

README

IDEAS V5.1

IDEAS has been developed as a MATLAB-based model of a dwelling and its servicing systems. The release presents an example of an example dwelling with a construction U-Value of $1 \text{ W/m}^2\text{K}$.

Included in this release are the following files:

README.pdf	this file
To.mat	DISTURBANCE: External Temperature based upon a Sheffield, England, Climate Location
SAPsetpoint.mat	SETPOINT: which is tracked
Qfree.mat Gains	DISTURBANCE: Appliance and Solar
ESRU_IDEAS_V5_1_Uof1_STC.m	SCRIPT: Main IDEAS Script
CalibrationParameters.m	SCRIPT: Generate Yearly Energy and Temperature Values

Requirements

MATLAB R2011b or compatible version.

Windows Installation

1. Download and unzip the archive.
2. Open and run IDEAS_V5_1_STC.m in MATLAB
3. CalibrationParameters.m can be run after step (2) to generate values and figures for Energy and Temperature for the modelled dwelling.
4. Update *.m files as required and re-run.