

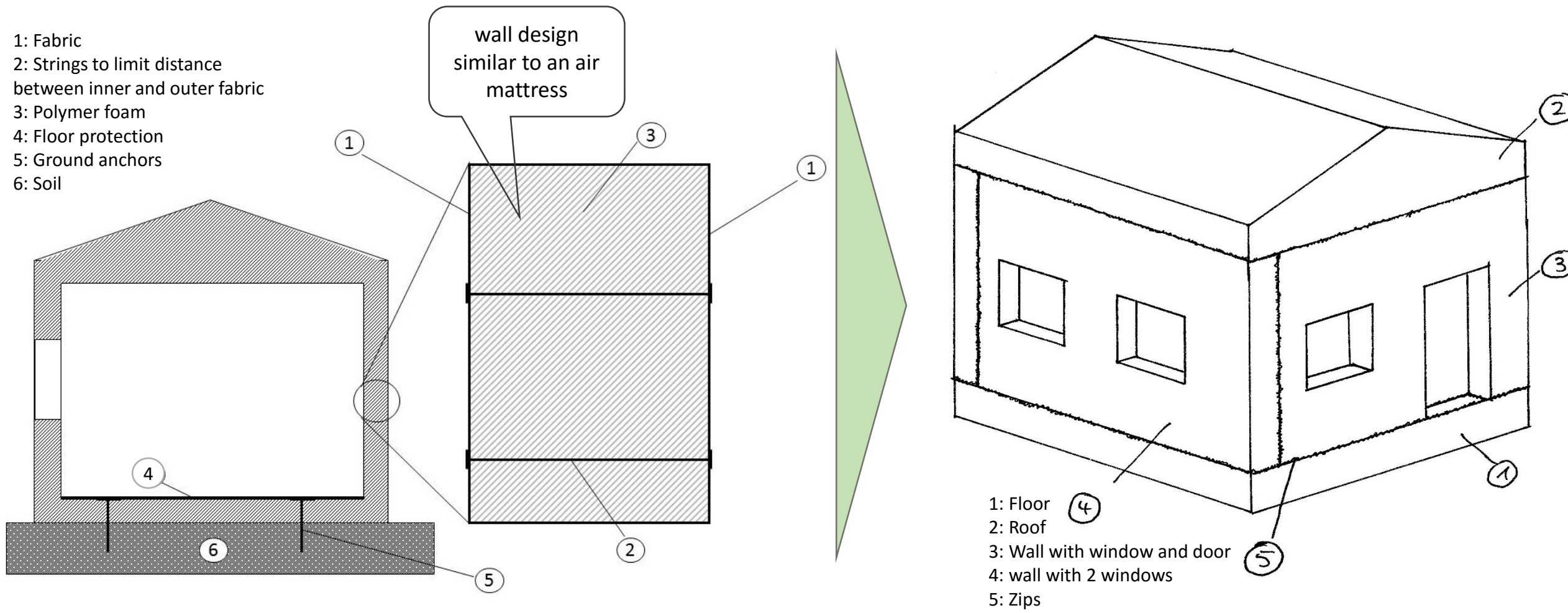
The Problem:

- In average, refugees and victims of natural disasters stay in temporary accommodation for more than 11 years
- Therefore short term accommodation is not sufficient, what we need are houses with a long lifetime that allow an adequate lifestyle and functional buildings like shops, schools, hospitals, offices and workshops – not only tents.
- Existing techniques are either expensive, heavy and bulky or do not offer an adequate standard for long term living.

