## fibraizol.ru

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### Top notch reliability!

## About Us

### Top notch reliability!

The "Givat" company was founded in 2014, specializes in the production and sale of non-flammable wind-and-waterproof membrane "Fibralzol ® NG".

#### Our assets:

- modern manufacturing technologies and scientific developments;
- team of professionals with years of experience;
- many successfully implemented projects in Russia, CIS countries and neighboring countries;

We strive to be a leader in our field of activity and maintain the reputation of a reliable partner.

#### Our work principles:



Consistent high quality is a distinctive feature of the product.



Positive business reputation - confirmation of the company "Givat" production reliability.





Individual approach. Timely and accurate deliveries.

Company founder: Gavrilov Denis Viktorovich

## Production

### Own manufacturing and laboratory

Fibralzol <sup>®</sup> NG membrane is manufactured by the Givat production company on its own production line. The company performs a full cycle of works on impregnation, rewinding and packaging of material on imported equipment, which guarantees the best result.

#### Control

Provided with modern analytical equipment at all stages of production - from obtaining raw materials to the release of finished products.

### Reliability

In our company, the production base is constantly being improved, the latest technologies are being introduced into work, and a step-by-step quality control system is in place. In addition, we regularly improve the skills of our specialists.

#### Warehouse program

Maintaining an irreducible warehouse stock allows for timely shipment of material in the required quantity. We don't have supply disruptions.



We make the most efficient use of our existing production facilities. We are ready to quickly and accurately fulfill orders for the supply of a high-quality membrane, which is not inferior to European counterparts..









## **Product Mission**

### Reliable protection for thermal insulation

#### Research

According to the conclusion of the Tambov State Technical University, during the thermal modernization of a residential building with mineral wool slabs, with an area of external walls of 1498 m2, about 1876 kg of dust can be released into the atmosphere in 25 conventional years of operation, which will be about 75 kg of dust per year

According to the calculations of the Central Research Institute for Industrial Buildings in Moscow, the thermal insulation properties of the insulation are reduced by 4 times without a windproof membrane.

The main disadvantage of mineral wool insulation is unlimited breathability, which leads to increased heat loss.

#### **Product properties**

Protecting the building walls from wind is the main function of membranes in ventilated facade system.

An additional functionality of the facade membrane is protection of mineral wool insulation from moisture, steam condensation and fiber emission.



SP-23-101-2004 (clause 12, table 17, note 2)

Air penetration resistance of mineral wool should be taken equal to zero, regardless of the thickness of the insulation layer.

### How it works?



#### With membrane

dew point falls on membrane, insulation does not damaged by influence of wind

#### Without membrane



dew point inside insulation, it gets damaged by influence of wind





### Designations

1. Facade 2. Wind 3. Membrane 4. Insulation

5. Wall 6. Cold air 7. Warm air 8. Temperature

## Relevance

### What does the membrane protect from?

### Wind

- increases heat loss, degrades energy efficiency;
- provokes the emission of fiber from the insulation, which has a detrimental effect on health;

- fiber emission reduces the weight of the insulation, which leads to an increase in its thermal conductivity and a decrease in thermal resistance;

### Water and dust

- destroy binding substances;
- reduce quality, efficiency and service life of insulation;

### Fire

- Causes of windproof membranes ignition :
- the use of a burner, welding, grinder during installation work;
- wiring short circuit;
- smoking in the process of work or operation of the building;
- arson;



A high-quality wind-waterproof membrane installed together with an insulation will increase the energy efficiency of the building, save on heating and extend the life of the facade.

### Consequences of not using membranes



Fiber emission due to wind exposure;

Destruction of insulation binding composition from water and dust;



Destruction of building due to the ignition of windproof membrane;

## About product

### Membrane "Fibralzol® NG"

**"Fibralzol ® NG"** is used as a wind-waterprotection in hinged facade systems and pitched roofs. It is used with any type of cladding without the installation of steel floor fire

Non-flammable membrane "Fibralzol <sup>®</sup> NG" provides airtightness of structure and guarantees reliable protection against transverse and longitudinal infiltration that occurs when air flow moves under the outer facade cladding.





