BS EN 13963:2014

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Jointing materials for gypsum boards — Definitions, requirements and test methods

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National foreword

This British Standard is the UK implementation of EN 13963:2014. It supersedes BS EN 13963:2005 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/544, Plastering, rendering, dry lining.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Date	Text affected

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English Version

Jointing materials for gypsum boards - Definitions, requirements and test methods

Matériaux de jointoiement pour plaques de plâtre - Définitions, spécifications et méthodes d'essai

Materialien für das Verspachteln von Gipsplattenfugen - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 22 May 2014.

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Foreword

This document (EN 13963:2014) 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of an identical text or by endorsement, at the latest by January 2015 and conflicting national standards shall be withdrawn at the latest by April 2016.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 13963:2005.

The main technical changes that have been made in this new edition of EN 13963 are the following:

a) normative references have been updated;

b) Commission Decision 2010/83/EU on classes of reaction to fire performance for air drying jointing compounds included in Annex B;

c) new clause symbols, abbreviations and classification has been introduced;

d) Annex ZA and Clause 6 have been revised to be in line with the Construction Products Regulation (CPR)

e) document has been editorially revised.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

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.

1 Scope

The European Standard specifies the requirements for jointing compounds and paper tapes used to fill and finish the joints formed at the edges and ends of gypsum plasterboards complying with EN 520, products from secondary processing complying with EN 14190, prefabricated gypsum plasterboard panels with a cellular paperboard core complying with EN 13915, thermal/acoustic composite panels complying with EN 13950, preformed plasterboard cornices complying with EN 14209 and gypsum boards with fibrous reinforcement complying with EN 15283-1 and EN 15283-2.

This European Standard does not cover tapes which are made from materials other than paper.

This European Standard covers the following characteristics: reaction to fire and flexural strength, to be measured according to the relevant test methods in this document.

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 196-3, *Methods of testing cement — Part 3: Determination of setting time and soundness*

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

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

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

EN ISO 535, *Paper and board — Determination of water absorptiveness — Cobb method (ISO 535)*

EN ISO 1924-2, *Paper and board — Determination of tensile properties — Part 2: Constant rate of elongation method (20 mm/min) (ISO 1924-2)*

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

3 Terms and definitions, symbols, abbreviations and classification

3.1 Terms and definitions

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

3.1.1
jointing system
combination of jointing compound or compounds with or without jointing tape to form a seamless joint between two gypsum boards

3.1.2
tapeless jointing compound
compound for use without tape for jointing gypsum boards with suitable edge profiles

3.1.3
jointing tape
strip of paper reinforcing material designed to be embedded in the bedding compound to reinforce the joints

Note 1 to entry Typically tapes are approximately 50 mm wide.

3.1.4
bedding compound
jointing compound for application directly to the gypsum board and in which the jointing tape is embedded

3.1.5
finishing compound
jointing compound for application over bedding compound in one or more applications and which forms the final finished surface of the joint

3.1.6
dual-purpose compound
jointing compound suitable for both bedding and finishing

3.1.7
ready-mixed compound
compound supplied so that it can be used without the site addition of water or other materials

3.1.8
short setting
compound with a setting time greater than 20 min but less than 60 min

3.1.9
normal setting
compound with a setting time of 60 min or greater but less than 180 min

3.1.10
long setting
compound with a setting time of 180 min or greater

3.1.11
hydrophobised compound
joint compound with reduced water absorption rate

3.2 Symbols and abbreviations

Table 1 — Symbols and abbreviations

Requirement	Sub-clause	Symbol or abbreviation
Reaction to fire	4.1	R2F
Flexural strength	4.2	F
Dangerous substances	4.3	DS
Tensile strength	4.9	σ
See manufacturer's literature		www.manufacturers_internet_address.com

3.3 Classification of compounds

Compounds specified in this document shall be classified into eight types according to their description and method of hardening as shown in Table 2.

Compound types 1A, 2A, 3A and 4A harden only by air drying. They are known as air drying compounds.

Compound types 1B, 2B, 3B and 4B harden by chemical reaction and air drying. They are known as setting compounds.

Table 2 — Types of jointing compounds

Description	Principle mechanism of hardening	
	Air drying (powder or ready-mix)	Setting (powder only)
Bedding compound	1A	1B
Finishing compound	2A	2B
Dual-purpose compound	3A	3B
Tapeless jointing compound	4A	4B
NOTE See Annex B for guidance for use.		

4 Requirements

4.1 Reaction to fire

Jointing compound materials for gypsum boards are classified in Euroclass A1 (no contribution to fire) without testing when they contain less than 1 % by weight or by volume (whichever is the more onerous) of organic materials[1)].

If the jointing compound materials contain 1 % or more by weight or by volume (whichever is the more onerous) of organic material, they shall be tested and then classified in accordance with EN 13501-1.

Jointing materials tested according to EN 13823 (SBI test) shall be mounted and fixed in accordance with Annex C or, when the manufacturer wishes to claim performance for a specific intended use, the mounting and fixing shall be representative of that intended use.

Where subject to regulatory requirements, the air drying jointing compounds of types 1A, 2A and 3A and paper jointing tape shall either be classified without further testing according to the provisions of Annex B or it shall be tested and classified according to EN 13501-1.

4.2 Flexural strength (expressed as breaking load)

Breaking load shall be measured according to test method 5.8.2 for types 1, 2 and 3 and according to test method 5.8.1 for types 4A and 4B (tapeless jointing compound).

4.3 Dangerous substances

National regulations on dangerous substances may require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

In the absence of European harmonized test methods, verification and declaration on release/content should be done taking into account national provisions in the place of use.

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1) See Commission Decision 96/603/EC as amended.

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction website on EUROPA accessed through:

http://ec.europa.eu/enterprise/construction/cpd-ds/

4.4 Setting time

When compound types 1B, 2B, 3B and 4B are tested by the method given in 5.2, the setting time shall be not less than 20 min but less than 60 min for a short setting compound. It shall not be less than 60 min but less than 180 min for a normal setting compound and not less than 180 min for a long setting compound.

4.5 Cracking

When compounds are tested by the method given in 5.3, there shall be no cracks in the zone 50 mm from the thin end of the wedge for type 2A, 2B, 3A and 3B compounds and no cracks in the 150 mm zone from the thin end of the wedge for type 4A and 4B compounds

4.6 Particle size distribution

When compound types 2A, 2B 3A, 3B, 4A or 4B are tested by the method given in 5.4, the mass retained on the 200 µm sieve shall be not greater than 1 %. There shall be nothing retained on the 315 µm sieve.

4.7 Adhesion/cohesion

When tested by the method given in 5.5, the adhesion/cohesion of the compounds shall exceed 0,25 N/mm^2.

4.8 Dimensional stability of paper tape

When tested by the method given in 5.6, the dimensional change in the length direction shall be less than 0,4 % and in the width direction shall be less than 2,5 %.

4.9 Tensile strength of paper tape

When tested by the method given in 5.7, the minimum tensile strength shall be 4,0 N per mm of tape width.

4.10 Additional requirements for jointing compounds Types H1, H2, H3 (with reduced water absorption)

The surface water absorption of the jointing compound determined by the method described in 5.9.1 for the face of the jointing compound shall not be greater than the values shown in Table 3.

The total water absorption of jointing compounds, determined by the method described in 5.9.2, shall not be greater than the values shown in Table 3.

