

INFORMATION BROCHURE



Joint Sealants in Accordance with EN 15651 – Declaration of Performance and CE Marking

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PREFACE

The current European harmonised version of EN 15651 "Sealants for non-structural use in joints in buildings and pedestrian walkways" was drafted according to the specifications of the Construction Product Directive (CPD). This also includes the terminology used in the CPD. On July 1, 2013, the new Construction Product Regulation will come fully into force. Some of the terms used in the new regulation now have new meanings and, in some cases, new terms are used to describe the same set of facts. Inevitably, corresponding modifications will need to be made.

This Information Brochure is intended to make CE marking of products pursuant to EN 15651 easier for manufacturers of joint sealants – especially in view of full implementation of the Construction Product Regulation.

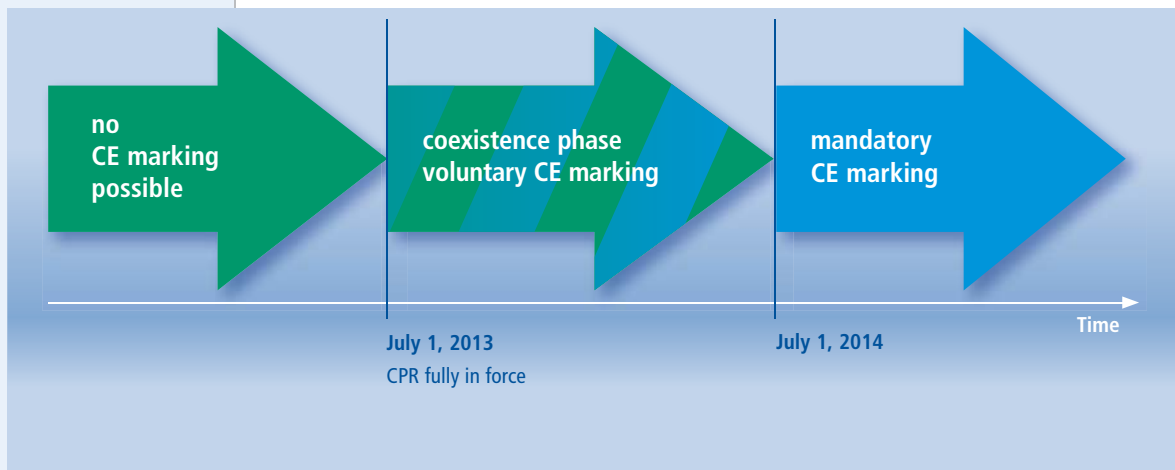
1 STANDARDISATION PROCESS AND SCOPE OF EN 15651

The process that led to the standard series EN 15651, parts 1-5 "Sealants for non-structural use in joints in buildings and pedestrian walkways", was a long journey.

Beginning in the year 2004, AFNOR (Association Française de Normalisation) brought forward a motion to set up a Technical Committee to prepare a series of standards for gun-grade sealants with the objective of making CE marking possible for sealants.

In 2012 the harmonised version of EN 15651 was presented and the Unique Acceptance Procedure (UAP) concluded. The five parts of the harmonised version of EN 15651 were published and the coexistence phase stated in the Official Journal of the EU (issue C 59 dated February 28, 2013). CE marking is thus possible as of July 1, 2013 but since the Construction Product Regulation (CPR) will go fully into force at the same time, CE marking must comply with the Construction Product Regulation.

As of July 1, 2014, CE marking for joint sealants pursuant to EN 15651 will be mandatory.



Standardisation process

Setting out the requirements for sealants was not always an easy task for the standardisation body, CEN/TC 349. The main setback was that very different requirements were placed on the properties of sealants within Europe. It was difficult to find a satisfactory solution, especially for part 3 which governs the properties of sanitary sealants.

In Germany, joint sealants have been governed so far by the standards DIN 18540 "Sealing of exterior wall joints in buildings using joint sealants" and DIN 18545 "Sealing of glazing with sealants". While DIN 18540, which is presently still valid, only deals with exterior joints in concrete, masonry work and natural stone and only permits one class of low modulus sealants with 25% movement capability, part 1 of EN 15651, in contrast, covers all types/classes of sealants and applications that are used on the inside and outside of a facade.

DIN 18540 is presently being revised so that in the near future only a German application standard will remain. The same applies to DIN 18545. Both remaining standards will mainly deal with the structural design of joints which is not a part of the EN standards. Parts 3 and 4 of EN 15651 have no effect on the German standard since there are no DIN standards for these areas.

