



EFFECTIVE THERMAL INSULATION



DURABILITY



ON THE BASIS OF BASALT



FIRE SAFETY



VAPOR PERMEABILITY



ENERGY EFFICIENCY

STONE WOOL

PRODUCT CATALOG

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ABOUT COMPANY

TechnoNICOL is a major European manufacturer and supplier of roofing, waterproofing and thermal insulation materials. Over 200 million people all over the world live in buildings made with TechnoNICOL materials

50
Plants
of the company

Operations in
79
countries

500
Independent
distributors

In 2003, TechnoNICOL entered the market of stone wool thermal insulation. Since then, in addition to being the leader in the market of roofing and insulation materials, TechnoNICOL company became one of the major European mineral wool producers. Customers find high quality and a broad selection of technical and physical characteristics. Here, they can choose an optimal material by its performance and price. As the demands of the construction market keep growing, TechnoNICOL company optimized the geographic distribution of its facilities. It supplies products flexibly and quickly and relieves its customers from the burden of additional transportation costs.

The Company's capacity and equipment enable the provision of large-

scale objects with the necessary volume of thermal insulation materials, as well as with unique custom products tailored to the customers' needs.

All TechnoNICOL products are certified, they feature high quality and comply with international standards. The most modern fiberizing technologies are applied at the factory, which enables to produce safe, non-flammable thermal insulation materials with increased strength properties. All the Company's plants work according to the principle of waste-free production, protecting the environment.

Highly-qualified personnel and cutting-edge information technologies are the basis for dynamic development of mineral insulation products.



7
stone wool
production plants

10
mln m³
capacity of plants

GEOGRAPHY

Six plants of the Company manufacture thermal insulation on the basis of stone wool, two of them supply their production to Europe.

The geographic distribution of the plants minimizes transportation costs and optimizes logistics.

TECHNOLOGICAL IMPROVEMENT IS THE FOUNDATION OF COMPETITIVENESS

TECHNONICOL thermal insulation based on stone wool is popular because of its technical and performance advantages, created during the production stage.

All materials are produced from basalt rocks with advanced and high-tech equipment from leading Western European manufacturers.

Technological processes are automated and strict quality control is implemented in all stages of production, from raw materials to finished product testing. It ensures stability of product properties. Ready-to-use products are safely packaged into a shrink film. A pallet with products is wrapped using stretch-hood technology, which reduces transportation and labor costs because of higher handling speed. But most importantly, this type of packaging does not get damaged when products are stored on the ground or in a construction site; the product does not lose its physical and mechanical properties in such storage conditions.

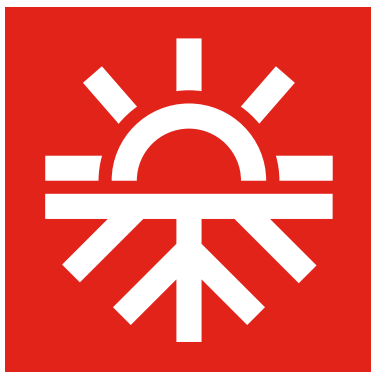
TECHNONICOL is not only about producer. It also runs a proprietary Research Center to ensure continuous improvement of products' technical properties and performance.

The company constantly invests time and recourses so as to improve its technologies and production assets. This resulted in a broad range of insulation materials of stone wool, stable quality and compliance with the European standards. Competitive price, uncompromising quality and numerous operational advantages made TECHNONICOL basalt-based non-flammable insulation to be the best choice for our customers. Contact our



representative today to get acquainted with the advantages of TECHNONICOL non-flammable insulation.

TECHNONICOL STONE WOOL PROPERTIES



EFFECTIVE THERMAL INSULATION

TECHNONICOL stone wool is a high-efficiency thermal insulating material. High resistance to thermal transmission is achieved because the finest intertwined mineral wool fibers retain a large amount of air inside the material.

High resistance to thermal transmission because air is retained inside the thermal insulation



FIRE SAFETY

The main raw material of TECHNONICOL stone wool products is gabbro-basalt rocks. Thanks to this, they are non-flammable. The fiber melting temperature exceeds 1000°C, which makes it possible to use the stone wool products in a wide range of working temperatures.

TECHNONICOL thermal insulation prevents the heat and fire to spread and protects structures from deformation and destruction. This gives additional time to evacuate people, documents and property.

An important aspect is that TECHNONICOL thermal insulation does not emit harmful or poisonous substances under high temperature.

The fiber melting temperature exceeds 1000°C

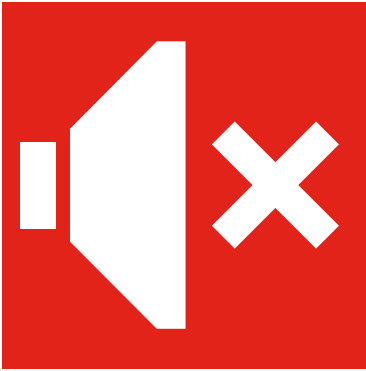


DIMENSIONAL STABILITY

The high mechanical stress resistance of TECHNONICOL materials is ensured by the fiber properties and stone wool structure. These parameters are set individually for each type of TECHNONICOL material, depending on the insulation's intended use.

Stresses vary in strength, direction and duration in various structures. To preserve the form, thickness and safe fastening of the material to the structure, thermal insulation materials should have high dimensional stability. This property, in its turn, provides reliable and durable insulation without loss in quality with time.

