CE marking for external renders and internal plasters based on organic binders

Explanations and examples for implementation of EN 15824

Fachgruppe Putz & Dekor
im Verband der deutschen
Lack- und Druckfarbenindustrie e. V.

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Industrieverband
WerkMörtel e. V.

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CE marking for external renders and internal plasters based on organic binders – explanations and examples for implementation of EN 15824

Publisher: Industrieverband WerkMörtel e.V., Duisburg, und Fachgruppe Putz & Dekor im Verband der deutschen Lack- und Druckfarbenindustrie e. V., Frankfurt am Main

Effective: September 2010

Foreword

The European standard EN 15824, which also applies in Germany, for external renders and internal plasters based on organic binders appeared in October 2009. In future these renders and plasters will therefore be marked with the CE symbol. This confirms that the products comply with the current European requirements for stability, fire protection and environmental protection. The CE marking is a step in the direction of transparent and user-friendly quality and environmental information.

For the producers there now follows the period for the introduction of the CE marking. This brochure provides information and explanations for practical implementation in Germany. The various European guidelines and the German building code law (which continues to apply) are all taken into account.

Active monitoring of correct observance of the CE marking is required of every member state. In Germany this monitoring of the market is coordinated by the Deutsches Institut für Bautechnik (German Institute for Building Technology) and carried out by the principal building inspectorate authorities in the states. Objections – including those of a formal nature – can lead to the use or further marketing of the particular construction product being forbidden by the appropriate authorities [6].

It is therefore important, not just for this reason, that the producers take careful note of the constraints for the CE marking of their products. It is equally important to strengthen the confidence of the consumers in the products by consistent and correct marking and compliance with the standard.

The associations that are involved therefore recommend that their members should take careful note of the advice given in this brochure.

Duisburg and Frankfurt, September 2010

Industrieverband WerkMörtel e. V. und
Fachgruppe Putz & Dekor im Verband der deutschen
Lack- und Druckfarbenindustrie e. V.

1 Basic principles

Scope

The European standard EN 15824 appeared in July 2009. In Germany it was published in October 2009 as DIN EN 15824 Specifications for external renders and internal plasters based on organic binders; German version of EN 15824:2009 [1]. It replaces the old DIN 18558:1985-01. The implementing regulations contained in it are being included in a new issue of DIN V 18550.

EN 15824 applies to all external renders and internal plasters based on organic binders. This covers, for example, final plaster coats, plaster undercoats and filler compounds, but not paints or coating materials, which are covered by the standards EN 1062-1 and EN 13300.

Implementation

The standard was compiled on the basis of the European Building Products Directive [2] and a mandate of the European Commission from CEN (the European Standardization Committee). This means that it is a “harmonized” European standard. Products falling within the scope of this standard must in future therefore be marked with the European CE conformity symbol. The basic principles for this are explained in this brochure. They must be implemented in all member states of the EU.

In Germany the European Building Products Directive was implemented by the Building Products Act [3]. From the Building Products Act it emerges that now a harmonized European standard exists the building products must be marked with the CE symbol to allow them to be placed on the market in Germany. For the producers there is no alternative. This also applies to products (e.g. plasters) that according to the Building Products Act did not previously appear in the Building Regulations List in Germany and did not have to be monitored, and that for this reason did not carry the Ü (conformity) symbol.

Use

It is possible that building products marked with the CE symbol in the EU member states may in fact be allowed to be placed on the market without further ado but that additional constraints have to be taken into account for their use. It may be, for example, that their use is possible only if certain minimum values relating to the product properties are reached (declared).

In Germany the use of building products is controlled by the building regulations of the federal states. Their use is permissible if, among other things, the product is placed on the market in accordance with the provisions of the Building Products Act [3]. This in turn lays down that a building product counts as usable if it complies with harmonized or recognized standards that have been made known or if it deviates from them to only an insignificant extent. EN 15824 was made known in Germany in the Official Federal Journal No. 62 of 23.04.2010, p. 1439. This means that the use of plasters complying with EN 15824 and marked with the CE symbol is permissible in Germany. Further constraints on the use of these plasters could be laid down in the Building Regulations List B [7]. However, this has not yet occurred. According to information from the German Institute for Building Technology there are currently no plans for inclusion of EN 15824 in the Building Regulations List B.

2 Schedule

Harmonized European standards come into force in accordance with a specific schedule (see Table 1) and replace the old national standards. This schedule is published in the Official Journal of the European Union. For EN 15824 this publication took place in December 2009. The dates and deadlines shown in Table 2 were stipulated.

