TECHNONICOL

CONSTRUCTION FILMS TECHNONICOL

2020

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CONSTRUCTION FILMS TODAY!

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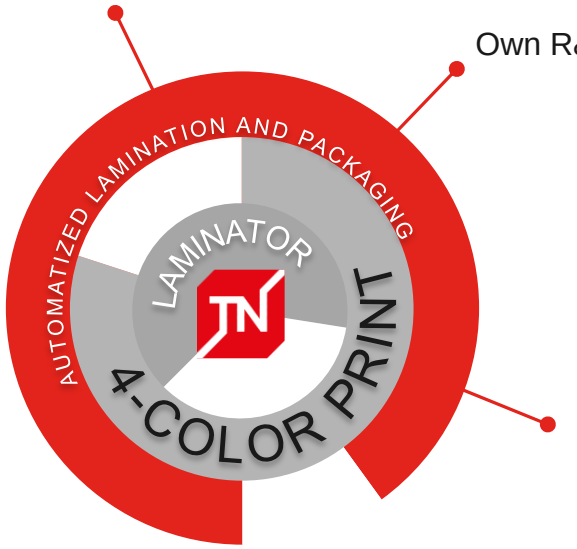
TECHNONICOL PRODUCTION - RYAZAN’

Modern equipment

Own R&D



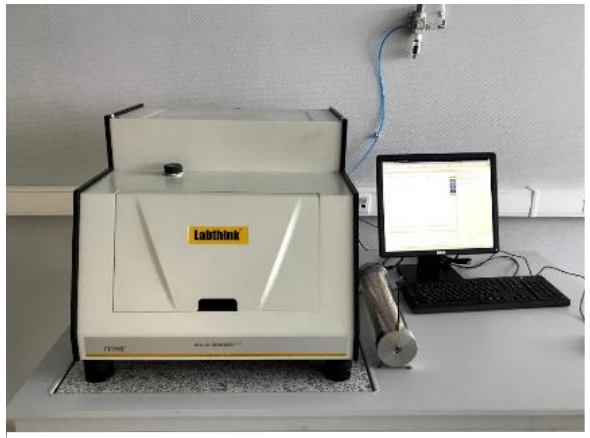
European quality standards

PRODUCTION CAPACITY 2020

100.000.000

m² annually

TECHNONICOL LABORATORY



Quality control of each parameter:

- Mass
- Vapor permeability
- Waterproofing properties
- Breaking load
- UV-stability

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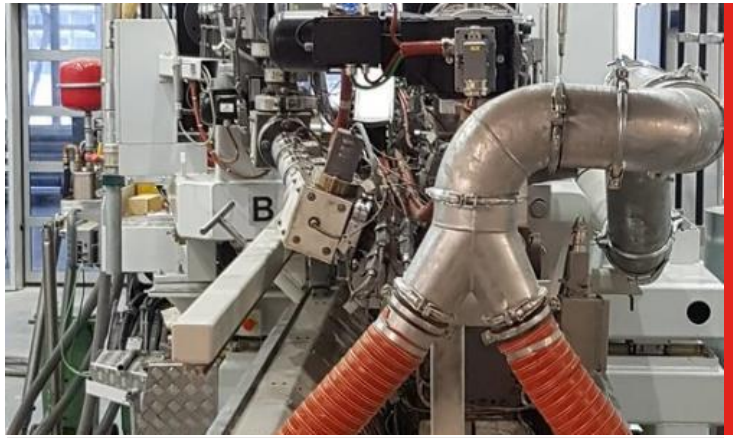
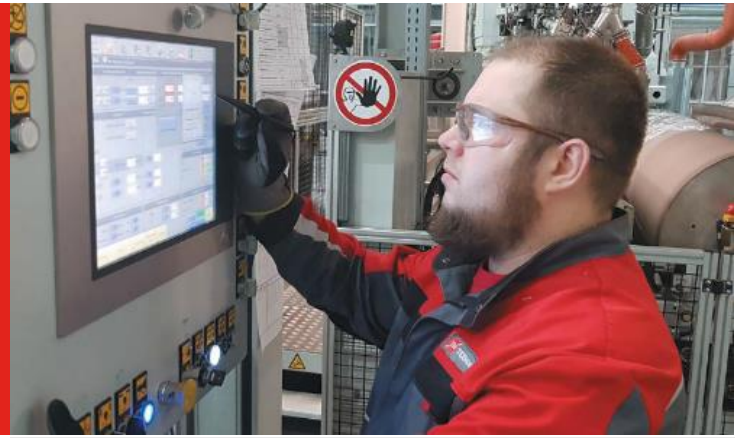
ADVANTAGES AND UNIQUENESS

PERFORMANCE AND UNIQUENESS



PRODUCTION FROM PRIMARY RAW MATERIALS

- Strict quality control!



