

HLCP — An Indian Hourly Load Calculation Program interface for EnergyPlus.

HLCP has been developed by ISHRAE, The Indian Society of Heating, Refrigeration and Air Conditioning Engineers.

HLCP has been specifically designed to meet the needs of Indian HVAC engineers for calculation of design day loads, 288 hour yearly outputs and 8760 hour hourly outputs through a single simplified tabbed graphical interface. Users can select between SI and IP units. Latent loads for ventilation air and infiltration are calculated as a post-process, and include simplified ventilation and infiltration inputs. Weather data for 58 Indian cities are available. The program structure is such so as to enable easy migration from conventional manual and spreadsheet load calculations with a minimal learning curve, and to serve as an adjunct to whole building energy analysis programs based on EnergyPlus. Features include an innovative wall dimension input screen, and inputs of various internal loads, inputs for external shading of windows, floors, roofs and ceilings. U value calculators for layered opaque and fenestration constructions have been incorporated. Post-processed hourly loads are available in CSV format. HLCP generates the EnergyPlus input data file (IDF) and executes EnergyPlus, and provides post-processed outputs without any further input from the user.

The current version has been released for sale. The interface is in English. There is no demo or trial version available.



ISHRAE proposes to release updated versions which would incorporate weather data for an additional 6 Indian cities, gable roofs, skylights, return air above plenum and use of any epw file for Design Day and hourly outputs to enable use of HLCP by a wider audience.

The main characteristics of the program are:

- * Numerical data entry, tabbed wizard graphical user interface.
- * Calls EnergyPlus directly from the interface.
- * Seasonal Design Day 288 hour and 8760 hourly outputs.
- * BIS Design Day data base, WeDco hourly weather database for 58 stations.
- * Rotation of building.
- * Project Masters and Schedule Masters.
- * Transmission and solar U value calculators.
- * Formatted PDF Design Day zone load output.

Website: <http://www.hvacindia.com/hlcp/>

Email: hlcp.support@gmail.com