When do the German producers have to make the changeover and start with the CE marking of their products? Basically, it is up to each individual producer to decide when to start with the CE marking of his products. However, the changeover must take place at the latest on the expiry of the co-existence period (01.04.2011).

On practical grounds it can be expected that many producers will change over their labelling on the key date of 01.01.2011.

Table 1: Steps for the implementation of harmonized European standards (in accordance with Guidance Paper J [5])

Formal Vote	Final vote at CEN on the definitive wording of a European standard; the national standardization institutes (CEN members) are eligible for the vote – i.e. the DIN for Germany.
Notification	Information from CEN to the European Commission about the completion of the standard after this has been "ratified" by CEN; the European Commission informs the EU member states.
Date of availability	Date at which CEN communicates the definitive text of a European standard to the national standardization institutes.
Publication in the Official European Journal	Takes place after the notification and is initiated by the European Commission.
Date of applicability	This date is published in the Official Journal of the European Union and as a rule is nine months after the date of availability. From this date the member states of the EU must accept that products that comply with the stated European standard and are marked with the CE symbol will be placed on the market and used. National standards may still be applied as an option (co-existence period).
Date of the end of the co-existence period	By this date all national standards that oppose the harmonized European standard must be withdrawn; only the European standard is valid. As a rule, the co-existence period ends one year after the start of applicability.

Table 2: European schedule for implementation of EN 15824 (published in the Official Journal of the EU of 18.12.2009 under 2009/C 309/01 and announced in the Federal Journal No. 62 of 23.04.2010, p. 1439)

		Co-existence period	
		Start	End
EN	Title	Date of applicability	Date of withdrawal of national standards
15824	Specifications for external renders and internal plasters based on organic binders	1st April 2010	1st April 2011

3 Attestation of conformity

The preconditions laid down in the system for attestation of conformity must be fulfilled before a product may be marked with the CE symbol. The elements that this covers are specified in “Appendix ZA” of the corresponding European product standard.

Three different systems for attestation of conformity have been laid down for external renders and internal plasters based on organic binders complying with EN 15824. The system to be applied depends on the class that the producer has declared with respect to the reaction to fire. The classification can be found in Table 3 of this brochure.

Table 4 contains an overview of the elements that make up the possible systems for attestation conformity.

When all the preconditions have been fulfilled the producer can start with the CE marking of his products. The decision over whether the preconditions have been fulfilled is the responsibility of the producer himself. At the same time as the labelling he must issue a conformity declaration for the product.

4 Reaction to fire

Basic principles

The German state building codes set basic requirements for the reaction to fire of building materials. In the Model Building Code [8] it states that: *"Building materials that are not at least moderately combustible (i.e. highly combustible materials) must not be used; this does not apply if they are not highly combustible in combination with other building materials."* Building materials for which the producer declares no class for the reaction to fire or declares class F in the context of CE marking count as highly combustible and may therefore not be used for the purposes of the building code. For this reason the producer must declare at least class E for the reaction to fire for proof of usability.

Class A1 for the reaction to fire

Class A1 (non combustible) for the reaction to fire does not normally come into question for renders or plasters based on organic binders conforming to EN 15824 and is therefore not covered below.

Classes A2, B, C and D for the reaction to fire

According to EN 13501-1 a test of the reaction to fire as specified in EN 13823 (Single Burning Item Test = SBI test) is necessary in order to be able to declare class A2, B, C or D for a render or plaster conforming to EN 15824[a]. The testing must be carried out by an inspection authority that is approved for this purpose ("notified body"). The test scenario (room corner) presupposes that the plaster to be tested is applied in a certain layer thickness to a specified substrate. The declaration of the class for the reaction to fire then applies in accordance with the test report only in combination with the substrate tested and up to a certain layer thickness. The producer must also specify this with the declaration (e.g. "Class B for the reaction to fire when used on mineral substrates in a layer thickness of up to 5 mm"). The information is listed in the classification report from the approved inspection authority.

Note:

EN 15824 contains a note in Section 4.7 that permits plasters complying with EN 15824 to be classified in class C for the reaction to fire if the plasters *"are applied in quantities < 3.5 kg/m²"*. This note is in contradiction to the rest of the standard text and to the European Construction Products Directive [2]. In its decision 2000/147/EG [9] the Commission has specified the criteria for classification of the reaction to fire on the basis of the Construction Products Directive. This contains no provision for classification based solely on the quantity applied and therefore represents an infraction of the standard, the Construction Products Directive and decision 2000/147/EG of the Commission and means that the product may not be placed on the market in Germany.