UNIQUE TECHNOLOGIES FOR RUSSIA

- Own production of diffusion membranes (adhesive bonding method)
- Production from complex polymers (for example, TPU – thermoplastic polyurethane)

AUTOMATIZATION

- 4 persons per shift on all production steps

SYSTEM SOLUTIONS AND TECHNICAL SUPPORT

1. ROOFING TYPE

PITCHED | **FLAT**

2. COVERING TYPE

- FLEXIBLE SHINGLES
- COMPOSITE SHINGLES, CERAMIC SHINGLES, SLATE ROOFING
- METAL SHINGLES, PROFILE SHEETS, SEAM ROOFING
- PROFILE SHEET
- TIMBER

3. THERMAL INSULATION OF ROOFING

FLEXIBLE SHINGLES			COMPOSITE SHINGLES, CERAMIC SHINGLES, SLATE ROOFING			METAL SHINGLES, PROFILE SHEETS, SEAM ROOFING			FLAT	
INSULATED (MANSARD)	COLD ROOF	NO THERMAL INSULATION	INSULATED (MANSARD)	COLD ROOF	NO THERMAL INSULATION	INSULATED (MANSARD)	COLD ROOF	NO THERMAL INSULATION	THERMAL INSULATION SW, XPS, PIR	

3. THERMAL INSULATION TYPE

	FLEXIBLE SHINGLES			COMPOSITE SHINGLES, CERAMIC SHINGLES, SLATE ROOFING			METAL SHINGLES, PROFILE SHEETS, SEAM ROOFING			FLAT	
PIR	TN-SHINGLAS Mansard PIR	TN-SHINGLAS Classic + TN-FLOOR Attic	TN-SHINGLAS Classic	TN-LUXARD Mansard	TN-LUXARD Classic + TN-FLOOR Attic	TN-LUXARD Classic	No TN system available	No TN system available	No TN system available	Analog of PAROBARRIER system	
STONE WOOL	TN-SHINGLAS Mansard										
							Similar roofing pie to TN-LUXARD Mansard	Similar roofing pie to TN-LUXARD Classic + TN-FLOOR Attic	Similar roofing pie to TN-LUXARD Classic		

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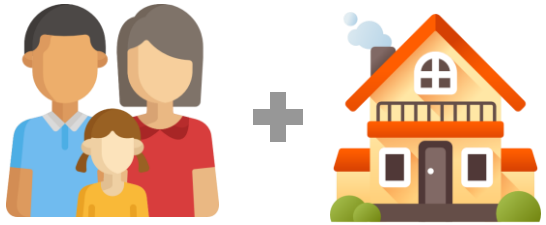
WHAT ARE CONSTRUCTION FILMS FOR?

WHAT ARE CONSTRUCTION FILMS FOR?



When a construction film does not fulfill its purpose, an average family incurs large expenses on heating their house and is forced to carry out repairs almost every year.

AFTERMATH OF USING LOW-QUALITY CONSTRUCTION FILMS

- Mold and fungi on attic flooring

- Leakages in roofing
- Large heat losses due to wet thermal insulation

Roofing, facades, inner walls and floor require long-lasting and reliable wind- and water-protection and vapor barrier.

TECHNONICOL ALPHA

WIND- AND WATER-PROTECTION

PROTECTION OF THE CONSTRUCTION AND STONE WOOL BASED THERMAL INSULATION FROM DIFFERENT EFFECTS.

Diffusion wind- and water-protection membrane insulates under-roofing layers from precipitation, wind and condensate, and removes moisture from the construction.

