**Deutsches Institut für Bautechnik**
**Zulassungsstelle für Bauprodukte und Bauarten**
**Bautechnisches Prüfamt**
Eine vom Bund und den Ländern gemeinsam getragene Anstalt des öffentlichen Rechts

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Authorised and notified according to Article 10 of the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products (89/106/EEC)

Deutsches Institut für Bautechnik

DIBt

Mitglied der EOTA
*Member of EOTA*

# European Technical Approval ETA-13/0128

*English translation prepared by DIBt - Original version in German language*

| | |
|---|---|
| Handelsbezeichnung<br>*Trade name* | "Electronic-Dose HWD 90"<br>*"Electronic Dose HWD 90"* |
| Zulassungsinhaber<br>*Holder of approval* | KAISER GmbH & Co. KG<br>Ramsloh 4<br>58579 Schalksmühle<br>DEUTSCHLAND |
| Zulassungsgegenstand und Verwendungszweck<br>*Generic type and use of construction product* | Im Brandfall aufschäumendes Formteil<br>*Intumescent pre-shaped element* |
| Geltungsdauer:<br>*Validity:* vom *from* bis *to* | 23 April 2013<br>23 April 2018 |
| Herstellwerk<br>*Manufacturing plant* | KAISER GmbH& Co. KG<br>Ramsloh 4<br>D-58579 Schalksmühle |



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|---|---|
| Diese Zulassung umfasst<br>*This Approval contains* | 10 Seiten einschließlich 2 Anhänge<br>*10 pages including 2 annexes* |

# I LEGAL BASES AND GENERAL CONDITIONS

1 This European technical approval is issued by Deutsches Institut für Bautechnik in accordance with:

- Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products[1], modified by Council Directive 93/68/EEC[2] and Regulation (EC) N° 1882/2003 of the European Parliament and of the Council[3];
- *Gesetz über das In-Verkehr-Bringen von und den freien Warenverkehr mit Bauprodukten zur Umsetzung der Richtlinie 89/106/EWG des Rates vom 21. Dezember 1988 zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten über Bauprodukte und anderer Rechtsakte der Europäischen Gemeinschaften (Bauproduktengesetz - BauPG) vom 28. April 1998[4], as amended by Article 2 of the law of 8 November 2011[5];*
- Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC[6].

2 Deutsches Institut für Bautechnik is authorized to check whether the provisions of this European technical approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European technical approval and for their fitness for the intended use remains with the holder of the European technical approval.

3 This European technical approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1 of this European technical approval.

4 This European technical approval may be withdrawn by Deutsches Institut für Bautechnik, in particular pursuant to information by the Commission according to Article 5(1) of Council Directive 89/106/EEC.

5 Reproduction of this European technical approval including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of Deutsches Institut für Bautechnik. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European technical approval.

6 The European technical approval is issued by the approval body in its official language. This version corresponds fully to the version circulated within EOTA. Translations into other languages have to be designated as such.



1 Official Journal of the European Communities L 40, 11 February 1989, p. 12
2 Official Journal of the European Communities L 220, 30 August 1993, p. 1
3 Official Journal of the European Union L 284, 31 October 2003, p. 25
4 *Bundesgesetzblatt Teil I 1998*, p. 812
5 *Bundesgesetzblatt Teil I 2011*, p. 2178
6 Official Journal of the European Communities L 17, 20 January 1994, p. 34

# II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

## 1 Definition of product and intended use

### 1.1 Definition of the construction product

This European technical approval (ETA) applies to the construction product "Electronic-Dose HWD 90".

The construction product "Electronic-Dose HWD 90" is a factory made spray cast element (built-in unit) consisting of an intumescent material[7] completed with an inner shell made of Polypropylene according to EN ISO 1873[8].

The fire sealing effect of the product "Electronic-Dose HWD 90" bases on the creation of foam at high temperatures in case of fire, that closes gaps, joints and other openings of construction elements and restricts the passage of heat, flame and/or smoke this way.

Annex 1 shows the standard type of the product "Electronic-Dose HWD 90" with the dimensions.

