SEALING INSTRUCTION OF WALL PASSES & CABLES AGAINST WATER UNDER PRESSURE

Contents:

1. OBJECTIVE AND SCOPE OF THE INSTRUCTION

The manual describes the technology of using the system for sealing cable / pipe penetrations in underground parts of the structure against moisture and water at a pressure below 0.25 bar using the following materials:

- sealing compound: ANTICOR Seal 511,
- plastic mortar: ANTICOR Seal 505,
- 2K PUR foam or PE cord.

The system has no fireproof properties and it is not certified against fire retardants.

2. EQUIPMENT

- Caulking gun (for cartridge 310 ml),
- Sandpaper, cleaning cloth,
- Container for mixing mortar,
- Water,
- Spatula,
- Protective clothing, gloves, glasses.

3. DESCRIPTION OF SEALING MATERIAL

ANTICOR Seal 511 is a synthetic, viscoelastic, permanently plastic material, resistant to moisture and water under pressure. It is characterized by high adhesion to concrete, ceramic, plastic, and metal surfaces.

ANTICOR Seal 511 is recommended for sealing and filling cable and pipe penetrations in underground parts of buildings against moisture and water under pressure. Additionally, the mass is also recommended for sealing and filling boxes in external, underground electrical and telecommunications installations, cables inlets, protective pipes, glands, etc.,

The product does not change its properties throughout the period of use.

It does not contain substances harmful to health and the natural environment (hygienic certificate).

4. SYSTEM PROPERTIES

a) wide range of continuous work temperature,
b) synthetic ingredients of the product ensure excellent sealing properties,
c) adhesion to wet and dry surfaces,
d) the minimum surface preparation required,
e) does not harden, remains permanently flexible and elastic,
f) easy and quick application, the compound is re-usable,
g) tightly fills and seals the insulated spaces and hollows, blocking the access of water and moisture to the inside of the building,
h) safe - does not contain components hazardous to human health and the environment (PZH Certificate).

PHISICIAL & OPERATING PROPERTIES OF ANTICOR Seal 511		
Parameters	**Unit**	**Value**
Working temperature	^{0}C	-15 ÷ +50
Application temperature	^{0}C	+10 ÷ +35
Density	kg/dm^3	1.46
Water absorbtion	%$_{mas}$	< 0.035
Breakdown voltage	kV/mm	7.2
Volume resistivity	Ωm	1.4*10^{12}
Pressure	Bar	0.25
Flash point	^{o}C	> 238
Adhesive to concrete and plastics	cohesive	

The product is available in the package: 310 ml cartridge.

5. TECHNOLOGY

Technological requirement:

The diameter of the wall passage should allow for a seal of at least of 25 mm (Fig.1).

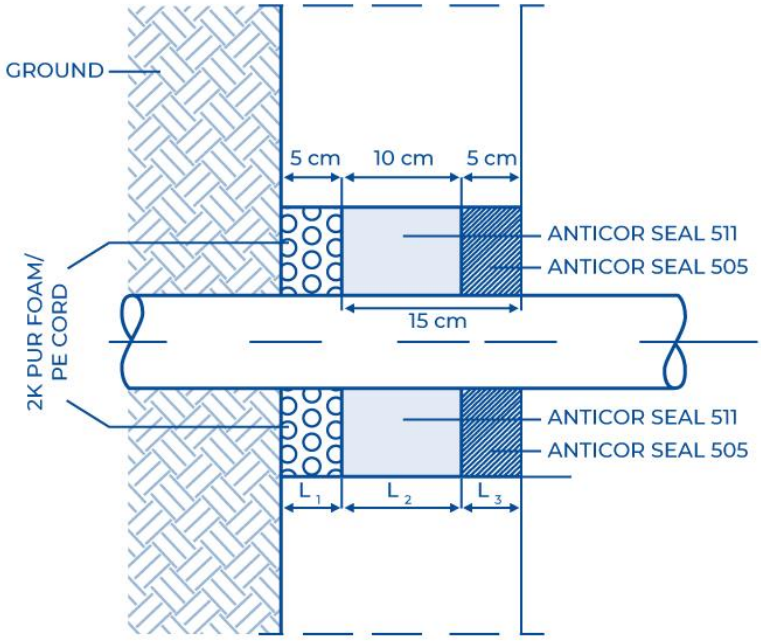


Fig. 1. Diagram of the culvert seal.

