



SoftHVAC

# User's Guide

## Heat Loss AutoCAD

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## General information

The application allows drawing envelopes in AutoCAD and importing data thereof to the application in browser.

# Installation

## 1. AutoCAD VBA Enabler

Download and install AutoCAD VBA Enabler:

- [https://www.softvac.com/download/vba/AutoCAD\\_2012.rar](https://www.softvac.com/download/vba/AutoCAD_2012.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2013.rar](https://www.softvac.com/download/vba/AutoCAD_2013.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2014.rar](https://www.softvac.com/download/vba/AutoCAD_2014.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2015.rar](https://www.softvac.com/download/vba/AutoCAD_2015.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2016.rar](https://www.softvac.com/download/vba/AutoCAD_2016.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2017.rar](https://www.softvac.com/download/vba/AutoCAD_2017.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2018.rar](https://www.softvac.com/download/vba/AutoCAD_2018.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2019.rar](https://www.softvac.com/download/vba/AutoCAD_2019.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2020.rar](https://www.softvac.com/download/vba/AutoCAD_2020.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2021.rar](https://www.softvac.com/download/vba/AutoCAD_2021.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2022.rar](https://www.softvac.com/download/vba/AutoCAD_2022.rar)
- [https://www.softvac.com/download/vba/AutoCAD\\_2023.rar](https://www.softvac.com/download/vba/AutoCAD_2023.rar)

Note:

If AutoCAD VBA Enabler has been installed earlier together with AutoCAD, then it is not required to install it. While attempting to reinstall the *Install* button will be inactive.

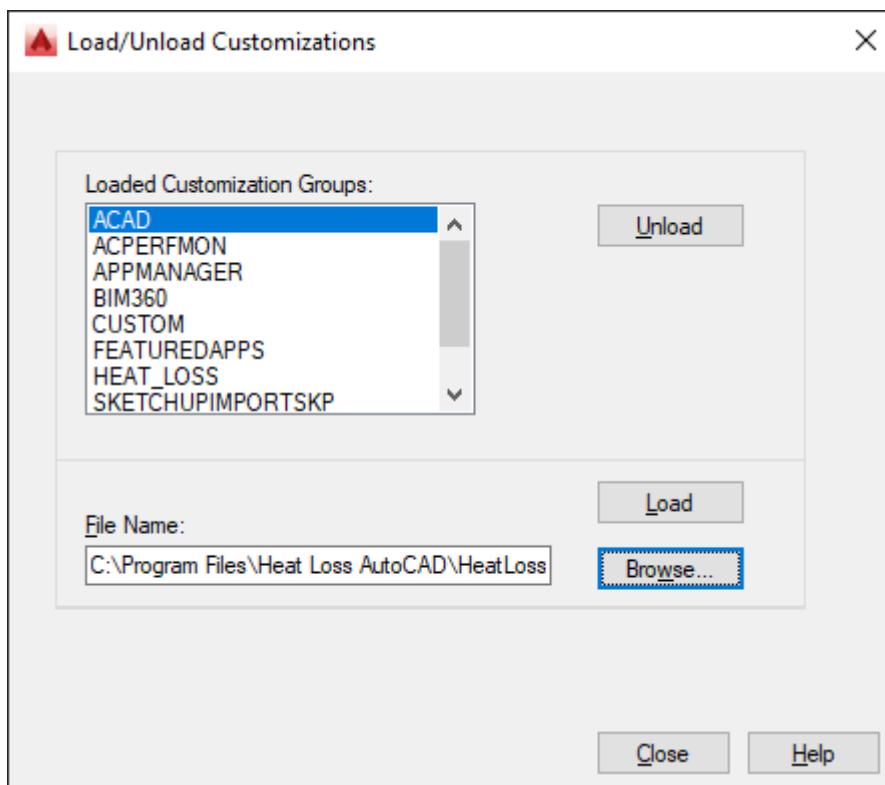
## 2. Heat Loss AutoCAD

Install Heat Loss AutoCAD having started the file [Heat\\_Loss\\_AutoCAD.exe](#).

## 3. Controls

Enter `_cuiload` in AutoCAD command line.

Download the file [HeatLossAutoCAD.cuix](#), it is located in the application installation folder (C:\Application Files\Heat Loss AutoCAD).



