K3-Cottage 7.4 - what's new.

Difference between the K3-Cottage 7.4 and its earlier versions

In the previous versions of **K3-Cottage** we focused on developing the functionality of the program. With the K3-Cottage 7.4 version we have successfully accomplished one more task - the work in program has become much more convenient for users. With the previous **"from action to object"** interface scheme the user had to look for the required command first and then indicated the object to apply the command to. Now we've introduced the new scheme **"from object to action**" where the number of required user actions has been significantly reduced. The user just indicates the scene object and the program automatically displays the list of commands applicable to the object at the moment. And the user just selects what he needs.
Those people who prefer the old manner can work as usual as the previous scheme still functions as well.

In order to speed up the working process we have also introduced the new **Additional Parameters Bar** which is the quick alternative to the traditional **Parameters** toolbar.

Two more log joint types has been introduced, these are the Canadian cut joint and the joint with dowel iteration. Two more types of joints have been added to log-and-board intersections. A lot of changes have been made to working with posts. Now you can make the required cuttings on both top and bottom ends of the post. The placement of the so-called free standing posts has been developed further. Now the top and the bottom points of the new a can be specified manually by using the mouse and the autosnapping.

Now, let us describe in detail all the new features one by one.

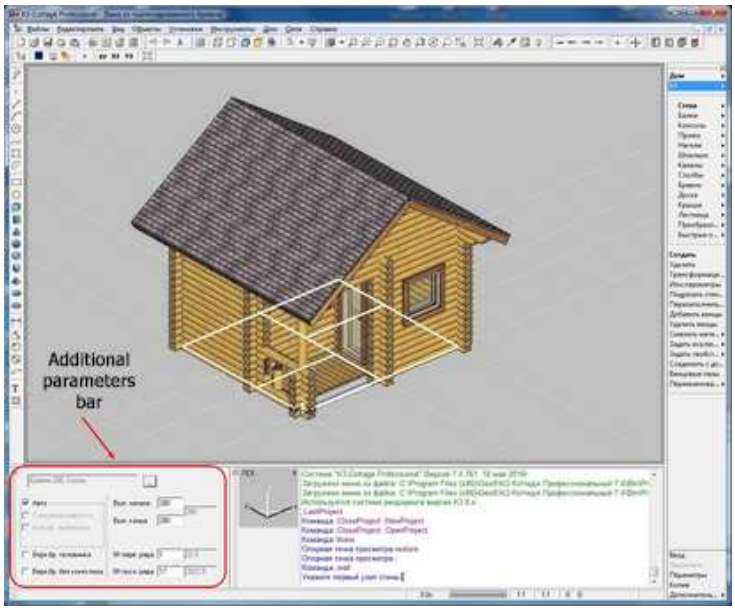
Working anew

The new way of working

In the previous versions of the K3-Cottage the user had to select the command first and then indicated the scene object to modify. Now you need to select the object and then the operation to be performed with it. To do, it right-click on the object. The context menu would pop-up. This menu comprises of commands used more often with this particular type of object. Select the required command. In case you don't find the required operation choose it from the traditional menu on the left side or from the toolbars on top.

The new toolbar

The **Additional Parameters Bar** is located in the bottom-left corner of the working field. It displays the parameters of the objects created or modified. This bar doesn't need to be called, but it shows up automatically every time when an object is created or modified and it is always at hand while working with the particular object.