WHEN WIND- AND WATER-PROTECTION DOES NOT WORK

Proper installation of wind- and water-protection on roofing and facade

TECHNONICOL FILMS – always a good solution!

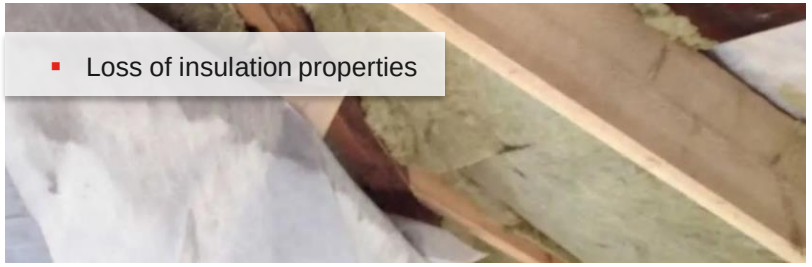
VAPOR BARRIER

PROTECTION OF THERMAL INSULATION LAYER FROM VAPOR INSIDE THE ROOM.

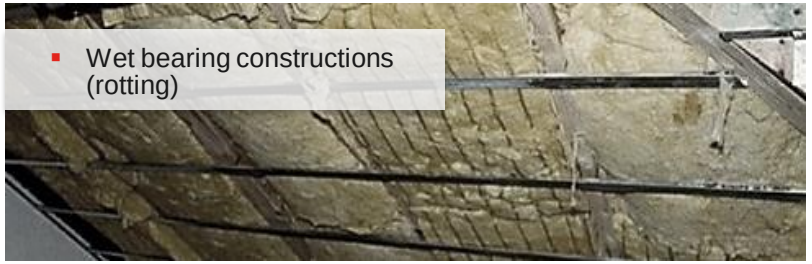
Protection of thermal insulation and construction from overwetting and freezing during cold season. Besides the main purpose, installation of vapor barrier also provides protection from mold and fungi.

Low-quality vapor barrier film can be easily damaged and loses its impermeability; moist penetrates thermal insulation, and as a result:

- Loss of insulation properties



- Wet bearing constructions (rotting)



! Expenses on unscheduled repair (demounting, purchase of new materials, works)

Stone wool based thermal insulation can function in dry state only. Reliable protection: construction films and membranes TECHNONICOL ALPHA.

Example of a reliable and strong vapor barrier film – TECHNONICOL ALPHA BARRIER 4.0

CHOOSING A FILM. WIND- AND WATER-PROTECTION

Professionals recommend to pay attention to functional properties when choosing a water- and wind protection film

All properties are only evaluated in complex.
There are no more important or less important parameters.

STRENGTH

Breaking properties define strength of the material, which directly influences operation reliability and life. The higher, the better.

VAPOR PERMEABILITY

Key characteristic – ability of a diffusion membrane to remove water vapor.

PRIMARY RAW MATERIALS

The base of diffusion membranes – Spunbond, a non-woven material from polymer melt. Only Spunbond from primary polypropylene is used.

SIMPLE INSTALLATION

Marking lines make installation convenient. Self-adhesive strip reduces installation time and provides additional tightness.

UV-STABILITY

.

CHOOSING A FILM. VAPOR BARRIER

Vapor barrier layer should only be made of reliable premium-class materials with the following functional properties

Foiled film TECHNONICOL ALPHA BARRIER 4.0 – the most reliable and modern solution for vapor barrier.

STRENGTH

Reinforcing layer of the vapor barrier film enables for bearing the weight of thermal insulation and mechanical load.

HIGHEST VAPOR PERMEABILITY

The higher s_d is, the better the quality of vapor barrier.

REFLECTING TECHNOLOGY

Foiled layer provides zero vapor permeability, which prevents thermal losses due to reflection of warmth in the room.

ENERGY EFFICIENCY

Thermal energy stays inside, which reduces heating costs.

