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 284-05-E**

**Manufacturer:** Spectrex, Inc., 218 Little Falls Road, Cedar Grove, N.J.

**Trade Name(s):** Spectrex

**Product:** SharpEye flame detectors

**Pertinent Code Section(s):** Subchapter 17 and Reference Standard RS-17

**Prescribed Test(s):** FM Approval, Class No. 3260

**Laboratory:** Factory Mutual (FM) Approvals

**Test Report(s):**
- Project ID: 3013474, Class 3260, issued June 12, 2003
- Project ID: 3013906, Class 3260, issued October 27, 2003

**Description:** Optical flame detectors: radiant energy – sensing fire detectors for automatic fire alarm signaling.

Flame detection employing electro-optical analysis of the electromagnetic radiation emitted by flames in the ultraviolet and infrared spectral bands. The patented spectral analysis of the flames radiation signals includes frequency and time domain analysis, cross correlations and ratios between the various sensor inputs. Unique background radiation analysis enhances the flame detection accuracy in a cluttered environment that contains various emitting sources like: direct solar radiation, heaters and burners, light projectors, high voltage sparks and welding radiation, extreme temperature conditions.

This line of Optical Flame Detectors name SharpEye was developed and introduced into the safety and high risk/high value fire protection markets. The SharpEye series includes UV, UV/IR, Triple IR (IR3) and Mini Triple IR (IR3) Optical Flame Detectors. Units and model numbers are described below.
<table>
<thead>
<tr>
<th>Model No.</th>
<th>Dimensions (inc.) Weight (lb.)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/20I</td>
<td>4.7” x 5.2” x 5.2”, Alum. 8.1 lb., St.St. 14.3 lb.</td>
<td>SharpEye Triple IR (IR3) Flame Detector</td>
</tr>
<tr>
<td>20/20L-LB</td>
<td>4.7” x 5.2” x 5.2”, Alum. 8.1 lb., St.St. 14.3 lb.</td>
<td>SharpEye UV/IR Flame Detector</td>
</tr>
<tr>
<td>20/20U-UB</td>
<td>4.7” x 5.2” x 5.2”, Alum. 8.1 lb., St.St. 14.3 lb.</td>
<td>SharpEye UV Flame Detector</td>
</tr>
<tr>
<td>20/20SI</td>
<td>4.7” x 5.2” x 5.2”, Alum. 8.1 lb., St.St. 14.3 lb.</td>
<td>SharpEye Triple IR (IR3) Flame Detector (Sealed Electronics)</td>
</tr>
<tr>
<td>20/20MI</td>
<td>4” x 4” x 2.5”, Alum. 1.1 lb., St.St. 2.5 lb.</td>
<td>SharpEye Mini Triple IR (IR3) Flame Detector</td>
</tr>
</tbody>
</table>


**Terms and Conditions:** The above units are accepted on condition that:

1. All uses, configurations, arrangements and functions, and installations shall comply with the provisions of New York City Building Code, specifically Subchapter 17, and with Reference Standard RS 17-3.

2. Installation shall be in accordance with applicable requirements of New York City Electrical Code, manufacturer’s recommendations and FM test report (Project ID 3013474 and 3013906).

3. The above-referenced flame detectors shall be installed in a dedicated supervised zone. Cross zoning of flame detectors shall not be allowed. The flame detectors shall provide a latching signal to an approved and compatible fire alarm control panel that provides separate circuits for power and alarm initiation.

4. The installation of these detectors shall be without any time delay for activation of an alarm. Time delay settings up to 15 seconds (as per FM approval) may be permitted only for special applications upon prior approval from this Department. Time delay settings of 20 and 30 seconds shall be removed from all above flame detector units, which shall be indicated in the Installation Manual.

5. Manufacturer’s maintenance procedures and limitations shall be complied with.

6. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered are equivalent to those tested and acceptable for use, as provided in Section 27-131 of the New York City Building Code.