

IBBTherm

External Wall Insulation System



*Quality
for professionals...*

The
Guide
to

External Wall Insulation & Render System

Why Choose Our

External Wall Insulation & Render System?

IBBTherm
External Wall Insulation System

IBB Therm External Wall Insulation & Render System offers sustainability, energy efficiency and innovative exterior finish. It offers the highest technology standards for cutting energy costs and is an excellent value for money. It is designated for both new builds and retrofits, allowing for creation of the better build environment.

IBB Therm is the thin coat insulated render system specially designated for both new builds and retrofits. IBB Therm is offered as ETICS- External Thermal Insulation Composite Systems and meets ETA 16/0347 requirements and No. PN-EN 15824:2010 requirement. It is currently in the process of BBA accreditation.

Protects the building structure - IBB Therm provides the external protective layer to the building structure.

Reduces energy loss - IBB Therm System offers the efficient type of insulation that lowers the U-values. Allows for choice of insulation thicknesses- it is not restricted by the cavity width or internal building dimensions.

Eliminates thermal bridges - IBB Therm reduces thermal bridging, minimises the problem of condensation, achieves low air permeability of the building envelope.

Improves External Facade - IBB Therm is available in the range of colours and textures what allows to achieve the exceptional finishes

Low maintenance - IBB Therm is resistant to adverse weather conditions, stains or discolouration

Easy application - IBB Therm System can be applied by professionals in easy process on all types of buildings- residential, high-rise and commercial buildings.

High resistance - IBB Therm System is highly resistant to weather conditions, UV radiation, water penetration, contamination etc.



How to take care of Render Facade?

If your property received the External Wall Insulation and Render System recently this short guide will inform you how to maintain its good appearance and efficiency. Within years weather conditions, heavy rains, snow, strong sun or the wind will have an impact on the external appearance of the render. It can be contaminated with sand and dust. Cracks and scratches may occur. Damp patches, smudges, discolours can be avoided with the proper maintenance and regular cleaning.

Maintenance

Once a year inspects the system to check for any damage, crack or discoloured areas. Inspect seals annually and avoid the high pressure washer to clean the render. Moreover, the annual coat of fungicidal wash can prevent algae and mould from growing. Contact us for advice about cleaning, doing minor repairs, replacing or adding new fixtures and fittings.

How to clean render facade?

Apply fresh warm water to the facade surface from top to bottom and use a brush carefully to clean the facade. In cases when dirt is not cleaned quickly the mild detergent/cleaning agent can be used and washed off. Often it is better to repaint the rendered facade and achieve the new appearance.

How to renovate the elevation?

There is a range of chemical agents available on the market. Some facades can be renovated with priming products, cement smoothing masses and appropriately selected facade paint. Such process of restoration consists of :

Step 1 - repairing cracks with the cement smoothing mass – we recommend Acryl Putz Fasada (available in all IBB depots)

Step 2 - painting by using one of the IBB Therm facade paints (AP100 or SN300). Depending on the surface material it can be an acrylic, silicate or silicone paint.

More time-consuming will be repair or replacement of the insulation layer. Such process of restoration involves the system approach and consists of:

Step 1 - restoration of external appearance (texture and colour)

Step 2 - use of adhesives, primers and plasters (mineral MT100, acrylic AT100 and silicone ST300). IBB Therm products are carefully selected and manufactured to the highest standards, while offers the excellent value for money.

Step 3 - painting of repaired area with IBB Therm facade paints (AP100 or SN300) in over 800 shades.

Thanks to used components the IBB Therm paints and plasters are highly resistant to UV radiation and preserve excellent colour for a long time.

To find out more about IBB Therm visit www.ibbtherm.uk. You can buy IBB Therm System and all products at www.ibbmerchant.uk



BRAND DESCRIPTION

Professional system of Building Insulation **IBBTherm** is a complete offer of products designed for performing external building insulation including:

- decorative thin coat renders
- facade paints
- primers and undercoats
- adhesive mortars
- fibreglass reinforcing mesh.

IBBTherm components are carefully selected by us, the best and the most cost effective external render materials on the market !

IBBTherm materials are good for building renovation as far as thermal insulation, construction protection and external image look are concerned. **IBBTherm** is a wide range of solutions based on top-quality products, available in full range of colours used both in currently erected buildings as well as existing detached and terrace houses.

IBBTherm
External Wall Insulation System

APPROVALS AND CERTIFICATIONS

IBBTherm products are offered in ETICS – External Thermal Insulation Composite Systems of building walls. They hold all required technical approvals and certifications:

Systems **IBBTherm S** – with polystyrene:

- Meet the requirements of standard No. PN-EN 15824:2010.
- ETA 16/0347



Polymers Protection

Polymers Protection is a unique combination of physical and chemical properties, being a part of surface system protection. Its particles concentrate on the surface of coating, decreasing its tension. As a result the surface attracts less contamination and dirt has less possibility to bind with the surface permanently. Moreover, a decorative coating is more durable and resistant to water penetration, which is freely removed from the elevation surface.

Features of **IBBTherm** paints and plasters enriched by Polymers Protection:

- resistant to deposits of dirt and dust on the surface of elevation,
- easy to clean, remove stains and contaminations,
- resistant to washing,
- provide effective protection against weather condition influence,
- resistant to destructive influence of UV radiation,
- resistant to water penetration which is quickly removed from the elevation surface,
- resistant to washing out protective substances,
- easy application.



BioCare Technology

Buildings are often exposed to influence of microorganisms which contribute to their damage. Both algae and fungus development is increased by moisture penetrating the uninsulated structure of walls. IBBTherm products are based on laboratory developed formula, which efficiently deter development of destructive factors. Specially designed products ensure sound and aesthetic elevations, resistant to microbiological corrosion. BioCare Technology, preventing formation of wall and ceiling corrosion centres, ensures also pure air within interiors as well as protects people's health who reside in them.



