

## New standard for fire protection: EN 54-23

Meeting the new requirements for fire protection systems  
with expertise and the ideal products

[siemens.com/en54-23](http://siemens.com/en54-23)

A harmonized European standard underlines the importance of visual alarming in the event of a fire. In many cases, installers of fire protection systems and building owners have to act quickly.

### Alarming according to EN 54-23 – with Siemens

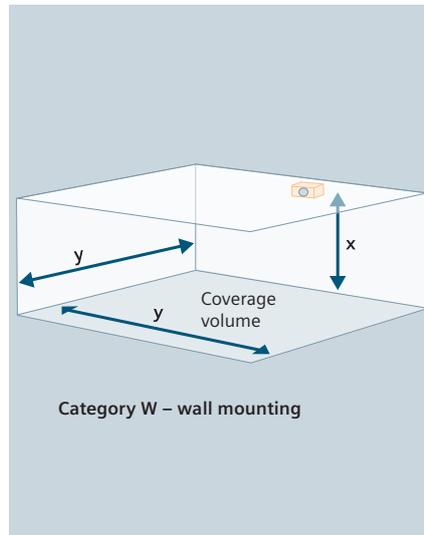
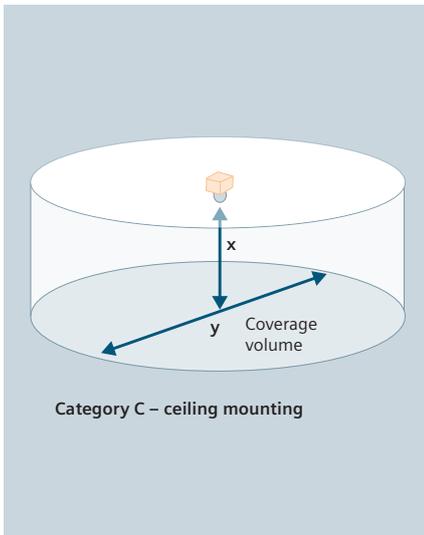
With the new European Standard EN 54-23 taking effect, it is now mandatory to use EN 54-23-certified optical or optical/acoustic sounder beacons in fire protection systems that require optical alarming under building regulations. To help you meet these requirements, Siemens offers optical/acoustic sounder beacons that are certified according to EN 54-23 – and fit the fire protection portfolio from Siemens.

### First European Standard for optical alarm devices

EN 54-23 was published in June 2010 and went into force in January 2014. It is the first uniform European Standard for visual alarm devices. Besides specifying the requirements, test methods and performance criteria for these devices, EN 54-23 also defines, for example, the requirements for light intensity and coverage area.

### Increasing safety by stimulating two senses

EN 54-23-certified optical or optical/acoustic sounder beacons can be installed in areas where acoustic signals can be missed due to loud ambient noises or because people are wearing ear protection or earplugs, etc. It also applies to rooms where hearing-impaired persons are present.



The number of visual alarm devices needed to cover an area depends on the particular category C, W, O.

### EN 54-23 requirements for visual alarm devices

- Illumination of min. 0.4 lux (lm/m<sup>2</sup>) over the entire coverage volume
- Light color: white or red flashing light
- Flash rate: 0.5 Hz – 2 Hz
- Coverage volume must meet the requirements in at least one of the three categories: C (ceiling-mounted devices), W (wall-mounted devices) and O (devices for which the mounting position is freely selectable)

### Category C – ceiling mounting

Specifications include a cylindrical coverage volume as well as installation heights up to 3 m, 6 m or 9 m. In category C, the properties of the alarm devices are specified as C-x-y. “x” stands for the maximum installation height in meters, i.e. the utmost height at which the alarm device may be mounted on the ceiling. “y” specifies the diameter of the coverage volume. For example, C-3-5 stands for a ceiling-mounted alarm device with an installation height of maximum 3 m and a cylindrical coverage volume of 5 m in diameter.

### Category W – wall mounting

Specifications include a cuboid coverage volume with a square area and a minimum installation height of 2.4 m. Alarm devices in this category are specified as W-x-y. “x” stands for the maximum mounting height on the wall. “y” specifies the square area. For example, W-2.4-9 describes an alarm device that is mounted on the wall at a height of 2.4 m and is approved for a coverage volume of 2.4x9x9 m.

### Category O – open class

For alarm devices in the category O, the mounting position and the respective coverage volume are open – and will be defined by the manufacturer.

### Highlights

- Maximum safety in the event of a fire – backed by expert advice and extensive planning expertise
- Cost reduction through products that match the coverage volume
- Standard-compliant installation of fire protection systems from Siemens – in any application, including hospitals, nursing homes and hotels

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