Table 3 — Water absorption classes

Water absorption classes	Surface water absorption g/m^2	Total water absorption %
H1	180	≤ 5
H2	220	≤ 10
H3	300	≤ 25

5 Test methods

5.1 Sampling

A minimum of three samples shall be subjected to the tests given in this section. Only the tests relevant to the class of compound as defined in 3.3 need to be done.

5.2 Determination of setting time

5.2.1 Principle

Jointing compound shall be mixed with tap water in the proportion recommended by the manufacturer. The setting time shall be determined using a Vicat apparatus fitted with a penetration cone in an environment maintained at (23 ± 2) °C and (50 ± 5) % of relative humidity.

5.2.2 Apparatus and materials

a) Vicat apparatus, as described in EN 196-3 with a cone of stainless steel or brass, approximately 35 mm long with a smooth polished surface and an angle of 30° ± 1. The cone is attached to the moveable rod of the Vicat apparatus in place of the needles;

b) waxed paper or plastic cups, at least 40 mm deep;

c) balance, to weigh 500 g with an accuracy of 0,1 %;

d) measuring cylinder;

e) a beaker of 250 ml to 400 ml capacity for use as a mixing vessel;

f) palette knife with a normal 100 mm x 20 mm flexible stainless steel blade;

g) stop clock.

5.2.3 Procedure

Bring the jointing compound to a temperature of (23 ± 2) °C in a closed container before testing.

Carry out the complete determination on two samples. The first sample is to determine the approximate setting time. The effective determination is carried out on the second sample.

Place in the mixing vessel (beaker) the amount of tap water at (23 ± 2) °C, which will give an adequate volume of mix to enable the waxed paper or plastic cup to be struck off level without difficulty. Using the mix proportions recommended by the manufacturer, weigh out the appropriate amount of the compound.

Start the stop clock and over 10 s add the compound to the water. Allow to settle for 20 s, then mix for 30 s at a rate of 2 to 3 strokes per second in such a manner that the entire contents of the mixing vessel are thoroughly mixed.

If required by the manufacturer, re-mixing should be carried out at the stated time using the technique specified above.

Transfer the mixed compound to two paper or plastic cups, strike off level and stand on a surface which is free from vibration and out of direct sunlight or draughts. Test from time to time with the Vicat apparatus, by placing the tip of the cone on the surface of the mix and allowing the moveable rod to fall freely. The distance between the points of impact of the cone shall be at least 12 mm from previous impacts and from the walls of the cup.

After each penetration wipe clean the cone and re-position on the surface. As the set approaches continue the test on the second sample, avoiding over frequent penetrations since these can affect the set. Determine and record the elapsed time when the cone fails to penetrate 10 mm into the mix. A graph of penetration versus time is useful for interpolation.

5.2.4 Expression of results

Report to the nearest 5 min the setting time of the compound as the elapsed time from the start of sprinkling the compound into the mixing water until the cone fails to penetrate 10 mm into the mix.

NOTE Scrupulous cleanliness of the apparatus used for mixing and careful adherence to the time and energy restrictions noted in the mixing procedures are essential if repeatable results are to be obtained.

Failure to eliminate unsoaked agglomerations of compound may lead to the early formation of hard lumps in the unset mass and difficulty in deciding when the set has occurred.

5.3 Determination of cracking resistance

5.3.1 Principle

A wedge of the compound shall be applied to the surface for direct decoration of a piece of gypsum board, dried and examined for cracking.

For type 4 compounds a thicker wedge is necessary to simulate the conditions of use as this material is used without tapes in much thicker layers (see Figure 2).

5.3.2 Apparatus and materials

a) For testing type 1, 2 or 3 compounds (see Figure 1):

1) Metal rod of 2 mm diameter and 150 mm minimum length;

2) broad knife, nominally 100 mm wide;

3) a piece of gypsum board complying with the requirements of type A of EN 520, 150 mm x 150 mm conditioned at (23 ± 2) °C and (50 ± 5) % of relative humidity.

Dimensions in millimetres

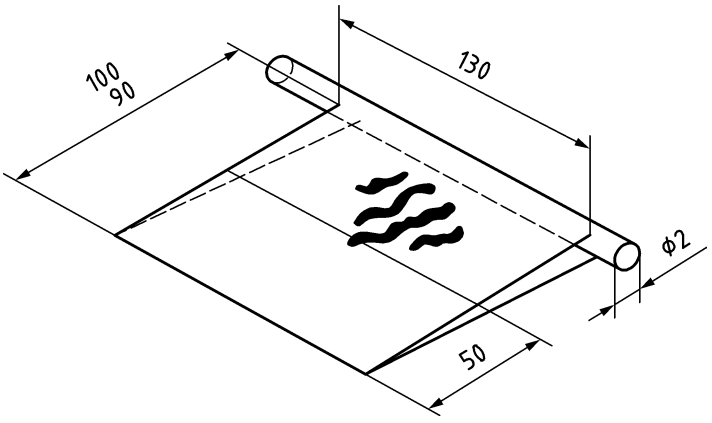


Figure 1 — Wedge showing cracking

b) For testing type 4 compounds (see Figure 2):

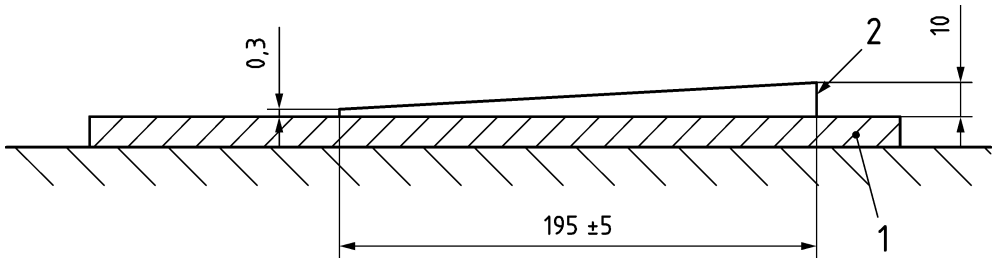
NOTE The device can also be used for testing types 1, 2 and 3 compounds in FPC.

1) Stainless steel or hard plastic wedges (195 ± 5) mm long, 25 mm wide and 0,3 mm to 10 mm high at the extremities;

2) broad knife, at least 60 mm wide;

3) a piece of gypsum plasterboard complying with the requirements of type A of EN 520 conditioned at (23 ± 2) °C and (50 ± 5) % of relative humidity.

Dimensions in millimetres



Key

1 gypsum plasterboard

2 wedge

Figure 2 — Wedge for testing type 4 compounds

5.3.3 Procedure

— For testing type 1, 2 or 3 compounds:

Prepare approximately 200 g of mixed compound in accordance with the manufacturer's recommendations. Position the rod on the surface for direct decoration, parallel and close to one edge of the gypsum board. Place some of the compound onto the plasterboard and next to the rod. With the broad knife spread the compound to make a wedge, 90 mm to 100 mm wide, which tapers across its width from 2 mm to zero using the rod as a thickness gauge. When spreading the mixture hold the broad knife at an angle of less than 45° to the plane of the board, and smooth the surface 2 to 4 times. Remove the rod and cut the wedge to a length of approximately 130 mm.

Dry the specimen to constant mass[2)] at (23 ± 2) °C and (50 ± 5) % of relative humidity.

Inspect the dried specimen and record the type of cracking in both the thick half and the thin half of the wedge, if any.