High resistance to mechanical stress



POWERFUL SOUND ABSORPTION

The fibrous structure of TECHNONICOL stone wool products secures excellent acoustic and sound-absorbing properties of the material. TECHNONICOL products have high sound-absorbing ratios in a broad range of frequencies, which decreases the level of airborne and impact noise in various sound-insulating structures: partitions, floors and others.

Effective sound abatement reduces airborne and impact noise



WATER REPELLENCY

All TECHNONICOL thermal insulation materials based on stone wool are treated with hydrophobized agents that give water-repellent properties to the insulation. The presence of moisture in the insulation affects its thermal properties, term of service and the indoor climate. If a thermal insulation gets wet, expensive and time-consuming measures have to be taken to eliminate the consequences – usually, the thermal insulation needs to be replaced.

High resistance to short-term exposures to moisture



VAPOR PERMEABILITY

Vapor permeability of TECHNONICOL stone wool materials is high, they do not retain the moisture coming from the premises in the form of vapor created by human activities. The thermal insulation almost always remains dry.

High vapor permeability



BIOSTABILITY

TECHNONICOL products fully meet the biological stability criteria, which was proved by numerous tests and trials as well as with the field data.

TECHNONICOL materials on the basis of stone wool is impenetrable by various macro- and microorganisms: the material does not provide conditions for the vital activity of bacteria, mold, fungi, and is not attractive as an environment for insects and rodents.

High resistance to the influence of microorganisms and rodents



CHEMICAL RESISTANCE

TECHNONICOL products are manufactured from basalt rocks. Natural minerals of this group are notable for their high chemical resistance to various substances: oils, solvents, paints, acidic and alkaline media.

TECHNONICOL materials based on basalt rocks can be safely used together with any types of construction materials as well as corrosive filters in many fields of the chemical industry.

Chemical neutrality to construction materials



ENERGY EFFICIENCY

The company develops, produces and promotes materials and systems that minimize heat loss and improve the efficiency of thermal protection of buildings, facilities and industrial objects. Energy efficient technologies and materials reduce heat loss considerably by creating covers of buildings and facilities.

TechnoNICOL conducts research on energy efficiency of thermal insulating systems based on stone wool. Such systems and materials reduce considerably the heating costs and energy consumption.

Contributes to energy savings



ON THE BASIS OF BASALT

The base raw materials for the production of our stone wool thermal insulating boards are gabbro-basaltic rocks - magmatic formations that result from volcanic eruptions. This unique raw material is natural, ecologically clean and safe. To obtain high-quality fiber at the plant, a careful selection of the batch composition is performed.

Made primarily
of melted igneous rocks



EASY INSTALLATION

The stone wool boards can be easily cut with readily accessible tools: such as a knife or a fine-toothed saw. It is also simple to make a pattern of your desired size and to install the boards into any structure, and to carry out quality controls.

Easy cutting
and processing



DIMENSIONAL STABILITY

The stone wool boards are produced with guaranteed stable geometrical dimensions, thanks to the automation and mechanization of our technological process. These clear and stable geometric dimensions will allow you to install boards that fit closely to each other or to the building's structure, depending on the installation conditions.

Guaranteed
dimensional stability

ADVANTAGES OF TECHNINICOL STONE WOOL



ECOLOGICAL COMPATIBILITY

Environmental safety is one of TechnoNICOL's priorities and a goal of innovations. The company's plants reuse the production waste. Being one of the major European mineral wool producers, TechnoNICOL constantly improves its products and services, using modern equipment and implementing eco-friendly technologies. All the products comply with sanitary and environmental standards, are safe for human health and nature, passed the complete cycle of certification, both obligatory and optional, and are permitted for use in Europe.



DURABILITY

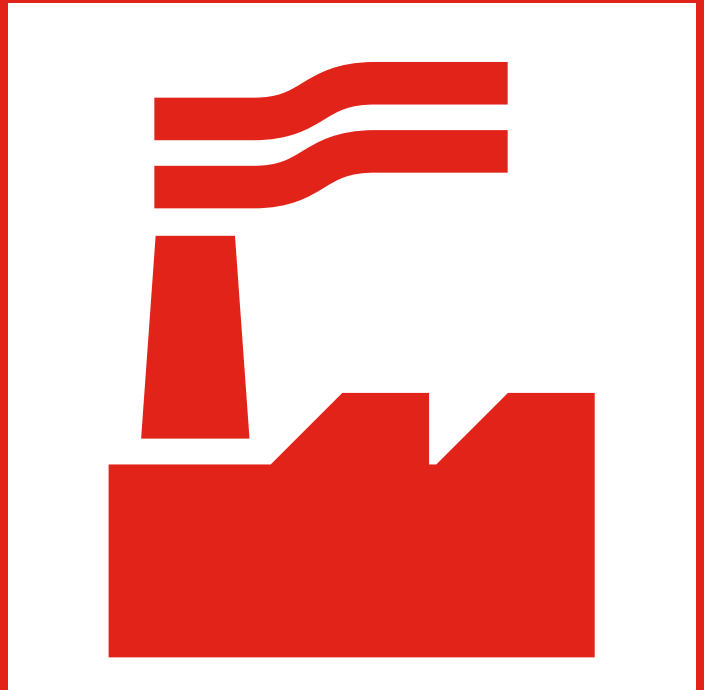
Durability of structures depends on several factors such as proper design and correct selection of a construction, quality assembly, compliance with transportation and storage requirements, etc.