[a] A test as specified in EN ISO 1182 or EN ISO 1716 is required in addition to the SBI test for classification in class A2; a small-scale test as specified in EN ISO 11925-2 is required in addition to the SBI test for classification in classes B, C or D.

Requisite proof for class E for the reaction to fire

The classification into class E for the reaction to fire is carried out in accordance with EN 13501-1 on the basis of a (small-scale) test as specified in EN ISO 11925-2. The test must be carried out by a laboratory that is approved for this purpose.

There are many decades of experience of the reaction to fire of external renders and internal plasters based on organic binders from, among others, numerous fire tests that were carried out in conjunction with the use of such renders and plasters as constituents of external thermal insulation composite systems (ETICS). It can therefore be assumed that the requirements for class E for the reaction to fire are achieved by these products.

Producers who want to declare class E for the reaction to fire for such products must weigh up individually how, and on what basis, they declare the reaction to fire and whether fresh fire tests are necessary for this purpose. It is possible that renders and plasters that only comply

Table 3: Systems of attestation of conformity laid down for external renders and internal plasters based on organic binders conforming to EN 15824

	Fire prevention requirements	Classification preconditions	Euro class declared by the producer for reaction to fire	Required system for attestation of conformity acc. to Table 4
1	For all applications for which requirements have been set for the reaction to fire [a]	This classification applies to products that are assigned to Euro class A1, A2, B or C on the basis of a test and for which a clearly identifiable stage in the production process leads to an improvement of the classification of the reaction to fire (e.g. addition of a fire retardant or limitation of the proportion of organic substances). [b]	A1, A2, B, C	1
2		This classification applies to products that are assigned to Euro class A1, A2, B or C on the basis of a test and to which the classification preconditions in row 1 of the table do not apply.	A1, A2, B, C	3
3		This classification applies to all products that are assigned to Euro class D or E on the basis of a test.	D, E	3
4		This classification applies to products that, without testing, are assigned to a class for the reaction to fire on the basis of a published decision by the European Commission. [c]	A1, A2, B, C, D, E	4
5		This classification applies to all products that are classified in Euro class F. [d]	F	4
6	For all applications for which no requirements have been set for the reaction to fire [a] [d]	No Euro class is declared by the producer; "NPD" or "No performance determined" is specified in the CE symbol.		4

The areas with a grey background will in future apply to the great majority of the renders and plasters conforming to EN 15824.

a) The state building codes set basic requirements for the reaction to fire of building materials (see Section 4).
b) According to a communication from the German Institute for Building Technology this condition applies, as far as building supervision is concerned, to those renders and plasters conforming to EN 15824 for which only slight changes in the organic content or in the mix formulation could lead to a change in the classification of the reaction to fire.
c) There is no such decision for renders and plasters conforming to EN 15824. However, a relevant application to the European Commission by the European Mortar Industry Organization EMO is in preparation.
d) This row cannot be applied in Germany as basic requirements are set for the reaction to fire, and therefore, as a minimum, it is necessary to declare class E (see footnote [a])

with class E for the reaction to fire (moderately combustible) may only be used to a restricted extent in some EU member states.

Classification based on a decision by the European Commission

There are two possible ways of undertaking a classification of the reaction to fire without any individual testing:

1 If, because of a decision by the European Commission, the product is listed in the "List of Products belonging to Classes A 'No contribution to fire' [...]" and the content of homogeneously distributed organic substances is not more than 1 % (volume or mass percent – the less favourable value is decisive). Renders and plasters based on mineral binders are, for example, listed in this register (see e.g. [10] and [11]). For renders and plasters based on organic binders this option is not possible because of their content of organic constituents.

2 If the reaction to fire of a building product can be determined so clearly and the agencies responsible for the fire prevention regulations in the member states do know the product so well that testing of this performance feature is considered unnecessary then the European Commission can make a decision for precisely defined products to specify a class for the reaction to fire to which producers can refer without further testing (Classified Without Further Testing = CWFT). For this reason an application to the European Commission is being prepared by EMO (European Mortar Industry Organization) to obtain a "CWFT decision". When this decision has been made and has been announced in the Official Journal of the European Union then the reaction to fire of renders and plasters conforming to EN 15824 can be classified by reference to this decision.