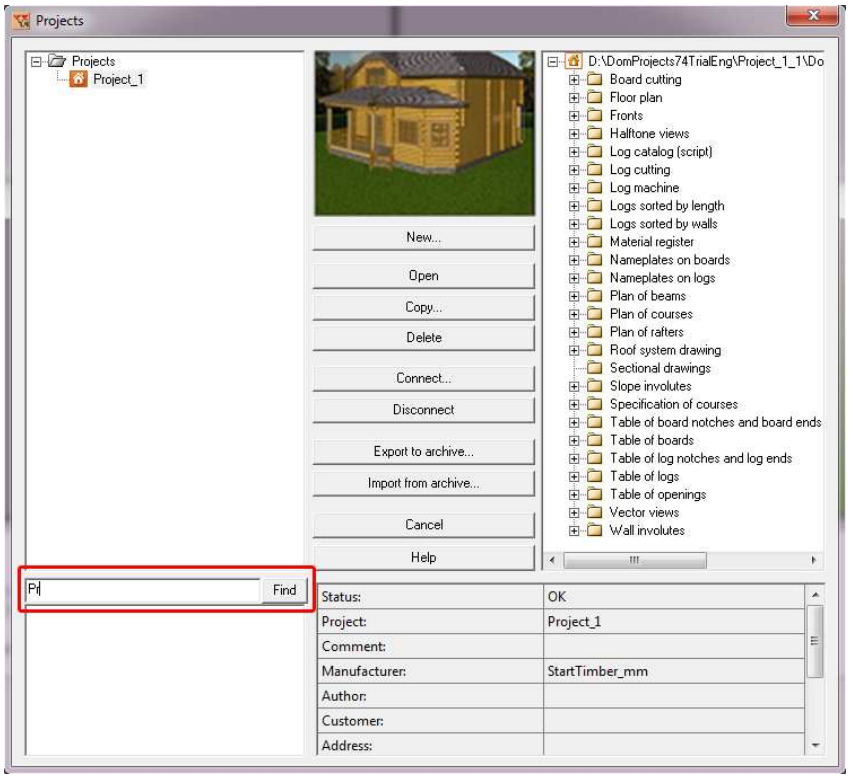


The new way of selecting the wall elements

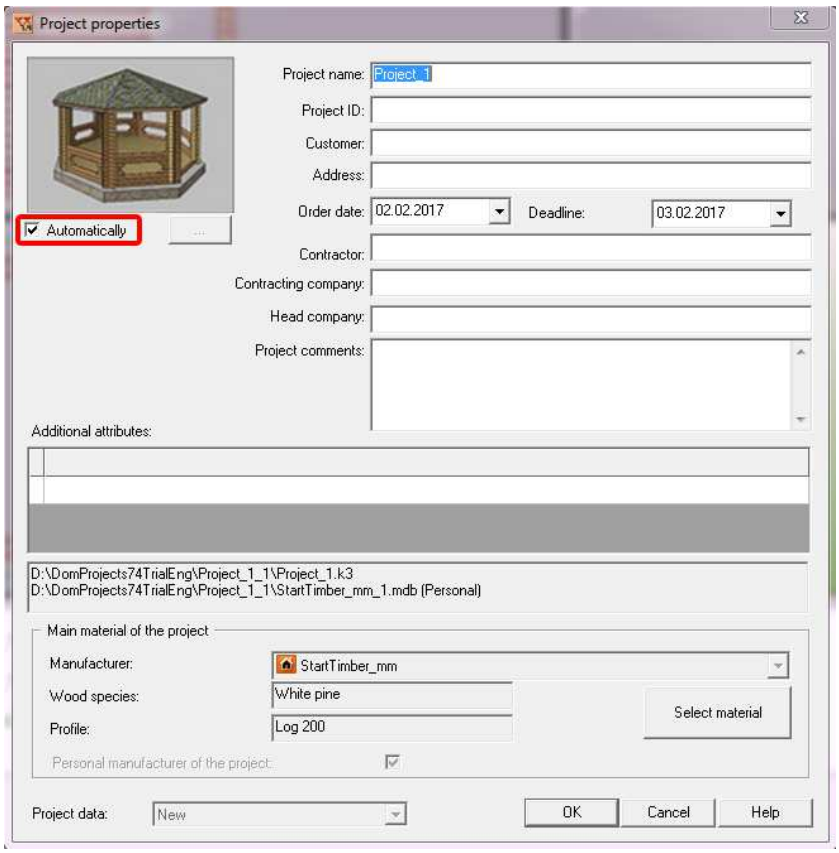
Now, when modifying, copying or deleting the wall elements (such as through bolts, treenails, openings and other) the designer may indicate the elements themselves without need to point on the wall to which they belong to. The wall is detected automatically by the very first selected object.

