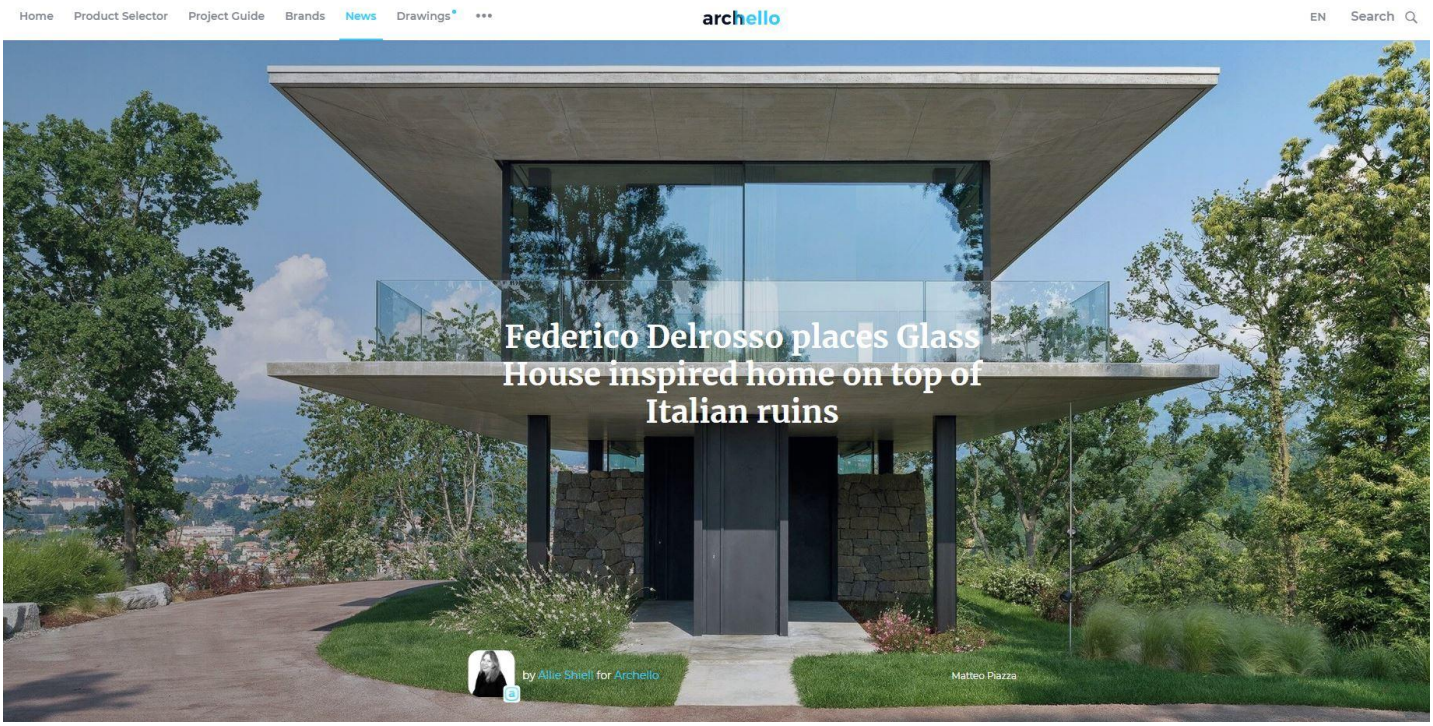


24 Jul 2020 Materialization

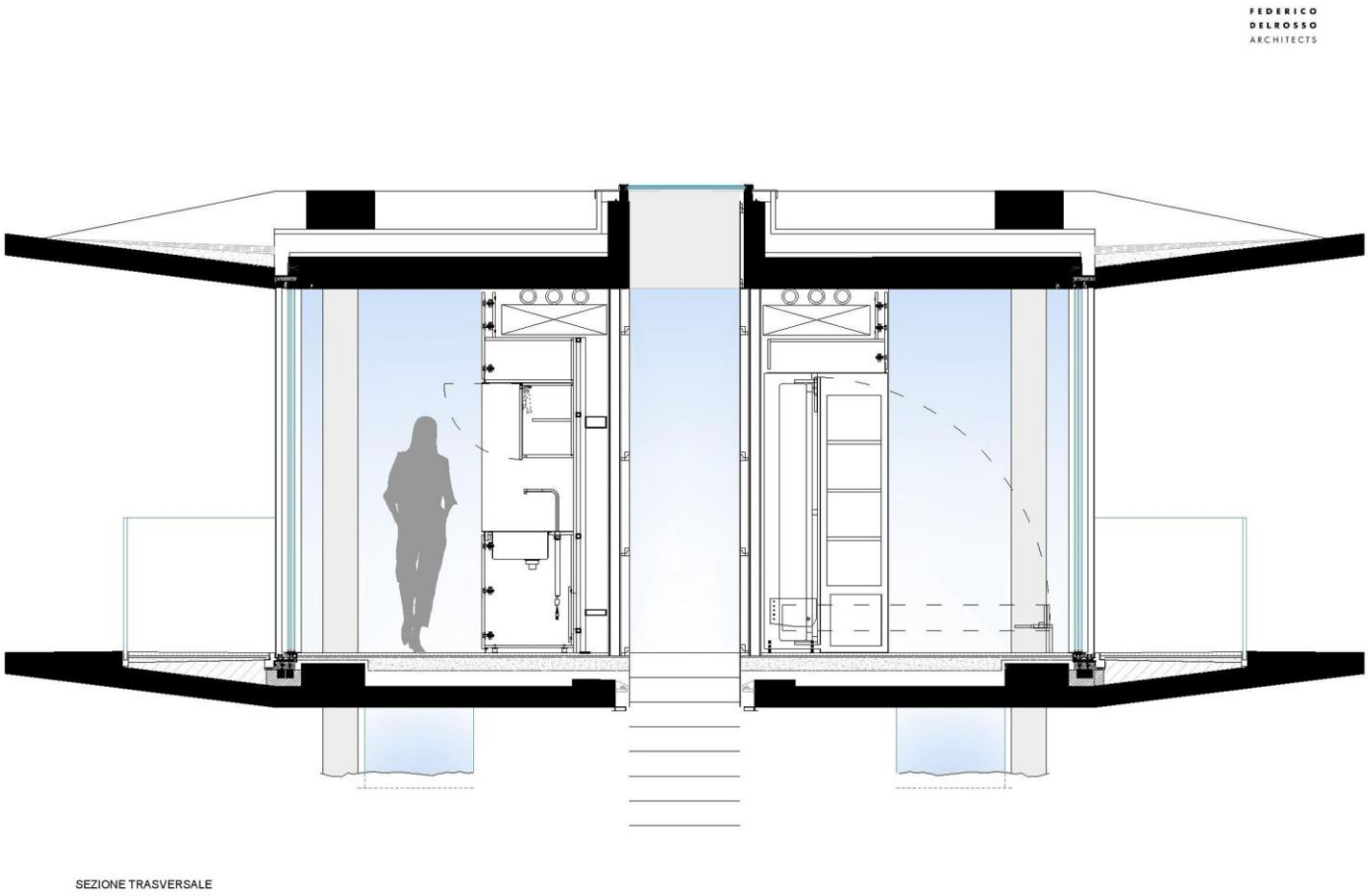
Inspired by Philip Johnson's Glass House as well as a minimal-naturalist approach, Teca House is a contemporary building born from the ruins of a rustic house on the Biellese hills of Italy. Designed by Federico Delrosso Architects, the existing rural wall systems become the base, connecting the house with the surrounding territory. Above is a new intervention, light and transparent: a structure in concrete that opens towards the landscape with two large horizontal wings and a completely openable glass layer that contains the volume.

Credit: Matteo Piazza

The building has an area of approximately 80 square meters which extends by another 50 square meters by opening the sliding glass walls that surround the volume. The flexibility of this concept makes the space ideal for meeting or hosting gatherings, but it can also serve as an intimate refuge for reading or practicing yoga. In addition to the use of original stone for the base, sustainable materials have been used and left unfinished. This includes concrete for the structure and floors and birch plywood for furnishings and coverings.

Credit: Matteo Piazza

In terms of environmental response, the design responds in several ways. In particular, floors that cantilever beyond the glass to protect against summer solar radiation, while still allowing in the winter sun.



Further to this, the building integrates high performing solutions and materials aimed at eliminating and correcting thermal bridges. Plant engineering alongside the insulation measures brings the building to energy class A4.

Credit: Matteo Piazza

The realization of an air heat pump single energy air conditioning system combined with radiant floor systems, and fan coils, the VMC system, and the high-performance photovoltaic system guarantee environmental comfort throughout the year.

plywood glass concrete italy stone cantilever flexibility birch plywood glass house glass façade radiant floor system Philip Johnson ruin air heat pump fan coils