Easy Application

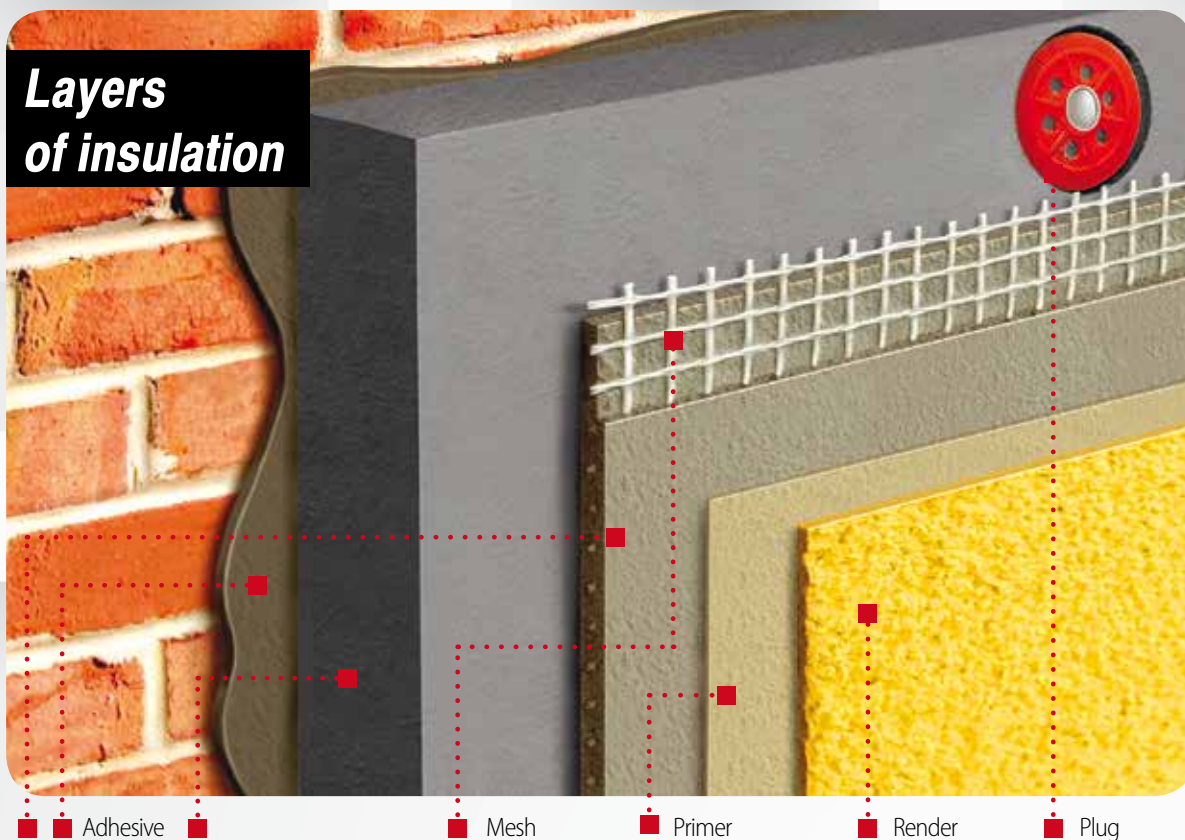
IBBTherm products are based on a special combination of components which ensure easy application as well as maintain very good adhesive properties to the surface. A suitable configuration of additives control the binding time of used products, contributing to easy application and in the event of plasters, sufficient time to obtain the required structure without a risk of premature binding. **IBBTherm** facade paints contain a special composition of rheology agents which prevent paint splatter during painting.



Systems with use of polystyrene

- S1 Mineral plaster **IBBTherm** TM100
- S2 Acrylic plaster **IBBTherm** AT100
- S3 Acrylic and silicone plaster **IBBTherm** AST120
- S5 Silicone plaster **IBBTherm** ST300

Layers of insulation



■ ■ Adhesive ■

■ Mesh

■ Primer

■ Render

■ Plug

The division of systems as regards plaster types

IBBTherm offer includes systems with use of polystyrene. Due to a type of plasters we can divide them into systems with use of plasters made of mineral, acryl, polymer as well as silicate and silicone.

Plasters	Plaster types	SYSTEM
		Polystyrene
MINERAL	Mineral plaster TM100	S1
ACRYLIC	Acrylic plaster AT100	S2
	Acrylic and silicone plaster AST120	S3
SILICONE	Silicone plaster ST300	S5

Plaster primers support the binding and drying process of applied plasters as well as prevent coat discoloration. They facilitate all works associated with plaster application, enhance its adhesiveness and uniform the substrate absorptiveness. They can be used both indoors and outdoors, upon substrates made of concrete, cement, cement and lime, plaster cardboard panels, particle boards etc.



IBBTherm AU10

ACRYLIC UNDERCOAT

IBBTherm SU30

SILICONE UNDERCOAT



Technical data:	Acrylic undercoat AU10	Silicone undercoat SU30
Application temp.	from +5°C to +25°C	from +10°C to +25°C
Density volume	1.65 g/cm ³ ± 5%	1.55 g/cm ³ ± 10%
Drying period	to 3 hours	to 3 hours
Plaster application time	24 hours after priming	24 hours after priming
Use	approx 0.3 kg/m ²	approx 0.3 kg/m ²
Container	container of: 16 kg, 8 kg, 3 kg	container of: 16 kg, 8 kg
Suitable for the following plasters	TM 10, TA 11, TS 12, TPT 40, TSS 25, TD 50	TN 30, TSS 25

IBBTherm PMA11

POLYSTYRENE & MESH ADHESIVE

Adhesive mortars are available in the form of pre blended dry mortars which consist of mineral aggregates, cement and special additives improving adhesiveness, efficiency and finishing works.

The offer covers the following mortars: for polystyrene & fibreglass mesh – PMA 11.



