

Accreditation of fire laboratories – interpretation of EN ISO/IEC 17025 for fire laboratories

(revision of EGOLF R4:2002)

Contents

	Page
Foreword	2
Scope	2
Part 1 Analysis of EN ISO/IEC 17025 and its application to fire test laboratories	3
Part 2 Interpretation of EN ISO/IEC 17025 when applied to fire test laboratories	9
Application notes	
clause 4 Signatories to reports	9
clause 4.1.4 Impartiality and conflict of interest	10
clause 4.4 Joint sponsors for fire testing, extended application and classification	12
clause 5.8 Handling of test materials and test specimens	14
clause 5.10/1 Types of reports	16
clause 5.10/2 Translation of reports	18
clause 5.10/3 Rectification of errors in reports	19
clause 5.10/4-1 Amendment of reports: clients changing product / company names (i) - for technical reasons - Issue of supplementary test reports	21
clause 5.10/4-2 Amendment of reports: clients changing product / company names (ii) - for commercial reasons - Issue of additional test reports	23
Application note to clause 5.10-5 Joint sponsors for fire testing: issue of reports	25



Foreword

EGOLF R2 was published in 1998 to provide guidelines to EN 45001: 1989. EN ISO/IEC 17025:1999 replaced EN 45001 resulting in R2 being withdrawn and replaced by R4. With the publication of the 2005 edition of EN ISO/IEC 17025, R4 has also been revised. The application notes in R4 addressed test reports, however fire laboratories now issue three types of reports, test reports, extended application reports and classification reports. Wherever the text in this Agreement refers to a test report, the text is equally applicable to extended application reports and classification reports.

1 Scope

This document

- provides an agreed framework against which, a common understanding can be reached amongst EGOLF member laboratories on what is required to meet and implement the requirements of EN ISO/IEC 17025: 2005 and to satisfy the requirements of Accreditation Bodies.
- creates, as a result of this understanding, a common level of technical performance and competence amongst EGOLF member laboratories, leading to mutual acceptance of test reports between laboratories.
- provides, through this agreed framework, a common interpretation of EN ISO/IEC 17025: 2005 against which all European Accreditation Bodies will provide accreditation and surveillance services to all EGOLF member laboratories and their specific fire testing activities.
- ensures, through this agreed framework, that European Accreditation Bodies apply uniform accreditation criteria to all EGOLF member laboratories.

The principles of this framework, where appropriate, may be adopted by other fire test laboratories and / or applied by European Accreditation Bodies to other fire test laboratories on the basis of national, local or other arrangements.

This document supplements EN ISO/IEC 17025: 2005. Where the requirements of EN ISO/IEC 17025: 2005 are considered to need specific interpretation or more detailed clarification for fire test laboratories and for those carrying out assessments of fire test laboratories then guidance on that interpretation is given in the form of Application Notes.

This document is applicable to all fire tests and associated measurements, whether to International, European or National test standards or to ad hoc tests, upon materials of any type.

Part 1 gives an analysis of the applicability of all clauses of EN ISO/IEC 17025 to the work and activities of fire test laboratories, that analysis and discussion leading to the Application Notes in Part 2.

Where possible this document is numbered as EN ISO/IEC 17025: 2005 and gives reference to the appropriate clauses therein.

EN ISO/IEC 17025: 2005 is the authoritative document to be applied to fire test laboratories in Europe.

In cases of dispute individual accreditation bodies will resolve matters with National Fire Test Expert Groups or with an appropriate joint EA [European Co-operation for Accreditation] / EGOLF forum. This document shall be revised if necessary as a result.

Part 1 Analysis of EN ISO/IEC 17025 and its application to fire test laboratories

1 Scope

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

2 Normative references

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

3 Terms and definitions

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4 Management requirements

Comment: the laboratory is required under EN ISO/IEC 17025: 2005, § 4.1.5j to appoint deputies for key, responsible persons and to define the roles and responsibilities within the quality manual under EN ISO/IEC 17025: 2005, § 4.1.5.f.

All communication with the client will be co-ordinated by a responsible person. EN ISO/IEC 17025: 2005, § 4.1, § 4.4.

The responsible persons within the laboratory, including those who might be qualified to sign test reports, extended application reports and classification reports are defined under several clauses in EN ISO/IEC 17025: 2005, § 4.1.5a, § 4.1.5f, § 4.1.5h, § 4.2.2, §4.2.2d, § 4.4.1, § 5.2.1, § 5.2.4, § 5.2.5 .

EN ISO/IEC 17025: 2005 does not discuss the legal responsibility for the content of the test reports. EN ISO/IEC 17025: 2005 §5.10.2j states that names, functions and signatures of persons who release the test report are mandatory.

Agreement: The detailed procedures (particularly those relating to technical/legal responsibility) in "Application Note" No. 4.0 should form the basis of an EGOLF model to be used by members in naming responsible persons in the quality manual.

4.1 Organisation

Comment: the laboratory is required under EN ISO/IEC 17025: 2005, § 4.1.4 to ensure that the organisation shall avoid potential conflicts of interest when both testing and other activities are performed within the organisation.

Otherwise, the principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Agreement: The detailed procedures relating to avoidance of potential conflicts of interest given in "Application Note" No. 4.1.4 should be followed by EGOLF members.

4.2 Quality system

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.3 Document control

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.4 Review of requests, tenders and contracts

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: EN ISO/IEC 17025: 2005, § 4.4, § 5.4.2, § 5.10.2 and § 5.10.3, §5.10.6, §5.10.7, §5.10.8, §5.10.9 address the preparation of a contract with the client, the selection of methods appropriate to the clients needs and reporting to clients.

There is no specific reference to "joint sponsors" although § 5.10.3.1e addresses "additional information which may be required by "clients or groups of clients".

Co-operation and mutual exchange of information between the laboratory and the client to avoid misunderstandings in connection with the planning, preparation and performance of tests is covered in EN ISO/IEC 17025: 2005 § 4.4.

