DIN EN 13914-1



ICS 91.100.10

Supersedes DIN EN 13914-1:2005-06

Design, preparation and application of external rendering and internal plastering –

Part 1: External rendering; English version EN 13914-1:2016, English translation of DIN EN 13914-1:2016-09

Planung, Zubereitung und Ausführung von Außen- und Innenputzen -

Teil 1: Außenputze;

Englische Fassung EN 13914-1:2016,

Englische Übersetzung von DIN EN 13914-1:2016-09

Conception, préparation et application des enduits extérieurs et intérieurs -

Partie 1: Enduits extérieurs;

Version anglaise EN 13914-1:2016,

Traduction anglaise de DIN EN 13914-1:2016-09

Document comprises 63 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.



A comma is used as the decimal marker.

National foreword

This document (EN 13914-1:2016) has been prepared by Technical Committee CEN/TC 125 "Masonry" (Secretariat: BSI, United Kingdom).

The responsible German body involved in its preparation was *DIN-Normenausschuss Bauwesen* (DIN Standards Committee Building and Civil Engineering), Working Committee NA 005-06-06 AA *Putzmörtel (SpA zu CEN/TC 125/WG 5 und CEN/TC 125/WG 2)*.

Amendments

This standard differs from DIN EN 13914-1:2005-06 as follows:

- a) normative references have been updated;
- b) the terms and definitions have been completely revised and supplemented;
- c) Clauses 4 to 8 and Annexes A and B have been completely revised;
- d) Annexes C and D have been added;
- e) the standard has been editorially revised.

Previous editions

DIN EN 13914-1: 2005-06

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13914-1

March 2016

ICS 91.100.10

Supersedes EN 13914-1:2005

English Version

Design, preparation and application of external rendering and internal plastering - Part 1: External rendering

Conception, préparation et application des enduits extérieurs et intérieurs - Partie 1: Enduits extérieurs

Planung, Zubereitung und Ausführung von Außen- und Innenputzen - Teil 1: Außenputze

This European Standard was approved by CEN on 2 January 2016.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

© 2016 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 13914-1:2016 E

This is a preview. Click here to purchase the full publication.

Con	tents	Page
European foreword4		
1	Scope	6
2	Normative references	7
3	Terms and definitions	8
4	Essential principles and building programme	11
4.1	Essential principles	
4.2	Building programme	
5	Materials	12
5.1	Types of render	
5.2	Materials for site-made renders	
5.2 5.3	Water	
5.4	Materials for reinforcement, carrier and beads	
5.5	Fixings	
5.6	Firring.	
6	Design considerations	
6.1	General	
6.2	Factors affecting the design of the rendering system	
6.3	Characteristics of background	
6.4	Adequacy of the background	
6.5	Durability of the render	
6.6	Exposure conditions	
6.7	Resistance to rain penetration	
6.8	Resistance to water rising from the ground without pressure (capillary water)	
6.9	Soluble salts	
6.10	Effects of atmospheric pollution	
6.11	Effects of freezing	
6.12	Resistance to impact or abrasion	
6.13	Corrosion of metals	
6.14	Occurrence of cracking	23
6.15	Thermal considerations	26
6.16	Protection afforded by architectural features and functions	26
6.17	Selection of renders	36
6.18	Number, thickness and relative strength of coats	37
6.19	Types of finish	
6.20	Colour and texture	40
7	Work on site, preparation and application of renderings	41
7.1	General	
7.2	Storage of materials	
7.3	Scaffolding	
7.4	Protection of adjacent surfaces	
7.5	Preparation of background	
7.6	Proportioning of mix materials on site	
7.7	Mixing on site	
7.8	Forming architectural features	

7.9	Application of the various coats	45
8	Maintenance and repair (other than restoration)	
8.1	General	
8.2 8.3	Inspection	
8.4	Repairs to cracksRepair of hollow or detached areas	
8.5	Overcoming unsatisfactory appearance	
8.6	Overcoming water penetration	
Annex	A (informative) Example on the selection of site mixed prescribed renders mixed in accordance with background type	50
A.1	General	50
A.2	Strong mixes	50
A.3	Moderately strong mixes	50
A.4	Weak mixes	50
Annex B (informative) Restoration of renders on old and historic buildings		51
B.1	General	51
B.2	Preliminary investigations	51
B.3	Preparatory work	53
B.4	Restoration systems and measures	53
B.5	Design	54
B.6	Application	54
Annex	C (informative) Examples of products for reinforcement, carrier and beads	56
C.1	General	56
C.2	Figures	56
Annex	D (informative) Examples of types of finish	60
Ribling	oranhy	61

European foreword

This document (EN 13914-1:2016) has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

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 September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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 13914-1:2005.

The first draft of this document was prepared by the European Union of Contractors of Plastering, Dry Lining, Stucco and Related Activities (UEEP) at the request of the CEN Technical Sector Board (Resolution No. BTS1/56/1991).

This document gives requirements and recommendations for building details, design and materials considerations, the selection of mixes and the application of renders based on cement, lime or organic binders for use on external backgrounds.

NOTE The term 'rendering mortar' is used in the European Standard product specification EN 998-1, but to reflect common usage in relation to this document and for ease of reference the term 'render' (noun) has been used.

A rendered finish may be applied to a variety of backgrounds, either to improve resistance to rain penetration and weathering and/or for aesthetic reasons.

For the purposes of this document (except where stated in relation to a specific product standard) the term 'strength' should be considered in terms of relative strengths between different types of backgrounds compared with the nominal strengths of prescribed render mixes. Although it may be possible to consider this in terms of compressive strength, this standard deals with aspects of a craft as opposed to design calculations. Therefore 'strength' is not considered in terms of numerical values derived from testing. Similar considerations also apply to terms such as 'movement', 'absorbency' and 'permeability' etc. used in this document.

This document refers only to the technical suitability of materials and/or procedures. During the application the user will need to observe any legal obligations relating to health and safety at any stage.

Because this document is a code-like document as opposed to the more conventional European product standard, it is appropriate to mention that, as with product standards, the use of the verbal form 'shall' denotes a requirement for which verification of compliance has to be able to be demonstrated. Recommendations are denoted by the verbal form 'should' and should be followed unless there is a justifiable reason for not doing so.

It is not the function of this standard to assign responsibility for the design and application of any work or actions mentioned within to any specific party. Such responsibility is a matter for other documentation associated with the work, e.g. the contract.

It has been assumed in the drafting of this document that the application of its provisions is entrusted to appropriately qualified and experienced people, for whose guidance it has been prepared.

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.