Long experience, modern equipment, continuous technology perfection and innovations made by the proprietary Research Center allow TechnoNICOL to manufacture stone wool products of stable high quality. They keep their properties during the entire useful life of buildings and structures.



COMPREHENSIVE SOLUTIONS

TechnoNICOL not only produces materials, but also offers optimal turn-key solutions. They have already won a good reputation and have been popular for many years. One of the basic conditions for a reliable insulating system is compatibility of its materials. That is why our specialists together with the leading research institutes developed professional technical solutions – TechnoNICOL Building Systems. The main criteria of the systems are components compatibility, structure durability and high quality. You can always choose an optimal ready-made solution and get qualified assistance on its assembly and installation.



MATERIALS FOR INDUSTRIAL AND CIVIL CONSTRUCTION

**TECHNOLITE / TECHNOBLOCK /
TECHNOVENT / TECHNOFACADE EXTRA /
TECHNOFACADE COTTAGE / TECHNOFACADE
OPTIMA / TECHNOFACADE EFFECT /
TECHNOFACADE / TECHNOSANDWICH
WALL / TECHNOROOF / TECHNOROOF Ng /
TECHNOROOF N / TECHNOROOF V**

TECHNOLITE

Resistance to high temperature

Stable volume and form

Universal material for framed structures

APPLICATION

- Framed partitions
- Lag floors, cold attic floors
- Mansard roofs
- Ventilated facade (the first interior layer in two-layer insulation)

REALIZED OBJECTS



Volkswagen factory



Olympic village



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 40-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOLITE EXTRA	TECHNOLITE OPTIMA
Thermal conductivity, λ_D , W/m · K	EN 12667	0.038	0.036
Short term water absorption, kg/m ²	EN 1609	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3
Water vapour transmission, μ	EN 12086	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	0.5	0.5
Density, kg/m ³	EN 13162	30(±5)	35(±5)

LOGISTIC PARAMETERS

Length, mm	1200	600
Width, mm	1200	600
Thickness, mm	50	100
Quantity in a pack, Slab, pcs	12	6
Quantity in a pack, m ²	8.640	4.320
Quantity in a pack, m ³	0.432	0.432
Quantity in a pallet, Packs, pcs	16	16
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032



TECHNOBLOCK

High heat-saving ability

Microbiological and rodent resistance

No shrinkage

APPLICATION

- Sandwich masonry
- Wall cladding with sidings

REALIZED OBJECTS



Drama theatre



Recreational swimming pool



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOBLOCK STANDARD	TECHNOBLOCK OPTIMA	TECHNOBLOCK PROF
Thermal conductivity, λ_b , W/m · K	EN 12667	0.036	0.035	0.036
Short term water absorption, kg/m ²	EN 1609	<1	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3	<3
Water vapour transmission, μ	EN 12086	1	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	0.5	0.5	5
Density, kg/m ³	EN 13162	45(±5)	55(±5)	65(±5)

LOGISTIC PARAMETERS

Length, mm	1200	1200	1200	1200
Width, mm	600	600	600	600
Thickness, mm	50	50	100	100
Quantity in a pack, Slab, pcs	8	12	6	4
Quantity in a pack, m ²	5.760	8.640	4.320	2.880
Quantity in a pack, m ³	0.288	0.432	0.432	0.288
Quantity in a pallet, Packs, pcs	24	16	16	24
Quantity in a pallet, m ³	6.912	6.912	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032	76.032	76.032



* - For thermal resistance of materials refer to page 32

TECHNOVENT

High heat retention

Fire safety

No need for windproof film

APPLICATION

— Ventilated facade (one-layer insulation
or the exterior layer in two-layer insulation)

REALIZED OBJECTS



**Russian International
Olympic University**



Ministry of Forestry



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOVENT STANDART	TECHNOVENT PROF
Thermal conductivity, λ_D , W/m · K	EN 12667	0.035	0.036
Tensile strength, kPa	EN 1607	5	-
Point load, N	EN 12430	100	50
Short term water absorption, kg/m ²	EN 1609	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3
Water vapour transmission, μ	EN 12086	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	10	20
Density, kg/m ³	EN 13162	80(±8)	100(±10)

LOGISTIC PARAMETERS

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	60
Quantity in a pack, Slab, pcs	6	4	5
Quantity in a pack, m ²	4.320	2.880	3.600
Quantity in a pack, m ³	0.216	0.288	0.216
Quantity in a pallet, Packs, pcs	32	24	32
Quantity in a pallet, m ³	6.912	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032	76.032



TECHNOFACADE EXTRA

High heat-saving ability

Transmission of water vapour

Alkali resistance

APPLICATION

— Exterior walls with a protective and decorative layer of thick-coat plaster over a steel reinforced grid

REALIZED OBJECTS



**Hotel Park Inn by
Radisson**



**Complexes
for mass media**



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	VERSUCHSVER- FAHREN	TECHNOFACADE EXTRA
Thermal conductivity, λ_D , W/m · K	EN 12667	0.036
Tensile strength, kPa	EN 1607	5
Point load, N	EN 12430	50
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	15
Density, kg/m ³	EN 13162	90(±10)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032



