EESTI STANDARD EVS-EN 13950:2006

Kipsplaadist paneelide soojus/heliisolatsiooniomadused. Määratlused, nõuded ja katsemeetodid

Gypsum plasterboard thermal/acoustic insulation composite panels - Definitions, requirements and test methods

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13950:2006 sisaldab Euroopa standardi EN 13950:2005 ingliskeelset teksti. Käesolev dokument on jõustatud 25.01.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13950:2006 consists of the English text of the European standard EN 13950:2005. This document is endorsed on 25.01.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard specifies the characteristics and performance of thermal/acoustic insulation composite panels made of an insulating material laminated to gypsum plasterboards for which the main intended use is the internal insulation (thermal and/or acoustic) of walls.	**Scope:** This European Standard specifies the characteristics and performance of thermal/acoustic insulation composite panels made of an insulating material laminated to gypsum plasterboards for which the main intended use is the internal insulation (thermal and/or acoustic) of walls.

ICS 01.040.91, 91.100.10, 91.180

Võtmesõnad: conformity, definition, dimensions, features, plasterboard

EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN 13950

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ICS 91.100.10; 91.100.60

English Version

Gypsum plasterboard thermal/acoustic insulation composite panels - Definitions, requirements and test methods

Complexes d'isolation thermique/acoustique en plaques de plâtre - Définitions, exigences et méthodes d'essai

Gips-Verbundplatten zur Wärme- und Schalldämmung - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 12 September 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Foreword

This European Standard (EN 13950:2005) has been prepared by Technical Committee CEN/TC 241 “Gypsum and gypsum based products”, the secretariat of which is held by AFNOR.

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 May 2006, and conflicting national standards shall be withdrawn at the latest by August 2007.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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

No existing European Standard is superseded.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

Diagrams 1 and 2 below show the relationship between this European Standard and the package of European Standards prepared to support the families of gypsum and ancillary products.

