TECHNONICOL

STONE WOOL

PRODUCT CATALOG

KNOWLEDGE. EXPERIENCE. CRAFTSMANSHIP.

WWW.TECHNONICOL.COM

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About the company

The TECHNONICOL Corporation is a leading international manufacturer of reliable and efficient building materials and systems. The company offers the latest technologies that combine developments of its own research centers and advanced international experience. More than 500 million people over the world live and work in buildings built using materials manufactured by TECHNONICOL.

58
production sites

export products to
118
countries

700
trade partners

In 2003, TECHNONICOL entered the market of heat-insulating materials based on stone wool. From that moment, in addition to being a leader in production of materials for roofing and waterproofing, TECHNONICOL has also become one of the largest Russian manufacturers of heat-insulating materials made of stone wool. The distinctive features of the thermal insulation we produce are its high quality, as well as a wide gradation of technical and physical characteristics, which allow our customers to select materials that are optimal in prices and physical parameters. As the needs of regional markets grew, we optimized the geography of our factories. It allows us to be flexible and fast suppliers of our products and not to overburden our customers with additional transport costs.

Our production capaciities and equipment allow us to provide large-scale facilities with necessary volumes of heat-insulating materials and create unique products according to your individual orders.

All TECHNONICOL products are duly certified, are notable for their high quality and comply with international standards. All the company's enterprises work according to the principle of waste-free production that saves ecology.

The dynamic development of the Mineral Insulation direction is based on highly qualified personnel, as well as on using modern technological solutions and equipment in production.

8
factories that produce stone wool

more than
11
mln m^3 of products per year
The total capacity of our factories

Geographic reach

The Corporation's industrial assets include 8 factories producing heat insulating materials based on stone wool in Russia: in Belgorod, Ryazan, Rostov-on-Don, Zainsk, Chelyabinsk, Yurga and Khabarovsk. Location of these factories allows minimizing transport costs

The key to competitiveness are technological improvements

The popularity of TECHNONICOL heat-insulating materials made of stone fiber among consumers is explained by a number of technical and operational advantages that are laid down already at the production stage.

All these materials are produced from rock formations of the basalt group using advanced high-tech equipment from some leading Western European manufacturers.

Technological processes in the line are automated, and strict quality control at all production stages, from raw components to testing of finished products,, provides stability of specifications of manufactured materials.

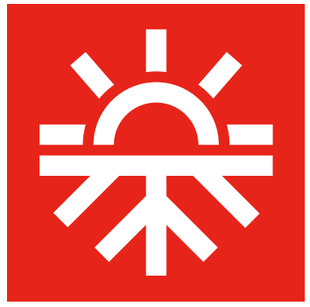
Ready-to-use products are packed into a heat-shrink film, which guarantees safety of materials. A pallet with products is packed according to the stretch-hood technology. This packaging technology reduces transport and labor costs by increasing the loading speed. But the most important thing is that this packaging type allows our clients to store supplied materials at an open warehouse or construction site without losses of their physical and mechanical performance.

TECHNONICOL is not only production capacities, but also its own scientific centres where continuous work is conducted aimed at improving the technical and operational qualities of finished products.

The company permanently invests time and money into improvement of production technologies and enhancement of production capacities. The result of this work is a wide range of insulating materials made of stone wool that are characterized by consistently high quality and compliance with the requirements of Russian and international standards from year to year.

Thanks to their competitive cost, uncompromising quality and wide range of performance values, non-combustible basalt-based materials made by TECHNONICOL have become an optimal choice for domestic and European buyers. You can appreciate the advantages of TECHNONICOL stone wool slabs already today through contacting our representatives.

TECHNONICOL
stone wool properties



EFFECTIVE HEAT INSULATION

The TECHNONICOL stone wool is a highly efficient heat-insulating material.

Its high heat transfer resistance is achieved by holding a large amount of air immobile inside the warmth-keeping material using closely intertwined finest stone wool fibers.

High heat transfer resistance by holding air inside the warmth-keeping material

FIRE SAFETY

The main raw materials for producing the TECHNONICOL stone wool are rock formations of the gabbro-basalt group. This ensures that all the TECHNONICOL products are non-combustible. The melting point of the fibers exceeds 1000°C, which allows using these stone wool products in a wide range of operating temperatures.

In case of fire, the TECHNONICOL heat insulation restrains heat transmission, prevents fire spreading and protects building structures from deformation and destruction. This gives an additional time needed to evacuate people, documents and property.

An important factor in selecting this material is that when exposed to high temperatures, the TECHNONICOL heat insulation does not emit harmful or toxic substances.

The fibres melting temperature is more than 1000°C

DIMENSIONAL STABILITY

The high resistance of the TECHNONICOL materials to mechanical loads is provided by the properties of the fiber and the stone wool structure. These parameters were set individually for each material of the TECHNONICOL range based on applications of specific heat-insulating materials.

In various designs, a material perceives different loads in terms of strength, direction and duration of exposure. For preserving their shape, thickness and reliability of fastening, structural heat-insulating materials must have a high resistance to deformation. This property, in turn, is necessary for reliable and durable thermal insulation of a structure without increasing quality loss in course of time.

High resistance to mechanical loads

GOOD SOUND ABSORPTION

The fibrous structure of the TECHNONICOL stone wool products ensures great acoustic and sound-absorbing properties of the material. The TECHNONICOL products have high sound absorption factors in a wide frequency range, which contributes to reducing air and shock noise levels when using in various sound-insulating designs, such as partitions, floors, etc.

High values of sound absorption factors enable to efficiently lower levels of both air and shock noise

HYDROPHOBICITY

The presence of moisture in a warmth-keeping material negatively influences over its heat-insulating properties, lifespan and indoor microclimate. In case of getting a warmth-keeping material wet, expensive and time-consuming measures are required to eliminate the consequences, which most often involve replacing the material.

All the TECHNONICOL stone wool based heat-insulating materials are treated with hydrophobic additives that give them water-repellent properties.

High resistance to short-term exposure to moisture

VAPOR PERMEABILITY

The stone wool based TECHNONICOL materials have a high vapor permeability, do not retain moisture coming from the room in the form of steam formed in the process of human life and virtually always remain in a dry state.

Good vapor permeability

BIOSTABILITY

All TECHNONICOL products wholly meet the biological resistance criteria, which is confirmed both by numerous tests ans by field data.

The stone wool based TECHNONICOL materials are able to resist the impact of various macro- and microorganisms: these materials do not support the vital activity of bacteria, mold and fungi, and are also not attractive as a habitat for existence of insects and gnawing animals.

High resistance to microorganisms and gnawing animals

CHEMICAL STABILITY

The TECHNONICOL products are manufactured based on the basalt group rocks. Natural minerals of this group feature a high chemical resistance to various substances, such as oils, solvents, paints, acidic and alkaline environments.

The TECHNONICOL materials based on the basalt group rocks may be safely used together with any kinds of construction materials, as well for filtration of aggressive agents in a number of chemical industry branches.

Chemical neutrality towards construction materials

ENERGY EFFICIENCY

TECHNONICOL develops, manufactures and promotes materials and systems in the construction market that allow minimizing heat losses and increasing the efficiency of thermal protection of buildings, structures and industrial facilities. By introducing energy-efficient technologies and materials, we achieve a significant reduction of heat losses through envelopment of buildings and structures.

