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a, ct sp. Concrete roofing tiles and fittings for roof covering and wall cladding - Product specifications



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36	490:2011.
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### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN 490** 

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Supersedes EN 490:2004

#### **English Version**

## Concrete roofing tiles and fittings for roof covering and wall cladding - Product specifications

Tuiles et accessoires en béton pour couverture et bardage -Spécifications des produits Dach- und Formsteine aus Beton für Dächer und Wandbekleidungen - Produktanforderungen

This European Standard was approved by CEN on 18 September 2011.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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#### **Foreword**

This document (EN 490:2011) has been prepared by Technical Committee CEN/TC 128 "Roof covering products for discontinuous laying and products for wall cladding", the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by April 2012, and conflicting national standards shall be withdrawn at the latest by July 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 490:2004.

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.

This edition incorporates minor technical changes including reaction to fire requirements.

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 and the United Kingdom.

#### 1 Scope

This European Standard specifies requirements for concrete roofing tiles and fittings for pitched roof coverings and wall cladding and lining.

Concrete roofing tiles and fittings may incorporate surface coatings and glued concrete components.

NOTE 1 Information on surface characteristics is given in Annex A.

NOTE 2 Information on the performance of roof and wall assemblies is given in Annex B.

#### 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 491:2011, Concrete roofing tiles and fittings for roof covering and wall cladding — Test methods

ENV 1187, Test methods for external fire exposure to roofs

EN 13238, Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates

EN 13823, Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item

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

EN 13501-5, Fire classification of construction products and building elements — Part 5: Classification using data from external fire exposure to roof tests

EN ISO 1716, Reaction to fire tests for products — Determination of the gross heat of combustion (calorific value) (ISO 1716:2010)

#### 3 Terms and definitions

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

#### 3.1

#### aggregate

concrete component consisting of uncrushed and/or crushed natural and/or artificial mineral substances with particle sizes and shapes suitable for the production of concrete

#### 3.2

#### additive

finely divided material that may be added to concrete in order to improve certain properties or to achieve special properties

#### 3.3

#### pigment

additive intended to add colour to the concrete