



CARBONET

simply secure

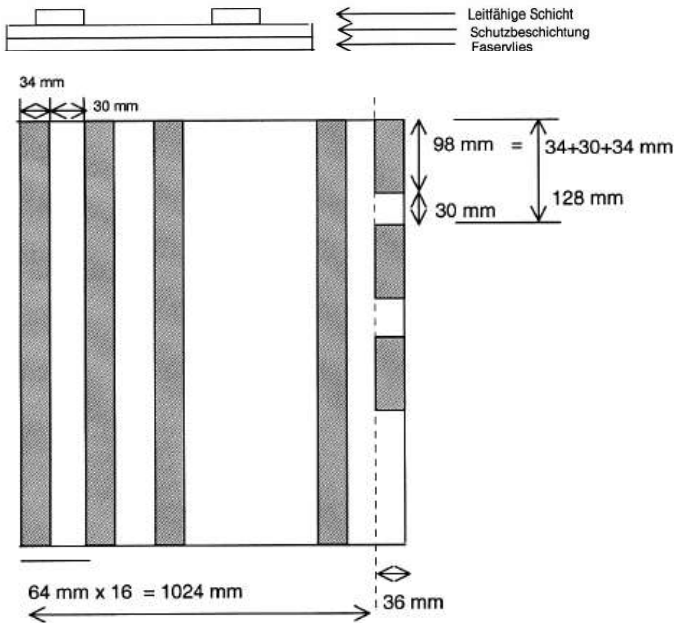
Short instruction

Surface-surveillance-control-system

- Easy, quick and economic processing
- Wall layer: Dimension-solidly, cellular, can cover disruption
- Completely smooth, ecologically friendly
- Insensitively against knocking and drilling
- Can be changed and be mended
- Permanently reliably, absolutely invisible
- Using rooms also with activated security system
- Protected against sabotage
- Universal interface for current alarm systems
- Adaptation to the circumstances of the room, no parts have to be individually built, no lead times

Non-woven material, Art.-Nr.: 97501

Wall layer consists flexible non-woven material with partially applied electrically leading-capable coating



Sensor module, Art.-Nr. 97502

The sensor module consists of two plastic cases with square base which are connected together with a 2-m-long adaptable cord. On the back-side are the contact elements which produce the connection with the wall covering. One of both cases has a red LED which indicates the status of the module. A cable of 4m length is connected to the alarm system. Individual adaptation to the circumstances is possible!

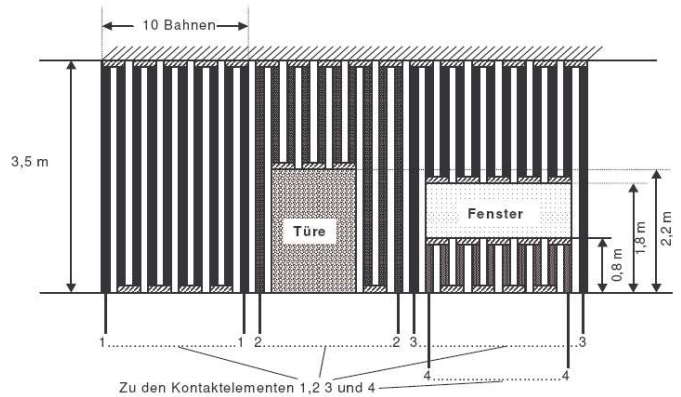
Terminal pin assignment:

- Black: Earth (-)
- Red: D.c. Voltage + 9 V bis 15 V,
- White and Yellow: Relay contact for alarm signal.

Basically the sensor modules behave like glass breaking detector and have to be connected like glass breaking detectors.

Planing

According to the following drawing the wallcovering has to be pass with mainly vertically running coal layer. The connection likewise occurs above carbon layer strips which are stuck together with wallpaper glue.

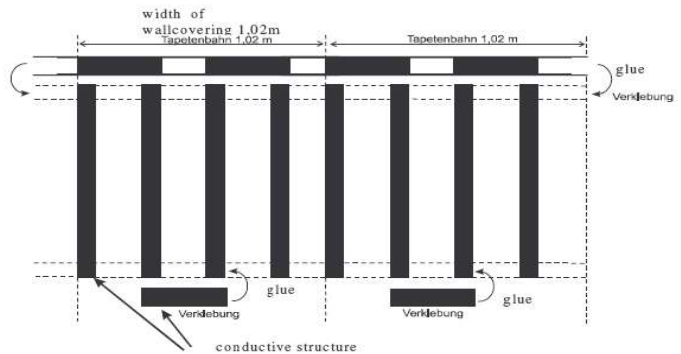


Because of the high flexibility of the sensor unit and the product wallpaper with alarm wire inset, there is a high measure of free space with the creation. Important is the guidance of strips with doors and windows. In preupcoming sketch are also examples given. An essential criterium by the planning is the total length of the strip. It's easy to add up. If the strips lengths are shorter, e.g., above a door or below a window, just add lower lengths.

- Least strip length: 16 m
- Maximum strip length: 60 m

In general counts: For a supervision surface of 4 sqm at least 1 sensor element is to be used. The planning of the connection technology and cable transfer has to occur compelling by the guidelines of the VdS in analogy to glass breaking detectors. The production of the maender structure occurs with a precast stripe which is at the side in the non-woven fleece. The stripe is perforated and has to be separated before the adhesion from the non-woven fleece.

Montage



Underground

It should be steady subsoil cleanly, drily, flatly, absorbent and sustainable. The humidity salary of the subsoil should not amount more than 2% (Vol.).

