

Customer Guide

Agreement for Fire Detection and Fire Alarm Components

European Fire and Security Group

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About EFSG

EFSG is the association of established certification bodies of Europe specialising in the fire and security sectors. It provides a network of highly experienced certifiers with well-respected quality marks helping manufacturers to access European and worldwide markets.

Members are committed to delivering a quality approval service that is focused on the needs of specifiers seeking reliable products and equipment manufacturers that must bring their products to market quickly.

The certification bodies work together with their associated test laboratories to facilitate the acceptance of each other's results thereby offering their clients the opportunity to obtain multiple quality marks with minimal duplication and cost.

Further details about the EFSG are provided on the website: <u>www.efsg.org</u>.

About this guide

This guide is for those seeking multiple certification of products using the mutual recognition agreement published by EFSG covering fire detection and fire alarm components. Its purpose is to inform customers (normally manufacturers of fire detection equipment) about the process associated with multiple certification and explain what further testing (if any) is necessary.

Multiple certification can be obtained via any EFSG member that is signatory to the EFSG agreement applicable to the product type.

EFSG agreements

EFSG agreements are in place for each of the areas where the EFSG is active. The EFSG agreements describe the criteria for the mutual acceptance of the results of testing and assessments. EFSG agreements are specific to particular fields of activity, in this case fire detection and they state which of the EFSG members and associated testing laboratories are working together in that field of activity.

Annexed to each EFSG agreement are specific details relating to the requirements of the applicable test standards. An annex may also contain notes for the associated test laboratories to help facilitate the acceptance of the test results when presented to each EFSG member.

The certification body takes the full responsibility for the certification of conformity, including the acceptance of the tests and assessment results. Therefore testing and certification under the umbrella of EFSG is performed only where signed EFSG agreements exist.

EFSG agreements are valid for a period of 3 years after which they are renewed or revalidated by the signatories.

Updates to agreements can be made at any time.

The content of the EFSG agreements is primarily intended to assist the certification body member of EFSG and their associated laboratories but copies can be viewed publically and freely downloaded from www.efsg.org.

Every attempt will be made among EFSG members to exchange and accept test results that have been obtained in accordance with the mutual acceptance procedures, however in the unlikely event that uncertainty exists for whatever reason a certification body may request further information, which in turn might lead to further testing.

How to apply for multiple certification

To apply for multiple certification the applicant completes an application form with the EFSG member certification body of choice, stating that multiple certification is required and which quality marks are needed.

To be sure of a smooth process it is essential for the applicant to declare an intention to apply for multiple certification when first contacting the certification body. If no intention has been declared prior to the start of the testing programme it may be necessary to repeat or include additional tests in order to satisfy all the requirements of each certification body involved. In the event, the reasons for the additional tests shall be justified in writing to the applicant and the other certification bodies involved will be notified.

The chosen certification body (referred to as the primary CB) will initiate the necessary contractual arrangements and will adopt the role of project manager, liaising with the other certification bodies as appropriate.

The certification process is conducted in accordance with the specific rules and procedures of the primary CB.

A list of EFSG member certification bodies and their associated testing laboratories together with their testing capabilities is available in Appendix B of this guide.

Although the testing and certification process is managed by the primary CB there is a requirement for customers to have contractual arrangements with each certification body involved. There may also be specific rules associated with the use of each of the quality marks.

Upon successful completion of testing, the results are submitted to each of the other member certification bodies for acceptance in accordance with the EFSG agreement.

The procedures

The processes to be followed that enable the certification bodies to accept test results from the associated test laboratories are collectively referred to as the mutual acceptance procedures.

There are currently five mutual acceptance procedures defined. Each describes the process flow based on the following situations;

Situation 1

Applications made for <u>all</u> quality marks under EFSG agreements dated after July 2014.

Situation 2

Applications made for specific quality marks under EFSG agreements dated after July 2014.

Situation 3

Applications made to obtain a quality mark after the product has been approved by another EFSG member certification body (after July 2014).

Situation 4

Applications made based on product approvals undertaken to EFSG Agreements dated before July 2014 (Historic projects).

Situation 5

Applications made based on modification of an approved product.

The descriptions and pictorial representations (i.e. flow diagrams) of each situation are provided for download from the EFSG website <u>www.efsg.org/fire-detection</u> and under associated publications select the document titled '*EFSG process for the certification of fire detection products*'

Benefits of working with an EFSG member certification body

Behind the EFSG agreements are extensive inter-laboratory comparison exercises and rigorous surveillance audits that provides the confidence for the EFSG members to accept testing results from the associated testing laboratories. Experts from the EFSG membership openly exchange technical expertise and work with the major standardisation organisations to establish common interpretations and test methodology associated with the test standards. This helps to improve the quality and consistency of testing which in turn leads to better product conformity.

