

## ALUMINIUM FOAM AS MATERIAL FOR DESIGNERS AND ARCHITECTS

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The present work's aim is to create, through scientific research methods, a basis for application of an innovative and so far mostly unnoticed material in the areas of architecture and design. Aluminum foam is a lightweight material with cellular structure and due to its technical as well as aesthetic properties very fascinating to handle. A set of problems is presented and possible solutions are developed. The focus lies on designing an efficient and modern coating technology to make the material resistant to weathering and optimal to use. The effects of artificial and natural weathering are researched to further improve the coating system. Further alternatives to the foam's design by intervention in the production process as well as through chemical baths are discussed. Thus this thesis presents fundamental research, intended to serve as a guideline and standard for large scale and broad implementation of the material aluminum foam.