Since the present version of EN 15651 was prepared pursuant to the specifications of the Construction Product Directive (CPD), changes will need to be made to the contents when this standard is revised in the future. Adjustments will be made, especially in regard to the mandatory parts, so that they comply with the specifications of the Construction Product Regulation.

* UAP: Unique Acceptance Procedure





Scope of EN 15651

As mentioned in the beginning, definitions and requirements on gunnable sealants are covered in EN 15651. Not included are sealant systems, that cannot be applied by gun such as elastomer profiles and systems such as linseed oil putties, etc.

The first four parts of EN 15651 deal with the requirements placed on products for different applications; part 5 with the assessment of conformity and labelling:

- Part 1: Sealants for facade elements
- Part 2: Sealants for glazing
- Part 3: Sealants for sanitary joints
- Part 4: Sealants for pedestrian walkways
- Part 5: Evaluation of conformity and marking

Sealants for facades EN 15651-1

EN 15651-1 deals with the definition and the requirements for non-structural facade sealants that are used on the outside of buildings to seal joints in exterior walls, along window and door frames, including visible faces in indoor areas.

Sealants for glazing EN 15651-2

EN 15651-2 sets out definitions and requirements for non-structural, elastic joint sealants for sealing glazing in buildings. Included are glazing joints as of an angle of 7° to the horizontal.

The areas in which these joint sealants are used are:

- Glass to glass
- Glass to frames
- Glass to porous carrier materials

Applications for aquariums, structural joints/glazing, interior and exterior sealing of pre-fabricated insulation glazing units, horizontal glazing (with a slope less than 7°) and glazing made of organic material (e.g. polycarbonate, PMMA, etc.) do not fall under the scope of this standard.

Sealants for sanitary joints EN 15651-3

EN 15651-3 deals with joints in sanitary areas inside buildings exposed to non-pressurized water. This includes joints in:

- Bathrooms
- Toilets
- Showers
- Domestic kitchens

Applications for service and drinking water, underwater applications (swimming pools, sewer systems, etc.) and applications with contact to food do not fall under the scope of this standard.

Sealants for floor joints with foot traffic EN 15651-4

EN 15651-4 deals with the definition of and requirements on cold applied, non-structural, elastic sealants for movement joints in floors for interior and exterior use. Included in the scope are:

- Floor joints in pedestrian walkways
 - Floor joints in surfaces with pedestrian traffic along with, e.g. trolleys, etc.
 - Floor joints in public areas
 - Movement joints between concrete slabs, e.g. in balconies, terraces and warehouses.
- Not included in the scope of this standard are floor joints in the chemical industry, in concrete roadways – e.g. at airports, or joints in sewage treatment plants.



Evaluation of conformity and marking EN 15651-5

EN 15651-5 sets out the procedures for assessment and verification of constancy of performance (conformity assessment) and the marking and labelling of joint sealants for the different non-structural applications in buildings and for pedestrian walkways that are dealt with in parts 1 to 4 of EN 15651. As of July 1, 2013, the Declaration of Conformity pursuant to the Construction Product Directive that is dealt with in this part of the standard will be replaced by the Declaration of Performance as set out in the Construction Product Regulation.

2 SYSTEMS FOR ASSESSMENT AND VERIFICATION OF THE CONSTANCY OF PERFORMANCE

Under the Construction Product Regulation there are different systems for the assessment and verification of constancy of performance (formerly Attestation of Conformity). These systems describe the basis on which a Declaration of Performance is prepared for a product, which duties the manufacturer has and which further bodies are involved.

Illustration 1: Overview of possible systems for assessment and verification of constancy of performance pursuant to EN 15651

