

SPACEPLATES Building System

A.Romme M.Arch., Ph.D.
KADK School of Architecture, Copenhagen, Denmark

I.Sørvin M.F.A.
N55, Copenhagen, Denmark

A.Bagger M.Sc. Ph.D.
Technical University of Denmark

ABSTRACT: The SPACEPLATES Building System, developed by an interdisciplinary research group, is defined in relationship to Ture Wester's research on pure plate structures and the dualistic geometric relationship between lattice and plate structures. The paper situates the building system within the genealogy of shell structures in general. The relationship between geometric, structural and material capacities is explained, and the use of biomimicry discussed. The working methods of the project is accounted for, and this leads to describing the architectural potential using the building systems for greenhouses, insulated houses, underwater habitats, and the pavilion in Barcelona.