

Betoonkonstruktsioonide ehitamine.

Osa 1: Üldsätted

Execution of concrete structures - Part 1: Common

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-ENV 13670-1:2003 sisaldab Euroopa standardi ENV 13670-1:2000 ingliskeelset teksti. Käesolev dokument on jõustatud 09.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-ENV 13670-1:2003 consists of the English text of the European standard ENV 13670-1:2000. This document is endorsed on 09.04.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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English version

Execution of concrete structures - Part 1: Common

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Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 104 "Concrete (performance, production, placing and compliance criteria)", the secretariat of which is held by DIN.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Because of the close connection between design rules and rules for execution, CEN/TC 104/SC 2 has developed this prestandard in conjunction with CEN/TC 250/SC 2.

This prestandard supersedes the execution and tolerance clauses in ENV 1992-1 Eurocode 2: Design of concrete structures and the execution rules in prEN 206:1997: Concrete - Performance, production, placing and compliance criteria.

This prestandard specifies the required level of execution in assembling products such as fresh concrete, reinforcement, precast concrete elements etc. into a structure that achieves the intended level of mechanical resistance and stability.

This prestandard has three functions:

- to transfer the requirements set during design from the designer to the constructor i.e. to be link between design and execution;
- to give a set of standardized technical requirements for the execution when ordering a concrete structure;
- to serve as a check list for the designer to ensure that he provides the constructor with all relevant technical information for the execution of the structure (see Annex A).

Introduction

(1) This European Prestandard assumes:

- the availability of a comprehensive design of the structure
- a project management in charge of the supervision of the works which will ensure the execution of a conforming structure;
- a site management which will take charge of the organisation of the works and ensure the correct and safe use of the equipment and machinery, the satisfactory quality of materials, the execution of a conforming structure and its safe use up to the delivery of the works.

When precast elements are used, the following additional assumptions are made:

- the availability of a specific design of the precast elements conforming to the relevant standards
- the availability of a design coordination between precast elements and site manufactured components.
- a technical specification of the precast structure with instructions for installation;
- there is an erection management to direct the erection team.

(2) This European Prestandard presupposes that the work is carried out with the necessary skill and adequate equipment and resources to perform the work in accordance with the requirements of the project specification and the requirements of this European Prestandard.

It is assumed that generally accepted rules for good workmanship for the various activities are known and applied.

(3) It is assumed that the constructor will conform to provisions valid at the construction site with respect to:

- qualifications for the personnel doing the various activities covered by this prestandard;
- health and safety aspects of construction.

(4) This prestandard assumes that the finished structure after completion is used as intended in the design and submitted to the planned inspection and maintenance necessary to achieve the intended design life and to detect weaknesses or any unexpected behaviour.

1 Scope

(1) This European Prestandard gives common requirements for execution of concrete structures. In particular, this part gives requirements for structures designed according to ENV 1992 -1 and for the concrete part of composite structures designed according to ENV 1994-1.

(2) In the case of civil engineering works, different or additional requirements need to be considered and, if required, given in the project specification.

(3) This prestandard permits the project specification to state specific requirements relevant to the particular structure.

(4) This prestandard is applicable to temporary as well as permanent concrete structures.

(5) Additional or different requirements should be considered and, if required, given in the project specification when using:

- Lightweight aggregate concrete;
- other materials (e.g. fibres) or constituent materials;
- special technologies/innovate designs.

(6) Small and simple concrete works and secondary structures of minor importance, defined as such in provisions valid at the construction site, are not within this prestandard.

(7) This prestandard does not apply to concrete members used only as equipment for the execution.

(8) This prestandard does not cover the specification, production and conformity of concrete.

- (9) This prestandard is not applicable to the production of precast concrete elements made in accordance with product standards.
- (10) This prestandard does not cover the requirements for concrete members in special geotechnical works such as pile foundations, ground anchors, slurry walls, etc.
- (11) This prestandard does not cover safety and health aspects of execution.
- (12) This prestandard does not state requirements for quality assurance or for qualification of personnel for the various activities.
- (13) This prestandard does not cover contractual issues or responsibilities for the identified actions.

2 References

(1) This European Prestandard incorporates by dated or undated reference, provisions from other publications. These references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Prestandard, only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

(2) All relevant national standards not covered by European Standards should be stated in the project specification.

2.1 Normative references

prEN 206:1997 Concrete – Part 1: Specification, performance, production and conformity

NOTE Presently EN 206 is available as prEN 206:1997 (see also clause 6.6(3), 11.2, E8.5, G 11.1 and G 11.7) and prEN 206-1 is in preparation.

- EN 446:1996 Grout for prestressing tendons - Grouting procedures
- EN 447:1996 Grout for prestressing tendons - Specifications for common grout
- EN 523 Steel strip sheaths for prestressing tendons - Terminology - Requirements and quality control
- EN 1065 Adjustable telescopic steel props - Product specifications, design and assessment by calculation and tests
- ENV 1991 Eurocode 1: Basis of design and actions on structures
- ENV 1992 Eurocode 2: Design of concrete structures
- ENV 1994 Eurocode 4: Design of composite steel and concrete structures
- prEN 10080:1999 Steel for the reinforcement of concrete - Weldable ribbed reinforcing steel
Part 1 – Part 6 ¹⁾
- ENV 10138 Steel for the prestressing of concrete. ¹⁾

2.2 Informative references

- ISO 1803-1 Building construction – Tolerances – Vocabulary – Part 1: General terms
- ISO 4463-1 Measurement methods for building – setting – out and measurement – Part 1: Planning and organization, measuring procedures, acceptance criteria

¹⁾ European Standards for reinforcement and prestressing steels (prEN 10080 and prEN.10138) are presently in preparation. Until these are issued and implemented, national standards apply.