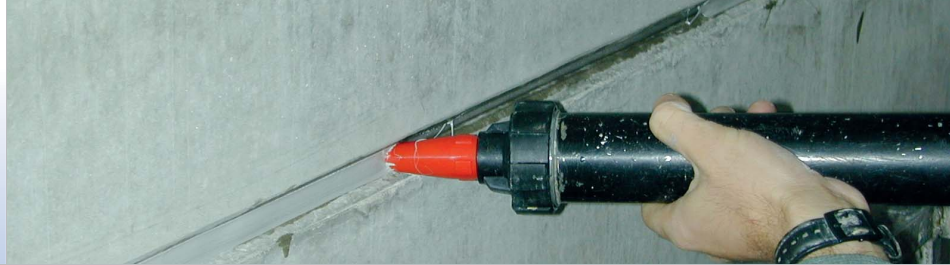
| System | Duties of the manufacturer | Type of notified body | Duties of the notified body | Type of certificate | Documentation |
|--------|---|-----------------------------------|--|--|---|
| 1 | <ul style="list-style-type: none"> Factory production control (FPC) Further testing of samples taken at the factory according to a prescribed test schedule | Product certification body | Certification of the product based on <ul style="list-style-type: none"> Type testing (determination of product type) Initial inspection of the plant and FPC Continuous surveillance, assessment and evaluation of FPC | Certificate of constancy of performance (for the product) | Declaration of Performance issued by the manufacturer related to the Essential Characteristics of the construction product |
| 3 | <ul style="list-style-type: none"> Factory production control (FPC) and sampling for Type Testing | Testing laboratory | <ul style="list-style-type: none"> Type testing (determination of product type) | Test Report | |
| 4 | <ul style="list-style-type: none"> Type testing (determination of product type) Factory production control (FPC) | | ----- | --- | |

Along with the manufacturer, the notified bodies named in the following may also be involved in the assessment and verification of constancy of performance of joint sealants pursuant to EN 15651:

- Testing laboratory (System 3)
- Product certification body (System 1).

The system to be used for products that fall under EN 15651 is found in Annex ZA of the respective part of the standard. In Chapter 7 of this Information Brochure, Table 4 gives an overview of the relevant systems for the different product types.

For most products covered by EN 15651, System 3 is to be used for product testing. In concrete terms, this means that type testing (determination of product type) must be carried out by a notified testing laboratory before the CE marking can be affixed to these products. Factory production controls must ensure that the performance of the product conforms with the declared performance (→ Declaration of Performance).



The only exception to this are joint sealants for facade elements exclusively for interior areas (product type EN 15651-1 F-INT), for which System 4 is used. This is the only case in which the manufacturer carries out type testing (determination of product type).

The reaction to fire of sealants pursuant to EN 15651 is dealt with separately. The system to be used for this is found in Annex ZA of the respective part of EN 15651. As shown in Illustration 2, the system also depends on the fire class given. Table 4 in this Information Brochure shows which systems are used to assess the reaction to fire for the different product types.

Illustration 2

| Fire class according to EN 13501-1 | System for assessment and verification of constancy of performance |
|------------------------------------|--|
| A1*, A2*, B*, C | 1 |
| (A1**, A2**, B**, C**, D), E | 3 |
| (A1 to E)***, F | 4 |

* Construction products/materials for which a clearly identifiable phase in the production process leads to an improvement of the reaction to fire classification (e.g. addition of fire retarding agents or a limitation of organic material).

** Construction products/materials not covered by footnote (*).

*** Construction products/materials that do not require testing for reaction to fire (e.g. products/materials in class A1 according to Commission Decision 96/603/EEC as amended by Commission Decision 2000/605/EG).

A list of the notified bodies must be published by the European Commission. As in the past for other product groups, these bodies will be published in the "NANDO Data Base" maintained by the European Commission.

<http://ec.europa.eu/enterprise/newapproach/nando/index.cfm>

Since the prerequisites for the notification of testing bodies pursuant to EN 15651 have not yet been set out, contact to the respective testing laboratories should be established as early as possible to clarify whether they intend to obtain the necessary notification.

3 NATIONAL REQUIREMENTS ON REACTION TO FIRE

In Germany, the minimum requirement of the building inspectorate is that all construction products and materials are normally flammable. This means that construction products that are easily flammable may not be used in Germany. This is governed by § 26 of the Model Building Code (MBO) or the corresponding paragraphs in State Building Codes.

The classification of construction products in view of their reaction to fire took place in the past according to the national standard, DIN 4102. For construction products that fall under a European harmonised standard such as EN 15651, the reaction to fire must now be assessed and classified according to the European standard, DIN EN 13501-1. It is no longer possible to declare reaction to fire for harmonised construction products by referring to DIN 4102.

Therefore, the classification of reaction of fire for joint sealants that fall under EN 15651 must now be made in accordance with DIN EN 13501-1 and declared in the scope of CE marking. Reference to the national standard, DIN 4102-4, is no longer permissible. A further consequence of this is that joint sealants that correspond to the European Class F pursuant to DIN EN 13501-1 with a corresponding declaration in the CE marking may not be used in Germany. A prerequisite for use in Germany is a declaration of at least Class E pursuant to DIN EN 13505-1 for which a test of reaction to fire must be carried out by a notified testing laboratory (System 3).