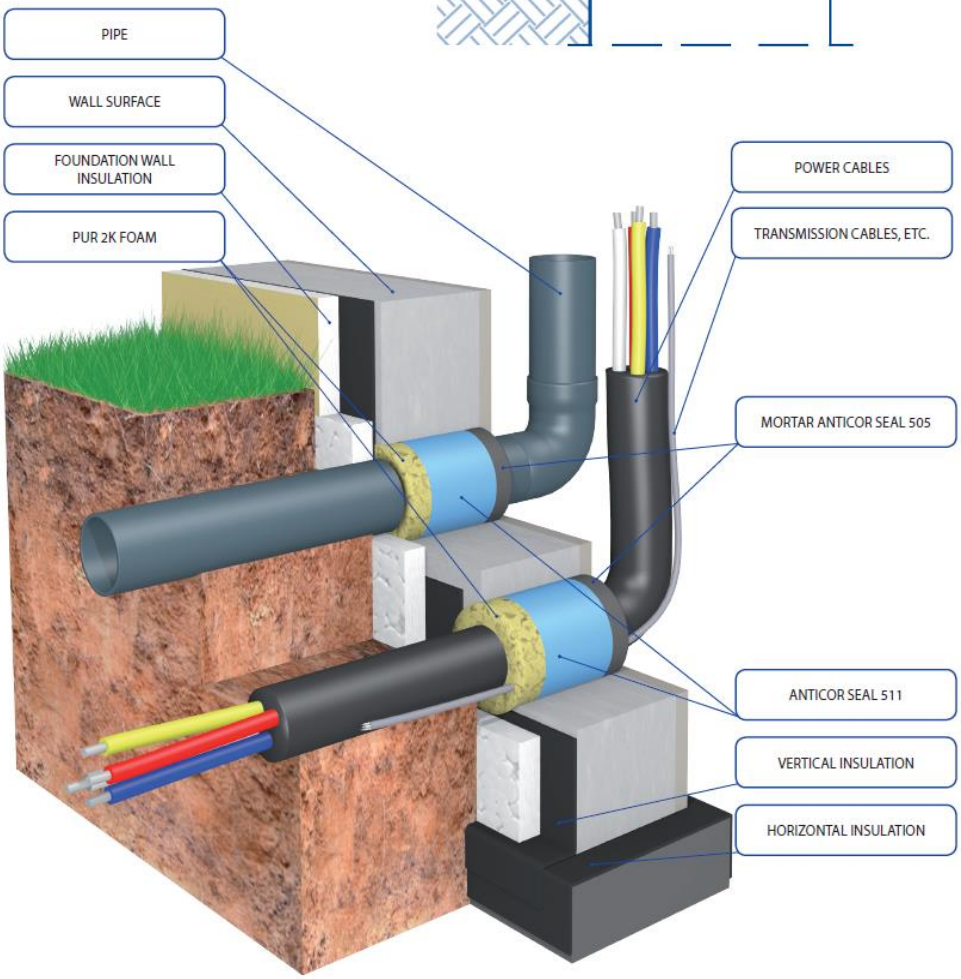
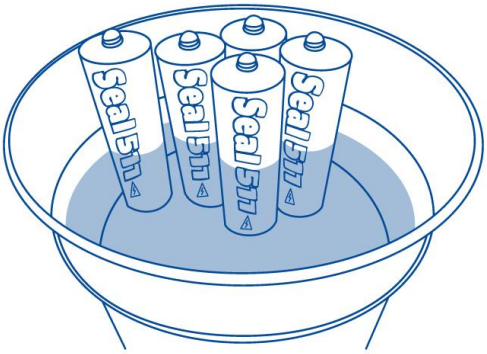


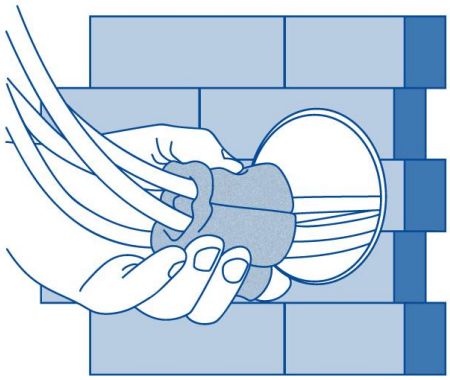
Fig. 2. The structure of the culvert sealing.