Project

1. The **Projects** card has gained the new search field. Now the specific project can be found in the base by inputting at least a part of its name in the field:



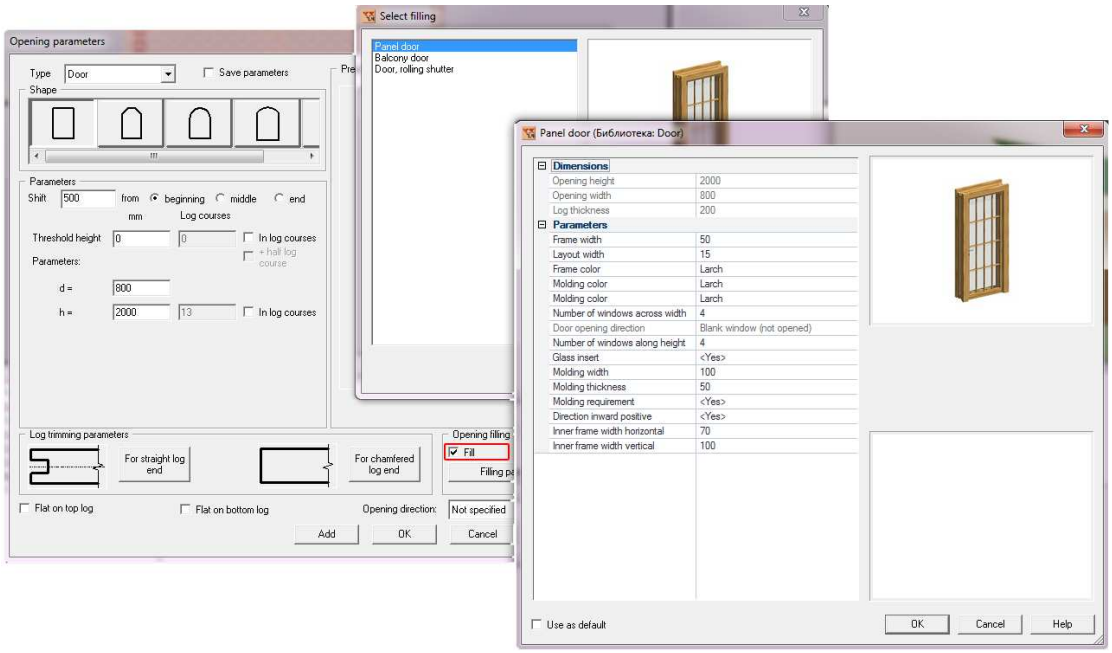
2. The picture for the project can now be created automatically at saving. In order to enable the picture of the project check the **Automatically** line in the upper left corner of the **Project Properties** card.



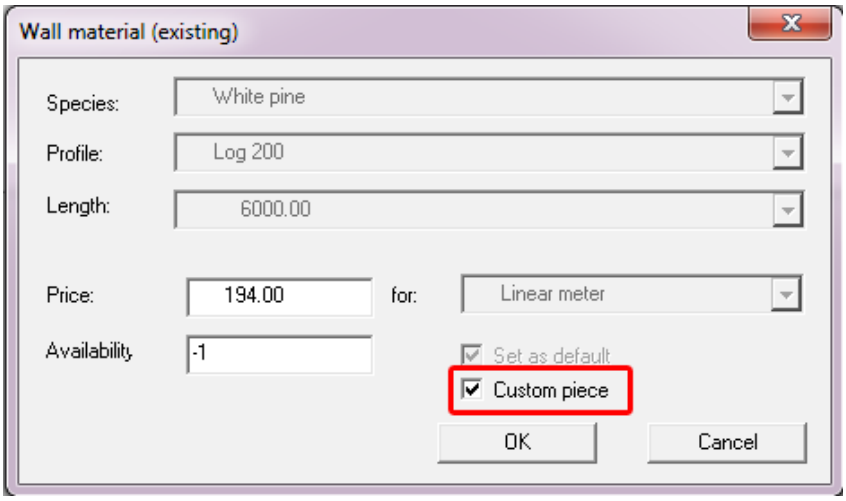
Manufacturer

1. Manufacturer is a special table where the section parameters, log lengths, wood species and many other production parameters can be specified. Since now in the **Sections** directory of the Manufacturer catalogue the system saves up to 5 decimal places when you set the section area manually:

