

## The ECOCELL Building System

### **The composite technology will change the building Industry:**

As in the aircraft- and automotive industries, composite technology will also be used in the construction industry, disrupting conventional construction methods.

## Low-Cost Material

The **ECOCELL fiber cement honeycomb** consists of 90% air and is a low-cost building material with raw material cost of \$25 to \$35 per cubic meter. Composites consist of a honeycomb as middle layer and a lower and upper cover board. The honeycomb itself represents at least three quarters of the total volume. The honeycomb is produced from recycled paper and is treated with a mineral coating.

In Switzerland, ECOCELL is producing highly accurate **standard building elements**. Standardized **connectors** for walls, floors or roofing elements are provided as well. Therefore, building is fast and entire houses will be ready-to-use within a few hours.

<https://m.youtube.com/watch?v=y7gAxUVuQvE&feature=youtu.be>

ECOCELL **moves all possible work to the factory**, reducing inefficient work on the building site. The new concept allows **serial production of standardized elements**, making production **independent of the planning process**.

## Swiss Cleantech

The ECOCELL®-BUILDING-SYSTEM has been tested in Switzerland and is constantly being perfected. ECOCELL will license its composite building technology worldwide, and will provide entire production lines and equipment.

<http://m.dw.com/en/the-house-that-paper-built/av-19432285>

### **Worldwide Interest in ECOCELL® Building Technology**

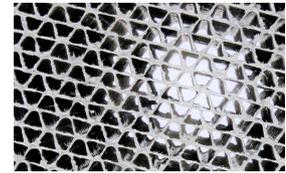
In September 2017 we presented the ECOCELL®-BUILDING-SYSTEM to a delegation led by the Mayor of Jinan, capital of the 100 million Province of Shandong in China.

<https://www.linkedin.com/pulse/asien-geht-eine-t%C3%BCr-auf-fredy-iseli/>

Two months later we were revisited by the deputy mayor and representatives of a 26km<sup>2</sup> Industry Park in Jinan, and a letter of intent has been signed to create the first ECOCELL plant in China.

<http://www.thurgauerzeitung.ch/ostschweiz/thurgau/arbon/wie-ein-sechser-im-lotto;art347388,5150121>

Today, further license negotiations are ongoing in some countries of South and Central America.



## Rapid Building System

### Powerful and Low-Cost Rapid Building System

The cost of a production factory is about \$25-35 million. This will initially produce building elements for 3'000 to 5,000 homes of 100m<sup>2</sup> floorspace a year. Further production capacity may be added with economies of scale.

## Solutions for Global Challenges

### Economic and Social Benefits

- The ECOCELL® rapid-building-system is a low-cost building material and offers **new opportunities for social housing**.
- **Important reduction and substitution of CO<sub>2</sub>** using OSB, wood or bamboo boards for the composite material.
- The large proportion of air in ECOCELL® fiber cement honeycomb offers added value through **excellent thermal insulation**.
- The ECOCELL® fiber cement honeycomb is the **first insulation with static function**, is **fire resistant** and allows for **earthquake-proof construction**.
- The ECOCELL® fiber cement honeycomb **needs neither sand nor gravel** and is 3 times lighter than wood and 12 times lighter than concrete.
- ECOCELL buildings, roof and facade, may be entirely clad with photovoltaics. This **provides energy independence**.