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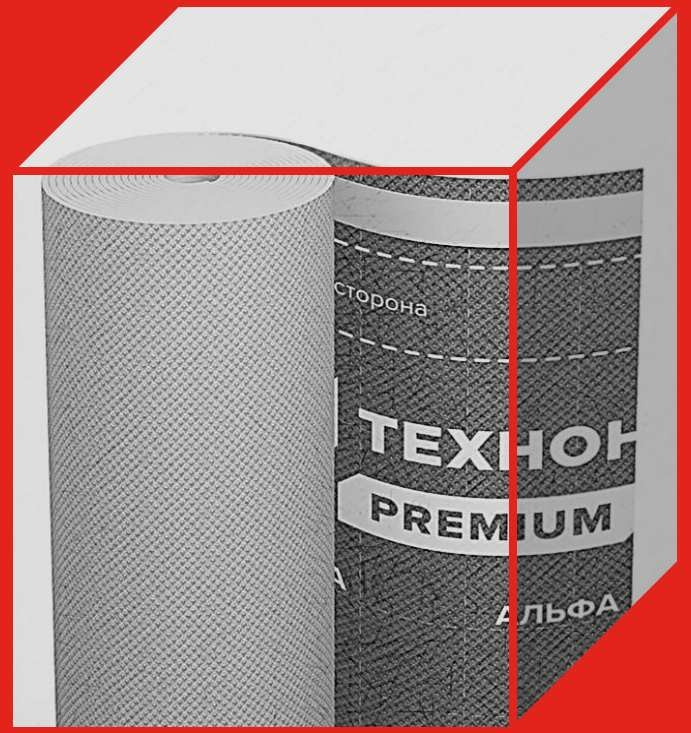
COLLECTION 2020



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TECHNONICOL ALPHA TOP

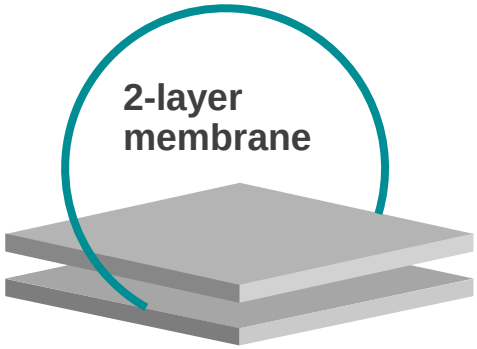
WIND- AND WATER-PROTECTION

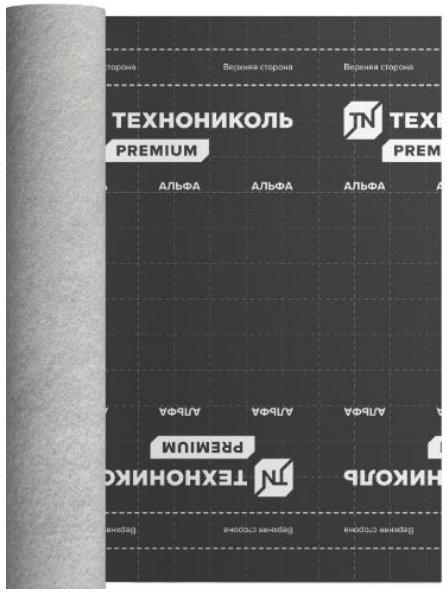
Diffusion membrane with an adsorption layer. Designed for pitched roofs with full thermal insulation of rafters and ventilated facades.

- Super-diffusion membrane
- Energy-efficient technology
- High strength of junctions
- Anti-condensate

INSTALLATION

- On thermal insulation
- On roof sheathing
- On solid decking





PREMIUM

For professional use

Healthy climate

Temporary roofing

TECHNONICOL ALPHA TOP

WIND- AND WATER-PROTECTION

ADVANTAGES OF THERMAL POLYURETHANE

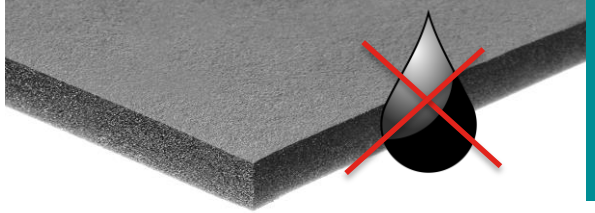
Temporary roofing
min. 6 months

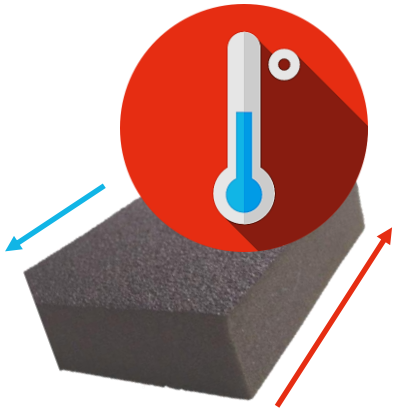
HIGH DURABILITY

including stability to:

- Oil products, lubricants and solvents
- Atmospheric factors
- Microorganisms

of films from polyurethane based on polyether.