The laboratory may make enquiries from the client about any potential health & safety and environmental hazards associated with the test material, which might lead the laboratory to discover that it does not have the resources (i.e. safety equipment and procedures) to perform the test safely.

Agreement: The issue of "Contracts with Joint Sponsors" is a specific case (of a single client). The detailed procedures given in "Application Note" No. 4.4 should be followed by EGOLF members.

4.5 Subcontracting of tests and calibrations

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.6 Purchasing services and supplies

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.7 Services to the client

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: The laboratory, based on its experience, may offer professional advice and recommendations to the client before the test is carried out according to § 5.4.2. The presence of clients, which should not jeopardise the test result in any way or the confidentiality of other clients, is covered in § 4.7 and § 5.3.

Clients right to inspect test residues and decide upon disposal means if not already agreed contractually is covered in § 4.7 and § 5.8.

Intellectual property which cannot be traced back to a certain test or sponsor (e.g. general knowledge, obtained from carrying out tests) must be considered as information that is free from any obligations and be outside the scope of EN ISO/IEC 17025: 2005, provided § 4.7 is satisfied.

4.8 Complaints

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.9 Control of nonconforming testing and/or calibration work

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.10 Improvement

This subject was a remark under paragraph §4.9 in the EN ISO/IEC 17025: 1999.

4.11 Corrective action

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.12 Preventive action

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.13 Control of records

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.14 Internal audits

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

4.15 Management reviews

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

5 Technical requirements

5.1 General

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

5.2 Personnel

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

***Comment:** EN ISO/IEC 17025: 2005 defines in detail the qualifications required to perform specific tasks § 5.2.1, identification of training needs § 5.2.2, job descriptions §5.2.4 and authorisation of personnel for specific tasks § 5.2.5. Records of authorisations, competence, qualifications etc. are required to be kept under § 5.2.5.*

There are few universities and schools offering direct training and formal qualifications in fire related disciplines. Each laboratory should address problems of recruitment and training in fire matters of civil engineers, mechanical engineers and other such persons in its quality manual.

5.3 Accommodation and environmental conditions

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

***Comment:** EN ISO/IEC 17025: 2005 requires that specific environmental conditions and controls stated within a standard shall be followed, monitored, controlled and recorded. The scenario where such environmental conditions are not available is addressed by EN ISO/IEC 17025: 2005, § 5.3.1, § 5.3.2., § 5.3.3, §5.3.4, §5.3.5 and reported under § 10.3.1 and § 10.3.2.*

EN ISO/IEC 17025: 2005, § 4.3.3.4, §4.12, § 5.3.2 and § 5.4.7 cover environmental risk (corrosion, smoke and heat) for the use of computers and control and storage of data.

Restricted access to particular areas of a laboratory for confidentiality or quality reasons are specified in § 4.7.1 and § 5.3.4.

5.4 Test & calibration methods / method validation

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *EN ISO/IEC 17025: 2005 covers the use of standard methods and controls to be applied when the standard methods do not fully apply or the client requires something different e.g. (a) deviations from the standard test § 5.4.1, § 5.4.2, (b) the non-standard test (including EGOLF Agreements, national instructions or individual laboratory interpretations) § 5.4.2, § 5.4.3, § 5.4.4, and (c) the indicative test § 4.4.1, § 4.7.1, § 4.9, § 5.4.2, § 5.4.4 and § 5.10.1.*

EN ISO/IEC 17025: 2005 § 5.4.2 requires that laboratories be informed of changes in test methods and use the latest approved method and that obsolete methods are withdrawn but retained for archive purposes. They may be used at the specific request of a client. Clients should be informed of changes to fire test methods and any consequences arising.

Estimation and measurement of uncertainty of test results is now mandatory. EGOLF should determine means to evaluate uncertainty of measurement for each individual method or family of methods, despite the known difficulties related to the very nature of fire testing.

5.5 Equipment

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *EN ISO/IEC 17025: 2005 requires that laboratories shall possess equipment that complies with the requirements of the standard in use etc. § 5.5.2 and meets uncertainty of measurement demands. There should not normally be a case where the equipment to be used is not defined in the standard. Should such a situation arise where the equipment to be used in a Standard Fire Test is not defined therein, then EGOLF should define that deemed proper and suitable for purpose, as part of its' training programmes.*

5.6 Measurement traceability

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment

As long as the item of measuring equipment contributes to the total uncertainty then components of multi-component items of test equipment, e.g. oil or gas flow indicators or controllers, pressure indicators, thermocouples etc., shall be treated individually and any necessary calibration procedures or manufacturers instructions followed § 5.6.2.2.1.

EN ISO/IEC 17025: 2005 § 5.6.2.2 and § 5.6.2.1.2 states the conditions under which calibration that are not done in SI-measurement have to be done. This would include the situation where International or National Standard Procedures for calibration and maintenance of equipment to be used in fire testing do not exist then EGOLF Agreements, where available, shall be used.

Laboratories shall have an established programme and procedure for the calibration of equipment, § 5.6.1.

A program and procedure for the calibration of Reference Standards of Reference Materials is mandatory in EN ISO/IEC 17025: 2005 § 5.6.3 As a result EGOLF Technical Committees should

*define the choice and type of reference standards or reference materials to be used for each standard fire test as far as this is not defined in the test- or calibration standard.
The use of Reference Standards or Reference Materials is mentioned in the EN ISO/IEC 17025: 2005 § 5.6.3.*

5.7 Sampling

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *Sampling is fully covered under EN ISO/IEC 17025: 2005, § 5.7. The sampling process shall be fully documented, whether carried out by the laboratory (or by inference, the client) and be reported § 5.10.2h. Any deviations from the sampling plan or requirements, whether laboratory or client initiated, shall be recorded § 5.7.2 and § 5.10.3.*

5.8 Handling of test and calibration items

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *Under EN ISO/IEC 17025: 2005, the laboratory shall have a procedure for the "Receipt, handling, protection, storage etc. of test samples", § 5.8.1, § 5.8.3 and § 5.8.4. Assembly of test specimens will be covered by these clauses, whether performed by the client, by the client's agent or a sub-contractor acting on behalf of the client or the laboratory.*

Under EN ISO/IEC 17025: 2005, monitoring of the assembly process, inspection before testing, conditioning and client confidentiality are covered by § 4.7 and § 5.8. Any relaxation in respect of confidentiality demands shall be part of the agreed contract, § 4.4. Any deviation with respect to the test standard shall be agreed with the client § 4.4 and reported § 5.10.2 and 5.10.3.