PMF Housing is a social entrepreneurship offering a superior solution:

Pre-fabricated modules (floor, walls, roof) are brought to the site, zipped together and then filled with polymer foam*

Polymer-Foam houses combine the advantages of tents with the strengths of fixed buildings



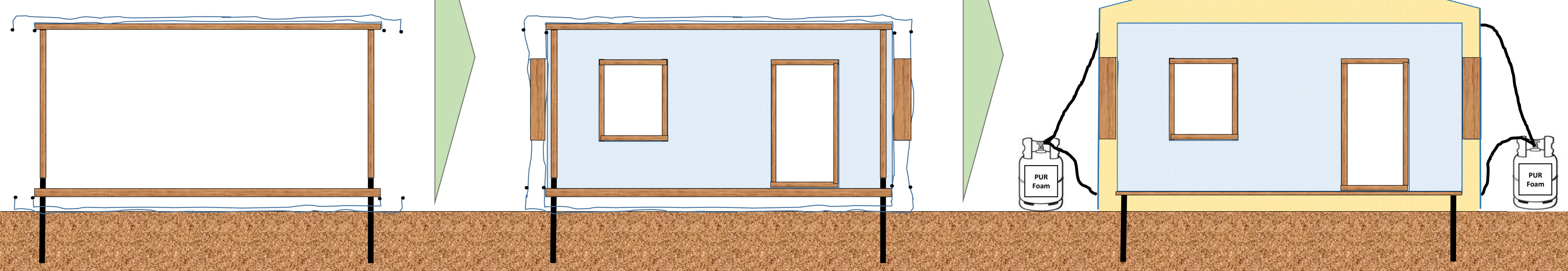
* Patent pending

	Time to build	Cost to build	Material logistics	Re-Usability	Lifetime / durability	Weather resistance	Design flexibility	Comfort of living
Tent	low	low	easy	medium	low	low	high	very low
Container	low	medium	difficult	high	high	high	medium	medium
Wooden Houses	medium	medium	medium	low	medium	medium	high	medium/high
Stone / concrete / steel	high	high	difficult	low	high	high	high	high
Steel Frame + panels	low	low	easy	good	low	medium	low	low
Textile and Concrete	low	low	easy	low	high	high	low	low
Plastic parts and textile	low	low	easy	medium	high	high	low	low
Polymer Foam	low	low	easy	medium	high	high	high	high

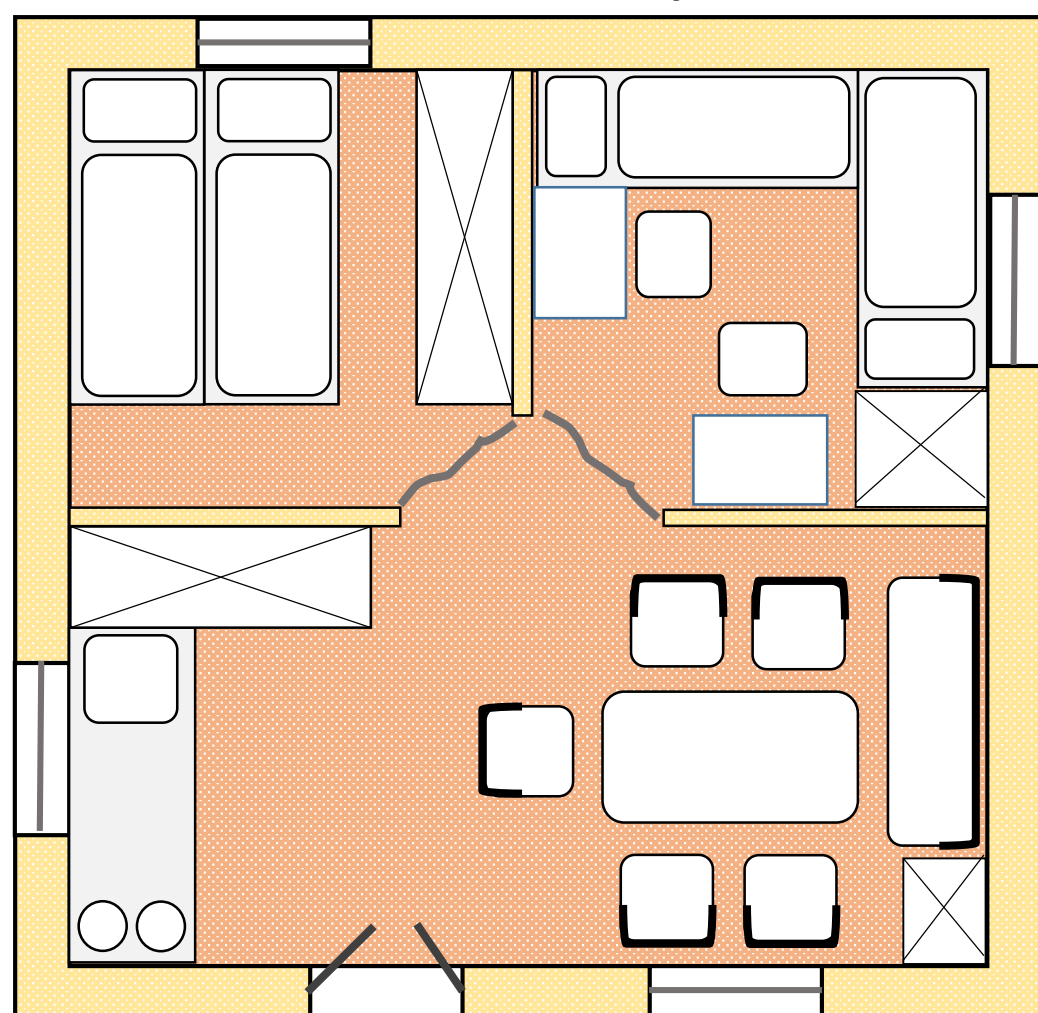
Assembly begins with a temporary framework...