Technical data:

Appropriate amount of water	approx 5.75-6.25 litres / 25 kg
Application temperature	from +5°C to +25°C
Period after opening (from application to sticking the insulation board)	to 20 minutes
Working period of mortar (from the moment of mixing with water)	approx 1 hour
Hardening time	from 6 to 24 hours
Average use per 1 m ² by applying the mortar on the edges and spots	from 4 to 5 kg
Average use per 1 m ² by applying the mortar on the whole surface	from 5 to 7 kg
Average consumption per 1 m ² with reinforced coat application	from 3 to 5 kg
Adhesive properties to concrete	≥ 0.3 MPa
Adhesive properties to polystyrene	≥ 0.1 MPa
Best-before-date	12 months
Container	25 kg paper bag

USE

The adhesive comprises an External Thermal Insulation Composite System (ETICS) IBBTherm and IBBTherm S. Intended for installing polystyrene boards to all construction substrates: concrete, silicate, ceramic, cement, cement and lime plasters etc., as well as to perform a protective base coat reinforced with a fibreglass mesh. For interior and exterior use of new buildings as well as those subjected to thermo-modernisation. Can be used to fill in holes and cracks in stabilised substrates.

SUBSTRATE PREPARATION

Polystyrene board installation: The substrate intended for installing polystyrene boards must be even, dry, solid, dust and dirt free as well as free from any biological (fungi, moulds, mosses) and chemical aggression etc. All sorts of dirt must be removed by using water under high pressure. Old renders and paint coats with poor adhesion must be removed. Fill in holes with Adhesive Mortar IBBTherm PMA 11 (max. to 6.0 mm in one coat), IBBTherm PA10/ PMA11 or a regular plaster mortar.

In order to reinforce substrates with poor adhesive properties, highly absorptive or chalky (i.e. leaving dust traces after palm rubbing), it's necessary to apply IBBTherm AP10 or IBBTherm AP10, 24 hours prior to polystyrene installation.

Polystyrene can be installed on new cement or cement and lime plasters minimum 14 days after their application. In case of concrete substrates min. after 30 days. All substrates must be stabilised as far as moisture is concerned and the curing process completed.

In the event of installing polystyrene

boards on substrates with poor adhesive properties, it is necessary to carry out an adhesion test. Install sample polystyrene blocks of 10x10 cm dimensions and remove the manualy after 4-7 days. The substrate is appropriate if the polystyrene is torn inside. If, however, the adhesive is removed with the polystyrene block and the substrate coat, it's necessary to remove the poor coat and apply IBBTherm AP10 lub IBBTherm PA10 - 24 hours prior to board installation.

REINFORCED COAT PERFORMANCE

The whole surface of installed polystyrene boards must be carefully abraded by sandpaper, and if necessary, carry out other reinforcement by applying plastic anchors. Polystyrene boards without reinforced coat over the course of above 2 weeks - their quality condition must be checked, if yellow and dusty must be abraded by sandpaper. In order to strengthen the external corners and edges it's necessary to apply fibreglass corners with mesh.

ADHESIVE PREPARATION

Put 5,75-6,25 litres of cool water into a clean container and while mixing put the whole content of the adhesive i.e. 25kg (0,23-0,25 litres of water per 1 kg of powder). Mix the compounds by taking advantage of a slow-speed agitator (driller) till obtaining a uniform consistency and leave it for approximately 5 minutes. Next mix it again and adjust the consistency by adding a small amount of water. Do not add any other substances except water. Workability time after mixing with water up to 4 hours. In the event of curing, it's necessary to mix it again without water or fresh mortar. Adding too much water impairs the adhesive features: adhesion to substrate, peel adhesion test, curing time.

POLYSTYRENE INSTALLATION

Polyurethane for insulation within ETICS method should meet requirements of PN-EN 13163:2004 standard. In case of walls, apply the mortar alongside the edges of polystyrene board - min. width of 3 cm and thickness between 1 and 2 cm, and pointwise - 'mounds' - diameter of 8-12 cm - remember to place

the mounds symmetrically and at the same volume. The total amount of applied mortar should cover at least 40% of the board's surface, and 60 % after pressing the board against the surface. In the event of smooth substrates and ceilings, or base courses of buildings apply the mortar on the whole surface of the board with a comb trowel (at least 10x10 mm). After applying the mortar, the board must be immediately put against the wall in the appropriate area and pressed so as to obtain a flat surface with relation to neighbouring boards. The boards must be installed alternately and tightly by joining them with the previously installed sheets. The boards must not be pressed twice or repositioned. Gaps exceeding 2 mm must be filled by polystyrene stripes. Minimum 24 hours after assembly, the surface must be abraded by sandpaper and protected by installing additional anchors in accordance with the technical design or ITB Manual no. 447/2009. It's recommended to use 4 anchors every 1m², whereas in edge areas and base courses 6-8 anchors every 1m². The depth of anchors should be at least 6 cm in case of solid substrates, and 8 cm in light substrates made of autoclaved aerated concrete, expanded clay aggregate etc. In the event of masonry units the anchor must go at least through two walls of the unit.

The reinforced coat can be performed at least after 3 days but no later than 3 months after polystyrene installation. If the polystyrene is not covered by the reinforced coat within 14 days, it's necessary to estimate its condition - yellow and dusty boards must be abraded by sandpaper. Before applying the mortar on the whole surface it's necessary to install additional diagonal mesh stripes - 20x30cm - in elevation corners. Appropriate mesh stripes must be also installed in interior corners of window frames. Apply the mortar with a comb trowel upon abraded and dust-free polystyrene boards and immerse the glass fibre mesh in it. Immerse the mesh by performing vertical stripes and apply 10 cm of overlap, and next smooth it so as to cover it completely. The mesh must not adhere directly to the polystyrene and cannot be visible. If necessary, apply another coat of mortar and smooth the surface, abrade the surface

imperfections after drying out. The thickness of the reinforced coat must be at least 3 mm. The ground area, including a base course of a building, must be installed with two layers of the reinforced mesh or fibreglass armour mesh. The plaster can be performed at least after 3 days but no later than 3 months after performing the reinforced coat. Before applying a top coat render it's recommended to paint the surface with undercoat/primer IBBTherm.