— For testing type 4 compounds:

Prepare a quantity of mixed compound depending on the number of test samples in accordance with the manufacturer's recommendations. Position the wedges on the surface for direct decoration parallel and about 40 mm apart. Place some of the compound onto the plasterboard within the wedges. With the broad knife spread the compound to fill the space between the wedges. When spreading the mixture hold the broad knife at an angle of less than 45° to the plane of the board, and smooth the surface 2 to 4 times.

Dry the specimen to constant mass[2)] at (23 ± 2) °C and (50 ± 5) % of relative humidity.

2) Constant mass is defined as two successive weighings 24h apart, differing by less than 0,1 %.

Inspect the dried specimen and record the type of cracking in both the thick half and the thin half of the wedge, if any.

5.3.4 Expression of results

Report the presence or absence of cracking in the zone 50 mm from the thin end of the wedge for type 1, 2 and 3 compounds or 150 mm from the thin end of the wedge for type 4 compounds.

5.4 Determination particle size distribution

5.4.1 Principle

The mass retained on 315 µm and 200 µm sieves shall be determined.

5.4.2 Apparatus

a) 315 µm and 200 µm sieves, complying with the requirements of ISO 565 and a sieve brush;

b) wide-mouth bottle of approximately 1 l capacity;

c) balance, accurate to 0,1 mg;

d) oven capable of being maintained at a temperature of (40 ± 2) °C.

5.4.3 Procedure

Prepare approximately 300 g of mixed compound in accordance with the manufacturer's recommendations.

Weigh (200 ± 5) g of mixed compound into the wide-mouthed jar and slowly add approximately 200 g of water continuously stirring to produce a thin homogeneous mix. Pour this mix through the 315 µm sieve and allow that which passes to pass on to the 200 µm sieve. Wash with water until the washings are clear.

Use the sieve brush to break up any dispersible agglomerates on the surface of the sieves.

Dry the sieve and any residue at (40 ± 2) °C. When dry, weigh the residue on each sieve.

5.4.4 Expression of results

Report the mass of the residue retained on each sieve as a percentage of the test sample weight.

5.5 Determination of adhesion/cohesion

5.5.1 Principle

The adhesion and the cohesion of a jointing compound layer shall be measured by applying a force perpendicularly to the interface (pull test).

Plasterboard conforming to type A of EN 520 shall be used as background as a typical support.

5.5.2 Apparatus

a) Two metal ribbons (720 mm length, 20 mm wide, 1,5 mm thick);

b) piece of plasterboard conforming to type A of EN 520 cut at least 100 mm from the edge (720 mm long, 200 mm wide, 12,5 mm thick);

c) taping knife (width > 200 mm);

d) bowl and spatula for mixing;

e) ventilated oven at 40 °C;

f) metal disc (50 mm diameter, 10 to 20 mm thick) with central connection to receive traction clamp (pull head);

g) adhesive with adhesion > 0,5 N/mm^2;

h) traction device having a self-centring clamp to apply a convenient tensile force;

i) dynamometer or appropriate device permitting readings to 25 N;

j) wooden plate (150 mm × 200 mm × 10 mm) with a circular “window” (65 mm diameter);

k) thin (<0,2 mm) double face adhesive tape.

5.5.3 Procedure

Under standard laboratory conditions (23 ± 2) °C and (50 ± 5) % of relative humidity.

Prepare the appropriate quantity of joint compound according to the product instructions. Place the two ribbons (a) on the face of the plasterboard (b) using the double faced adhesive (k) along each long edge. Fill uniformly with the paste avoiding bubbles. Remove excess plaster with the taping knife. Let it set and/or dry for sufficient time (according to the product instructions). Fill once more if necessary. Let it set and dry, the final drying being carried out in an oven at 40 °C to constant mass. Stick the 5 metal discs (f) to the surface of the dried jointing compound with adhesive (g) at 120 mm centres along the centre line of the board. Put the wooden plate (j) on the surface of the test sample with the 65 mm diameter window concentric to the 50 mm metal discs. Connect the pulling device to the metal disc through the “window” of the wooden plate. Apply an increasing force until failure occurs. (The increase shall be constant, non-stop with a value of (50 ± 5) N per second). Note the maximum tensile strength in N and the type of failure. Make five measurements, where the rupture occurs according to A or B as defined in 5.5.4.

Where test equipment cannot accept 720 mm samples, board (b) and ribbons (a) may be cut into 5 or less modules before preparing the specimens.

5.5.4 Expression of results

The rupture may occur (see Figure 3):

A - in the compound itself,

B - at the interface between compound and board,

C - in the plasterboard core,

D - at the interface between compound and device,

E - in the paper (not shown).

State the position of the rupture. Determine the average force (F) in N of the five measured values.

When the rupture occurs in C, D and E, the results may be disregarded.

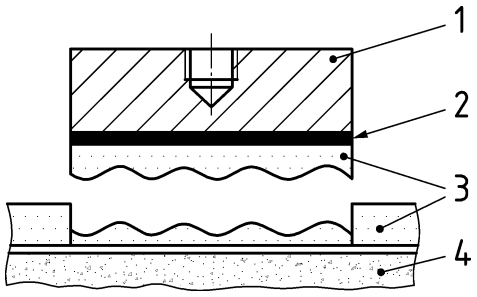
Calculate the adhesion or cohesion strength (R) in N/mm^2 as follows:

$$R = F/S$$

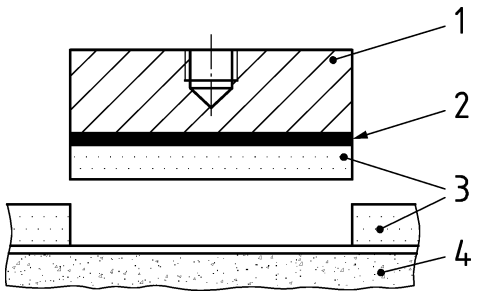
where

S is the area of the disc in mm^2

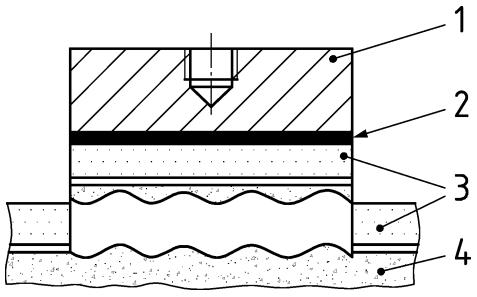
Report the adhesion R.



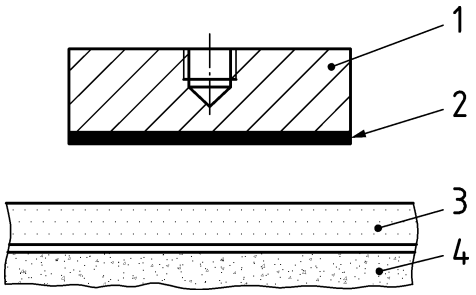
A



B



C



D

Key

1 metal disc

2 adhesive

3 jointing compound

4 board

Figure 3 — Adhesion/cohesion – Fracture pattern

5.6 Determination of dimensional stability of paper jointing tape

5.6.1 Principle

The length and width of a test piece shall be measured before and after immersion in water and the percentage change in dimensions shall be calculated.

5.6.2 Apparatus

a) water bath;

b) measuring device permitting readings to 0,1 mm.

5.6.3 Procedure

Condition the tape for 24 h before tests at (23 ± 2) °C and (50 ± 5) % of relative humidity.