TECHNONICOL conducts research activities aimed at increasing of energy efficiency, using heat-insulating systems with stone wool materials. Usage of such systems and materials allows to greatly reduce energy consumption for heating.

For instance, heat-insulation of facades in a residential apartment building, taking into account the growth of tariffs for thermal energy, will pay off on average after 10 years of its operation.

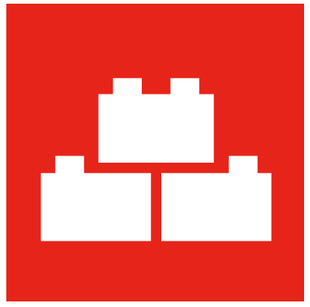
Facilitates saving energy resources

BASALT-BASED

The main raw materials for producing the heat-insulating stone wool slabs are rocks of the gabbro-basalt group, which are magmatic formations resulting from a volcanic eruption. These unique raw materials are natural, ecologically clean and safe.

In order to obtain high-quality fiber, the charge mixture is carefully selected at our factories.

Made mainly from melt of erupted rocks



EASY INSTALLATION

The stone wool slabs are easily cut with an available tool, such as a knife or a fine-toothed saw. A pattern having a desired size is made and mounted into a design without difficulty, and mounting quality is easily monitored.

Easy cutting and processing

DIMENSIONAL STABILITY

Thanks to the automation and mechanization of the technological process, our stone wool slabs are produced with guaranteed stable geometric dimensions.

Clear and stable geometric dimensions enable to install the slabs with a tight fit to each other or to the frame of a building structure, depending on the installation conditions.

Guaranteed stable geometric dimensions

TECHNONICOL
stone wool advantages

ECOLOGICAL COMPATIBILITY

Taking care of the environment during production of materials is one of the priorities of the TECHNONICOL Corporation, as well as another area of applying innovations. As one of the leading stone wool manufacturers in Russia, TECHNONICOL constantly improves its products and services, using modern equipment and technologies to preserve the environment. All products that are developed and manufactured by the company meet international sanitary and environmental regulations, are safe for human health and nature, undergo a full cycle of both mandatory and voluntary certification, and are approved for using in Russia and abroad.

DURABILITY

The period of efficient service of 37 grades of TECHNONICOL mineral wool heat insulation has been confirmed by tests of the Research Institute of Construction Physics (RICF) of the Russian Academy of Architecture and Construction Sciences (RAACS).

The stone wool materials were tested as per GOST R 57418-2017, “Heat-insulating mineral wool materials and products. The method of determining the period of efficient service”.

In the course of research, RICF specialists moistened slab samples and subjected them to repeated cycles of freezing and thawing. The tests have confirmed that the durability of the TECHNONICOL materials is at least 50 years.

This is a scientifically confirmed warranty of the quality of the material, preservation of its properties and stable operation of a heat-insulating layer in a structure.

COMPLETE SOLUTIONS

TECHNONICOL not only produces materials, but also offers optimal ready-made solutions that have proven themselves well and have been popular for many years. Good compatibility of materials is one of the basic conditions for obtaining a reliable insulating system. That is why our specialists, in cooperation with some leading research institutes, have developed a number of professional technical solutions called TECHNONICOL Building Systems. The main criteria of these systems are compatibility of components, structural durability and high quality. At TECHNONICOL, you can always purchase an optimum ready-made solution and get qualified assistance on its installation.

Industrial and civil construction

TECHNOLIGHT / TECHNOBLOCK PROF / TECHNOVENT N / TECHNOVENT EXTRA / TECHNOVENT / TECHNOFAS EXTRA / TECHNOFAS DECOR / TECHNOFAS OPTIMA / TECHNOFAS EFFECT / TECHNOFAS / TECHNOROOF PROF / TECHNOROOF N / TECHNOROOF N PROF / TECHNOROOF 45 / TECHNOROOF V EXTRA / TECHNOROOF V OPTIMA / TECHNOROOF V PROF / TECHNOROOF N PROF KLIN / TECHNOROOF V EXTRA KLIN / TECHNOROOF N PROF VENT / TECHNOROOF GALTEL / TECHNOSANDWICH

TECHNOLIGHT

STO 72746455-3.2.7-2018

High heat-saving efficiency

Dimensional stability

Versatile material for framework structures

Applications

— Frame partitions
— Beam floors, cold roofs
— Mansards

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOLIGHT EXTRA	TECHNOLIGHT OPTIMA
Thermal conductivity (λ_{10}/ λ_D/λ_A/ λ_B), W/m·°K, not more than	0,036/0,037/ 0,039/0,040	0,035/0,037/ 0,039/0,040
Organic matter content, %, not more than	2,5	2,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	34 (+4/-8)	38 (±4)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	100
Quantity of slabs per pack, pcs	12	6
Quantity per pack, m^2	8,640	4,320
Quantity per pack, m^3	0,432	0,432
Quantity of packs per pallet, pcs	16	16
Quantity of packs per pallet, m^3	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032

Implemented objects

Aquapark "Limpopo",
Yekaterinburg

Restaurant "Barzha",
Kemerovo

TECHNOBLOCK PROF*

STO 72746455-3.2.7-2018

High heat-saving efficiency

Resistance to microorganisms and gnawing animals

No shrinkage

Applications

— Layered masonry
— Walls with siding

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-150 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOBLOCK PROF*
Thermal conduc (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,035/0,035/ 0,038/0,039
Compressibility,%, not more than	8
Organic matter content	2,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	65 (±5)

* TECHNOBLOCK PROF is available to order only for cities of the Far East

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	50	100	100
Quantity of slabs per pack, pcs	8	12	6	4
Quantity per pack, m^2	5,760	8,640	4,320	2,880
Quantity per pack, m^3	0,288	0,432	0,432	0,288
Quantity of packs per pallet, pcs	24	16	16	24
Quantity of packs per pallet, m^3	6,912	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032	76,032

Implemented objects

Apartment complex "Magellan",
Kazan

Retail and entertainment centre "Kontur",
Cheboksary

FIND OUT MORE
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TECHNOVENT N

STO 72746455-3.2.1-2018

- No shrinkage
- Vapor permeability
- Fire safety

Applications

— Ventilated facade (the first inner layer in case of insulation installation using two layers)

— Layered masonry (only TECHNOVENT N PROF slabs)

Geometric dimensions

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOVENT N	TECHNOVENT N PROF
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,036/0,037/ 0,039/0,040	0,035/0,036/ 0,038/0,040
Compressive strength at 10% deformation, kPa, not more than	0,5	0,5
Organic matter content, %, not more than	2,5	2,5
Short-term water absorption during partial immersion, kg/m², not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m³	36 (±4)	45 (±5)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	100	150	200
Quantity of slabs per pack, pcs	6	4	2	2
Quantity per pack, m²	4,320	2,880	1,440	1,440
Quantity per pack, m³	0,216	0,288	0,216	0,288
Quantity of packs per pallet, pcs	32	24	32	24
Quantity of packs per pallet, m³	6,912	6,912	6,912	6,912
Vehicle loading rate, volume, m³	76,032	76,032	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Apartment complex “Yabloni”,
Krasnoyarsk

Kindergarten,
Krasnoyarsk

TECHNOVENT EXTRA

STO 72746455-3.2.1-2018

- High heat-saving efficiency
- Fire safety
- Does not require application of wind protection membranes

