



# Report of Materials and Equipment Acceptance Division

NYC Department of Buildings  
280 Broadway, New York, NY 10007  
Robert D. LiMandri, Acting Commissioner  
(212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

## MEA 424-07-E

**Manufacturer:** Honeywell/Alerton, 6670 185<sup>th</sup> Avenue N.E., Redmond, VA 98052

**Trade Name(s):** Alerton

**Product:** Smoke-control system

**Pertinent Code Section(s):** Subchapter 13 and 17, Reference Standards RS 13 and RS 17

**Prescribed Test(s):** UL 864/UUKL

**Laboratory:** Underwriters Laboratories, Inc.

**Test Report(s):** UL File S8105, Project 02NK33215, issued February 25, 2003, revised August 31, 2007.

**Description:** The Alerton Smoke Control System is an automated purge system that implements special control parameters to engage dedicated and non-dedicated HVAC equipment with the intent to strategically control the flow of smoke through, and out of a building. The goal is to minimize harm to occupants and building contents. **The Firefighters' Smoke Control Station (FSCS) ALR-xxxxxx (manufactured by Automated Displays, Inc.)** is the interface between a firefighter and the automated system. All points of control can be manually overridden (key-switched) and the resulting changes to equipment and devices (feedback) are prominently displayed on the FSCS. An audible alarm is activated on loss of communication or a system failure. A supervised Modbus (EIA-422) serial communication circuit connects the FSCS to a **primary global controller, BTI-S**. The BTI-S independently executes DDC algorithms to manage operation of **field controllers, VAV-SD-S, VAV-DD7-S, VLC-16160-S and VLC-1188-S**, via serial MS/TP (EIA-485) LAN. The commands driven at the FSCS and resulting system feedback are ported through the BTI-S. The BTI-S also hosts automatic control features including schedules, trendlogs, and alarms. To log system events, a DB-9 EIA-232 serial communication port is provided for connection to a **printer (OKI**

**Data Microline 320 Turbo**). A BTI-S has an on-board Ethernet jack allowing additional secondary BTI-S' to be added to the system Ethernet network using an Ethernet Switch (**EI Switch manufactured by Contemporary Controls**). In-line protection device called **ESD-100** provides electrical surge protection for each BTI-S on the Ethernet network.

Unitary or field controllers VLC-1188-S, VLC-16160-S, VAV-DD7-S and VAV-SD-S connect to the MS/TP LAN and typically control the actions of smoke dampers, fans, actuators, VAV boxes, and end-of-travel proof sensors through binary and analog inputs and outputs. The FSCS must use a suitable UL-listed standby power supply. All other control devices use UL-listed 24V AC transformers, sized according to nameplate ratings, on powered devices. Use of MS/TP LAN terminating resistors and suitable wire types/gauges/lengths are outlined in the Alerton Smoke Control System Guidelines.

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections (letter dated June 2, 2008, F.P. Index #0712024A).

**Terms and Conditions:** The above-described smoke-control systems are accepted under the following conditions:

1. All uses, configurations, arrangements and functions, application and installations shall comply with all applicable provisions of New York City Building Code, specifically Subchapters 13 & 17, and New York City Electrical Code. Further, the installation shall be in accordance with manufacturer's recommendations, NFPA 72 and UL Standard 864.
2. Firefighters' Smoke Control Station (FSCS) shall have visual display of mechanical/HVAC system diagrams that aid the responding firefighters/emergency personnel in their smoke control strategy.
3. FSCS shall be located in the lobby of the building on the entrance floor and shall be easily accessible to the responding firefighters/emergency personnel. In buildings where a fire command station is installed, FSCS shall be at a location not greater than 10 (ten) feet from the fire command station.
4. All communication wiring from fire alarm control panel to Alerton smoke control system shall be plenum-rated and shall be installed in RMS, IMC or EMT, and shall be monitored for integrity.
5. All fire alarm control panels shall be listed and approved types with which the compatibility has been determined to be accepted by a UL test report.
6. Underwriters Laboratories Inc.'s listing requirements and limitations shall be fully complied with.

7. Overall system configuration and installation is subject to Fire Department inspection and testing.
8. All shipments and deliveries of such equipment shall be provided with a label, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided in Section 27-131 of the New York City Building Code.

Final Acceptance June 16, 2008  
Examined By 