

## Müürimörtide spetsifikatsioon. Osa 1: Krohvimört

Specification for mortar for masonry - Part 1: Rendering and plastering mortar

This document is a preview generated by EVS

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 998-1:2010 sisaldab Euroopa standardi EN 998-1:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.09.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 998-1:2010 consists of the English text of the European standard EN 998-1:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.10.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 15.09.2010.

The standard is available from Estonian standardisation organisation.

ICS 91.100.10

### Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

### Right to reproduce and distribute belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:  
Aru str 10 Tallinn 10317 Estonia; [www.evs.ee](http://www.evs.ee); Phone: 605 5050; E-mail: [info@evs.ee](mailto:info@evs.ee)

English Version

## Specification for mortar for masonry - Part 1: Rendering and plastering mortar

Définitions et spécifications des mortiers pour maçonnerie -  
Partie 1: Mortiers d'enduits minéraux extérieurs et intérieurs

Festlegungen für Mörtel im Mauerwerksbau - Teil 1:  
Putzmörtel

This European Standard was approved by CEN on 12 August 2010.

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 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 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

# Contents

Page

Foreword .....	3
Introduction .....	4
1 Scope .....	5
2 Normative references .....	5
3 Terms, definitions and abbreviated terms .....	6
4 Materials .....	8
5 Requirements .....	8
5.1 General .....	8
5.2 Properties of hardened mortars .....	8
5.2.1 General .....	8
5.2.2 Reaction to fire .....	9
5.2.3 Durability .....	9
5.3 Properties of fresh mortars .....	13
5.4 Mixing of mortar on site .....	13
6 Designation of rendering and plastering mortars .....	13
7 Marking and labelling .....	13
8 Evaluation of conformity .....	14
8.1 General .....	14
8.2 Initial type testing, ITT .....	14
8.2.1 General .....	14
8.2.2 Sampling .....	14
8.2.3 Reference test .....	14
8.2.4 Repeating of initial type test .....	14
8.2.5 Recording .....	14
8.2.6 Application of test methods .....	15
8.3 Factory Production Control, FPC .....	15
8.3.1 General .....	15
8.3.2 Process control .....	15
8.3.3 Finished product conformity .....	15
8.3.4 Statistical techniques .....	16
8.3.5 Traceability – marking and stock control of products .....	16
8.3.6 Non conforming products .....	16
<b>Annex A (normative) Sampling for initial type testing and independent testing of consignments .....</b>	<b>17</b>
A.1 General .....	17
A.2 Sampling procedure .....	17
<b>Annex ZA (informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive .....</b>	<b>18</b>
Bibliography .....	23

## Foreword

This document (EN 998-1:2010) 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 March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.

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 European Standard supersedes EN 998-1:2003.

The main technical changes compared to the previous edition are in relation to thermal conductivity, where the basis for the declared value has been specified, and in relation to evaluation of conformity, where more details have been given.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports the essential requirements of the EU Construction Products Directive (89/106/EEC).

For relationship with EU Directive(s), see informative Annex ZA which is an integral part of this document.

EN 998 *Specification for mortar for masonry* consists of:

*Part 1: Rendering and plastering mortar.*

*Part 2: Masonry mortar.*

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.

## Introduction

The properties of rendering and plastering mortars depend essentially on the type or types of binders used and their respective proportions. Special properties can be achieved by the type of aggregates, admixtures and/or additions used.

Rendering/plastering mortars are defined

- a) according to the concept as either:
  - designed mortars; or
  - prescribed mortars.
- b) according to the mode of manufacture as either:
  - factory-made mortars;
  - semi-finished factory mortars; or
  - site-made mortars.
- c) according to the properties and/or use, as either:
  - general purpose rendering/plastering mortar;
  - lightweight rendering/plastering mortar;
  - coloured rendering mortar;
  - one-coat rendering mortar;
  - renovation rendering/plastering mortar;
  - thermal rendering/plastering insulating mortar.

Rendering/plastering mortars do not attain their final characteristics until properly hardened after application. The functions performed by a rendering/plastering mortar depend on the properties of the type of materials used, on the thickness of the coats and the type of application. In addition, rendering/plastering mortars determine the surface of the construction.

