

## MAINTAINING RELIABLE RESULTS: CALIBRATING YOUR TRUTEST SMOKE DETECTOR SENSITIVITY TESTER

The Trutest Smoke Detector Sensitivity Tester ensures accurate sensitivity testing, which is vital for confirming that smoke detectors are functioning as they should. However, like any precision instrument, the Trutest tester can lose accuracy over time. Regular calibration is essential to maintain reliable, precise readings and ensure compliance with safety standards.

NFPA 72 (2025 edition), Table 14.4.3.2 outlines several methods for testing smoke detectors to ensure they are within their listed sensitivity range. These include using a calibrated test method, the manufacturer's calibrated sensitivity test instrument, listed control equipment arranged for sensitivity testing, a smoke detector/control unit arrangement that signals when sensitivity falls outside the approved range, or any other calibrated test method approved by the authority having jurisdiction.

To meet the requirements of NFPA 72 and other fire safety codes, the Trutest must be regularly calibrated. Calibration ensures that smoke detectors are tested within the proper sensitivity range—neither too sensitive, which could trigger false alarms, nor too insensitive, which could cause missed detections. Without proper calibration, there's a risk of inaccurate results that could compromise safety and violate regulatory standards. Ensuring that your tester is calibrated helps maintain the accuracy of your results, confirms that detectors are functioning as intended, and ensures compliance with safety regulations.

Calibration also helps maintain consistency across tests. Whether you're testing multiple detectors or conducting

annual inspections, you want your results to be reliable and comparable. If the tester is not calibrated, small inaccuracies can introduce variability, making it difficult to assess the performance of detectors over time. Regular calibration ensures that you can track detector sensitivity with confidence and make informed decisions based on accurate data.

In addition to ensuring accuracy and consistency, calibration helps protect your equipment. Over time, environmental factors such as temperature fluctuations, humidity, and frequent use can affect the tester's performance. Regular calibration helps identify and address any issues early, preserving the tester's functionality and extending its lifespan. Without it, you might find that your tester is gradually losing accuracy, leading to wasted time, resources, and potentially false test results.

So, how often should you calibrate your Trutest? The general recommendation is to calibrate it annually. However, if the tester is used frequently, especially in demanding environments, it may need to be calibrated more often—every 6 months is a good guideline for high-usage scenarios. Additionally, if the tester has been exposed to extreme conditions (e.g., temperature changes or physical shock), calibration should be performed immediately to ensure it's still operating accurately.

To maintain the reliability and accuracy of your Trutest, regular calibration is essential. By ensuring that your tester is properly calibrated, you can continue to provide precise readings and uphold safety standards.



