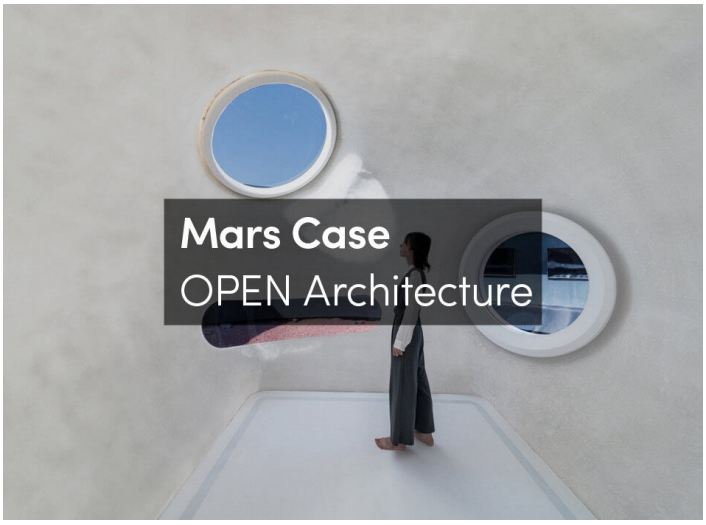

MARS CASE: RADICAL SIMPLICITY FOR A RESOURCE-SCARCE FUTURE

Posted on July 22, 2025 by xavigonzalez

Categories: Contributors, expanding design practices, Formats, OPEN Architecture, Project, Technology and fabrication, Topics

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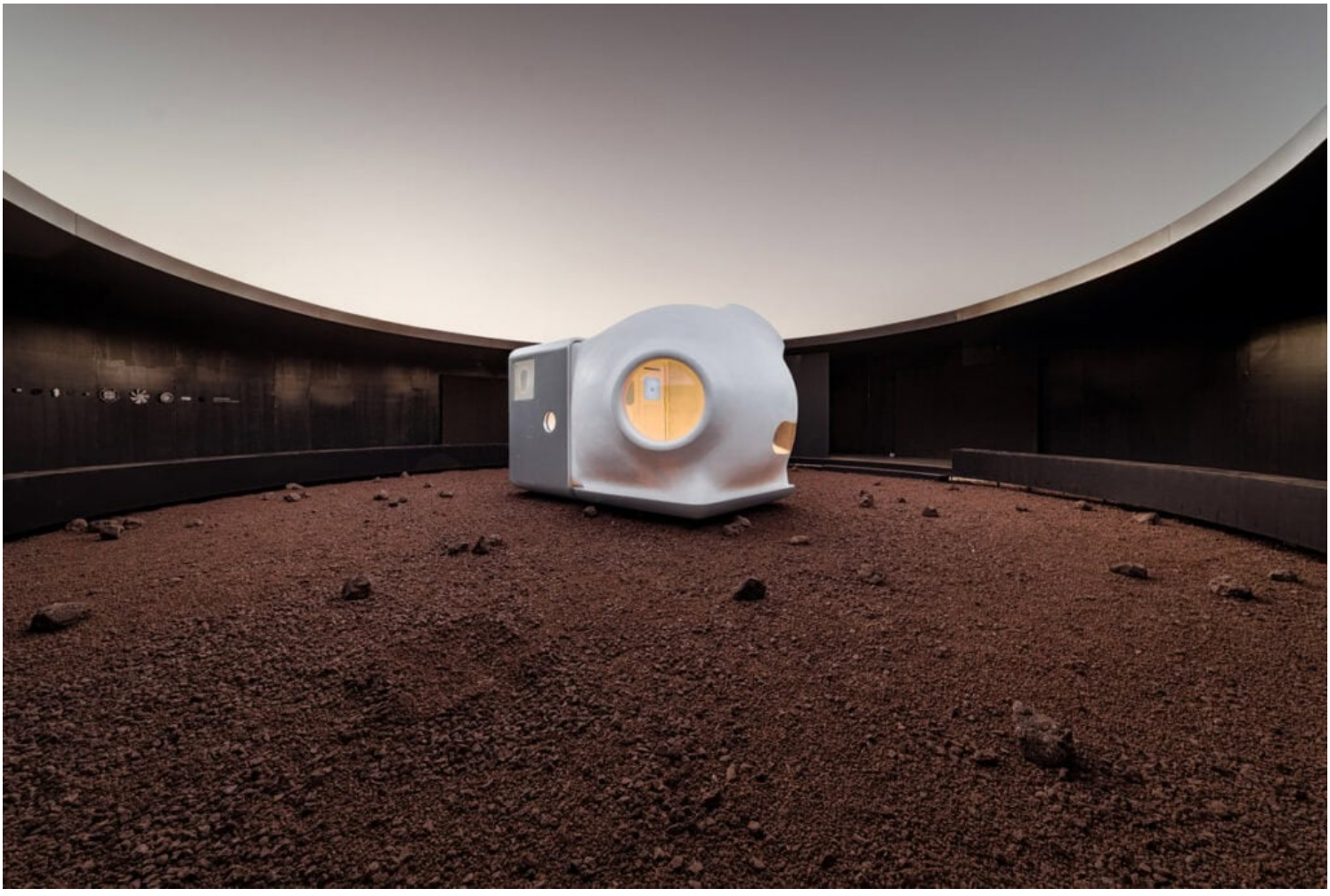
What if humanity's settlement on Mars became the catalyst for rethinking the way we live on Earth?

Referencing Henry David Thoreau's 1845 retreat into the forest—a pursuit of essential living chronicled in *Walden—MARS Case* speculates on a near future in which survival depends not on abundance, but on radical simplicity. Thoreau wrote, "I went to the woods because I wished to live deliberately, to front only the essential facts of life." In today's context of overconsumption and ecological collapse, *MARS Case* revisits this idea through a minimal, self-sustaining housing prototype designed to function in the resource-scarce environment of Mars.



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Conceived as a provocation, the project imagines life in a place where no natural resources can be taken for granted. On Mars, the recycling of air, water, food, and waste becomes not an option but a necessity. By confronting such extreme limitations, the prototype challenges prevailing notions of comfort, prompting a reevaluation of what is truly essential for living.

Developed in collaboration with Chinese electronics company Xiaomi, *MARS Case* integrates architecture, industrial design, and smart technology into a single, compact system. Domestic appliances are embedded into one cohesive product—the home itself. Waste heat, exhaust, condensation, and other byproducts are captured and reused within a closed-loop system that recirculates energy, air, and water, minimizing resource use.

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The structure consists of two modules. The first is a lightweight, transportable service core measuring 2.4 x 2.4 x 2 meters, which contains the kitchen, bathroom, and mechanical systems. It also functions as an airlock and storage unit. When deployed, the module expands to release a secondary inflatable sphere that serves as the primary living space—an area for rest, reflection, and personal activity. Once deflated, this space collapses back into the core, allowing the unit to be transported like a suitcase—hence the name *MARS Case*.

Compact, mobile, and resource-efficient, *MARS Case* proposes a self-contained lifestyle where every action and material is part of an integrated ecosystem. It offers a visionary response not only to imagined Martian conditions but also to the pressing environmental questions of contemporary

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urban life.

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