

CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Materials and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner
MEA 59-02-E
Report of Material and Equipment Acceptance Division

Manufacturer - Kidde-Fenwal, Inc., 400 Main Street, Ashland, MA 01721

Trade Name(s) – KIDDE

Product – ORION™ XT, High Sensitivity Smoke Detection System.

Pertinent Code Section(s) – Article 6 Section 27-978 through 27-981, Reference Standard RS 17.

Tests – UL UL 268, UL268A and UL 1481.

Laboratory - Underwriters Laboratories, Inc.

Test Reports - UL File S1064, Vol. 19, Sec. 1, Project 00NK29213 dated June 28, 2001 and UL File S7909, Vol. 1, Sec. 1, Project 00NK23853 dated April 5, 2001.

Description - The ORION XT High Sensitivity Smoke Detection (HSSD) system is intended for early warning smoke detection applications such as telecommunications facilities, data processing facilities, museums and warehouses. For use with compatible approved fire alarm controls. One ORION XT HSSD system, when connected to a pipe network designed using “SNIFF” software, provides coverage for an area up to 20,000 sq. ft.

The ORION XT HSSD system consists of; an air sampling pipe network, a laser based high sensitivity detector (with a dynamic sensitivity range of 0.00075% to 0.3%/ft obscuration) and a high efficiency fan. The Self-Contained Power Supply provides 24 VDC power for one detector from 120/240 VAC. The Multi-Zone Power Supply provides 24 VDC power for up to eight detectors from 120/240 VAC.

The optional user interface Display Module provides visual indication of the detector’s alarm and trouble status on a LCD screen. It can be mounted either within the detector or remotely and communicates via an RS-485 connection.

A local PC station running the ORION Configuration Software (OCS), UL Listed for Electronic Data Processing (EDP) equipment, connected to the ORION XT via an RS-232 port is used to configure and monitor the system.

The PEGAsys Addressable Loop Module (PALM) provides an addressable interface for an ORION XT to connect to the PEGAsys Control Panel, via a two wire communication loop.

The High Sensitivity Smoke Detection system is UL Listed as follows:

Model/ Part No.	Description
297101	Detector Assembly
297102	Display Module
297103	PEGAsys Addressable Loop Module
297104	Self-Contained Power Supply
297106	Multi-Zone Power Supply
297107	Multi-Zone Power Supply Enclosure

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 26, 2002, F.P. Index 0202040A.

Recommendation – That the above be accepted on condition that all uses, configurations, arrangements and functions, electric power for the unit and installations shall comply with the provisions of New York City Building Code, specifically Subchapter 17 and Reference Standards 17-3 and the Electrical Code and the UL Listing. Further, the spacing of the sampling tubes shall be in accordance with the manufacturer's recommendations and on further condition that:

1. This unit shall not be installed as a primary detector unit in areas that the Building Code specially calls for the installation of an ionization and photoelectric smoke detector.
2. Each unit shall be viewed and limited to the operation of a single detector only.
3. The ORION XT shall be installed with its own fuse cut out.
4. When installation in a building with a Fire Command Station, all troubles and fire alarms from ORION XT unit shall be reported to the main fire command station and the signal shall latch on at the main fire panel until it is manually reset.

5. Every plan and permit application for installation shall be accompanied with a piping layout and network calculation, to verify that the design meets the manufacturer's recommendations with regards to the minimum suction pressure of 0.05 in and the maximum period of 180 sec. transmit time from the furthest sampling port.
6. In order to prevent buildup of moisture and condensation, the sampling tubes shall be installed with a pitch of 1/16 of an inch per linear foot, away from the ORION XT unit. Flexible piping or tubing may not be utilized in this installation.
7. The system must be configured with a LCD display module.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitable placed, certifying that the equipment shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance July 19, 2002
Examined by Mark [Signature]