



AIR PRESSURE TESTING LTD

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Checklist of Items to be completed prior to our arrival on Site

1. We will require the following information at least 5 days prior to our arrival on site:
 - The Type of Agent used in the Suppression System
 - The weight or volume of the Agent that would be discharged
 - The initial concentration of the Agent in the room after it has been discharged
 - The minimum concentration of the Agent required in the room to suppress a fire.
 - The specified retention time for the enclosure
 - Elevation of Building above Sea Level to within the nearest 100m
 - The Normal Operating Temperature of the room
 - The maximum height of the equipment to be protected in the room
2. All external doors in the test enclosure should have drop seals to the bottoms and seals around the jams.
3. All internal doors within the enclosure should be wedged open.
4. Open all doors in adjacent rooms and around the outside of the enclosure
5. Ductwork leading from or into the Test enclosure should be permanently sealed off.
6. All HVAC systems should be shut down during the test.
7. All dampers that would normally be closed during the RETENTION period following a discharge of the Clean Agent, must be closed.
8. Floor drains should have integral traps, these should be designed to have water in them at all times.
9. We require TWO 240v MAINS powered electrical sockets within 5 metres of EACH of our testing equipment set up.
10. We require a competent member of your staff available on the test day to modify and/or seal any further areas that we identify as requiring extra work.
11. We require a parking space for a transit van type vehicle within 10 metres of the test location on site.
12. **If we arrive on site and are delayed due to the site not being prepared adequately, or the items in this checklist not being completed prior to our arrival, we reserve the right to cancel the test. The full test fee will be payable.**

IF YOU HAVE ANY QUESTIONS ABOUT THE PREPARATION OR THE ACTUAL TEST, THEN PLEASE RING OUR OFFICE TO DISCUSS THEM. WE ARE HERE TO HELP YOU ACHIEVE A PASS AT THE FIRST ATTEMPT.

GOOD PRACTICE ITEMS

9. The test enclosure walls should extend from the floor to ceiling slab, in areas where suspended ceilings exist, all the ceiling tiles should be present and clipped.
10. All holes, cracks or penetrations leading into or out of the test enclosure must be sealed; this includes pipe runs and cable trays. All walls should be sealed around the perimeter of the test enclosure where they rest on the floor slab and where they intersect abut the ceiling above.
11. If voids below raised access floors continue out of the test enclosure to adjoining rooms, the floor void must be completely sealed under the floor, by constructing a bulkhead directly under the walls to the test enclosure, these bulkheads must be sealed completely top and bottom. If the rooms share the same under floor air handlers, then the bulkheads must have dampers installed.
12. Block walls/masonry walls must be sealed slab to slab to prevent air leakage through the walls, the walls should be painted with at least 2 coats of masonry paint, however rendering the walls is a more airtight option.
13. The general aim is to make the test enclosure as air tight as possible, during and after the clean agent discharge. Clean agent is heavier than air and therefore openings below floors are usually more critical than those above ceilings. However during discharge the room gets pressurised to some extent and any gas that can be pushed out of the room will not return. This is more prevalent in smaller rooms because each little crack becomes more significant as the surface to area to room volume ratio changes.
14. Once the gas has been discharged into the test enclosure, it must remain in the room at its designed concentration for the specified retention time. This is usually 10 minutes. The length of time the agent will remain in the room is proportional to the air tightness of the room, therefore it is critical the test enclosure is designed and constructed as air tight as possible.

Please note for the avoidance of doubt: The above points are not all inclusive nor guarantee that the fire integrity test will pass. They are however presented as the more common items that will affect clean agent concentration tests.