



November 27, 2018

Craig Lewis, Construction Superintendent  
Colson & Colson Construction  
Portland, Maine Retirement Residence  
830 Ocean Avenue  
Portland, ME 04103

Subject: Ashton Gardens Retirement Residence-Atrium Smoke Control System Test

On Tuesday, November 27, 2018 I was at the Ashton Gardens Retirement Residence to inspect and test the Atrium Smoke Control System. My inspection and test included the following.

#### Pre-Test Checks

- Corridor doors were checked for smoke seals and opened. Magnetic hold-opens were checked to ensure doors stayed in the normal hold open position.
- Other doors with magnetic hold-opens were checked to ensure they were in the normal open position.
- Doors without magnetic hold-opens were closed.
- Inspection of the two roof-mounted atrium exhaust fans (SEF-1) and the Multipurpose Room makeup air fan (SSF-1).
- Inspection of the three ground-floor makeup air doors to ensure they were clear of obstructions.
- Inspection of the fire alarm and smoke control panel to ensure the systems were on and in the normal status.

#### Test Procedure

Activation of the smoke control system was accomplished by the lighting of two 30-second smoke emitters above a portable fire pit, set on medium, in the Dining Room just in front of the fireplace. Once the fire alarm system was activated the following occurred.

- The two atrium exhaust fans started.
- All doors on magnetic hold-opens released, closed and sealed.
- Both sets of main entry and double doors near Private Dining opened.
- SSF-1 and related outside air damper were activated.

During the test all systems performed as designed. Once the alarm was reset the two atrium exhaust fans and SSF-1 turned off, the three sets of make-up air door closed, and the fire alarm system returned to the normal status.

Initially, the fire fighters control panel indicated the SF-1 fan was not operational even though the fan was confirmed to be running. This issue was resolved during the second test.

Utility power was shutoff while the atrium smoke control system was operational. The generator started emergency power was energized in less than the 10 second code requirement.

I have reviewed this report and by personal knowledge and on-site observation, certify that the smoke control system is in substantial compliance with the design intent, and to the best of my understanding, complies with the requirements of the code.

The air balance and test report will be provided separately by Jet Industries.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,



Robert J. Hazleton, Jr., PE