Cut a strip of tape (250 ± 2) mm long and lay it on a flat surface. Cut two 10 mm long reference marks for the length measurement of the tape, perpendicular to the length of the tape and approximately 10 mm from each end. Measure the length down the centre line of the tape between the reference marks to the nearest 0,1 mm with the measuring device.

Measure the full width of the tape in a similar manner, marking the points between which the measurement is taken.

Roll up the test piece and place it in the container of water at (23 ± 2) °C so that it is entirely submerged. After 30 min remove the test piece from the water and roll it out on the flat surface and remove excessive water. Repeat the measurements of length and width immediately.

5.6.4 Expression of results

Report the changes in length and width dimensions as percentages.

5.7 Determination of tensile strength of paper jointing tape

5.7.1 Principle

Test pieces of given dimensions cut in the width direction shall be subjected to a tensile force and the tensile strength recorded.

5.7.2 Apparatus

a) tensile testing apparatus that is capable of acting on a test piece at a rate of loading such that failure of the test piece can be obtained in (20 ± 5) s and that permits the tensile force at the moment of failure to be read to 1 %;

b) scalpel or very sharp knife;

c) steel straightedge.

5.7.3 Procedure

Using the scalpel and straightedge, cut 10 test pieces at right angles in the width direction at intervals of not less than 0,9 m along the length of the tape. Cut the test pieces the full width of the tape and (15 ± 0,5) mm wide (*w*) (see Figure 4).

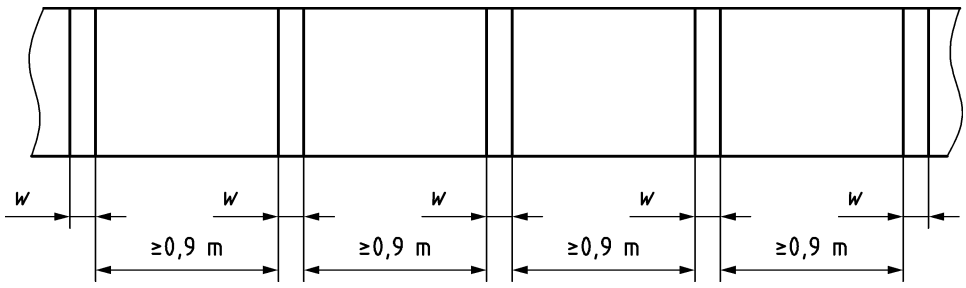
Condition the test pieces at (23 ± 2) °C and (50 ± 5) % of relative humidity for not less than 24 h.

Test in accordance with the procedure of EN ISO 1924-2 except that the distance between the clamps shall be the width of the tape minus 10 mm on each end for clamping.

5.7.4 Expression of results

Report the average of the tensile strength of the 10 specimens in N/mm width.

Dimensions in millimetres



Key

W width of the test pieces

Figure 4 — Sampling for tensile strength testing

5.8 Determination of flexural strength (breaking load)

5.8.1 Determination of breaking load by tensile method

5.8.1.1 Principle

A joint is constructed from the materials to be used and dried under laboratory conditions. The joint shall then be subject to loading at a controlled rate and the loads at which the first crack and at which failure occurs are determined.

5.8.1.2 Apparatus

A loading machine permitting readings to 2 % and capable of applying the necessary load with a rate of 250 N/min ± 125 N/min.

5.8.1.3 Procedure

For each of the three samples of jointing material, cut two pieces of 12,5 mm plasterboard conforming to type A of EN 520 each 200 mm × 300 mm. Joint the pieces in pairs along the long side following the manufacturer's instructions. Before jointing apply strip of adhesive tape along the back of the joint and fix carefully to battens to support the joint while the joint is made (see Figure 5).

Allow the joints to dry at (23 ± 2) °C and (50 ± 5) % of relative humidity for seven days.

After drying remove the battens and adhesive tape and carefully cut into five test specimens each 50 mm wide and 400 mm long (Figure 5).

Longer pieces of board may be used to provide additional specimens in case of breakage during handling, etc. but only five should be tested.

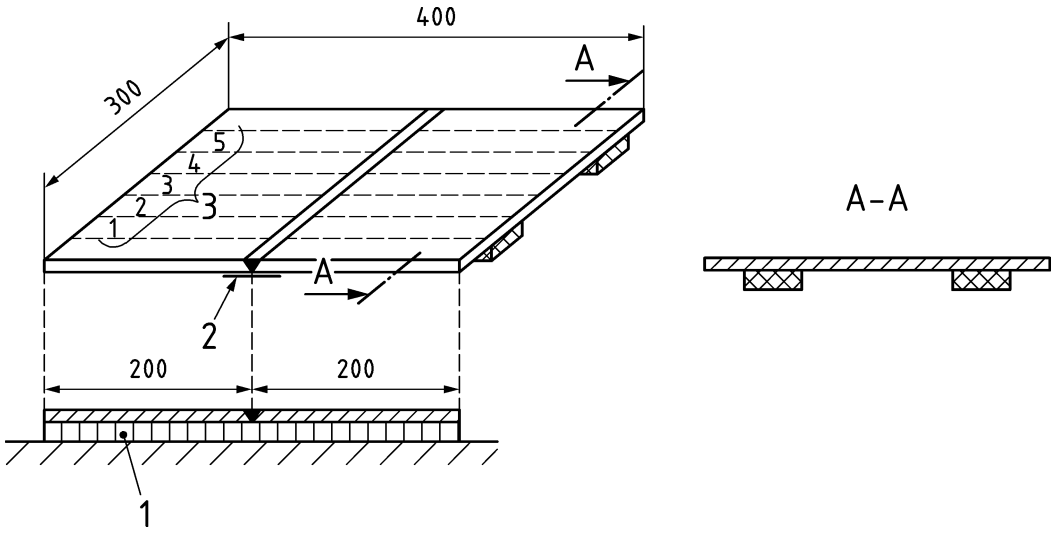
Mount each specimen vertically in the loading machine and apply a tensile load continuously.

5.8.1.4 Expression of results

Draw the load/extension curve for each specimen and report the load at which the first crack appears and the final breaking load. Note the type of rupture.

Report the individual results for each of the 15 specimens and the average load (in N) at which cracking first appears and also the average breaking load (in N).

Dimensions in millimetres



Key

1 wood batten to support board pieces during jointing

2 adhesive tape

3 number of test specimens

Figure 5 — Preparing of specimens

5.8.2 Determination of breaking load by flexural method

5.8.2.1 Principle

A joint is constructed from the materials to be used and dried under laboratory conditions. The joint shall then be subject to a loading at a controlled rate and the loads at which the first crack and at which failure occurs shall be determined.

5.8.2.2 Apparatus

A loading machine permitting readings to 1 % and capable of applying the necessary load at a rate of 250 N/min (±50 %).

5.8.2.3 Procedure

For each of the three samples of jointing material, cut 10 pieces of 12,5 mm plasterboard conforming to type A of EN 520 each 200 mm × 300 mm. Joint the pieces in pairs along the long side following the manufacturer's instructions. Before jointing apply strip of adhesive tape along the back of the joint and fix carefully to battens to support the joint while the joint is made (Figure 5).

Allow the specimens to dry at (23 ± 2) °C and (50 ± 5) % of relative humidity for seven days. After drying remove the battens and adhesive tape.

Mount each specimen horizontally in the loading machine with the joint upwards and supported as shown in Figure 6. Apply the load continuously at a rate of 250 N/min (±125 N/min) and record the deflection and the load.

