111" ANNUAL INTERNATIONAL CONFERENCE, SCHOOL OF ARCHITECTURE, LTH

## Sacha Menz Going Into Perfection: Materials, Design, Details

"We always talk about nature, sustainability, but we build bigger, heavier... We only think about our personal comfort, but do not think about community."

In his presentation, Sacha argues for rethinking the approach to sustainability, where not only the technical solutions for more efficient buildings need to be met, but most importantly we have to change the needs of personal comfort and space. In Switzerland the average living area per person has almost doubled in the last 50 years, leading to buildings being bigger in private spaces but very much lacking the common social places.

Sacha presents three of his projects, described as three roofs, which demonstrate his search for the common space, construction efficiency and materiality. Through optimisation and choice of the right material and building process, the structures can become self-sustaining with a minimum of supporting elements leading to an efficient use of space. As shown in the projects of the Swiss Re Pavilion, the use of steel allows for a shape defining leaf-like structure without additional support; in the Alpine Residence a combination of solid concrete base and wooden load-bearing frame creates a single open common space visually connected to its surrounding. The importance and opportunities of digital fabrication, which can bridge the traditional materials and high-tech construction, are presented in Sacha Menz's latest project of the Architecture Institute building at ETH, Zurich. The large digitally fabricated roof covers a building, where the overall reduction and optimisation of installation and core space lead to over 90% usable area from which a majority is used as communal space, enhancing the social life in the building.

Sacha is gratuated as an architect at ETH in Zurich (1989) and works as a full professor for Architecture and Building Process at ETH since October 2014 where he teaches various courses, focusing on the architecture and building process. In 2008, he published a book "Three Books on the Building Process" on the topic. In 1997, Sacha co-founded the architectural offices a m architekten (sam architects and partners Inc). Since 2004, he is a member of the Federation of Swiss Architects.

http://www.samarch.ch