Ribbon tab and Heat Loss panel will appear in AutoCAD.

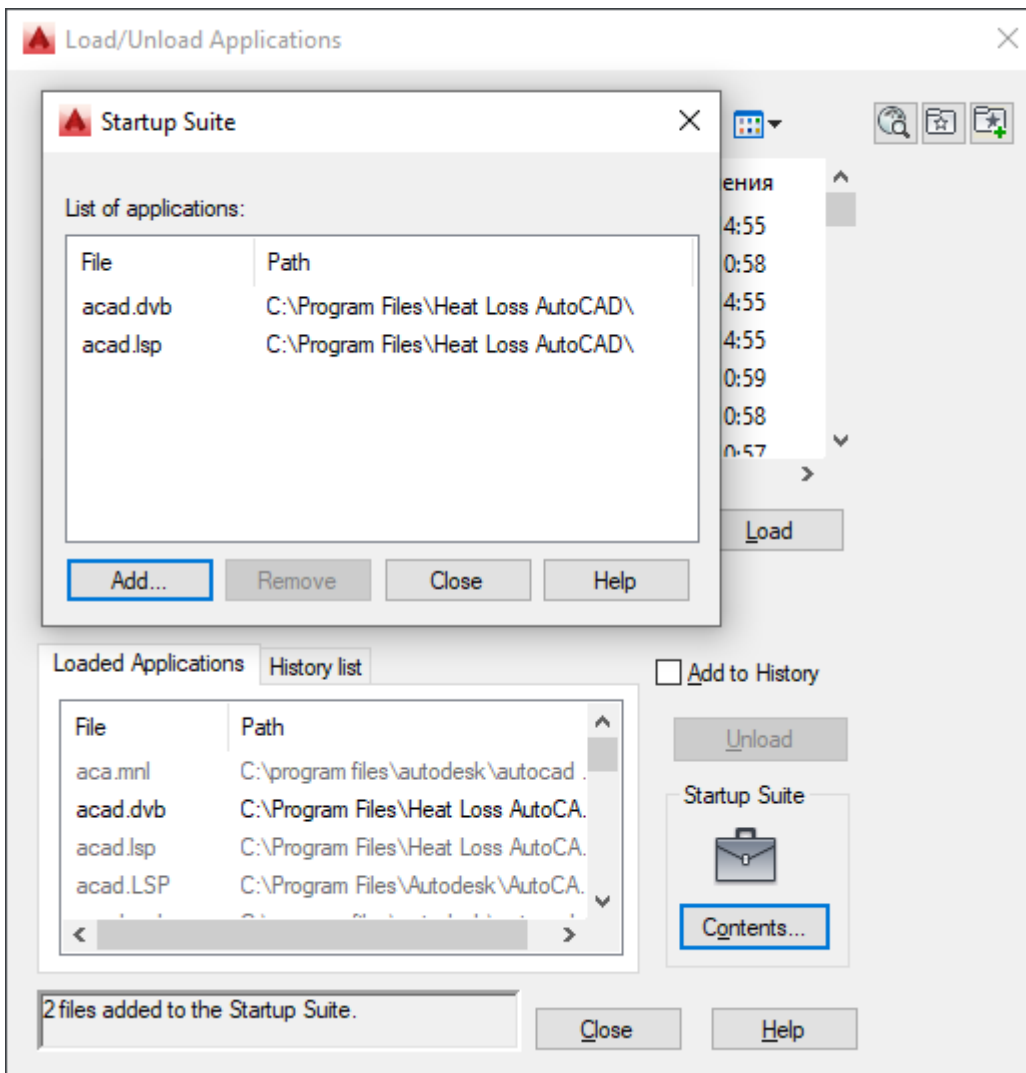


#### 4. VBA Project

Enter `_apload` in AutoCAD command line.

Download the files `acad.dvb` and `acad.lsp`, they are located in the application installation folder (C:\Application Files\Heat Loss AutoCAD).

Restart AutoCAD.




