



# Rules of the BOSEC brand **Certification rules Products**

## The guarantee of the conformity of Products and systems in the fire prevention domain

Information about the present rules:

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These rules are edited in French, Dutch and English.

For the official implementation of the rules only the original French version is taken into account in order to avoid interpretations due to translation.

It can freely be consulted.

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Group nr 1: the insurance companies and their professional organization (Assuralia);

Group nr 2: the authorities;

Group nr 3: the professional organizations representing the certification bodies or bodies being capable

of becoming a certification body;

Group nr 4: the organizations representing the users that are not represented in Group nr 1; Group nr 5: organizations of standardization, training, research, inspection and laboratories.

The present **Product rules of the BOSEC brand** determine per type of Product or System that lead to the attribution of the certification according to the BOSEC referential. It is completed by the **Rules of the BOSEC brand** with the administrative and legal clauses about the use of the brand.



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### **Definitions**

AFD system Automatic fire detection system

AFE system Automatic fire extinguishing system

CEA Comité Européen des Assurances/Insurance Europe

IEC International Electrotechnical Committee

EN European standard

FFS Fixed Firefighting Systems

FM Factory Mutual

ISO International Standardisation Organization

NFPA National Fire Protection association

NTN Technical Note

SHE-system Smoke and Heat evacuation system

UL Underwriters Laboratories



### 1. Scope

The present **Product rules of the BOSEC brand**, stipulates per type of Product and System the technical criteria to what they have to comply to obtain certification according to the BOSEC referential. It is completed by the **Rules of the BOSEC brand - Administrative and legal clauses** about the use of the brand.

The brand BOSEC-Products is meant for all **components** and their **compatibility and associativity** to participate in the **active Protection against fires (this scope is also extended to the autonomous CO detectors meant to prevent intoxication)**. The brand BOSEC-Products is especially meant for the components and systems of the following Installations:

- Automatic Fire Detection (AFD) (the systems for fire detection and the components that are part of a fire detection system and the autonomous smoke, heat and CO detectors for domestic or similar applications
- Smoke and Heat Evacuation (SHE) (natural or mechanical ventilation)
- Automatic Fire Extinguishing (AFE) (water, gases, foam, mist, etc.)

and in a more general way, all components and systems that can be connected between them or that can be connected directly to the above mentioned Installations.

The BOSEC brand does not aim:

- manual fire extinguishing means (extinguishers, fire blankets, fire hose reels, etc.);
- automatic extinguishing modules for burners and deep fryers;
- control panels of motor-driven diesel pump units;
- the fixed 'passive' construction products such as the walls, structural elements, etc.
- the mobile 'passive' construction products such as the doors, the valves, the exhaust valves, etc. when those are not serviced by means of an electric control;
- the furniture (dustbins, fire resistant safes, etc.)

that are covered by the brands ANPI or BENOR/ATG.

### 2. Certification process

The certification process is realized in 5 to 8 steps depending on the product type:

- 1° Initial evaluation of the certification request file handed over by the Applicant;
- 2° Initial evaluation of the conformity of the Product or System with regard to normative documents, amongst others by means of tests carried out in laboratories that are accepted by the certification body:
- 3° Realization of an initial audit of the production chain if this audit has not already been realized for example in the framework of a CE-CPR certificate
- 4° Certification decision;
- 5° Realization of a periodical audit of the production chain if this audit has not already been realized for example in the framework of a CE-CPR certificate
- 6° Periodical surveillance audits by sampling the Product in places that are accessible tot he consumer and at the production or distribution chain;
- 7° Periodical tests in the laboratories (only for the autonomous detectors)
- 8° Maintain or withdraw the certificate

The added value of the BOSEC certification is not only to validate the quality of a Product at the moment of its initial certification but also to guarantee this same quality in time through checks and audits, at the distribution points.

The implementation of the certification system is written down in the quality manual and/or the procedures of the Division Certification from ANPI and audited and accredited by BELAC, according to ISO/EN 17065.

### 3. Criteria to which the Products have to comply

## 3.1 Applicable referentials

The standards that are automatically accepted by the BOSEC-brand are:

- the international and European standards (EN, IEC, ISO, etc.);
- the Belgian standards (NBN);



- the standards from countries outside the European Union when those are written in French, Dutch, English or German and when the concerned Product is not been treated in a European standard or an Belgian standard;
- the codes with an international reputation (NFPA, CEA, FM, UL, etc.);
- the technical notes from ANPI (NTN).

