# SLOVENSKI STANDARD
# oSIST prEN 13914-1:2026

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**Projektiranje, priprava in uporaba zunanjih in notranjih ometov - 1. del: Zunanji ometi**

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

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

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



**Ta slovenski standard je istoveten z:** **prEN 13914-1**

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# 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: Außenputz

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**



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## European foreword

This document (prEN 13914-1:2026) has been prepared by Technical Committee CEN/TC 125 “Masonry”, the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13914-1:2016.

This document includes the following significant technical changes with respect to EN 13914-1:2016:

a) update of normative references;

b) additions and revisions of terms;

c) revision of the content of all sections and Annexes A and B;

d) the former Annex C was deleted and the previous Annex D became the new Annex C.

The EN 13914 series consists of the following parts:

— EN 13914-1, *Design, preparation and application of external rendering and internal plastering — Part 1: External rendering*;

— EN 13914-2, *Design, preparation and application of external rendering and internal plastering — Part 2: Internal plastering*.

# Introduction

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 applicable product standard 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.

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 can 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 needs 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.

# 1 Scope

This document specifies requirements and recommendations for the design, preparation and application of

— renders based on cement, lime or other mineral binders, and/or combinations thereof, masonry cement and polymer modified binder based external renderings, in accordance with EN 998-1 or site made renders;

— renders based on organic binders in accordance with EN 15824

on all common types of backgrounds. It includes rendering on both new and old backgrounds and the maintenance and repair of existing work. This document gives guidance on the use of established site, factory and semi-finished factory-made renders.

This document does not cover the following:

a) the use and application of special renders for liquid retaining structures, e.g. coatings, and for backgrounds to cladding systems;

b) the structural repair of concrete;

c) the installation of external thermal insulation composite systems (ETICS);

d) the specification and use of sealants used to seal joints for use with rendering;

e) the use of gypsum-based renders;

f) renders on historical monuments or buildings in protected areas;

g) the design and installation of flashings at windowsills and elsewhere.



Because of the many varied materials, practices and different climatic conditions, it is not possible for certain aspects of the standard to enter into sufficient detail to be fully usable by all practitioners.

NOTE Local or national regulations take precedence when applicable.

# 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

EN 413-1, *Masonry cement — Part 1: Composition, specifications and conformity criteria*

EN 459-1, *Building lime — Part 1: Definitions, specifications and conformity criteria*

EN 934-3, *Admixtures for concrete, mortar and grout — Part 3: Admixtures for masonry mortar — Definitions, requirements, conformity and marking and labelling*

EN 998-1:2016, *Specification for mortar for masonry — Part 1: Rendering and plastering mortar*

EN 1008, *Mixing water for concrete — Specification for sampling, testing and assessing the suitability of water, including water recovered from processes in the concrete industry, as mixing water for concrete*

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

EN 10346, *Continuously hot-dip coated steel flat products for cold forming — Technical delivery conditions*

EN 12004 (all parts), *Adhesives for ceramic tiles*

EN 12878, *Pigments for the colouring of building materials based on cement and/or lime — Specifications and methods of test*

EN 13055, *Lightweight aggregates*

EN 13139, *Aggregates for mortar*

EN 13496, *Thermal insulation products for building applications — Determination of the mechanical properties of glass fibre meshes as reinforcement for external thermal insulation composite kits with renders (ETIC kits)*

EN 13658-2, *Metal lath and beads — Definitions, requirements and test methods — Part 2: External rendering*

EN 15824, *Specifications for external renders and internal plasters based on organic binders*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods (ISO 1461:2022)*

EN ISO 16120-2, *Non-alloy steel wire rod for conversion to wire — Part 2: Specific requirements for general purpose wire rod (ISO 16120-2)*



## 3 Terms and definitions



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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

**3.1**
**render**
mix of one or more inorganic and/or organic binders, aggregates, water and sometimes admixtures and/or additions used for protective and/or decorative reasons to obtain a surface finish which is applied to walls and ceilings

**3.2**
**rendering**
application of render

Note 1 to entry: Rendering is used as a verb here.