# Commands

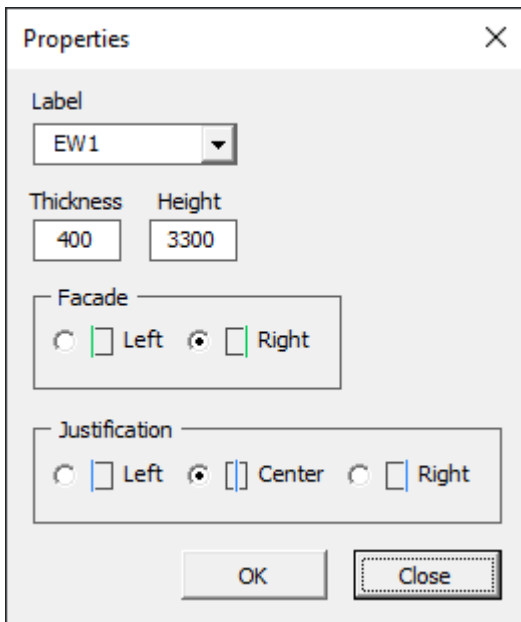
The envelope drawing commands have options, they can be opened through the context menu by clicking the right mouse button or entering the uppercase letter of the option in AutoCAD command line.

## External wall

To create the wall, it is necessary to indicate the start and end points.

Command options:


- **“Height”**. To enter the wall height value.
- **“Thickness”**. To enter the wall thickness value.
- **“Measure thickness”**. Allows to measure the wall thickness on the drawing, it is necessary to indicate the start and end points.
- **“Facade”**. Allows to indicate the location of the wall facade in relation to the drawing direction – **“Left”** or **“Right”**. The wall facade is indicated on the drawing by the symbol .
- **“Justification”**. Allows to indicate the axis of the wall in relation to the drawing direction – **“Left”**, **“Center”** or **“Right”**.
- **“Match properties”**. Allows to copy the properties of the wall drawn earlier.
- **“Properties”**. Opens the window of the envelope properties.

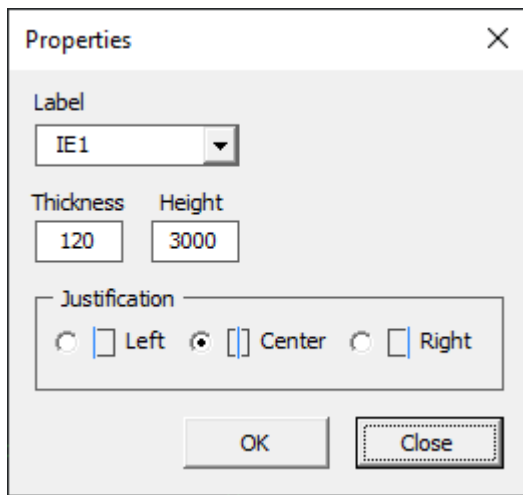


## Internal wall

To create the wall, it is necessary to indicate the start and end points.

Command options:

- **“Height”**. To enter the wall height value.
- **“Thickness”**. To enter the wall thickness value.
- **“Measure thickness”**. Allows to measure the wall thickness on the drawing, it is necessary to indicate the start and end points.
- **“Facade”**. Allows to indicate the location of the wall facade in relation to the drawing direction – **“Left”** or **“Right”**. The wall facade is indicated on the drawing by the symbol .
- **“Justification”**. Allows to indicate the axis of the wall in relation to the drawing direction – **“Left”**, **“Center”** or **“Right”**.
- **“Match properties”**. Allows to copy the properties of the wall drawn earlier.
- **“Properties”**. Opens the window of the envelope properties.




## Glass wall

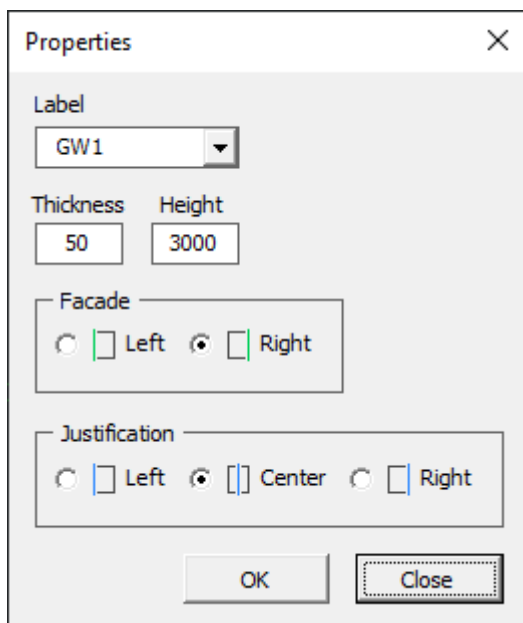
To create the wall, it is necessary to indicate the start and end points.

