

Amendment 2019 – SBF 110:8

Rules for fire alarms

This amendment is a correction of SBF 110:8 and are valid from 2019-01-01. Amendments are marked with a line in the margin.

In the event of any discrepancy between the Swedish original version and the English translation, the former shall prevail.

6.2 System

6.2.2 Division into circuits

6.2.2.3 A circuit shall be made so that one (1) fault cannot cause a loss of more than 32 detectors and/or other units.

Comment:

Units refers to detectors, manual call points, alarm devices and I/O units.

6.2.2.6 An outage or short circuit in a circuit for alarm devices may never entail a total loss of coverage in an alarm device area.

6.3 Division into detection zones and alarm device areas

6.3.1 Zone division

6.3.1.7 One detection zone shall only comprise one floor level. Exceptions are granted if

- a) the detection zone comprises a light well or lift shaft, stairwell or the like, which constitutes an own fire compartment
- b) the detection zone comprises a maximum of two floor levels with good internal communications that without doors connect the two levels. The detection zone's total scope may not exceed that stated in clause 6.3.1.5.

6.5 Siting of detectors and manual call points

6.5.3 Heat detectors (HD)

6.5.3.6 If a ceiling is divided into fields through beams, air ducts or the like, the beam depth of which or height exceeds 10 per cent of the total ceiling height, one heat detector shall be sited in each field if possible. However, the total number of heat detectors need not be more than what is equivalent to 1 per 20 m² of protected area.

If the distance between beams' lower edge and the ceiling does not exceed 5 per cent of the ceiling height and the centre distance between beams does not exceed 1 metre, heat detectors may be sited in the beam's lower edge or at the same level.

If the beam depth of any part exceeds 50 per cent of the ceiling height, each field is treated as a separate space. However, the total number of heat detectors need not exceed what is equivalent to 1 per 20 m² of protected area on condition that there is an air gap between the beam pockets of at least 0,15 metres height.

11.5 User's schedule for testing

11.5.3 Quaterly testing

At least once a quarter, the following checks and tests shall be carried out in connection with the ordinary monthly checks:

- a) During alarm testing of detectors in systems with detectionzone division without additional alarm addresses, at least one detector in 10 per cent of the detection zones shall be tested. In one year, all detection zones shall be tested.
- b) During alarm testing of detectors in systems with detection zone division and additional alarm addresses, at least 2 per cent of the detectors shall be tested. In one year a minimum of 8 per cent of the detectors shall be tested.
- c) Function tests for connected alarm devices and controls in the detection zones that are alarm tested (as per above). In one year, all alarm device areas and control areas shall be tested.
- d) Function test of alarm and fault signal transmission to the alarm receiving centre (where applicable).
- e) Testing of the control and indicating equipment's and fire brigade panel's indications and functions as per user maintenance instructions.

Appendix G

G2 Technical measures that can prevent false alarms

Without inherent grading, examples are being left here of other measures that can be taken to prevent false alarms:

- a) Changing to better adapted detector type and/or detector sensitivity
- b) Moving of detectors
- c) Use of delayed smoke detectors or the equivalent
- d) Use of two-detector or two-detection zone dependence (see clause 6.12)
- e) Moving or otherwise protection of manual call points from unauthorised activation
- f) Interference filtering of radio frequency interference

In some cases, the measures below can be used after special approval by a possible specifier, which may be stated in the design specification.

- g) Reduction of the detection sensitivity during certain times
- h) Disablement of smoke detectors certain times when in the area there is a basic monitoring with heat detectors
- i) Timers that disconnect smoke detectors, this presupposes that the area is manned and that manual call points are sited at strategic locations

For timers, there shall be a sign with a basic description of handling and a description of what parts are covered by the disablement. In the activation by timers, a back-lit sign shall be activated with suitable text, such as *Detektorer frånkopplade [Detectors disabled]*. A certain time before re-enablement of the detectors, a warning signal shall sound.

- j) Alarm filtering (the function is described more closely in clause 5.11 and Appendix F)

Alarm filtering function shall always fulfil the requirements as per Appendix F.

In the installation of alarm filtering in the system, it is important to take into consideration whether the system constitutes requirements in BBR. If this is the case, an analytical dimensioning is required since certain functions such as alarms to alarm receiving centres or evacuation alarms are delayed.

In the installation of alarm filtering, there shall always be a functioning alarm management on site as per clause 5.8.

If any of the measures g), h) or i) are used it shall be stated as a deviation in the installed system certificate.