2. The 7.4 version allows presetting the defaults for filling the openings. In order to do this, double click the required opening. The settings window for the opening will appear. Check the **Filling** line, select the filling for the opening and setup its parameters.



3. The new category of the 7.4 version - is the custom piece log. Any material can now be classified as a custom piece in the Wall material directory of the manufacturer table. The indicated material will further be used for cutting of long size details only. At cutout such oversized blanks should contain at least one log detail longer than maximum log length. The log length maximum value is set in the **House Parameters** window, **Material** bookmark, by the **Maximum log length** parameter.



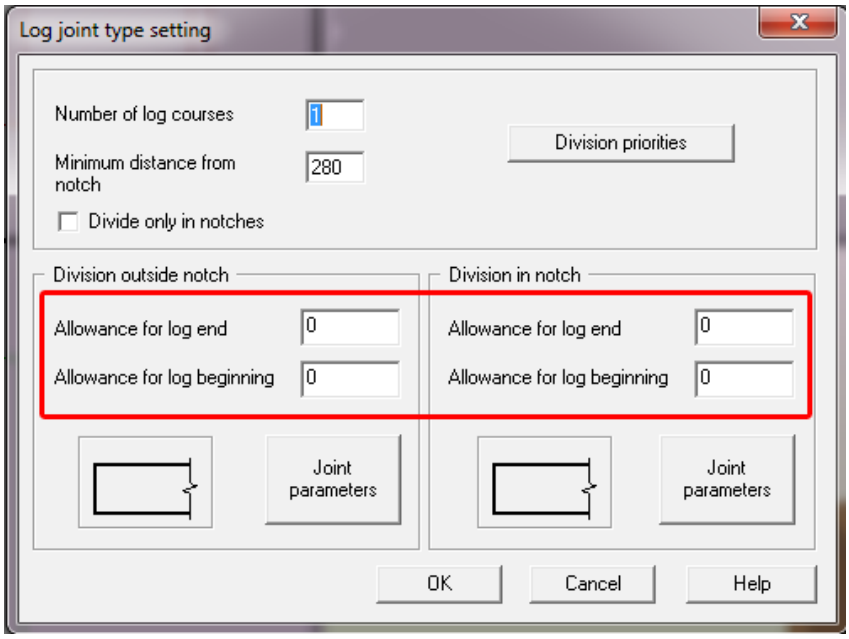
Logs

Partition of logs

The 7.4 version introduces the new type of log partition called the **Bricks Technology**. This type of log partition imitates the brick wall. The logs are divided to their longest rate and are shifted horizontally by half of their length. Such logs are depicted in green color. To enable this mode run the command **Log/Partition/Bricks technology.**

