

PROJECTS



Living in A CONTAINER HOUSE in Cyprus

IMAGINATION AND MAPEI PRODUCTS JOIN TO FULFILL A WONDERFUL DREAM.

What about living surrounded by nature, among flowers and trees, close by the seaside? What about building your own house by yourself using original and cheap materials and saving, by the way, a lot of money?

We are going to tell you a story about dreams shared by most people and about the possibility to fulfill them using intelligence and creativity. To this purpose one has to fully believe in his or her dream and be familiar with the best materials available, as, in this case, of the innovative technologies Mapei offers the market of chemical products for building.

Mr Takis Zachariades managed to fulfill his dream: he built his own country house out of some container by using a number of Mapei products in a very

original way. The final result is marvelous and it is worth describing the several work stages that led to it.

Mr Zachariades is a client of Gevo Ltd, the local distributor of Mapei in Cyprus. He owned a piece of land of exceptional beauty in the countryside district of Larnaca. Since he was working and living in town he used to visit his field whenever he had the opportunity, in order to relax and spend some time in nature. As time went by he started cultivating some plants and trees there and bought one used container which he placed in the middle of the field and used it as a rest-house and warehouse.

Then he decided to build a permanent structure that he could use as a cottage-house. Trying to keep as low as possible the construction costs, he



decided to buy a number of used containers and combine them in a two level structure, opening windows and doors at the appropriate places. By the time the containers were put together in the desired order, extruded polystyrene panels were used for external thermo-isolation by fixing them in the outer sides of the containers.

The polystyrene panels were then covered with MAPETHERM AR1* combining it with a fiberglass mesh and using it as a leveling compound. The smoothing compound PLANITOP 560* was used as a final layer over MAPETHERM AR1*.

The surface was then painted with an acrylic paint.

In the inside areas hard rock-wool panels were mechanically installed

over the container walls and floors.

All rock-wool wall surfaces were then levelled with MAPETHERM AR1*.

This product is indeed used for bonding all types of thermal insulation panels (foam or extruded polystyrene, foam polystyrene, mineral fibers, cork, etc.) directly on render, brickwork or concrete walls or ceilings. Mixed with water, MAPETHERM AR1* becomes a mortar featuring low viscosity, ease of application by trowel and high thixotropy: it can be applied on vertical surfaces without sagging and without letting even large sized insulating panels slip.

Gypsum boards were used to build the internal walls and the high performance C2TE adhesive KERAFLEX* was used for the installation of tiles over them in the kitchen and bathroom areas. The two-component polyurethane adhesive KERALASTIC* was used for the installation of tiles directly over the metal surfaces.

The high performance C2FTE adhesive ELASTORAPID* was used for the installation of porcelain tiles on all internal and external floors.

Tiles were grouted with high performance ULTRACOLOR PLUS* which is water-repellent thanks to the DropEffect® and antimold due to BioBlock® technology.

In the kitchen the two-component epoxy grout KERAPOXY* was used for the grouting of the tiles. This product is particularly suitable for grouting tiles in food industries, thermal swimming pools, tanks containing aggressive chemicals, kitchen work surfaces, hospitals, supermarkets and all environments where complete hygiene and resistance to most chemical aggressions are required.

MAPESIL AC* solvent-free, acetic-cross-linking mildew-resistant silicone sealant (available in 26 colours and transparent) was used to seal all expansion joints of the internal and external areas.

The photos of this project speak for themselves and it really gives you a thrill to go through the different work stages of this intelligent project, from the piled containers to the final wonderful result.

Once again Mapei plaid a major role in this story with its innovative products. On the other hand, one has to acknowledge that Mr Zachariades was able to use them in most creative way.

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***Mapei Products:** the products referred to in this article belong to the "Products for Ceramic Tiles and Stone Materials" and "Building Speciality Line" ranges. The technical data sheets are available on the "Mapei Global Infonet" CD/DVD or at the web site: www.mapei.com.

Mapei's adhesives and grouts conform to EN 12004 and EN 13888 standards.

Elastorapid (C2FTE): highly deformable, high performance, fast-setting and hydration two-component cementitious adhesive, with no vertical slip and extended open time, for ceramic tiles and stone material.

Keraflex (C2TE): high performance cementitious adhesive, with no vertical slip and extended open time, for ceramic tiles and stone material.

Keralastic (R2): high performance two-component polyurethane adhesive for ceramic tiles and stone material.

Kerapoxy (RG): two-component acid-resistant epoxy grout, available in 26 colors, for joints of at least 3 mm. Can also be used as an adhesive.

Mapesil AC: solvent-free, acetic-cross-linking mildew-resistant silicone sealant, available in 26 colours and transparent.

Mapetherm AR1: one-component cementitious mortar for bonding and levelling insulation boards and for external thermal insulation systems.

Planitop 560: white lime-cement based finishing compound for very smooth finishing of both fresh and cured interior and exterior cementitious renders and concrete surfaces: can be applied from 0 to 3 mm thick.

Ultracolor Plus (CG2): fast setting and drying, high performance, anti-efflorescence, polymer modified grout, for joints from 2 to 20 mm. Water-repellent with DropEffect® and antimold Bioblock® technology.

TECHNICAL DATA

Container House, Larnaca (Cyprus)

Work: thermal insulation, installation of porcelain tiles on the walls and floors, grouting of the tile joints, sealing of the expansion joints.

Years: 2005-2006

Customer: Takis Zachariades

Project: Takis Zachariades

Installation Company: Panayotis Costa, Nicosia (Cyprus)

Mapei Distributor: Gevo Ltd, Cyprus

Mapei Co-ordinator: Gianni Koropoulos, Mapei Hellas.