4 TYPE TESTING (DETERMINATION OF PRODUCT TYPE)

The objective of type testing is to determine the type of product as set out in EN 15651 and, where applicable, to define the intended use in more detail. Type testing consists of a complete series of tests that are to be executed according to the standard for a certain product type.

Type testing must be carried out to determine the performance of the product placed on the market according to the specifications of the applicable European harmonised product standard (i.e. EN 15651-1, EN 15651-2, EN 15651-3 or EN 15651-4).

Type testing consists of tests to determine so-called Essential Characteristics of the joint sealant which are set out in the respective part of EN 15651.

Essential Characteristics can be stated in the form of

- Performance levels (by stating a numerical value),
- Performance classes (statement of a class that is defined by a lowest and a highest value) or
- Threshold values (statement of a lowest or highest level).

The result of type testing determines the product type (where applicable with supplemental information on intended use).

Pursuant to EN 15651, products are divided into the following product types (identification codes) (for an explanation, see Table 4):

- Type F-INT
- Type F-EXT-INT
- Type F-EXT-INT-CC
- Type G
- Type G-CC
- Type S
- Type PW-INT
- Type PW-EXT-INT
- Type PW-EXT-INT-CC

Type testing must be executed by a notified testing laboratory. The only exception to this are Type F-INT sealants ("interior facade applications"). This is the only case in which the manufacturer carries out type testing and determines product type.

The Essential Characteristics relevant for type testing are given in Table 1 (it should be noted that not all of the named properties must be tested – the Essential Characteristics depend on product type and, in this conjunction, the intended use of the joint sealant).





Table 1: Requirements for type testing

| | Characteristic/property | Type F | | Type G (CC) | Type S | Type PW | |
|--------------------------|--|--------------|-----|-------------|--------|---------|--------------|
| | | EXT-INT (CC) | INT | | | INT | EXT-INT (CC) |
| Reaction to fire | Reaction to fire according to EN 13501-1 | PH | PH | PH | PH | PH | PH |
| Performance requirements | Resistance to flow according to EN ISO 7390 | P | H | P | P | | |
| | Loss of volume according to EN ISO 10563 | P | H | P | P | P | P |
| | Elastic recovery according to EN ISO 7389 | | | P | | | |
| | Tensile properties: Secant modulus according to EN ISO 8339 (-30°C) | P* | | P* | | | P* |
| | Tensile properties at maintained extension according to EN ISO 8340 (-30°C) | P* | | P* | | | P* |
| | Adhesion/cohesion properties after cyclic exposure to heat, water and artificial light according to EN ISO 11431 | | | P | | | |
| | Tear resistance according to EN ISO 8340 (modified) | | | | | P | P |
| | Adhesion/cohesion properties after immersion in water according to EN ISO 10590 (modified) | | | | | | P |
| | Adhesion/cohesion properties after immersion in salt water according to EN ISO 10590 (modified) | | | | | | P |
| | Modulus according to EN ISO 8339 ** | (P) | | (P) | | (P) | (P) |
| | Extension to break according to EN ISO 8339 ** | (P) | H | | | | |
| | Tensile properties at maintained extension according to EN ISO 8340 ** | (P) | | (P) | (P) | P | P |
| | Adhesion/cohesion properties at variable temperatures according to EN ISO 9047 ** | (P) | | (P) | (P) | (P) | (P) |
| | Adhesion/cohesion properties at constant temperature according to EN ISO 9046 ** | (P) | | | | | |
| | Adhesion/cohesion properties at maintained extension after immersion in water according to EN ISO 10590 ** | P | | (P) | P | (P) | (P) |
| | Adhesion/cohesion after immersion in water: Expansion at 23°C according to EN ISO 10591 ** | P | | | P | | |
| | Micro-organisms: Intensity of growth according to EN ISO 846-B ** | | | | | P | |
| Durability – see comment | | P | H | P | P | P | P |

** These tests can be used for testing durability. See comment.

P = "Essential Characteristic" – test by a notified testing laboratory.

P* = "Essential Characteristic" – test by a notified testing laboratory. Testing is only necessary if ability to perform in cold climate zones (CC) is required.

PH = "Essential Characteristic" – test by a notified testing laboratory when tested according to System 3 for reaction to fire; not applicable if Class F is given.

H = "Essential Characteristic" – the test can be executed by the manufacturer.

(P) = This test can be used to determine durability. If the test is used to determine durability, the test must be executed by a notified testing institute. See comment.