Table 4: Elements of procedures 1, 3 and 4 for attestation of conformity

System for attestation of conformity		Producer's duties	Duties of the approved body
1	Conformity certification by an approved certification body	– initial type testing of the product (apart from reaction to fire) – factory production control – further testing of samples taken at factory according to a sampling plan	– initial type testing of the reaction to fire – initial inspection of the factory and of the factory production control system – continiuous surveillance, assessment and approval of factory production control (no material tests)
3	Conformity declaration by the producer	– initial type testing of the product (apart from reaction to fire) – factory production control	– initial type testing of the reaction to fire
4	Conformity declaration by the producer	– initial type testing of the product – factory production control	(engagement of an approved body not required)

5 Initial type testing and factory production control

Every system for attestation of conformity includes the factory production control that has to be carried out, recorded and conducted continuously by the producer on his own responsibility. This factory production control is a system of self-monitoring with elements that resemble quality management systems conforming to EN ISO 9001. Producers that have introduced and maintained a quality management system conforming to EN ISO 9001 also, as a rule, fulfil the requirements that are set for the factory production control. One precondition is that the specific requirements of EN 15824 are integrated into the quality management system.

An initial type test of the product has to be carried out for the CE marking. For systems 1, 3 and 4 for attestation of conformity this is carried out by the producer himself – with the exception of the fire testing, which, in the cases of systems 1 and 3 for the attestation of conformity, has to be carried out by a laboratory being approved for this purpose (approved body).

Initial type tests maintain their validity for as long as the starting materials and the production method are retained. A fresh initial type testing only becomes necessary if changes are made that affect the declared product properties.

6 Declaration of conformity

The producer must state in a “declaration of conformity” that his product complies with the requirements of EN 15824. Examples of the declaration of conformity are shown and explained below.

The producer must submit the declaration of conformity on request.

7 CE marking

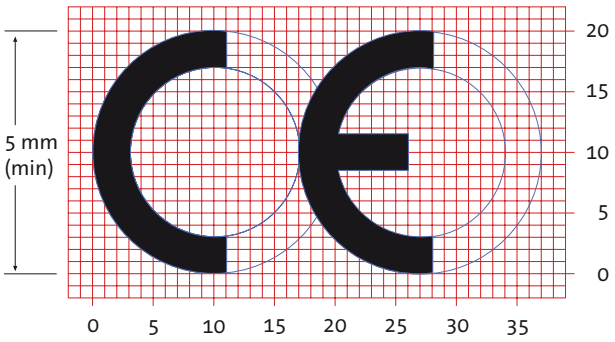
CE conformity mark (logo)

The CE mark is a European Union symbol. It is the EU who stipulates the conditions under which it can be used. The CE mark is not confined to building products and also applies in other areas; it is also found, for example, on electrical equipment and computers.

The conditions under which the CE conformity mark is to be used for building products are laid down in the Construction Products Directive [2]. The Guidance Paper D [4] contains explanations.

The abbreviation CE stands for "Conformité Européenne". Directive 93/68/EWG of the Council of 22nd July 1993 states how it should look as a pictorial symbol. It states there:

"The CE conformity marking consists of the letters 'CE' with the following typeface:



If the CE mark is made smaller or larger the proportions shown in the grid shown above must be maintained. The different components of the CE symbol must be of approximately equal height; the minimum height is 5 mm."

Artwork for the CE conformity symbol can be downloaded from the websites of the associations involved.

Additional information accompanying the CE symbol

Further individual information about the product properties must be given together with the CE symbol. The information that is required is stated in Appendix ZA of the product standard. An example of the CE marking is shown below.

"No Performance Determined"

If, in a member state of the EU, certain characteristic property values of a product are considered not necessary (from the point of view of the building code law) then there is no legal need for the producer to determine or state these characteristic property values. In lieu he can state "No Performance Determined" instead of this characteristic property value.

How does the producer know whether a characteristic property value has to be given or whether the information "No Performance Determined" is sufficient? This information can only be found in the respective national regulations of the individual EU member states. In Germany, for example, it can be taken from Building Regulations List B. According to current information EN 15824 will not be included in Building Regulations List B, so in Germany this means that from the building code law point of view, no characteristic property values – with the exception of the fire classification – *have* to be declared.

However, regardless of the stipulations of the building code law, specification of the characteristic property values also provides information for the user. It can therefore be entirely appropriate to provide characteristic property values even if, according to the building code law, it would be sufficient to state "no performance determined". More details can be found from the examples in the appendix of this brochure.

Location of the marking

Guidance Paper D (see [4]) specifies where the CE marking should take place:

- on the product itself (not normally possible with pasty renders and plasters),
- on the packaging (e.g. bucket),
- on a label attached to the product or the packaging (e.g. with silos),
- in the commercial accompanying papers (e.g. delivery note or technical code of practice).

