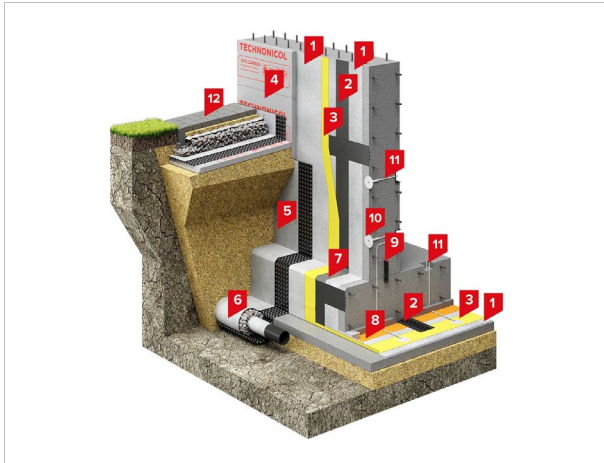




## TN FOUNDATION PVC PROTECT PROF

Repairable waterproofing solution for a foundation with PVC membrane and drainage



### Area of application

The system is designed for underground waterproofing of buildings and structures erected in pits with backfilling, in soils with the presence of one or more aquifers of high capacity and hydrostatic pressure.

### Advantages



High reparability



Signal layer for easy quality control



Loose laid system



Efficient removal of groundwater

### System composition and material consumption rates

No.	Material	Unit	Thickness, mm*	Consumption rate**
1	Needle-punched geotextile	m <sup>2</sup>	2.3 × 2	1.15 × 2
2	TECHNONICOL EC-320-4 waterstop	m	–	acc. to calculation
3	LOGICBASE V-SL	m <sup>2</sup>	2.0	1.15
4	XPS TECHNICONICOL CARBON PROF 300 (optional)	m <sup>3</sup>	50-200, increments 10 mm	1.03
5	PLANTER geo	m <sup>2</sup>	8	1.15
6	Drainage pipe	–	–	acc. to calculation
7	PVC Band LOGICBASE V-Strip FB glued with TECHNICONICOL 2K epoxy glue	m	–	acc. to calculation
8	Polyethylene film	m <sup>2</sup>	0.2	1.15
9	TECHNONICOL IC-125-2-SP waterstop	m	–	acc. to calculation
10	Injection flange	pcs	–	5 pcs per 150 m <sup>2</sup>
11	Injection hose	m	–	acc. to calculation
12	Blind area	–	–	acc. to calculation

\*The available thicknesses of the selected thermal insulation materials are to be checked with the manufacturer.

\*\*The consumption rates are taken conditionally – according to the manufacturer's recommendations.

### Technical description

Repairability is the key feature of this system. It is ensured by dividing the waterproofing layer with TECHNICONICOL waterstops into separate sections of up to 150 m<sup>2</sup> and an injection system, which consists of injection flanges and hoses leading to these isolated segments. Compartmentalization prevents groundwater spread between the waterproofing layer and the foundation structure in case of damage. The injection system allows repairing the waterproofing by delivering polymeric repair compounds to the damaged section. The repair can be easily done from the inside of the structure at any stage of construction or operation. The single-ply waterproofing system is based on a premium non-reinforced PVC membrane LOGICBASE V-SL with a special yellow signal layer for prompt and easy quality control of works. The overlaps of the loose laid membrane are welded with hot air using automatic welding equipment to form double seams with a central air channel designed to check their tightness.

Needle-punched geotextile with a surface density of 500 g/m<sup>2</sup> is used as a protective and separating layer. On the horizontal part of the foundation, additional protective layers of polyethylene film and sand-cement screed are provided.

The wall drainage system made of dimpled HDPE membrane PLANTER geo and drainage pipes effectively removes the atmospheric and ground waters from the basement walls and protects the waterproofing layer from possible damage. In case the thermal insulation of the socle is required, one may use XPS slabs TECHNICONICOL CARBON PROF 300. To seal the concrete joints at the junctions of the slab and the foundation wall, a special TECHNICONICOL IC-125-2-SP waterstop is used.