It is for this reason that the certificates issued by EFSG members are widely accepted by specifiers, end users and certification bodies as evidence of compliance with the appropriate standards. Products bearing the quality marks of EFSG members are universally recognised by users as being of high quality.

Some markets have additional requirements which must be met. EFSG through its network of members can ease customers into these markets by ensuring the additional requirements are included within the certification process and managed by the certification body of choice. Thereby removing the need for further compliance testing and duplication that would otherwise be required.

Products and services certified using the EFSG agreements are readily identifiable by the use of the EFSG logo on their certificate.

Complaints and appeals

Complaints from users

Complaints from users or authorities relating to certified products, systems or services received by the EFSG shall be immediately referred to the appropriate member certification body(ies) for attention under their specific complaints procedure.

Complaints from customers

Complaints from customers relating to EFSG procedures shall be immediately referred to the Board of Management for attention under the EFSG complaints procedure.

Contact with the Board of Management can be made by writing to the secretary at the address given below.

Appeals

Where a customer wishes to challenge a decision taken by an EFSG member certification body or an associated test laboratory, an appeal must be registered in the first instance with the EFSG member in accordance with the specific appeals procedure of that member.

It is expected that the appeal will be addressed within one month of receipt and resolved within the shortest time.

European Fire and Security Group

The Secretary c/o CNPP CERT SASU Route de la Chapelle Réanville 27950 La Chapelle-Longueville FRANCE

Appendix A

Scope of the fire detection agreement

Certification body members of EFSG have agreed to accept the test results from any of the associated testing laboratories that are signatory to the EFSG agreement for the EN 54 series standards identified below.

EN 54-2 Control and indicating equipment EN 54-3 Fire alarm devices. Sounders EN 54-4 Power supply equipment EN 54-5 Heat detectors EN 54-7 Point smoke detectors EN 54-10 Flame detectors - Point Detectors EN 54-11 Manual call point EN 54-12 Smoke detectors - line detectors using an optical light beam EN 54-17 Short circuit isolators EN 54-18 Input/output devices EN 54-23 Fire alarm devices - Visual alarms EN 54-29 Multi-sensor fire detectors EN 14604 Smoke alarm devices

Full testing agreement

Full testing agreement exists where the certification body signatories accept the results of the associated testing laboratories for all the test clauses of the applicable EN standard. That is, with the exception of marking, labelling and documentation requirements because each certification body must assess the equipment labelling and supplied literature in their local language.

Partial testing agreement

Where one or more test clauses (excluding marking, labelling and documentation requirements) are not included within the scope of the EFSG agreement, a partial testing agreement exists. Under a partial testing agreement the certification bodies may require further evidence of compliance with the requirements of the test clauses not included within the scope of the agreement, e.g. by testing at their associated testing laboratory.

A partial testing agreement can also apply to individual associated testing laboratories, for example, where one is in the process of being assessed by EFSG. When satisfactory results from the interlaboratory testing programmes have been confirmed the status for the individual member will be updated to the relevant standard testing agreement.

Mutual recognition

The fire detection agreement and this guide includes the mutual recognition of test results based on EN 54 series standards and the EN 14604 standard only. In future the EFSG agreement and this guide will be expanded to include the list of additional requirements specific to each quality mark certification rules.

The customer shall be aware that a certification body may have additional requirements for the certification of a product, for example, a control and indicating panel that has different options with requirements from EN 54-2 and where some are mandatory for specific quality marks or a higher severity of test is specified.

Where a standard has options with requirements, the options may be forbidden by one certification body and mandatory for another. To obtain the certificate of both certification bodies an extension of the test schedule shall be requested to cover all the relevant requirements prior to the start of testing. Requirements specific to each quality mark certification rules (e.g. Sounders with regulatory specific tones) can also be incorporated into the test schedule. In each case the certification body will advise the applicant.

A list of the additional requirements specific to each quality mark certification rules is available upon request to the EFSG Secretariat by completing the enquiry form at <u>www.efsg.org/contact</u>.

The reader should be aware that there may be other requirements 'hidden' within installation codes of practice that could have an impact on the functions provided by a product that has successfully undergone testing and certification via the EFSG route.

