
Automatic fire detection and alarm systems— Methods of test for actuating devices

Method 26: Carbon monoxide (CO) sensitivity test

1 SCOPE

This Standard sets out the method of test for actuating devices to establish their performance with respect to defined levels of CO.

2 PRINCIPLE

The actuating device is exposed to an environment containing a measured amount of CO and its response is monitored.

3 APPARATUS

A test facility, in the form of a sealable chamber internally 1000 mm long by 400 mm wide by 500 mm high, shall be provided (see Figure 1). The chamber shall have facilities for:

- (a) Mounting not less than five CO detectors.
- (b) Mixing fan.
- (c) An inlet to allow the introduction of purge air.
- (d) An outlet to allow the exhausting of the air/test medium mixture to a safe area.
- (e) An inlet to allow the introduction of the test medium.
- (f) A sensor to measure the level of CO within the chamber. The sensor shall be capable of measuring within the range of 0–200 ppm with an accuracy of at least 5 ppm. The sensor response time shall be fast enough to follow the required rate of rise of CO concentration with an accuracy of 5 ppm or better.
- (g) A sensor to measure the temperature within the chamber.
- (h) A sensor to measure the humidity within the chamber.
- (i) Adjustment and maintenance of the CO, temperature and humidity within the chamber.

The sensors described in Items (f) (g) and (h) shall be located 100 mm below the top of the chamber.