



The bathroom in 3D Housing 05 features a yellow marble sink and bathtub, designed by architect Massimiliano Locatelli, alongside a pair of sconces by Osvaldo Borsani and an 'Oval' carpet by Thierry Betancourt for ILO. **Right:** Locatelli stands next to his 'Atollo' table and 'ML 1.2' chairs.



## BACK TO THE FUTURE

*Italian architect Massimiliano Locatelli furthers his investigation into innovative architecture with a first-of-its-kind 3D-printed house*

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Massimiliano Locatelli knows where the future of architecture is. And as his site-specific 3D-printed house—titled '3D Housing 05'—testified, it's already here. Standing in the middle of Piazza Cesare Beccaria, it was erected to start a conversation, one that transcends its materiality and form. "It is a project that puts the accent on man's freedom of [choice], while respecting the place where he lives," says Locatelli. Working with Italcementi (of the HeidelbergCement Group), engineering and design firm Arup and 3D-printing experts Cybe, the architect reaffirms one thing: that an architectural utopia is one where ethics and aesthetics reconcile, where the material becomes a metaphor and the idea of a home, an innovative force.

In Milan, though, 3D Housing 05 became the first of its kind, a 100-square-metre prototype built within a week in the city. The structure is made up of 35 modules, each of which was printed in 60 to 90 minutes. The medium of construction—the 3D printer, in this case—allows the structure to take any form, even letting users build around themselves. "The client and architect relationship is completely revised," says Locatelli, "The designer becomes an interpreter of the desires and reasoning of

the homeowner, who can achieve his goals with 3D technology, which no longer has limits." The speed and flexibility of the technique, additionally, permits immediate implementation. "Even in situations of risk, during emergencies or in the wake of catastrophes—anywhere," he adds.

The circular house comprises a living area, bedroom, kitchen and bathroom, along with a roof terrace that was conceived as a garden for vegetables and flowers. "The outside has a soft, sinuous form that fits into the architecture of the city in a natural way. The organic form of the house, with the roof garden, the vegetable garden and the trees, allows a human approach, taking full advantage of the freedom offered by 3D printing," he says of the house that was moved to a new location after Salone. Locatelli reiterated his appeal with contemporary furnishings—from his five-module 'Atollo' table, to a Gio Ponti chandelier from the early 1960s and an 'Oval' carpet by Thierry Betancourt for ILO—driving home the point that sustainable architecture is anything but plain. "The initiative puts innovation and beauty at the service of everyone, in an authentically progressive vision of dwelling, and therefore of being," he concludes. ♦