

A SUSTAINABLE SOLUTION COMING FROM THE NEW YORK INSTITUTE OF TECHNOLOGY

The Architecture and Design School of New York Institute of Technology (NYIT) develops solutions to wide-spread problems in the architecture and design field, with a special attention for human development and environment. The School adopts both in its teaching and its researching approach the respect for the social, cultural and environmental context.

In particular, in the last period NYIT's Architecture and Design School has focused its efforts in combining solutions to the problem of waste management and up-cycling of products and solutions for easy-accessible, low-cost building construction in difficult climate conditions. The main result of these research activities is the **SodaBIB** (Bottle Interface Bracket) innovation, related with the creation of roofs starting from plastic bottles.

Both blow-molded PET and resin bottles can be used for building a roof that guarantees cool interiors (plastic bottles absorb heat, but don't irradiate it), natural ventilation (thanks to the specific design the project is based on) and sun light to the house, while facilitating the sliding of water when it rains.



Basically, a lot of bottles with the same shape have to be cut following two different patterns, both very easily reproducible; then, the bottles need to be screwed (exploiting the caps of the bottles themselves) to the special grid pallet NYIT's Architecture and Design School has designed. The pallet is meant to be a very simple structure, which can be easily split into layers and roofing purlins with bare hands and a small knife, before completing it with plastic bottles: the idea is to keep as much work as possible "on the ground", and to use as much recycled material as possible.

Aimed at being mainly deployed in disaster relief zones with hot, rainy weather (essentially, equatorial area), **SodaBIB** roof can be applied to any kind of pre-existing roof thanks to the fact that the grid pallet can be easily cut into squares anyone can nail or screw into roofs created with any kind of material, thus keeping the costs of the installation very low and facilitating its use in a lot of different contexts. At the moment, the **SodaBIB** roof is being tested through a full-scale model. The NYIT's Architecture and Design School website shows other interesting innovative projects carried out in many countries.



To know more

[SodaBIB project](#)

[NYIT's Architecture and Design School](#)

[NYIT's Costa Rica recycling center](#)