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Mavčna veziva in mavčni notranji ometi - 2. del: Preskusne metode

Gypsum binders and gypsum plasters - Part 2 : Test methods

Gipsbinder und Gips-Trockenmörtel - Teil 2: Prüfverfahren

Plâtres et enduits à base de plâtre pour le bâtiment - Partie 2: Méthodes d'essai

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Gypsum binders and gypsum plasters - Part 2 : Test methods

Plâtres et enduits à base de plâtre pour le bâtiment - Partie
2: Méthodes d'essai

Gipsbinder und Gips-Trockenmörtel - Teil 2: Prüfverfahren

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Foreword

This document (FprEN 13279-2:2013) has been prepared by Technical Committee CEN/TC 241 “Gypsum and gypsum based products”, the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 13279-2:2004.

This document on gypsum binders and gypsum plasters, EN 13279, *Gypsum binders and gypsum plasters*, consists of two parts:

— *Part 1: Definitions and requirements;*

— *Part 2: Test methods.*

This document for gypsum binders and gypsum plasters uses European standardized test methods as far as possible and where this was not applicable other appropriate proven test methods have been used.

This document includes an informative Annex A concerning water retention.

Introduction

Figure 1 shows the family of gypsum binders and gypsum plasters

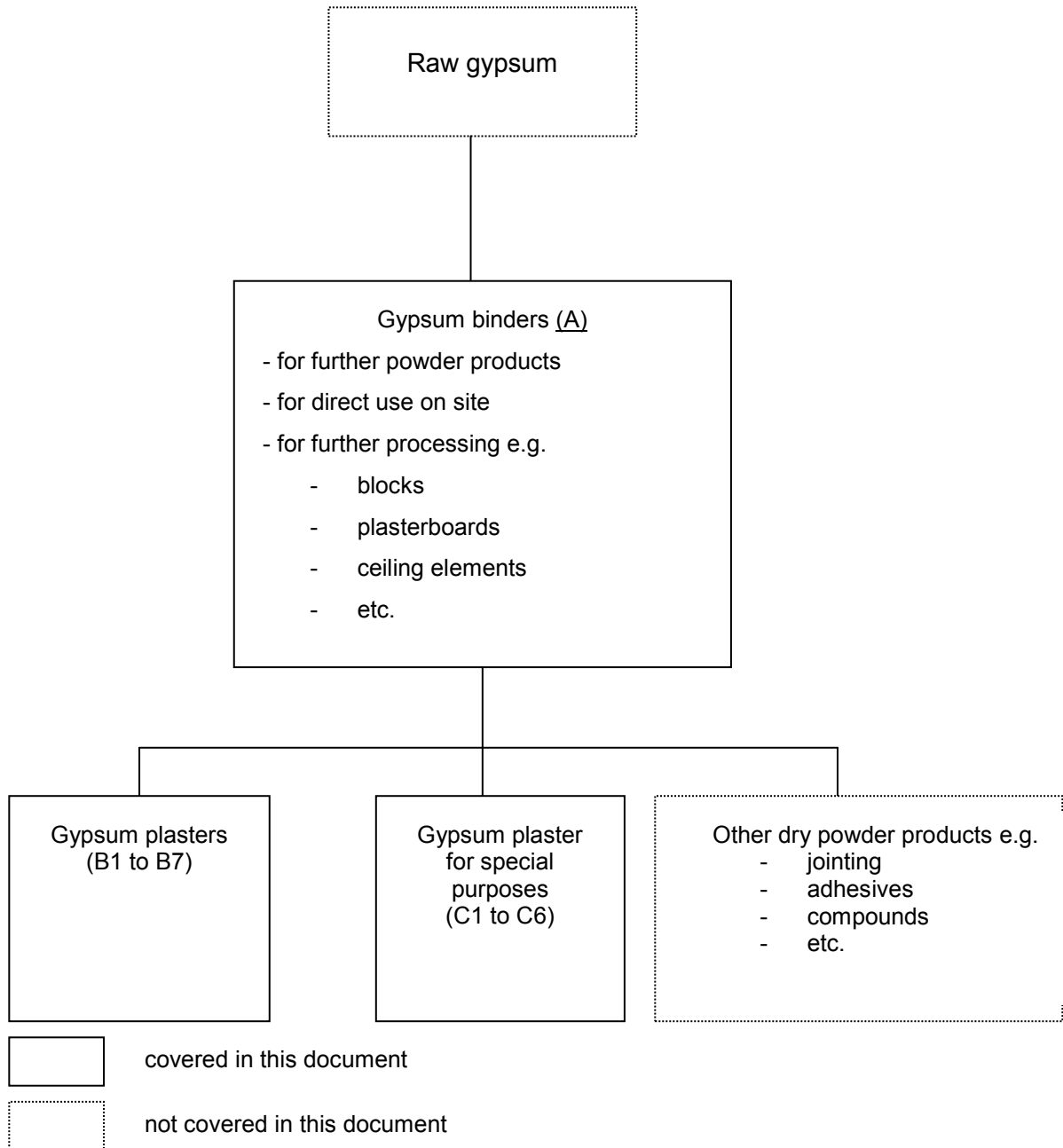


Figure 1 — Family of gypsum binders and gypsum plasters

1 Scope

This European Standard describes the reference test methods for all gypsum binders and gypsum plasters covered by EN 13279-1.

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 196-1:2005, *Methods of testing cement — Part 1: Determination of strength*

EN 196-7, *Methods of testing cement — Part 7: Methods of taking and preparing samples of cement*

EN 459-2:2010, *Building lime — Part 2: Test methods*

EN 932-1, *Tests for general properties of aggregates — Part 1: Methods for sampling*

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

3 Test conditions and sampling

3.1 Test atmosphere (reference test)

Temperature of the test room, the equipment and the materials (plaster, water): $(23 \pm 2) ^\circ\text{C}$

Relative humidity of the air: $(50 \pm 5) \%$

3.2 Sampling

