

# Precast concrete products — Street furniture and garden products

The European Standard EN 13198:2003 has the status of a  
British Standard

ICS 91.100.30

# National foreword

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The UK participation in its preparation was entrusted to Technical Committee B/524, Precast concrete products, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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English version

## Precast concrete products - Street furniture and garden products

Produits préfabriqués en béton - Mobilier urbain et de jardin

Betonfertigteile - Straßenmöbel und  
Gartengestaltungselemente

This European Standard was approved by CEN on 10 March 2003.

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## Foreword

This document (EN 13198:2003) has been prepared by Technical Committee CEN/TC 229 “Precast concrete products”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2003, and conflicting national standards shall be withdrawn at the latest by November 2003.

Annexes A and B are informative.

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

## Introduction

This European Standard covers a vast range of products, which are widely used in our daily environment and have an important decorative function. Bearing in mind the great variety of these products, the standard sets minimum requirements for the various products and specific requirements for some particular products.

## 1 Scope

This European Standard specifies the requirements for street furniture and garden products in precast concrete.

This kind of prefabricated, non-structural products and accessories can be used in public and private areas such as gardens, parks, foot-paths, squares, essentially for the landscaping, without, however, being subject to loads resulting from vehicle traffic. They can also be used for internal applications.

Examples are : products for the furnishing of spaces such as benches, seats, tables, playshapes, step blocks, flower boxes, plant containers, fountains, billboards, street signs, traffic marking signposts, illuminated boards, barbecues, mailboxes, clothesline posts, litter bins, statues, decorative columns and bollards, copings; products for soil erosion control such as piled flower boxes, banks with vegetation with no superimposed load and not exceeding a total height of 1 m; floorscape products such as tree frames and grids, gratings, stepping stones.

This Standard does not cover paving units, flags, kerbs, fences, drainage channels, safety barriers, retaining walls nor sound barriers.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative 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 Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 12620:2002, *Aggregates for concrete*.

EN 13369:2001, *Common rules for precast concrete products*.

## 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

### 3.1

#### **actual dimension**

the dimension found by measurements

### 3.2

#### **continuous use of elements**

arrangement of elements each adjoining the preceding one, the position of each element depending on the key-dimension of the next identical element

**3.3****corrosion protected reinforcement**

steel which is inherently resistant to corrosion or has been coated with a protective material e.g. zinc-coated reinforcement, reinforcement of stainless steel, epoxy-coated

**3.4****(concrete) cover**

distance between the nearest concrete surface and the surface of reinforcement

**3.5****design (nominal) cover**

value of the cover thickness quoted in the project documentation and referred to the clear distance from the steel reinforcement to the concrete surface

**3.6****lightweight concrete**

concrete having an oven-dry density of not less than 800 kg/m<sup>3</sup> and not more than 2000 kg/m<sup>3</sup>. It is produced using lightweight aggregate for all or part of the total aggregate

**3.7****minimum cover**

minimum cover thickness given by the design cover reduced by the tolerance

**3.8****normal weight concrete**

concrete having an oven-dry density of not less than 2000 kg/m<sup>3</sup> but not exceeding 2600 kg/m<sup>3</sup>

**3.9****secondary processing**

manufacturing process to texture the whole product or any surface, carried out after basic manufacture (i.e. washing or sand blasting)

**3.10****work (design) dimension**

the dimension targeted by the manufacturer and generally complying with the dimension indicated in the project or in the manufacturer documentation

**4 Requirements****4.1 Material requirements**

For material requirements, the clause 4.1 of EN 13369:2001 shall be applied.

**4.2 Production requirements**

For production requirements, the clause 4.2 of EN 13369:2001 shall be applied.

Additionally, the concrete shall meet one of the minimum strength requirements in Table 1. The minimum class to ensure durability is given in Table 1, in relation to the kind of concrete that is used.

The manufacturer may demonstrate compliance using alternative test methods to the compressive test (e.g. splitting or bending carried out on a test specimen or the unit).