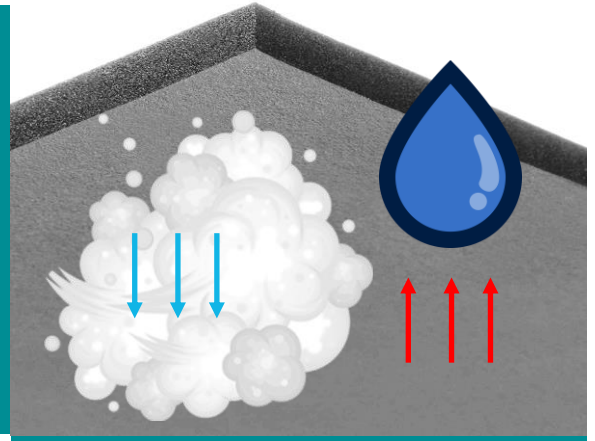




ELASTICITY

in a vast range of temperatures

NO PLASTICIZERS



IMPERMEABLE FOR LIQUIDS, WELL PERMEABLE FOR WATER VAPOR

TECHNONICOL ALPHA TOP

WIND- AND WATER-PROTECTION

APPLICATION

- Metal
- Metal shingles
- Ceramic and sand-concrete shingles
- Flexible shingles

Parameter	Value
Surface density	190±10 g/m²
Breaking load lengthwise	400 N/5 cm
Breaking load crosswise	300 N/5 cm
Vapor permeability, s_d coefficient	0,15 m
Category of water impermeability	W 1
Thermal stability	120 °C
UV-stability	At least 3 months
Length	50 m
Width	1,5 m

TN SYSTEMS

ROOFING

- TN-Shinglas Mansard
- TN-Shinglas Classic + TN-FLOOR Attic
- TN-LUXARD Mansard
- TN-LUXARD Classic
- Cold and insulated roofing with metal shingles

FACADE

- TN-Facade Siding

FLOOR

- TN-Floor Light Acoustic
- TN-Floor Attic

TECHNONICOL ALPHA VENT 150 (130)

WIND- AND WATER-PROTECTION

Diffusion membrane for roofing with single-layer ventilation, walls of frame constructions, ventilated facades.