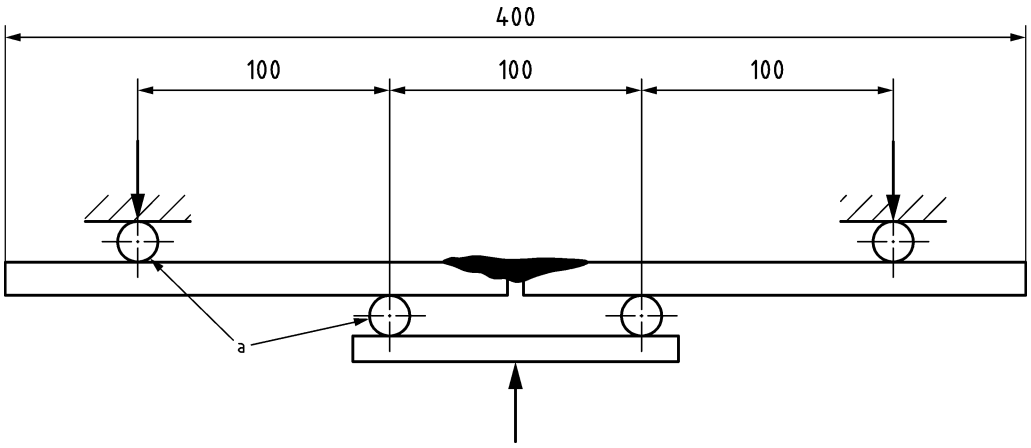
If more convenient the joint may be mounted downwards but it is then usually more difficult to see the joint during the test.

5.8.2.4 Expression of results

Draw the load/deflection curve for each specimen and report the load at which the first crack appears (this can be identified from the kink in the load/deflection curve) and the final breaking load. Note the type of rupture.

Report the individual results for each of the 15 specimens and the average load (in N) at which cracking first appears and also the average breaking load (in N).

Dimensions in millimetres



Key

[a] ø (6 – 30)

Figure 6 — Flexural method

5.9 Determination of water absorption

5.9.1 Surface water absorption

5.9.1.1 Principle

The surface of a conditioned specimen shall be exposed to water at (23 ± 2) °C for a fixed time and the increase in mass shall be determined.

5.9.1.2 Apparatus

a) Balance permitting readings to 0,01 g;

b) clock or watch permitting readings to 1 min;

c) Cobb apparatus in accordance with EN ISO 535 with a cylinder height of 25 mm.

5.9.1.3 Procedure

Cut two specimens measuring [125 ± 1,5) x (125 ± 1,5)] mm from each board of the intended water absorption class (H1, H2, H3), skimmed with 2 mm thickness of the jointing compound to be tested. Condition the specimens to constant mass[2)] at (23 ± 2) °C and (50 ± 5) % relative humidity and carry out the test immediately.

Weigh a specimen to within 0,01 g and place it in the Cobb apparatus (100 cm^2) which has previously been conditioned at (23 ± 2) °C, with the skimmed side to be exposed to the water tap uppermost. Fill the ring of the apparatus with water at (23 ± 2) °C until the test surface of the specimen is covered by 25 mm of water.

Leave the specimen for 2 h ± 2 min in the apparatus and then pour the water out of the apparatus and remove the specimen.

Immediately remove excess water by blotting with dry absorbent paper and re-weigh the specimen to the nearest 0,01 g.

5.9.1.4 Expression of results

Calculate the difference (in grams) between the dry mass and the wet mass of each specimen.

Calculate the average difference in mass and multiply this by 100. Record this value as the surface absorption of the skimmed face of the gypsum plasterboard expressed in g/m^2.

5.9.2 Total water absorption

5.9.2.1 Principle

Conditioned specimens (as in 5.9.1.3) are immersed in water at (23 ± 2) °C and the percentage increase in mass is determined.

5.9.2.2 Apparatus

a) Balance permitting readings to 0,1 g;

b) water bath at (23 ± 2) °C large enough to hold the specimen.

5.9.2.3 Procedure

Cut a specimen measuring [(300 ± 1,5) × (300 ± 1,5)] mm from each board, skimmed with 2 mm thickness of the jointing compound to be tested, approximately half-way between the edges and at least 150 mm from the ends.

Condition the specimens to constant mass[2)] at (23 ± 2) °C and (50 ± 5) % relative humidity, weigh to the nearest 0,1 g and carry out the test immediately.

Immerse the specimen in a water bath at (23 ± 2) °C covered with 25 mm to 35 mm of water for 2 h ± 2 min.

Place the specimen horizontally but not resting flat on the bottom of the container.

After removal from the bath, wipe excess water from the surface and edges of the specimen and weigh immediately to the nearest 0,1 g.

5.9.2.4 Expression of results

Calculate increase in mass of each specimen as a percentage of the initial mass. Record the average percentage increase in mass as the water absorption of the skimmed gypsum board.

6 Assessment and verification of constancy of performance – AVCP

6.1 General

The compliance of jointing materials for gypsum boards with the requirements of this standard and with the performances declared by the manufacturer in the DoP shall be demonstrated by:

— Determination of the product type;

— factory production control by the manufacturer (FPC).

The manufacturer shall always retain the overall control and shall have the necessary means to take responsibility for the conformity of the product with its declared performance(s).

For the purposes of testing, jointing materials for gypsum boards may be grouped into families, where it is considered that the selected property is common to all jointing materials within that family.

The decision on those products or properties which fall within a family shall be made by the manufacturer.

6.2 Type testing

6.2.1 General

Sampling and testing shall be in accordance with Clause 5.

The results of all type tests shall be recorded and held by the manufacturer for at least 10 years.

6.2.2 Determination of the product type

Determination of the product type shall be performed to show conformity with this document.

Determination of the product type shall be performed at the beginning of the production of a new jointing material type (unless it is a member of a family previously tested) or at the beginning of a new method of production (where this may affect the stated properties).

Tests previously performed in accordance with the provisions of this document (same product, same characteristic(s), test method, sampling procedure, system of AVCP, etc.) may be taken into account.

All product characteristics in Clause 4 applicable to the intended uses shall be subject to the determination of the product type:

— release of dangerous substances may be assessed indirectly by controlling the content of the substance concerned;

— when design values or declared values are used;

— when reaction to fire is class A.1 (no contribution to fire) without further testing as 4.1.

6.2.3 Further type testing

Whenever a change occurs in the jointing material design, the raw material or supplier of the components, or the production process (subject to the definition of a family), which would change significantly one or more of the characteristics, the type tests shall be repeated for the appropriate characteristic(s).

Sampling shall be in accordance with 5.1.

The results of all type tests shall be recorded and held by the manufacturer for at least 10 years.

6.3 Factory production control (FPC)

6.3.1 General

The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform with the stated performance characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

A FPC system conforming with the requirements of EN ISO 9001, and made specific to the requirements of this European Standard, should be considered to satisfy the above requirements.

The results of inspections, tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded and retained for the period specified in the manufacturer's FPC procedures.

6.3.2 Personnel

The responsibility, authority and the relationship between personnel that manage, perform or verify work affecting product conformity, shall be defined. This applies in particular to personnel that need to initiate actions preventing product non-conformities from occurring, actions in case of non-conformities and to identify and register product conformity problems. Personnel performing work affecting product conformity shall be competent on the basis of appropriate education, training, skills and experience for which records shall be maintained.

6.3.3 Equipment

6.3.3.1 Testing

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

6.3.3.2 Manufacturing

All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the manufacturer's written procedures and the records retained for the period defined in the manufacturer's FPC procedures.

