

Abstract: The energy saving is a challenge to the engineering this work focuses on this subject in the field of air conditioning. A numerical program has been developed to obtain the thermal response of different walls to energy sources (sun and ambient temperature) in summer of tropical zones. Many suggestion has been offered to reduce fabric heat gain through walls, a new natural insulation is used to reduce heat gain to air-conditioned space. From the view of saving energy, this work proposed a usage of natural insulation gathered from palm to save energy required to condition a space. A finite element solution for heat flow through wall is used with suitable iteration solution where boundary conditions are varying due to solar radiation and environment thermal load. The result-in saving of