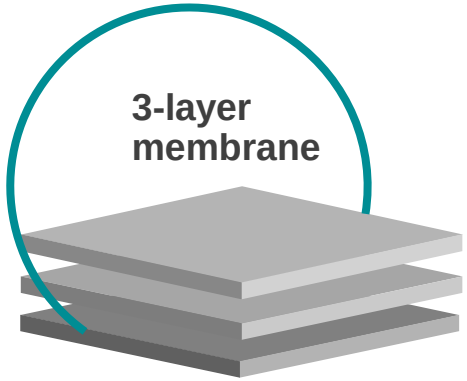
Diffusion membrane

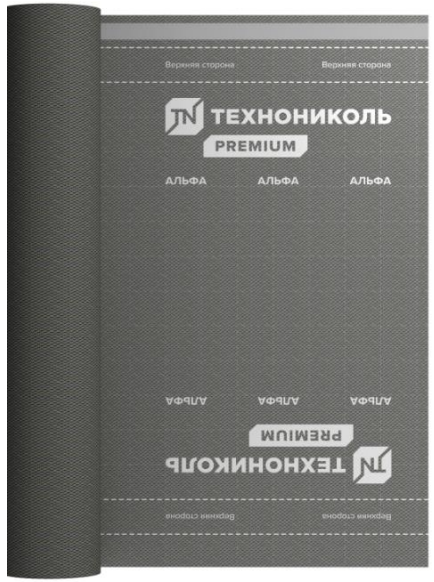
Energy-efficient technology

Anti-condensate

INSTALLATION

- On thermal insulation





PREMIUM

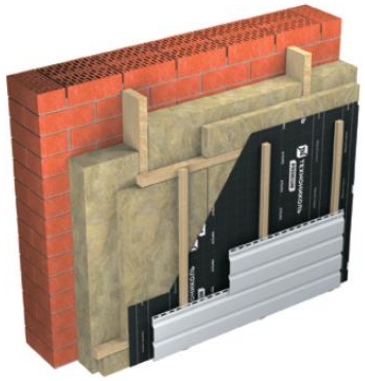
For private use

Healthy climate

Self-adhesive strip

TECHNONICOL ALPHA VENT 150 (130)

WIND- AND WATER-PROTECTION



APPLICATION

- Metal
- Metal shingles
- Ceramic and sand-concrete shingles
- Flexible shingles

TN SYSTEMS

ROOFING

- TN-Shingles Mansard
- TN-Shingles Classic + TN-Floor Attic

FACADE

- TN-Facade Siding
- TN-Facade Hauberk

Parameter	TECHNONICOL ALPHA VENT 150	TECHNONICOL ALPHA VENT 130
Surface density	150±5 % g/m²	130±5 % g/m²
Breaking load lengthwise, not less than	250 N/5 cm	220 N/5 cm
Breaking load crosswise, not less than	180 N/5 cm	160 N/5 cm
Vapor permeability, not less than	≥1600 g/m²×24 h	≥1600 g/m²×24 h
Vapor diffusion thickness, s_d coefficient	≈0,02 m	≈0,02 m
Water impermeability at the pressure of at least 0,001 MPa during 24 hours	W 1	W 1
UV-stability	At least 2 months	At least 2 months
Length	50±5 % m	50±5 % m
Width	1,5 (–0,5…+1) % m	1,5 (–0,5…+1) % m

TECHNONICOL ALPHA VENT 110 (95)

WIND- AND WATER-PROTECTION

Diffusion membrane for roofing with single-layer ventilation, walls of frame constructions, ventilated facades.

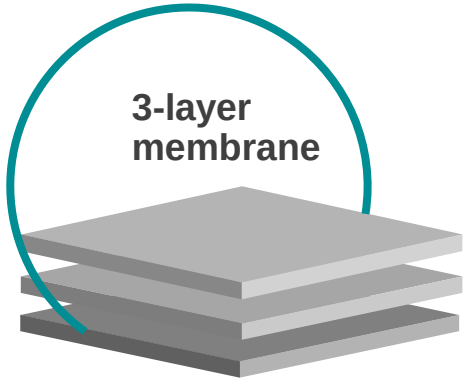
Diffusion membrane

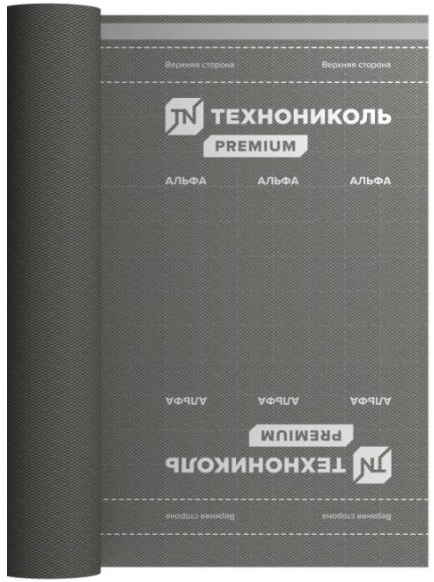
Energy-efficient technology

Anti-condensate

INSTALLATION

- On thermal insulation





PREMIUM

For private use

Healthy climate

Self-adhesive strip

TECHNONICOL ALPHA VENT 110 (95)

