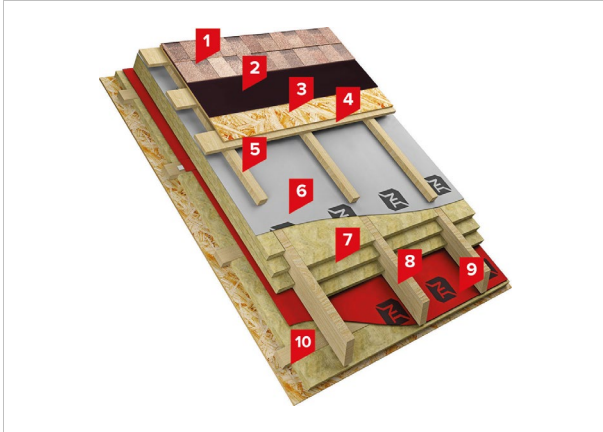




## TN SHINGLES MANSARD

Solution for a pitched roof with thermal insulation of stone wool



### Area of application

Pitched roofs of residential houses and administration buildings with a slope of 12° or greater with stone wool thermal insulation.

### Advantages



Energy efficiency



Reliable waterproofing



Powerful sound absorption



Under roof ventilation

### System composition and material consumption rates

No.	Material	Unit	Dimensions	Consumption rate*
1	TECHNONICOL roofing shingles	m <sup>2</sup>	width: 1000 mm height**: 317-349 mm	1.00***
2	Underlayment membrane of UNDERLAY series	m <sup>2</sup>	width: 1 m length****: 15-25 m	1.10
3	Solid base (OSB-3 or plywood)	–	acc. to project	acc. to calculation
4	Counter battens	–	acc. to project	acc. to calculation
5	Ventilation space battens	–	acc. to project	acc. to calculation
6	Diffusion membrane TECHNOLITE ALPHA	m <sup>2</sup>	1.5 × 50 m	1.07
7	Stone wool slabs TECHNOLITE EXTRA	m <sup>2</sup>	1.2 × 0.6 m	1.03
8	Rafter system	–	–	acc. to calculation
9	Vapor barrier film TECHNOLITE ALPHA	m <sup>2</sup>	1.5 × 50 m	1.07
10	Ceiling cladding	–	–	–

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

\*\*The total height of the shingle depends on the chosen collection.

\*\*\*The quantity of sqm per bundle indicated on the package already includes overlapping coefficient. The consumption may increase due to cuttings subject to the complexity of roofing design and the chosen collection.

\*\*\*\*The length of the roll depends on the chosen membrane.

### Technical description

The solution represents a reliable watertight system for pitched roofs with thermal insulation made from stone mineral wool. Non-flammable stone wool slabs of low density TECHNOLITE EXTRA are used to arrange effective thermal insulation, therefore increasing the energy efficiency of the overall construction. At the same time, mineral wool significantly reduces the noise level from outside, making the life of inhabitants more comfortable. From the inside of the construction, the stone wool slabs are protected from the vapor ingress by vapor barrier films of TECHNOLITE ALPHA series. From the opposite side, diffusion membranes TECHNOLITE ALPHA are used to preserve the slabs from harmful impacts of water, wind and dust, as well as to contribute to the removal of excess moisture from building structures via the provided ventilation system.

The base for roofing materials must be solid, rigid and flat, and is normally made of OSB-3 or exterior plywood with increased moisture resistance. SBS-modified bitumen membranes of UNDERLAY series are used as an underlayment for roofing shingles over the whole roof surface. These lightweight materials provide secure protection from wind-driven rain. For the zones of valleys and eaves, one should apply self-adhesive membranes UNDERLAY NEXT SELF or ULTRAFLEX SA; the remaining roof can be covered with UNDERLAY PRO (S) 500, UNDERLAY BASE 1500 or UNDERLAY BASE 900 membranes that are fixed mechanically. TECHNOLITE roofing shingles serve as the main roof covering, providing waterproofing and an attractive appearance. The great variety of patterns and colors allows making a choice that best suits the chosen house design. The material is fixed with roofing nails, the quantity of which depends on the roof slope and the chosen shingles collection.