Command options:

- **“Height”**. To enter the wall height value.
- **“Thickness”**. To enter the wall thickness value.
- **“Measure thickness”**. Allows to measure the wall thickness on the drawing, it is necessary to indicate the start and end points.
- **“Facade”**. Allows to indicate the location of the wall facade in relation to the drawing direction – **“Left”** or **“Right”**.

The wall facade is indicated on the drawing by the symbol .

- **“Justification”**. Allows to indicate the axis of the wall in relation to the drawing direction – **“Left”**, **“Center”** or **“Right”**.
- **“Match properties”**. Allows to copy the properties of the wall drawn earlier.
- **“Properties”**. Opens the window of the envelope properties.



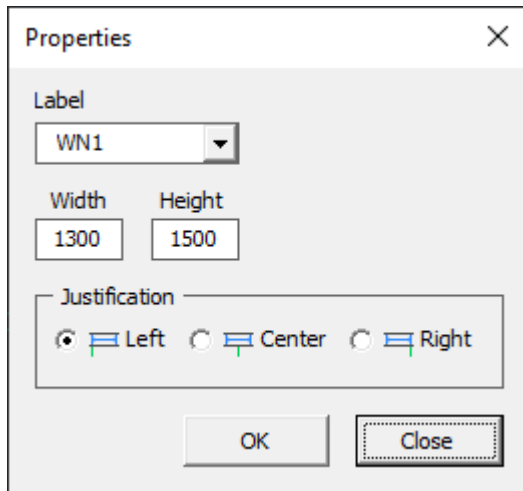
## Window

To create the window, it is necessary to select the wall and indicate the point of pasting.

Command options:

- **“Height”**. To enter the window height value.
- **“Width”**. To enter the window width value.

- **“Measure width”**. Allows to measure the window width on the drawing, it is necessary to indicate the start and end points.
- **“Justification”**. Allows to indicate the location of the point of pasting of the window across its width – **“Left”**, **“Center”** or **“Right”**.
- **“Match properties”**. Allows to copy the properties of the window drawn earlier.
- **“Properties”**. Opens the window of the envelope properties.

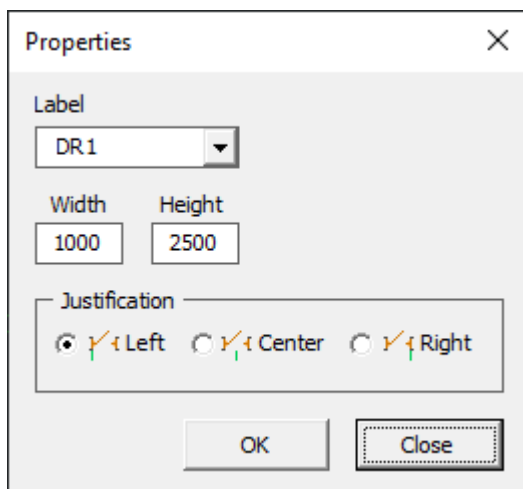


## Door

To create the door, it is necessary to select the wall and indicate the point of pasting.

Command options:

- **“Height”**. To enter the door height value.
- **“Width”**. To enter the door width value.
- **“Measure width”**. Allows to measure the door width on the drawing, it is necessary to indicate the start and end points.
- **“Justification”**. Allows to indicate the location of the point of pasting of the door across its width – **“Left”**, **“Center”** or **“Right”**.
- **“Match properties”**. Allows to copy the properties of the door drawn earlier.
- **“Properties”**. Opens the window of the envelope properties.



*Note:*

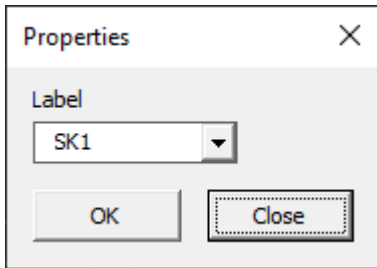
*Location of the point of pasting of the door in relation to the axis of the wall is the indicator of direction of the door leaf opening.*

## Skylight

To create the skylight, it is necessary to indicate the point of the first and second angle of the skylight.