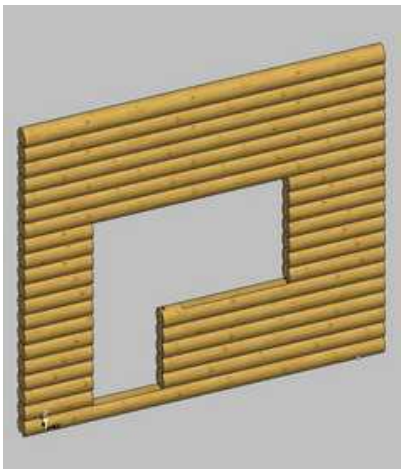
Long logs

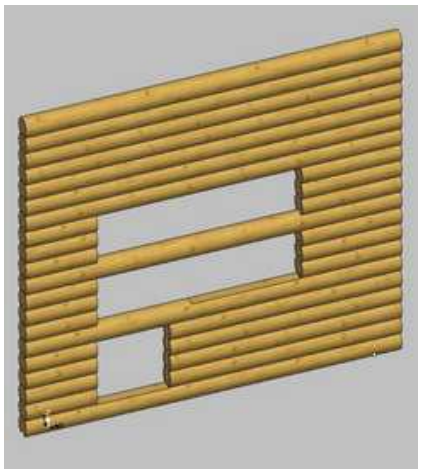
Now the long logs of the house are displayed according to the same rule as in the reports. A log is considered long when its overall length with allowances is longer than the log maximum length specified by the **Maximum log length** parameter in the **House Parameters** window. Such logs are depicted in green color.



Mounting logs

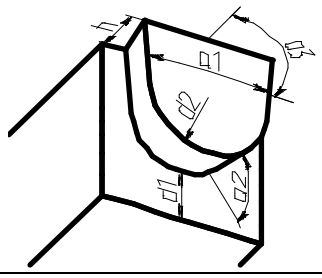
The mounting logs now can be put to several adjacent openings at a time (see the pictures). This operation is performed in manual mode. “Adjacent openings” are the openings, that don’t have any parts of walls between them. The space separating the openings should be shorter than the preset minimal length of log. When added to adjacent openings the mounting log is put to the resulting opening whole width.





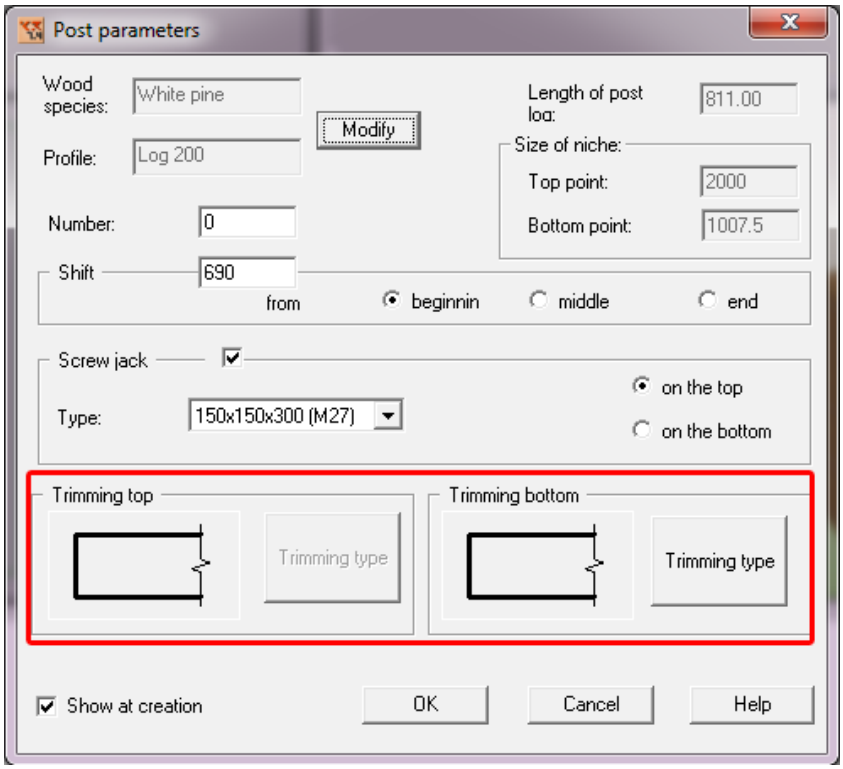
Log end cuttings

One more log end cutting added:

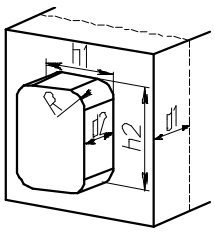
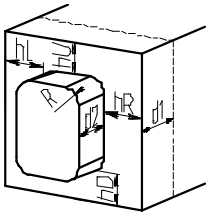
Shortened dovetail	