Applications

— Ventilated facade (single-layer insulation or outer layer in case of insulation installation using two layers

Geometric dimensions

Length: 1200 mm

Width: 600 mm

Thickness: 40-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOVENT EXTRA
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,034/0,035/ 0,037/0,038
Compressive strength at 10% deformation, kPa, not more than	10
Tensile strength at right angle to front surfaces, kPa, not more than	5
Organic matter content, %, not more than	4,0
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	75 (±7)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	150
Quantity of slabs per pack, pcs	6	4	2
Quantity per pack, m²	4,320	2,880	1,440
Quantity per pack, m³	0,216	0,288	0,216
Quantity of packs per pallet, pcs	32	24	32
Quantity of packs per pallet, m³	6,912	6,912	6,912
Vehicle loading rate, volume, m³	76,032	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Residential quarter ”Patroclus”,
Vladivostok

Russian International Olympic University,
Sochi

TECHNOVENT

STO 72746455-3.2.1-2018

- High heat-saving efficiency
- Fire safety
- Does not require application of house wraps (wind protection films)

Applications

— Ventilated facade (single-layer insulation or outer layer in case of insulation installation using two layers)

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness of TECHNOVENT STANDARD slabs:
50-200 mm (step: 10 mm)
Thickness of TECHNOVENT OPTIMA slabs:
50-180 mm (step: 10 mm)
Thickness of TECHNOVENT PROF slabs: 50-180 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOVENT STANDARD	TECHNOVENT OPTIMA	TECHNOVENT PROF
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,035/0,035/ 0,037/0,038	0,035/0,035/ 0,038/0,039	0,036/0,037/ 0,039/0,041
Compressive strength at 10% deformation, kPa, not more than	10	12	15
Tensile strength at right angle to front surfaces, kPa, not more than	5	6	8
Organic matter content, %, not more than	3,5	3,5	3,5
Short-term water absorption during partial immersion, kg/m², not more than		1	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3	3	3
Flammability degree	Non-flammable	Non-flammable	Non-flammable
Density, kg/m³	80 (±8)	90 (±9)	100 (±10)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	100	100	130
Quantity of slabs per pack, pcs	6	4	3	2
Quantity per pack, m²	4,320	2,880	2,160	1,440
Quantity per pack, m³	0,216	0,288	0,216	0,187
Quantity of packs per pallet, pcs	32	24	32	36
Quantity of packs per pallet, m³	6,912	6,912	6,912	6,739
Vehicle loading rate, volume, m³	76,032	76,032	76,032	74,131

FIND OUT MORE
Watch video installation instructions

Implemented objects

Cancer center,
Orsk

Ministry of Forestry,
Kazan

TECHNOFAS EXTRA

STO 72746455-3.2.1-2018

- High heat-saving efficiency
- Vapor permeability
- Alkali resistance

Applications

— Outer walls with a protective-decorative layer of thick-layered plaster over a steel reinforcing mesh

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-150 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOFAS EXTRA
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,035/0,035/ 0,039/0,040
Compressive strength at 10% deformation, kPa, not more than	15
Tensile strength at right angle to front surfaces, kPa, not more than	6
Organic matter content, %, not more than	3,5
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	90 (±10)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	100
Quantity of slabs per pack, pcs	6	3
Quantity per pack, m²	4,320	2,160
Quantity per pack, m³	0,216	0,216
Quantity of packs per pallet, pcs	32	32
Quantity of packs per pallet, m³	6,912	6,912
Vehicle loading rate, volume, m³	76,032	76,032

Implemented objects

Apartment complex “Novy svet”,
Volgograd

Media complexes,
Sochi

TECHNOFAS DECOR

STO 72746455-3.2.1-2018

Optimal ratio of characteristics to cost

Without limitation on height of application

Vapor permeability

Alkali resistance

Applications

— Outer walls with a protective-decorative layer of thin-layered plaster

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOFAS DECOR
Thermal conductivity (λ_{10}/ λ_0/λ_x/λ_B), W/m·°K, not more than	0,036/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	30
Tensile strength at right angle to front surfaces, kPa, not more than	15
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	100 (±10)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	150
Quantity of slabs per pack, pcs	6	3	2
Quantity per pack, m^2	4,320	2,160	1,440
Quantity per pack, m^3	0,216	0,216	0,216
Quantity of packs per pallet, pcs	32	32	32
Quantity of packs per pallet, m^3	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Apartment complex “Dresden”,
Orenburg

Hotel Park Inn by Radisson,
Sochi

TECHNOFAS EXTRA

STO 72746455-3.2.1-2018

High tearing strength of layers

Vapor permeability

Without limitation on height of application

Alkali resistance

Applications

— Outer walls with a protective-decorative layer of thin-layered plaster

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOFAS EXTRA
Thermal conductivity (λ_{10}/ λ_0/λ_x/λ_B), W/m·°K, not more than	0,036/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	30
Tensile strength at right angle to front surfaces, kPa, not more than	15
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	120 (±10)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	150
Quantity of slabs per pack, pcs	6	3	2
Quantity per pack, m^2	4,320	2,160	1,440
Quantity per pack, m^3	0,216	0,216	0,216
Quantity of packs per pallet, pcs	32	32	32
Quantity of packs per pallet, m^3	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Apartment complex “Vostok”,
Krasnodar

Apartment complex,
Krasnodar

TECHNOFAS EFFECT / TECHNOFAS

STO 72746455-3.2.1-2018

- High tearing strength of layers
- Vapor permeability
- Alkali resistance
- Without limitation on height of application

Applications

— Outer walls with a protective-decorative layer of thin-layered plaster

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOFAS EFFECT	TECHNOFAS
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,038/ 0,040/0,041	0,037/0,038/ 0,040/0,042
Compressive strength at 10% deformation, kPa, not more than	45	45
Tensile strength at right angle to front surfaces, kPa, not more than	15	15
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	131 (±6)	145 (±14)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	120
Quantity of slabs per pack, pcs	6	3	2
Quantity per pack, m^2	4,320	2,160	1,440
Quantity per pack, m^3	0,216	0,216	0,173
Quantity of packs per pallet, pcs	32	32	40
Quantity of packs per pallet, m^3	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032

FIND OUT MORE
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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Apartment complex “Akademichesky”,
Yekaterinburg

Business centre “Sodruzhestvo”,
Saint-Petersburg

TECHNOROOF N

STO 72746455-3.2.6-2018

- Easy installation
- High heat-saving efficiency
- Fire safety
- Neutrality when contacting with concrete and metals

Applications

— The bottom layer of two- or three-layer heat insulation of roofs

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-180 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOROOF N EXTRA	TECHNOROOF N OPTIMA
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,036/0,037/ 0,039/0,040	0,036/0,037/ 0,039/0,041
Compressive strength at 10% deformation, kPa, not more than	30	40
Concentrated load, N, not less than	400	450
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	100 (±10)	105 (±15)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	100
Quantity of slabs per pack, pcs	6	3
Quantity per pack, m^2	4,3200	2,1600
Quantity per pack, m^3	0,2160	0,2160
Quantity of packs per pallet, pcs	32	32
Quantity of packs per pallet, m^3	6,9120	6,9120
Vehicle loading rate, volume, m^3	76,0320	76,0320

РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Treasury Department of the Republic of Tatarstan,
Kazan

Tower “Evolution”,
Moscow-City

TECHNOROOF N PROF

STO 72746455-3.2.6-2018

- Easy installation
- High heat-saving efficiency
- Fire safety

Applications

— The bottom layer of a two- or three-layer flat roof heat insulation

— It is recommended to use these slabs in combination with TECHNOROOF V EXTRA, TECHNOROOF V OPTIMA, TECHNOROOF V PROF and TECHNOROOF PROF slabs

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOROOF N PROF
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	45
Concentrated load, N, not less than	500
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	120 (-10/+15)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	100	120	150
Quantity of slabs per pack, pcs	6	3	2	2
Quantity per pack, m^2	4,320	2,160	1,440	1,440
Quantity per pack, m^3	0,216	0,216	0,172	0,216
Quantity of packs per pallet, pcs	32	32	40	32
Quantity of packs per pallet, m^3	6,912	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032	76,032

Implemented objects

Retail and entertainment centre “Indigo Life”,
Nizhny Novgorod

Supermarket “Bakhetle”,
Novosibirsk

TECHNOROOF 45

STO 72746455-3.2.6-2018

- High compressive strength
- High heat-saving efficiency
- Neutrality when contacting with concrete and metals
- Load-carrying capability

Applications

— The bottom layer of two- or three-layer heat insulation of roofs

— Single-layer heat insulation of a flat roof

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-150 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOROOF 45	
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,038/ 0,040/0,042	
Compressive strength at 10% deformation, kPa, not more than	50	
Concentrated load, N, not less than	550	
Organic matter content, %, not more than	4,5	
Short-term water absorption during partial immersion, kg/m^2, not more than	1	
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	
Flammability degree	Non-flammable	
Density, kg/m^3	135 (±15)	

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	100
Quantity of slabs per pack, pcs	6	3
Quantity per pack, m^2	4,3200	2,1600
Quantity per pack, m^3	0,2160	0,2160
Quantity of packs per pallet, pcs	32	32
Quantity of packs per pallet, m^3	6,9120	6,9120
Vehicle loading rate, volume, m^3	76,0320	76,0320

Implemented objects

Nadezhdinsky Metallurgical Plant,
Norilsk

Stadium “Mordovia Arena”,
Saransk

TECHNOROOF PROF

STO 72746455-3.2.6-2018

- High compressive strength
- Versatility of use on roofs
- Neutrality when contacting with concrete and metals
- Fire safety

Applications

— Single-layer heat insulation of a flat roof
— The upper layer of double-layer heat insulation of a flat roof
— Can be used without protective screeds

Material description

TECHNOROOF PROF and TECHNOROOF PROF s are non-combustible water-repellent heat-insulating slabs made of stone wool.

Letter “s” in the name of the second trademark means that the material has a one-sided coating in the form of glass-fibre mat, which allows you to build up by welding a waterproofing layer of roll-bitumen materials (Uniflex Express) over heat insulation without arranging protective screeds.

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness of TECHNOROOF PROF slabs: 40-150 mm (step: 10 mm)
Thickness of TECHNOROOF PROF s slabs: 40 mm, 50 mm

Physical and mechanical characteristics

	TECHNOROOF PROF	TECHNOROOF PROF s
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,038/0,038/ 0,041/0,042	0,037/0,038/ 0,041/0,042
Compressive strength at 10% deformation, kPa, not more than	60	60
Concentrated load, N, not less than	600	800
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	160 (-25/+15)	160 (±15)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	100
Quantity of slabs per pack, pcs	6	3
Quantity per pack, m^2	4,320	2,160
Quantity per pack, m^3	0,216	0,216
Quantity of packs per pallet, pcs	32	32
Quantity of packs per pallet, m^3	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032

FIND OUT MORE
Watch video installation instructions

Implemented objects

Construction hypermarket Mile, Minsk

Toyota car showroom, Krasnoyarsk

TECHNOROOF V EXTRA

STO 72746455-3.2.6-2018

- High concentrated load
- Increased mechanical strength
- Fire safety
- Neutrality when contacting with concrete and metals

Applications

— The upper layer of double-layer heat insulation of a flat roof
— It is recommended to use these slabs in combination with TECHNOROOF N PROF slabs

Material description

TECHNOROOF V EXTRA and TECHNOROOF V EXTRA s are non-combustible water-repellent heat-insulating slabs made of stone wool.

Letter “s” in the name of the second trademark means that the material has a one-sided coating in the form of glass-fibre mat, which allows you to build up by welding a waterproofing layer of roll-bitumen materials (Uniflex Express) over heat insulation without arranging protective screeds.

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness of TECHNOROOF V EXTRA slabs: 30 mm, 40 mm, 50 mm
Thickness of TECHNOROOF V EXTRA s slabs: 40 mm, 50 mm

Physical and mechanical characteristics

	TECHNOROOF V EXTRA	TECHNOROOF V EXTRA s
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,038/0,039/ 0,041/0,043	0,038/0,039/ 0,041/0,043
Compressive strength at 10% deformation, kPa, not more than	65	65
Concentrated load, N, not less than	650	900
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	170 (±15)	170 (±15)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	40	50
Quantity of slabs per pack, pcs	5	4
Quantity per pack, m^2	3,600	2,880
Quantity per pack, m^3	0,144	0,144
Quantity of packs per pallet, pcs	48	48
Quantity of packs per pallet, m^3	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032

Implemented objects

Trade and logistics center “Schomyslitsa”, Minsk

Hypermarket “Lenta”, Tyumen

TECHNOROOF V OPTIMA

STO 72746455-3.2.6-2018

High concentrated load

Increased mechanical strength

Fire safety

Neutrality when contacting with concrete and metals

Applications

— The upper layer of double-layer heat insulation of a flat roof
— It is recommended to use these slabs in combination with TECHNOROOF N PROF slabs

Material description

TECHNOROOF V OPTIMA and TECHNOROOF V OPTIMA s are non-combustible water-repellent heat-insulating slabs made of stone wool.

Letter “s” in the name of the second trademark means that the material has a one-sided coating in the form of glass-fibre mat, which allows you to build up by welding a waterproofing layer of roll-bitumen materials (Uniflex Express) over heat insulation without arranging protective screeds.

Implemented objects

ASSC Volkswagen-Skoda,
Abakan

“Erofey Arena”,
Khabarovsk

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness of TECHNOROOF V OPTIMA slabs: 30 mm, 40 mm, 50 mm
Thickness of TECHNOROOF V OPTIMA s slabs: 40 mm, 50 mm

Physical and mechanical characteristics

	TECHNOROOF V OPTIMA	TECHNOROOF V OPTIMA s
Thermal conductivity (λ_{10}/ λ_0/λ_A/λ_B), W/m·°K, not more than	0,038/0,040/ 0,042/0,043	0,038/0,040/ 0,042/0,043
Compressive strength at 10% deformation, kPa, not more than	70	70
Concentrated load, N, not less than	700	1000
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	180 (±15)	180 (±15)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	30	40	50
Quantity of slabs per pack, pcs	7	5	4
Quantity per pack, m^2	5,040	3,600	2,880
Quantity per pack, m^3	0,151	0,144	0,144
Quantity of packs per pallet, pcs	44	48	48
Quantity of packs per pallet, m^3	6,652	6,912	6,912
Vehicle loading rate, volume, m^3	73,180	76,032	76,032

TECHNOROOF V PROF

STO 72746455-3.2.6-2018

High concentrated load

Increased mechanical strength

Fire safety

Neutrality when contacting with concrete and metals

Applications

— The upper layer of double-layer heat insulation of a flat roof
— It is recommended to use these slabs in combination with TECHNOROOF N PROF slabs

Material description

TECHNOROOF V PROF and TECHNOROOF V PROF s are non-combustible water-repellent heat-insulating slabs made of stone wool.