If there is no standard for the concerned Product, the applicant will submit in his technical file all possible studies that justify the quality of the presented Product. A short technical document could be written in order to register the test procedure and the technical criteria so that similar Products that would be presented afterwards can be treated in the same way.

#### 3.2 Administrative criteria

The Applicant has to fulfil the following conditions:

- the proof of conformity of the Product with the prescriptions indicated in the evaluation report, based on the tests and/or visits mentioned in the present rules;
- if applicable, delivery of a copy of the CPD/CPR certificates as well as the declaration of performance;
- delivery of a copy of a valid certificate ISO 9001 with a scope that treats the specific aspects from the production line<sup>1</sup> of the components or a copy of the ISO 9001 certificate of the Certification Applicant
- having signed a certification convention (see model in annex 1).
- the obligation to add a copy of the manual or a link to it to each delivery of certified Products.

The fact not to fulfil one of thise conditions can result in the refusal of the request.

During the process of his request the applicant can send remarks to ANPI and, if necessary, be heard about the subject by the Management Committee of the BOSEC mark.

# 3.3 It can be demonstrated that the Product already complies to the applicable referentials

Important note: it is not sufficient to submit a quality certificate. It is surely necessary to submit test reports from (accredited and recognized by ANPI) laboratories so that can be checked that the tests have been carried out on the presented Product.

The Product and the accompanying technical file are submitted to the ANPI laboratories that carry out the identification and the traceability of all elements of the file:

- if the traceability is incomplete supplementary tests will be requested;
- if the traceability is complete, the laboratories of ANPI deliver a report to the Division Certification from ANPI.

# 3.4 It cannot be demonstrated that the Product already complies to the applicable referentials

The tests have to be carried out according tot he applicable referentials, or by the ANPI laboratories or by laboratories that are accepted by ANPI. The results will be delivered to the Applicant as well as to the Division Certification from ANPI.

#### 4 Certification treatment

#### 4.1 Basic conditions

The Applicant or Certificate holder has to take the following steps:

- a) Submit an official request, correctly filled in and signed by a mandated representative,
- b) Submit the necessary information,
- c) Go along with the terms that are applicable tot he certification system during the validity period of the certificate,

 $<sup>^{1}</sup>$  This certificate has to be delivered by a certification body that complies with EN 45012.



- d) Facilitate the evaluation management,
- e) Only use the brand or promote it according tot he authorized stipulations,
- f) Stop the use or promotion of the brand as soon as the certificate is no longer valid or as soon as the brand is suspended or withdrawn,
- g) Pay the costs and fees for the certification.

Note: Every written information request from the Division Certification from ANPI to the Applicant that has not been answered can give cause to a reminder. In case that, after a month, there has been no answer to the registered mail, the Applicant is informed, without affecting the rights to appeal, that his file is closed. The file is returned to the Applicant. The amounts already invoiced cannot be recovered.

### 4.2 Treatment of the requests

Before introducing the request the Applicant gets the Product(s) tested directly in the ANPI laboratories (see 3.3 and 3.4). The mission and test request are dealt with directly between the Applicant and the laboratories accepted by ANPI.

### 4.2.1 Stipulations for a certification request

The Applicant submits his request to the Division Certification from ANPI by means of the certification request form fort he use of the BOSEC brand mentioned in annex 1. Only the use of this form is valid and excludes any other document.

### 4.2.2 Registration

On reception of the request, the secretariat of the Division Certification from ANPI undertakes the following actions:

- 1. Registration of the request and assign a file number;
- 2. Forwards to the Applicant within 10 working days:
  - a) the registration number of the file
  - b) the rules of the BOSEC brand
  - c) the present Product rules containing the following
    - the technical certification stipulations,
    - the contents of the technical file that has to be submitted for certification,
    - the invoice for the registration rights.

## 4.2.3 Receptivity of the request and certification project – Application review

On reception of the technical file and the proof of payment of the registration rights the administrative staff of the Division Certification from ANPI undertakes the following actions:

- 1. verification of the completeness of the file;
- 2. treatment of the request;
- 3. imposes an initial audit of the production chain (according to the existing procedure for a CE-CPR certificate) if this is not already covered by a CE-CPR certificate
- 4. composition of the certification file;

The certification file is created within 10 working days, counting from the receipt date of the complete file and the payment of the amounts invoiced by ANPI.

