

During the spring semester of 2026, the ZHAW Master's Studio *Urban Project*, led by Thomas Hildebrand and Mirjam Niemeyer, explored building with natural resources. The starting point was the conviction that, in the face of climate change, it is necessary to reduce the global transportation of building materials and make consistent use of locally available resources such as stone and timber. This can help reduce CO₂ emissions, strengthen local value creation and further develop the architectural culture of a region.

Against this background, the students explored the Valser quarry and the Truffer AG workshop together with Pia and Pius Truffer and their team. They gained insights into the extraction, processing and use of natural stone, as well as the role of water in its processing. Based on these experiences, they developed individual designs with the aim of making targeted use of local resources and strengthening the economic and social resilience of Vals. One central question guided the design process: What potential does Valser Quartzite hold for the future of construction?

The designs demonstrate a wide range of possible applications. As a prestressed column or beam, quartzite can fulfil structural functions; it can store heat, provide protection against flooding and be used for roofing. Quartzite components can also be prefabricated and assembled in a short time. Many of these applications already shape Vals today – from the traditional stone roofs to the village bridge and the flood protection walls. The projects draw on these building traditions and develop them further through contemporary construction methods, often in combination with locally sourced timber.

On display are plans, visualisations and models of five projects: a new production hall in the quarry; a residential building with a natural stone structural system; a river and outdoor swimming pool along the Valser Rhine; a new mountain station constructed from natural stone; and a greenhouse and mushroom house that uses residual heat from the St. Peter spring for winter cultivation.

The projects are complemented by a spatial strategy that considers stone as a foundation for the future of the village: providing local employment, additional housing and long-term prospects for the community.

These student projects offer ideas and impulses for the future of building in Vals. They demonstrate the potential of Valser Quartzite and open up new possibilities for working with this familiar building material.