The procedures for control of assembly, post test verification and disposal of fire test specimens are largely covered by EN ISO/IEC 17025: 2005, § 4.4, § 4.12.2, § 5.7, § 5.8, § 5.9 and § 5.10. However, the procedures given therein are insufficient.

Under EN ISO/IEC 17025: 2005, the laboratory shall have a procedure for the "transportation, receipt, handling, protection, storage, retention and/or disposal of test samples (residues, including all provisions necessary to protect the integrity of the test item and to protect the interests of the laboratory and the customer)", § 5.8.1.

Agreement: The more detailed procedures for "control of assembly, post test verification and disposal of fire test specimens" given in "Application Note" No. 5.8/1 should be followed by EGOLF members.

5.9 Assuring quality of test & calibration results

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *Participation in inter-laboratory co-operation and comparison schemes is covered by EN ISO/IEC 17025: 2005, § 5.9. Participation in such schemes is one of the tasks within EGOLF to assist its members in obtaining valid information.*

5.10 Reporting the results

The principles are fully covered by the requirements of EN ISO/IEC 17025: 2005.

Comment: *The alternative naming of test reports as test certificates is indicated in § 5.10.1 (note 1). To avoid confusion test documents issued by fire test laboratories shall be named "Test Reports", unless national requirements state otherwise.*

The fire test laboratory may issue several types of reports depending upon the type of test and clients instructions (which should be written instructions § 4.4). Each of the types of test report described in "**Application Note**" No 5.10/1 is permitted under EN ISO/IEC 17025: 2005, § 5.10.1 and any instruction about its validity for product assessment, certification or approval purposes is permitted under § 5.10.1.

Translations of test reports, the subject of "**Application Note**" No 5.10/2, is not addressed by EN ISO/IEC 17025: 2005.

The procedure of "**Application Note**" No 5.10/3. Amendment of test reports (To rectify incorrect information) is permitted under EN ISO/IEC 17025: 2005, § 4.9 and § 5.10.9. Under § 5.10.9 a new revised test report must be uniquely identified (c.f. the EGOLF proposal was that the test report carried the same number).

Amendment of test reports is permitted under EN ISO/IEC 17025: 2005, § 5.10.9 without any specified permitted reasons for so doing. Therefore, presumably sponsors changing product / company names, "**Application Note**" No 5.10/4, is a valid reason for re-issue of supplementary test reports.

EN ISO/IEC 17025: 2005, § 4.4, § 5.4.2, § 5.10.2 and § 5.10.3 address the preparation of a contract with the client, the selection of methods appropriate to the clients needs and reporting to clients. There is no specific reference to "joint sponsors" although § 5.10.3 addresses "additional information which may be required by "clients or groups of clients". "**Application Note**" No. 5.10/5 is not specifically addressed by EN ISO/IEC 17025: 2005. The issue of "Joint Sponsors" is a specific case (of a single client).

EN ISO/IEC 17025: 2005 § 4.9, § 5.10.9 addresses the continued validity of a test result if a non-conformance arises. If as a result of the investigation amendment of the test report or issue of a new test report is required then either is permitted.

Agreement: The detailed procedures for "types of test reports, translation of test reports, rectification of errors, amendment of test reports and reporting to joint sponsors" given in "Application Notes" No.5.10/1 to 5.10/5 should be followed by EGOLF members.

5.11 Remark

The application notes give the EGOLF members a more detailed way of dealing with those subjects than EN ISO/IEC 17025: 2005.

The new EN ISO/IEC 17025: 2005 compared to the previous edition (EN ISO/IEC 17025: 1999) has changed little. On the following point there is a difference:

- definitions : the ISO/IEC 17000 is mentioned
- §4.1.5 k and § 4.1.6 have been added
- §4.2.2 e :
- §4.2.3, §4.2.4 and §4.2.7 have been added
- §4.10 has been changed from a remark under §4.9.2 to a new paragraph
- §5.2.2. has been elaborated
- §5.9.2
- The cross reference table in add. A is a cross reference between ISO 9001:2000 and the EN ISO/IEC 17025: 2005

Part 2: Interpretation of EN ISO/IEC 17025: 2005 when applied to fire test laboratories – Application notes

Application note to clause 4

Signatories to reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

The laboratory will have named signatories who are qualified to sign test reports and to be legally and technically responsible for the content of those reports.

(ii) Operating guidelines

An authorised person, or persons, with official (management) responsibility for the test being reported and for the legal liability of the laboratory, shall sign all test reports.

Laboratories may decide whether one or two signatories to test reports are required. For larger laboratories it is likely that two signatories might be required, but for smaller laboratories a single person might have responsibility for both aspects and sign accordingly.

Any signature relating to legal liability for the test reported should be applied to the test report after the authorised technical signatory has signed it.

Approved deputies with authority to sign test reports in respect of the technical content of the test report and in respect of the legal liability of the laboratory shall be permitted.

Only authorised signatories or approved deputies may sign test reports.

The names and positions of all authorised signatories of test reports in respect of the technical content of the test report and their approved deputies shall be recorded in the Laboratory Quality Manual or similar official controlled documentation. This information shall normally be given for each individual test carried out by the laboratory.

The names and positions of all authorised signatories of test reports in respect of the legal liability of the laboratory and their approved deputies shall be recorded in the Laboratory Quality Manual or similar official controlled documentation.

Additional signatures to those given above e.g. that of the laboratory technician carrying out the work may optionally be applied to test reports, according to the rules of the laboratory.

