

MASTER'S DISSERTATION AT ENGINEERING ACOUSTICS

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**THE WORK IS PERFORMED AT
AND IN COOPERATION WITH
SAINT-GOBAIN ECOPHON AB**

GLOBAL MARKET SURVEY OF LIGHTWEIGHT FLOOR CONSTRUCTIONS

BACKGROUND

Saint-Gobain Ecophon AB is an international company developing and producing sound insulation systems. The company is presently developing two new products called Ecodrain and Ecophon Granules that is made from waste material from glass wool fiber. The question is whether the products can replace other types of impact sound insulations that are in use today.

PROJECT AIM

The final goal with this thesis is to identify different types of wooden intermediate floors in Europe, where the new light weight aggregates could be used as an impact sound insulation material. It is of interest to compare the new materials with other impact sound insulations in the market. In the final conclusion, production costs and necessary volumes will also be presented.

METHODOLOGY

A market survey is carried out, where intermediate floors of different brands from different countries in Europe are investigated. One or two floors will be modeled in FEM to find out if the new materials can replace other sound impact insulation materials used today. The results are analyzed and it is discussed if the new light weight aggregates could be used as impact sound insulation in intermediate floors.



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