

Senior Thesis Brief Description

Thesis Title	Life Cycle Assessment of a Phase Change Material
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Life Cycle Assessment
Student's Name	Avraam Avraam
Students Reg. Number	6399
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaidis, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Short Description	The main scope of this study was the implementation of a comprehensive life cycle assessment of a phase change material. To this end, the properties of a thermal phase change plaster, currently being investigated in the research project PCPlaster, were investigated. The inventory of the production of the phase change material was documented. The assessment was conducted using Gabi Software and appropriate material libraries. Different production alternatives were investigated towards minimizing the environmental impact of the investigated process.