* - For thermal resistance of materials refer to page 32

TECHNOFACADE COTTAGE

Comfortable environment for rooms

Reductions in heating costs

Free moisture exit out of the structures

APPLICATION

— Exterior walls with a protective and decorative layer of thin-coat plaster for low-rise housing constructions, with a height of application measuring less than 10 m

REALIZED OBJECTS



Azimuth hotel complex



International airport in Irkutsk



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOFACADE COTTAGE
Thermal conductivity, λ_D , W/m · K	EN 12667	0.036
Tensile strength, kPa	EN 1607	10
Point load, N	EN 12430	150
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	30
Density, kg/m ³	EN 13162	105(±10)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032



TECHNOFACADE OPTIMA

High layer separation strength

High transmission of water vapour

Unlimited heights of application

Alkali resistance

APPLICATION

— Exterior walls with a protective and decorative layer of thin-coat plaster

REALIZED OBJECTS



Complexes for media representatives



Hotel Marriott



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	VERSUCHSVERFAHREN	TECHNOFACADE OPTIMA
Thermal conductivity, λ_D , W/m · K	EN 12667	0.037
Tensile strength, kPa	EN 1607	15
Point load, N	EN 12430	200
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	30
Density, kg/m ³	EN 13162	120(±10)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032



* - For thermal resistance of materials refer to page 32

TECHNOFACADE EFFECT

High peel strength

Water vapor permeability

Lightweight board

Chemically neutral to construction materials

APPLICATION

— Exterior walls with a thin protective and decorative layer of plaster

REALIZED OBJECTS



Radisson hotel



Hilton Garden Inn Ufa



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-150 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	VERSUCHSVERTFAHREN	TECHNOFACADE EFFECT
Thermal conductivity, λ_D , W/m · K	EN 12667	0.038
Tensile strength, kPa	EN 1607	15
Point load, N	EN 12430	350
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	40
Density, kg/m ³	EN 13162	135(±13)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032



TECHNOFACADE

High tear strength of layers

Vapor permeability

Chemically neutral
to construction materials

APPLICATION

— Exterior walls with a thin protective
and decorative layer of plaster

REALIZED OBJECTS



**Otkritie Arena
stadium
in Moscow**



Toyota-Center



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	VERSUCHSV- FAHREN	TECHNOFACADE
Thermal conductivity, λ_D , W/m · K	EN 12667	50–90 mm –0.038 100–200 mm –0.037
Tensile strength, kPa	EN 1607	15
Point load, N	EN 12430	400
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	40
Density, kg/m ³	EN 13162	145(±14)

LOGISTIC PARAMETERS

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	100	150	80
Quantity in a pack, Slab, pcs	3	2	3
Quantity in a pack, m ²	2.160	1.440	2.160
Quantity in a pack, m ³	0.216	0.216	0.173
Quantity in a pallet, Packs, pcs	32	32	40
Quantity in a pallet, m ³	6.912	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032	76.032



* - For thermal resistance of materials refer to page 32

TECHNOSANDWICH WALL

High shear resistance

Surface homogeneity and integrity

Highly precise geometric dimensions

APPLICATION

— Sheet are designed to be used as a heat- and sound-insulation layer in three-layer wall sandwich panels with metal coverings

REALIZED OBJECTS



Toyota factory



METRO Shopping Mall



GEOMETRIC DIMENSIONS

Length: 1200, 2400 mm

Width: 627, 1200 mm

Thickness: 50–150 mm

PRODUCT TECHNICAL DATA *

	VERSUCHSVERFAHREN	TECHNOSANDWICH WALL
Thermal conductivity, λ_D , W/m · K	EN 12667	0.043
Tensile strength, kPa	EN 1607	100**
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	60**
Density, kg/m ³	EN 13162	105(±25)

LOGISTIC PARAMETERS

Length, mm	1200	2400
Width, mm	627	1200
Thickness, mm	122	122
Quantity in a pallet, m ³	10	11
Standard load per vehicle, 92 m ³	66,091	69,569



TECHNOROOF

High heat retention

Neutral to concrete and metal

Ability to carry load

APPLICATION

— One-layer heat insulation of flat roofing

REALIZED OBJECTS



Main Media Centre



John Deere exhibition service centre



GEOMETRIC DIMENSIONS

Length: 1200, 2400 mm

Width: 600, 1200 mm

Thickness (spacing – 10 mm): TECHNOROOF 45 40-150 mm, TECHNOROOF 50 40-130 mm

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOROOF 45	TECHNOROOF 50
Thermal conductivity, λ_D , W/m · K	EN 12667	0.038	0.039
Tensile strength, kPa	EN 1607	10	10
Point load, N	EN 12430	450	300
Short term water absorption, kg/m ²	EN 1609	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3
Water vapour transmission, μ	EN 12086	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	45	50
Density, kg/m ³	EN 13162	140(±14)	150(±15)

LOGISTIC PARAMETERS

Length, mm	1200	1200	1200
Width, mm	600	600	600
Thickness, mm	50	100	100
Quantity in a pack, Slab, pcs	4	2	3
Quantity in a pack, m ²	2.880	1.440	2.160
Quantity in a pack, m ³	0.144	0.144	0.216
Quantity in a pallet, Packs, pcs	48	48	32
Quantity in a pallet, m ³	6.912	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032	76.030