6.3.4 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

6.3.5 Product testing and evaluation

The manufacturer shall establish procedures to ensure that the stated values of all of the characteristics are maintained.

Compliance with EN ISO 9001:2008, 7.5.1 and 7.5.2 should be deemed to satisfy the requirements of this clause.

6.3.6 Traceability and marking

Individual products, product batches or packages shall be identifiable and traceable with regard to their production origin. The manufacturer shall have written procedures ensuring that processes related to affixing traceability codes and/or markings are inspected regularly.

Compliance with EN ISO 9001:2008, 7.5.3 should be deemed to satisfy the requirements of this clause.

6.3.7 Non-complying products

The manufacturer shall have written procedures which specify how non-complying products shall be dealt with. Any such events shall be recorded as they occur and these records shall be kept for the period defined in the manufacturer's written procedures.

6.3.8 Corrective action

The manufacturer shall have documented procedures that instigate action to eliminate the cause of non-compliances in order to prevent recurrence.

Compliance with EN ISO 9001:2008, 8.5.2 should be deemed to satisfy the requirements of this clause.

6.3.9 Other test methods

For factory production control, test methods other than those specified for the determination of the product type may be used provided they provide sufficient confidence in the compliance of the product with this document.

7 Designation of jointing materials

Jointing materials shall be designated as follows:

a) the wording 'jointing compound for gypsum board' or 'jointing tape for gypsum board' as appropriate;

b) reference to this document;

c) the type of compound in accordance with Clause 3 of this document if appropriate or the statement 'paper tape';

d) machine or hand application if the material is a jointing compound;

e) setting time class as defined in 3.1.8, 3.1.9, 3.1.10 of this document, if appropriate.

EXAMPLE OF DESIGNATION

— Jointing compound for gypsum board, EN 13963.

— Finishing compound, Type 2B.

— Hand application.

— Long setting.

8 Marking, labelling and packaging

Jointing materials complying with this document shall be clearly marked on the packaging or on the accompanying commercial documents (e.g. delivery note) with the following items:

a) reference to this document;

b) the name, trademark or other means of identification of the manufacturer of the jointing material;

c) the date of production and/or “use by” date;

d) the means of identifying the jointing materials and relating them to their designation according to Clause 7.

NOTE Where the CE marking also requires the above items, compliance with CE marking would be deemed to satisfy the requirement of this clause.

Annex A
(informative)

Sampling procedure for testing

A.1 General

The required number of samples to determine the compliance with specification should be sampled from a delivery consignment of jointing materials.

The appropriate consignment size should be agreed between representatives of any involved parties who should have the opportunity to be present at the time of sampling.

A.2 Sampling procedure

A.2.1 General

The choice of the method of sampling should be as defined in A.2.2 and A.2.3 as appropriate.

A.2.2 Random sampling[3)]

Whenever practically possible, the random sampling method should be used, in which every smallest unit (e.g. a bag or a box) in the consignment has an equal chance of being selected for the sample.

Three units of each type should be selected from positions throughout the consignment without any consideration given to the condition or quality of the selected units.

A.2.3 Representative sampling

A.2.3.1 General

When random sampling is impracticable or not convenient, e.g. when the units form a large stack or stacks with ready access to only a limited number of units, a representative sampling procedure should be used.

A.2.3.2 Sampling from a stack

The consignment should be divided into at least three real or imaginary sections, each of a similar size. One unit should be selected at random from within each section in order to give the required number of samples as indicated in 5.1.

NOTE It will be necessary to remove some sections of the stack or stacks in order to gain access to units within the body of such stacks when taking samples

3) In practice, random sampling is normally only convenient either when the units forming the consignment are being moved in a loose (unpacked) form from one place to another or when they have been split into a large number of small stacks awaiting installation.

A.2.3.3 Sampling from a consignment formed of banded or wrapped packs

At least three packs should be selected at random from the consignment. The packaging around each of the selected packs should be removed and one unit should be sampled at random from within each pack in order to give the required number of samples without any consideration given to the condition or quality of the selected units.

Annex B
(normative)

Classes for reaction to fire performance for air drying jointing compounds

The table set out in this annex lists construction products and/or materials which satisfy all the requirements for the performance characteristic “reaction-to-fire” without need for testing.

Table B.1 — Classes of reaction to fire performance for air drying jointing compounds

Product[a]	**Product details for the jointing system**	**Maximum organic content (% in weight)**	**Class**[b]
Air drying jointing compounds for gypsum plasterboards used together with paper jointing tape. Paste ready to use or powder to be mixed with water, on any substrate of at least class A2-s1,d0 with thickness at least 6 mm and with density at least 700kg/m^3 (excluding floorings)	Air drying jointing compounds of types 1A, 2A and 3A and paper jointing tape[c] according to EN 13963.	7,0	A2-s1,d0

a Wet density of the jointing compound at least 1,1 kg/litre (1100kg/m^3).

b Class as provided for in Table 1 of the Annex to Commission Decision 2000/147/EC.

c Maximum width of the paper jointing tape: 55 mm; maximum mass of the paper jointing tape per unit area: 135 g/m^2.

Annex C
(normative)

Mounting and fixing in the test according to EN 13823 (SBI test)

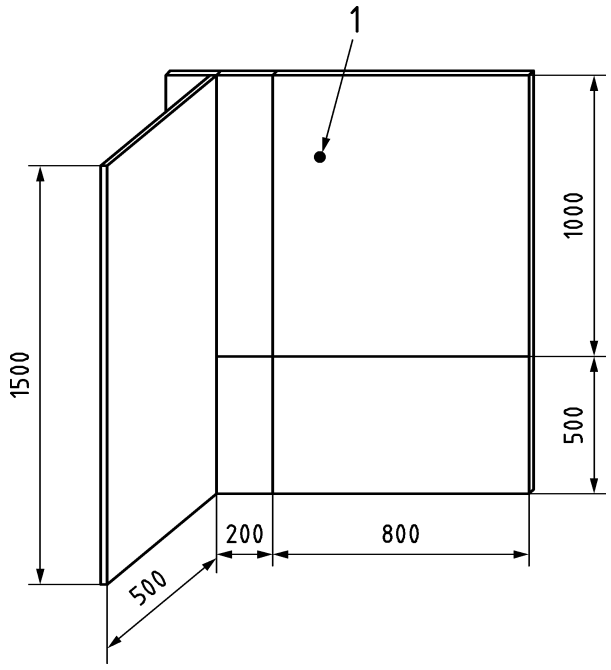
C.1 Mounting and fixing of the jointing materials

The jointing materials shall be mounted and fixed using the following method. The classification obtained shall be applied to all end use applications.

Gypsum boards included in the scope of this standard shall be mechanically fixed to a vertical metal sub-structure (made from components detailed in EN 14195) as shown in Figures C.1 and C.2. The mechanical fixings shall be screws, which shall be fixed through the thickness of the boards into the sub-structure at (300 ± 30) mm centres measured along the length of each supporting member.

Both vertical and horizontal joints shall be included positioned as shown in Figure C.1. All joints between adjoining boards shall be filled and finished using the jointing system under test. Where the jointing system requires the compound to be applied to the whole surface of the board, the test shall be carried out with the surface coated with the highest recommended thickness. Results obtained in this way apply also to jointing systems where full surface coating is not carried out providing the same jointing material is used.

