25 = 25

AllotHouse

Participant info

Name: Magdalena Zabek Institute: RWTH Aachen

Project info

The initial meaning of inflationary used buzzwords like "sustainability" and "green" is of great importance for our future and well being, since the importance of local communities and public engagement constantly grows. Together with an increasing need of health and social responsibility, allotment gardening provides a great alternative to widely consumed convenience products. With a vivid community of over 1 million allotment gardeners, Germany is one of the leading countries for self-sustaining farming and small scale local agricultural products. However, with most of the gardeners being over 60 years old, the classic type of allotment gardening is associated with a retiring age and the maintenance of tiny greens. Nevertheless, a movement in urban farming takes place amongst young people promoting organic vegetables and fruits with local contribution followed by a significant impact on health and welfare.

When employing the available urban space for allotment gardening, the restricted under roofed area has to be utilised in the most sensible way. In addition, housing regulations limit the floor area to 24m2 with a permitted height of 3.5m, adapting a contemporary building style. In order to meet these local council regulations and maximising the available volume, I demonstrated a novel civil engineering approach by using scaffolding poles for the structural integrity of a building. The construction meets weight, material and mobility requirements being set up and ready to use within hours. When building the life size model, I proofed the feasibility of this project and gave valuable insight into constructive modularity and static load allowances. In addition, insulation was easy proofed providing evidence for a year-round use. At the same time, scaffolding poles can provide shelter and a possible weather proof housing facility for refugees. No least, no building permission is required when erecting scaffolding poles since no groundwork is made,.