Letter “s” in the name of the second trademark means that the material has a one-sided coating in the form of glass-fibre mat, which allows you to set up a waterproofing layer of roll-bitumen materials (Uniflex Express) over heat insulation without arranging protective screeds.

Implemented objects

Exhibition and service center “John Deere”,
Krasnodar

Mikheevsky Mining and Refining Plant,
Chelyabinsk

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness of TECHNOROOF V PROF slabs: 30 mm, 40 mm, 50 mm
Thickness of TECHNOROOF V PROF s slabs: 40 mm, 50 mm

Physical and mechanical characteristics

	TECHNOROOF V PROF	TECHNOROOF V PROF s
Thermal conductivity (λ_{10}/ λ_0/λ_A/λ_B), W/m·°K, not more than	0,039/0,040/ 0,042/0,044	0,039/0,040/ 0,042/0,044
Compressive strength at 10% deformation, kPa, not more than	80	80
Concentrated load, N, not less than	800	1100
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	190 (±15)	190 (±15)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	30	40	50
Quantity of slabs per pack, pcs	7	5	4
Quantity per pack, m^2	5,040	3,600	2,880
Quantity per pack, m^3	0,151	0,144	0,144
Quantity of packs per pallet, pcs	44	48	48
Quantity of packs per pallet, m^3	6,652	6,912	6,912
Vehicle loading rate, volume, m^3	73,181	76,032	76,032

TECHNOROOF N PROF KLIN

STO 72746455-3.2.6-2018

Reducing roof loads

Absence of wet processes when performing works

High installation rate

Fire safety

Applications

— Creating a general slope of 2.1% on a roof for removing water from the roof to water disposal points
— Creating a counter slope of 4.2% on a roof for water disposal between funnels in the roof valley
— In case of a two-layer thermal insulation system, laying is performed on the first (lower) thermal insulating layer

Material description

The TECHNOROOF N PROF KLIN kit for creating a slope and a counter slope on a flat roof includes non-combustible water-repellent heat-insulating slabs with a pre-created slope that are made of stone wool based on the basalt group rocks and a low phenolic binder with addition of water-repelling admixtures.

Geometric dimensions

	General slope (2.1%)	Counter slope (4.2%)
	A, B, C	A, B, C
Length, mm	1200	600, 1200
Width, mm	600	1200
Thickness		
Element A, mm	30-55	15-40
Element B, mm	55-80	40-65
Element C, mm	50	50

Physical and mechanical characteristics

	General slope (2.1%)	Counter slope (4.2%)
	A, B, C	A, B, C
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,037/ 0,040/0,041	0,037/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	45	45
Concentrated load, N, not less than		500
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	120 (-10/+15)	120(-10/+15)

* The characteristics of the TECHNOROOF N PROF brand are indicated.

Logistic parameters

	General slope (2.1%)			Counter slope (4.2%)		
	A	B	C	A	B	C
Quantity per pallet, pcs	104	72	108	88	64	192
Quantity per pallet, m^3	2,995	3,110	3,110	2,693	3,110	6,912
Vehicle loading rate, volume in m^3 92 m^3 (11 pallets)	65,894	68,429	68,429	59,242	68,429	76,032
Vehicle loading rate, volume in m^3 120 m^3 (14 pallets)	71,885	74,650	74,650	64,627	74,650	82,944

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Residential house,
Perm

Car showroom,
Ufa

TECHNOROOF V EXTRA KLIN

STO 72746455-3.2.6-2018

Absence of wet processes

High installation rate

Increased mechanical strength

Reducing roof loads

Applications

— Creating a general slope of 2.1% on a roof for removing water from the roof to water disposal points
— Creating a counter slope of 4.2% on a roof for water disposal between funnels in the roof valley
— In case of a two-layer thermal insulation system, laying is performed on the first (lower) thermal insulating layer

Material description

The TECHNOROOF V EXTRA KLIN kit for creating a slope and a counter slope on a flat roof includes non-combustible water-repellent heat-insulating slabs with a pre-created slope that are made of stone wool based on the basalt group rocks and a low phenolic binder with addition of water-repelling admixtures.

Geometric dimensions

	General slope (2.1%)	Counter slope (4.2%)
	A, B, C	A, B, C
Length, mm	1200	600, 1200
Width, mm	600	1200
Thickness		
Element A, mm	30-55	15-40
Element B, mm	55-80	40-65
Element C, mm	50	50

Physical and mechanical characteristics

	General slope (2.1%)	Counter slope (4.2%)
	A, B, C	A, B, C
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,038/0,039/ 0,041/0,043	0,038/0,039/ 0,041/0,043
Compressive strength at 10% deformation, kPa, not more than	65	65
Concentrated load, N, not less than	650	650
Organic matter content, %, not more than	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3
Flammability degree	Non-flammable	Non-flammable
Density, kg/m^3	170 (±15)	170 (±15)

Logistic parameters

	General slope (2.1%)			Counter slope (4.2%)		
	A	B	C	A	B	C
Quantity per pallet, pcs	104	72	108	88	64	192
Quantity per pallet, m^3	2,995	3,110	3,110	2,693	3,110	6,912
Vehicle loading rate, volume in m^3 92 m^3 (11 pallets)	65,894	68,429	68,429	59,242	68,429	76,032
Vehicle loading rate, volume in m^3 120 m^3 (14 pallets)	71,889	74,650	74,650	64,628	74,650	82,944

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Shopping centre Selgros,
Kazan

Lexus car showroom,
Yekaterinburg

TECHNOROOF N PROF VENT

STO 72746455-3.2.6-2018

Air circulation possibility

Excess moisture removal

Reduced freezing risk
Increased roof life

Providing indoor comfort

Applications

— Flat roofs with arranging a system of vented channels
— The bottom layer of double-layer heat insulation of a flat roof

Material description

Non-combustible water-repellent heat- and sound-insulating stone wool slabs with vented channels

Geometric dimensions

Length, mm	1200
Width, mm	600
Thickness	50-150
Element A, mm	30
Element B, mm	15-30
Element C, mm	200

Physical and mechanical characteristics

	TECHNOROOF N PROF VENT
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	45
Concentrated load, N, not less than	500
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	120 (-10/+15)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity of slabs per pack, pcs	3	2
Quantity per pack, m^2	2,160	1,440
Quantity per pack, m^3	0,216	0,216
Quantity of packs per pallet, pcs	32	32
Quantity of packs per pallet, m^3	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Sports and fitness complex “Basseyny Dona”,
Rostov-on-Don

Racecourse “Akbuzat”,
Ufa

TECHNOROOF 45 GALTEL

STO 72746455-3.2.6-2018

High strength

Easy installation

Reducing terms of performing works

Applications

— Along parapets on a flat roof for ensuring transition of the waterproofing material from the horizontal plane of the roof to the vertical plane of the parapet
— For creating a counter slope along a joint of vertical and horizontal structures

Material description

Non-combustible water-repellent heat- and sound-insulating triangular cross-section strips cut from stone wool slabs based on the basalt group rocks, in which a low phenolic binder is used.