Checking where the CE marking should be applied must take place in the sequence given above, i.e. when it is possible to label the packaging, this must be carried out. Only if this is not possible, e.g. with silo products, is it permissible to make use of the next type of labelling specified.

Size of the CE mark

There are no obligatory guidelines on the size of the CE mark, including the requisite accompanying information. It is just necessary to bear in mind that the CE logo must have a minimum height of at least 5 mm (see page 12).

Electronic CE marking

Some producers have, for simplicity, changed over to providing their products just with the CE logo and some basic information. All remaining information is deposited on the internet. The European Commission has not yet stipulated any legally binding conditions on the subject.

8 Special case: renders for external thermal insulation composite systems (ETICS)

External thermal insulation composite systems are building products that currently still require Technical Approvals (EOTA) in Germany and Europe. If renders are placed on the market exclusively as constituents of an external thermal insulation composite system then they do not fall within the scope of EN 15824. However, if the same product is to be placed on the market both as a constituent of an ETICS and as “normal” external render or internal plaster then in addition to the external thermal insulation composite system labelling it must also be marked with the CE symbol in accordance with EN 15824. This is also necessary if the German or European Technical Approval requires the use of renders or plasters conforming to EN 15824.

With external thermal insulation composite systems the fire testing relates to the system. The test result cannot be applied directly to the individual components of the external thermal insulation composite system. However, it can be assumed that the render or plaster used will at least reach the class for reaction to fire from the test on the system, including when used on non-combustible substrates.

9 Literature

[1] DIN EN 15824:2009-10 Specifications for external renders and internal plasters based on organic binders; German version of EN 15824:2009

[2] Construction Products Directive: Directive by the Council of 21.12.1988 (89/106/EWG), amended by Directive 93/68/EWG by the Council of 22.07.1993.

[3] Act concerning the marketing and free movement of building products for implementation of Directive 89/106/EWG by the Council of 21.12.1988 to harmonize the legal and administrative regulations of the member states for building products and other legislative acts of the European Community (Building Products Act – BauPG) (in German) in the version announced on 28.04.1998, including the amendments of 29.10.2001 and 15.12.2001.

[4] Guidance Paper D (concerning the Construction Products Directive – 89/106/EC): CE Marking under the Construction Products Directive; May 2004 – European Commission Enterprise Directorate-General

[5] Guidance Paper J (concerning the Construction Products Directive – 89/106/EC): Transitional Arrangements under the Construction Products Directive (Revision Sep. 2002) – European Commission Enterprise Directorate-General

[6] Schubert, Wolfgang: Market surveillance for harmonized building products (in German). In: DIBt Mitteilungen 41 (2010) vol. 1, p. 2–4

[7] Building Regulations List A, Building Regulations List B and List C, issued 2010/1 (in German). In: DIBt Mitteilungen 41 (2010) – special issue no. 39

[8] Model Building Regulations in the November 2002 version (last amended in October 2008) – issued by ARGEBAU [Building Ministers Conference] and published at www.is-argebau.de (in German)

[9] Decision 2000/147/EG by the Commission of 08.02.2000 for implementation of Directive 89/106/EWG by the Council with respect to classification of the reaction to fire of building products. In: Official Journal of the European Union No. L 50/14 of 23.02.2000

[10] Commission Decision 96/603/EC of 4 October 1996 establishing the list of products belonging to Classes A “No contribution to fire” provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC on construction products. In: Official Journal of the European Union No. L 267, 19.10.1996, p. 23

[11] Commission Decision 2003/424/EC of 6 June 2003 amending Decision 96/603/EC establishing the list of products belonging to Classes A “No contribution to fire” provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC on construction products. In: Official Journal of the European Union No. L 144, 12.6.2003, p. 9

Example of EC declaration of conformity for system 1 for attestation of conformity

EC declaration of conformity

CE

The producer

ColorPutz GmbH & Co. KG
Musterstraße 1
D-12345 Musterstadt

E 1

states in accordance with § 9 Building Products Act (implementation of Building Products Directive 89/106/EWG), that the product

PremiumColor 3000plus

E 2

produced in the plant

Werk Musterstadt
Musterstraße 1
D-12345 Musterstadt

E 3

complies with the provisions of EN 15824:2009 and fulfils the preconditions for the CE marking in accordance with Appendix ZA.1 of EN 15824:2009.

E 4

The procedures specified in Table ZA.3.1 were carried out for evaluation of conformity.

