



Report of Materials and Equipment Acceptance Division

NYC Department of Buildings
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Robert D. LiMandri, Acting Commissioner
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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 171-08-E

Manufacturer: LABTAM PTY LTD.
33 Malcolm Road, Braeside
3195 Australia

Trade Name(s): SIEMENS Monitair™

Product: Smoke Detectors for special applications

Pertinent Code Section(s): 27-968 through 27-981, RS 17-3 & RS 17-5

Prescribed Test(s): UL 268, 5th edition and UL 268A, 3rd edition

Laboratory: Underwriters Laboratories, Inc.

Test Report(s): UL S2346, Project 06CA45259 issued December 12, 2007.

Description: Smoke detector, air sampling detector type, Monitair Models M502 and M501 duct selectors. These two models must employ one of the following accessories, M400L, M400N, M401L, M401N, M402L, M402N and M403, when connected to an UL 864 listed FACP (Fire Alarm Control Panel). Detectors must be used with a compatible UL 1481 Listed power supply and UL 864 Listed control panel.

The products covered by this report are intended to detect an abnormal (both small and large) amounts of smoke density in the area in which they are installed and to signal a fire alarm control panel during this condition. Each unit consists of resistors, capacitors, diodes, transistors, photodiodes and LED, mounted on a printed wiring board inside an enclosure which has an opening to the outside air via a pump. The pump (aspirator) draws in air which passes through a detector head using dual (red and blue) optical lights in a light scattering detection arrangement.

The Monitair air sampling detectors, M502s, are designed for applications with a 10,800 square feet maximum coverage and contain single inlet ports. The maximum volume of air passing through the detector is only limited by the amount of sampling pipe and holes allowed in the piping network and the speed of the fan.

Model M502 is a detector only incorporating analog 4-20mA outputs. The 4-20mA outputs are provided for both smoke and air-flow signals and are used to connect to a PLC (Programmable Logic Controller or similar industrial control equipment). The M502 does not contain a local display or on-board relays. Models M502-DL, -DN contain a local display M400L (latching) or M400N (non-latching). Models M402L (latching) and M402N (non-latching) are remote displays that are similar to M400L, -N. When models M402L, -N are used with a housing, the model designation of M401L, -N is given. Model M501 is an air-sampling smoke detector for duct application.

These products are also suitable for open area protection with a fire alarm setting set no less sensitive than 3.0% / ft. (10% / m). For open area protection, the limits are 0.5% /ft. (1.6% / m) – 3.0% /ft. (10% / m). The alarm relay contacts are to be connected directly to the control panels for fire evacuation purposes.

Model	Description
M400L, -N	Latching and non-latching Local display units
M402L, -N	Latching and non-latching Remote display units
M401L, -N	Latching and non-latching Remote display units with Housing
M403	Rack-mounted, Remote display unit, up to <u>Six</u> M403 units can be use in a 19" rack frame
M502-DN, -DL	Air-sampling smoke detector, Unit M502, with M400L or M400N Local display unit mounted to the front.
M501	Air-sampling smoke detector for direct mounting to HVAC system (Air sampling detection unit for <u>Duct</u> application). Includes a special Monoprobe sample tube (0 – 4000 ft./m).
M502	Air-sampling smoke detector – (no local display)
M500P	Monitair sampling pipe manufactured by Harvel manufacturer. This is orange CPVC pipe used for connection to the Air sampling detection system for the purpose of delivering sampled air to the Monitair detector. The Monitair pipe is UL listed, flame retardant to V-O, UL 94 and meets UL 1887 standard as dry pipe.

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 12, 2008, F.P. Index #0805043).

Terms and Conditions: The above-describe smoke detectors are accepted under the following conditions:

1. All uses, configurations arrangements and functions, application, installations shall comply with applicable provisions of New York City Building Code, specifically Subchapter 17, and Reference Standard 17-3. Further, the installation and spacing of detectors shall be in accordance with the manufacturer's recommendation, NFPA 72 (2002 edition, section 5.7.3.3), and UL Standards.
2. The above referenced smoke detectors shall be used only with listed and approved/accepted remote displays and Fire Alarm Control Panels with which the compatibility has been determined by UL test reports.
3. Underwriters Laboratories Inc.'s listing requirements and limitations shall be complied with.
4. Installation and layout shall be done by trained professionals in accordance with manufacturer's installation instruction.
5. Periodic maintenance and sensitivity test of smoke detectors shall be conducted in accordance with the regulations of Fire Department.

Final Acceptance June 30, 2008.

Examined By Donald [Signature]