Masses

Add-in for Autodesk Revit for creating models of the visible shell of buildings and structures

Purpose of the add-in

Add-in Masses make simplified 3D model with only external buildings envelop. This tool is useful to produce analytical models for solar and external lighting applications, reduce time for fisheye camera shots and similar tasks.

Working with the add-in

The add-in panel looks like this:

The "Create model" button designed to create masses models.

The "Create model" button is active when any 3D model of the Revit project is the active view in the interface.

Before creating the model, a window opens in which the "grid step" is set. The grid step is to set the size of the grid of points that are the origin of the rays used to determine the outer shell of the buildings. The default value is 1 meter. The units of measurement are taken from the Revit project.

The lower the value of the "grid pitch" parameter, the more accurate the model will be built, but the time to create it will be longer.

The accuracy (the number of outgoing rays) is set in the configuration file "masses_cfg", which is located in the add-in installation folder in the line "Precision". Corresponds to the number of rays from the point (1 ray, 5 rays, 9 rays). The default value is 5.

The higher the value of the "Precision" parameter, the more accurate the model will be built, but its creation time will be longer.

After changing the "masses_cfg" file, you need to restart the Revit program.

The "Start" button starts the creation of a simplified three-dimensional model.

An example of a simplified three-dimensional model built:
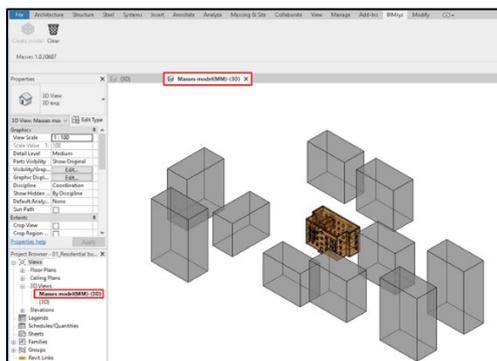
The "Clear" button It is designed to clean up the project from outdated masses models.

Before clicking the "Clear" button, it is necessary to delete outdated masses models in the Project Manager and click the "Clear" button.

After the "Clear" button is finished, an information window is displayed with a message about the number of deleted objects.

Installing the add-in

Run the distribution's exe file masses--XXXXX.exe , where XXX corresponds to the number of the current build of the program.

Launch the Autodesk Revit program. When you first start the program with the add-in, a window will appear in which you need to click the "Always download" button.

To use the "Masses" add-in, you must activate it by following the instructions in the activation window.

After installing and activating the add-in, the "Natomas" tab will appear in the Autodesk Revit program, with the "Masses" panel.

Removing the add-in

To remove the "Masses" add-in, you need to go to the "Control Panel"/"Uninstall or modify the program" application. Find the "Masses" add-in in the list, right-click on it and select the "Delete" context menu item.