* - For thermal resistance of materials refer to page 32

TECHNOROOF Ng

Air circulation

Removal of excessive moisture

Lower risk of frost penetration

Indoor comfort

APPLICATION

- Flat roofs with ventilated channels
- Bottom layer in two-layer insulation of flat roofing

REALIZED OBJECTS



Evolution tower with offices, Moscow City complex



IKEA



GEOMETRIC DIMENSIONS

Length: 1200, 2400 mm
 Width: 600, 1200 mm
 Thickness (spacing – 10 mm): TECHNOROOF N30g, N35g 50-200, TECHNOROOF N40g 50-140 mm
 Ventilation channels width: 30 mm
 Ventilation channels height: 15-18 mm
 Channels spacing: 200 mm

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOROOF N30g	TECHNOROOF N35g	TECHNOROOF N40g
Thermal conductivity, λ_p , W/m · K	EN 12667	0.036	0.036	0.036
Tensile strength, kPa	EN 1607	7.5	7.5	7.5
Point load, N	EN 12430	250	300	350
Short term water absorption, kg/m ²	EN 1609	<1	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3	<3
Water vapour transmission, μ	EN 12086	1	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	30	30	40
Density, kg/m ³	EN 13162	120(±10)	120(±15)	125(±15)

LOGISTIC PARAMETERS

Length, mm	2400	2400	2400
Width, mm	1200	1200	1200
Thickness, mm	200	100	80
Quantity in a pallet, m ³	6.912	6.912	6.912
Standard load per vehicle, 92 m ³	76.032	76.032	76.032



TECHNOROOF N

Easy installation

High heat retention

Low weight

APPLICATION

- Bottom layer in two-layer heat insulation of flat roofing
- Recommended for use in combination with TECHNOROOF V sheets

REALIZED OBJECTS



Volvo center



Vnukovo-3 business terminal in Moscow



GEOMETRIC DIMENSIONS

Length: 1200, 2400 mm

Width: 600, 1200 mm

Thickness (spacing – 10 mm): TECHNOROOF N30, N35 50-200 mm, TECHNOROOF N40 50-140 mm

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOROOF N30	TECHNOROOF N35	TECHNOROOF N40
Thermal conductivity, λ_D , W/m · K	EN 12667	0.036	0.036	0.036
Tensile strength, kPa	EN 1607	7.5	7.5	7.5
Point load, N	EN 12430	250	300	350
Short term water absorption, kg/m ²	EN 1609	<1	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3	<3
Water vapour transmission, μ	EN 12086	1	1	1
Reaction to fire, Euroclass	EN 13501-1	A1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	30	30	40
Density, kg/m ³	EN 13162	120(±10)	120(±15)	120(±15)

LOGISTIC PARAMETERS

	TECHNOROOF N30	N35	N40
Length, mm	2400	1200	1200
Width, mm	1200	600	600
Thickness, mm	120	100	50
Quantity in a pack, Slab, pcs	-	3	6
Quantity in a pack, m ²	-	2.160	4.320
Quantity in a pack, m ³	-	0.216	0.180
Quantity in a pallet, Packs, pcs	-	32	36
Quantity in a pallet, m ³	6.912	6.912	6.480
Štandardná nosnosť automobilu, 92 m ³	76.032	76.032	71.280



* - For thermal resistance of materials refer to page 32

TECHNOROOF V

Dimensional stability

High mechanical strength

Fire safety

APPLICATION

- Upper layer in two-layer heat insulation of flat roofing
- Recommended for use in combination with TECHNOROOF N sheets

REALIZED OBJECTS



SELGROS
Shopping Mall



LEXUS Showroom



GEOMETRIC DIMENSIONS

Length: 1200, 2400 mm

Width: 600, 1200 mm

Thickness: TECHNOROOF V50, V60 30-100 mm,
TECHNOROOF V70 40-100 mm (spacing – 10 mm)

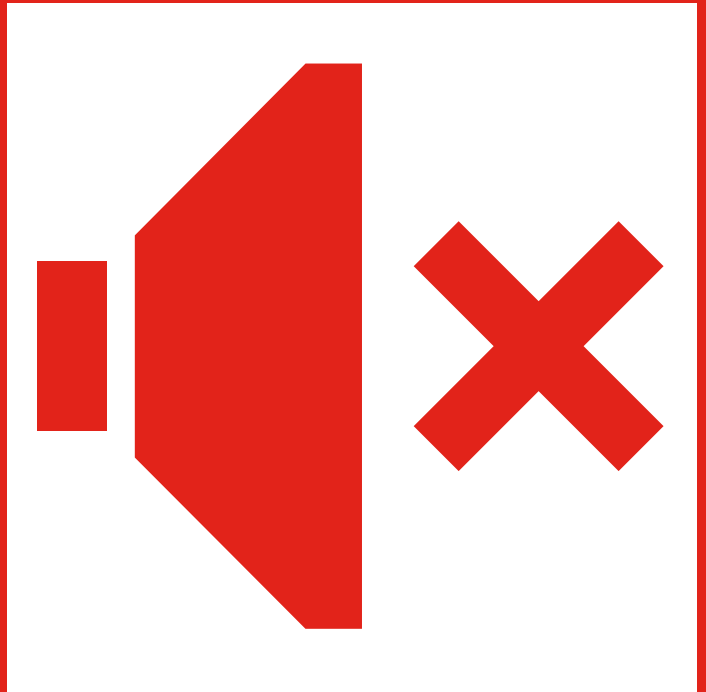
PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOROOF V50	TECHNOROOF V60	TECHNOROOF V70
Thermal conductivity, λ_D , W/m · K	EN 12667	0.038	0.038	0.040
Tensile strength, kPa	EN 1607	15	15	15
Point load, N	EN 12430	650	700	750
Short term water absorption, kg/m ²	EN 1609	<1	<1	<1
Long term water absorption, kg/m ²	EN 12087	<3	<3	<3
Water vapour transmission, μ	EN 12086	1	1	1
Reaction to fire, Euroclass	EN 13501-1 A1	A1	A1	A1
Compressive stress at 10 % deformation, kPa	EN 826	50	60	70
Density, kg/m ³	EN 13162	170(±15)	180(±15)	190(±15)