WIND- AND WATER-PROTECTION

APPLICATION

- Metal
- Metal shingles
- Ceramic and sand-concrete shingles

TN SYSTEMS

FACADE

- TN-Facade Economy
- TN-Facade Light Hauberk

Parameter	TECHNONICOL ALPHA VENT 110	TECHNONICOL ALPHA VENT 95
Surface density	110±5 % g/m²	95±5 % g/m²
Breaking load lengthwise, not less than	190 (±50) N/5 cm	160(±25) N/5 cm
Breaking load crosswise, not less than	100 (±30) N/5 cm	90(±25) N/5 cm
Vapor permeability, not less than	≥1400 g/m²×24 h	≥1400 g/m²×24 h
Vapor diffusion thickness, s_d coefficient	≈0,015 m	≈0,015 m
Water impermeability at the pressure of at least 0,001 MPa during 24 hours	Must pass the test	Must pass the test
Length	50±5 % m	50±5 % m
Width	1,5 (–0,5…+1) % m	1,5 (–0,5…+1) % m

TECHNONICOL ALPHA BARRIER 4.0

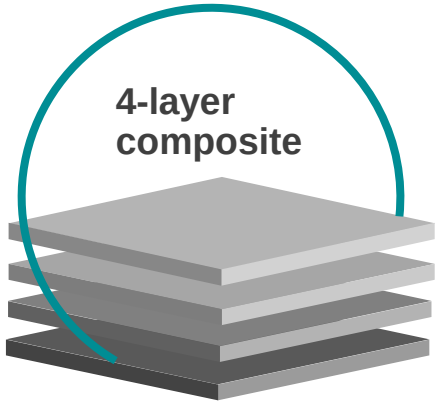
VAPOR BARRIER

Energy-efficient foiled vapor barrier film with zero vapor permeability.

- Reflecting vapor barrier
- Energy-efficient technology
- High strength, reinforced with mesh
- Zero vapor permeability

INSTALLATION

- On solid decking
- On roof sheathing



PREMIUM

For professional use

Healthy climate

Complies with advanced requirements to standards of buildings

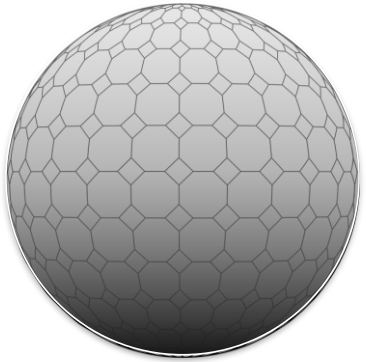
TECHNONICOL ALPHA BARRIER 4.0

VAPOR BARRIER

RECOMMENDED FOR PERMANENT RESIDENCE HOUSES

STRENGTH AND PLASTICITY

Due to extra strong polymer mesh the film possesses high strength and at the same time high plasticity and stability of dimensions.



VAPOR PERMEABILITY

Provides 100% protection of the construction from warm and humid air.

~ 0%

- WORKING AREA
- SWIMMING POOLS
- BATHROOM
- KITCHEN
- ROOM

THERMAL SCREENING

Aluminum coating applied by spraying is protected with a transparent polyether film from the outside.

REDUCTION OF OPERATION COSTS

Improvement of thermal protection of the entire roofing.

Up to 10%

FOR ROOMS WITH NORMAL AS WELL AS HIGH HUMIDITY ENVIRONMENT

TECHNONICOL ALPHA BARRIER 4.0

VAPOR BARRIER

APPLICATION

- Mansards of all types
- Basements
- Walls

Parameter	Value
Surface density	180±5 % g/m^2
Breaking load lengthwise, not less than	450 N/5 cm
Breaking load crosswise, not less than	450 N/5 cm
Vapor diffusion thickness, s_d coefficient	150 m
Water impermeability at the pressure of at least 0,001 MPa during 72 hours	W 1
UV-stability	At least 2 months
Length	50±5 % m
Width	1,5 (–0,5…+1) % m

TN SYSTEMS

ROOFING

- TN-Roofing Practic
- TN-Shinglas Mansard
- TN-Shinglas Mansard (SW)
- Insulated roofing with metal shingles
- Cold roofing with metal shingles

FACADE

- TN-Facade Econom
- TN-Facade Light Hauberk

ROOM

- TN-Floor Thermo KMS
- TN-Floor Light Acoustic
- TN-Floor Attic

TECHNONICOL ALPHA BARRIER 3.0

VAPOR BARRIER

Reinforced vapor barrier translucent film with limited vapor permeability.

