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Precast concrete products - Wall elements
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14992:2007+A1:2012 sisaldab Euroopa standardi EN 14992:2007+A1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 14992:2007+A1:2012 consists of the English text of the European standard EN 14992:2007+A1:2012.
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English Version

Precast concrete products - Wall elements

Produits préfabriqués en béton - Eléments de mur

Betonfertigteile - Wandelemente

This European Standard was approved by CEN on 17 February 2007 and includes Amendment 1 approved by CEN on 7 April 2012.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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The numbering of clauses is strictly related to EN 13369:2004: *Common rules for precast concrete products*, at least for the first three digits. When a clause of EN 13369:2004 is not relevant or included in a more general reference of this standard, its number is omitted and this may result in a gap on numbering.

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Foreword

This document (EN 14992:2007+A1:2012) has been prepared by Technical Committee CEN/TC 229 “Precast concrete products”, the secretariat of which is held by AFNOR and was examined by and agreed with a joint working party appointed by the Liaison Group CEN/TC 229-TC250, particularly for its compatibility with structural Eurocodes.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2012, and conflicting national standards shall be withdrawn at the latest by December 2012.

This document supersedes EN 14992:2007.

This document includes Amendment 1 approved by CEN on 2012-04-07.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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 Construction Products Directive(s) (89/106/EEC).

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

This document is one of a series of product standards for precast concrete products.

For common aspects reference is made to EN 13369: *Common rules for precast concrete products*, from which also the relevant requirements of the EN 206-1: *Concrete — Part 1: Specification, performance, production and conformity* are taken.

The references to EN 13369:2004 by CEN/TC 229 product standards are intended to make them homogeneous and to avoid repetitions of similar requirements.

Eurocodes are taken as a common reference for design aspects. **A1** The installation of some structural precast concrete products is dealt with by EN 13670, *Execution of concrete structures*. **A1** **A1** deleted text **A1**

The programme of standards for structural precast concrete products comprises the following standards, in some cases consisting of several parts:

EN 1168, *Precast concrete products — Hollow core slabs*.

EN 12794, *Precast concrete products — Foundation piles*.

EN 12843, *Precast concrete products — Masts and poles*.

EN 13224, *Precast concrete products — Ribbed floor elements*.

EN 13225, *Precast concrete products — Linear structural elements*.

EN 13693, *Precast concrete products — Special roof elements*.

EN 13747, *Precast concrete products — Floor plates for floor systems*.

EN 13978, *Precast concrete products — Precast concrete garages*.

EN 14843, *Precast concrete products — Stairs.*

EN 14844, *Precast concrete products — Box culverts.*

EN 14991, *Precast concrete products — Foundation elements.*

EN 14992, *Precast concrete products — Wall elements.*

EN 15037, *Precast concrete products - Beam-and-block floor systems.*

EN 15050, *Precast concrete products — Bridge elements.*

EN 15258, *Precast concrete products — Retaining wall elements.*

This standard defines in Annex ZA the application methods of CE marking to products designed using the relevant EN Eurocodes (EN 1992-1-1 and EN 1992-1-2). Where, in default of applicability conditions of EN Eurocodes to the works of destination, design Provisions other than EN Eurocodes are used for mechanical strength, the conditions to affix CE marking to the product are described in ZA.3.4.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The evaluation of conformity given in this standard refers to the completed precast elements which are supplied to the market and covers all the production operations carried out in the factory.

For design rules reference is made to EN 1992-1-1. Additional complementary rules are provided where necessary.

1 Scope

This European Standard applies to prefabricated walls, made of normal weight or lightweight concrete with dense structure. ^[A1] Also fibre reinforced concrete (steel, polymer or other fibres covered by European Standards) may be used. ^[A1] ^[A1] These wall elements ^[A1] may have external wall functions (see 3.11) or not, have facing functions (see 3.12) or not or have a combination of these functions.

External wall functions could be:

- thermal insulation (see 3.11.1);
- sound insulation (see 3.11.2);
- hygrometric control (see 3.11.3);

or a combination of these.

They may be plain, reinforced or prestressed. They may be loadbearing or not.

These include:

- solid walls;
- composite walls;
- sandwich walls;
- lightened walls;
- claddings.

The wall element may also work as a column or beam.

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 1992-1-1:2004, *Eurocode 2: Design of concrete structures — Part 1-1: General rules and rules for buildings*

EN 13369:2004, *Common rules for precast concrete products*

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 terms and definitions given in EN 13369:2004 and the following apply. In general the term “product” refers to an element which is produced in large numbers. For general terms see Clause 3 of EN 13369:2004.