

## Smoke density

The determination of smoke density is another important aspect to evaluate cable combustion characteristics, because it concerns personnel evacuation and fire extinguishing within a short range. According to fire department statistics, about 80% of the deaths are caused by harmful poisonous gas in fire, as well as smoke inhalation or being trapped. The concept of smoke density concerns examination of the cable from burning it under certain conditions, while measuring minimum light transmittance. The standard of smoke density test is IEC61034. If you need more about this test, please download the full introduction.

Tested in an airtight chamber, the combustion chamber size of 3 m x 3 m x 3 m = 27 m<sup>3</sup>, examining the flame test indoor light transmittance.

For low smoke zero halogen cables, cable standards in general have the requirement of light transmittance of 60%. This value set is to ensure that people can find their way in smoke. Qualified low smoke zero halogen material and cable design can meet this requirement, however PVC base material of cables may be unable to achieve this index. If the projects required for cable light transmittance, PVC cables are not recommended.

