

To: Users of System Sensor smoke detectors
From: Systems Application Engineers
Subject: Aerosol Smoke Tester from Home Safeguard

System Sensor has evaluated the testing of its smoke detectors using Home Safeguard Industries' original Smoke Detector Tester™ and new Smoke Detector Tester Plus™ non-flammable formula canned smoke aerosol tester.

When used according to Home Safeguard's printed instructions, both Smoke Detector Tester formulas properly activated System Sensor's smoke detectors. Additionally, both formulas did not result in any discoloration of the smoke detectors.

Therefore, System Sensor accepts the use of Home Safeguard Industries' Smoke Detector Tester and Smoke Detector Tester Plus canned aerosol spray (Models 25S and 25-NF) solely provided that the spray is used in accordance with Home Safeguard's printed instructions.

Notes:

1. Neither System Sensor nor Home Safeguard will guarantee the proper operation of the detectors if either System Sensor's detectors or Home Safeguard's aerosol spray are improperly installed/used.
2. Aerosol testing is only to be used as a smoke entry test and is not an acceptable method for determining smoke detector sensitivity. See NFPA 72 for further details.

Listed below are additional general considerations when testing smoke detectors with canned smoke aerosol testers.

- Always ensure that the smoke detector is installed in accordance with NFPA 72 guidelines (reference NFPA 72 – 2002 Edition, Paragraph 5.7.1.8). Smoke detectors shall not be installed if any of the following ambient conditions exist:
 - (1) Temperature below 0°C (32°F),
 - (2) Temperature above 38°C (100°F)
 - (3) Relative humidity above 93 percent
 - (4) Air velocity greater than 1.5 m/sec (300 ft/min)
- Certain System Sensor smoke detectors are equipped with signal processing capabilities such as smoothing algorithms (also referred to as delay circuits), which are intended to minimize the likelihood of nuisance alarms. Detectors equipped with such capabilities may not alarm on the first attempt. In such a case, the detector may need to be sprayed 1 to 2 additional times to activate the alarm.
- NFPA 72 permits alternative methods of generating smoke/aerosol to cause an alarm at the detector's installed location, as approved by the smoke detector manufacturer.

If you have any questions concerning System Sensor products or their application, please contact Technical Services at 1-800-SENSOR2 (736-7672), extension 2.