... then the elements for walls, roof and floor are zipped together...

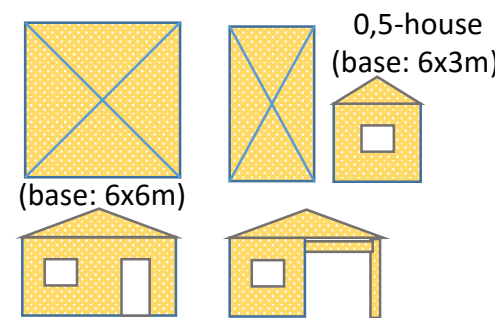
... then the gap between the outer and the inner lining is filled with polyurethane foam, and the framework gets removed.



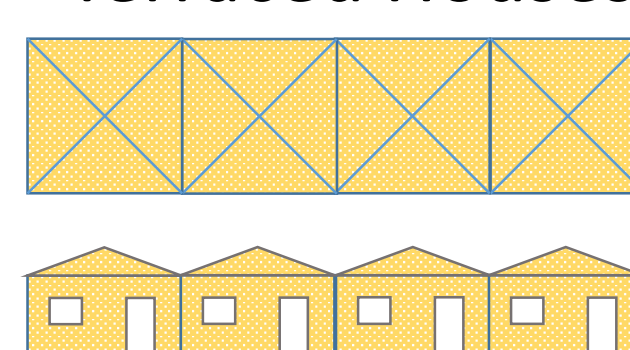
A 6x6m standard house is suitable for a family of 4 - 6



