

Refurbishment measures of historic masonry construction

2012-04-13 Vilnius

Protection of architectural monuments

External wall insulation on external facades are the most popular methods according to construction aspects and the simplest heat insulation mean.

On the other hand, it is impossible to apply approximately to 40-y percent of all buildings.

Valuable natural stone or brick wall is the main obstacle- protection of architectural valuable buildings, which not allowed damage.



Basic advantages

In these cases is one possible way to save heat energy – internal building wall insulation.

Basics advantages – protection of buildings from moisture and it's after-effect, like with condensation and mould growth, which damage exterior of building, and also could be danger for human health.



iQ-Therm – advance refurbishment system

Considering into changing energy safety demand Remmers specialist created insulation system, which allowed not only to save, but also to protected valuable historical facade and will help population of multistory houses discover individual housing insulation means.

iQ-Therm - Breathable internal wall insulation system for solid walls to reduce heat and energy loss particularly on historic structures or where facades cannot be altered.



New Remmers iQ Therm Insulation Meets the Latest Building Regulations

Remmers iQ-Therm is the first internally applied insulation system that can meet the next level of Building Regulations for thermal efficiency in wall insulation, without creating a vapour barrier and the subsequent risk of problems with condensation and mould growth.

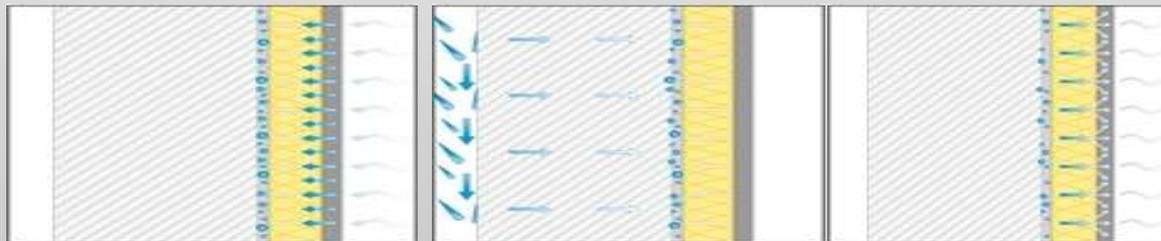


Individual decision

Internal wall insulation system, as opposed to external, allows apartment residents choose the resolution in an individual way. To restore and insulate the apartment is not always possible to do this due to the different needs of the population - not everyone can or wants to give some money, so the decision to adopt the most common failure. In this case, the only option - internal wall insulation. Residents can decide individually - they must be sealed housing or not. If there is no need, not necessarily insulate the apartment, perhaps enough to rescue one or more of the "coldest" apartment walls and will achieve the desired result - heat retention

Heat and humidity regulation inside the building

Remmers offers a world novelty - iQ-Therm - internal wall insulation system. This is a high quality rescue system, congested capillaries help regulate heat and humidity inside the building. It is a system which ensures high-quality and efficient results. It can be applied even in the architectural monuments and modern buildings, the exterior facade can not be broken.



Active capillaries

For water vapor, temperature differences or from the external walls of the building due to rain and other weather conditions resulting from moisture, including rescue boards and walls of the building is transferred onto the inner wall surface. Rescue board in active capillaries has the ability to divert water to open pores.

The room inside the capillary channel by controlling the humidity in the room, return the steam back to the surface. Joint operating system, specially suitable for the ambient air absorbs moisture, it preserves and regulating the back. This provides a fresh and healthy indoor air. This system is completely environmentally friendly and highly recommended for people with allergies. iQ-Therm system will avoid mold, fungus and similar border violations, since the free wall "breathes" and can regulate the amount of water vapor on the surface.

Interior room walls are covered with iQ-Fix adhesive coating and iQ-Therm sealing polyurethane foam panels. 5 cm or 8 inches thick iQ-Therm panels are filled with capillary active material. Then, 10-15 mm thick layer is applied moisture regulating render iQ-Top. Finally, the wall is painted with this paint system by iQ-Paint.

iQ-Therm – the used insulation systems - is the most advanced in its field, for two important features: first, for the most sophisticated thermal insulation capacity, on the other - especially effective for protection against moisture.

iQ-Therm - a progressive rehabilitation of internal borders, protecting the external facade of the building thanks to the unique capillary. Reliable, durable and efficient result.



Technical advice to the IQ THERM Insulation card

Component parts of the system:

IQ fix - glue

IQ 50 or IQ Therm Therm 80 - panel

IQ TOP - Filler

IQ TEX - grid

Rundbogenprofil – angle profile

IQ FILL-leveling cement

IQ - Paint - Paint with silver dust, which prevent formation of mould



Technical advice

First, the spirit level to check that no-curve wall. If the curve - just plaster stub from the bottom. Prior to this base can be leveled with Grundputz. In damp walls, waterproofing liquid used Kiesol, Sulfatexshlamme and Dichtspachtel. Before gluing panel wall surface can not be primed, as it will blocked by the system "breathing" and worse, and glue board adhesive properties. The board starts stick on the wall from the bottom of the wall and try to be the length of the penultimate corner of the plate is distant third at a distance. At the bottom on the floor and sills of adhesive tape deformation.

Fix Adhesives IQ (25 kg) mixed with 7.5 liters of water. The first 4 minutes are mixed adhesive double mixer after adding 5 liters water, then pour the remaining water and stir again for 4 minutes. Glue is applied only to plates plane (the side panels do not apply). Glue consumption time - 60 minutes.

The most important work, the thermal insulation of the inner iQ(1)



Removal of old paint by machines. The surface must be strong, strong enough on its not the individual particles or weak. Gypsum plaster filler should be removed. Very rough. The surface must be smooth and covered with plaster ground water, according to WTA technical description 2-9-04-D, in order to achieve complete system assembly.

The most important work, the thermal insulation of the inner iQ(2)



iQ Thermal panels attached the whole area to lock iQ (paste) high quality of the adhesive properties of the CIS marked by mortar intended iQ thermal plate bonding.

Hydraulically flaming cure for fixing mortar iQ is open to diffusion characterized by capillary permeability, high adhesion / bonding force, resistance abrasion, water and climatic conditions (heat and cold) exposure, without mineral fibers.

The most important work, the thermal insulation of the inner iQ(3)



IQ lock on the level surface or plate of uniform covered with a toothed trowel (strips).

Final thickness of at least 5 mm. Avoid chips, or point of adhesion.

The most important work, the thermal insulation of the inner iQ(4)



IQ thermal panels pressed into the fresh, the whole area coated any adhesive layer. Avoid cross stitches!

A flat area, which must be switches sockets cut.

The most important work, the thermal insulation of the inner iQ(5)



Top iQ is applied to a thermo as an upper mezzanine plaster layer. Thickness of about 5 mm notched.

Article 10/12. I just covered “comb out”.

The most important work, the thermal insulation of the inner iQ(6)



Mezzanine Tex fabric iQ mortar is applied to iron vertical stripes without wrinkles (separate fabric strips for at least 10 cm has come on top of each other).

The board starts to stick on the wall from the bottom and the length of the wall must be measured, that the distance between penult board and corner will be $1/3$. Deformation adhesive strip sticks on the bottom of the floor and under the sill.



Glue on the wall spreads vertically (yield - 3.5 kg/m²), on a plate - horizontal (yield - 3.5 kg/m²). Apply glue equalized with comb.



Where appropriate, in the IQ Thermo board are cutted out rips for heaters, sockets and cables. Shouldn't be butts in the corners of the window.



In working process windows must be plaster. The panels can be cutted in different ways, but corners must be refurbish. Windows inside and outside corners covered by a special angle fixer with the grid. Above the upper corners diagonally the extra grid has to be applied.



Finishing sticking process all the spaces are filled with polyurethane foam Pistolenschaum 1K. If on the other wall won't be iQ Therm plate, it is necessary to give the angle of the slope from 5 cm to 1 cm. Cupboard fittings are glued with polyurethane glue Coll Express Pu.



In order to obtain a smooth wall surface, walls are levelling anti mould putty IQ Fill.

Adjusted walls are painted with special paint IQ PAINT breathing with silver dust (before the wall is not primed). IQ is a color-PAINTRAL, NCS color cards.



Renovated architectural monuments



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in Palanga



Train station in Marijampole



Education
faculty of
University of
Klaipeda

Renovated architectural monuments



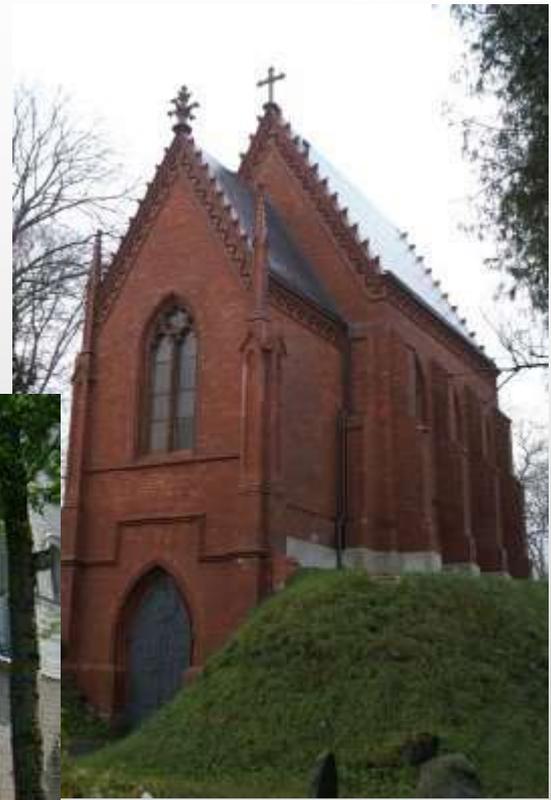
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Univeristy of
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Church of Viešpaties apsireiškimo St
Mergelei Marijai in Kretinga



Chapel of the Earls Tiškevičiai



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Thank you for your attention!



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