**3.3**
**factory-made render**
render batched and mixed in a factory

Note 1 to entry: It can be 'dry render' which is ready mixed only requiring the addition of water and further mixing or 'wet render' which is supplied ready to use.

**3.4**
**ready mixed dry render**
dry factory-made render

**3.5**
**prebatched render**
mortar whose constituents are wholly batched in a factory, supplied to the building site and mixed there in accordance with the manufacturer's specification and conditions

**3.6**
**pre-mixed lime/sand**
render constituents batched and mixed in a factory, supplied to the building site where further constituents specified or supplied by the factory are added

Note 1 to entry e.g. cement

**3.7**
**pre-bagged factory-made render**
render completed on site using only materials permitted by the manufacturers



**3.8**
**site made render**
mortar composed of individual constituents batched and mixed on the building site



**3.9**
**render mix**
proportions of the constituent materials that are used to make the render

**3.10**
**designed render**
render whose composition and manufacturing method is chosen by the producer in order to achieve specified properties (performance concept)

[SOURCE: EN 998-1:2016, 3.1.3.1, modified]

**3.11**
**prescribed render**
render made in pre-determined proportions, the properties of which are assumed from the stated proportions of the constituents (prescription or recipe concept)

[SOURCE: EN 998-1:2016, 3.1.3.2 modified]

**3.12**
**render system**
sequence of coats to be applied to a background which can be used with a support and/or reinforcement and/or a pre-treatment

Note 1 to entry: In some cases the pre-treatment can be regarded as a separate coat in addition to the specified system.

[SOURCE: EN 998-1:2016, 3.1.6.3, modified]

**3.13**
**renovation render**
factory-made rendering mortar used on moist masonry walls containing water soluble salts

Note 1 to entry: These mortars have a high porosity and vapour permeability and reduced capillary action

**3.14**
**thermal insulating render**
render system containing of thermal insulating render, reinforced-render and final coat

**3.15**
**undercoat**
lower coat or coats of a system

[SOURCE: EN 998-1:2016, 3.1.6.5]



**3.16**
**reinforcement**
material incorporated within a render to improve resistance to cracking (e.g. welded wire mesh, glass fibre mesh, fibres)



**3.17**
**reinforcing coat**
polymer modified mineral or organic render layer with a mesh embedded into it and applied over an undercoat or defective background which contributes to the minimizing of cracks

**3.18**
**final coat**
last coat, decorative or not, of a render system

**3.19**
**one coat render**
for external use designed rendering mortar applied in one coat which fulfils all the functions of a multicoat system used externally and which is usually coloured

Note 1 to entry: One coat mortars for external use can be manufactured using normal and/or lightweight aggregates.

[SOURCE: EN 998-1:2016, 3.1.5.4, modified]

**3.20**
**render sealer**
waterproofing coat generally intended to be applied to the surface of renders to prevent the water penetration from soil

**3.21**
**background**
surface of a construction element to which a render or a render system is to be applied

**3.22**
**preparatory treatment**
actions to be taken on backgrounds with devices, machines and/or tools, to remove dust and unstable or deleterious material, e.g. efflorescence

**3.23**
**key**
property of a background or render coat which allows the bonding of a render without the need for a pre-treatment or carrier

**3.24**
**pre-treatment**
application of a material on the background to improve the application properties of the render (e.g. spatterdash, primer, bonding agent)

**3.25**
**bond**
mechanical and/or chemical adhesion between the render and the background

**3.26**
**bonding agent**
proprietary material used to provide or improve adhesion of the render or render system to the background where necessary



**3.27**
**primer**
material for pre-treatment of the background

Note 1 to entry: For example primers can be used to reduce suction or to stabilize the surface of the background.