Sampling shall be carried out in accordance with EN 196-7.

Sample granular material in accordance with the procedures given in EN 932-1 for aggregates taking into account the need to minimise moisture and carbon dioxide absorption.

The spot sample size shall be (8 ± 3) kg.

The test sample prior to testing shall be kept in hermetically sealed containers.

3.3 Preparation of the sample

Before carrying out tests, the mass of the sample shall be homogenised.

Before carrying out chemical analyses, a representative sample of (50 ± 5) g shall be taken and be ground to a particle size of $\leq 0,1$ mm.

3.4 Water

The water used for reference tests and chemical analyses shall be distilled or deionised.

FprEN 13279-2:2013 (E)**3.5 Appliances and apparatus**

The apparatus used for gauging and the moulds used for preparing the test pieces, shall be free from leaks and shall be manufactured from a water resistant material which is non reactive to calcium sulphate (e.g. glass, brass, stainless steel, hardened steel, hard rubber and plastics). Soft plastic and rubber materials shall not be used.

Since the characteristics of plasters are strongly influenced by the presence of particles of calcium sulphate dihydrate which can influence the setting time, all the equipment used in the tests shall be kept in a perfect state of cleanliness.

4 Test methods for gypsum binders and gypsum plasters (including special purposes)**4.1 Sieve analysis (Fineness)****4.1.1 Apparatus**

- a) Control sieves conforming to ISO 565:
 - 5 000 μm , only for gypsum bricklaying plaster (C2);
 - 200 μm and 100 μm for fibrous gypsum plaster elements (C1);
 - 1 500 μm for fibrous plaster works and thin coat plaster (C1, C6);
- b) wooden or plastic spatula;
- c) balance accurate to $\pm 0,1$ g;
- d) desiccator.

4.1.2 Determination of particles retained on 5 000 μm sieves**4.1.2.1 Procedure**

From the hermetically sealed laboratory sample weigh $500 \text{ g} \pm 5 \%$ and pass through a 5 000 μm sieve, crushing any soft lumps with a spatula. Weigh the residue and examine any hard particles retained on the sieve.

Repeat the procedure on a second sample.

4.1.2.2 Expression of results

Express the mass retained on the sieve as a percentage of the total sample. Take the mean of the two results and record it in the test report.