 two-part masonry unit**
masonry unit manufactured with different facing and backing concretes
- 3.6 co-ordinating size**
size of the co-ordinating space allocated to a masonry unit including an allowance for joints
- 3.7 work size**
size of a masonry unit specified for its manufacture to which the actual size conforms within permissible deviations
- 3.8 actual size**
size of a masonry unit as measured
- 3.9 regular shaped masonry unit**
masonry unit with an overall rectangular parallelepiped shape
- 3.10 specially shaped masonry unit**
masonry unit which is not a rectangular parallelepiped
- 3.11 accessory unit**
masonry unit which is shaped to provide a particular function, e.g. to complete the geometry of the masonry