



EXIT-LYON Energy

Design of solar energy storage container wall



Overview

The RC-network in Fig. 5 can be mathematically modelled by a set of first order differential equations (energy conservation law) called state-space systems as: By using an iteration process, the conduction coefficients can be linearly related to other nodal temperatures in the network through. In order to solve Eq. (2), there are seven resistances in the RC model (Fig. 5) and their conductance coefficients ((k_{nm})) which should be determined in. In this section, the value of (E_n) (incident solar radiation on glazing) in Eq. (2) is calculated in each time interval. The Perez model used in the current study by .:



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