COMMENT: The test for durability is deemed passed if the requirements for testing pursuant to EN ISO 8339 or EN ISO 8340 given in the relevant parts of the standard are fulfilled and the requirements of tests pursuant to EN ISO 846, EN ISO 9046, EN ISO 9047, EN ISO 10590 or EN ISO 10591 are fulfilled.

Type testing can be executed with test specimens made of different carrier materials:

EN15651-1 – Type F Mortar M1 or mortar M2 and/or aluminium and/or glass

EN15651-2 – Type G Glass, in addition also aluminium and/or mortar M1 or mortar M2

EN15651-3 – Type S Glass and/or aluminium and/or a carrier material normally used in sanitary areas

EN15651-4 – Type PW Mortar M1 or mortar M2 and/or other carrier materials

If specified in the individual tests, there are two methods for conditioning that can be selected ("Method A" or "Method B"):

- Method A consists of preliminary storage of the test specimen in normal climate.
- Method B consists of preliminary storage of the test specimen in normal climate followed by alternating storage in water and at 70°C.

The same conditioning method and carrier material must be used for all relevant individual tests. The carrier material used and conditioning method as well as product type are to be stated in the Declaration of Performance and the CE marking.

The results of type testing (determination of product type) are to be recorded and maintained in the technical documentation (see Chapter 6 Technical Documentation) for the product so that they are available for inspections in the scope of market surveillance. The technical documentation on the individual products, which include the results of type testing, must be kept for a period of at least ten years.

5 FACTORY PRODUCTION CONTROL (FPC)

One of the duties of manufacturers of sealants is to maintain a continuous system of factory production control to ensure that the batches of products produced fulfil the essential characteristics of the determined product type. All batches placed on the market must meet these requirements.

Factory production control (FPC) serves as proof of conformity with the performance (essential characteristics) of the sealant determined in the type test. It is to be specified by the manufacturer of the sealant.

The samples taken for the tests that are executed must be taken in sufficient quantity and in a such a manner that the sample is homogenous and representative for the batch or the product to be tested. At least one sample should be taken from each batch. In continuous production processes, at least one sample per day must be taken. The following records must be kept on the samples:

- Production date
- Quantity of the sample
- Date of sampling
- Designation of sealant
- Type (chemical family)
- Colour
- Batch number
- Name of manufacturer and name of the person responsible for taking the sample.

For factory production control, the manufacturer can select either representative identification or performance tests (essential characteristics) or other test methods. If other test methods are used, it must be ensured that the results achieved by these test methods correlate with the results achieved by the test methods set out in EN 15651.



Examples of the frequency of testing within the scope of factory production control are found in Annex A of EN 15651 part 1 to part 4 (see Table 2 in this Information Brochure). However, it may be necessary to increase frequency during initial production or after a non-conformity has occurred.

Table 2: Examples for the frequency of testing for Factory Production Control (taken from Annex A of EN 15651 part 1 to 4 for information)

| Characteristic/property | Type F | | Type G (CC) | Type S | Type PW | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| | EXT-INT (CC) | INT | | | INT | EXT-INT (CC) |
| Description of the product: Test of the appearance of a sealant, e.g. <ul style="list-style-type: none"> Colour Homogeneity, etc. | F _A | F _A | F _A | F _A | F _A | F _A |
| Test on an uncured sealant, e.g. <ul style="list-style-type: none"> Viscosity Relative density according to EN ISO 1183-1 Skin formation time Stringing Extrusion rate, etc. | F _A | F _A | F _A | F _A | F _A | F _A |
| Test on a cured sealant, e.g. <ul style="list-style-type: none"> Peel-off test to determine adhesion Shore hardness according to EN ISO 868 Tensile properties of reactive sealants | F _B | F _B | F _B | F _B | F _B | F _B |
| Resistance to flow according to EN ISO 7390 | F _C | F _C | F _C | F _C | | |
| Loss of volume according to EN ISO 10563 | F _C | F _C | F _C | F _C | F _C | F _C |
| Modulus according to EN ISO 8339 | | F _C | | | | |
| Extension at break according to EN ISO 8339 | | F _C | | | | |
| Adhesion/cohesion at maintained extension after water immersion according to EN ISO 10590 for classes 25LM, 25HM, 20LM, 20HM, 12.5E | F _C | | | F _C | | |
| Adhesion/cohesion after water immersion: Extension at 23 °C according to EN ISO 10591 for all other classes | F _C | | | F _C | | |
| Adhesion/cohesion after exposure to heat, water and artificial light according to EN ISO 11431 | | | F _C | | | |
| Tear resistance according to EN ISO 8340 (modified) | | | | | F _C | F _C |
| Tensile properties at maintained extension at (-30) °C for applications in cold climate zones ^a | | | | | | F _C |
| Adhesion/cohesion after water immersion according to EN ISO 10590 (modified) | | | | | | F _C |
| Adhesion/cohesion after salt water immersion according to EN ISO 10590 (modified) | | | | | | F _C |

