

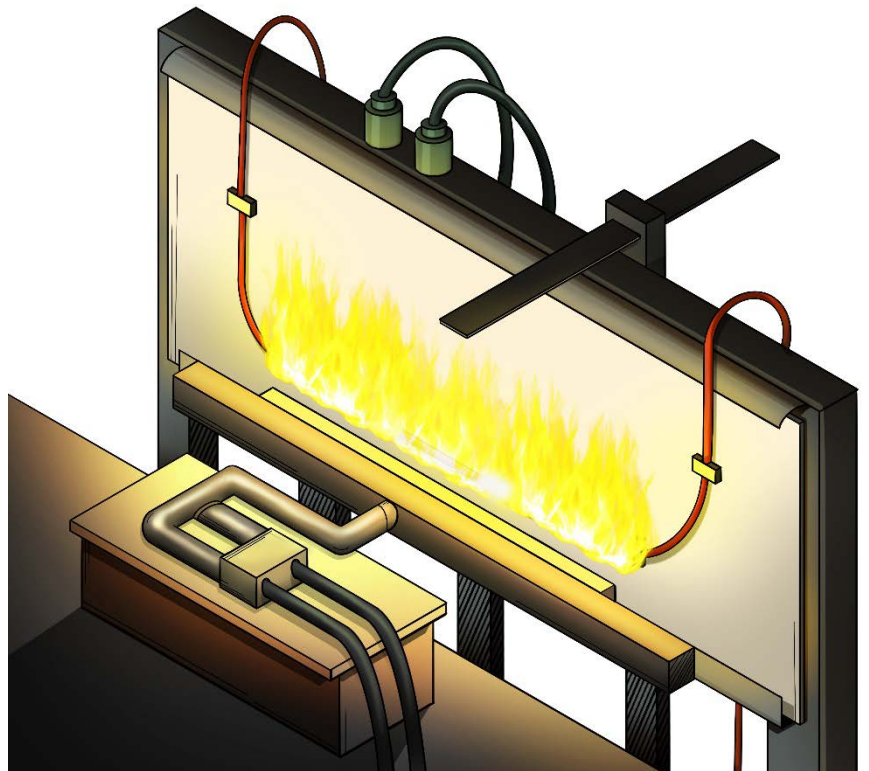
B3 INTERNATIONAL

Fire Resistant BS 6387

BS 6387 specifies methods of test for resistance to fire, resistance to fire with water and resistance to fire with mechanical shock. This test aims to assess whether a cable maintains its circuit integrity when exposed to these scenarios. This is particularly important for safety critical systems such as emergency lighting.

BS6387 Test procedure:

Resistance to fire alone - the cables is tested by gas burner flame while passing a current at its rate voltage. Four survival categories are defined Cat A (3 hours at 650°C), Cat B (3 hours at 750°C), Cat C (3 hours at 950°C), and Cat S (20 minutes at 950°C).



Resistance to fire with water spray - a new sample of cable is exposed to flame at 650°C for 15 minutes while passing a current at its rated voltage and then the spray is turned on to give exposure to both fire and water for a further 15 minutes.

A single survival category W is defined if the cables surpassed the testing requirement.

Resistance to fire with mechanical shock - the final requirement is mechanical shock damage. A fresh sample is mounted on a backing panel in an S bend and is exposed to flames while the backing panel is struck with a steel bar with the same diameter as the cables under test every 30 seconds for 15 minutes. The cables will be tested under the following temperatures: X (650°C /15min), Y(750°C /15min) and Z (950°C /15min).

The highest standard for BS 6387 is CWZ.