

International Energy Journal, Vol. 1 No. 1, June 2000[HOME](#) | [ABOUT](#) | [LOG IN](#) | [REGISTER](#) | [SEARCH](#) | [CURRENT](#) | [ARCHIVES](#)[Home](#) > [Vol. 1 No. 1, June 2000](#) > [Parishwad](#)**Estimation of Cooling Load for India***G.V. Parishwad, C.H. Prasad, R.K. Bhardwaj, V.K. Nema***Abstract**

A software has been developed for the estimation of monthly-mean hourly cooling load for Indian cities by Cooling Load Temperature Difference (CLTD) method prescribed by ASHRA. For this purpose empirical equations for the design temperatures, monthly-mean hourly wind velocities and humidity ratios at the locations are used. The software takes the city, month, wall orientation, building materials and their dimensions, wattage of lighting, number of occupants and occupancy hours and type of window glass with different types of shadings as input. The cooling loads for the month of May thus calculated are compared with those calculated using Solar Heat Gain Factor method. The computed values of cooling loads for eight cities, distributed all over India, are compared with these values are the results plotted to show the difference. The error analysis done for these calculations shows that the relative standard deviation for heat gain, through walls and roof, varies from 6.5% to 15.7% for different wall orientations.

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