The Laboratory Quality Manual or similar official controlled documentation should describe for the particular laboratory on what basis authorised signatories and approved deputies are chosen.

Application note to clause 4.1.4

Impartiality and conflict of interest

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to the means whereby laboratories maintain impartiality and ensure that their personnel are free from any undue pressures which might influence their technical judgement.

It especially applies to situations where laboratories are involved in design, product development or consultancy on behalf of industrial or commercial clients. It considers the means by which separation of responsibilities is made to ensure that persons involved in such design, product development or consultancy activities are not involved in, or may influence, any subsequent aspect of the proof of conformity of the products(s), i.e. testing, extended application, inspection and/or certification work.

(ii) General principles

Laboratories shall ensure that management practices exist whereby the impartiality of all personnel, involved in design, product development, consultancy or testing work on behalf of industrial or commercial clients, within the laboratory is maintained and situations likely to give rise to conflicts of interest are avoided.

(iii) Transparency

A significant aspect in evaluating or assessing the laboratories impartiality is considered to be transparency. There is a need to provide full information to potential end users about the scope of the laboratory activities and the relationship that the laboratory may have with any manufacturer or supplier, or with any industry or commercial based trade association(s), in connection with activities other than those directly related with proof of conformity of a product.

Of specific concern is that information accumulated from activities related to proof of conformity assessment of one or more products is not used to the benefit of other similar products. Test results and information declared by the manufacturer/supplier which relates to any one product shall not be used to the benefit of any other manufacturer or supplier.

(iv) Operating guidelines

Laboratories shall have a clearly stated intention that the work performed by all their personnel shall be performed impartially. Laboratories shall ensure that impartiality is maintained by:

- Preferably, organisational arrangements being made to ensure that design, product development and consultancy work is fully separated from testing and extended application activities.
- Otherwise, persons and resources being assigned to design, product development, consultancy and/or testing and extended application work in a way such that confidentiality and impartiality can be demonstrated.

Laboratory management shall examine, throughout every design, product development, consultancy or test programme that the integrity of that work is not influenced by any internal or external person(s) or organisation(s).

In considering the competency of personnel and authorisation to perform specific work items or practices, notice shall be provided and guidance given where that stated competency or authorisation might lead to conflict of interest.

Laboratories shall ensure that when design, product development, consultancy or test work programmes are defined and organised that different tasks are allocated to personnel in such a way that there can be no conflict of interest and impartiality be maintained. Where conflict of interest is possible or likely to arise, such allocation of tasks shall be detailed in writing as part of the work plan.

Laboratories shall ensure that when a contract to provide design, product development, consultancy or testing and extended application work is made attention is paid to solving any conflict of interest problems. If this cannot be done by separation at the organisation level, special procedures may need to be devised to ensure that none of the personnel making decisions have any conflicting interests.

Laboratories shall review the effectiveness of their procedures designed for the purpose of effecting impartiality and avoidance of conflict of interest according to their internal audit and management review procedures, as required under EN ISO/IEC 17025: 2005.

(v) Declaration in contract

Where a laboratory involves itself in activities other than those that are directly related to evaluating product performance for the purposes of proof of conformity, especially those related to the role of a notified body within the context of Community legislation, it shall provide a statement within its conditions of contract that relate to each proof of conformity task.

The statement shall be of the following form:

"In addition to testing, extended application, classification, inspection and/or certification activities that are related to demonstration of proof of conformity of products, this laboratory (or the organisation to which it belongs) is involved in aspects of design or consultancy in connection with the development of products. However, specific internal procedures are employed within the organisation to protect against any conflict of interest and to ensure impartiality in the operation of tasks associated with proof of conformity of products"

Application note to clause 4.4

Joint sponsors for fire testing, extended application and classification

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to situations where several companies or organisations combine to provide materials or components of a test specimen, or data leading to a test, extended application or classification report being prepared. Each requires, as a result of the activity, a report relating to the performance of its material or component.

(ii) Definition of joint sponsorship

Joint sponsorship occurs when:

- a) A material or an element of building construction to be tested is produced jointly by several manufacturers or suppliers of components, (and is assembled in or outside the laboratory).
or
- b) When a material or element of building construction is manufactured against a single approved product standard and is made and sold by different companies under different trade names. For instance:
 - A single manufacturer selling one product through different outlets under different trade names
 - A single manufacturer making the same product in separate locations or divisions of the company and selling it through the same or different outlets under the same or different trade names
 - The same product is manufactured in several companies, e.g. under licence, and is sold through the same or different outlets under the same or different names.

Each manufacturing point or sales outlet for the product may be considered as a separate sponsor in the joint sponsorship.

(iii) Operating guidelines for contracts between joint sponsors and laboratories

Joint sponsorship of fire tests, extended application or classification may be allowed, at the discretion of the laboratory. The contractual arrangements shall be agreed between the laboratory and all joint sponsors.

Each joint sponsor shall agree when the contract is drawn up between the laboratory and the joint sponsors the exact status of each and whether each may additionally receive separate individual test reports - each with their own name indicated as sponsor and (if relevant), with the trade name of their product.

The laboratory shall treat each joint sponsor equally.

Each sponsor shall agree to provide details of any approved standard to which the product or its component parts may have been manufactured and all construction features on each component that are essential to the fire test result.

Each joint sponsor shall agree to provide details of any special procedures for verification of the product or its' component parts which are to be tested or subject to extended application.

The joint sponsors and the laboratory shall agree the individual responsibilities of each of the parties involved for the construction, assembly and erection of any the test specimens.

All joint sponsors shall agree the legal basis of ownership and authority for the subsequent use of the test reports. This includes for instance, extended application, amendments and supplements, transfer of ownership and permission for use by 3rd parties. In order to avoid problems related to ownership and use in the future all joint sponsors shall agree, at the outset, whether permission for such subsequent use is required to be obtained from all of the joint sponsors or just one.