Mutual recognition of test results requires that the products to be certified are identical to those tested and the test reports issued by any of the associated testing laboratories contain the same level of detailed information.

Content

Control and	Indicating Equipment	EN 54-2:1997+A1:2006	

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Partial	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Partial	covers the tests of Clause 15.
VdS	VdS	Partial	
DBI	CNPP	Partial	

The test requirements listed below are those not covered by the agreement. Each certifier may therefore request further evidence of compliance with these requirements by testing at their associated testing laboratory.

Test requirement description	Clause No.	Refer to notes
General requirements	4	
General requirements for indicators	5	
Quiescent condition	6	
Fire alarm condition	7	
Fault warning condition	8	
Disabled condition	9	
Test condition	10	
Standardised I/O interface	11	
Design requirements	12	
Additional design requirements	13	
Marking	14	1)

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- 2) Requirements specific to each quality mark certification rules may require different 'options with requirements' (see annex B of EN54-2). Mutual recognition by the EFSG member certification bodies requires that these options are included within the CIE subjected to the environmental conditioning tests.

Sounders

EN 54-3:2001+A1:2002+A2:2006

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-3.
VdS	VdS	Full	
DBI	CNPP	Full	

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- Requirements specific to each quality mark certification rules may require functions in addition to those of EN 54-3. Mutual recognition by the EFSG member certification bodies requires that these functions are included within the sounders subjected to the environmental conditioning tests of EN 54-3.

Power Supply Equipment

EN 54-4:1997+A1:2002+A2:2006

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-4.
VdS	VdS	Full	
DBI	CNPP	Full	

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- 2) Requirements specific to each quality mark certification rules may require specific functions in addition to those of EN 54-4 (e.g. deep discharge protection for the batteries). Mutual recognition by the EFSG member certification bodies requires that these functions are included in the power supply equipment subjected to the environmental conditioning tests of EN 54-4.

Resettable Heat Detectors

EN 54-5:2000+A1:2002

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-5.
VdS	VdS	Full	
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Resettable Heat Detectors

EN 54-5:2017+A1:2018

	Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
	AFNOR	CNPP	Full	The scope of the EFSG agreement
Γ	BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-5.
Γ	VdS	VdS	Full	
	DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Optical & ionization Smoke Detectors EN 54-7:2000+A1:2002+A2:2006

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-7
VdS	VdS	Full	except Annex N.
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Optical & ionization Smoke Detectors EN 54-7:2018

Signatory	Associated Testing	Agreement	Comment
Certification Bodies	Laboratories	type	
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-7.
VdS	VdS	Full	Agreement of clauses 4.2.6, 4.3.2
DBI	CNPP	Full	and 4.4.2 applies to closed detectors
			only.

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

EN 54-10:2002+A1:2005

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Partial	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Partial	covers test clauses 5.6 through to
VdS	VdS	Partial	5.15 and 5.17.
DBI	CNPP	Partial	

The test requirements listed below are those not covered by the agreement. Each certifier may therefore request further evidence of compliance with these requirements by testing at their associated testing laboratory.

Test requirement description	Clause No.	Refer to notes
General requirements	4	
Reproducibility	5.2	
Repeatability	5.3	
Directional dependence	5.4	
Fire sensitivity	5.5	
Variation in supply parameters	5.16	
Marking	6	1)

Notes

Manual Call Points

Flame Detectors

EN 54-11:2001+A1:2005

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN54-11.
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Smoke Detectors – Line Detectors using optical light beam

EN 54-12:2015

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Partial	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Partial	covers test clauses 4.2, 4.3.4, 4.3.5,
VdS	VdS	Partial	environmental and EMC testing.
DBI	CNPP	Partial	

¹⁾ Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

The test requirements listed below are those not covered by the agreement. Each certifier may therefore request further evidence of compliance with these requirements by testing at their associated testing laboratory.

Test requirement description	Clause No.	Refer to notes
Operational reliability	4.2	
Rapid changes in attenuation	4.3.4	
Response to slowly developing fires	4.3.5	
Environmental tests	4.6.x	
EMC test	4.6.4	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Short Circuit Isolators

EN 54-17:2005 + AC:2007

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN54-17.
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Input / Output Devices

EN 54-18:2005 + AC:2007

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN54-18.
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Visual Alarm Devices

EN 54-23:2010

Signatory	Associated Testing	Agreement	Comment
Certification Bodies	Laboratories	type	
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of EN54-23
VdS	VdS	Full	with the exception of Clause 5.3.1
DBI	CNPP	Full	Coverage Volume for non LED types
			only. For example, there is no mutual recognition of test results for the coverage volume of visual alarm devices incorporating xenon strobes.