The characteristics and performances of the intumescent product "Electronic-Dose HWD 90" relevant for fire sealing purposes were determined as follows[9]:

- loss of mass on heating: 72,0 % ± 5 %
  (tested at 550 °C for 30 minutes)
- expansion ratio: 8,0 to 10,0
  (tested at 550 °C for 30 minutes with a top-load)[10]
- expansion pressure: ≤ 0,25 N/mm$^2$
  (tested at 300°C, method 4)

### 1.2 Intended use of the construction product

The construction product "Electronic-Dose HWD 90" is intended to be used as a component essential for the fire sealing and fire stopping effect of construction elements, kits and assemblies, which shall meet requirements concerning the safety in case of fire. The construction product prevents the heat transmission and the propagation of fire by creating foam.

The product "Electronic-Dose HWD 90" according to this ETA in end use conditions may be subjected to conditions for the use category type $Z_2$ (dry and frost-protected in-door use at temperatures up to +40 °C and relative humidity below 85%).

If the construction product "Electronic-Dose HWD 90" is intended to be exposed to specific conditions, further tests are necessary.

The provisions made in this European technical approval are based on an assumed working life in end use application of the construction product "Electronic-Dose HWD 90" of 10 years, provided that the conditions laid down in sections 4.2, 5.1 and 5.2 for packaging, transport, storage, installation, use, maintenance and repair are met.



7 Chemical composition deposited at DIBt.

8 EN ISO 1873 Plastics – PP moulding and extrusion materials – Part 1:1995: Designation system and basis for specifications; Part 2:2007: Preparation of test specimens and determination of properties

9 Test methods in accordance with the CUAP 11.04/06, edition December 2011; see EOTA Technical Report 024 (TR 024), edition July 2009

10 Details of testing are deposited at DIBt.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or the approval body, but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

## 2 Characteristics of the product and methods of verification

### 2.1 Mechanical resistance and stability

Not relevant

### 2.2 Safety in case of fire

#### 2.2.1 Reaction to fire

The construction product "Electronic-Dose HWD 90" complies concerning reaction to fire with the requirements of class E according to EN 13501-1[11].

#### 2.2.2 Resistance to fire

The fire resistance of a fire resistant assembly containing the pre-formed intumescent fire sealing element "Electronic-Dose HWD 90" was tested according to the relevant test method for classification according to EN 13501-2[12].

This test basically qualifies the intumescent fire sealing product "Electronic-Dose HWD 90" for final applications in fire resistant assemblies.

The performance "resistance to fire" is not being considered in more detail in this ETA.

### 2.3 Hygiene, health and the environment

#### 2.3.1 Air and water permeability

Not relevant

#### 2.3.2 Release of dangerous substances

According to the manufacturer's declaration and the chemical compositions deposited[13], the intumescent product "Electronic-Dose HWD 90" does not contain dangerous substances as registered in the Council Directive 76/769/EEC (amended by EC Decision 455/2009/EC of 6 May 2009)[14] or listed in the database of the European Commission; published in the Regulation (EC) N° 1272/2008 of 16 December 2008[15].

NOTE:

In addition to the specific clauses relating to dangerous substances contained in this European technical approval, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Directive, these requirements need also to be complied with, when and where they apply.



11 EN 13501-1:2009 Fire Classification of construction products and building elements, Part 1: Classification using test data from reaction to fire tests.

12 EN13501-2 Fire classification of construction products and building elements, Part 2: Classification using data from fire resistance tests, excluding ventilation services.

13 The detailed chemical composition is deposited at DIBt.

14 Official Journal of the European Communities L 137 of 3 June 2009, p 3

15 Official Journal of the European Communities L 353 of 31 December 2008, p 1

**2.4 Safety in use (mechanical resistance and stability)**

Not relevant

**2.5 Protection against noise**

Not relevant

**2.6 Energy, economy and heat retention**

Not relevant

**2.7 Aspects of durability and servicebility**

The construction product "Electronic-Dose HWD 90" is deemed to satisfy use category type $Z_2$[16].

**Conclusion**:

The construction product "Electronic-Dose HWD 90" in end use conditions may be exposed to frost-protected, dry in-door conditions without any additional condensation at temperatures up to +40 °C without expecting essential changes of the intumescent properties.

## 3 Evaluation and attestation of conformity and CE marking

**3.1 System of attestation of conformity**

According to the Decision 1999/454/EG of the European Commission[17], system 1 of the attestation of conformity applies.

In addition, according to the Decision 2001/596/EC of the European Commission[18] system 3 of the attestation of conformity applies with regard to reaction to fire.

