ROOF INSULATION MATERIALS USING CEMENT, WOOD (SAWDUST) AND POLYSTYRENE

Abstract:
This study aims to use the environmental elements and how to exploit and deal with them to reach a green building that embodies full cooperation between the various engineering disciplines, and focuses on the importance of studies and environmental design of buildings in terms of economic, aesthetic and climatic aspects and their friendliness of the ocean, in addition to offering practical architectural and engineering solutions as solutions to deal with the environment and climate Starting with straw, clay, and indoor courtyards, they display the most prominent materials available in Jordan that can be used in environmentally friendly buildings.
This study aims to produce effective materials for insulation (heat, moisture, and waterproofing insulation) using materials consisting of polyester, wood (sawdust) and cement as shown in **figure 1**. These samples are prepared using a polyester die casting method with sawdust and cement, and experimental results have shown that the sample has minimum heat and moisture transfer values. Experimental results showed that additives (fillings) polyester and sawdust add moisture and heat insulation.