

## **BS476 Class 0&1 Explained**

### **Question: What is Class 1?**

Answer: Class 1 is a classification defined by BS476 Pt 7 – Surface spread of Flame. The

test measures the distance and time a flame will spread across a surface.

Results range from:

The worst, Class 4 – i.e. longest distance and fastest of flame spread, To the best, Class 1 – i.e. least distance and slowest of flame spread.

e.g. A good Class 1 result would be the flame not spreading further than 165mm from the point of ignition over the total test time of 10 minutes.

### **Question: What is Class 0?**

Answer: Class 0 is not a fire test but in fact a classification from The Building Regulations

1991 – Fire Safety, Approved Document B.

In order for a system to achieve a Class 0 rating it must meet the following requirements:

Achieve a Class 1 fire rating from BS476 Pt 7 – Surface spread of Flame

\*Achieve an index of I = less than 12 and  $i_1$  = less than 6 from BS476 Pt 6 – Fire Propagation.

\*This Fire Propagation test measures the amount of heat the surface is giving off during the fire. Measurements are taken frequently throughout the 20 minute test and then calculated using a special formula to achieve an 'index rating'.

For the surface to achieve Class 0 classification the index figure that is produced after 90 seconds must be 6 or less and after the full 20 minutes must be 12 or less. The index ratings do not equate to exact temperatures but are within the specified guidelines.

To Summarise:

Class 1 – Protects your surface from the spread of flames.

Class 0 – Protects your surface from the spread of flames AND limits the amount of heat released from the surface during a fire.

The decision whether to meet Class 1 or Class 0 classification is usually determined by your Building Regulations Officer or Architect.