**3.28**
**spatterdash**
technique for pre-treatment characterized by brushing, throwing or spraying of site or factory-made mortar onto a background to improve its bonding properties and/or to regulate the suction of the background

**3.29**
**dubbing out**
process of filling large localized irregularities in the background, such as hollows, prior to the application of an undercoat

**3.30**
**carrier**
product attached to the background to which a render is applied so that the render system is largely independent of the background (e.g. lathing)

**3.31**
**firring**
additional support for the carrier

**3.32**
**crazing**
network of short, irregular and very fine cracks up to approximately 0,2 mm in width

Note 1 to entry: Hairline cracks do not impair the function of the render and are therefore acceptable to a limited extent.

**3.33**
**depth gauge**
band of render or bead used in setting out for a required thickness or evenness

**3.34**
**drying time**
necessary hardening- and drying- time until the next layer or coating can be applied

**3.35**
**efflorescence**
deposit of salts on a surface during drying caused by the presence of soluble substances

**3.36**
**fresh on fresh technique for base coat**
application of a render base coat made in several passes while the material is still fresh to achieve the required thickness

# 4 Essential principles and building programme

## 4.1 Essential principles

The design shall include drawings and specifications sufficiently detailed to provide suitable guidance for the preparation of estimates and for the execution of the works.

Prior to the commencement of the contract there should be an exchange of information between all parties concerned.

When preparing the details the following points shall be taken into account:

a) the nature and condition of the background; including any pre-treatment or substrate preparation that can be required;

b) the conditions of exposure of the rendering;

c) the functional requirements;

d) the type of rendering;

e) the type of finish/appearance.

As soon as possible there should be an exchange of information between those responsible for the constructional work, the rendering and any subsequent work, and with other trades whose work will affect or be affected by the rendering.

All materials should be in accordance with the associated technical documentation if available; if not available, the materials should be in accordance with the standards applicable at the place of use.

### 4.2 Building programme

In preparing a time schedule for the work involved in a building, each operation should be considered in relation to the others.

Agreement shall be obtained between all the various parties on the programme times for all the necessary operations and the correct sequence for carrying out these operations. The programme should be kept up-to-date as the project proceeds and damage by subsequent trades should be avoided.

The following items shall be considered by all those involved in planning the programme:

a) the suitability of the weather conditions for the application of the render;

b) sufficient time for the background to be inspected and to dry out;

c) sufficient time for preparation of the background, application and drying out of each coat of rendering;

d) sufficient time for any curing required;

e) the programme should be kept up to date as the project proceeds;

f) sufficient time for inspection of the work as it proceeds;

g) background and air temperatures shall not fall below 5 °C, except for silicate plasters, which shall not be used below 8 °C during application, setting and drying. Alternatively, heating can be provided to maintain these temperatures. A record should be kept of the dates of completion of each area.



## 5 Materials



### 5.1 Types of render

#### 5.1.1 General

Factory made renders can be mixed entirely in the factory or partly in the factory and subsequently completed on site. Alternatively, render can be mixed entirely on site.

Further detailed design recommendations and sub-division in accordance with location of manufacture and purpose are given in 6.17.

#### 5.1.2 Factory made and semi-finished factory-made renders

Factory made and semi-finished factory-made renders shall conform to the requirements of EN 998-1 or EN 15824 for those parts of the process either wholly or partly carried out in the factory. For those parts of the process for semi-finished factory-made renders completed on site, only materials permitted by the manufacturer shall be used. No addition of any material is permitted for wet, ready-to-use renders. Unless otherwise specified by the manufacturer, no addition, other than water in the recommended proportions, shall be added to dry factory-made renders. Where permitted, only materials conforming to the requirements of 5.1 and 5.2 should be used.

#### 5.1.3 Renders with mineral binders

These renders harden mainly by chemical reaction. They shall fulfil the requirements according to EN 998-1.