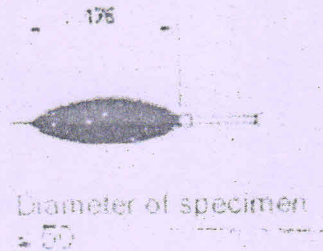


Flame Propagation

(IEC 332-1)

Single cable

A test sample of 600 mm length shall be clamped vertically in a metal chamber with an open front side. A propane gas burner with a flame length of 175 mm is mounted in such a way that the cone of the flame is applied in a 45° angle to the sample at a distance of 100 mm from its bottom end. Two burners shall be used for cables exceeding a diameter of 50 mm.

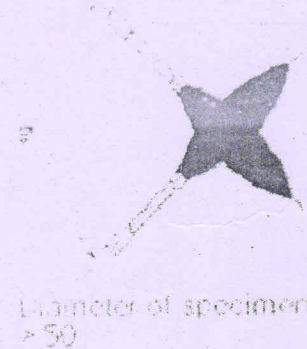


VDE 0482 part 265-2-1

VDE 0472 part 804 test method B

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

Overall diameter [mm]	Flame application [sec]
$D \leq 25$	60
$25 < D \leq 50$	120
$50 < D \leq 75$	240
$D > 75$	480



IEC 60332-1 (still valid)

$$T = 60 + 0,04 m$$

T = Duration of flaming in s.,

m = Weight of specimen in g.

Flame Propagation IEC 332-3

Flame Propagation

(IEC 332)

Bunched cables

The tested cable lengths shall be 3.5 m and the number of samples shall comply with one of the following three categories, where the amount of combustible material contained in a one metre sample and the test duration are shown. The number of samples is also a function of diameter and cross-section of the cables being tested.

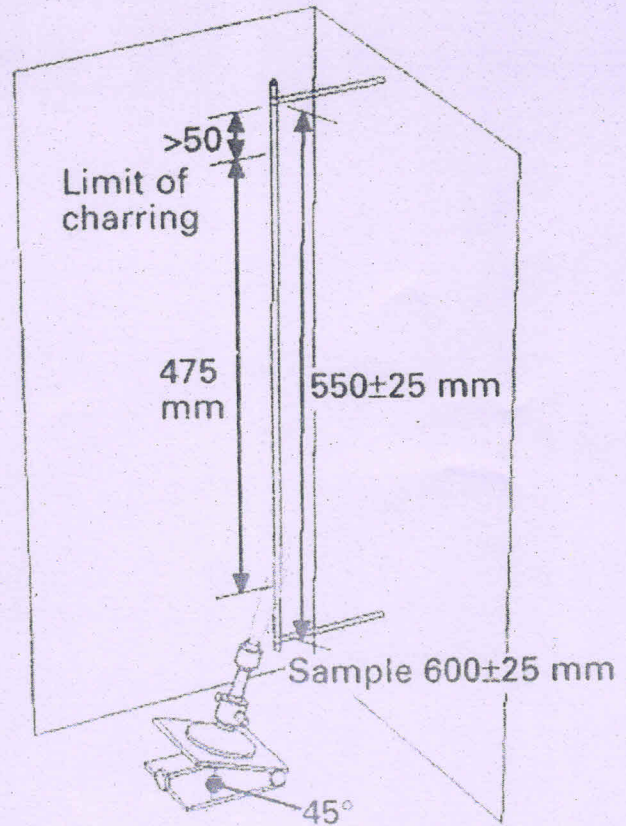
Category	A	B	C
Number of litres of combustible material in a one metre sample :	7	3.5	1.5
Test duration in minutes:	40	40	20

The test samples are secured to a vertical steel ladder, whereby the total width of the mounting samples should not exceed 300 mm. The steel ladder is fixed at the rear of test chamber having a width of 1 m, a depth 2 m and a height of 4 m. The test chamber of approximately 5000 l / min.

The cable samples shall be flamed at a distance of 75 mm by a ribbon type propane gas burner which is mounted 600 mm above the bottom of the chamber. The test duration listed in the table for each of the different categories.

After burning for the defined period of time, the test will be regarded as passed when the charred or affected portion has not reached height exceeding 2.5 m from the bottom edge of the burner, measured at the front and rear side of the cable assembly.

The test will be regarded as passed, when the flames extinguish by themselves after the burner has been removed and the distance between the lower edge of the top support and the onset of the charring part is greater than 50 mm.



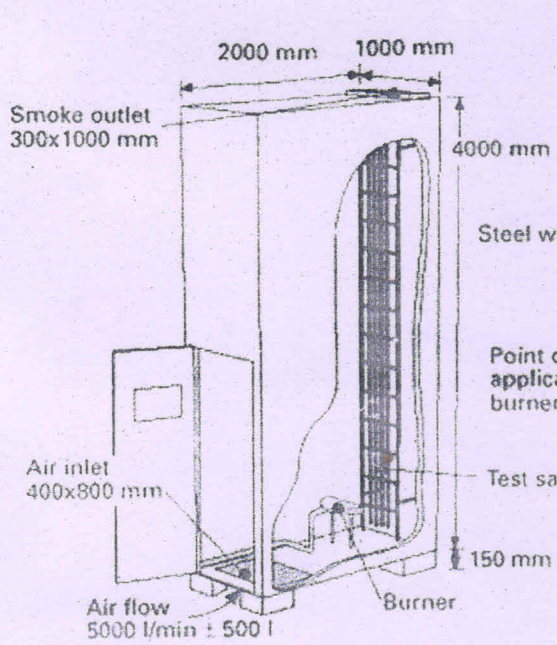


Figure 1.

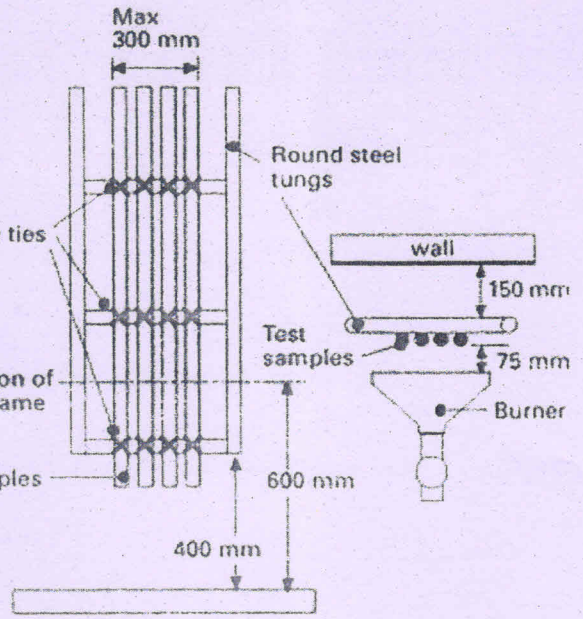


Figure 2.