



**VIC ENGINEERING SDN BHD**

No. 2 & 4, Jalan Jenaris 2b,  
Desa Sri Jenaris,  
43000 Kajang, Selangor.  
Phone :- 603 8739 9043  
Mobile :- 6011 1086 9043

## What is a Room Integrity Test?

An Integrity test predicts how long fire suppressant agents take to descend to a given level in the room without having to release the agent itself.

The Integrity test is carried out using:

- Modular adjustable panels for the door frame which adjusts to fit a wide variety of door sizes.
- Calibrated Fan(s) and range configuration
- Calibrated gauge(s)
- Laptop Computer
- Enclosure Integrity Software

The system is setup in an available doorway. The protected area is then pressurised and the fan flow readings are taken, then to check those measurements the room is depressurised to take measurements to compare. The predicted retention time is calculated from the leakage characteristics and the enclosure and extinguishing system data.

A retention time of 10 minutes is the normal minimum period the suppressant agents except Co2 that requires a 20min retention Time. Ten minutes is long enough for most deep-seated fires to be cooled so that re-ignition is unlikely. Gaseous fire suppression systems should provide adequate time for the emergency services to attend and in most cases prevent the fire taking hold.

## When do I need an Integrity Test?

When you have a gaseous suppression system installed, your protected area will need testing to ensure that the suppressant is maintained within the area and will work in case of fire. It is a requirement of most insurance policies and British standards that your suppression system is tested at least annually.

An Integrity retest is also required if any modifications are made to the area.

So moving a partition, fitting a new door, installing new cables or pipes or in any way modifying the structural perimeter of an enclosure will almost certainly affect gaseous fire suppression retention. Any changes to the room (no matter how small or inconsequential they may seem) will require a retest carried out.

For more info you can contact us at [general@vic.com.my](mailto:general@vic.com.my)