

Designing architecture for reuse, recycling and a sustainable tomorrow

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The building industry has a negative effect on the environment by contributing greatly to the greenhouse effect through emissions of carbon dioxide, wastage and the depletion of materials. This project explores through the design of a house how architects can battle some of these problems and contribute to a more sustainable future. To accomplish that we should design for reuse and recycling to use our resources more effectively and reduce the negative impact on the environment. Therefore, the project partly uses second-hand materials (which reduces waste and saves energy) and have a construction of as few different and pure components as possible, so that they can be reused after the building's lifetime. The building components are put together in ways so it can be easily assembled and taken apart to be reused, avoiding adhesives, nails, casting and other permanent connections. By leaving joints, connections and fasteners visible and accessible maintenance and deconstruction is made easier and faster. The design of the house features this as part of its charm and shows how designing for reuse and recycling can add to the architectural expression.