

GRAPHICAL DEGREE-DAY DATA FOR SIMPLIFIED BUILDING ENERGY CALCULATIONS FOR SAUDI CITIES

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Abstract

Degree-days data is very useful in simplified building energy estimate calculations for comparing the heating requirements from one location to another as well as for the purpose of studying trends and comparing systems or alternatives. This paper presents graphical heating and cooling degree-day data for various Saudi cities. Such graphical presentation will allow flexibility in finding degree-day values at any balance point temperature for the respective locations. This will be useful to building designers and engineers in performing simplified energy calculations for Saudi climates especially in the early design stages of buildings.

Key words:

Energy calculations, graphical, variable-base, degree-days, cooling, heating, Saudi Arabia