Command options:

- “**Match properties**”. Allows to copy the properties of the skylight drawn earlier.
- “**Properties**”. Opens the window of the envelope properties.

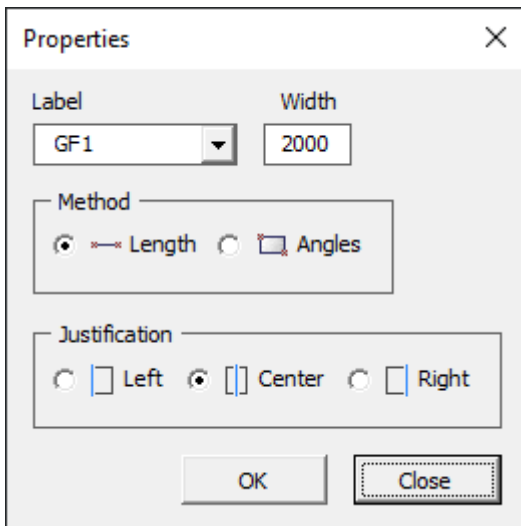


## Rectangular slab

To create the rectangular slab, it is necessary to indicate the angle points or start and end point of the slab.

Command options:

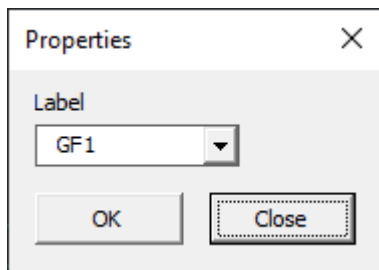
- “**Method**”. Allows to select one of two methods of the slab creation – “**Line**” or “**Angles**”.
- “**Match properties**”. Allows to copy the properties of the slab drawn earlier.
- “**Width**”. To enter the slab width value.
- “**Measure width**”. Allows to measure the slab width on the drawing, it is necessary to indicate the start and end points.
- “**Justification**”. Allows to indicate the axis of the slab in relation to the drawing direction – “**Left**”, “**Center**” or “**Right**”.
- “**Properties**”. Opens the window of the envelope properties.




## Polygonal slab

To create the polygonal slab, it is necessary to indicate the points of the slab peaks, the last point should match with the first one. The command has the following options:

- “**Connect**”. Connects the last point with the first one.
- “**Match properties**”. Allows to copy the properties of the slab drawn earlier.
- “**Properties**”. Opens the window of the envelope properties.

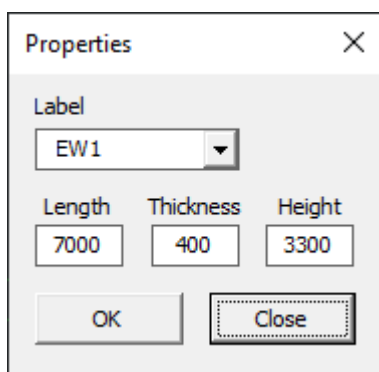


Note:

Applying the AutoCAD command “Mirror”  to the envelopes “External wall” and “Glass wall” is not allowed. Otherwise, determination of positioning of the envelopes will be performed incorrectly.

## Edit properties

To edit properties, select the necessary envelope.



Also, the envelope properties can be edited in the standard AutoCAD properties palette.

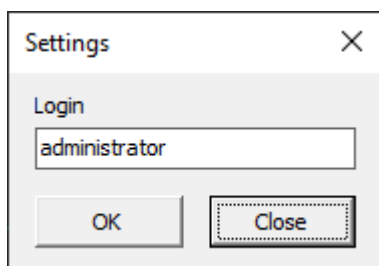
## Export envelopes

Allows exporting data of the envelopes to the room in the application in browser.

For exporting select the necessary envelopes and press Enter, at this time the page of the respective room should be opened in browser.

## Settings

It is necessary to indicate login of the account at [softvac.com](https://softvac.com) in the settings.



## Refresh envelopes list

In case of changing the envelopes list (set, indicators, colors) in the application in browser, this list can be refreshed in AutoCAD as well.

## Refresh envelopes color

Allows to refresh the color of envelopes as in the application in browser.  
For refreshing the color select the necessary envelopes and press Enter.