



YOUR MIXED PLASTIC WASTE BECOMES A LIFESAVING RESOURCE



**THANKS TO PROMEKO
EMERGENCY SHELTERS PLANT**

Input material:

Film – polyolefin LDPE	75%	375 kg/h
Plastic rigid HDPE	20%	100 kg/h
Paper	5%	25 kg/h
Cardboard		
Wood		
Other plastics		
	100%	500 kg/h

Output:

profiles boards made of recycled plastic,
dimensions: width 300 mm, length 2.650 mm, thickness 30 mm
with tongue and groove joints and honey comb structure



Tongue and groove joint

Living unit data

Sides (walls): 5,30 x 2,65 m

Height: 2,76 m

Floor area: 14 sqm

Total weight: 1.100 kg

Total volume in pallet: mc 2,70

Production

Capacity per line: 500 kg/hour

Total houses per year: no. 2.300

equivalent to shelter for 9.200 people

Total floor surface for storage: 1.500 sqm

Total floor surface per year: 28.000 sqm



Piled boards ready for assembly

Easy and fast to assemble, reliable and safe to live in, Promeco has engineered a complete turnkey plant designed to manufacture with plastic waste economical standard living units ideal in any emergency situation when immediate housing is required.

This projects aims to build low cost housing from recycled material, namely mixed waste plastic, with the following features:

- Requires limited storage space
- Extremely easy to assemble
- Ready for immediate use
- Easy to transport
- Environmental friendly

***Made from recycled waste
and completely recyclable in the future***

These living units may be used as shelters for people in case of natural disasters such as floods, tsunami, earthquakes, hurricanes or in UNHCR refugee camps.

The shelters manufactured with Promeco's plants are designed to provide housing in all post disaster settings and in extreme climates they can be further increased with appropriate insulation. Their floorspace can comfortably host up to 4 people. This is the reliable and long lasting alternative for the 3,5 million people still living in tents worldwide.

Plant description

The plant designed by Promeco allows the conversion of plastic waste to profiles that can be assembled to build other products, such as the emergency living units.

Advantages of Promeco system

- Ease of maintenance
- Can be installed everywhere because the waste processed is available all over the world
- High production capacity: from 400 up to 1.500 kg/h
- Versatility
- Minimum floor requirements for storage
- High density material
- Product size and shape suitable for the intended use
- Lower operation and maintenance costs compared to traditional methods

Characteristic of the shelter

“Refugees and others of concern to UNHCR have the right to adequate shelter - to protection from the elements, to a space in which they can live and store belongings, and to privacy, comfort and emotional security. A shelter is a habitable covered living space that provides a secure and healthy living environment with privacy and dignity in order to benefit from protection from the elements, space to live and store belongings as well as privacy, comfort and emotional support.”

Shelter solutions UNHCR Emergency handbook

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