

External, insulated, decorative rendering system



is Europe's biggest event dedicated to sustainable design, construction and the built environment. 26-28 February 2008 here in Earls Court London you are welcome to visit our stand F 236 and with us take part in the biggest showcase of sustainable construction products in the UK.



Polish Building Wholesale Ltd

will present two green technology systems,

energy efficient and low carbon methods of green building.

1. external insulation rendering system.

2. drying and eliminating dry-rot an amazing and effective non invasive technology alternative to others on the market.



**UK GREEN
BUILDING
COUNCIL**

Green Building also known as sustainable building is the construction or renovation in an ecological and resource-efficient manner. It is important to reduce the overall impact to the environment by improving the efficiency of using energy, water and resources.

During the Ecobuild you can explore green design strategies. You may find out that some green building initially costs more, however you will save through lower operating costs over the life of a building. The green building approach involves many project life cycle cost analysis, which determines the appropriate up-front expenditure and cost over the useful life of a building.

For instance the house energy audit calculator enables you to determine where energy is being lost due to heat escaping from your house. The savings can only be increased if the green methods are employed by the professionals during the design phase of a project. Most buildings can reach higher energy efficiency levels by incorporating new eco technologies.

In our Polish BUILDER magazine we want to present a very well known Polish technology insulated external decorative render system. This is a very energy efficient method of renovating and making new modern building elevations. There is a lot of literature about this method and many manufacturers of the products used in the system.

We concentrate on the practical aspects which can influence your decision to renovate the exterior of your home elevations. We have many years of experience and are ready to help you to carry this out.

In the next pages we present some information, guidance and cost calculation details on what is important during this type of project.

Below we present examples of our completed projects in London. After the work these houses were warm and modern and stood out in appearance as the best in the street.

We have an extensive range of colours of renders, special acrylic and silicon paints that will make your home look great.



detached house in south London- fine layer render with external wall insulation system

source:IBB



detached house near Stansted, 'old' brick plus render with external wall insulation system

source:IBB

Insulated external render system thin mineral layer

Estimate was done on the base of Polish labour and materials norms KNR nr 0-23 0931-01 and our experience. We describe the cheapest version of elevation done with mineral render with the finish of „sheepskin” or „woodworm effect” and coat thickness of 1,5 mm.

We can also suggest, which is popular on the UK market, a smooth external render based on white cement CEKOL C-35. It will give a very nice white finish and there is also the possibility to renovate old render with this method.

Estimation conditions

- materials are delivered on site
- internal transport horizontal and vertical is included in the average building situation
- labour included fitting light scaffolding up to 4m high
- calculation of materials includes an allowance for waste
- water, electricity, sand paper and other small materials are added with 1,5% rate calculated from basic materials

Sequence of operation

- clean and prime the surface with CEKOL DL-80
- fix base edge strip according to thickness of polystyrene sheets
- prepare adhesive
- cut and glue polystyrene panels to the wall
- drill holes and fix plastic plugs
- prepare polystyrene joints with the special tool to make an even surface
- glue one layer of glass fibre mesh
- fix aluminium strip with glass fibre mesh to the external corners
- apply adhesive coat
- prepare render from dry powder
- 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

Table 1
Expenditure of materials for making 1m2 decorative mineral render with insulation system based on polystyrene sheet 5cm thick

No	Material	Unit	Price * excl. VAT [pcs]	Norm for 1m2 wall	Unit price excl. VAT [GBP]	Price excl. VAT for 1m2 wall	Price incl. VAT for 1m2 wall
1	Primer	can 5l	£7,66	0,07l/m2	1,53 £/l	£ 0,11	£ 0,13
2	Foamed polystyrene EPS 70 - 040 FACADE 5cm thick	1m3=20m2	£67,23	1,05m2	3,36 £/m2	£ 3,53	£ 4,15
3	Fix polystyrene panels using £110x90mm plugs	pcs	£0,09	6szt/m2	0,09£/l	£ 0,54	£ 0,63
4	CS-129S adhesive for glueing polystyrene panels and glass fibre mesh	bag 25 kg	£11,06	8,0kg/m2	0,44 £/kg	£ 3,52	£ 4,14
5	Glass fibre mesh 145g/m2 weight	roll 50 m2	£30,21	1,135m2/m2	0,60 £/m2	£ 0,68	£ 0,80
6	Edge metal strip 3m/50mm	pcs	£4,26	individual	1,42 £/m		-
7	Aluminium corner with mesh 3,0mb	pcs	£3,06	individual	1,02 £/m		-
8	Mineral render 1,5mm thick „sheepskin” finish	bag 25kg	£20,43	2,30kg/m2	0,82£/kg	£ 1,89	£ 32,22
9	Additional materials 1,5%					£ 0,15	£ 0,18
	Total					£ 10,42	£ 12,25