RECOMMENDATIONS

Use at the substrate and ambient temperature between +5°C and +25°C. Do not apply on hot substrate. During application it's necessary to avoid direct sunlight, strong wind and rain. Substrate and ambient temperature during application and over the course of 24 hours must not be lower than +5°C. Cured and mixed adhesive must not be diluted by water or new material. Do not apply the adhesive in joints of insulation boards. The information provided constitutes principle guidelines regarding the product use, works must be carried out in accordance with ITB regulations no. 447/2009 and 418/2007, principle construction rules and HSE regulations. The manufacturer shall not be liable for any damages resulting from inappropriate use or purpose of the product. Detailed information about the product can be found in Technical Data Sheet.

STORAGE

Store in dry and ventilated area in undamaged containers. Storage temperature: from +5°C to +25°C. Protect against influence of frost and direct sunlight.

TOOLS

A slow-speed agitator (driller), a trowel, steel trowels (smooth and comb), a container for adhesive.

SAFETY POLICY

The product contains cement and provides alkaline reaction after mixing with water. During application protect eyes and skin. In the event of contact with eyes, rinse them with pure water immediately and contact a physician. Dispose this material and its container at hazardous or special waste collection point.

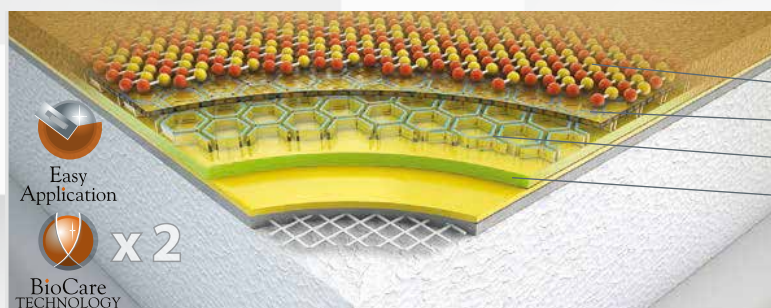
IBBTherm AT100

ACRYLIC TOPCOAT

The plaster made on the basis of acrylic dispersions, marble aggregates and fillers. The product contains refining agents and special wax dispersion preventing moisture penetration into the surface texture as well as facilitating plaster application. Acrylic plaster AT100 is designed to be applied either by hand or spraying method. It's suitable performing thin-coat decorative plasters on various mineral substrates used both indoors and outdoors.

Product features:

- easy application and finishing
- long lasting colour
- good adhesive properties
- resistance to deformations
- high resistance to biological hazards
- high quality coat
- high resistance to contaminations
- a wide range of colours



PLASTER SECTION

- High-quality acrylic resin
- Dual biocide system
- Wax dispersion
- Refining agents

Prime coat
Reinforcing coat
Polystyrene

Technical data:

Application temp	from 10°C to 25°C
Drying period	approx 6-8 hours
Binding period	approx 48 hours
Colour	240 colours + 1451 NCS
Container	25 kg container

Provided technical data refers to temperature of +20°C and relative humidity of 60%

Efficiency:

Grain coarseness	Hand application – (bark beetle or fleecy texture), use	Spraying application (fleecy texture)		
		Nozzle number	Pressure	Use
1.5 mm	2.0 - 2.5 kg/m ²	2 (5.5 mm)	2.1 - 2.5 atm	2.0 - 2.2 kg/m ²
2.0 mm	2.5 - 3.0 kg/m ²	3 (6.5 mm)	2.1 - 2.5 atm	2.3 - 2.5 kg/m ²
2.5 mm	3.3 - 3.7 kg/m ²	4 (7.0 mm)	2.1 - 2.5 atm	2.6 - 3.0 kg/m ²
3.0 mm	4.1 - 4.6 kg/m ²	4 (7.0 mm)	2.1 - 2.5 atm	3.1 - 3.3 kg/m ²

INSULATION SYSTEM WITH USE OF PLASTER AT100

ELEVATION	Insulation system	FOVEO TECH S2
	Adhesive mortar	Mortar for polystyrene PA 10
	Insulation material	Polystyrene
		Insulation anchors
	Reinforcing coat	Mortar for fibreglass mesh PMA 11
		Fibreglass mesh M 145 / M 165
	Prime coat	Prime coat AU10
	Plaster	Acrylic plaster AT 100

USE

Ready-to-use top coat render compound intended for manual or spraying performance of thin-layer, decorative renders within External Thermal Insulation Composite System (ETICS) IBB Therm and FOVEO TECH. Can be used on new and refurbished interior and exterior mineral substrates. Contains biocidal agents which prevent fungi, moulds and algae from development on plaster surface.

SUBSTRATE PREPARATION

The substrate must be even, dry, solid, dust and dirt free as well as free from any biological (fungi, moulds, mosses) and chemical aggression etc. All sorts of dirt must be removed by using water under high pressure. Old renders and paint coats with poor adhesion must be removed. Fill in holes with Fill in holes with Adhesive Mortar IBBTherm PMA 11 (max. to 6.0 mm in one coat), FOVEO TECH KS10/ KU 11 or a regular plaster mortar.

In order to reinforce substrates with poor adhesive properties, highly absorptive or chalky (i.e. leaving dust traces after palm rubbing), it's necessary apply IBBTherm AP10 or FOVEO TECH GA 10. If necessary, smooth the surface with Adhesive Mortar IBBTherm PMA 11. New cement or cement and lime plasters must be painted minimum 28 days after application whereas concrete after 3 months, within the insulation system the reinforced coat must be seasoned min. 3 days. All substrates must be stabilised as far as moisture is concerned and the curing process completed. Before plaster application the surface must be primed by IBBTherm AU10 or FOVEO TECH PA 10, (colour as close to the render colour as possible).

APPLICATION

Before use the whole content of the bag must be mixed carefully by taking advantage of a slow-speed agitator (driller) till obtaining a uniform consistency. If necessary, add a small amount of water (up to 1,5%). During spraying application the maximum water content should be up to 100 ml/25kg of plaster. The amount of water added should be the same for each container. An addition

of water may contribute to change of plaster properties and its colour. Do not interfere with compound content by adding cement, sand or other components.