E 5

The product was submitted to initial type testing and is subject to the factory production control specified in EN 15824.

E 6

On mineral substrates the product corresponds to class B for reaction to fire.

E 7

The continuous surveillance, assessment and approval of the factory production control is carried out by the notified body

Überwachungs- und Zertifizierungsstelle
Zertifizierungsstraße 1
D-01234 Zertifikatstadt
(Kenn-Nr. 0123)

E 8

The EC certificate of conformity with the registration No. ABCD-CPD-OPQR was issued on >date< (and is valid for Y years).

Musterstadt, >date<

Signature

E 9

Name and position of the signatory

Enclosure

Technical instruction sheet

E 10

Explanations for the EC declaration of conformity for system 1 for attestation of conformity

E 1 The producer's name and address must be given in full so that the information can be used to contact the producer. The "producer" given here is legally responsible for the conformity of the product. It is not essential that he has produced the product in his own plant. The purpose of this information is that those responsible for placing the product on the market can be identified and contacted.

E 2 Clear product designation – further information about the product properties is not necessary at this point as it is contained in the CE marking (avoidance of repetitions). Several (similar) products can also be combined. In this case the individual product designations should be given.

E 3 Information about the production plant must be given here to ensure traceability back to the particular production plant (especially if just an "agent" is given as the producer, see E1). The information is not supplied so that a user can contact the production plant and may therefore be given in coded form.

E 4 Precise information about the technical specification to which the declaration of conformity refers. In the present case this is the European standard EN 15824 for external renders and internal plasters based on organic binders with the requirements specified in Appendix ZA, compliance with which provides entitlement to the CE marking. The requirements for the product are given in Table ZA.1.

E 5 Statement about how the conformity of the product with the requirements was checked. The system 1 applied here is described in Table ZA.3.1 in the standard.

E 6 Information about the factory production control carried out by the producer; the factory production control includes, among other things, the initial type testing and the "factory production control manual" that must be compiled.

E 7 The class for reaction to fire in accordance with the classification report of the approved inspection authority should be given here as a "special application note" together with constraints listed in it, e.g. reference to the substrate.

E 8 Reference to the third-party surveillance by an approved body and the number of the certificate; if a limited validity period has been specified then this should also be given.

E 9 Name and function of the person empowered to sign the statement of conformity, e.g. general manager, attorney. The empowerment of the signatory must be documented.

E 10 With render or plaster the properties of the finished product are heavily dependent on its processing on the building site, so it is appropriate to attach to the declaration of conformity the technical instruction sheet associated with the product with the necessary application notes.

CE marking (example of system 1 for attestation of conformity)

CE		CE 1
0123		CE 2
ColorPutz GmbH & Co. KG **Musterstraße 1** **D-12345 Musterstadt**		CE 3
10		CE 4
ABCD-CPD-OPQR		CE 5
EN 15824		CE 6
Render or plaster based on organic binders for use externally and internally		CE 7
Water vapour permeability:	V_2 medium	CE 8
Water absorption:	W_3 low	CE 9
Adhesion:	≥ 0,3 MPa	CE 10
Durability (freeze-thaw resistance):	Permeability rate as specified in EN 1062-3 is ≤ 0.5 kg/(m² · $h^{0,5}$)	CE 11
Thermal conductivity $\lambda_{10,dry,mat}$:	No performance determined	CE 12
Reaction to fire:	Class B for reaction to fire (when used on mineral substrates)	CE 13

Explanations for the CE marking (example for system 1 for attestation of conformity)

CE 1 CE conformity symbol in accordance with Directive 93/68/EWG (minimum height 5 mm)

CE 2 Identification number of the notified certification body

CE 3 The producer's name and address must be given in full so that the information can be used to contact the producer. The "producer" given here is legally responsible for the conformity of the product. It is not essential that he has produced the product in his own plant. The purpose of this information is that those responsible for placing the product on the market can be identified and contacted.

CE 4 The last two digits of the year in which the qualification takes place. This is not the production date but the moment from which the producer takes over responsibility for compliance with the requirements that are binding for the product.

CE 5 Number of the certificate issued by the certification body

CE 6 Number of the underlying European standard

CE 7 General description of the product on the basis of the properties specified in the standard; the requisite individual information for identifying the product features are described in rows CE 6 to CE 11. It is necessary to differentiate whether the render or plaster is intended for external and internal use or only for external use or only for internal use.