These systems of attestation of conformity are defined as follows:

System 1: Certification of the conformity of the product by a notified certification body on the basis of:

(a) Tasks for the manufacturer:

(1) factory production control (FPC);

(2) further testing of samples taken at the factory by the manufacturer in accordance with a prescribed test plan;

(b) Tasks for the notified body:

(3) initial type–testing of the product;

(4) initial inspection of factory and of factory production control;

(5) continuous surveillance, assessment and approval of factory production control.

System 3: Declaration of conformity of the product by the manufacturer on the basis of:

(a) Tasks for the manufacturer:

(1) factory production control (FPC);

(b) Tasks for the notified body:

(2) initial type-testing of the product.



16 The use category $Z_2$ is assumed justified on the basis of "historical data" (provided evidences of national approval procedure)

17 Official Journal of the European Communities L 178/42 of 14 July 1999

18 Official Journal of the European Communities L 209/33 of 2 August 2001

## 3.2 Responsibilities

### 3.2.1 Tasks for the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall insure that the product is in conformity with this European technical approval.

The manufacturer may only use raw materials and components stated in the technical documentation of this European technical approval.

The factory production control (FPC) shall be in accordance with the control plan which is part of the technical documentation of this European technical approval. The control plan is laid down in the context of the FPC system operated by the manufacturer and deposited with Deutsches Institut für Bautechnik.[19]

The results of FPC shall be recorded and evaluated in accordance with the provisions of the control plan of 08/04/2013.

3.2.1.2 Other tasks for the manufacturer

The manufacturer shall, on the basis of a contract, involve a body which is notified for the tasks referred to in section 3.1 in the field of fire sealing and fire stopping products in order to undertake the actions laid down in section 3.2.2. For this purpose, the control plan referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the notified body involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this European technical approval ETA-13/0128 issued on 23 April 2013.

### 3.2.2 Tasks for the notified bodies

The notified body shall perform the

- initial type-testing of the product (systems 1 and 3),
- initial inspection of factory and of factory production control (systems 1),
- continuous surveillance, assessment and approval of factory production control (system 1)

in accordance with the provisions laid down in the control plan of 08/04/2013.

The notified body shall retain the essential points of its actions referred to above and state the results obtained and conclusions drawn in a written report.

The notified certification body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical approval.

In cases where the provisions of the European technical approval and its control plan are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform Deutsches Institut für Bautechnik without delay.



[19] The "control plan" is a confidential part of the European technical approval and only handed over to the notified body/bodies involved in the procedure of attestation of conformity. See section 3.2.2.

### 3.3 CE marking

The CE marking shall be affixed on the product itself or the label attached to it or on packaging or the accompanying commercial document, e.g. the EC declaration of conformity.

The letters "CE" shall be followed by the identification number of the notified certification body, where relevant, and be accompanied by the following additional information:

- name and address of the producer (legal entity responsible for the manufacture),
- the last two digits of the year in which the CE marking was affixed,
- the number of the EC certificate of conformity for the product,
- the number of the European technical approval,
- the generic type of product,
- the use category/ies

Example: see annex 2

NOTE:

According to the regulation (EC) N° 765/2008 of 9 July 2008, article 30 (3)[20] the manufacturer indicates by affixing the CE marking on the product "Electronic-Dose HWD 90", that he takes responsibility for the conformity of the product with all applicable requirements set out in the relevant Community harmonisation legislation providing for its affixing.

## 4 Assumptions under which the fitness of the product for the intended use was favourably assessed

### 4.1 Manufacturing

The European technical approval is issued for the construction product "Electronic-Dose HWD 90" on the basis of agreed data and information, which identify the product assessed and judged and which are deposited at Deutsches Institut für Bautechnik.

Changes concerning the products or the production process, which could result in the fact, that deposited data and information are invalid or incomplete, should be notified to Deutsches Institut für Bautechnik before implementing the changes.

The Deutsches Institut für Bautechnik will decide whether or not such changes affect the approval and consequently the validity of the CE marking on the basis of the approval and if so whether further assessment or modifications to the approval shall be necessary.

### 4.2 Installation

Additional protective measures must not restrict the creation of foam of the flexible, intumescent fire sealing product "Electronic-Dose HWD 90".

The manufacturer's installation instruction shall be considered.