The means of disposal of any test residues shall be agreed as part of the contract to test made between the laboratory and the joint sponsors.

Application note to clause 5.8

Handling of test materials and test specimens

Incorporating: control of assembly of fire test specimens
post-test verification of fire test materials
control of disposal of fire test specimens

(i) Scope

This document provides the procedures by which fire test laboratories shall control and verify fire test specimens before test and ensure security of identity and client confidentiality at all stages of their handling from receipt until disposal.

(ii) Operating guidelines: Control of assembly of fire test specimens

These procedures apply to control of assembly of fire resistance test specimens. If appropriate to reaction to fire test specimens then the same principles shall apply.

General: The client is responsible for the construction and erection of the test specimens. Normally, this is carried out by the client or a sub-contractor acting for the client (the laboratory may act as the sub-contractor).

The client shall provide, to the laboratory, a description of all constructional details, drawings and schedule of major components, their manufacturer/supplier and an assembly procedure, sufficiently in advance of the test to enable the laboratory to plan and carry out verification that the test specimen and its assembly conforms with the information provided. Any special procedures for verification of test specimens given in the test method or product standards for specific products shall be followed.

The above verification may be carried out by a third party, e.g. sub-contractor, but the responsibility for the accuracy of that verification remains with the laboratory.

Assembly of test specimens: Assembly of test specimens can be carried out either within the laboratory or at the client's premises.

Assembly in the laboratory: The laboratory shall arrange that facilities are made available to the client or client's agent, such that assembly, conditioning and storage may take place in confidence (to both client and other clients).

Assembly at the clients' premises: The client shall inform the laboratory of the manufacture / assembly schedule sufficiently in advance to enable the laboratory to arrange to carry out verification of the specimen and its assembly. If it is not possible to monitor and verify the whole assembly process it shall be agreed that the most important stages shall be overseen and recorded. That part of the assembly process which is not monitored by the laboratory shall be recorded by the client, e.g. by photographs, the results of which can be used by the laboratory for verification purposes.

If the assembly is carried out at the client's premises and the laboratory cannot monitor and verify that process, the laboratory may request an additional specimen for verification purposes. The laboratory shall decide which specimen is to be tested and which is to be used for verification purposes (i.e. be dismantled and examined).

The verification process: The laboratory shall monitor and verify the most important stages of the assembly process. The following shall be examined and verified against the documentation provided:

- The type, manufacturer, quality and dimensions of the materials and components of the test specimen
- The identity and actual material properties (e.g. Density, nominal equilibrium moisture content, strength etc.) Determined on samples of the materials and components
- The surface preparation, amounts of adhesives and surface finishes (paints) applied (where appropriate)
- Photographs and / or other appropriate type of record, e.g. video, of the different stages of the assembly.

For test specimens assembled at the clients premises the verified test specimen shall be marked (signature and date), be sealed or secured, and not opened or altered before testing takes place.

Documentation of the verification process: the following shall be recorded and retained during the process of verification of the test assembly:

- Client company, address and date
- Name of company carrying out the assembly, if other than the client
- Type, manufacturer, quality and dimensions of the materials / components of the test specimen
- Fabrication method and equipment used
- Actual material properties measured on samples of the materials and components
- Ambient conditions
- The surface preparation, amounts of adhesives and surface finishes [paints] applied, as appropriate
- Photographs and / or other appropriate type of record, e.g. Video, of the different stages of the assembly.

All deviations from the drawings and specifications shall be recorded (and discussed with the client before testing is commenced).

(iii) Operating guidelines: Post-test verification of fire test materials

If it is not possible to verify that the test specimen and its assembly conforms with the information provided by and specified by the client prior to the fire test, then, the laboratory shall do so immediately after the test, as explicitly as possible, before any disposal of the test specimen occurs (e.g. examination of the interior of sealed components such as doors etc.).

The test specimen or its component(s) can be cut in pieces, opened or dismantled and the materials etc. therein as well as the installation and fixing methods used can be checked according to (ii) Operating guidelines: Control of assembly of fire test specimens (5.8).

(iv) Operating guidelines: Control of disposal of fire test specimens

The laboratory shall ensure that fire test residues are held securely and in confidence.

Fire test residues, or representative parts thereof, may be retained, where necessary or practical at the discretion of the laboratory, for four weeks after delivery of the test report to the client (or according to any different instructions in the test method used).

Note: some test specimens may be so large or so badly damaged by the test that it is not possible to retain and store them. In this case the test residues may be destroyed immediately after the test.

Before disposal of fire test residues the laboratory shall ensure that sufficient evidence is held about the performance of the test specimen to permit any errors arising in the test report to be rectified and a supplement to the test report to be issued, according to EGOLF Application Note 5.10/3.

Test residues should be subject to disposal in a manner agreed between the laboratory and the client. That disposal, which may be carried out by the laboratory or by the client, shall be carried out according to locally, permitted procedures.

Where the client has supplied more test specimens than is actually required for testing the additional untested specimens shall be treated in the same manner as fire test residues.

Before disposal all test residues and additional test specimens shall be rendered unidentifiable, e.g. by removal or blotting out markings of the client and laboratory. The laboratory waste storage facility shall be inaccessible to unauthorised persons.

Application note to clause 5.10 / 1

Types of reports

Note: The text of this Application Note covers test reports only, however it is envisaged that a short form classification report might also be prepared.

a) Test reports

(i) Scope

The FULL TEST REPORT shall be the only valid test report according to EN ISO/IEC 17025: 2005. It shall be written in such a way that anybody having the technology can perform the test again and get the same test results.

EGOLF members may during the course of their work be required by their clients to issue the following other types of fire test reports in addition to the full Test Report:

- Short form test report
- Test confirmation letter
- Indicative test report
- Report from a non-standard or ad-hoc test

(ii) Content of the full test report

The full Test Report shall contain and fully address all requirements of the fire test standard in use and EN ISO/IEC 17025: 2005.