* - products available at above prices at IBB Polish Building Wholesale Ltd, London - prices before discount

* - in our quotation we use norm for joining polystyrene and glueing mesh in one position ; for both you should calculate 4kg/m2 separately

Table 2
Expenditure of labour for making 1m2 elevation like above

No	Description	Labour hours	Unit rate excl. VAT [GBP]	Rate [GBP] per 1m2 excl. VAT *	Rate [GBP] per 1m2 incl. VAT
1	Priming bottom surface and surface of adhesive	0,066 labour/m2 *	- £ 14,	£ 0,924	£ 1,09
2	Fixing edge metal strip	0,237 l/m	- £ 14,	-	-
3	Glue polystyrene panels	1,329 l/m2 *	- £ 14,	£ 18,61	£ 21,86
4	Fixing corners with mesh	0,220 l/m	- £ 14,	-	-
5	Coating mesh with adhesive	0,611 l/m2 *	- £ 14,	£ 8,55	£ 10,05
6	Making render	0,493 l/m2 *	- £ 14,	£ 6,90	£ 8,11
	Total	2,606 l/m2 *		£ 34,99	£ 41,11

Attention: in our quotation we have only described positions marked *, the rest you have to calculate individually like corner 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 or more than one colour.

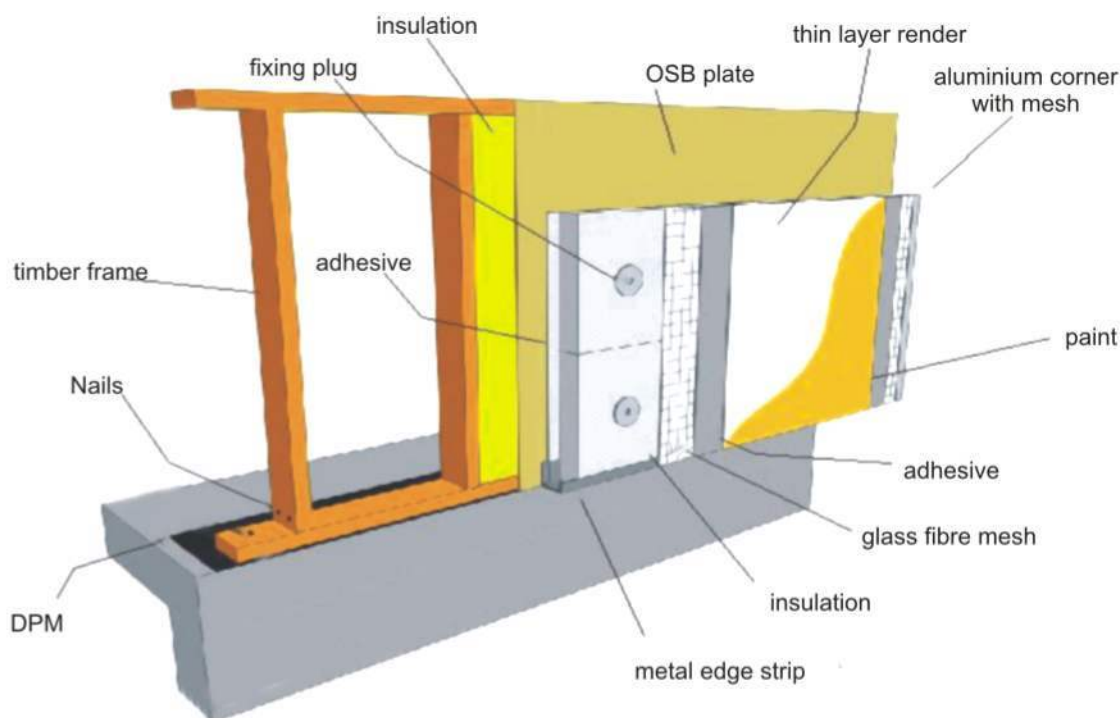


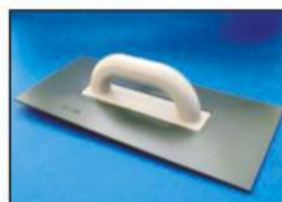
Fig.1 external insulated render can also be applied to a timber frame wall (source: IBB)

Important information connected with building elevation

- when edge metal strip is chosen remember 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 adhesive is applied
- attention: it is not necessary to fix polystyrene panels with plugs when the elevation is a small area. Adhesive only will suffice.
- on the British market you should cover the fixing screws with polystyrene plugs to protect against cold transfer. when preparing insulation surface, 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.
- thickness of one coat is only the thickness of the grain used in the render you cannot even the surface by just applying further render.
- the surface area of one level elevation should be done continuously from one side to the other without a break by two people one for applying the render and second for making the decorative finish. To allow part of a surface to dry before continuing would leave a ripple on the surface.
- do not apply render during rain or bright sunshine
- if any render drops from the elevation during application do not re-use it
- you can check the ability 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 silikat 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 not an edge metal strip to match.
- You can apply a thin layer render on to old cement based render but cleaning, priming and applying fiberglass mesh with adhesive is necessary
- 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

Usefull tools :

- trowel with sandplate – £ 4,37*
- plastic trowel for decorative render– £ 2,90
- scraper for old renders– £ 9,40
- prices incl. VAT before discount



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.



