

related test method	EN 1363-1 and EN 1634-1
subject	Different test results on the same product – fire resistance
reference of original query	TC2, N607, Helpdesk 2011-02

Problem

A client tested two symmetric wooden door sets, exactly the same door set, in one test, one with the opening direction into the furnace and the other outwards. In accordance with EN 1634-1, 13.4.2, it is enough to test with the opening into the furnace and it will cover the other direction. In this test the door opening into the furnace failed after 38 minutes, and the door opening outwards failed after 33 minutes, i.e. it did not reach the overrun time.

The question is how the classification shall be made with regard to the direct field of application. The direct field of application makes it possible to increase the size of the door if the test is positive with an overrun (which was the case for the door opening into the furnace). Although we know from the test of the door opening outwards did not pass the overrun, i.e. the increase of size is not permitted. To complicate the case further, it was a wooden door set and it is enough to test it into the furnace where it passed the overrun.

This is not a simple question. If we keep strictly to the standard, it would be possible to ignore the test that did not pass and base the classification on the door tested with the opening into the furnace. On the other hand, we as a test lab, who writes the classification, know that the door did not pass the requirements for this classification when tested with the opening outwards the furnace.

The same question may arise when a producer first fail a test, and then the client want to make the test once more on the same product, or two products that are exactly the same is tested at the same time. When testing products for marine applications (IMO) it is required that the product must be modified, i.e. it is not allowed to test the same product more than once.

Recommendation

A client is always allowed the widest possible field of application based on the validity of the test result obtained.

EGOLF should be informed if test evidence shows that the rules in the standard are not working as anticipated e.g. if test evidence shows that the worst case for a timber doors in timber frames not always to test it opening into the furnace.

EGOLF can then question the other lab members to see if other labs have had similar experience. When evaluating the results, the uncertainty of resistance to fire test should be taken into



consideration. The relevant CEN workgroup should be informed, if it turns out that there is a trend.

Clients retesting exactly the same product/construction more than once

Labs should avoid the situation where a client continues to test exactly the same product/construction in the hope of obtaining a positive result.

The Lab can refuse to re-test exactly the same product/construction more than once, because it can then be claimed that the test specimen is no longer representative of the product/construction in practice as required in EN1363-1 § 6.4.

e.g. A test specimen that only fulfills the requirements one out of 3 times is not representative of the product in practice.

A product can be retested due to errors or untidiness in the installation process which has caused an early failure, it means that the retest will concern a product which is not exactly the same (the error or untidiness has been corrected), so you are allowed to re test it (because this is not exactly the same product).

In the cases where an unsuccessful test had been conducted prior to the a classification test, the client shall give a description of the modifications made to the test specimen indented to be tested (a difference in the method of installation can be judged as a modification) (this rule is taken from the revised FTP code § 5.1.6.)

Avoiding mis-use of the system by clients

Parallel to the problem with different test results on the same product, clients can ask multiple labs to issue classification reports based on the same test evidence. This could lead to labs giving different field of application based on the results.

To avoid this situation EGOLF should work towards getting a statement into EN1363-1

The sponsor shall declare if test evidence or classification related to the test specimen exists