(iii) Other types of test reports and their content

EGOLF members may issue the other different types of test reports defined in the scope, provided the circumstances under which each is required and the data presented therein is as specified below:

Short form test report

A short form test report is one in which the test results obtained during the test and fully reported in the full Test Report are presented in an abbreviated and summarised form.

A short form test report may be issued in 2 cases:

- a) When the use of such a report, which shall be additional to the full Test Report, is prescribed or authorised as an option within the test standard.

In this case the sponsor may request and the laboratory agree to produce a short form test report as specified in that test method. This is particularly so for all fire resistance testing where the use of short form test reports is permitted in the "General Requirements" document EN 1363-1.

- b) When the test results obtained indicate that the product fails to achieve the required level of performance.

In this case the sponsor may ask the laboratory to present the results in a summarised format, even though the use of such a format is not prescribed or authorised as an option within the test standard.

All short form test reports shall state "*Whilst the test data provided within this short report was obtained in a test conducted fully in accordance with[standard] the presentation of the results in this short form may not satisfy the requirements of that standard and EN ISO/IEC 17025: 2005. The presentation of the results in this manner is made by agreement with the sponsor and use of the information herein for product assessment, approval or certification purposes will be restricted*".

□ Test confirmation letter

A test confirmation letter is one issued in advance of the full Test Report at the request of the sponsor to give an indication of the likely test results.

Test confirmation letters may be issued in advance of the full Test Report in cases where preparation of the full Test Report is likely to take some time to complete, e.g. in fire resistance testing. They shall be valid for ~~4~~ six months only or until the full Test Report is issued, whichever is earliest. They shall be re-issued on a monthly basis until the full Test Report is issued.

There shall be stated within the test confirmation letter that *"Whilst the test information and results provided within this test confirmation letter were obtained from a test conducted fully in accordance with.....(the standard fire test used) the presentation of the results in this manner does not satisfy the requirements of that standard and EN ISO/IEC 17025: 2005. Additionally it should be recognised that the result of the test might change during further analysis of the data during the completion of the full Test Report. The information provided in this test confirmation letter is valid for ~~4~~ six months only or until the full Test Report is issued, whichever is earliest"*.

□ Indicative test report

An indicative test report is one that gives test results arising from a standard test performed in a non-standard manner. For instance, clients might require such testing and reporting during the development of proto-types etc., to gain some indication of performance, whilst avoiding the costs of the full test.

An indicative test report shall include a statement *"These test results relate to a test carried out using the test methodology given in(define test), however, the full requirements of the standard were not met. The information is provided for the sponsor's information only and should not be used to demonstrate performance against the standard nor compliance with any regulatory requirement. The test was not carried out under the requirements of(name accreditation body) accreditation"*.

Report from a non-standard or ad-hoc test

Reports from non-standard or ad-hoc tests may be issued when laboratories carry out tests, which are not the subject of normalised European or national test procedures. Such non-standard or ad hoc test methods shall be fully documented. The continued relevance and validity of such reports may change with time and the sponsor should periodically check this with the test laboratory.

Reports from a non-standard or ad-hoc test shall state, *"This report covers a test which was conducted to a procedure which is not the subject of a standard test, but utilised the principles of(define). Since fire tests are the subject of a continuing standardisation process and because existing tests are the subject of review and possible amendment and new interpretations, it is recommended that the report be referred back to the laboratory after a period of ...(number) years to ensure that the methodology adopted remains valid at that time"*.

Footnote: National procedures and requirements with respect to test reports may be different to those presented herein. In that case National Requirements shall be paramount.

Application note to clause 5.10 / 2

Translation of test reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

Test reports will normally be prepared in the national language of the laboratory, although on occasion EGOLF member laboratories working in the pan-European field may be required or choose to produce fire test reports in a variety of other languages.

This may be especially required in situations where "mutual acceptance or endorsement of test reports" is required by other laboratories in other countries.

Mutual acceptance of test reports is the acceptance of test results produced in one laboratory as being as valid as if produced in ones own laboratory. Endorsement of test reports is defined as the process of review of test reports to confirm mutual acceptance of test results plus the supply of supporting documentation for use by the client for regulatory purposes.

(ii) Procedure for translation of test reports

If a translation is required for "mutual acceptance or endorsement of test report" or any other purpose the following procedures shall be followed.

When a client requires a translation of a test report the terms of that translation, including payment for translation, shall be formally agreed by contract between the laboratory and client.

Competent translators shall carry out translations of test reports. In the case of "mutual acceptance or endorsement of test reports" this translation may be carried out either by the test laboratory or by the laboratory that will review the test report and provide the "endorsement" or any third party. The translation shall be checked for accuracy before issue or use.

The translated test report shall clearly state the validity of the translation (see iii. below).

The laboratory shall file copies of all language versions of the test report in its records. Each language version of the same test report shall carry the same reference number.

(iii) Validity of translations of test reports

The original language in which a test report is / was written shall be stated within the translation. All test reports in languages different to that in which the original version is / was prepared (be it the national language of the test laboratory or any other) shall clearly state that it is a translation.

The translated test report shall name the organisation or person(s) responsible for issuing and / or checking the translation.

Application note to clause 5.10 / 3

Rectification of errors in reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to situations where a test report has been issued and information contained therein is subsequently discovered by the laboratory to be incorrect. The error found may relate to test data, information provided by the sponsor or their reporting.

Sponsors shall be advised of this procedure when the contract to test is made.

(ii) Operating guidelines

- a) If an error in a test report is discovered by a laboratory or notified to a laboratory, within a maximum of four (4) weeks of the issue of that test report, the laboratory may be permitted to issue a new corrected test report, provided that:
- The sponsor returns all originals and copies of the test report to the laboratory and declares that no further copies have been made, and that:
 - The sponsor gives assurance that the test results given in the test report have not been used towards support of the product in the marketplace.
- b) In all other cases the laboratory shall issue a supplement to the original test report, to record corrections made to all data that has been found incorrect.

The laboratory shall examine the consequences of correction of the error with the sponsor, especially if the test results given in the test report have been used towards support of the product in the marketplace.