F_A – Test of each batch

F_B – Test once a week

F_C – Test once a year

^a Only required for applications in cold climate zones

6 TECHNICAL DOCUMENTATION

Records on Factory Production Control are a part of technical documentation and must be kept for at least ten years (pursuant to Art. 11 of the Construction Product Regulation). These records include:

- Reports and confirmations prepared by notified bodies (only in System 1)
- Reports on results of type testing to determine product type, either from the notified testing laboratory (System 3) or the manufacturer (System 4)
- Results of factory product control (FPC) determined within the scope of assessment and verification of performance
- Measures taken, especially for non-conformance with control values or control criteria
- Frequency of sampling the raw materials used or the reference batches
- Specifications of all delivered raw materials and components as well as their inspection plan to ensure conformity of raw materials
- Test of production equipment and production processes
- Inspection and maintenance, including calibration of equipment (devices for weighing, measuring and testing)
- Results of tests on final products
- Frequency of sampling final products
- All deviations from the stipulated frequency of factory production control and proof of equivalence of the determined results

When significant changes in formulations or production processes are made, testing or determination of product type (type testing) must be repeated on products from current production. These documents must be kept for ten years.

Manufacturers of sealants must have suitable procedures in place to ensure that materials can be identified and traced, starting with receipt of the raw materials through all stages of production up to delivery. The manufacturer is responsible for setting up and operating such a system.

7 DECLARATION OF PERFORMANCE

After the coexistence phase of EN 15651 expires on July 1, 2014, all joint sealants in accordance with EN 15651 must be marked with the CE marking. At the earliest, CE marking may be affixed when the coexistence phase begins on July 1, 2013. The manufacturer must prepare a Declaration of Performance based on the systems listed in Illustration 1 for each product to which the CE marking is to be affixed when the product is placed on the market. With the Declaration of Performance, the manufacturer takes responsibility for the declared performance. The Declaration of Performance is to be prepared according to the model found in Annex III of the Construction Product Regulation. Examples for Declarations of Performance for joint sealant materials pursuant to EN 15651 are also found on the Deutsche Bauchemie website (www.deutsche-bauchemie.de).

Certain information must be provided in the declaration of performance. For example, the number and issue date of the underlying harmonised technical specification – e.g. EN 15651-1:2012, the intended use of the construction product as well as the performance of at least one but all essential characteristics of the construction product required by the respective Member States.

The Declaration of Performance may be provided in printed or in electronic form, e.g. as a PDF file via email, but if the customer requests it the declaration of performance shall be supplied in printed form.

■ What is a Declaration of Performance?

A Declaration of Performance states the performance of a construction product in regard to its Essential Characteristics in accordance with the respective harmonised technical specification. The essential characteristics are determined when the product is type tested (see Table 1).



The Declaration of Performance is based on technical documentation compiled by the manufacturer. The technical documentation contains a description of the elements in conjunction with the prescribed system for assessing and verifying constancy of performance. Included are, e.g. documentation of test results from type testing the product or determination of the identity of tested batches if more than one batch was used during the scope of type testing.

Only upon justified request, these documents must be presented to the competent national authorities.

■ **When does a Declaration of Performance need to be prepared and by whom?**

A Declaration of Performance must be prepared by the manufacturer and supplied with the construction product when a CE marked construction product is placed on the market.

■ **How and in what form is the Declaration of Performance to be provided?**

The Declaration of Performance is to be provided in printed or electronic form and must be kept by the manufacturer for a period of ten years.

The Declaration of Performance is to be produced in the languages specified by the Member State in which the product is placed on the market.

The possibility of providing the Declaration of Performance on a website as stated in the Construction Product Regulation is not yet possible since the respective conditions for this have not yet been set out by the EU Commission.

■ **What does a Declaration of Performance contain?**

The Declaration of Performance is to be prepared according to the model given in Annex III of the Construction Product Regulation. New in this respect is that the Declaration of Performance must be given a unique number that the manufacturer is free to choose. The number of the Declaration of Performance is to be stated in the CE marking.

The information that must be included in the Declaration of Performance has been compiled in the following table.