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Wholesale Price List

No	Description	Photo	Minimum Q-ty*	[unit]	Retail price excl. VAT [£/unit]	Retail price incl. VAT [£/unit]	Disc [%]	Wholesale price excl. VAT [£/unit]	Wholesale price incl. VAT [£/unit]	Value incl. VAT [£]
1	Reinforcing glass-fibre – roll 50m2 Mesh 1m 10mmx10mm Fibreglass wall mesh 145g-160g/m2 is highly recommended for a professional finish.		10	[roll]	30.21	35.50	30	21.15	24.85	248.50
2	Concealed base edge strip 3m/50mm Aluminium starting channel 50mm		10	[pcs]	4.26	5.01	30	2.98	3.51	35.07
3	Aluminium corner with mesh – 3,0m These angles are recommended for use with the Fibrelite System as they form a lock between the substrate, render and the angle.		25	[pcs]	3.06	3.60	30	2.14	2.52	63.00
4	Screwed-in anchor for fixing e.g. £1 10X90mm , box=600pcs For mechanical mounting of insulation (foamed polypropylene, mineral wool, layer plate) to concrete base (concrete, stone, brick) and other materials such as: hollow brick and cellular brick.		600	[pcs]	0.09	0.11	30	0.07	0.08	46.20
5	Plate holder 60mm TD-60 for mineral wool and foamed polypropylene. For mechanical mounting of insulation (foamed polypropylene, mineral wool) to a wooden base with proper screws Use 5mm wood/chipboard screws (length 50 –100 mm) for mounting.		100	[pcs]	0.06	0.07	30	0.04	0.05	4.90
6	Non-absorbable, water and frost resistant adhesive plaster for immersing glass-fibre CEKOL C-129S bag=25kg, pallet 42bags=1100kg		42	[bag]	11.06	13.00	20	8.85	10.40	436.80
7	Deep penetrating primer emulsion CEKOL DL-80 protect plaster surfaces against moisture and atmospheric conditions, plastic can=5l		40	[can]	7.66	9.00	25	5.74	6.75	270.00
8	White cement based external smooth plaster CEKOL C-35 , bag=20kg, pallet 48bags=960kg		48	[bag]	22.98	27.00	20	18.38	21.60	1036.80
9	White cement based external plaster with 2mm grainin - „woodworm” effect CEKOL C-35, bag=20kg, pallet 48bags=960kg		42	[bag]	20.43	24.00	20	16.34	19.20	806.40
10	White cement based external plaster with 1,5 mm grainin - „fleece” effect CEKOL C-35, bag=20kg, pallet 48bags=960kg		42	[bag]	20.43	24.00	20	16.34	19.20	806.40
11	Foamed polystyrene EPS 70-040 FACADE – sheets dimensions 500x1000mm thickness from 2cm – 12cm used for external wall insulation systems if required		5	[m3]	67.23	79.00	20	53.79	63.20	316.00
12	ACRYLIC EXTERIOR PLASTER MT-41 “woodworm effect” texture MT-41 is a water-based acrylic decorative plaster mix with “bark beetle” texture and grain size of 2 or 3mm. Designed for interior and exterior use. MT-41 is ready to apply onto such substrates as: cement, lime plaster, cement mortars, concrete, sandstone etc. provided they are durable and smooth.		10	[25l]	33.62	39.50	20	26.89	31.60	316.00
13	Silicat FACADE external paint MF-11 , can=10l apr.15kg The MF-11 is a water-based matt silicate paint for use on exterior mineral walls (plasterwork, cement fresh decorative plasterwork, concrete, sandstone, brickwork etc.) and covered with firmly bonded mineral coatings. Not recommended for use on existing acrylic and oil paints.		10	[10l]	29.79	35.00	10	26.81	31.50	315.00
14	AKRYL Z Acrylic Emulsion Paint , can=10l apr.15kg AKRYL Z is recommended for decorative and protective painting of elevations on various surfaces such as cement and lime cement plasters, cement sheets, concrete, aerated concrete, brick, stone, acrylic and mineral plaster, fillers and wood (impregnated). A.E. is ideal for whitening Acrylic colour paints (Can also be used internally)		10	[10l]	19.57	23.00	20	15.66	18.40	184.00

Important: * - min. order value for wholesale price and free delivery in London * - time of delivery – if product on stock – 1 day, if not 14 days * - prepayment 3% additional discount
* - credit payment and limit if settled & covered by HSBC

