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Determination of energy efficiency for six kinds of insulation materials in two different methods and wall types used

F Nihal Tüzün and Volkan R Karakoç
Hitite University, Turkey

Two different types of methods known as TS-825 and heating degree-days (HDD) were tried based on six kinds of insulation materials as standard expanded polystyrene(EPS), Neopor(graphite added expanded polystyrene)(EPS), extruded polystyrene(XPS), stone wool, aerogel and vacuum insulation panel (VIP) at two types of wall structures depending on hollow brick and pumice stone with evaluating energy losses at top side and external walls for considering last six years to indicate the distinction in energy efficiency between the methods in terms of different insulation materials and wall structures used. Even though, optimum insulation thicknesses varied depending on insulation materials for both wall types and methods, lower optimum insulation thicknesses were attained in HDD method and pumice stone wall.

nihaltuzun@yahoo.com