Posts

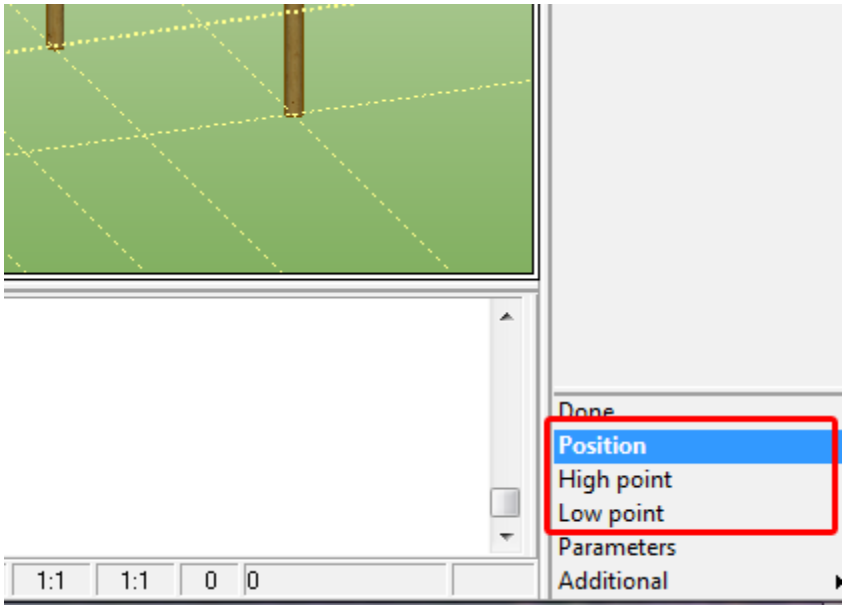
1. Cuttings for both ends of the posts have been added in 7.4 version:



2. Two new post cuttings appeared:

	**rounded tenon**
	**tenon with setback on four sides**

3. Now the upper and the lower points of the free post can be specified not only in the card, but also manually by using the mouse, or by the keyboard input in the dialogue window. In order to provide this, the new options to the free post creation context menu has been added:

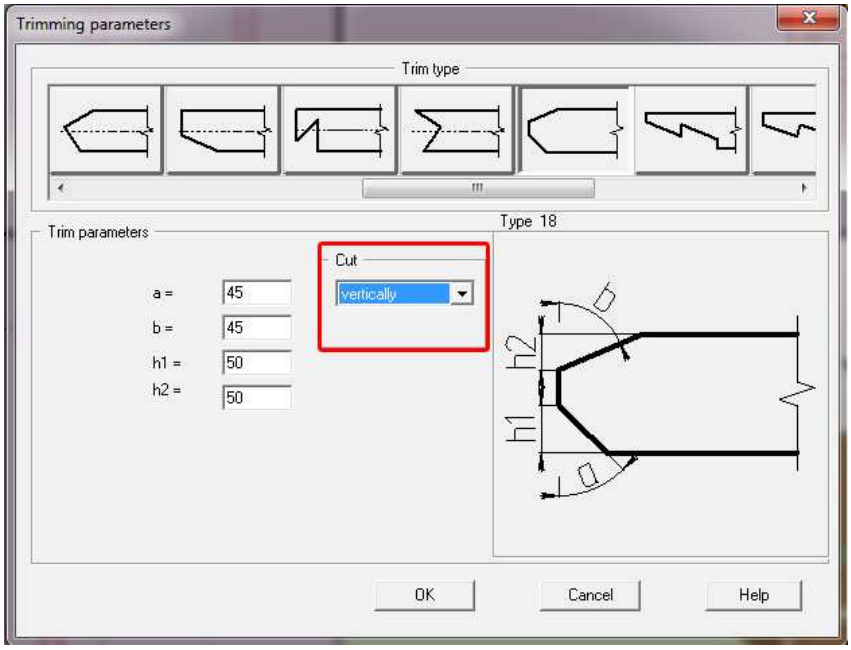


The upper and the lower points of the post can be specified by using snaps.