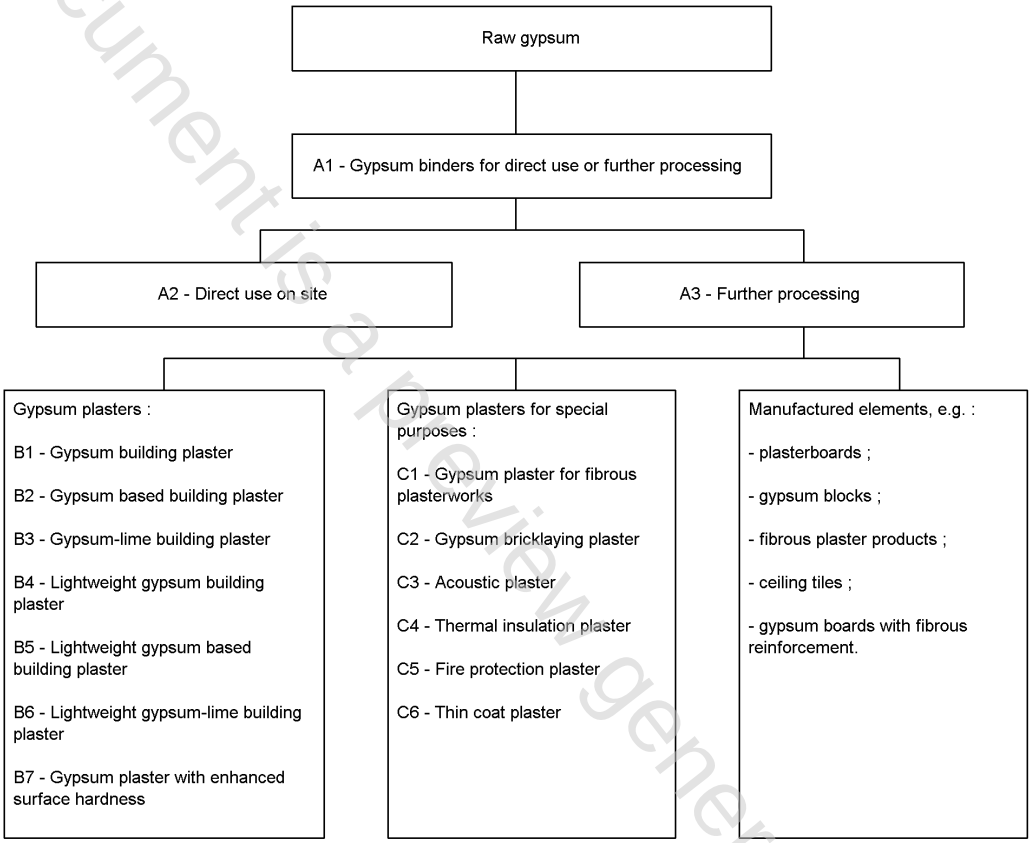

Diagram 1 — Family of gypsum products

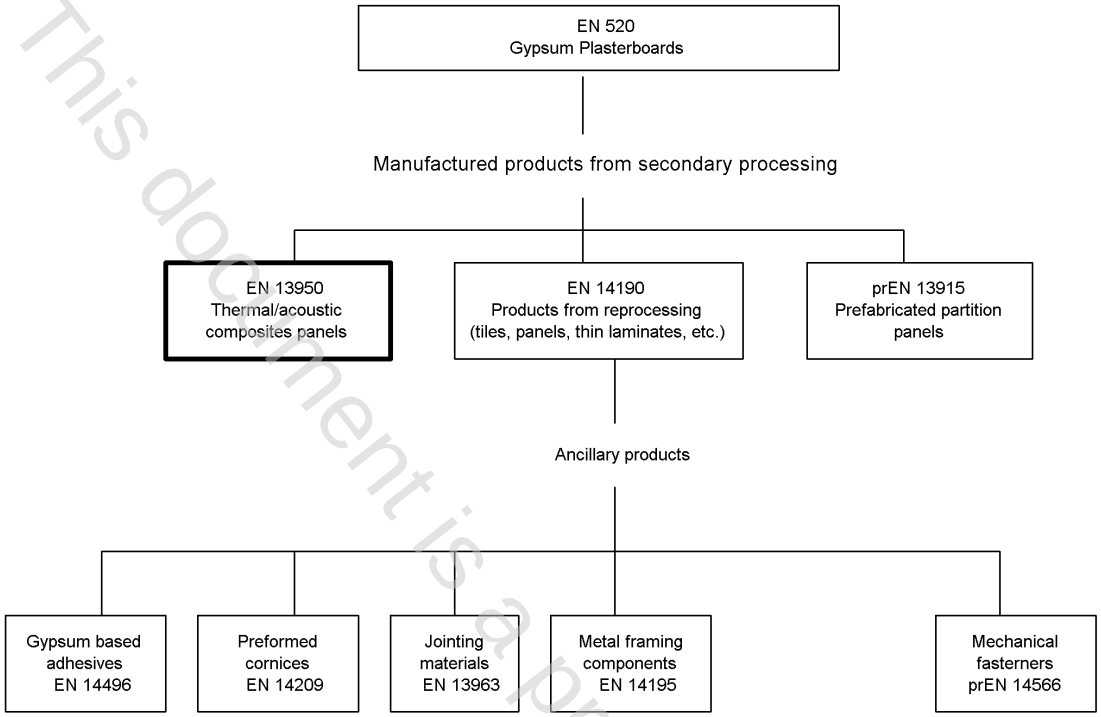

Diagram 2 — Family of ancillary products

1 Scope

This European Standard specifies the characteristics and performance of thermal/acoustic insulation composite panels made of an insulating material laminated to gypsum plasterboards for which the main intended use is the internal insulation (thermal and/or acoustic) of walls. They are attached with adhesives or by mechanical fixings to vertical solid backgrounds and by mechanical fixings to wood or metal framing with the plasterboard face exposed. The method of fixing and jointing shall ensure that the insulating material is not exposed in its normal application

This European Standard covers the following performances characteristics: reaction to fire, fire resistance, water vapour permeability, flexural strength, impact resistance, direct airborne sound insulation and thermal resistance to be measured according to the corresponding European test methods.

It provides for the evaluation of conformity of the products to this European Standard.

This European Standard covers also additional technical characteristics that are of importance for the use and acceptance of the product by the construction industry.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 520:2004, *Gypsum plasterboards — Definitions, requirements and test methods*

EN 825:1994, *Thermal insulating products for building applications — Determination of flatness*

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

EN 13501-2, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

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

EN 13963, *Jointing materials for gypsum plasterboards — Definitions requirements and test methods*

EN 14190, *Gypsum plasterboard products from reprocessing - Definitions, requirements and test methods*

EN 14496, *Gypsum based adhesives for thermal/acoustic insulation composite panels and plasterboards — Definitions, requirements and test methods*

EN ISO 140-3, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements (ISO 140-3:1995)*

prEN ISO 140-16, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 16: Laboratory measurement of the sound reduction index improvement by additional lining (ISO/DIS 140-16:2004))*

EN ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:1996)*

EN ISO 354, *Acoustics — Measurement of sound absorption in a reverberation room (ISO 354:2003)*

EN ISO 11925-2, *Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame – Part 2: Single-flame source test (ISO 11925-2:2002)*

EN ISO 12572, *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties (ISO 12572:2001)*

EN ISO 9001:2000, *Quality management systems — Requirements (ISO 9001:2000)*

ISO 7892, *Vertical building elements — Impact resistance tests — Impact bodies and general test procedures*

3 Terms and definitions

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

3.1 Terms and definitions of the product

3.1.1
gypsum plasterboard thermal/acoustic insulation composite panel
panel made from an insulating material laminated to gypsum plasterboard, with or without a water vapour retarder.

Gypsum plasterboard thermal/acoustic insulation composite panels are manufactured by the bonding of one of the following insulating materials (as specified in its relevant EN) to gypsum plasterboards complying with EN 520 or EN 14190:

a) for class 1 composites:

— expanded polystyrene foam (EPS) (see EN 13163);

— extruded polystyrene foam (XPS) (see EN 13164);

— rigid polyurethane foam (polyisocyanate, polyisocyanurate) (PUR and PIR) (see EN 13165);

— phenolic foam (PF) (see EN 13166);

b) for class 2 composites:

— mineral wool (MW) (see EN 13162).

Gypsum plasterboard thermal/acoustic insulation composite panels are for convenience referred to elsewhere in this European Standard as “composites”

3.1.2
gypsum plasterboard thermal/acoustic insulation sandwich panel
gypsum plasterboard thermal/acoustic insulation composite panel with plasterboard on both faces

3.2 Terminology

3.2.1
water vapour retarder
material which reduces water vapour diffusion, provided separately or in conjunction with the plasterboard (see EN 14190)

3.2.2
panel facing
exposed surface of plasterboard to receive either direct decoration or gypsum plaster