Table 3: Contents of the Declaration of Performance

| No.* | Required information in the Declaration of Performance (as set out in Annex III, CPR) |
|------|---|
| | Number of the Declaration of Performance |
| 1 | Unique identification code of the product type |
| 2 | Type, batch or serial number for identification of the construction product (as required in Article 11(4)) |
| 3 | Intended use(s) of the construction product according to the applicable harmonised Technical Specification |
| 4 | Name, registered trade name or brand and contact address of the manufacturer in accordance with Article 11, sub-section 5 |
| 5 | When applicable, name and contact address of the authorised party appointed with the tasks specified in Article 12 (2). |
| 6 | System or systems for assessment and verification of constancy of performance of the construction product (as set out in Annex V) |
| 7 | When applicable, name and identification number of the notified body/bodies and description of the tasks of third parties pursuant to Annex V as well as reference to issued constancy of performance certificates, attestation of conformity for FPC, test/calculation reports – when relevant |
| 8 | When applicable, name and identification number of the Technical Assessment Body, reference number of the European assessment document, reference number of the European Technical Assessment and description of the tasks of third parties pursuant to Annex V as well as reference to issued constancy of performance certificates, attestation of conformity for FPC, test/calculation reports – when relevant |
| 9 | Declared performance <ul style="list-style-type: none"> ■ List of Essential Characteristics (as set out in the harmonised Technical Specification) for the declared intended use – see No. 3 ■ Performance of the construction product for the listed Essential Characteristics ■ Harmonised Technical Specification (number and issue date, where applicable reference number) |
| 10 | Place, issue date, name/function and signature of the manufacturer responsible for preparation of the Declaration of Performance |

*: The numbering used here is the same as the numbering found in Annex III of the Construction Product Regulation

Table 4

Much of the information given in the Declaration of Performance is directly dependent on the type of product. Table 4 gives an overview of the items in the Declaration of Performance that are related to each other.

| Unique identification code of the product type | Use intended by the manufacturer or intended use of the construction product as set out in the applicable harmonised Technical Specification | System or systems for assessment and verification of constancy of performance of the construction product as set out in Annex V | | | |
|--|--|---|-----------------------------|--|--|
| Point 1 of the Declaration of Performance as set out in Annex III of the Construction Product Regulation | Point 3 of the Declaration of Performance as set out in Annex III of the Construction Product Regulation | Point 6 of the Declaration of Performance as set out in Annex III of the Construction Product Regulation | | | |
| | | System for the technical properties | System for reaction to fire | | |
| EN 15651-1 Type F-INT | Sealant for facade for interior applications only | System 4 | | | |
| EN 15651-1 Type F-EXT-INT | Sealant for facade for interior and exterior applications | | | | |
| EN 15651-1 Type F-EXT-INT-CC | Sealant for facade for interior and exterior applications (intended for use in cold climates) | | | | |
| EN 15651-2 Type G | Sealant used for sealing glazing applications | | | | |
| EN 15651-2 Type G-CC | Sealant used for sealing glazing applications (intended for use in cold climates) | | | | |
| EN 15651-3 Type S | Sealant for joints in sanitary areas | | | | |
| EN 15651-4 Type PW-INT | Sealant for movement joints in floors for interior application only | | | | |
| EN 15651-4 Type PW-EXT-INT | Sealant for movement joints in floors for interior and exterior application | | | | |
| EN 15651-4 Type PW-EXT-INT-CC | Sealant for movement joints in floors for interior and exterior application (intended for use in cold climates) | | | | |

8 CE MARKING

CE marking is only possible on the basis of harmonised Technical Specifications. This means that CE marking for joint sealants will only be possible after the coexistence phase begins on July 1, 2013. After the coexistence phase expires on July 1, 2014, CE marking will be mandatory for the respective joint sealants.

When the manufacture affixes the CE marking, he is not only responsible for observance of all applicable requirements pursuant to the Construction Product Regulation but also for the declared performance of the construction product – and not, as in the past, for conformity with the harmonised standard.



■ **When and where as well as under which conditions may or must CE marking be affixed?**

Before the construction product is placed on the market, the CE marking must be permanently affixed to the construction product itself or the attached label in a place where it is easily visible and legible. If this is not possible – as in the case of joint sealants – the CE marking must be affixed to the packaging or the accompanying documents.

A prerequisite for CE marking is that the manufacturer of the concerned construction product has prepared a declaration of performance.

■ **What content must CE marking have?**

Specifications have been set out in EN 15651 for CE marking of joint sealants. Annex ZA3 of the respective part of the standard describes which information must be given in the CE marking. New under the Construction Product Regulation is that the reference number of the declaration of performance must be given.