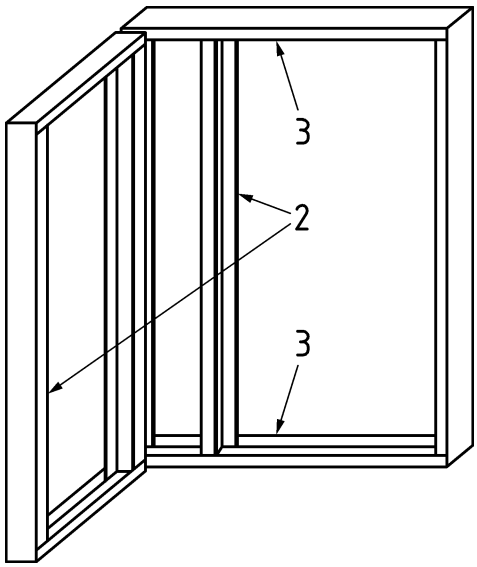
Dimensions in millimetres



Key

1 gypsum board

Figure C.1 — Joints



Key

2 metal stud

3 U-channel

Figure C.2 — Sub-structure

Annex ZA
(informative)

Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation

ZA.1 Scope and relevant characteristics

This European Standard has been prepared under a Mandate M/106 “Gypsum products” as amended and given to CEN by the European Commission and the European Free Trade Association.

If this European standard is cited in the Official Journal of the European Union (OJEU), the clauses of this standard, shown in this annex, are considered to meet the provisions of the relevant mandate, under the Regulation (EU) No. 305/2011.

This annex deals with the CE marking of the jointing materials for gypsum boards intended for the uses indicated in Table ZA.1 and shows the relevant clauses applicable.

This annex has the same scope as in Clause 1 of this standard related to the aspects covered by the mandate and is defined by Table ZA.1.

Table ZA.1 — Relevant clauses for jointing materials for gypsum boards and intended use

Product: Jointing materials for gypsum boards			
Intended use(s): Filling and finishing joints of gypsum boards			
Essential Characteristics	**Clauses in this and other European Standard(s) related to essential characteristics**	**Regulatory classes**	**Notes**
Reaction to fire	4.1	A1 to F	Declared class
Flexural strength	4.2	–	Declared value in N
Dangerous substances	4.3		

The declaration of the product performance related to certain essential characteristics is not required in those Member States (MS) where there are no regulatory requirements on these essential characteristics for the intended use of the product.

In this case, manufacturers placing their products on the market of these MS are not obliged to determine nor declare the performance of their products with regard to these essential characteristics and the option “No performance determined” (NPD) in the information accompanying the CE marking and in the declaration of performance (see ZA.3) may be used for those essential characteristics.

ZA.2 Procedure for AVCP of jointing materials for gypsum boards

ZA.2.1 Systems of AVCP

The AVCP systems of jointing materials for gypsum boards indicated in Table ZA.1, established by EC Decisions 95/467/EC (OJ L 268, 10.11.1995, p.29) amended by 2001/596/EC of 8 January 2001 (L209 page

33, 2.8.2001) and 2002/592/EC of 15 July 2002(L192, page 57, 20.7.2002) is shown in Table ZA.2 for the indicated intended uses and relevant levels or classes of performance.

Table ZA.2 — Systems of AVCP

Products	Intended uses	Levels or classes of performance	AVCP systems
Plasterboards and ceiling elements with thin laminations, fibrous gypsum boards, fibrous gypsum plaster casts and composite panels (laminates) in which the incorporated material is placed on a face susceptible to be exposed to fire, including relevant ancillary products	In walls, partitions or ceilings (or lining thereof) subject to reaction to fire requirements	A1([1]), A2 ([1]), B ([1]), C ([1])	1
		A1([2]), A2([2]), B ([2]), C([2]), D, E	3
		(A1 to E) ([3]), F	4
Plasterboards, blocks, ceiling elements and plasters, fibrous gypsum plaster casts, including relevant ancillary products	In walls, partitions or ceilings, as relevant, for situations and uses not mentioned above	–	4
([1]) Products/materials for which a clearly identifiable stage in the production process results in any improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material) ([2]) Products/materials not covered by footnote ([1]) ([3]) Products/materials that do not require to be tested for reaction to fire (e.g. Products/materials of Classes A1 according to Commission Decision 96/603/EC). System 1: See Regulation (EU) No. 305/2011 (CPR) Annex V, 1.2 System 3: See Regulation (EU) No. 305/2011 (CPR) Annex V, 1.4 System 4: See Regulation (EU) No. 305/2011 (CPR) Annex V, 1.5 *[10]*			

NOTE The Table ZA.2 lists the relevant systems of AVCP as defined in the Commission Decisions. The jointing materials for gypsum boards and their intended use defined in Table ZA.1 belong to the products defined in Table ZA.2. Experience has shown that the majority of the jointing materials for gypsum boards are subject to system 3 for reaction to fire.

The AVCP of the jointing materials for gypsum boards in Table ZA.1 shall be according to the AVCP procedures indicated in Tables ZA.3.1 to ZA.3.3 resulting from application of the clauses of this or other European Standard indicated therein. The content of tasks of the notified body shall be limited to those essential characteristics as provided for, if any, in Annex III of the relevant mandate and to those that the manufacturer intends to declare.

Table ZA.3.1 — Assignment of AVCP tasks for jointing materials for gypsum boards under system 1 (for reaction to fire classes A1 ([1]), A2 ([1]), B ([1]), C ([1]))

Tasks		Content of the task	AVCP clauses to apply
Tasks for the manufacturer	Factory production control (FPC)	Parameters related to essential characteristics of Table ZA.1 relevant for the intended use which are declared	6.3
	Further testing of samples taken at factory according to the prescribed test plan	Essential characteristics of Table ZA.1 relevant for the intended use which are declared	6.2.3, 6.3
Tasks for the notified product certification body	determination of the product type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product	Reaction to fire	6.2.2
	Initial inspection of manufacturing plant and of FPC	Reaction to fire. Documentation of the FPC.	6.3
	Continuous surveillance, assessment and evaluation of FPC	Reaction to fire. Documentation of FPC	6.3

Table ZA.3.2 — Assignment of AVCP tasks for jointing materials for gypsum boards under system 3 (for reaction to fire classes A1 ([2]), A2 ([2]), B ([2]), C ([2]), D, E)

Tasks		Content of the task	AVCP clauses to apply
Tasks for the manufacturer	Factory production control (FPC)	Parameters related to essential characteristics of Table ZA.1 relevant for the intended use which are declared	6.3
	Determination of the product-type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product	Essential characteristics of Table ZA.1 relevant for the intended use which are declared except 'reaction to fire'	6.2
Tasks for a notified testing laboratory	Determination of the product-type on the basis of type testing (based on sampling carried out by the manufacturer), type calculation, tabulated values or descriptive documentation of the product	Reaction to fire	6.2

Table ZA.3.3 — Assignment of AVCP tasks for jointing materials for gypsum boards under system 4 (for reaction to fire classes (A1 to E) ([3]), F)

Tasks		Content of the task	AVCP clauses to apply
Tasks for the manufacturer	Factory production control (FPC)	Parameters related to essential characteristics of Table ZA.1 relevant for the intended use	6.3
	Determination of the product-type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product	Essential characteristics of Table ZA.1 relevant for the intended use which are declared	6.2

ZA.2.2 Declaration of performance (DoP)

ZA.2.2.1 General

The manufacturer draws up the DoP and affixes the CE marking on the basis of the different AVCP systems set out in Annex V of the Regulation (EU) No 305/2011:

In case of products under system 1

— the factory production control and further testing of samples taken at the factory according to the prescribed test plan, carried out by the manufacturer; and

— the certificate of constancy of performance issued by the notified product certification body on the basis of determination of the product type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product; initial inspection of the manufacturing plant and of factory production control and continuous surveillance, assessment and evaluation of factory production control.