CE 8 The water vapour permeability only has to be specified for external renders. This is carried out on the basis of a test of the water vapour transmission rate. It is not the test value that is given but the category into which the test value falls (V_1 high; V_2 medium; V_3 low).

CE 9 The water absorption only has to be specified for external renders. This is carried out on the basis of a test of the liquid water permeability rate. It is not the test value that is given but the category into which the test value falls (W_1 high; W_2 medium; W_3 low).

CE 10 The adhesion has to be tested. It must not be less than 0.3 MPa. Unless the declaration of a higher value is needed for special applications the information "≥ 0.3 MPa" is sufficient even if the measured test value is higher.

CE 11 Information about durability is only necessary for external renders. Basically, there are three possible options for specifying the durability:
Option 1 (internal plasters only): the information "**no performance determined"** is sufficient for internal plasters (exclusively for internal use) without further testing.
Option 2 (external renders): the permeability rate for liquid water (see explanation CE 9) is ≤ 0.5 kg/(m² · $h^{0.5}$), i.e. the render falls into category W2 or W3. The CE symbol then states: **"Permeability rate as specified in EN 1062-3 is ≤ 0.5 kg/(m² · $h^{0.5}$)"**. Freeze-thaw cycle testing is not necessary in this instance.
Option 3 (external renders): the permeability rate for liquid water (see explanation CE 9) is > 0.5 kg/(m² · $h^{0.5}$), i.e. the render falls into category W1. After the freeze-thaw cycle test has been passed it is then stated in the CE symbol that **"Adhesion after freeze-thaw cycle testing ≥ 0.3 MPa"**.

CE 12 Information about the thermal conductivity is not meaningful for thermal insulation purposes because of the small thickness of the renders or plasters. Derivation of the thermal conductivity from the dry bulk density provided for in EN 1745 is not possible as there is no procedure for determining the dry bulk densities of renders or plasters conforming to EN 15824.

CE 13 Specification of a class for reaction to fire is necessary because in Germany no building materials may be used that are not at least moderately combustible (see Section 4 of this brochure). The constraints listed in the classification report (e.g. information about the substrate) should also be mentioned.

Example of EC declaration of conformity for system 3 for attestation of conformity

EC declaration of conformity

CE

The producer

ColorPutz GmbH & Co. KG
Musterstraße 1
D-12345 Musterstadt E 1

states in accordance with § 9 Building Products Act
(implementation of Building Products Directive 89/106/EWG), that the product

StarColor 5000 E 2

produced in the plant

Werk Musterstadt
Musterstraße 1
D-12345 Musterstadt E 3

complies with the provisions of EN 15824:2009 and fulfils the preconditions for CE marking in accordance with Appendix ZA.1 of EN 15824:2009. E 4

The procedures specified in Table ZA.3.2 were carried out for evaluation of conformity. E 5

On mineral substrates the product corresponds to class D for reaction to fire.
The testing of the class for reaction to fire was carried out by the notified test laboratory

Materialprüfstelle für den Brandschutz
Brand-Allee 100
D-12345 Feuerbach
(Kenn-Nr. 1111) E 6

and the resulting classification report 12345-xyz-AAA
of >date< was issued.

The product was submitted to initial type testing and is subject to the factory production control specified in EN 15824. E 7

Musterstadt, >date<

Signature E 8

Name and position of the signatory

Enclosure

Technical instruction sheet E 9

Explanations for the EC declaration of conformity for system 3 for attestation of conformity

E 1 The producer's name and address must be given in full so that the information can be used to contact the producer. The "producer" given here is legally responsible for the conformity of the product. It is not essential that he has produced the product in his own plant. The purpose of this information is that those responsible for placing the product on the market can be identified and contacted.

E 2 Clear product designation – further information about the product properties is not necessary at this point as it is contained in the CE marking (avoidance of repetitions). Several (similar) products can also be combined. In this case the individual product designations should be given.

E 3 Information about the production plant must be given here to ensure traceability back to the particular production plant (especially if just an "agent" is given as the producer, see E1). The information is not supplied so that a user can contact the production plant and may therefore be given in coded form.

E 4 Precise information about the technical specification to which the declaration of conformity refers. In the present case this is the European standard EN 15824 for external renders and internal plasters based on organic binders with the requirements specified in Appendix ZA, compliance with which provides entitlement to the CE marking. The requirements for the product are given in Table ZA.1.

E 5 Statement about how the conformity of the product with the requirements was checked. The system 3 applied here is described in Table ZA.3.2 in the standard.