### 4.2.4 Certification process (Evaluation, review and decision)

The technical staff from the Division Certification of ANPI:

- 1. does this based on all information and on the certification file,
- 2. requests complementary information, if necessary
- 3. gives an advice,
- 4. asks a second advice (review) from (an) expert(s) (external reviewer) in case of negative advice
- 5. decides to deliver the certification or not

This process is realized within 15 working days.



### 4.2.5 Delivery of the certification

The Division Certification of ANPI:

- 1. informs the Applicant when the decision is negative
- 2. sends the request to the Applicant when it is about a complementary information request.
- 3. When the decision is positive the original certificate is drawn up after having received the signed certification convention (see model in annex 2) that is sent to the Applicant.

The Applicant receives a license number for the first product for which he obtains a certificate. All other certificates of the mark that he will obtain in the future will fall under that same number.

The treatment is done within 15 working days after having received the conclusions of the decision.

#### 4.2.6 Duration of the certification

The technical rules determine the duration of the certification with a maximum of 12 years.

In case one of the specifications mentioned on the certificate have been amended or revised, it has to be proven to the Division Certification from ANPI that the concerned product(s) is (are) still in conformity with this amendment or revision and this according to the same conditions as the initial study and within a period of 2 years, or another period determined by the CGMB, following the publication of that same amendment or revision.

This duration depends on the implementation of new binding laws or standards. In that case the Mark CGMB decides upon the certification duration and the possible time periods to redress the conformity per case.

Prolongations/renewals are treated in the same way as a new request.

See the corresponding article (Certificate renewal) for prolongation/renewals of the certification.

#### 4.3 Modifications

The user of the mark has to inform the Division Certification from ANPI as soon as possible, and at the latest within one month, about every modification with regard to the object(s) of the certification with the exception of modifications to Certified Products.

For modifications to Certified Products, see the procedure in Annex 4.

After having observed the modifications the Division Certification of ANPI announces its decision.

### 4.4 Follow-up of the certification/surveillance audits

The BOSEC-certification is subject to a surveillance procedure carried out by the Division Certification from ANPI. This can be subcontracted under their responsibility.

# 4.4.1 Duties of the Certificate holder

With respect to the surveillance audits the user of the brand has to:

- announce to the Division Certification from ANPI every modification to his certified Product(s) according to the annexed procedure
- announce to the Division Certification from ANPI all manufacturing- and stock places in Belgium and abroad as well as places of primary storage for imported Products and communicate the distribution network;
- sign a certification convention that authorizes the Auditor mandated by ANPI to carry out the surveillance audit that are foreseen in the certification scheme;
- allows the ANPI representatives access to the places mentioned in the second point of this article at all times
- puts the register of complaints at the disposal of the mandated Auditor. The Certificate holder keeps a register of complaints with a brief and chronological overview of the complaints with regard tot he certified Product(s). This register contains: the origin of the complaint, its content. Complementary documents concerning the treatment of the complaint (letter, fax note...) are added to the complaint as an annex.



### 4.4.2 Surveillance

The surveillances are carried out in order to be sure that the certified Product(s) always comply with the certification requirements.

Practical stipulations of the surveillances are described in annex 4.

In the case that a surveillance is impossible (i.e. absence of a Product) the user of the brand has to request an additional control to the Divisie Certification from ANPI within 30 calendar days. Otherwise he exposes himself to the sanctions foreseen in the Rules of the BOSEC brand, Administrative and legal clauses.



# Annex 1: Request form for certification and the use of the BOSEC brand

The request forms are revised on a regular basis in order to take into account specific questions.

The latest version can be found on <a href="www.bosec.be">www.bosec.be</a>



# Annex 2: Certification convention

See document available at the Certification Division from ANPI (cert@anpi.be) or on www.BOSEC.be



## Annex 3: Technical referentials

## 3.1 Passive protection

The brands ANPI, BENOR and the ATG implementation prescriptions are the only brands that are recognized by the ANPI brand.

If BENOR or ATG or an equivalent European brand is not applicable on a certain Product, this Product will have to be evaluated by a laboratory and be attested by the brand ANPI.



## 3.2. Active protection

## 3.2.1. Automatic Fire Detection (AFD)

See separate document on www.BOSEC.be

## 3.2.2. Fixed Firefighting Systems (FFS) - Automatic Fire Extinguishing (AFE)

See separate document on www.BOSEC.be

### 3.2.3. Smoke and Heat Evacuation (SHE)

The components have to comply with the standards that are specified in the project studies (EN, CEA, NFPA, FM, etc). If a European standard is harmonized it is mandatory and replaces all other referentials. The compatibility of those CE components with the other used referentials has to be guaranteed.