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- Requirements specific to each quality mark certification rules may require specific functions in addition to those of EN 54-23. Mutual recognition by the EFSG member certification bodies requires that these functions are included in the visual alarm devices subjected to the environmental conditioning tests of EN 54-23.

Multi-Sensor Fire Detectors

EN 54-29:2015

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN54-29.
DBI	CNPP	Full	

Notes

1)

Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Smoke Alarm Devices

EN 14604:2005 + AC:2008

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN14604.
DBI	CNPP	Full	

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- 2) Requirements specific to each quality mark certification rules may require specific functions in addition to those of EN 14604. Mutual recognition by the EFSG member certification bodies requires that these functions are included in the smoke alarm devices subjected to the environmental conditioning tests of EN 14604.

Manual triggering and stop devices for Gas extinguishing systems

EN 12094-3: 2003

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement is
BRE Global Ltd	BRE Global Ltd	Full	limited to electrical devices with
VdS	VdS	Full	EN 54-11 design.
DBI	CNPP	Full	

Notes

1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.

Power Supplies for Smoke and heat EN 12101-10: 2005 + AC: 2007 control systems

Signatory Certification Bodies	Associated Testing Laboratories	Agreement type	Comment
AFNOR	CNPP	Full	The scope of the EFSG agreement
BRE Global Ltd	BRE Global Ltd	Full	covers all the test clauses of
VdS	VdS	Full	EN 12101.
DBI	CNPP	Full	

Notes

- 1) Each CB to assess the equipment labelling and supplied literature e.g. user manuals in their local language.
- 2) A certification body may require additional functions (e.g. deep discharge protection for the batteries). Mutual recognition requires that these functions are included in the p.s.e. submitted to environmental testing.

Appendix B

Member certification bodies and the testing capabilities of the associated testing laboratories

			Cer	tificatio	on bod	ies
Certification bodies and their associated testing laboratories			AFNOR Certification	BRE Global Ltd	SbV	DBI
Associated Testing laboratories	Standards	Remarks / Limitations to tests				
	EN 54-2	None		٠		
	EN 54-3	Frequency: not less than 365Hz. IP for outdoor use (1)		•		
	EN 54-4	None		•		
	EN 54-5	None		•		
	EN 54-7	None		•		
	EN 54-10	None		٠		
BRE Global Ltd	EN 54-11	IP for outdoor use (1)		•		
	EN 54-12	None		•		
	EN 54-17	None		٠		
	EN 54-18	None		٠		
	EN 54-23	IP for outdoor use (1)		٠		
	EN 54-29	None		٠		
	EN 14604	Electrical safety (1)		٠		
	EN 12094-3	Only electrical devices with EN 54-11 design		•		
	EN 12101-10	Only electrical PSE with batteries		•		
	EN 54-2	None	•			
	EN 54-3	Frequency : not less than 400Hz	•			
	EN 54-4	None	•			(
	EN 54-5	classes A1 to C only	•			(
	EN 54-7	None	•			(
	EN 54-10	None	•			(
NPP	EN 54-11	None	•			
	EN 54-12	None	•			(
	EN 54-17	None	•			(
	EN 54-18	None				(
	EN 54-23	None				(
	EN 54-29	None				(
	EN 14604	None	•			(
	EN 12094-3	Only electrical devices with EN 54-11 design	•			(
	EN 12101-10	Only electrical PSE with batteries				

(1) The tests are subcontracted to another associated testing laboratory listed in this agreement

				tificatio	on bod	ies
Certification bodies and their associated testing laboratories		AFNOR Certification	BRE Global Ltd	BKE Global Ltd VdS		
Associated Testing laboratories	Standards	Remarks / Limitations to tests				
	EN 54-2	None			•	
	EN 54-3	Frequency : not less than 400Hz			•	
	EN 54-4	None			•	
	EN 54-5	None			•	
	EN 54-7	None			•	
	EN 54-10	None			•	
/dS Schaden-verhütung	EN 54-11	None			•	
Schauen-verhutung	EN 54-12	None			•	
	EN 54-17	None			•	
	EN 54-18	None			•	
	EN 54-23	None			•	
	EN 54-29	None			•	
	EN 14604	None			•	
	EN 12094-3	Only electrical devices with EN 54-11 design			•	
	EN 12101-10	Only electrical PSE with batteries			•	

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