In the event of manual application the plaster must be applied by stainless steel trowel and spread till obtaining a coat of grain thickness. Within 15 minutes after application it's necessary to carry out a desirable effect by a plastic trowel: dotted - by circular movements, whereas rustic - vertical, horizontal and circular movements, depending on desirable system of cracks. Do not use water during smoothening. The excessive material can be used subsequently after mixing.

Only dotted texture render can be used in the event of spraying method, grain thickness between 1,5 mm and 3 mm. Consequently, it's necessary to use a spraying kit recommended by the manufacturer in accordance with the following parameters: render of 1,5 mm thickness - nozzle no. 2 (5,5mm), render of 2mm thickness - nozzle no. 3 (6,5mm), render of 2,5 mm and 3 mm - nozzle no. 4 (7 mm). Recommended unit pressure: 3,5 -4 bar. The render stream must be sprayed perpendicularly 25 cm from the wall. The gun must be operated steadily on the whole surface of the wall. In order to avoid discolouration it's necessary to apply the render which holds the same batch number (expiry date and batch number on the container). Top coat renders which hold different batch numbers must be mixed before use. Work intervals must be scheduled beforehand (e.g. after work completion in corners and bends, under drain pipes, colour contacts etc.). Detailed information about the product can be found in Technical Data Sheet.

RECOMMENDATIONS

Use at the substrate and ambient temperature between +5oC and +25oC. Do not apply on hot substrate. During top coat render application and drying it's necessary to avoid direct sunlight, strong wind and rain. Protect the top coat render applied till complete curing by applying a foil or a thick protective mesh. Substrate and ambient temperature during application and over the course of

48 hours must not be lower than +5oC. Low temperature and high air humidity can extend the drying time. Clean the tools with water immediately after application. Fresh plaster dirt can be washed by water, whereas cured plaster remains can be removed mechanically only. The top coat render obtains its full strength properties 28 days after application. In case of interior application the area must be ventilated until the odour vanishes. Top coat render application within insulation systems of dark and intense colours (at light reflectance value (LRV) below 20%) should not exceed 10% of the surface plastered. Before commencing to perform the elevation it's necessary to carry out a compliance test of ordered texture and colour on a small surface.

Any suggestions regarding substandard features of the render and its colour must be reported immediately to the seller. Works must be carried out in accordance with principle construction rules, standards and HSE regulations. In the event of combining the product with other products, FFIL Śnieżka SA shall not bear any responsibility.

The purpose of the information herein is to provide optimal performance as regards render application. The manufacturer shall not be liable for any damages resulting from inappropriate use or purpose of the product, since weather conditions during application are beyond its control.

STORAGE

Store and keep in sealed containers. Protect against influence of frost and direct sunlight. Storage temperature: from +5oC to +30oC.

TOOLS

An agitator (driller), a trowel, stainless trowels, plastic trowels, plaster spraying kit

SAFETY POLICY

In the event of contact with eyes, rinse them with pure water immediately and contact a physician. The product must be stored in an area out of reach for children. Waste material and container should be forwarded for disposal.

IBBTherm ST300

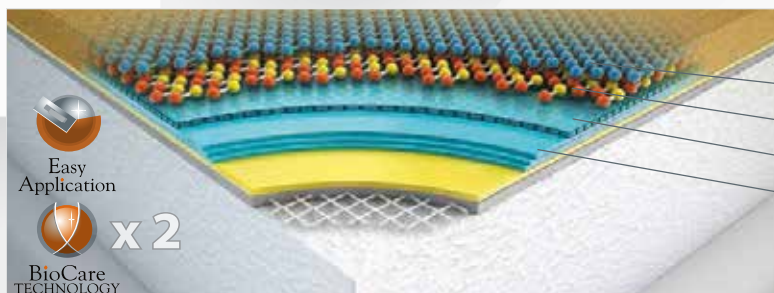
SILICONE TOPCOAT

A plaster based on silicone resin, high-quality synthetic resin, marble aggregates and fillers. It contains special refining agents. The product reaches the top parameters as far as unfavourable weather conditions, biological corrosion and contaminations are concerned. It's highly flexible and resistant to mechanical damage. It's characterized by high vapour-permeability and low water absorption. Silicone plaster ST300 is designed to be applied either by hand or spraying method. It's suitable for performing thin-coat decorative plasters on various mineral substrates used both indoors and outdoors



Product features:

- easy application and finishing
- long lasting colour
- good adhesive properties
- resistance to UV radiation
- high vapour permeability
- resistance to deformations
- high resistance to biological hazards
- high quality coat
- high resistance to contaminations
- a wide range of colours



PLASTER SECTION

- Silicone resin
- High-quality synthetic resin
- Dual biocide system
- Refining agents
- Prime coat
- Reinforcing coat
- Polystyrene

Technical data:

Application temp	from 10°C to 25°C
Drying period	approx 8 hours
Binding period	approx 48 hours
Colour	240 colours + 1451 NCS
Container	25 kg container

Provided technical data refers to temperature of +20°C and relative humidity of 60%

Efficiency:

Grain coarseness	Hand application – (bark beetle or fleecy texture), use	Spraying application (fleecy texture)		
		Nozzle number	Pressure	Use
1.5 mm	2.2 - 2.5 kg/m ²	2 (5.5 mm)	3.5 - 4.0 atm	1.9 - 2.3 kg/m ²
2.0 mm	2.5 - 3.0 kg/m ²	3 (6.5 mm)	3.5 - 4.0 atm	2.2 - 2.4 kg/m ²
2.5 mm	3.3 - 3.7 kg/m ²	4 (7.0 mm)	3.5 - 4.0 atm	3.0 - 3.5 kg/m ²
3.0 mm	4.1 - 4.6 kg/m ²	4 (7.0 mm)	3.5 - 4.0 atm	4.0 - 4.4 kg/m ²

INSULATION SYSTEM WITH USE OF PLASTER ST300

ELEVATION	Insulation system	FOVEO TECH S5
	Adhesive mortar	Mortar for polystyrene KS 10
	Insulation material	Polystyrene
		Insulation anchors
	Reinforcing coat	Mortar for fibreglass mesh KU 11
		Fibreglass mesh SW 145 / SW 165
	Prime coat	Silicone prime coat PN 30
	Plaster	Silicone plaster TN 30



IBBTherm MT100

MINERAL TOPCOAT

The plaster based on compound of white and grey cement, lime, white quartz sand as well as mineral additives. It's designed to be applied by hand upon various substrates made of: concrete, cement and lime, plaster cardboard panels used both indoors and outdoors. Mineral plaster MT100 is available in white or grey option to be painted by the following elevation paints: FA 10, FAT 15, FT 20, FSS 25 or FN 30.