In all cases the traceability (through marking) and the compatibility of all components of the Installation has to be guaranteed.



### Annex 4: Procedure for notification and acceptance of product modifications

In order to maintain the validity of the certificates delivered by ANPI, ANPI has to be informed about each modification of the product.

ANPI has to be informed and has to approve the modifications before they are implemented. The procedure for the treatment of modifications described underneath has to be applied.

The procedure for treatment of announcements of modifications to Products is described in CERT PROC 023 ADVICE REQUEST F.

#### **Major modifications**

Major modifications in the documents, the production process or the Product that could affect the demonstration of conformity to the applicable standards and rules.

Examples of major modifications:

- Changes in component values
- Changing of component (f.i.: electrolytic condenser instead of a ceramic condenser, a transistor that is replaced by an equivalent or better model, thermistor of a heat detector, IR LED or photodiode in an optic smoke detector, microprocessors or ASICs);
- Changes of minor tracks on a PCB (for instance a minor modification in the position of the track in order to obtain a different component size/shape);
- Changing of material into similar or improved specifications (for instance PCB material);
- Changing of the application method of PCB coating;
- Changes to the layout or tracks of a PCB (different from the minor changes described above);
- Change of labels and documents that could affect the marking or the data requirements by ANPI or by the
  applicable standards.
- Changes, even minor, to the profile of the detector that affect the shape, the smoke entries or fixation clips;
- Changes to the protection shields against insects on a smoke detector;
- Changing of materials (e.g. metal housing replaced by plastic housing, characteristics of different materials such as for instance fragility, corrosion resistance, etc.);
- Changes or upgrades in the software or designs of programmable components (f.i.: ASIC, main and auxiliary microprocessors) that affect the functioning of the equipment;
- Changes in the characteristics of the digital circuits (e.g.: speed);
- Major changes to the production process (for instance a new production line, an alternative production site);
- Changes that can have an impact on the conformity with the EMC requirements..

The Major Modifications have to be announced to the Division Certification.

The department ANPI Division Certification will consult the laboratory in order to determine whether the announcement corresponds to a major modification and whether complementary tests are necessary. The certificate holder is never allowed to implement Major Modifications without the positive advice from ANPI Division Certification.

## **Minor modifications**

Minor modifications in the documents, the production process or the Product that do not affect the demonstration of conformity to the applicable standards and rules.

Examples of minor modifications:

- Correction of writing or typing error;
- Administrative changes to document formats etc;
- Additional information to assist the production;
- Minor changes in order to improve / update the production process;
- Changing of component manufacturer for non crucial components such as resistances, condensers, etc (N.B. a thermistor of a heat detector would be a critical component);
- Very minor changes of tracks on a PCB (for instance a slight modification (< 0.5 mm) of the track width, radius
  of curvature or size of a sensor, with the guarantee that the security and the integrity of the circuits is
  maintained);</li>
- Changing of the diameter of a mounting hole in a component;
- Minor changes to the profile of the detector that do not affect the complete shape, smoke entries or fixation clips;



- Corrections of software bugs that do not affect the requested functions;
- Minor changes of a PCB that do not affect the layout of tracks or components;
- Label changes that do not affect the marking requested by ANPI or by the applicable standard(s);

The certificate holder can group up to 5 minor modifications to the same Product before announcing them and has to announce them at least 1 month before Surveillance audit date of the Product.

The minor modifications can be implemented in the production before having received the advice from ANPI Division Certification. This implementation is the responsibility of the certificate holder.

The ANPI certification division will consult the laboratories in order to determine whether the declaration corresponds to a minor modification and whether complementary tests are necessary.

In case of deviations encountered during the surveillance test by the laboratories, the holder is obliged to provide the proof of the implementation of necessary corrective actions including the products put on the market.



# Annex 5: Surveillance stipluations

# **5.1.** Passive protection

The surveillance stipulations of the brands ANPI, BENOR and of the ATG-prescriptions, and from the possible surveillances in the framework of the decennial warranty from the buildings and works of art are applicable.



# 5.2. Active protection

# 5.2.1. Detection, Alarm and Evacuation

See separate document on www.BOSEC.be

## 5.2.2. Fire detection systems

See separate document on www.BOSEC.be

## 5.2.3. Smoke and heat Evacuation

See separate document on www.BOSEC.be



# Annex 6: Certificate models

Contact the administrative service from the ANPI Division Certification.