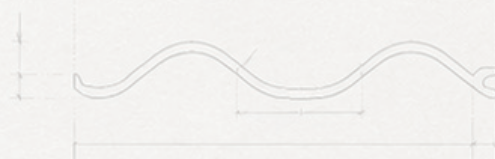


MASTER'S THESIS

Thermal Performance of Ceramic Roof Tiles



The subject for the proposed master's thesis will investigate the potential of roof tile geometry, surface quality, and colour as strategies for reducing temperatures on roofs, in cooperation with ongoing research at the Austrian company Wienerberger.

Following a theoretical review of current research into roof tile design and heat mitigation, the project will continue with an extensive phase of physical experimentation and prototyping. A key focus will be the investigation of how different geometries, surface characteristics, and colour properties of roof tile products influence their thermal behaviour and the resulting temperature of roof surfaces.

The interdisciplinary project will involve collaboration with Wienerberger and offers the possibility of conducting parts of the research on site at the Wienerberger laboratory in Vienna. Depending on the development of the project, different approaches to material testing, fabrication, and evaluation can be explored in relation to the ongoing industrial research. Following the successful completion of the thesis, there is a possibility to formulate the research findings for submission to a scientific publication.

THESIS SUPERVISOR:

Milena Stavric

DURATION:

max. 12 months

INFRASTRUCTURE:

IAM ShapeLab, Wienerberger Laboratory

ADDITIONAL SUPPORT:

Wienerberger, Julian Jauk

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