

General instructions for the configuration and installation in buildings with false bottoms

Preparation

- Identification of possible sources of danger (e.g. water pipes, air conditioning devices)
- Identification of objects / plant parts that need to be protected (e.g. computer centers, communication cabinets, valuable objects)
- Marking of all sources of danger and plant parts that need to be protected within the building layout

Configuration of the sensor array

Outline the sensor cable path, the point sensors and the electronic monitoring system(s) into the building layout. The electronic monitoring system **RLW** does not necessarily require an installation plan with meter specifications if the rooms or objects to be monitored are clearly outlined in the plan and on site. The leakage location and area can be indicated in plain text.

- a. Monitoring of individual objects by means of point sensors or short sensor cable sections
- b. Large-area monitoring by means of the sensor cable
wave-form floor installation of the sensor cable
(recommended distance = 1.2 m or double pad distance)
- c. Monitoring of a specific area by means of the sensor cable
Floor installation of the sensor cable directly alongside the danger sources,
i.e. complete isolation of the danger source.

The sensor cable can be connected to standard installation cables (e.g. LIYY 4 x 0.5 mm²) between single objects or rooms that need not be monitored. Plug, socket and separator are provided for this purpose. Special T-branch distributors allow the branching off from the major sensor cable conduit. Leakage detection and rupture monitoring remain intact.

Documentation needed for the installation

- Installation plan
- System documentation consisting of:
 - Description, data sheets, installation instructions and indications, user instructions, start-up, operational performance, test protocol

Instant of installation

All works within the false bottom (including the final cleaning-up) should be finished prior to the installation of the sensor cable.

- ⇒ Prevention of sensor cable damages.

Installation indications for the sensor cable

- The floor must be **dry, dirt-free** and possibly **dust-free**.
- Use self-adherent tape to fix the sensor cable where required (e.g. false bottom).
- Fasten the sensor cable to the floor at 1-m-distances.
- The sensor cable must not be flattened against metal parts as the electronic evaluation system checks the cable for its electrical resistance.
- Condensate dripping from pipes or coolers must not wet the sensor cable.
- For flush-mounting in walls or other confinements, a non-detecting connection cable, a protective conduit or a flexible tube must be used.
- Locations where the sensor cable could be damaged should be marked by way of labels ("Attention – delicate sensor cable").
- The sensor cable must rest on the surface to be monitored (obstacles such as directly installed cable routes may be jumped if leakage monitoring can be immediately continued on the other side of the obstacle).
- In the installation plan, outline the sensor cable length actually installed (especially in case of partial lengths with T-branches).
- After its installation and prior to the system start-up, the sensor cable should be checked for its insulation resistance (see test protocol).
- See the system documentation for the start-up procedure and technical data.