

EN 13773

European FR Standard



Principle

EN 13773 standard – FR fabric test for European contract industry
 This standard is made up of 3 different tests: EN 1101, EN 1102 and EN 12772.

Step 1 – EN 1101

A fabric sample is placed vertically on a metal frame. A flame is applied to the bottom edge of the fabric for 1 second, then 2 seconds, then 3 seconds up to 20 seconds. After each time interval it must be observed if the fabric ignites or not.

Step 2 – EN 13772

This test must only be performed if there is no ignition during the EN 1101 test.

A fabric sample is placed vertically on a metal frame and exposed to an electrical burner. The metal frame has 2 measurement markers. A flame is applied to the bottom edge of the fabric.

The following parameters are observed:

- How long the fabric continues to burn after the flame is removed (after flame)
- Time for flame to reach the first marker
- Time for flame to reach the second marker
- Measure the length of the burn damage after the flame is distinguished (char length)
- Do burning droplets of fabric fall and ignite the filter paper in the testing chamber

Step 3 – EN 1102

This test must only be performed if there is ignition during the EN 1101 test.

A fabric sample is placed vertically on a metal frame. The metal frame has 2 measurement markers. A flame is applied to the bottom edge of the fabric for 10 seconds. The time taken to reach the second marker is measured.



Results

Following completion of the EN 1101 and EN13772 or EN1102 tests, the fabric can be categorised as EN13773 from Class 1 to 5. Class 1 being the highest standard of FR and Class 5 being the lowest:

- Class 1:** - no ignition occurred during the EN 1101 test
 1st marker not reached during the EN13772 test
- Class 2:** - no ignition occurred during the EN 1101 test
 1st marker reached, but 2nd marker not reached during the EN13772 test
- Class 3:** - no ignition occurred during the EN 1101 test
 1st and 2nd markers reached during the EN13772 test
- Class 4:** - ignition occurred during the EN 1101 test
 2nd marker not reached during the EN1102 test
- Class 5:** - ignition occurred during the EN 1101 test
 1st and 2nd markers reached during the EN1102 test