In case of products under system 3

— the factory production control carried out by the manufacturer; and

— the determination of the product-type on the basis of type testing (based on sampling carried out by the manufacturer), type calculation, tabulated values or descriptive documentation of the product, carried out by the notified testing laboratory.

In case of products under system 4

— the factory production control carried out by the manufacturer

— the determination by the manufacturer of the product-type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product.

ZA.2.2.2 Content

The model of the DoP is provided in Annex III of the Regulation (EU) No 305/2011.

According to this Regulation, the DoP shall contain, in particular, the following information:

— the reference of the product-type for which the declaration of performance has been drawn up;

— the AVCP system or systems of the construction product, as set out in Annex V of the CPR;

— the reference number and date of issue of the harmonised standard which has been used for the assessment of each essential characteristic;

— where applicable, the reference number of the Specific Technical Documentation used and the requirements with which the manufacturer claims the product complies.

The DoP shall in addition contain:

a) the intended use or uses for the construction product, in accordance with the applicable harmonised technical specification;

b) the list of essential characteristics, as determined in the harmonised technical specification for the declared intended use or uses;

c) the performance of at least one of the essential characteristics of the construction product, relevant for the declared intended use or uses;

d) where applicable, the performance of the construction product, by levels or classes, or in a description, if necessary based on a calculation in relation to its essential characteristics determined in accordance with the Commission determination regarding those essential characteristics for which the manufacturer shall declare the performance of the product when it is placed on the market or the Commission determination regarding threshold levels for the performance in relation to the essential characteristics to be declared.

e) the performance of those essential characteristics of the construction product which are related to the intended use or uses, taking into consideration the provisions in relation to the intended use or uses where the manufacturer intends the product to be made available on the market;

f) for the listed essential characteristics for which no performance is declared, the letters “NPD” (No Performance Determined);

Regarding the supply of the DoP, Article 7 of the Regulation (EU) No 305/2011 applies.

The information referred to in Article 31 or, as the case may be, in Article 33 of Regulation (EC) No 1907/2006, (REACH) shall be provided together with the DoP.

ZA.2.2.3 Example of DoP

The following gives an example of a filled-in DoP for jointing materials for gypsum boards

DECLARATION OF PERFORMANCE

No. 001DoP2013-07-14

1) Unique identification code of the product-type:

Type 4B

2) Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):

Type 4B – Brand name

3) Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Jointing of gypsum boards

4) Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

AnyCo SA,

PO Box 21

B-1050 Brussels, Belgium

Tel. +32987654321

Fax: +32123456789

Email: anyco.sa@provider.be

5) Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

Not relevant

6) System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:

System 3

7) In case of the declaration of performance concerning a construction product covered by a harmonised standard:

Notified testing laboratory No. 5678 performed the determination of the product-type on the basis of type testing (based on sampling carried out by the manufacturer), type calculation, tabulated values or descriptive documentation of the product under system 3 and issued the test/calculation reports.

8) Declared performance

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire R2F	A1	EN 13963:2014
Flexural strength* F	300 N	
Tensile strength σ**	pass	
Dangerous substances DS	NPD	
* for jointing compounds only **for paper tape only		

9) The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

……

……..... …… ……

(name and function). (place and date of issue) (signature)

ZA.3 CE marking and labelling

The CE marking symbol shall be in accordance with the general principles set out in Article 30 of Regulation (EC) No 765/2008 and shall be affixed visibly, legibly and indelibly:

— to a label attached to the product.

Where this is not possible or not warranted on account of the nature of the product, it shall be affixed:

— to the packaging

or

— to the accompanying documents.

The CE marking shall be followed by:

— the last two digits of the year in which it was first affixed,

— the name and the registered address of the manufacturer, or the identifying mark allowing identification of the name and address of the manufacturer easily and without any ambiguity,

— the unique identification code of the product-type,

— the reference number of the declaration of performance,

— the level or class of the performance declared,

— the dated reference to the harmonised technical specification applied,

— the identification number of the notified body, *[only for products under systems 1 and 3]*,

— the intended use as laid down in the harmonised technical specification applied.

The CE marking shall be affixed before the construction product is placed on the market. It may be followed by a pictogram or any other mark notably indicating a special risk or use.

Figures ZA.1 and ZA.2 give examples of the information related to products subject to AVCP under the system 3 to be given on the accompanying label, or on the packaging or on the accompanying commercial documents.

CE 8910	*CE marking, consisting of the "CE"-symbol* *Identification number of the notified test laboratory*
AnyCo Ltd, PO Box 21, B-1050 Brussels, Belgium **14** **001DoP2013-07-14**	*Name and the registered address of the manufacturer, or identifying mark* *Last two digits of the year in which the marking was first affixed* *Reference number of the DoP*
EN 13963:2014 Type 4B Jointing of gypsum boards **Reaction to fire - R2F:** A1 **Flexural strength - F:** 300 N **Dangerous substances - DS:** NPD	*No. of European Standard applied, as referenced in OJEU* *Unique identification code of the product-type* *Intended use of the product as laid down in the European Standard applied* *Level or class of the performance declared*

Figure ZA.1 — Example CE marking information of jointing compounds under AVCP system 3 on the label, or on the packaging or on the accompanying commercial documents

CE	*CE marking, consisting of the "CE"-symbol*
AnyCo Ltd, PO Box 21, B-1050 Brussels, Belgium **14** **001DoP2013-07-14**	*name and the registered address of the manufacturer, or identifying mark* *Last two digits of the year in which the marking was first affixed* *Reference number of the DoP*
EN 13963:2014 Type T Jointing of gypsum boards **Reaction to fire with jointing compound – R2F:** **- type B:** A1 **- type 1A, 2A, 3A:** A2-s1,d0 **Tensile strength - σ**: pass **Dangerous substances - DS:** NPD	*No. of European Standard applied, as referenced in OJEU* *Unique identification code of the product-type* *Intended use of the product as laid down in the European Standard applied* *Level or class of the performance declared*

Figure ZA.2 — Example CE marking information of paper tapes under AVCP system 4 on the label, or on the packaging or on the accompanying commercial documents

Bibliography

[1] EN 13915, *Prefabricated gypsum plasterboard panels with a cellular paperboard core — Definitions, requirements and test methods*

[2] EN 13950, *Gypsum plasterboard thermal/acoustic insulation composite panels — Definitions, requirements and test methods*

[3] EN 14190, *Gypsum plasterboard products from reprocessing — Definitions, requirements and test methods*

[4] EN 14195, *Metal framing components for gypsum plasterboard systems — Definitions, requirements and test methods*

[5] EN 14209, *Preformed plasterboard cornices — Definitions, requirements and test methods*

[6] EN 15283-1, *Gypsum boards with fibrous reinforcement — Definitions, requirements and test methods — Part 1: Gypsum boards with mat reinforcement*

[7] EN 15283-2, *Gypsum boards with fibrous reinforcement — Definitions, requirements and test methods — Part 2: Gypsum fibre boards*

[8] EN ISO 9001:2008, *Quality management systems — Requirements (ISO 9001:2008)*

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