

Information Design Project WS 24/25

Task

Given the ongoing invasion by Russia against Ukraine, the extent of destruction continues to increase. In addition to residential buildings and medical facilities, nearly 3,500 educational institutions, such as preschools, schools, and universities, were destroyed by October 2023 [1]. Therefore, timber construction can make a decisive contribution to the necessary reconstruction of Ukraine. In particular, the modular construction method allows for the quick and easy build of temporary educational facilities.

As part of an interdisciplinary design offered by the Chair of Architecture and Timber Construction and the Chair of Timber Construction and Building Construction, a building system is to be developed that is suitable for both kindergartens and primary schools. This building system serves as a template for sustainable replacement buildings/temporary buildings for the time the destroyed educational institutions are rebuilt. To ensure quick and easy assembly, the necessary components and modules are manufactured abroad. The individual parts of the building system are then delivered to Ukraine by container. On-site, the building system is assembled with the involvement of the Ukrainian population. It is designed to be so simple that even non-specialists, such as the local population or the military, can help with the assembly. Additionally, care is taken to use resources available in Ukraine. This ensures that the building system can be reproduced in the future without supplies from abroad. Once the destroyed educational institution is rebuilt, the replacement/temporary building can be completely dismantled and reused at another location. Accordingly, the building system is to be developed in such a way that the dismantling of the individual components and modules is guaranteed.

The interdisciplinary design project takes place in groups consisting of two architecture students and two civil engineering students.

Contactinformationen

Chair of Architecture and
Timber Construction

Contact person: Tabea Huth
E-Mail: tabea.huth@tum.de

Chair of Timber Structures and
Building Construction

Contact person: Julian Lukas
E-Mail: j.lukas@tum.de

Source

[1] Beer, A. (2023, Oktober 24): *Das Ausmaß der Zerstörung*. Tagesschau
<https://www.tagesschau.de/ausland/europa/ukraine-zerstoerung-104.html>.