Product features:

- good adhesive properties
- high coat durability
- high vapour permeability
- resistance to UV radiation
- high resistance to biological hazards
- resistance to temperature fluctuations



PLASTER SECTION

Paint

■ A compound of white and grey cement, limewhite quartz sand and mineral additives

Refining agents

Prime coat

Reinforcing coat

Polystyrene

Technical data:

Powder density	approx 1.5 kg/dm ³
Period after opening	to 15 minutes
Use time	approx 1 hour
Binding period	approx 72 hours
Appl. temperature	from +5°C to +30°C
Colour	white, grey
Container	25 kg paper bag

Efficiency:

Grain coarseness	Hand application (fleecy texture)
1.5 mm	approx 2.0 kg/m ²
2.0 mm	approx 3.0 kg/m ²

INSULATION SYSTEM WITH USE OF PLASTER MT100

ELEVATION	Insulation system	FOVEO TECH S1
	Adhesive mortar	Mortar for polystyrene KS 10
	Insulation material	Polystyrene
		Insulation anchors
	Reinforcing coat	Mortar for fibreglass mesh KU 11
		Fibreglass mesh SW 145 / SW 165
	Prime coat	Prime coat PA 11
	Plaster	Mineral plaster TM 10
	Paint coat	Acrylic prime coat GA 10/ Acrylic paint FA 10
		Acrylic prime coat GA 10/ Acrylic paint with Polymers Protection
		Silicone prime coat GT 20 / Silicate paint FT 20
		Silicone prime coat GN 30/ Silicate and silicone paint FSS 25
		Silicone prime coat GN 30/ Silicone paint FN 30

Primers are designed to enhance properties of porous, very absorptive mineral substrates such as cement, cement and lime, concrete and thin-coat minerals plasters, being the final coating as far as insulation systems are concerned.

They are used before application of facade paints or to dilute them. They penetrate the substrate thoroughly, even out its absorptiveness and enhance adhesion of top coats.

IBBTherm AP10

PAINT ACRYLIC PRIMER



IBBTherm SP30

PAINT SILICONE PRIMER

Technical data:	Acrylic primer AP10	Silicone primer SP30
Application temp.	from +5°C to +25°C	from +10°C to +25°C
Drying period	to 2 hours	to 2 hours
Use	to 10 m ² /L	to 10 m ² /L
Container	5 L	5 L
Suitable for the following paints	FA 10, FAT 15	FSS 25, FN 30



IBBTherm AP100

ACRILIC PAINT

Acrylic paints are based on up-to-date recipes which consist of high-quality tetrapolymer resins, a full range of refining agents, hydrophobizing the coat as well as making it resistant to destructive ultra violet radiation. Additionally, Paint FAT 15 contains Polymers Protection – an additive decreasing the surface tension of the coat and contributing to increased resistance to contaminations, destructive influence of weather conditions and UV radiation. Used compilation of FLEXIFORMULA in Paint FA 10 results in excellent covering properties of painted surface, good adhesiveness to uneven substrate, durable coat and resistance to dynamic strain.

Technical data:	Acrylic Façade Paint AP100
Application temp.	from 5°C to 25°C
Drying period	2 hours
Binding period	28 days
Efficiency	to 10 m ² /L
Colour	239 colours + 1451 NCS
Container	container of: 4.5 L or 9 L



IBBTherm SN300

SILICONE PAINT

Silicone paints contain a unique additive – micro glass beads, which in combination with other specially designed components, make a unique coating – NANOSTRUCTURE, (Neostruktura) thanks to which the paints are able to reflect light significantly, diminishing negative heating effects of the painted surface.

They do not attract contamination and show self-washing features. The paints have high vapour permeable properties and at the same time, they are resistant to water penetration. They are also characterized by high parameters in terms of adhesiveness, covering properties and application

Technical data:	Silicone Façade Paint SN300
Application temp.	from 5°C to 25°C
Drying period	2 hours
Binding period	28 days
Efficiency	to 8 m ² /L
Colour	239 colours
Container	container of: 4.5 L or 9 L

IBBTherm M145 & M155

FIBERGLASS MESH

Fibreglass mesh (E-Glass) M145 and M165 is a high-quality product of enhanced parameters which can be used within insulation systems of buildings, where the quality and easy application play a crucial role. As a result of highly flexible fibre, it is ideal while applying upon the wall, and facilitates mortar application. The meshes are recommended as a reinforcing material in **IBBTherm S** and **IBBTherm W** insulating systems. Mesh 165 is especially recommended while using mineral wool. Special features: **German quality**, high tearing resistance, special non-slip finish provides dimension stability, plasticity (aperture!). stability, plasticity (aperture!).



Product name	Mesh size	Substance	Measure unit	Quantity	
				1 roll	1 palette
Fibreglass mesh M145	4 x 5 mm, leno weave	145 g/m ²	1 m ²	50 m ²	1650 m ² (33 rolls)
Fibreglass mesh M155	4 x 4 mm, leno weave	155 g/m ²	1 m ²	50 m ²	1650 m ² (33 rolls)



External Wall Insulation & Render System

IBBTherm are the best, carefully selected by us, most cost effective external render materials on the market ! We describe below the most popular version of elevation done with acrylic render, white, dotted finish with grain thickness of 1.5 mm.

