



THE IGNITIBILITY TEST EN ISO 11925-2:2020

ROLE OF TEST IN THE EUROCLASS SYSTEM

The EN ISO 11925-2 Ignitability of building products subjected to direct impingement of flame - Part 2: Single-flame source test results are required for a classification E - B (combined with test results from EN 13823), as well as for classification E_{fl} - B_{fl} (combined with test results from EN ISO 9239-1).

TEST PRINCIPLE

The test determines the ignitability of a vertically oriented test specimen when exposed to a small flame, either at the edge or the surface of the specimen. The burning behaviour of the specimen is observed for flame spread, and the occurrence of burning particles and droplets.

TEST REPORT

The test report contains information about the test specimens and test results. The following information is given in the test report:

- the exposure time used in the test (15 or 30 s);
- the exposure mode (edge - surface);
- whether the flame tip reaches and/or passes the 150 mm mark above the flame application point, and the time at which this occurred;
- whether burning droplets were observed, which ignited the filter paper in a tray underneath the test specimen.

CRITERIA FOR EVALUATION ACCORDING TO EN 13501-1

The test results described above can be used for assessing a classification according to EN 13501-1. Normally, this is done based on the average of 6 – 12 single tests. The criteria depend on the classification which is aimed for. For classification D - B, 30 s exposure is required, and the flame height should not exceed 150 mm within 60 s after the start of the test. For the (other) classifications (E and E_{fl}), 15 s exposure is required, and the flame height should not exceed 150 mm within 20 s after the start of the test. For the flooring classifications, and for end-use applications where edge exposure is not possible, only surface exposure is applied. In all other cases, edge exposure is applied in addition to the surface exposure.

TEST SPECIMEN

The specimens shall be representative of the product in its end-use application, as far as possible. This applies specifically to the use of standard substrates, as described in EN 13238.

Essentially flat specimens shall be used:

- Dimensions: 250 mm x 90 mm
- Thickness: maximum 40 mm (including substrate when used)

Product standards for specific products (groups) can contain prescriptions for specimen construction to obtain a maximum field of application, and can give guidance on test specimens representative for a wider range of products. Testing can be started when the order is confirmed in writing, and the test specimens have been conditioned according to the standard. Normally it will take about 3-4 weeks from we have received the test specimens until the test report is finished.

ADDITIONAL TESTS FOR MULTI-LAYER SPECIMEN

Flame impingement for additional set of tests for multi-layer specimen with a thickness greater than 10 mm is only needed for individual layers with a thickness of ≥ 3 mm (except for glue layers).