Geometric dimensions

Length, mm	1200
Angle of rifling, °	45
Length of cathets, mm	100
Section area, m^2	0,005
Volume of 1 pce, m^3	0,006

Physical and mechanical characteristics

	TECHNOROOF V EXTRA GALTEL
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,037/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	45
Concentrated load, N, not less than	550
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	135 (+15)

- “The characteristics of the brand TECHNOROOF 45 are indicated”

Logistic parameters

Length, mm	1200
Width, mm	100
Thickness, mm	100
Quantity per pallet, pcs	480
Quantity per pallet, m^3	2,880
Vehicle loading rate, volume, m^3	63,360

Implemented objects

Shopping centre “Tair”,
Karaganda

Shopping centre “Mega”,
Saint-Petersburg

РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

TECHNOSANDWICH

STO 72746455-3.2.7-2018

- High shear strength
- Surface uniformity and integrity
- High geometry fidelity

Applications

— Factory-made three-layer concrete and reinforced concrete wall panels (TECHNOSANDWICH BETON)
— Three-layer “sandwich” type wall panels with factory-made metal sheathings (TECHNOSANDWICH S)
— Three-layer “sandwich” type roof panels with factory-made metal sheathings (TECHNOSANDWICH K)

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 40-180 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNO-SANDWICH BETON	TECHNO-SANDWICH S	TECHNO-SANDWICH K
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,036/0,037/ 0,039/0,040	0,040*/0,041*/ 0,042*/0,044*	0,041*/0,042*/ 0,043*/0,045*
Compressive strength at 10% deformation, kPa, not more than	25	-	-
Compression strength, kPa, not less than	-	60*	100*
Share strength, kPa, not less than	10	100*	100*
Tensile strength, kPa, not less than	-	50*	75*
Organic matter content, %, not more than	4,5	4,5	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1	1	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3	3	3
Flammability degree	Non-flammable	Non-flammable	Non-flammable
Density, kg/m^3	100 (±10)	115 (±15)	145 (±15)

* Slabs are cut into strips (lamella), and samples are rotated 90° around the long axis.

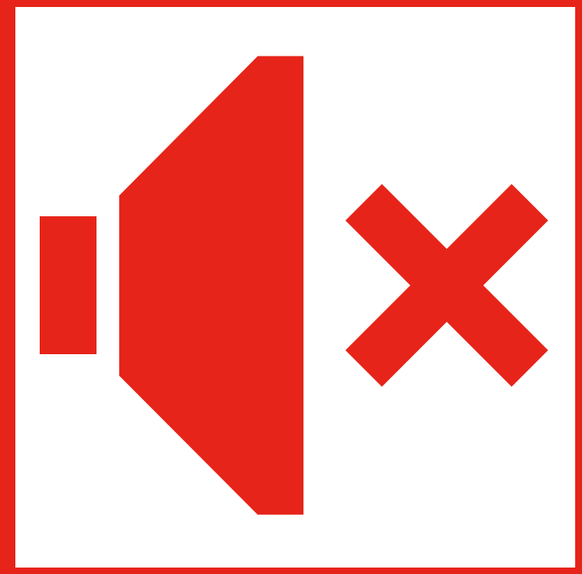
Logistic parameters

Length, mm	1200	1200	1200	1200	2400	2400
Width, mm	627	627	1200	1200	1200	1200
Thickness, mm	102	122	102	122	102	122
Quantity of pallets, pcs	10	10	11	11	22	11
Vehicle loading rate, volume, m^3	67,535	66,091	71,090	69,569	64,627	69,569

Implemented objects

Shopping centre Leroy Merlin,
Omsk

Shopping centre Metro,
Perm



Acoustic insulation

TECHNOACOUSTIC / TECHNOFLOOR STANDARD / TECHNOFLOOR PROF

TECHNOACOUSTIC

STO 72746455-3.2.7-2018

- Insulation from airborne noise
- High noise absorption rates
- Not subject to deformation during the whole lifespan of a building

Applications

— Framed partitions (room dividers) and walls
— Suspended ceilings
— Inter-floor constructions

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50 mm, 100 mm

Physical and mechanical characteristics

	TECHNOACOUSTIC
Thermal conductivity (λ_{10}/ $\lambda_{\text{Б}}$/$\lambda_{\text{А}}$/$\lambda_{\text{Б}}$), W/m·°K, not more than	0,035/0,036/ 0,038/0,039
Compressive strength at 10% deformation, kPa, not more than	0,5
Organic matter content, %, not more than	2,5
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	41 (±4)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	50	50	100
Quantity of slabs per pack, pcs	6	8	12	6
Quantity per pack, m²	4,320	5,760	8,640	4,320
Quantity per pack, m³	0,216	0,288	0,432	0,432
Quantity of packs per pallet, pcs	32	24	16	16
Quantity of packs per pallet, m³	6,912	6,912	6,912	6,912
Vehicle loading rate, volume, m³	76,032	76,032	76,032	76,032

Implemented objects

Kindergarten,
Moscow

Business centre,
Krasnoyarsk

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

TECHNOFLOOR STANDARD

STO 72746455-3.2.7-2018

- Protection from impact noise
- High geometry fidelity
- High strength characteristics

Applications

— Floating floors to be screeded

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 30-160 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOFLOOR STANDARD
Thermal conductivity (λ_{10}/ $\lambda_{\text{Б}}$/$\lambda_{\text{А}}$/$\lambda_{\text{Б}}$), W/m·°K, not more than	0,036/0,037/ 0,039/0,041
Compressive strength at 10% deformation, kPa, not more than	30
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	110 (±10)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	30
Quantity of slabs per pack, pcs	6	7
Quantity per pack, m²	4,320	5,040
Quantity per pack, m³	0,216	0,151
Quantity of packs per pallet, pcs	32	44
Quantity of packs per pallet, m³	6,912	6,653
Vehicle loading rate, volume, m³	76,032	73,181

Implemented objects

Car showroom “Safari Auto”,
Togliatti

City hospital No. 7,
Kazan

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

TECHNOFLOOR PROF

STO 72746455-3.2.7-2018

- Protection from impact noise
- High geometry fidelity
- High strength characteristics

Applications

— Thermal insulation of floors with increased specified characteristic loads
— Floating floors
— Heated floors
— Floors to be screeded at production facilities, sports buildings and warehouses

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 30 mm, 40 mm, 50 mm

Physical and mechanical characteristics

	TECHNOFLOOR PROF
Thermal conductivity (λ_{10}/ λ_D/λ_A/λ_B), W/m·°K, not more than	0,038/0,039/ 0,041/0,043
Compressive strength at 10% deformation, kPa, not more than	50
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	155 (±15)

Logistic parameters

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	50	30
Quantity of slabs per pack, pcs	6	7
Quantity per pack, m^2	4,320	5,040
Quantity per pack, m^3	0,216	0,151
Quantity of packs per pallet, pcs	32	44
Quantity of packs per pallet, m^3	6,912	6,653
Vehicle loading rate, volume, m^3	76,032	73,181