Estimation conditions:

- materials are delivered on site
- internal transport horizontal and vertical is included for the usual building site conditions
- labour included fitting light scaffolding up to 4m high
- calculation of materials includes an allowance for waste
- water, electricity, and small amount of materials are added with 1.5% rate calculated from basic materials

Sequence of operation:

- clean and prime the surface
- fix base metal track according to thickness of polystyrene sheets

- prepare adhesive – mix powder with water
- cut and glue polystyrene panels to the wall
- drill holes and fix polystyrene panels with plastic plugs
- prepare polystyrene joints with the special trowel to make an even surface
- fix PVC corners with mesh to the external corners and revals
- apply adhesive basecoat reinforced with fibreglass mesh on top of polystyrene panels
- prime basecoat with primer
- mix acrylic render in bucket
- apply render with the steel trowel
- work wet render with plastic trowel to receive decorative finish
- protect with dust sheet and foil or plastic against rain and sun

Coverage of materials for 1sqm topcoat acrylic render with insulation; system insulated with graphite polystyrene panels 5cm thick

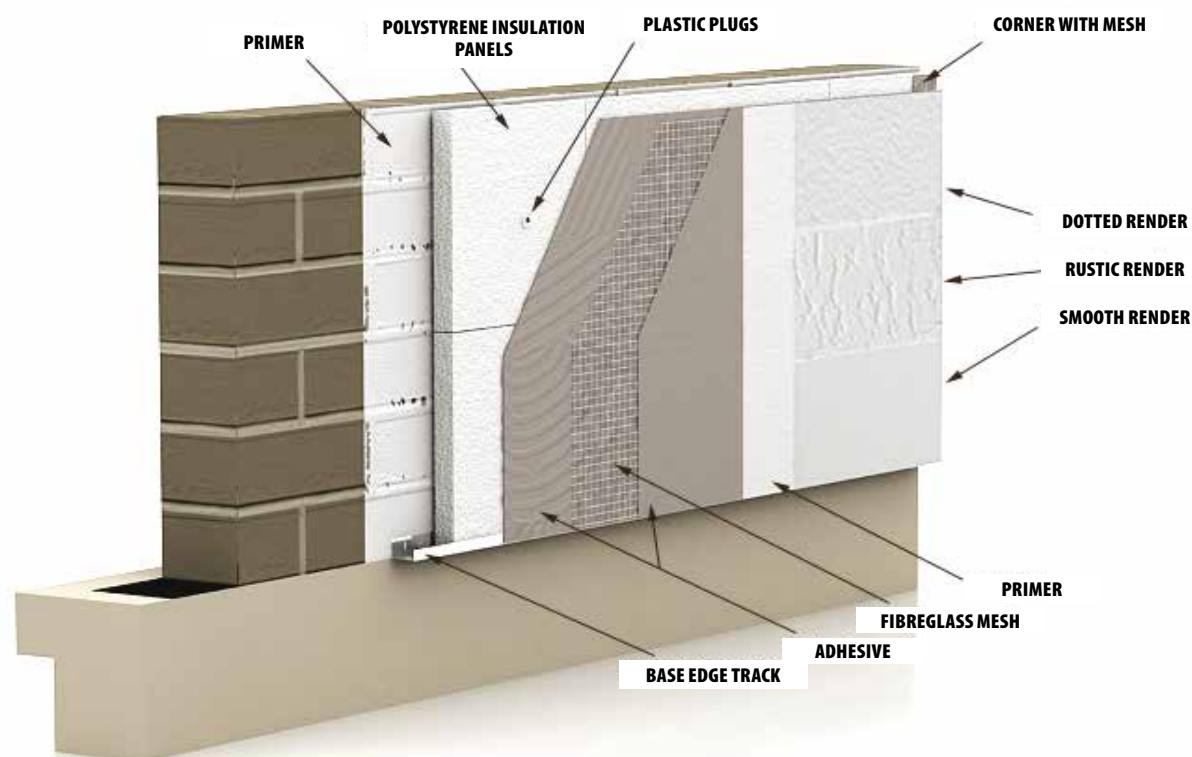
No	Material	Unit	Price* excl VAT [pcs]	Norm for 1m ² wall	Unit price excl. VAT [GBP]	Price excl. VAT for 1m ² wall	Price incl. VAT for 1m ² wall
1	IBBTherm AP 10 – acrylic primer	can 5l	£ 6.75	0.07l/m ²	£ 1.35/l	£ 0.09	£ 0.11
2	Metal track 53/2500mm	pcs	£ 2.75	TBC eg. 0.20m/m ²	£ 1.10/m	£ 0.22	£ 0.26
3	Foamed polystyrene EPS 70-032 FACADE, graphite 5cm thick	1m ²	£ 2.48	1.05m ²	£ 2.48/m ²	£ 2.60	£ 3.12
4	Fixings for polystyrene panels 11-10x90mm plugs	pcs	£ 0.10	6 szt/m ²	£ 0.10/szt	£ 0.60	£ 0.72
5	PVC corner with mesh 2.50m	pcs	£ 1.40	TBC eg. 0.50m/m ²	£ 0.56/m	£ 0.28	£ 0.34
6	IBBTherm PMA 11 – adhesive for glueing polystyrene panels and basecoat reinforced with fibreglass mesh	bag 25 kg	£ 6.25	8.0kg/m ²	£ 0.25/kg	£ 2.00	£ 2.40
7	Fibreglass mesh 145g/m ²	roll 50 m ²	£ 19.50	1.135m ² /m ²	£ 0.39/m ²	£ 0.44	£ 0.53
8	IBBTherm AU 10 – contact primer	bucket 25kg	£ 34.50	0.25kg/m ²	£ 1.38/kg	£ 0.35	£ 0.42
9	IBBTherm AT 100 – acrylic top coat render dotted 1.5mm	bucket 25kg	£ 21.25	ca 3.0kg/m ²	£ 0.85/kg	£ 2.55	£ 3.06
10	Additional materials 1.5%					£ 0.14	£ 0.16
Total						£9.27	£11.12*

* products IBBTherm available at above prices in all IBB Polish Building Wholesale branches – included the maximum 40% discount applies to IBBestimator PRO users and during promotion

Labour costs per 1sqm of elevation (as above)

