### Dear friends

As I promised on Wemakeit I am sending you a summary of my recent stay in Thailand.

I am grateful and glad that we have reliable partners who will provide us in autumn with the materials we need for the shell of the "Ukraine House".



My bodyguard / mascot in Thailand

### **Production Steel Skeleton**

We had many discussions with our supplier for the laser work and were able to agree on a win-win cooperation with him. Khun Chidpong will also cut the roof structure on the laser and prepare it for assembly.



**HSG** laser machine



Processing of the 1st sample part

Our team will equip all lasered components with the blind rivet nuts and color code them. All components that belong together are bundled and placed on a pallet.

Protected against moisture and dust, these pallets are stored on the construction site according to the planned assembly process.

# **Cement Foam Boards**

This lightweight construction method is widespread in Asia for the construction of high-rise buildings.

In addition to ecological considerations, these cement foam panels offer many other advantages:

The weight per m2 is about 60 kg. The panels can be installed easily and quickly, the facades and interior walls are certainly straight and smooth.

The outer skin of the panels consists of cement, water and paper waste. This mixture guarantees easy workability of the panels, paint can be applied without touching up the surface.

The filling of the panels (EPS part) is mixed from extruded cement foam as well as additives such as fly ash and recycled textile fibers. Together this mixture gives a very high strength.





Cement foam board sample part

Our goal is that a Happy Home in Ukraine can be assembled without a crane or large construction machinery. For this reason, we decided to reduce the facade from 150 mm to 100 mm. This reduction in insulation is compensated for by rock wool, which we integrate into the skeleton.

Thanks to a thickness of 100 mm, the weight of the individual wall elements is reduced to 80 kg. Four people can easily erect a panel and fix it to the skeleton.

A team of 4 people can install about 160 m2 per working day.

I was also able to find a local supplier for this product who specializes in high-rise construction and therefore has a lot of experience with these cement foam panels.

We received a binding offer from him. He made us an unbelievably advantageous offer for our «Happy Home» in Ukraine. So, we pay USD 21 per m2 including logistics costs.

Our supplier will provide the required volume at the beginning of October, so that we can complete the shell construction in the fall without delay.

## Location assembly place for the Ukraine house



We can rent an area in the same village where we set up the first 2 «Happy Homes». Here we will carry out the assembly according to the construction plan and document it with a video.

The landowner offered us special rental conditions. We have agreed an annual rent and pay 30,000 baht / year; about 750 CHF. This gives us enough time to present the shell to various potential aid organizations and Swiss authorities so that hopefully financing for houses in Ukraine can be generated.

Since the villagers know us and appreciate our team, we don't have to worry that our building materials will "go on the move". Due to the high unemployment rate in Thailand, this is currently a major problem.

Some villagers are also temporarily unemployed. I will employ them on fair terms to set up the «Ukraine House». As always, I will attach great importance to occupational safety. This point always gives me a queasy feeling because many Thais are quite careless in this regard. For me, on the other hand, a safe workplace is very important.

Currently, the Thai authorities have set the basic wage at 300 baht per working day. Since we can employ these employees on a short-term basis only and they will be unemployed again after the assembly work, they will receive a daily wage from us of 1,000 baht, which corresponds to around CHF 25.

In mid-November, Prof. Felix Wenk from the OST University of Applied Sciences in Rapperswil will visit us and give us advice. He will produce an independent technical report on the Happy Home for Ukraine. We look forward to his assessment. I am convinced that with Happy Home Technology we can make a positive contribution to reconstruction in Ukraine and for families in other crisis areas.

### Plans for the future

With the shell of the building, the video documentation of the construction and the report by Prof. Wenk, we can show the Swiss authorities, aid organizations and other donor countries that our «Happy Home» is stable, meets the climatic conditions of Ukraine, can be set up quickly and offers a safe and comfortable home to families.

If the necessary funds are committed, the production of the first houses for the Ukraine can start immediately in Thailand. The houses would be shipped in 40' containers and delivered to Ukraine.

In any case, our goal is to localize production in the Ukraine as quickly as possible, to procure the necessary processing machines and to train local people.

We are already in contact with possible suppliers. If funding is pledged by donor countries and the Ukrainian authorities approve «Happy Home», a Ukrainian production can be set up within 6 months.

As always, I'm happy to answer any questions you may have.

Kind regards

Franz