E 6 Reference to the initial testing of the reaction to fire carried out by a laboratory (notified body) that is approved for this purpose. Specification of the class for reaction to fire revealed in the classification report and the constraints under which it is achieved (e.g. information about the substrate). The number of the classification report must be given. If a limited validity period has been stipulated then this must also be given.

E 7 Information about the factory production control carried out by the producer; the factory production control includes, among other things, the initial type testing and the "factory production control manual" that must be compiled.

E 8 Name and function of the person empowered to sign the statement of conformity, e.g. general manager, attorney. The empowerment of the signatory must be documented.

E 9 With render or plaster the properties of the finished product are heavily dependent on its processing on the building site, so it is appropriate to attach to the declaration of conformity the technical instruction sheet associated with the product that contains the necessary application notes.

CE marking (example of system 3 for attestation of conformity)

CE		CE 1
ColorPutz GmbH & Co. KG **Musterstraße 1** **D-12345 Musterstadt**		CE 2
10		CE 3
EN 15824		CE 4
Render or plaster based on organic binders for use externally and internally		CE 5
Water vapour permeability:	V_2 medium	CE 6
Water absorption:	W_3 low	CE 7
Adhesion:	≥ 0.3 MPa	CE 8
Durability (Freeze-thaw resistance):	Permeability rate as specified in EN 1062-3 is ≤ 0.5 kg/(m² · $h^{0,5}$)	CE 9
Thermal conductivity $\lambda_{10,dry,mat}$:	No performance determined	CE 10
Reaction to fire:	Class D for reaction to fire (when used on mineral substrates)	CE 11

Explanations for the CE marking (example for system 3 for attestation of conformity)

CE 1 CE conformity symbol in accordance with Directive 93/68/EWG (minimum height 5 mm)

CE 2 The producer's name and address must be given in full so that the information can be used to contact the producer. The "producer" given here is legally responsible for the conformity of the product. It is not essential that he has produced the product in his own plant. The purpose of this information is that those responsible for placing the product on the market can be identified and contacted.

CE 3 The last two digits of the year in which the qualification takes place. This is not the production date but the moment from which the producer takes over responsibility for compliance with the requirements that are binding for the product.

CE 4 Number of the underlying European standard

CE 5 General description of the product on the basis of the properties specified in the standard; the requisite individual information for identifying the product features are described in rows CE 6 to CE 11. It is necessary to differentiate whether the render or plaster is intended for external and internal use or only for external use or only for internal use.

CE 6 The water vapour permeability only has to be specified for external renders. This is carried out on the basis of a test of the water vapour transmission rate. It is not the test value that is given but the category into which the test value falls (V_1 high; V_2 medium; V_3 low).

CE 7 The water absorption only has to be specified for external renders. This is carried out on the basis of a test of the liquid water permeability. It is not the test value that is given but the category into which the test value falls (W_1 high; W_2 medium; W_3 low).

CE 8 The adhesion has to be tested. It must not be less than 0.3 MPa. Unless the declaration of a higher value is needed for special applications the information "≥ 0.3 MPa" is sufficient even if the measured test value is higher.

CE 9 Information about durability is only necessary for external renders. Basically, there are three possible options for specifying the durability:

Option 1 (internal plasters only): the information **"no performance determined"** is sufficient for internal plasters (exclusively for internal use) without further testing.

Option 2 (external renders): the permeability rate for liquid water (see explanation CE 7) is ≤ 0.5 kg/(m² · $h^{0.5}$), i.e. the render falls into category W_2 or W_3. The CE symbol then states: **"Permeability rate as specified in EN 1062-3 is ≤ 0.5 kg/(m² · $h^{0.5}$)"**. Freeze-thaw cycle testing is not necessary in this instance.

Option 3 (external renders): the permeability rate for liquid water (see explanation CE 7) is > 0.5 kg/(m² · $h^{0.5}$), i.e. the render falls into category W1. After the freeze-thaw cycle test has been passed it is then stated in the CE symbol that **"Adhesion after freeze-thaw cycle testing ≥ 0.3 MPa"**.

CE 10 Information about the thermal conductivity is not meaningful for thermal insulation purposes because of the small thickness of the renders or plasters. Derivation of the thermal conductivity from the dry bulk density provided for in EN 1745 is not possible as there is no procedure for determining the dry bulk densities of renders or plasters conforming to EN 15824.

CE 11 Specification of a class for reaction to fire is necessary because in Germany no building materials may be use that are not at least moderately combustible (see Section 4 of this brochure). The constraints listed in the classification report (e.g. information about the substrate) should also be mentioned.

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Effective: September 2010