LOGISTIC PARAMETERS

	V50	V60	V70
Length, mm	2400	1200	2400
Width, mm	1200	600	1200
Thickness, mm	40	50	40
Quantity in a pack, Slab, pcs	-	5	-
Quantity in a pack, m ²	-	3.600	-
Quantity in a pack, m ³	-	0.180	-
Quantity in a pallet, Packs, pcs	-	36	-
Quantity in a pallet, m ³	6.912	6.480	6.912
Standard load per vehicle, 92 m ³	76.032	71.280	76.032





ACOUSTIC INSULATION

TECHNOACOUSTIC /
TECHNOFLOOR STANDART

TECHNOACOUSTIC

Impact noise protection

High dimensional accuracy

Excellent strength properties

APPLICATION

- Framed partitions and walls
- Suspended ceilings
- Intermediate floors with joists

REALIZED OBJECTS



Mercedes car centre



Volvo plant



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOACOUSTIC
Thermal conductivity, λ_D , W/m · K	EN 12667	0.037
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	0.5
Density, kg/m ³	EN 13162	40(±10)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ²	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032



TECHNOFLOOR STANDART

Insulation against airborne noise

High noise absorption levels

Deformation resistance during the whole life of the building

APPLICATION

— Floating floors with a cement screed

REALIZED OBJECTS



SOCHI PLAZA hotel



Leroy Merlin shopping centre



GEOMETRIC DIMENSIONS

Length: 1200 mm

Width: 600 mm

Thickness: 50-200 mm (spacing – 10 mm)

PRODUCT TECHNICAL DATA *

	TEST METHOD	TECHNOFLOOR STANDART
Thermal conductivity, λ_D , W/m · K	EN 12667	0.037
Point load, N	EN 12430	50
Short term water absorption, kg/m ²	EN 1609	<1
Long term water absorption, kg/m ²	EN 12087	<3
Water vapour transmission, μ	EN 12086	1
Reaction to fire, Euroclass	EN 13501-1	A1
Compressive stress at 10 % deformation, kPa	EN 826	25
Density, kg/m ³	EN 13162	110(±11)

LOGISTIC PARAMETERS

Length, mm	1200	1200
Width, mm	600	600
Thickness, mm	100	150
Quantity in a pack, Slab, pcs	3	2
Quantity in a pack, m ²	2.160	1.440
Quantity in a pack, m ³	0.216	0.216
Quantity in a pallet, Packs, pcs	32	32
Quantity in a pallet, m ³	6.912	6.912
Standard load per vehicle, 92 m ²	76.032	76.032



* - For thermal resistance of materials refer to page 32

CUSTOMER SERVICE

The key to the success and continuous development of the TechnoNICOL Company is our desire for continuous modernization, the expansion of our tasks and product line, as well as the development and improvement of our client and partner services

INTERNATIONAL STANDARDS

The quality management system of TechnoNICOL stone wool production is certified according to ISO 9001:2008.

The implementation of this certification ensures effective company management in general as well as the output of products with stable qualitative characteristics that meet the requirements of the international markets and customer expectations.

The system of ecological management at all TechnoNICOL stone wool producing plants is certified according to one more international standard - ISO 14001:2004. The document is issued by a German certifying body - Deutsche Akkreditierungsstelle GmbH (DAkkS).

This certificate confirms that all the stages of managerial and production processes comply with the highest international requirements of environmental regulations. Control of these processes guarantees the reduction of negative impacts upon the environment as well as waste reclamation and broke disposal, which, in turn, improves our environmental performance.

YOUR PERSONAL MANAGER

The export manager is your personal assistant, a specially assigned TechnoNICOL specialist, whose responsibility is to provide the client with any necessary support at all the stages of order processing. Your personal manager eliminates the necessity to contact different business units of the company personally, as he himself coordinates the work of all units to ensure prompt decision making and find optimal solutions. The manager is ready to take the order in any way that you find convenient – by personal email, phone. There is also an online web-store www.zakaz.tn.ru, where you can form orders upon after logging in.

Efforts to meet all your needs and create comfortable conditions of service and interaction – this is what defines the team of TechnoNICOL personal client managers.

