Modular renewable energy smart homes

S²A Northern California MegaFactory: 300 Park Center Drive Patterson, CA 95363 ...

The first electrically self-sustaining, custom luxury homes are changing the way the ...

S²A Modular keeps it all under one roof in our many 100,000-plus Sq. Ft. ...

S²A Modular believes in sustainability, producing clean energy combined with ...

Like Sasha Jokic, founder of building startup Cosmic, points out, "homes count for roughly 45% of all the U.S CO_2 emissions, with the vast majority of those emissions (87%) attributed to fossil fuel-fired heating, cooling, and hot water." The necessary response from the housing sector is therefore clear: it must aim for carbon-neutral, energy-efficient homes that, unlike many cases, must be affordable to be accessible at a massive scale. Once that is prioritized with the necessary urgency, we can begin to dream of really tackling the devastating effects of the ongoing climate crisis.

To reshape the housing sector, the first step is to question the way today"s homes are being built. The second is to adopt an entirely new approach and allocate resources accordingly. With this in mind, Cosmic has developed the first end-to-end housing development chain for fully electric, self-powered homes. Their first product is an innovative ADU (accessory dwelling unit) prototype that brings extra living space and pays for itself by self-generating clean energy. Also referred to as an autonomous backyard home, it produces zero emissions and avoids the irresponsible depletion of natural resources, seeking to improve people"s health and wellbeing.

A standardized system that reshapes residential construction

In an effort to deliver these self-powered homes at a massive scale, it was necessary to come up with an innovative modular construction system. Traditionally, projects are built in one-offs, meaning that design, engineering and construction costs are not shared between different projects. On the contrary, Cosmic"s approach treats buildings like a product, creating an iterative system with the goal of achieving efficiency, sustainability and cost-effectiveness.

The result is a standardized building template centered around a modular, all-electric building chassis, which besides acting as a foundation system, includes built-in mechanical, electric and plumbing systems. These can be combined in practically endless ways without having to engineer each project individually from the ground up.

While the chassis is made of metal and wood, the joists, joints and decking are made of tubes and sheet metal.

The roof is made of standing seam metal and other structural elements are composed of sustainably sourced wood. Similar to other prefab constructions, all of these components are initially built in a factory and then transported in flat pack containers to the building site. Since the module"s maximum weight is 600 pounds (272 kilograms), offload and assembly require only a small telehandler, avoiding the use of cranes. Altogether, the standardized design improves predictability, minimizes costs and accelerates project delivery by 50%.

Generating more energy than is consumed

Apart from offering additional living space, this tiny house stands out because of its ability to generate more energy than it consumes. This doesn"t just offset energy on the ADU itself, but also provides heating, cooling and power to the main home or any electric vehicle.

Contact us for free full report

Web: https://kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346