STN	Vláknocementové vlnovky a tvarovky. Špecifikácia výrobku a skúšobné metódy.	STN EN 494+A1
		72 3161

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/15

Obsahuje: EN 494:2012+A1:2015

Oznámením tejto normy sa ruší STN EN 494 (72 3161) z mája 2013 STN EN 494+A1: 2016

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 494:2012+A1

September 2015

ICS 91.100.40

Supersedes EN 494:2012

English Version

Fibre-cement profiled sheets and fittings - Product specification and test methods

Plaques profilées en fibres-ciment et accessoires -Spécifications du produit et méthodes d'essai Faserzement-Wellplatten und dazugehörige Formteile
- Produktspezifikation und Prüfverfahren

This European Standard was approved by CEN on 11 August 2012 and includes Amendment 1 approved by CEN on 6 June 2015.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 494:2012+A1:2015) 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of an identical text or by endorsement, at the latest by March 2016, and conflicting national standards shall be withdrawn at the latest by June 2017.

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 includes Amendment 1 approved by CEN on 6 June 2015.

This document supersedes (A) EN 494:2012 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A1).

h 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 the EU Construction Products Regulation 305/2011.

For relationship with the EU Regulation 305/2011, see informative Annex ZA, which is an integral part of this document. (A)

My When comparing EN 494:2004+A3:2007 and the previous edition EN 494:2012, the following paragraphs had been changed or added: 3.10, 3.11, 5.1.1, Table 2, 5.3.3.1, 5.3.3.4, 5.6.3, Table 6, 6.3.2, 7.4.2.1 and Annex ZA.

A distinction has been made between product appraisal (type tests) and routine quality control requirements (acceptance tests).

The performance of a roof or another building part constructed with these products depends not only on the properties of the product as required by this document, but also on the design, construction and installation of the components as a whole in relation to the environment and conditions of use.

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, Former Yugoslav Republic of Macedonia, 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.

1 Scope

This European Standard specifies the technical requirements and establishes methods of control and test as well as acceptance conditions for fibre-cement profiled sheets and their fibre-cement fittings for one or more of the following uses:

- roofing;
- internal wall finishes;
- external wall and ceiling finishes.

For the purpose of this European Standard, fibre-cement profiled sheets are classified according to their height of corrugation and their mechanical characteristics.

This European Standard covers fibre-cement profiled sheets reinforced with fibres of different type as specified in 5.1.1, with and without factory applied coating.

This European Standard does not include calculations with regard to works, design requirements, installation techniques, wind uplift or rain proofing of the installed sheets.

NOTE Some of these requirements can be applied, after agreement, to curved sheets for specific applications.

2 Normative references

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

EN 197-1, Cement — Part 1: Composition, specifications and conformity criteria for common cements

CEN/TS 1187 Test methods for external fire exposure to roofs

EN 13501-1, Fire classification of construction products and building elements — Part 1: Classification using test 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 roofs tests

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

EN 15057, Fibre cement profiled sheets - Impact resistance test method

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

ISO 2602, Statistical interpretation of test results — Estimation of the mean — Confidence interval

ISO 2859-1, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

ISO 3951-1, Sampling procedures for inspection by variables — Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL