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Modern Construction Systems Issues

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Title of content

- Construction insulation system in against to cold and warm weather condition with surface colored masonry.
- Construction insulation system in against of moisture and water.
- Tile working system with tile glue.
- Epoxy system.
- Internal and external construction color system according to the catalog and cod number and mix with professional computer machine.
- Caulk system for creak, line of junction and split with special acryl materials.

Whereas our country within a period of 25 years was involved in war and desolation, and this phenomenon ruin our country day by day and with losing millions human forces and ruined economy.

Indeed almighty Allah showed the sun of hope for better future and improved Afghanistan from the high mountains. And this is our duty to use from this opportunity and make our country together and obtain a better life and bright future for ourselves and our Children. That's why Responsible of Temoryan-H, L.t.d tried to establish a company. This company obtained his license from the ministry of business in year in December and in year 2004 with disposing an assembly and inviting some of the construction companies and governmental responsible and technicians notified his existence. Temoryan-H, L.t.d company with contracting exclusive agreements with European big companies such as Schmid Industrie Holding which has agency in 18 countries of the world and more than 3500 workers are working in 60 companies, and also Den Braven, Domo, Isover constantly trying to help people by creating constructional fluencies. Training the way of using these products is one of the basic elements of this company and by no mean content to only importing these products, rather use his most try to transfer this training system from one person to another in its basic form, and inform his customers with preparing technical pages in Dary and English languages. Temoryan-H, L.t.d Company with social human and engineers corporation can participate more activities in rehabilitation and construction of our country which can exemplified among them Herat New Faculty building external and internal painting, regional hospital kitchen rehabilitation with advanced Epoxy anti bacterial system, water storage insulation of the honorable power office, plastering and repairing of Ghul Urdo blocks. Also in private section this company

continued its duty; cold and warm weather insulation system for buildings, moisture and water insulation system, tile glue system and filter glue for filling tile junction, plastering big or small crack repairing system, presenting different external and internal color catalog for buildings and prepared with computer machine. Window and door robber for dust, warm and cold weather prevent, and suspended ceiling is an example of our other activity.

Today the activity area of this company improve from Herat to Kabul, Mazar-e-Sharif and service to our countryman, also warm and cold weather insulation find its interested in Badqis. This company always tries to receive our customer's satisfaction And for find this target try to present a good positive information and complete logistical perfection for all demand.

And at the final, to deem it necessary to remind a sentences of a famous president which mentioned between students (never you don't see that country what pay to you, perhaps see what you pay to country) We also with following this target wanted to do a brief service for our country and need help each one of our social people.

Construction insulation system in against cold and warm weather condition with surface painting mortar finishing (Baumit)

Regarding to, in today world energy generation and sources are so vital and greatest importance, all construction specialists ad inventors are thinking about the save power and energy in buildings and research the way to reduce energy losing in buildings which receive to this issue cause save payment and budget, in other way buildings find better space for life and beautiful outward appearance. According to this base, construction insulation system day to day improve and this well-being for Temoryan-H, co. which can promote this issue in our country.

Image (1): combine insulation system in surface of external wall

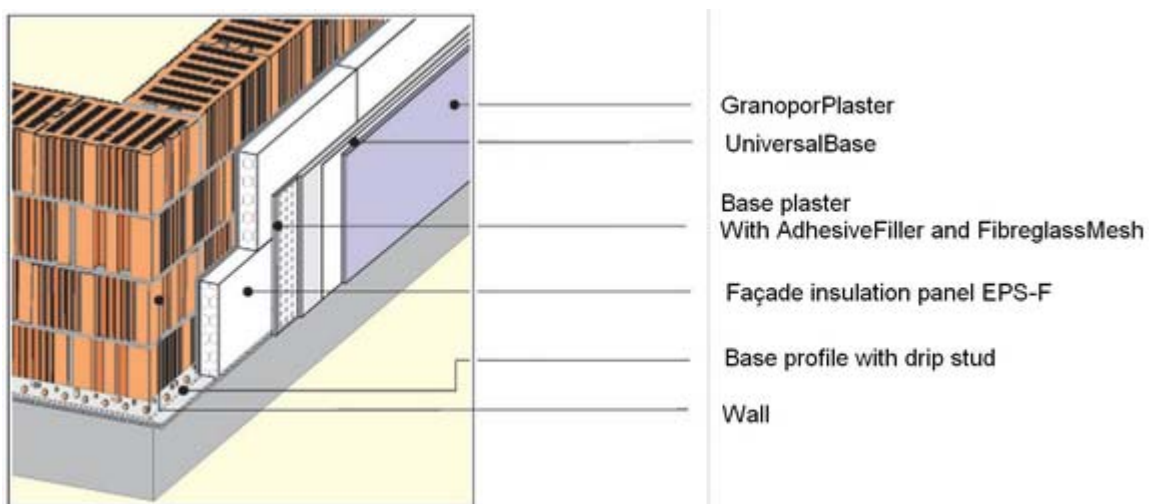
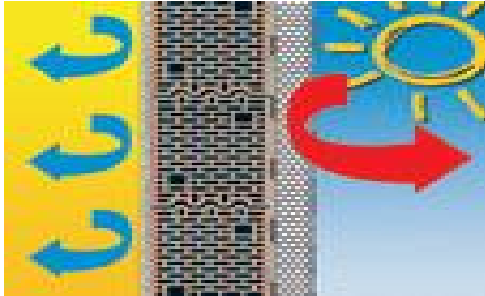
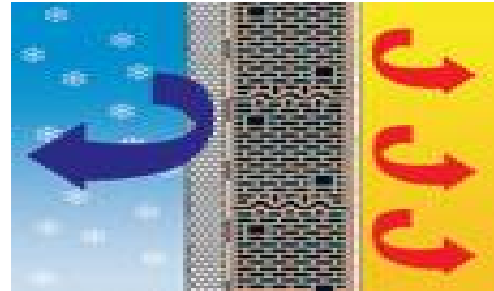


Image (2): economize in consumption of energy during the summer to cool down.



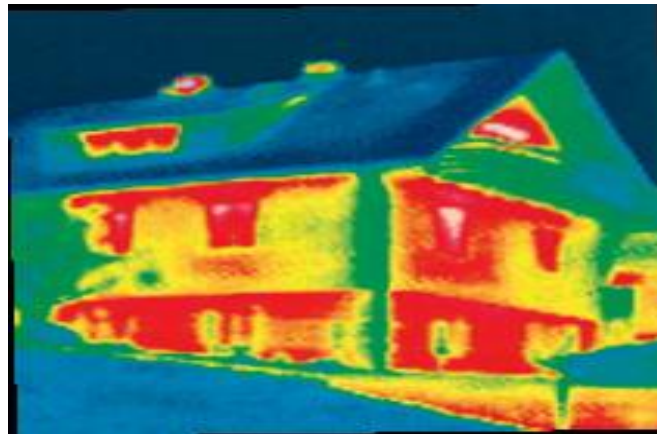
...and on airconditioning in summer!

Image (3): economize in consumption of energy during the winter to warm up.



Save on heating costs In winter...

Image (4): Red surface which take photo with thermo camera that show energy lost areas in uninsulated buildings.



Materials that will be used

- 1-Polystyrene (thickness 2-4cm) and this is mentionable 1cm insulation equal to 10cm brick working.
- 2-Adhesive for glue: to paste polystyrene sheets in the wall and fasten jail on polystyrene sheets.
- 3-Plastic Plugs: for 6m upward use plastic pin for fix polystyrene on the wall.
- 4-FibreglassMesh: the mentioned jail prepare from glass materials and use for fix and uniform system and paste with Adhesive for glue and plastering.
- 5-UniversalBase.
- 6-GranoporPlaster.

Working procedure

1-Blending :

6.5 litter water with 25 kg Adhesive for glue mixed and blend up to mix receive to elasticity condition, after 3-5 minute remain mix in air and start again, try to mix all 25 kg glue.

2-Pate polystyrene :

For fix polystyrene sheet on the wall, first a thin layer of glue polishes in back side of polystyrene sheet with a trowel. Whenever back surface are flat we can use saw trowel (Image.5)

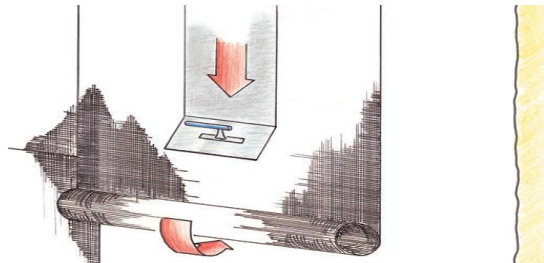
Image (5):



3-FibreglassMesh installation :

For pasting FibreglassMesh on the polystyrene sheet it's necessary to smooth and flat surface of polystyrene with sandpaper then fill all the cracks and holes with filler. Never don't fill cracks between polystyrene with glue. If surface of polystyrene smooth and flat with sandpaper it must remain 2 week in its position and after 2 week start to jail installation. Glue polish in polystyrene surface with trowel and then install jail on the polystyrene with trowel pressure when glue come up from jail holes flat glue with trowel, installation of FibreglassMesh will continue on by on FibreglassMesh layer up to 10 cm depth, at the final jail must be don't visible. saw trowel (Image.6)

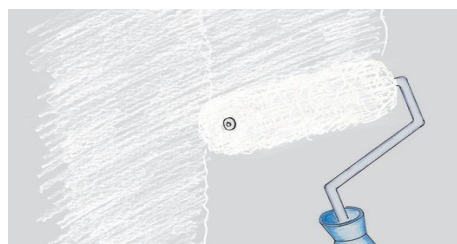
Image (6):



4- UniversalBase:

After 3 day in warm weather and 6 day in cold weather the mentioned surface smoothing and base coloring start, the mentioned bade color will be worked with roller brush or simple brush. saw trowel (Image.7)

Image (7):



5- Mortar color:

After 24 hour , apply the mortar color to the mentioned surface, but before used mortar color it must be mixed correctly with electrical mixer and then apply the color with iron trowel to the surface then quickly and without any lost time other colleague stroke the mortar color with plastic trowel to make a jagged surface. This is mentionable that the customer can choose its desirable color up to 200 colors. (Image 8).

Image (8):



Moisture and dampness construction insulation system (Murexin)

Moisture and dampness insulation system in Afghanistan is a familiar system but unfortunately it encourage as a common system without any global standard. In the modern construction today world always have been tried to use a simple and high quality insulation materials which insulated buildings with suitable workability and easy performance so for this reason our moisture insulation system that we bring to our costumer, is so easy to use and don't need to transfer any big tar bags, fuel and boiler.

1. Bath, water closet and kitchen, moisture insulation system. Liquid plastic with plasticity and water barrier function for moisture insulation. Liquid plastic usually used under the tile and ceramic in the water contact areas like bath, W.C& Kitchens.

Instruction:

Put the liquid plastic in the desirable surface with roller brush, the minimum thickness must be 1 mm , after 24 hours we can use tile and ceramic on it. Liquid plastic after 8 days completely dry and hard, whenever don't install ceramic after 24 hr, keep surface from water contact. Also we can use liquid plastic in mortar, cement, gypsum, wood, ceramic & tile.

2. 1 K Moisture Insulation system for pool and water storage1 K moisture insulator can use for the following surfaces: Mortar plaster surface, cement plaster surface, directly in concrete surface, concrete panel, wooden panel, gypsum, iron, tile & ceramic.

Insulator after mix with water extend with trowel in pool or water storage plaster surface, then put jail on it and with trowel pressure bring out insulator form jail hole and again flat surface with trowel, we continue this way up to 10 cm depth and after finishing the final jail should not be visible. (Image 9) After drying which depend to weather condition, start for ceramic installation with stone glue, this is mentionable that minimum space between ceramics must be 3mm and after 24 hr fill space between ceramics by special liquid glue.

(Image 9)



3. Concrete Insulation

Concrete insulation ordinarily use for roof concretes, trusses and balcony. Whereas surface of roofs, trusses and totally all concrete surface sometime have creak after drying the mentioned surface must be ready for jail and glue.

Instruction: Concrete insulator directly flat with roller brush in mentioned surfaceFist of all use base color, we can prepare base color by mixing 10% -20% water with concrete insulator and drag it on surface, after 2-4hr pause in second step drag concrete insulator without water mixing and stay to dry, After 1 week can put water on it, this insulator fined in yellow, Gray, Green and silver color.

Tile working system with tile glue (Baumit and Murexin)

Tile and ceramic for fifty years ago promote in Afghanistan and day to day improve usage of it so at the moment all the new construction surely use tile and ceramic. But unfortunately installation of tile and ceramic didn't any change during this time, whereas in other countries this science more improve and nobody don't used cement mortar for tile or ceramic installation, so we try to improve this science to coordinate our country with universal community.

Tile glue

Mixed materials with water, ice and heat resistance and thin thickness prepare a good condition for adhering. Instruction: First of all, Mix 7 liter water with 25 kg glue and blend it up to mix find elastic shape, then take free 3-5 min in fresh air. Know glue is ready, polish glue in the surface with jagged trowel and fix tile or ceramic with rubber hummer, you have 5 minute time for fixing. (Image 10)

Image 10



Image 11



2- Filler glue:

Filler glue usually used for filling space between tiles, ceramics, nature stones, marble, plastering surface with maximum 7 cm space.

Instruction: Put 7.5 litter water and 25 kg glue in a bucket and blend up to receive to elastic shape or creamy state, take mix free 10 minute in open air and then blend it again but must not hard, and try to mix as much as you desire to prevent wasting materials. Polish ready glue in back side of tile or ceramic and clean it with wet sponge after 5-15 min, of course the sponge must be always wash with clean water and clean all the surface after drying with wet sponge. (Image 11)

Necessary attention: Because Afghanistan weather is warm and dry, therefore after glue hardiness up to 3-4 days watering tiles, because filler glue act as concrete so watering is more important, also remove tile glue between tile gaps and ready surface for filler glue.

Epoxy system (Murexin)

Epoxy flooring system is one of the modern flooring systems in recent decade, which by applying this method building floor become most durable and take good shape and view. This system usually use in hospitals, airplane & conference rooms and floor uniformity is one of the specialty of this method, uniformity make it easy for cleaning, it's very durable for soapy materials, before use this method, flooring is necessary and is an essential element for beginning. (Image 12)

(Image 12)



Foundation

- 1- Desirable floor must be stable and durable without any free particle, dust and grease.
- 2- Clean the surface with special cleaning liquid which protect water seepage.
- 3- For prepare a flat surface without any ups and down area use newposition liquid , mix 25 kg of this material with 5 liter water and polish it with roller brush in surface.

Epoxy

After floor drying we use IP 70 material, this materials made from epoxy and have liquid shape which pack in 2 special can, each can as instructed below must be mix together with electrical mixer.

A: B = 2:1, after mixing you must be known that have lintel time for using, otherwise the mix become hard like stone. After applying liquid on surface other colleagues sprinkle special stone particle on surface and stay to drying, after drying use IP 3 materials that also liquid and have 2 type can which blend together with this ration A:B=5:1 and after blending polish with roller brush on dry surface and after one day do this procedure again, at the final catalog is ready for customer for choose color.

External and Eternal construction color by using color catalog and mixing with modern computer instrument (Baumit)

Color and painting is one of the familiar issues in our country which of Temoryan-H, Co. have an innovation for mixing color with computer mixing instrument and electrical blending machine with best quality. Our color divided in two parts: external construction color and Internals construction color. (Image 13)

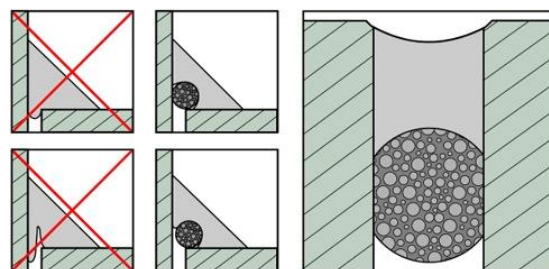
Image (13):



Track and creak filler system (Den Braven)

The creak problem in our country is very huge and this cause trouble for customer and construction companies that of course Temoryan-H, Co. try to solve this problem. (Image 14)

Image (14):



- 1- Thin track up to 0.5 cm

ST1: before using this material scrape plaster creaks with sharp object and try to don't increase creak more than 5 mm then clean dust of the mentioned surface with special materials and brush and ready filling materials and fill all cracks, after drying

- smooth surface with sandpaper and ready for painting.
- 2- Thin track up to 5 cm
ST8: before used this materials used up description with this different scrape plaster creaks which depth and wide become equal, press special wick sponge on the creaks and ready ST8 materials and fill the cracks, after drying smooth surface with sandpaper and ready for painting. Thicknesses of the wick sponge are as following: 6mm, 8mm, 10mm, 15mm, 20mm, 25mm, 30mm, 40mm, 50mm
 - 3- Foam or liquid cake.
Used these materials for big creak filling in buildings these materials are also liquid and fill crakes by pressure of iron tube and increase its volume up to 40% when drying. Usage of this material is for installation of windows, doors in lieu of gypsum and easily fills all construction tracks and creaks.
 - 4- Door Surrounding rubber
Door rubber made from special spongy materials which have insulation state, with installation of this rubber in one way protect cold and warm weather transferring and in other way protect room from dust transfer and this is mentionable that this rubber have glue and don't need any glue.
 - 5- Window surrounding rubber
This rubber also same as upper parts produce from special spongy materials for insulate window in against of dust and weather transferring.

References

Technical document of Baunit
Technical document of Murexin
Technical document of Den Braven