COMPLEX APPROACH TO WORK

We value the time of our customers and are always ready to offer optimal business processes and document flow. We conclude a unified agreement on all TechnoNICOL products and conduct a unified lending policy. To achieve flexible and quick delivery we provide complex shipment of the products from warehouses throughout the Europe within that unified agreement and invoice. We also optimize the geographic distribution of our production facilities and expand the distribution network to meet the growing demands of the construction market.

We perform export declaring ourselves, without resorting to broker companies, which minimizes the costs and terms of transportation and reduces the customers' expenditure.

Our goal is to fully meet the needs of our customers with the help of complex approach to work and attempts to find optimal solutions.

QUICK ACCESS TO INFORMATION

If you fail to find an answer to your question in this catalogue or need additional details on stone wool products of TechnoNICOL, our website will surely help: www.tn-europe.com. If you have any questions, please do not hesitate to contact us at: info@tn-europe.com.

There you can learn more about the company, analyze the product range of stone wool thermal insulation materials, choose the optimal solution for your goals and find all the necessary instruction manuals and product certificates as well as find out the location of our nearest trade partners.

STORAGE

If the materials are not stored indoors, they should be protected from the rain. The packages should be stacked on a flat platform that does not touch the ground. If necessary, the pallets holding the material should be covered with a waterproof tarpaulin or plastic film. Special attention should be paid to the process of loading/unloading the products.

USE OF PERSONAL PROTECTION EQUIPMENT

Research studies show that basalt fibers do not cause damage to human health, but during the process of working with the material it is still recommended that protection equipment is used to avoid skin irritation in case of an individual intolerance to the material. Keep your work clothes separate from your everyday wear. If your eyes are sensitive to dust, use protective glasses at work. If you wear contact lens, use of protective glasses is required. It is also necessary to use a dust mask if the content of fine particles in the air increases when working with the material.

PRODUCT TECHNICAL DATA OF THERMAL INSULATION MATERIALS

	NON-LOAD BEARING STRUCTURES		SANDWICH MASONRY			VENTILATED FACADES		PLASTER FACADES				
PROPERTY, UNITS OF MEASUREMENT	TECHNOLITE		TECHNOBLOCK			TECHNOVENT		TECHNOFACADE				TECHNOFACADE
	EXTRA	OPTIMA	STANDART	OPTIMA	PROF	STANDART	PROF	EXTRA	COTTAGE	OPTIMA	EFFECT	
Length, mm	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
Thickness, mm	50–200	40–200	50–200	50–200	50–200	50–200	50–200	50–200	50–200	50–200	50–200	50–200
Thermal conductivity, λ_D , W/m · K	0.038	0.036	0.036	0.035	0.036	0.035	0.036	0.036	0.036	0.037	0.038	50-90 mm - 0.038 100-200 mm - 0.037
Tensile strength, kPa	-	-	-	-	-	5	-	5	10	15	15	15
Point load, N	-	-	-	-	-	100	50	50	150	200	350	400
Short term water absorption, kg/m ²	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Long term water absorption, kg/m ²	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Water vapour transmission, μ	1	1	1	1	1	1	1	1	1	1	1	1
Reaction to fire, Euroclass	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
Compressive stress at 10 % deformation, kPa	0.5	-	0.5	0.5	5	10	20	15	30	30	40	40
Density, kg/m ³	30(±5)	35(±5)	45(±5)	55(±5)	65(±5)	80(±8)	100(±10)	90(±10)	105(±10)	120(±10)	135(±13)	145(±14)

WALL SANDWICH PANELS	FLAT ROOFING											ACOUSTIC INSULATION		
	TECHNOSANDWICH WALL	TECHNOROOF N						TECHNOROOF 45	TECHNOROOF 50	TECHNOROOF V			TECHNOACOUSTIC	TECHNOFLOOR STANDART
30		35	40	30g	35g	40g	50			60	70			
	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200, 2400	1200	1200
	627, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600, 1200	600	600
	50-150	50-200	50-200	50-140	50-200	50-200	50-140	40-150	40-130	30-100	30-100	40-100	50-200	50-200
	0.043	0.036	0.036	0.036	0.036	0.036	0.036	0.038	0.039	0.038	0.038	0.040	0.037	0.037
	100	7.5	7.5	7.5	7.5	7.5	7.5	10	10	15	15	15	-	-
	-	250	300	350	250	300	350	450	300	650	700	750	-	50
	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1
	60	30	30	40	30	30	40	45	50	50	60	70	0.5	25
	105(±25)	120(±10)	120(±15)	120(±15)	120(±10)	120(±15)	125(±15)	140(±14)	150(±15)	170(±15)	180(±15)	190(±15)	40(±10)	110(±11)