Adhesive

For the adhesion of the wallcovering use regular wallpaper paste (Henkel Methylan special, Optalin special, Glutolin 77, Walocel special or equally) with an addition of 20% of dispersion paste. As far as it is necessary, pure dispersion paste (e.g. Ovalit) can be used. Use only excluding special pastes with an addition of max. 20% of dispersion glue for the adhesion of the edges stripes which produce the horizontal connections of the electric structure. These edges stripes are stuck together with the black side down (to the wall) and in the pattern suitably to the wallcovering.

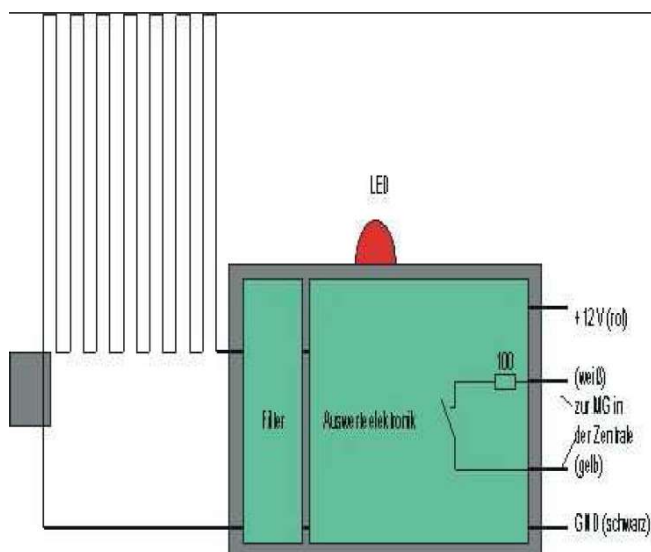
Paste over/Cover

A paste over of the structure is possible, as far as these are not electrically conductive and none electrically conductive pastes are used.

Before paste over/cover, the maender structur has to be checked for adequate and orderly function. Before checking attributes, the wall layer must have dried enough. The drying time depends on the underground and the surroundings terms.

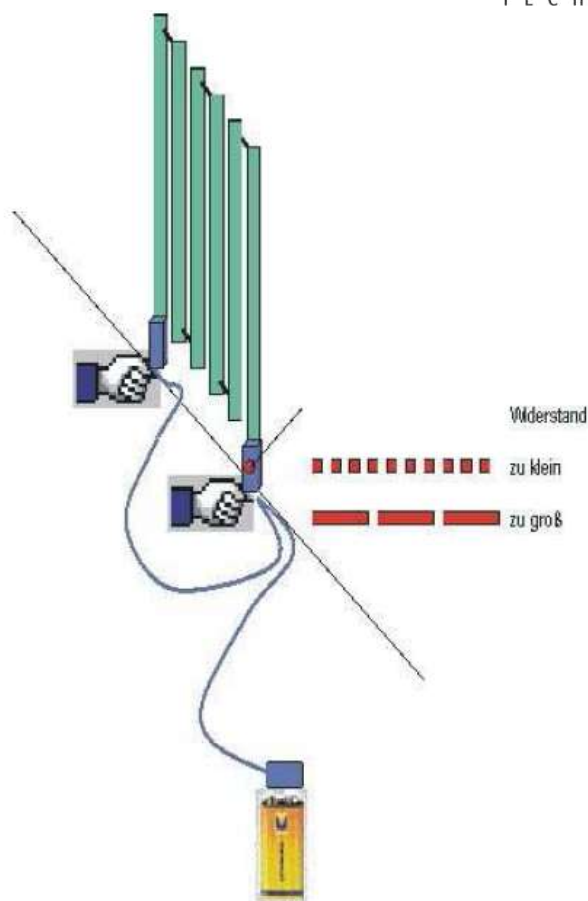
Electrical connection

The electric connection with alarm system occurs according to following sketch. The alarm signaling occurs freely of potential through opening the relay contact. The relay contact remains open on putting on the care tension in the sensor. The LED flashes during the calibration. After successful calibration, the LED signed off and the relay contact is closed. From this time the supervision of the wallpaper occurs. If the electricity supply precipitates, the relay contact opens, that signals an alarm for the alarm system. In the alarm case the LED is permanently red. The reset occurs like with glass breaking detector through removal of the power. With new putting on of power the test program starts for approx. 1 minute. This function can also be used to find damages. The sensor ist supplied by 9V to 15V of d.c. voltage, the power consumption amounts to 50 mA.



Functional check

The functional check is easy to do. Substantially and decisive for the function of a wall layer is, that the resistance of the meander structure is within the limits. The length of the structur is between min. 16m and max. 60 m. In order to check use a contact element. The contact element has a connection plug for a 9V battery which the distant registration engineer will remove later. Connect power of the module with a 9V battery.



Attend the polarity of the connections: Negative pole black, positive pole red. As soon as you connect the 9V battery, the LED flashes for the duration of approx. 1 minute. Take now an element in the left one and one in the right hand and press it to the ends of the maenders of the wallpaper. After approx. 1 minute, the LED has to be signed off. If the element flashes slowly red, the opposition is too big. Short red flashing signals register that the opposition is too small. The electric contact elements of the sensor must contact the road at both ends. Moreover the contact feathers of both connection elements must touch the black road stripe. Placing the connection elements in such a way that the contact feathers sit very concentric on the black road stripe. The connection elements are fastened with a suitable screw and a 6 mms of standard-plastic rawl plug.

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