

# Scope Breakdown – Smoke Control in High-Rise Buildings

Fire emergency systems for high-rise buildings regulated under OFC Part 7 consist of building pressurization, venting to aid firefighters, elevator service in fire conditions, and central alarm control facilities for life safety maintenance.

- 1) Review of Existing/Original Documentation
  - a. Review annual test reports for all the fire protection systems/ equipment mandated for high-rise buildings
  - b. Review the building's current approved and implemented fire safety plan
  - c. Review the original design permit mechanical and architectural floor plan as-built package
  - d. Review the building's commissioning report

Upon authorization to proceed, Safety media requests digital format of the building's approved and implemented fire safety plan, latest fire alarm system annual test report, permit as-built architectural and mechanical package, and building commissioning report (if conducted at time of permit).

- 2) Conduct a Site Review
  - a. Review specific areas and equipment within the building to visually inspect:
    - All equipment identified in the reviewed Phase 1 documentation
    - Identify additional building construction / features which may passively impact applicable equipment or systems
    - Confirm information identified in Phase 1 is consistent to existing site conditions
- 3) Develop Smoke Control Test Procedures

To provide the capability to conduct self-operated or facilitated quarterly maintenance smoke control tests (internally or externally at your discretion).

  - a. Review site findings to that of applicable codes and standards
  - b. Develop procedures around building design and current compliance requirements
- 4) Conduct a Performance-Based Test
  - a. Conduct a test of fire alarm activation
  - b. Test applicable smoke control protection systems and equipment
  - c. Revise procedures based on test
  - d. Conduct engineer review services to obtain professional stamp of approval
  - e. Provide correspondence with property management and incumbent service providers as necessary where required / beneficial

This performance-based test will require fire and mechanical service providers, equipped with necessary pressurization measurement tools and fire panel operation capabilities.

- 5) Provide final report Package

Which will consist of the following (complete with engineer approval stamp):

  - a. Building summary of installed smoke control systems and equipment regulated under Part 7 of the OFC
  - b. Building review to that of current code compliance measures under the Ontario Building and Fire Codes
  - c. Findings of smoke control tests, and procedure template to complete ongoing quarterly maintenance