APPLICATION

- Walls
- Pitched roof.

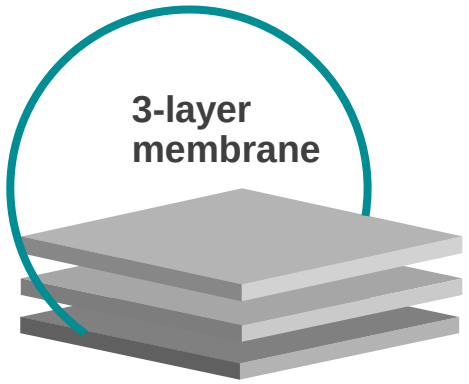
Limited vapor permeability

High strength, reinforced with mesh

Visual control

INSTALLATION

- On solid decking
- On roof sheathing



PREMIUM

For professional use

Mold protection

TECHNONICOL ALPHA BARRIER 3.0

VAPOR BARRIER

APPLICATION

- Mansards of all types
- Basements
- Walls

Parameter	Value
Surface density	100±5 % g/m^2
Breaking load lengthwise, not less than	300 N/5 cm
Breaking load crosswise, not less than	300 N/5 cm
Vapor diffusion thickness, s_d coefficient	20 m
Water impermeability at the pressure of at least 0,001 MPa during 72 hours	W 1
UV-stability	At least 2 months
Length	50±5 % m
Width	1,5 (–0,5…+1) % m

TN SYSTEMS

ROOFING

- TN-Shinglas Classic + TN-Floor Attic

ROOM

- TN-Floor Barrier
- TN-Floor Classic
- TN-Floor Prof

TECHNONICOL ALPHA BARRIER 2.0

VAPOR BARRIER

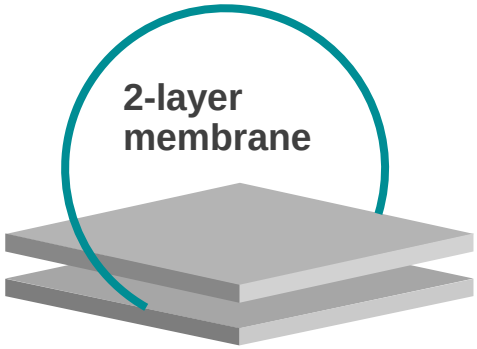
Vapor barrier film for pitched roofs and walls.

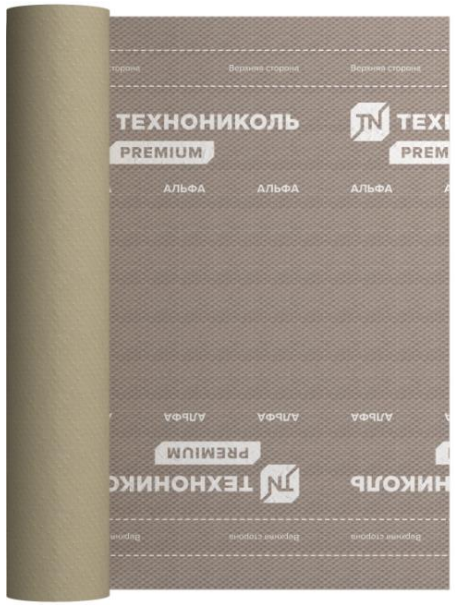
Limited vapor permeability

Removes moisture from rooms without risk of condensation

INSTALLATION

- On solid decking





PREMIUM

For private use

Mold protection

TECHNONICOL ALPHA BARRIER 2.0

VAPOR BARRIER

APPLICATION

- Mansards of all types
- Floors

Parameter	Value
Surface density	80±5 % g/m2
Breaking load lengthwise, not less than	140 N/5 cm
Breaking load crosswise, not less than	110 N/5 cm
Vapor diffusion thickness, s_d coefficient	2 m
Water impermeability at the pressure of at least 0,001 MPa during 72 hours	W 1
UV-stability	At least 2 months
Length	50±5 % m
Width	1,5 (–0,5…+1) % m

TN SYSTEMS

ROOFING

- TN-Shinglas Classic + TN-Floor Attic

ROOM

- TN-Floor Light
- TN-Floor Standard
- TN-Floor Hydro

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