



Green building from Straw



Prespaglia is operating in the green building sector. It produces bio-bricks made from a compound of straw, clay and hydraulic lime. They can be used for both building interiors and exterior walls, in line with bio-architecture. They are environmentally sustainable, renewable and recyclable and have been tested, certified and patented.

Prespaglia managed to enhance cereal straw that represents one of the more available by-products in Southern Italy, particularly in Apulia Region. By using Cereal Straw, it has developed an eco-friendly material for the building sector and is also further contributing to reducing GHG and improving people's quality of life.

All products are certified and covered by patents and they are a new biobased products focused on the new sustainable markets with bigger opportunity to enhance one of the rural residues most representative, and improve the circular economy at the EU level. The main advantages are direct to both farmers, producers, and finally to consumers. Producing eco-sustainable bricks allows the growth of a more greener and environmentally friendly building market.

Using of straw would represent a better enhancement of rural residues as new material, with benefits towards both farmers and bio-based operators market, through the creation of a new and sustainable supply chain.

Finally, further benefits are also offered to consumers, who will live in healthier, more energy-efficient and environmentally sustainable homes. The key innovation is based on the manufacturing of ready-to-assemble modular straw brick, that can fully replace cement, bricks or expanded clay artifacts. In addition to being recognized as a sustainable product, Eco-brick is considered suitable as an earthquake-proof building material due to its lightweight. Products made by Prespaglia guarantee buildings energy performance standards that are being approved by the European Commission on the Green Building Directive.



KEY WORDS

Rural areas, Bio-bricks, sustainability, technological innovations

COUNTRY/REGION

Italy/Apulia, Southern Italy

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BRANCHES

BOOSTING RURAL BIOECONOMY NETWORKS FOLLOWING MULTI-ACTOR APPROACHES

ADDITIONAL INFORMATION



The key innovation is based on the manufacturing of ready-to-assemble modular straw brick, that can fully substitute the cement, laterizio or expanded clay artifacts. the modular eco-brick represents one of the first eco-friendly brick let to increase both energy efficiency for the building sector and to valorize the biomass residues toward BBPs sector with a strengthening of circular economy and GHG reduction. In addition to being recognized

as a sustainable product, Eco-brick is considered suitable as an earthquake-proof building material due to its lightweight. At last, eco-brick is also fire-proof and all their components are classified in A1 class (top class for all fire-resistant materials. the material included in this class must resist firing for 240 minutes, on par of the rock wool or panel based on plaster).

Prespasglia obtained several awards for innovative products applied to the green-building with a constant attention to reducing environmental impacts along the whole Life Cycle Product. All efforts carried out to create innovative and eco-friendly products ensures the recycling and biodegradability in case of decommission too.



ABOUT BRANCHES

BRANCHES is a H2020 “Coordinaton Support Action” project, that brings together 12 partners from 5 different countries. The overall objective of **BRANCHES** is to foster knowledge transfer and innovation in rural areas (agriculture and forestry), enhancing the viability and competitiveness of biomass supply chains and promoting innovative technologies, rural bioeconomy solutions and sustainable agricultural and forest management.

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