No	Description	Labour hours	Rate excl.VAT [GBP]	Rate [GBP] per 1sqm excl.VAT	Rate [GBP] per 1sqm incl.VAT
1	Priming substrate and base coat surface before applying top coat render	0.066 labour/m ² *	£ 14,-	£ 0.92	£ 1.10
2	Fixing metal track	0.237 l/m	£ 14,-	-	-
3	Glueing polystyrene panels	1.329 l/m ² *	£ 14,-	£ 18.61	£ 22.33
4	Fixing corners with mesh	0.220 l/m	£ 14,-	-	-
5	Coating mesh with adhesive	0.611 l/m ² *	£ 14,-	£ 8.55	£ 10.26
6	Applying top coat render	0.493 l/m ² *	£ 14,-	£ 6.90	£ 8.28
Total		2.606 l/m²*		£ 34.98	£ 41.97

Attention: Attention: in our quotation we have only described positions marked *, the rest you have to calculate individually eg. fixing corners with mesh according to how many reveals there are on the elevation, it is also important that for reveals you have to increase the quotation, the same for scaffolding or colour render.



Adhesive

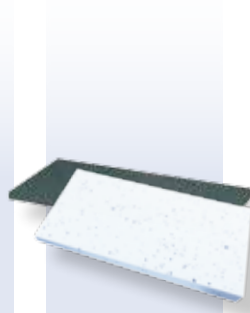
Polystyrene panel

Mesh

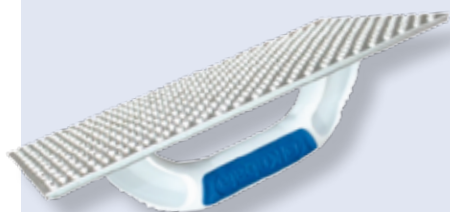
Primer

Render

Plug



Cost of Materials for the most popular External Wall Insulation System with polystyrene EPS-70-032 graphite insulation 50mm thick, acrylic render - dotted, white colour, 1.5mm grain after the greatest discount level is **£ 9.27 net/sqm**

Useful tools


***Trowel
with sandplate***



***Plastic trowel
for decorative render***

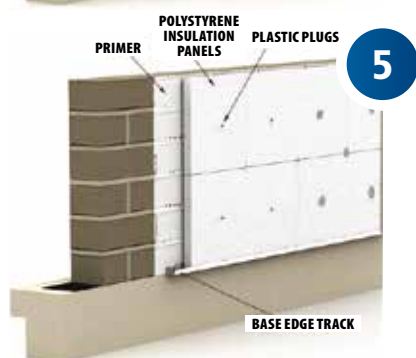
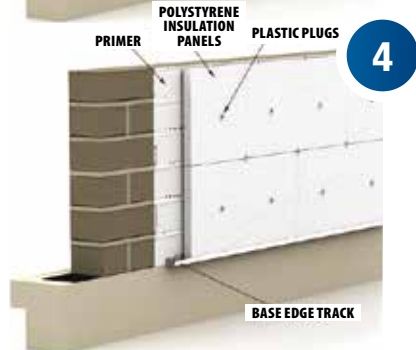
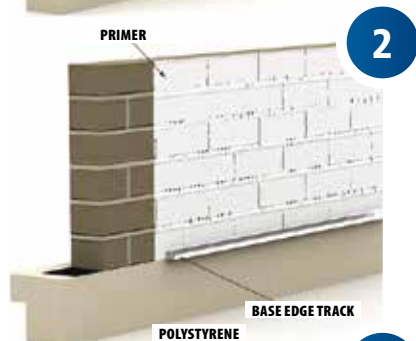
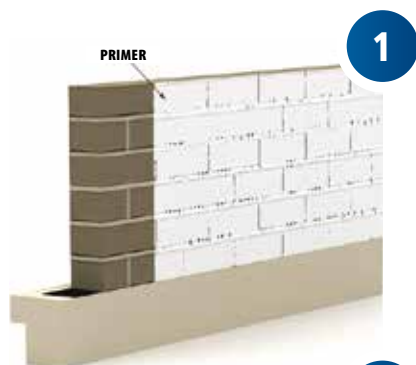


***Scraper
for old renders***


Attention!

Our norms and rates should be taken as a guide only and there are no obligations for anybody to adhere to them.; you have to take sole responsibility and apply your own rates to your quotations. Cost of materials can vary from prices shown on the manufacturers specification We cannot accept any responsibility for anyone using this information – you must make your own checks.

Important information regarding building elevation:



- while choosing metal edge strip, please mind that both thickness of polystyrene panels and thickness of adhesive are important
- apply adhesive around the edge of polystyrene panel and in the middle
- fix plugs only in the area where the adhesive is applied
- attention: it is not necessary to fix polystyrene panels with plugs when the elevation is a small area. Adhesive only will do the job
- in the UK you should cover the fixing screws with polystyrene plugs to protect against the cold bridge
- when preparing insulation surface, an adhesive layer, etc. should be done carefully and evenly; the adhesive surface should not be sanded – otherwise it is difficult to apply the render and get a good finish
- the thickness of one coat is only the thickness of the grain used in the render – you can not level the surface by just applying another layer of render
- the surface area of one level elevation should be done continuously from one side to the another without a break, by two people – one for applying the render and second one for making the decorative finish. If you allow part of a surface to dry before continuing it will leave ripples on the surface
- do not apply render during rain or bright sunshine
- if some render drops from the elevation during application – do not re-use it
- you can check the skills and experience of your builders by looking under the scaffolding for fallen render
- you can use a pre-coloured render but remember - if you use an acrylic external paint always wait 28 days
- you can paint after 24 hours but you must use a silicat external paint
- if you use a coloured render make sure it is an acrylic one
- for insulating polystyrene panels you can use 2-3 cm thickness but there is no matching edge metal strip to be found
- you can apply thin layer render on to old cement based render – but cleaning, priming and applying fiberglass mesh with adhesive is a must
- in some situations it is necessary to fit insulated rendering system with special buttons
- new render finishes should be protected against weather, especially rain, by using plastic sheeting – repairing damaged render can only be done by applying a new layer of adhesive with mesh and new decorative render