Regional differences in construction practices and climate, and different constituents for rendering/plastering mortars do not allow for the establishment of standard mix proportions for prescribed mortar that would be applicable in all of Europe. Therefore, the specification of such mix proportions (recipes) and fields of application should be based on practice and experience available in the place of use.

## 1 Scope

This European Standard is applicable to factory made rendering/plastering mortar based on inorganic binders for external (rendering) and internal (plastering) use on walls, ceilings, columns and partitions. It contains definitions and final performance requirements.

It does not cover mortars where calcium sulphate binder is the principle active binding agent.

Calcium sulphate binder can be used as an additional binder together with air lime. If air lime is the principle active binding component, the rendering/plastering mortar is covered by this European Standard. If the calcium sulphate binder is the principle active binding component, the mortar is covered by EN 13279. The classification is carried out by the producer of the mortar.

Special fire resistant- and acoustical mortars, mortars for structural repair and surface treatments of building elements such as materials for smoothing or trueing, paints, coatings, thin-layer organic renders/plasters and prefabricated units (e.g. plaster boards) are not dealt with in this European Standard.

This European Standard covers rendering/plastering mortars defined in Clause 3 with the exception of site made rendering/plastering mortars. However, this European Standard or part of this European Standard may be used in conjunction with codes of application and national specifications covering site made mortars.

## 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 1015-2, *Methods of test for mortar for masonry — Part 2: Bulk sampling of mortars and preparation of test mortars*

EN 1015-7, *Methods of test for mortar for masonry — Part 7: Determination of air content of fresh mortar*

EN 1015-9, *Methods of test for mortar for masonry — Part 9: Determination of workable life and correction time of fresh mortar*

EN 1015-10, *Methods of test for mortar for masonry — Part 10: Determination of dry bulk density of hardened mortar*

EN 1015-11, *Methods of test for mortar for masonry — Part 11: Determination of flexural and compressive strength of hardened mortar*

EN 1015-12, *Methods of test for mortar for masonry — Part 12: Determination of adhesive strength of hardened rendering and plastering mortar on substrates*

EN 1015-18, *Methods of test for mortar for masonry — Part 18: Determination of water absorption coefficient due to capillary action of hardened mortar*

EN 1015-19, *Methods of test for mortar for masonry — Part 19: Determination of water vapour permeability of hardened rendering and plastering mortar*

EN 1015-21, *Methods of test for mortar for masonry — Part 21: Determination of the compatibility of one-coat rendering mortars with substrates*

EN 1745:2002, *Masonry and masonry products — Methods for determining design thermal values*

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

### **3 Terms, definitions and abbreviated terms**

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

#### **3.1**

##### **rendering/plastering mortar**

mix of one or more inorganic binders, aggregates, water and sometimes admixtures and/or additions, used as external renders or internal plasters

#### **3.2**

##### **fresh rendering/plastering mortar**

mortar completely mixed and ready for use

#### **3.3 Types of rendering/plastering mortar defined according to concept**

##### **3.3.1**

##### **designed rendering/plastering mortar**

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

##### **3.3.2**

##### **prescribed rendering/plastering mortar**

mortar made in pre-determined proportions, the properties of which are assumed from the stated proportion of the constituents (recipe concept)

#### **3.4 Types of rendering/plastering mortar according to the mode of manufacture**

##### **3.4.1**

##### **factory-made rendering/plastering mortar**

mortar batched and mixed in a factory. It can be 'dry mortar' which is ready mixed only requiring the addition of water, or 'wet mortar' which is supplied ready for use

#### **3.4.2 Semi-finished rendering/plastering factory mortar**

##### **3.4.2.1**

##### **prebatched rendering/plastering mortar**

mortar whose constituents are wholly batched in a factory, supplied to the building site and mixed there according to the manufacturer's specification and conditions

##### **3.4.2.2**

##### **premixed lime-sand rendering/plastering mortar**

mortar whose constituents are wholly batched and mixed in a plant, supplied to the building site where further constituents specified or provided by the factory are added (e.g. cement)

##### **3.4.3**

##### **site-made rendering/plastering mortar**

mortar composed of individual constituents batched and mixed on the building site