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Football stadium “Astana Arena”,
Astana

Swimming pool of the Siberian State Technological University,
Krasnoyarsk

Private house construction

ROCKLIGHT / TECHNOFAS COTTAGE / TECHNOBLOCK STANDARD

ROCKLIGHT

STO 72746455-3.2.7-2018

- Versatile material for private house construction
- Resistance to microorganisms and gnawing animals
- Material service life: at least 50 years

Applications

— Mansards
— Framed walls
— Room dividers
— Beam floors
— Inter-floor constructions
— Cold roof bridgings
— Facades with siding
— Bathhouse heat insulation
— Balconies (loggias)

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50 mm, 75 mm, 100 mm, 150 mm

Physical and mechanical characteristics

	ROCKLIGHT
Thermal conductivity (λ_{10}/ λ_5/λ_A/λ_B), W/m·°K, not more than	0,036/0,037/ 0,040/0,041
Compressive strength at 10% deformation, kPa, not more than	0,5
Organic matter content, %, not more than	3,5
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	35 (±5)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	50	50	100
Quantity of slabs per pack, pcs	12	12	8	6
Quantity per pack, m²	8,640	8,640	5,760	4,320
Quantity per pack, m³	0,432	0,432	0,288	0,432
Quantity of packs per pallet, pcs	24	16	24	16
Quantity of packs per pallet, m³	10,368	6,912	6,912	6,912
Vehicle loading rate, volume, m³	114,048	76,032	76,032	76,032

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РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Private house,
Moscow Region

Housing community “Korovino”,
Moscow Region

TECHNOFAS COTTAGE

STO 72746455-3.2.1-2018

- Maintaining a comfortable indoor climate
- Reduced heating costs
- Unobstructed exit of moisture from a structure
- Suitable for heat insulation of buildings and structures up to 10 m in height

Applications

— Outer walls with a protective-decorative layer of thin-layered plaster in low-rise construction, not more than 10 m in height

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 50 mm)

Physical and mechanical characteristics

	TECHNOFAS COTTAGE
Thermal conductivity (λ_{10}/ λ_5/λ_A/λ_B), W/m·°K, not more than	0,036/0,036/ 0,039/0,041
Compressive strength at 10% deformation, kPa, not more than	20
Tensile strength at right angle to front surfaces, kPa, not more than	10
Organic matter content, %, not more than	4,5
Short-term water absorption during partial immersion, kg/m², not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than	3
Flammability degree	Non-flammable
Density, kg/m³	105 (±10)

Logistic parameters

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	150
Quantity of slabs per pack, pcs	6	3	2
Quantity per pack, m²	4,320	2,160	1,440
Quantity per pack, m³	0,216	0,216	0,173
Quantity of packs per pallet, pcs	32	32	32
Quantity of packs per pallet, m³	6,912	6,912	6,912
Vehicle loading rate, volume, m³	76,032	76,032	76,032

Implemented objects

Private house,
Nizhny Novgorod

Private house,
Saint-Petersburg

РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

TECHNOBLOCK STANDARD

STO 72746455-3.2.7-2018

- High heat-saving efficiency
- Resistance to microorganisms and gnawing animals
- No shrinkage
- Material service life: at least 50 years

Applications

— Layered masonry
— Walls with siding
— Framed walls

Geometric dimensions

Length: 1200 mm
Width: 600 mm
Thickness: 50-200 mm (step: 10 mm)

Physical and mechanical characteristics

	TECHNOBLOCK STANDARD
Thermal conductivity (λ_{10}/ λ_{0}/λ_{A}/λ_{B}), W/m·°K, not more than	0,035/0,036/ 0,038/0,039
Compressive strength at 10% deformation, kPa, not more than	10
Organic matter content, %, not more than	2,5
Short-term water absorption during partial immersion, kg/m^2, not more than	1
Water absorption during partial immersion of samples for a set long time, kg/m^2, not more than	3
Flammability degree	Non-flammable
Density, kg/m^3	45 (±5)

Logistic parameters

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	50	100	100
Quantity of slabs per pack, pcs	8	12	6	4
Quantity per pack, m^2	5,760	8,640	4,320	2,880
Quantity per pack, m^3	0,288	0,432	0,432	0,288
Quantity of packs per pallet, pcs	24	16	16	24
Quantity of packs per pallet, m^3	6,912	6,912	6,912	6,912
Vehicle loading rate, volume, m^3	76,032	76,032	76,032	76,032

FIND OUT MORE
Watch video installation instructions

РОСИЗОЛ ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

Implemented objects

Private house,
Ryazan

Housing community “Korovino”,
Khimki

Training and assistance in calculations

Training and assistance in calculations

TECHNONICOL pays great attention to training builders in innovative technologies and features of using new materials.

Training centres

The Construction Academy of TECHNONICOL summarizes and studies experience of thousands of the company's employees and clients, as well as produces and transmits knowledge in the area of designing and installing insulation systems.

The proper training quality is provided by 20 training centers in Moscow, St. Petersburg, Yekaterinburg, Kazan, Ryazan, Novosibirsk, Ufa, Kumertau, Krasnodar, Khabarovsk, Cheboksary, Astana and Minsk.

Construction specialists, employees of design and contract entities and representatives of trading partners can participate in the training.

A registered certificate is issued following the results of training.

Getting education in TECHNONICOL training centers means:

— acquisition of skills in working with new modern materials and equipment;

— increasing labor productivity and quality of works performed;

— minimization of claims from customers and supervisory bodies when accepting works.

academy.tn.ru

Training installation guides

A rich set of training tools allows getting desired information from the most comfortable sources. Quality materials and professional competence are foundations for durability of a building.

The set of TECHNONICOL training tools includes a number of series of videos and printed materials in the form of manuals dedicated to installation of various types of systems with thermal insulation made of TECHNONICOL stone wool.

These films and publications enable to study the main points regarding the stages of installation of system materials, necessary components and equipment, as well as technical characteristics of materials.

Each our training tool is a professional teaching aid, studying of which allows to properly select a heat-insulating material for a building structure and avoid further problems connected with an incorrect heat insulation installation.

teplo.tn.ru

Webinars

One of the most efficient training tools implemented at TECHNONICOL are webinars, i.e. online seminars conducted by federal technical specialists of the company in cooperation with the training centres of the Construction Academy of TECHNONICOL. Such a kind of training is comfortable because location of a person being trained does not matter: you can get any desired information at any place with an Internet connection. This significantly saves time and business travel expenses in the process of training.

Our highly qualified specialists will help you find answers to all your questions and increase your level of professional competence.

academy.tn.ru/
learning/webin/

Calculators

On website www.teplo.tn.ru , some online calculators are presented that allow promptly calculate the required thickness of a heat-insulating material.
The energy efficiency calculator enables to calculate the necessary thickness of a heat-insulating layer, as well as required and actual values of heat transfer resistance for a specific region (city) and construction system type.

The soundproofing calculator allows to choose the necessary thickness of a soundproofing material that ensures the required air noise insulation index for a particular type of room depending on the noise kind.

The tapered heat insulation calculator enables to calculate the necessary quantity of heat insulation for

forming a general slope and a counter slope on a flat roof with using TECHNOROOF KLIN slabs.