(iii) Issue of corrected test reports (and recall of all previously issued test reports)

In the case of option (ii)a) above, a corrected test report shall be issued carrying the same test report number and date of issue as the original test report.

The laboratory shall cancel all copies of the original test report or parts thereof containing the incorrect information held in the laboratory files. Cancellation shall be shown by permanent marking. The cancelled test report or the relevant parts thereof shall be kept in the laboratory files.

(iv) Issue of supplements to test reports

In the case of option (ii)b). above, the laboratory shall issue a supplement to the original test report.

The laboratory shall ensure that an original copy of the supplement to the test report is issued for each and every original copy of the test report that had been issued. The laboratory and the sponsor shall ensure that the supplement to the test report, in its entirety, is attached to each and every copy of the original test report.

In cases where the test results given in the original test report have been used towards support of the product in the marketplace, the sponsor shall ensure that the supplement to the original test report is additionally used for that purpose.

The laboratory shall cancel all parts of the original test report containing the incorrect information in all copies of the original test report held in laboratory files. Cancellation shall be shown by permanent marking. The complete test report, including the cancelled parts, shall be kept in the laboratory files, together with a copy of the supplementary test report.

(v) Format of "supplements to test reports"

Supplements to test reports shall have a cover sheet comprising the front page of the original test report, overprinted "Supplement to Test Report" and be dated according to the issue date of the supplement (not that of the original test report). It shall declare that it is a supplement to the test report originally issued as No.... dated...".

Supplements to test reports shall clearly state that there was an error in the original test report, that the product involved has not been retested.

(vi) Signatories to corrected test reports and to supplements to test reports

Signatories to corrected test reports or supplements to test reports shall be those personnel currently authorised to sign such test reports in the laboratory. In certain circumstances signatories may not be the same as for the original test report.

(vii) Validity of corrected test reports and of supplements to test reports

Test reports are statements of fact and as such are of unlimited validity. Corrected test reports issued according to (iii.), and supplements to test reports issued according to (iv.), shall similarly be of unlimited validity.

(viii) Records

The laboratory shall control and maintain a record of all copies of original test reports or relevant parts thereof, cancelled according to (iii.) or (iv.), and the corresponding corrected test reports or supplements to test reports, which have been issued.

Application note to clause 5.10 / 4 - 1

Amendment of ~~test~~ reports: clients changing product / company names (i) - for technical reasons - Issue of supplementary test reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to situations where the identity of a product changes and the client desires a supplementary test report relevant to that identity. Such cases, not involving commercial secrecy, include:

- The original test was upon a development or prototype product carrying a development or prototype number. The product is now marketed under a different name.
- The name of the company owning the product that was originally tested has changed, e.g. take-over, transfer of rights etc.

(ii) Operating guidelines

Laboratories shall be permitted to issue a supplement to a fire test report to accommodate those changes in product or supplier identity, described in clause (i.) of this Application Note, which are notified by the sponsor of the test, for a limited period after the date of the original test and provided that guarantees are given that the product is unchanged.

(a) Alterations to data given in test reports before first issue

Alterations to details of product or supplier identity to be included in test reports (from those given by the sponsor at the time the test was agreed / carried out) may be made when these occur and are notified to the laboratory before the first test report is issued.

- Changes to product name shall be permitted if the sponsor declares, in writing, the change in name or trade name and that the product under its new name is identical to that tested.
- Changes to the named sponsor (nominated in the test report) shall be permitted only if the initial sponsor and the new sponsor have jointly declared their approval in writing.

Written details of the full circumstances of the change, including the supplier of the test specimen(s), from all concerned parties shall be included in the test records held by the laboratory.

(b) Supplementary test reports after the original test report is issued

The publication of a supplementary test report, under a new date, after the original test report is issued shall be permitted when:

- Changes to product name given in the test report are required to be made and when the sponsor has declared, in writing, the change in name or trade name of the product.
- Changes to the named sponsor or owner of the rights to the product given in the test report are required to be made and if the original and new sponsor or owner have jointly provided written details of the organisational change and their joint approval in writing. Alternatively, an independent, professional body, e.g. a solicitor or liquidator, shall provide the details.

There shall be a written declaration from the sponsor that the product to be named in the supplementary test report has not changed and is identical in every way to the specimen(s) which was/were tested. In addition any alternative named supplier shall provide a written declaration that they will only use the supplementary test report in connection with the product that is named in that report and that they will take all possible steps to ensure that the product that is supplied is identical to that tested.

(iii) Details to be reported in supplementary test reports

The supplementary test report shall be named "Supplementary Test Report" and dated. The cover sheet shall declare that "This test report is a supplement to that issued as No..... dated".

The supplementary test report shall clearly state that the product has not been retested and that it should be read and used only in conjunction with the original test report.

The supplementary test report shall contain reference to the identity or description of the product originally tested and shall state the change in details that are being recorded, together with details of the person or company reporting the changes. Copies of all written declarations shall be included in the supplementary test report.

(iv) Issue of supplementary test reports

The laboratory shall ensure that an original copy of the supplementary test report is issued for each and every original copy of the test report that had been issued. The sponsor shall ensure that the supplementary report is attached to every copy of the original report.

(v) Signatories to additional test reports

Signatories to additional test reports shall be those personnel currently authorised to sign reports and may not be the same as for the original report.

(vi) Validity of supplementary test reports

Test reports are statements of fact and as such are of unlimited validity. Supplementary test reports shall similarly be of unlimited validity.

Where a supplementary test report is issued the sponsor shall ensure that both the original test report and its adjoined supplement are available and used towards support of the product in the marketplace.

(vii) Records

The laboratory shall control and maintain a record of all original copies of the test report and its supplements.