[20] Amtsblatt der Europäischen Union L 218/30 vom 13.08.2008

## 5 Indications to the manufacturer

### 5.1 Packaging, transport and storage

The construction product "Electronic-Dose HWD 90" shall be protected from direct effect of weathering, humidity and UV-radiation during transport.

The construction product "Electronic-Dose HWD 90" may be stored frost-protected at temperatures up to +40 °C and at a relative humidity between 50 % and 70 °C.

The manufacturer's recommendations concerning packaging, transport and storage shall be considered.

### 5.2 Use, mintenance, repair

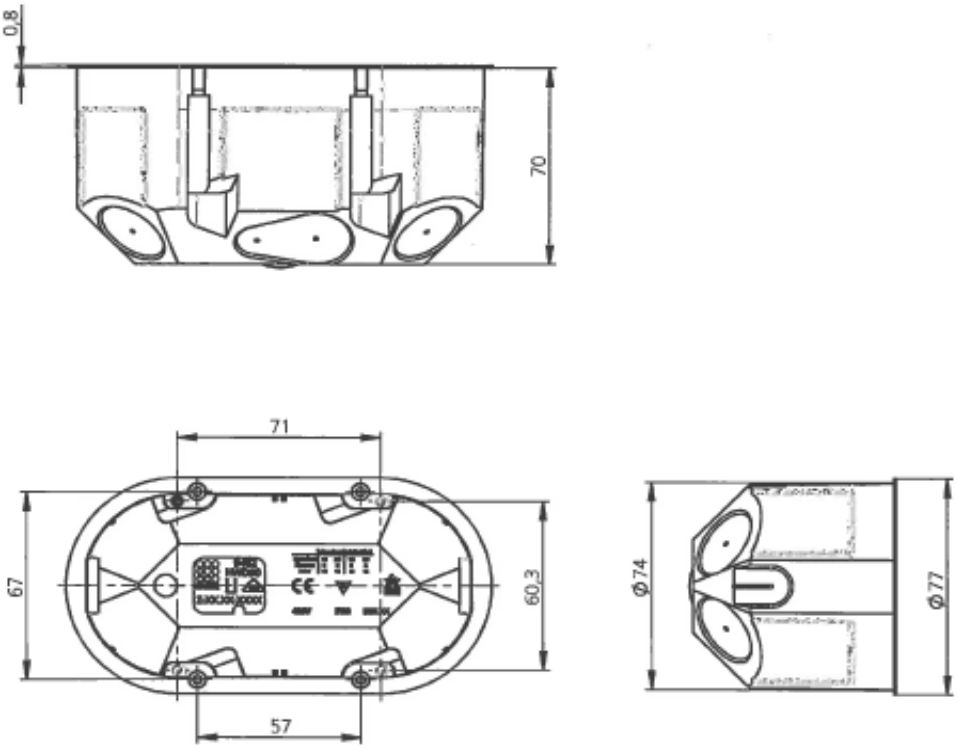
Damaged pre-formed built-in units of "Electronic-Dose HWD 90" shall be only replaced by new, unspoiled pre-formed built-in units of "Electronic-Dose HWD 90" with identical dimensions. The substitution shall be carried out carefully.

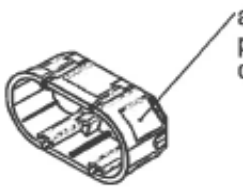
Prof. Gunter Hoppe
Head of Department

*beglaubigt:*
Dr.-Ing. Dierke

## ANNEX 1

Standard built-in unit and dimensions of the product "Electronic-Dose HWD 90"




**Dimensions in mm**

**ANHANG 2**

Example of CE-marking of the construction product "Electronic-Dose HWD 90"

| | |
|---|---|
| CE | Symbol "CE" |
| xxxx | Identification number of notified certification body for AoC system 1 |
| KAISER GmbH & Co. KG<br>Ramsloh 4<br>D-58579 Schalksmühle | Name and address of the manufacturer |
| xx | Two last digit of year of affixing CE marking for AoC system 1 |
| xxxx-CPD-xxxx | Number of EC certificate of conformity |
| ETA-13/0128 | ETA number |
| Im Brandfall aufschäumendes Formteil<br>*Intumescent pre-shaped element*<br>"Electronic-Dose HWD 90" | Generic type of the product and trade name |
| Nutzungskategorie:<br>*Use category*<br>Typ/*type* $Z_2$<br>Innenanwendung/*in-door use* | Use category according to ETA-13/0128 |