All obtained calculation results can be printed out or saved in PDF format.

International standards

At all factories manufacturing the TECHNONICOL stone wool, the environment management system has been certified as per international standard ISO 14001:2015.

The presence of this certificate confirms that all stages of management and production processes comply with high international environmental law requirements. Control over organizing these processes guarantees reduction of negative impact on the environment, improvement of environmental indexes, safe disposal of waste and rejected pieces.
Our quality management system also complies with the requirements of international standard ISO 9001:2015, which confirms high quality level and stable output of products.

Russian standards

All TECHNONICOL stone wool products are certified. Their properties, safety and specifications meet modern requirements of Russian standards and regulations.

Compliance with the voluntary certification system

Compliance with the technical rules

РОСИЗОЛ
ВЫСОКОЕ КАЧЕСТВО ТЕПЛОИЗОЛЯЦИИ

“Rosizol” Quality Mark

Founded in 2002, the Association of Russian Manufacturers of modern mineral insulation “Rosizol”, which includes the TECHNONICOL company, has developed

“Rosizol” Quality Mark. The presence of this mark confirms and guarantees compliance of the corresponding material with the highest quality standards.

Physical and mechanical characteristics of materials

Parameter name, measurement unit		Soft heat insulators for non-loaded structures			Layered masonry		Ventilated facades						Facades covered with plaster					
		ROCKLIGHT	TECHNO-LIGHT		TECHNO-BLOCK		TECHNOVENT N	TECHNOVENT N PROF	TECHNOVENT				TECHNOFAS					TECHNOFAS
			EXTRA	OPTIMA	STANDARD	PROF*			EXTRA	STANDARD	OPTIMA	PROF	EXTRA	COTTAGE	DECOR	OPTIMA	EFFECT	
Density, kg/m³		35 (±5)	34 (+4/-8)	38 (±4)	45 (±5)	65 (±5)	36 (±4)	45 (±5)	75 (±7)	80 (±8)	90 (±9)	100 (±10)	90 (±10)	105 (±10)	100 (±10)	120 (±10)	131 (±6)	145 (±14)
Compressive strength at 10% deformation, kPa, not less than		0,5	-	-	-	-	0,5	0,5	10	10	12	15	15	20	30	30	45	45
Compressibility, %, not more than		-	-	-	10	8	-	-	-	-	-	-	-	-	-	-	-	-
Concentrated load, N, not less than		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tensile strength at right angle to front surfaces, kPa, not less than			-	-	-	-	-	-	5	5	6	8	6	10	15	15	15	15
Thermal conductivity, W/(m·°K), not more than	λ_{10}	0,036	0,036	0,035	0,035	0,035	0,036	0,035	0,034	0,035	0,035	0,036	0,035	0,036	0,036	0,036	0,037	0,037
	λ_D	0,037	0,037	0,037	0,036	0,035	0,037	0,036	0,035	0,035	0,035	0,037	0,035	0,036	0,037	0,037	0,038	0,038
	λ_A	0,040	0,039	0,039	0,038	0,038	0,039	0,038	0,037	0,037	0,038	0,039	0,039	0,039	0,040	0,040	0,040	0,040
	λ_B	0,041	0,040	0,040	0,039	0,039	0,040	0,040	0,038	0,038	0,039	0,041	0,040	0,041	0,041	0,041	0,041	0,042
Organic matter content, %, not more than		3,5	2,5	2,5	2,5	2,5	2,5	2,5	4,0	3,5	3,5	3,5	3,5	4,5	4,5	4,5	4,5	4,5
Short-term water absorption during partial immersion, kg/m², not more than		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Length, mm		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Width, mm		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Thickness, mm		50; 75; 100; 150	50-200	50-200	50-200	50-150	50-200	50-200	40-200	50-200	50-180	50-180	50-150	50-200	50-200	50-200	50-200	50-200
Flammability degree		**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf

Parameter name, measurement unit		Flat roof													Tapered heat insulation						Soundproofing		
		TECHNOROOF N				TECHNOROOF			TECHNOROOF V						TECHNOROOF N PROF KLIN		TECHNOROOF 45 GALTEL	TECHNOROOF V EXTRA KLIN			TECHNOACOUSTIC	TECHNO-FLOOR	
		EXTRA	OPTIMA	PROF VENT	PROF	45	PROF	PROF s	EXTRA	EXTRA s	OPTIMA	OPTIMA s	PROF	PROF s	GENERAL SLOPE (2.1%) A, B, C	COUNTER SLOPE (4.2%) A, B, C		GENERAL SLOPE (2.1%) A, B, C	COUNTER SLOPE (4.2%) A, B, C		STANDARD	PROF
Density, kg/m³		100 (±10)	105 (±15)	120 (-10/ +15)	120 (-10/ +15)	135 (±15)	160 (-25/ +15)	160 (±15)	170 (±15)	170 (±15)	180 (±15)	180 (±15)	190 (±15)	190 (±15)	120 (-10/ +15)	120 (-10/ +15)	135 (±15)	170 (±15)	170 (±15)	41 (±4)	110 (±10)	155 (±15)
Compressive strength at 10% deformation, kPa, not less than		30	40	45	45	50	60	60	65	65	70	70	80	80	45	45	45	65	65	0,5	30	50
Compressibility, %, not more than		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concentrated load, N, not less than		400	450	500	500	550	600	800	650	900	700	1000	800	1100	500	500	550	650	650	-	-	-
Tensile strength at right angle to front surfaces, kPa, not less than		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thermal conductivity, W/(m·°K), not more than	λ_{10}	0,036	0,036	0,037	0,037	0,037	0,038	0,037	0,038	0,038	0,038	0,038	0,039	0,039	0,037	0,037	0,037	0,038	0,038	0,035	0,036	0,038
	λ_D	0,037	0,037	0,037	0,037	0,038	0,038	0,038	0,039	0,039	0,040	0,040	0,040	0,040	0,037	0,037	0,037	0,039	0,039	0,036	0,037	0,039
	λ_A	0,039	0,039	0,040	0,040	0,040	0,041	0,041	0,041	0,041	0,042	0,042	0,042	0,042	0,040	0,040	0,040	0,041	0,041	0,038	0,039	0,041
	λ_B	0,040	0,041	0,041	0,041	0,042	0,042	0,042	0,043	0,043	0,043	0,043	0,044	0,044	0,041	0,041	0,041	0,043	0,043	0,039	0,041	0,043
Organic matter content, %, not more than		4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	2,5	4,5	4,5
Short-term water absorption during partial immersion, kg/m², not more than		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Water absorption during partial immersion of samples for a set long time, kg/m², not more than		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Length, mm		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Width, mm		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	-	600	600	600	600	600
Thickness, mm		50-180	50-180	50-150	50-200	50-150	40-150	40; 50	30; 40; 50	40; 50	30; 40; 50	40; 50	30; 40; 50	40; 50	A: 30-55 B: 55-80 C: 50	A: 15-40 B: 40-65 C: 50		A: 30-55 B: 55-80 C: 50	A: 14-40 B: 40-65 C: 50	50; 100	30-160	30; 40; 50
Flammability degree		**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf	**Nf

* TECHNOBLOCK PROF is available to order only for cities of the Far East.
** Nf - Non-flammable

www.teplo.tn.ru

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