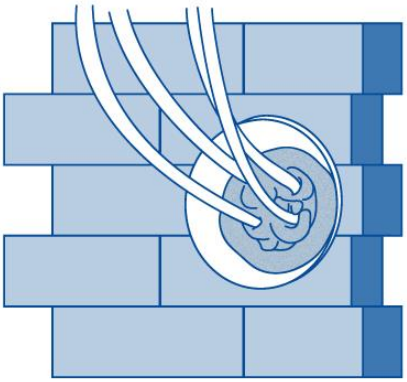
APPLICATION PROCESS:



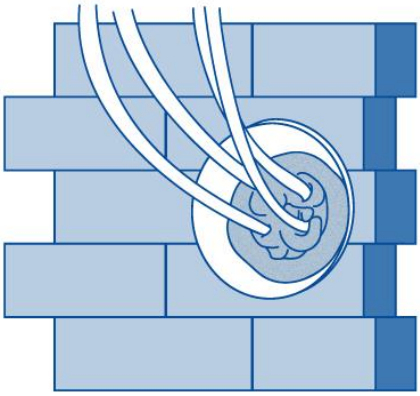
Step 1: Before application, preheat the cartridge in a water at a temperature of 30÷40°C for ~15 minutes.
To avoid heating, trim the end of the applicator approx. 4 cm from the base

Step 2: Insert the pre-heated cartridge into the caulking gun.

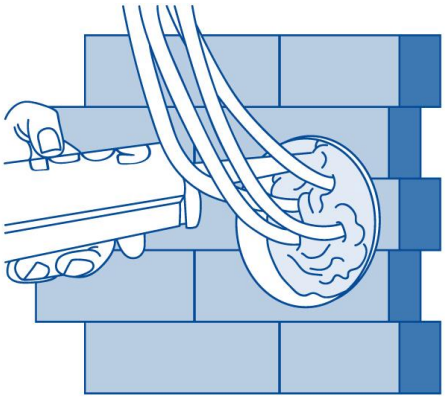




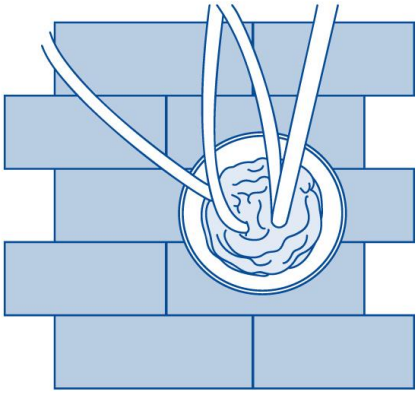
Step 3: Before sealing, clean the duct / culvert to a minimum depth of 20 cm. Make a blocking ring for the mass from foam or expansion cord (L_1) and place it at a depth of 15 cm.



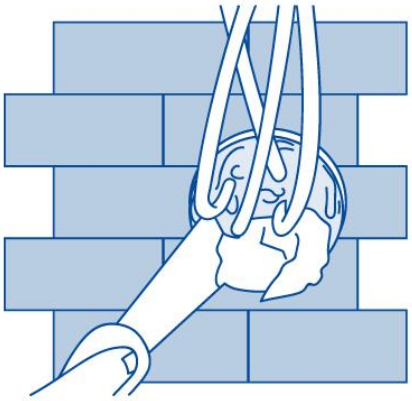
Step 4: Apply the mass slowly in layers around the cables, start from the inside of inlet, avoid the air pockets. Make sure that the mass tightly fills the spaces between cables, move the cables to ensure 100% filling and tightness (L_2).



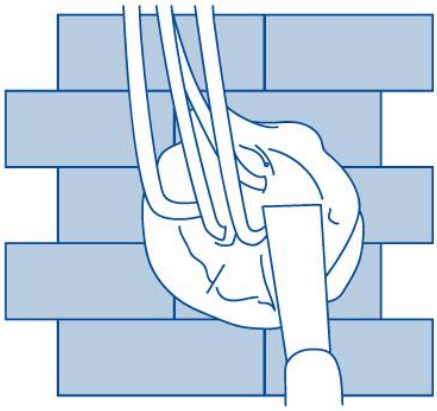
Step 5: After applying the mass, clean the edge of the culvert again and, in the case of PVC pipes, roughen the surface with sandpaper.

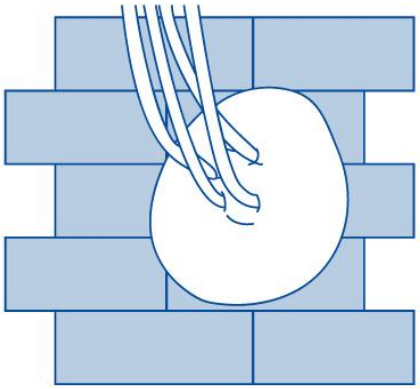


Step 6: Start applying ANTICOR Seal 505 mortar (min. 25-50 mm) on the prepared surface.



Step 7: Fill the culvert with mortar and smooth its surface precisely with a spatula (L_3).





Step 8: Once the mortar has set, the culvert is fully secured.