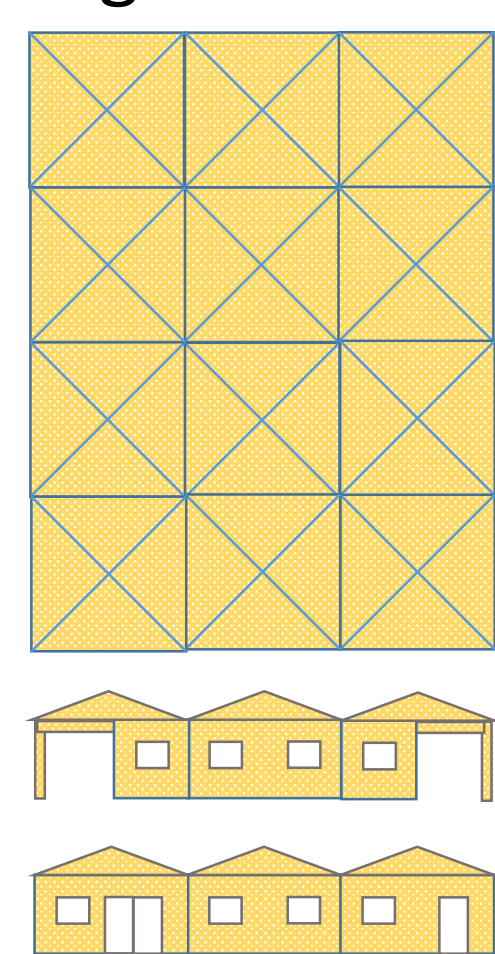
Detached House



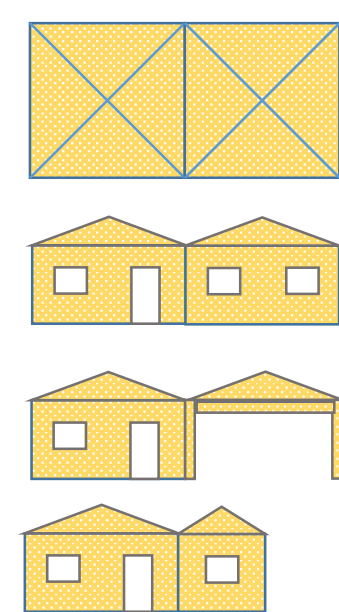
Terraced Houses



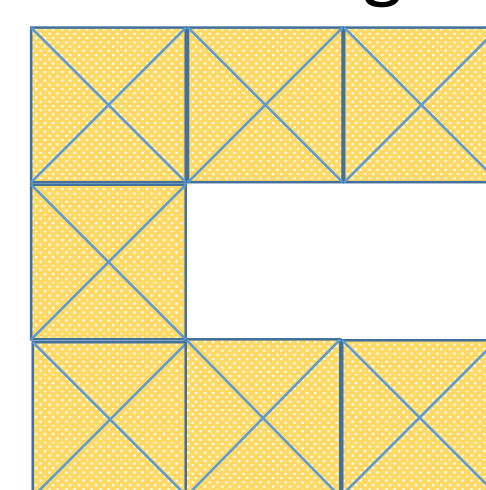
Larger structures



Double-sized



Combinations for farms and large families



Polymer-Foam-Houses are superior to other techniques as they offer:

- **Low costs:** Approximately €7.000.- to 10.000.- per house = €200 – 300 per m², approximately €100-150 per person per year
- **Ease of transport:** Low weight ca. 1500 kg/house (= ca 50kg/m²), low volume: ca. 240m² living space fits in a 20ft container
- **Pre-fabrication:** Fast construction of a large number of houses
- **Durability:** Weather proof, non rotting, stable, earthquake-proof, fire retardant, well insulated, comfortable and hygienic.
- **Modular design:** A small number of modules for a large variety of buildings: Homes, schools, (work)shops, hospitals, offices
- **Design flexibility:** Wide range of humanitarian and commercial applications (e.g. warehouses, workshops, budget housing)
- **Good standard of living:** integrated floor, vertical walls, high ceiling, dry, insulated, heated, good ventilation, good size
- **Environmentally friendly:** Low heating/cooling demand, low emissions, no rotting, very good recyclability

* Assumption: 30m²; 4 People; 20 years lifetime

Our goal: JV with a manufacturer of shelters to set up a new product line

We look for:

- Investors and supporters for financing and implementation
- Industrial Partners for a Joint Venture, a co-operation, technical cooperation/support
- Cooperation with Aid Organizations to ensure buildings are fit for purpose
- Governmental support (Municipalities, States, Federal)

We are supported by:

