FIRE + SMOKE CURTAIN CARE

A GUIDE FOR MAINTENANCE TRADES

This guide is for Facility Managers and other Essential Services trades and is intended to create awareness of the function and care of fire curtains, smoke curtains and smoke containment screens in buildings, with the benefit of minimising maintenance costs.

FACILITY MANAGERS

Fire curtains, smoke curtains and smoke containment screens are commonplace in modern building design. Unfortunately, the neglect and damage to these products by other maintenance trades is by far the most significant cost to the ongoing maintenance. These costs can be significantly reduced by being aware of and implementing some basic rules of thumb for service and maintenance activities in your buildings incorporating these products.





How to protect your fire curtain, smoke curtain and smoke containment screen assets

1. Identify whether your building contains these systems.

It may come as a surprise to you that Fire Safety Schedules were created many decades ago, well before the digital age, even well before the first PC's. Unfortunately, these have not been updated to reflect modern building construction. Inclusions of modern essential fire safety measures is left up to the Building Certifier and therefore items such as fire curtains and other Performance Solutions may not be included or easily identified on the Schedule.

We believe people deserve to work & live in safe & beautiful buildings.













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Even if the Building Certifier has missed the Performance Solution specifics or not understood the significance of them or simply added the non-specific statement "Performance Solutions in accordance with FER XYZ", it is up to the Building Owner or their nominated agent (typically the Facility Manager) to maintain the level of life safety in the building in accordance with the original design.

One way to determine whether there are fire and smoke curtains in your building is to identify where these are typically installed. These can be around interconnecting stairs, over lift doors (in lieu of a smoke lobby – which interestingly has never been on the statutory Fire Safety Schedule), dividing large floor plates, around escalators in shopping centers, proscenium curtains in theatres, servery openings, and where smoke doors and fire doors would otherwise normally be required.



2. Understand the fire matrix

Life safety systems require specific functions and timings to work in unison and be effective when in fire alarm mode. Performance Solutions may also require modified functions and timings due to the complexity of the building and life safety design. It is important that the FIP maintenance contractor and the Mechanical Services maintenance contractor thoroughly understand these requirements.

A full function fire test must include full air conditioning shut down, for example. It must also include the timings built into the Fire Matrix. It is not acceptable to call a full function fire test when it is not strictly a full function fire test.

It is also not acceptable to conduct partial maintenance and testing without any regard to other fire safety measures in the building. Maintenance and testing of mechanical smoke management systems can involve hundreds of 'tests'. Other fire safety measures should be isolated in the required position for this testing to prevent unnecessary wear and tear.

Testing any fire safety measure from the FIP for example, and resetting the alarm signal mid-cycle will by-pass the fire matrix timings and create conflicts in operation of these systems.



Not isolating the air conditioning during any type of fire safety measure testing will also potentially damage fire and smoke curtains. This will also give false pressure differential readings and these systems could not be possibly signed off under these conditions which are in direct conflict with the Fire Matrix.

Management in use requirements are also part of the Fire Matrix. These include things such as keeping combustible materials to specific levels, keeping paths and exits free of obstructions, ensure fire doors and fire curtains are not obstructed at any time and that Fire Wardens are trained on the egress requirements for the building.



3. Advise all Fire Safety Measure Trades

When new trades are appointed to maintain certain aspects of the fire safety measures, the Facility Manager should advise the simple protocols required for the specific building which include;

- Before testing, ensure there are no obstructions under fire curtains, smoke curtains and smoke containment screens
- ii. Understand the extent of the maintenance and testing required
- iii. Understand the fire matrix and sequencing of each fire safety measure



- iv. Ensure any fire safety measures that require deployment such as fire curtains and sliding fire doors, permanently held open doors and the like are clear of obstructions
- v. Isolate those areas not required to be serviced in order to reduce risk of damage. Fire curtains for example can be isolated in the deployed position for the duration of the testing of mechanical smoke management systems. The maintenance contract should not overpressure any fire safety measure beyond the manufacturers specified limits
- vi. Pressures must be allowed to dissipate from the building before fire curtains are reset to allow them to rewind properly to the standby position
- vii. Some buildings may require specific protocols that others do not. If in doubt Smoke Control should be invited to attend the testing to ensure everyone is on the same page.





SERVICE + MAINTENANCE



OUR MISSION

We believe people deserve to work & live in safe & beautiful buildings.

We demonstrate this by partnering with industry to leverage our knowledge & expertise, offering high quality life preserving products & services, with a value-driven solution-oriented approach.

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A LITTLE MORE ABOUT US...

Smoke Control was established in 2003. We partner with leading local & international organisations to work with the new performancebased design environment - in addition to the traditional prescriptive environment - designing and installing systems to meet the challenging fire and smoke control demands of modern buildings.

Constant research & development continue to enhance our offering of fire windows, fire shutters and fire curtains, bringing the most innovative technology to both regular and unique project challenges. If you cannot find what you are looking for, please contact our team as we may already have a solution for you.

Smoke Control services all regions in Australia & New Zealand via our own offices and people. International customers can contact our Australian office by phone or email for your nearest distributor.