Application note to clause 5.10 / 4 - 2

Amendment of reports: clients changing product / company names (ii) - for commercial reasons - Issue of additional test reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to situations where the identity of the product or the supplier changes for commercial reasons and the client requires a new test report relevant to that identity. Such situations, which involve the need for commercial secrecy, include:

- The name of the product that was originally tested has been changed or additional names are applied to the product for commercial reasons, e.g. sale into other markets etc.
- The producer of the product wishes to sell the product to another company (or companies) that will resell the product under new company name (or names) or new trade name (or trade names).

(ii) Operating guidelines

Laboratories shall be permitted to issue an additional fire test report to accommodate those changes in company name, supplier and/or product identity, described in clause (i.) of this Application Note, which are notified by the sponsor of the test, provided that guarantees are given that the product is unchanged.

(a) Alterations to data given in test reports before first issue

Alterations to details of product or supplier identity to be included in test reports (from those given by the sponsor at the time the test was agreed / carried out) may be made when these occur and are notified to the laboratory before the first test report is published.

- Changes to product name, or inclusion of additional product names, shall be permitted if the sponsor declares, in writing, the change (or changes) in name or trade name and that the product under its new name (or names) is identical to that tested.
- Changes / additions to the named company commercially responsible for the product shall be permitted only if the original sponsor and the other company (or companies) have mutually declared their approval in writing.

Written details of the full circumstances of the change, including the supplier of the test specimen(s), from all concerned parties shall be included in the test records maintained by the laboratory.

(b) Alterations to data given in test reports after test report first issued

The publication of an additional test report, under a new date, shall be permitted when:

- Changes to / additions to the product name given in the test report are required to be made and when the sponsor has declared, in writing, the change in name or trade name of the product.
- Changes to / additions to the name of the company, commercially responsible for the product, given in the test report are required to be made and if the original sponsor or owner and the other company (or companies) have provided their mutual approval in writing.

There shall be a written declaration from the original sponsor that the product named in the additional report has not changed and is identical in every way to the specimen (or specimens) which was (were) tested. In addition any alternative named supplier shall provide a written declaration that they will only use the test report in connection with the product that is named in

the additional report and that they will take all possible steps to ensure that the product that is supplied is identical to that tested.

(iii) Details to be reported in additional test reports

The additional test report shall be named "Additional Test Report" and dated. The cover sheet shall declare that "This test report is additional to that issued as No..... and dated and that the original test report shall remain valid and is not replaced by the additional test report".

The additional test report shall clearly state that the product has not been retested and that the additional report does not involve technical change or technical review of the original test report.

The additional test report shall indicate that both the original and new name of the product and the name of the company commercially responsible for the product are documented by the laboratory and maintained in laboratory records.

(iv) Issue of additional test reports

The laboratory shall issue additional test reports at the instruction of the sponsor or owner of the product. The laboratory records shall clearly state that an additional report has been issued and include copies of the additional test report, the original test report and all associated declarations.

(v) Signatories to additional test reports

Signatories to additional test reports shall be those personnel currently authorised to sign reports and may not be the same as for the original report.

(vi) Validity of additional test reports

Test reports are statements of fact and as such are of unlimited validity. Additional test reports shall similarly be of unlimited validity.

(vii) Records

The laboratory shall maintain / control a record of all original copies of the test report and its additions or revisions.

Application note to clause 5.10 / 5

Joint sponsors for fire testing: issue of reports

Note: In this Application Note the term 'test report' is equally applicable to extended application reports and classification reports prepared by the laboratory.

(i) Scope

This procedure applies to situations where several companies or organisations combine to provide materials or components of a fire test specimen. Each requires as a result of the test a test report relating to the performance of its material or component in the test.

(ii) Definition of joint sponsorship

Joint sponsorship occurs when:

- b) A material or an element of building construction to be tested is produced jointly by several manufacturers or suppliers of components, (and assembled in or outside the laboratory).

or

- c) When a material or element of building construction is manufactured against a single approved product standard and is made and sold by different companies under different trade names. For instance:

- A single manufacturer selling one product through different outlets under different trade names
- A single manufacturer making the same product in separate locations or divisions of the company and selling it through the same or different outlets under the same or different trade names
- The same product is manufactured in several companies, e.g. under licence, and is sold through the same or different outlets under the same or different names.

Each manufacturing point or sales outlet for the product may be considered as a separate sponsor in the joint sponsorship.

(iii) Operating guidelines for joint sponsorship in fire testing

Joint sponsorship of fire tests may be allowed, at the discretion of the laboratory. The contractual arrangements relating to the test shall be agreed between the laboratory and all joint sponsors [see Application Note 4.4/1].

(iv) Issue of test reports to joint sponsors

If the joint sponsors need their own unique report they shall receive an identical original copy of the test report with respect to measured specimen and test result data. Only sponsor, producer, and product name may be unique.

If the joint sponsors own the report together each of them shall receive an identical original copy of the test report. The report shall contain a statement declaring the joint ownership.

The fire test report shall describe any approved standard to which the product may have been manufactured and all construction features on each component that are essential to the fire test result.

The fire test report issued to each sponsor shall describe any approved standard to which the product may have been manufactured and all construction features on each component that are essential to the fire test result.

- a) Each original copy shall bear the name and address of all joint sponsors and shall detail the

source of the specimens or components and the suppliers of the information contained within the report.

- b) Each joint sponsor may additionally receive separate individual test reports - each with their own name indicated as sponsor and (if relevant), with the trade name of their product if agreed when the contract to test is drawn up between the laboratory and the joint sponsors [see Application Note 4.4/1].

If agreed with the sponsors the test report can include the statement "further test reports have been produced for other joint sponsors relating to other components of the test assembly or using other trade names for this product and its components". Reference shall in this case be made to the original

(v) Amendment of test reports to joint sponsors

Before any amendments may be made to joint sponsored reports, all joint sponsors agree to such amendments, according to EGOLF Application Note 4.4/1.

The laboratory shall ensure that any action upon any report, e.g. the issue of supplements or amendments, is taken identically upon all original copies provided to all joint sponsors.

(vi) Records

The laboratory shall control and maintain a record of all original copies of test reports for joint sponsors and of any action or amendment subsequently taken in relation to any such test report.