## Characteristics

### Parameters of "Fibralzol® NG" Membrane

Air penetration resistance 1000 m2-h-Pa/kg GOST 26602.2-99 GOST R ISO 9237-99 GOST EN 12085-2011

Vapor resistance 0,09 m2 h Pa/mg GOST 25898-83 Water permeability under pressure 0,001 MPa Within 200 hours - the material is not permeable GOST 2678-94

Membrane material weight 215 g/m2 GOST 2678-94 **Operation at a temperature of** -60 C° Withstands GOST 2678-94

**Tear strength** (longitudinal/transverse) **1590/1590** GOST 6943.10-79

Flammability group NG (KMO) GOST 30244-94 Service life without external cladding 10 years Service life with external cladding at least 50 years



Membrane "Fibraizol <sup>®</sup> NG" complies with the fire safety requirements established by GOST 30244-94 for NG class materials (non-flammable material).

## System design

### Pitched roof scheme

Roof tiles -	
Transverse roof battens	
Counter batten ————	
Membrane	Contraction of the
Insulation	

### Ventilated facade scheme

Wall	
Subsystem	· · · · ·
Insulation	Constraint -
Membrane	
Metal cassette	0

## Documentation

### Quality assurance

**Non-flammable membrane "Fibralzol** <sup>®</sup> **NG**" has all certificates and conclusions, that confirm great quality and guarantee safety of buildings and structures.

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Tests at the Central Research Institute im.Kucherenko

Fire certificate

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A complete set of documentation for membrane will help you to avoid possible claims from regulatory authorities.

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Technical certificate

Tests according to GOST

## Membranes differences

### "Fibralzol ® NG"

#### Water protection

Water resistance is documented by testing GOST 2678-94. On site **fibraizol.ru** you can watch a video recording of experiment with membrane.

#### Vapor permeability

Has high vapor permeability. Releases the steam formed inside the insulation and prevents moisture condensation.

#### Strength

Retains properties during the operation of the facade without facing. Does not crack or break in places where the material is bends.





Production of a real, high-quality, non-combustible wind and waterproof membrane is very complex process that requires strict compliance to technology at all stages.

### Analogues

#### Water protection

Tests for water resistance may be absent or carried out with deviations from standart methodology.

#### Vapor permeability

Due to unbalanced properties, they can have a high resistance to vapor permeation and trap steam inside a hinged ventilated facade, which creates condensate and waterlogging of the insulation.

### Strength

They can tear like normal construction fabric. Loses properties with prolonged exposure to sunlight and does not allow long-term operation without cladding.

### OTHER MANUFACTURERS



Unscrupulous manufacturers, under the guise of a non-combustible membrane, offer to buy ordinary construction fabric.

## Insulation does not need protection, if there are letters from manufacturers, why should we use a membrane??

#### Answer:

Main function of membrane is to protect walls of building from wind by reducing heat loss and increasing energy efficiency of said building. Insulation protection is an additional feature.

Mineral wool insulation, which would not let air through, has not yet been invented. Guided by SP-23-101-2004 "Design of thermal protection of a building", the resistance to air penetration of mineral wool should be taken equal to zero, regardless of the layer thickness.

According to the calculations of the Central Research Institute of Industrial Buildings in Moscow, the heat-insulating properties of the insulation are reduced by 4 times without a windproof membrane. In other words, mineral wool without a windproof membrane works inefficiently. The cost of heating the building increases, the operational life of the structure decreases.

## Now they make Insulation that are not threatened by fiber emission.

Such statements are like a marketing ploy. If you carefully read the information letters from insulation manufacturers, you can see that they guarantee preservation of properties, provided that it is protected from moisture by precipitation. Confirming the fact that insulation still needs to be protected.

# Insulation manufacturers directly indicate that it is possible to refuse the use of membrane in a hinged ventilated facade system. Answer:

If you carefully read what the insulation manufacturers write, you can see that there are no categorical statements about rejection of membranes.

The need to use membranes is established during project development based on calculations that take into account building height, its location relative to the prevailing wind directions, etc. Final decision on the use of wind and waterproof materials is made by design organization. In other words, responsibility is shifted to the shoulders of designers. Also, when using mineral wool insulation in hinged facade systems, the time interval between installation of insulation boards and installation of external cladding should not exceed 90 days. In cases where this gap is larger, it is recommended to protect surface of plates from atmospheric influences with membranous materials. This once again confirms as fact that nsulation still needs protection.

## Our objects



Arbitration Court of the Tatarstan Republic



Domodedovo airport



Mineralnye Vody Airport



High-tech city "Innopolis"



Business center "Moscow City"



Residential complex "Scarlet sails"



Skolkovo Innovation Center



Cosmodrome "Vostochny"



Multidisciplinary clinic of MMA



Novosibirsk State University



Luzhniki Stadium



Nizhny Novgorod Stadium

## Contacts

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