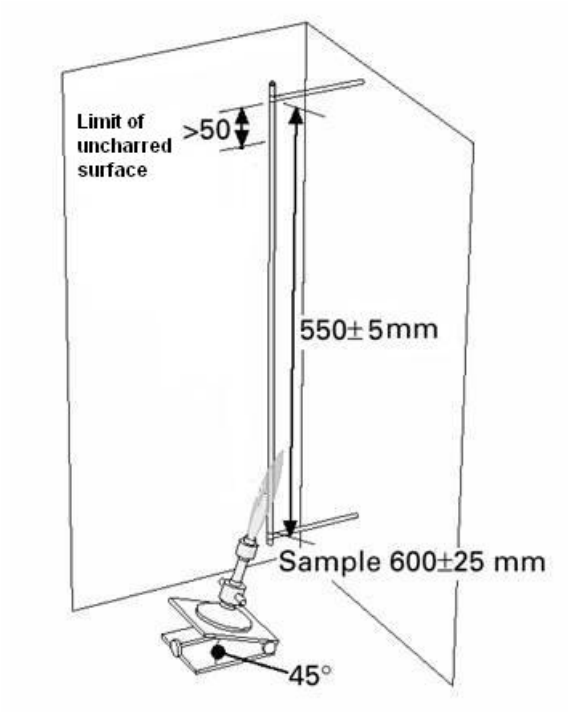
Test on electric cables on the fire conditions according to IEC 332-1

This part of IEC 332 specifies a method to test on a single vertical insulated wire or cable under the conditions and the requirements for compliance.

The test sample is a piece of the finished wire or cable (600±25) mm long.

The test apparatus and arrangement are illustrated in the figure.



The ignition source is a gas burner complying with IEC 695-2-4/1.

The flame shall be applied continuously for the period of time corresponding to the diameter shown in the table.

Overall diameter of test piece, mm	Time for flame application, s
D≤25	60
25<D≤50	120
50<D≤75	240
D>75	480

The wire or cable shall pass the test in the distance between the lower edge on the top support and the onset of charring is greater than 50 mm. In addition, a failure shall be recorded if burning extends downwards to appoint greater than 540 mm from the lower edge of the top support. If the failure is recorded two more tests shall be carried out. If both test results in passes, the wire or cable shall be deemed to have passed the test.