It is currently being discussed how a reference to CE marking can be made on the packaging of joint sealants.

If it cannot be affixed to the construction product itself or the packaging, the entire CE marking must be found in the accompanying documents.

It should be noted that the CE symbol must correspond to the specifications set out in Directive 93/68/EEC or Regulation (EC) 765/2008. It must be at least 5 mm high and the information given in the marking must be easily legible.

Table 5

| Required information (pursuant to Article 9 CPR) | Explanation |
|--|---|
| CE | CE symbol (as defined Directive 93/68/EEC) |
| Identification number of the notified body (if applicable) | Identification number of the notified bodies called in (see list in NANDO), e.g. of the notified testing laboratory for type testing according to System 3 |
| Name and registered address of the manufacturer | Name and registered address of the manufacturer (alternative: a identifying mark that allows simple and unambiguous identification of the name and address of the manufacturer) |
| The last two digits of the year in which the CE mark was affixed for the first time. | The last two digits of the year in which the CE marking was first affixed to the concerned product (e.g. '13'). |
| Reference number of the Declaration of Performance | Statement of the unique number given by the manufacturer for the Declaration of Performance underlying the CE marking. Statement of the number of the certificate of Factory Production Control that was required under the CPD is no longer required. |
| Reference to the harmonised Technical Specification | Number of the relevant part of the harmonised standard, e.g. 'EN 15651-2:2012' <i>Note: If a product falls under several parts of EN 15651, all relevant parts must be listed.</i> |
| Stipulated intended use (as set out in the Technical Specification) | Intended use as set out in the Technical Specification, e.g. 'joint sealant for sealing glazing applications' |
| Unique identification code of the product type (pursuant to Article 2) | Description of the product type, for example by means of the code stipulated in the Technical Specification, e.g. 'G'. Conditioning method and carrier material for joint sealants must also be given. <i>Note: If a product corresponds to several product types, all relevant identification codes must be listed.</i> |
| The declared performance given in levels or classes stated in the Declaration of Performance | Statement of the declared performance (in levels or classes) of the Essential Characteristics stipulated in the Declaration of Performance. <i>Note: If a product falls under several parts of EN 15651, the Essential Characteristics for all parts must be listed.</i> |

9 OUTLOOK

In 2013, the Construction Product Regulation enters into full force at the same time that the coexistence phase of EN 15651 "Sealants for non-structural use in joints in buildings and pedestrian walkways" begins. There are still several unanswered questions concerning the implementation of the Construction Product Regulation which are being clarified at the moment.

As a rule, standards are subject to revision every 5 years. When revision takes place, EN 15651 should be formally revised so that it complies with the Construction Product Regulation. When this happens, the contents of basic requirement 3 "Hygiene, Health and the Environment", which has been expanded, will be taken into account and the new basic requirement 7 "Sustainable Use of Natural Resources" will be added.

10 BIBLIOGRAPHY

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- [2] Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC. Official Journal of the EU L 88, 04.04.2011 – construction products
- [3] Council Directive 93/68/EEG of 22 July 1993 amending Directives 87/404/EEG (simple pressure vessels), 88/378/EEG (safety of toys), 89/106/EEG (construction products), 89/336/EEG (electromagnetic compatibility), 89/392/EEG (machinery), 89/686/EEG (personal protection equipment), 90/384/EEG (non-automatic weighing instruments), 90/385/EEG (active implantable medicinal devices), 90/396/EEG (appliances burning gaseous fuels), 91/263/EEG (telecommunications terminal equipment), 92/42/EEG (new hot-water boilers fired with liquid or gaseous fuels) and 73/23/EEG (electrical equipment designed for use within certain voltage limits). Official Journal of the European Union L 220, 30.08.1993
- [4] DBC Information Brochure "The New European Construction Products Regulation – An Implementation Aid for Deutsche Bauchemie's Member Companies", 2012

11 EPILOGUE

This Information Brochure, "Joint Sealants in accordance with EN 15651 – Declaration of Performance and CE Marking" was prepared by a project group appointed by Deutsche Bauchemie e.V., "CE Marking for Sealants", and adopted by Deutsche Bauchemie's Special Committee 7, "Sealants for Buildings". The purpose of this Information Brochure is to provide information that will help member companies when CE marking joint sealants pursuant to EN 15651 in the future.

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Deutsche Bauchemie e. V. would be pleased if you would share your experience in regard to this Information Brochure and invites you to make comments which should be directed to the main office in Frankfurt.





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