THERMAL RESISTANCE OF TECHNICAL MATERIALS

PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$	PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$	PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$
TECHNOLITE EXTRA	50	1.25	TECHNOBLOCK OPTIMA	40	1.15	TECHNOVENT PROF	40	1.10
	60	1.55		50	1.45		50	1.40
	70	1.75		60	1.70		60	1.65
	80	2.05		70	2.00		70	1.95
	90	2.30		80	2.30		80	2.20
	100	2.50		90	2.55		90	2.50
	110	2.80		100	2.80		100	2.75
	120	3.05		110	3.10		110	3.05
	130	3.30		120	3.40		120	3.30
	140	3.55		130	3.70		130	3.60
	150	3.80		140	4.00		140	3.85
	160	4.05		150	4.25		150	4.15
	170	4.30		160	4.55		160	4.40
180	4.55	170	4.85	170	4.70			
190	4.80	180	5.10	180	4.95			
200	5.05	190	5.40	190	5.25			
TECHNOLITE OPTIMA	40	1.10	TECHNOBLOCK PROF	200	5.70	TECHNOFACADE EXTRA	200	5.55
	50	1.40		40	1.10		50	1.40
	60	1.65		50	1.35		60	1.65
	70	1.95		60	1.65		70	1.90
	80	2.20		70	1.95		80	2.15
	90	2.50		80	2.20		90	2.40
	100	2.75		90	2.50		100	2.65
	110	3.05		100	2.75		110	2.90
	120	3.30		110	3.05		120	3.15
	130	3.60		120	3.30		130	3.40
	140	3.85		130	3.60		140	3.65
	150	4.15		140	3.85		150	3.90
	160	4.45		150	4.15		160	4.15
170	4.70	160	4.45	170	4.40			
180	5.00	170	4.70	180	4.65			
190	5.25	180	5.00	190	4.90			
200	5.55	190	5.25	200	5.15			
TECHNOBLOCK STANDART	40	1.10	TECHNOVENT STANDART	30	0.80	TECHNOFACADE COTTAGE	50	1.40
	50	1.40		40	1.10		60	1.65
	60	1.65		50	1.40		70	1.90
	70	1.95		60	1.70		80	2.15
	80	2.20		70	1.95		90	2.40
	90	2.50		80	2.25		100	2.65
	100	2.75		90	2.55		110	2.90
	110	3.05		100	2.80		120	3.15
	120	3.30		110	3.10		130	3.40
	130	3.60		120	3.40		140	3.65
	140	3.85		130	3.70		150	3.90
	150	4.15		140	3.95		160	4.15
	160	4.40		150	4.25		170	4.40
170	4.70	160	4.50	180	4.65			
180	5.00	170	4.80	190	4.90			
190	5.25	180	5.10	200	5.15			
200	5.55	190	5.40					
		200	5.70					

PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$	PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$	PRODUKT	THICKNESS, mm	$R_D, m^2 \cdot K/W$	
TECHNOFACADE OPTIMA	50	1.40	TECHNOFACADE EFFECT	140	3.85	TECHNOROOF V60	30	0.75	
	60	1.55		150	4.00		40	1.70	
	70	1.70		160	4.40		50	2.00	
	80	2.00		170	4.70		60	2.25	
	90	2.25		180	4.90		70	2.40	
	100	2.40		190	5.20		80	2.60	
	110	2.60		200	5.45		90	2.80	
	120	2.80		TECHNOROOF N40 TECHNOROOF N40g	50		1.35	100	3.00
	130	3.00			60		1.65	110	3.40
	140	3.20			70		1.90	30	0.75
	150	3.40			80	2.15	40	1.00	
	160	3.60			90	2.45	50	1.25	
	170	3.80			100	2.70	TECHNOROOF V70	60	1.40
180	4.00	110	2.95		70	1.75			
190	4.20	120	3.25		80	2.00			
200	4.50	130	3.55		90	2.25			
50	1.25	140	3.80		100	2.50			
60	1.50	40	1.00	40	1.10				
70	1.75	50	1.25	50	1.35				
80	2.00	60	1.50	60	1.60				
90	2.25	70	1.75	70	1.90				
100	2.50	80	2.00	80	2.15				
TECHNOFACADE	110	2.75	TECHNOROOF 45	90	2.30	TECHNO-ACOUSTIC	90	2.45	
	120	3.00		100	2.55		100	2.70	
	130	3.40		110	2.75		110	2.95	
	140	3.60		120	3.00		120	3.25	
	150	3.75		130	3.25		130	3.50	
	50	1.30		140	3.50		140	3.75	
	60	1.50		150	3.80		150	4.05	
	70	1.80		TECHNOROOF 50	40		1.05	160	4.30
	80	2.15			50		1.30	170	4.60
	90	2.45			60		1.55	180	4.85
	100	2.70	70		1.80	190	5.10		
	110	2.95	80		2.05	200	5.40		
	120	3.25	90		2.30	40	1.05		
130	3.55	100	2.55		50	1.35			
140	3.85	110	2.80		60	1.65			
150	4.15	120	3.05		70	1.90			
160	4.45	130	3.35		80	2.20			
170	4.70	140	3.60	90	2.45				
180	4.95	150	3.85	100	2.70				
190	5.20	40	1.05	110	3.00				
200	5.45	50	1.25	120	3.25				
TECHNOROOF N30	60	1.60	TECHNOROOF V50	60	1.55	TECHNOFLOOR STANDART	130	3.50	
TECHNOROOF N30g	70	1.90		70	1.80		140	3.80	
TECHNOROOF N35	80	2.15		80	2.05		150	4.05	
TECHNOROOF N35g	90	2.45		90	2.35		160	4.35	
50	1.35	100		2.60	170		4.60		
60	1.60	110		2.95	180		4.85		
70	1.90	120		3.25	190		5.15		
80	2.15	130		3.60	200		5.40		
90	2.45	40		1.05					
100	2.70	50		1.25					
110	2.95	60	1.55						
120	3.25	70	1.80						
130	3.60	80	2.05						
		90	2.35						
		100	2.60						
		110	2.85						
		120	3.15						

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