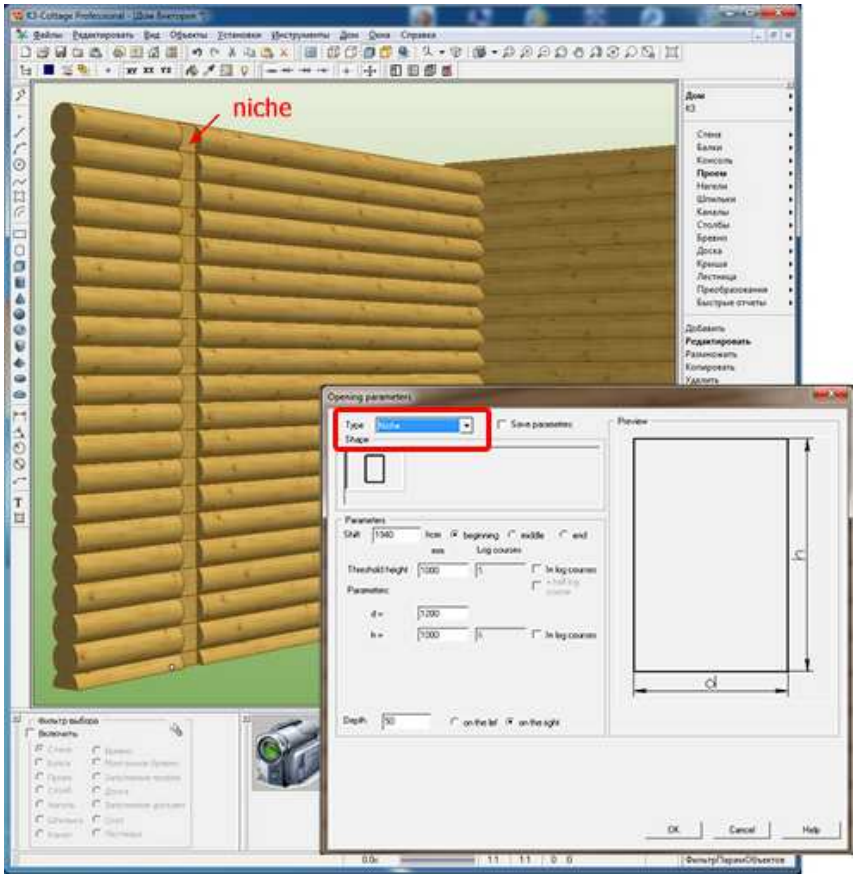
4. The allowance for the screw jack (set in the Manufacturer section - **Add** parameter) is now displayed in the drawings by a hatched rectangle ending the post.

Openings

Some new special board and log cutting parameters have been added allowing to choose between vertical and horizontal cut.



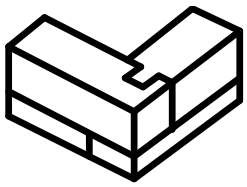
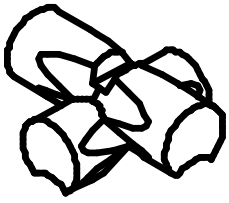
Niche – is the new additional type of opening. It represents an arbitrary indent in the wall not running completely through it.



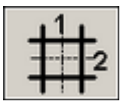
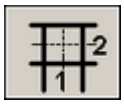
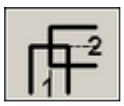
Joints

Log joints (notches)

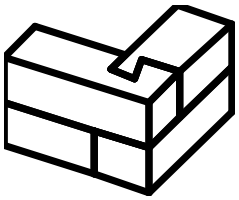
1. Two new joints have been added to the **Table of log joints**:

	**Type 13**: dowel alternation. Notch parameters can be specified. **Used for:** walls (beams) with intersection type No.3, No.4 и No.5 (see the table below) **Log types**: log, square log, Swedish cope square log **Notch essential conditions:** – Logs of intersecting walls coincide by section height – Courses of intersecting walls coincide
	**Type 14**: *Scandinavian notch*. Notch parameters can be specified. **Used for:** walls (beams) with intersection type No.1 (see the table below), except for beams with free position **Log types**: log, Swedish cope square log **Notch essential conditions:** – Logs of intersecting walls coincide by section height – Courses of intersecting walls shift by half log

For your reference the **Table of log joints** is given below**:**

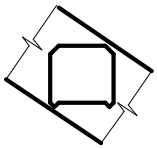
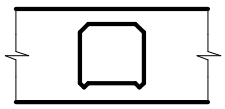
	**Type 1**: **crossing** Logs **1** and **2** cross each other all the way through.
	**Type 2**: **overlap** Log end of log **1** is inside log **2** and overlaps its axis.
	Type 3: **T-shape** Logs **1** and **2** don't cross each other all the way through. Log end of log **1** is inside log **2** and does not reach its axis or overlaps its axis.
	Type 4: **angle shape** Logs **1** and **2** don't cross each other all the way through. Log end of log **1** is inside log **2** and does not reach its axis or overlaps its axis. Log end of log **2** is inside log **1** and overlaps its axis.
	**Type 5**: **knot** Logs **1** and **2** don't cross each other all the way through. Log end of log **1** does not reach axis of log **2** or overlaps its axis. Log end of log **2** does not reach axis of log **1** or overlaps its axis
	Type 6: **corner** Logs **1** and **2** don't cross each other all the way through. Log ends of logs **1** and **2** are inside each other and overlap the axes.
	Type 7: **junction** Logs **1** and **2** do not cross.

2. Since now the joint Type 7 is eligible not only for straight angles but for obtuse angles too. See the details of the joint Type 7 below:

	**Type 7**: bond with root tongue. Notch parameters should be set. Notch is cut only if values of all its parameters are higher than zero. **Used for:** walls and beams of square logs. **Notch essential conditions:** – Materials of crossing walls (beams) coincide by profile height. – In case of walls (beams) with shift of log courses the notches are cut in only one wall. – In case of walls (beams) without shift of log courses the notches are cut in each crossing walls (beam) in succession.

Log-and-board joints

Two new types of intersections have been added to the **Table of connections of logs with boards**:

	**Inclined board**. The board crosses the log at an angle and completely overlaps the log section area.
	**Horizontal Board**. The board crosses the log horizontally and completely overlaps the log section area.

In both cases, there are two options for log-and-board connection:

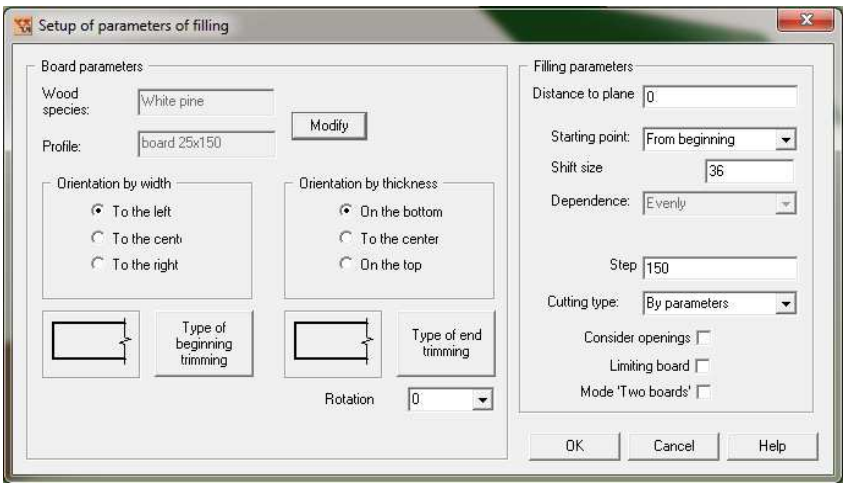
- without joint
- the log is cut apart considering the board width

Slopes

Now the slopes can be enumerated manually. To do it click ***Roof/Renumber slopes***.

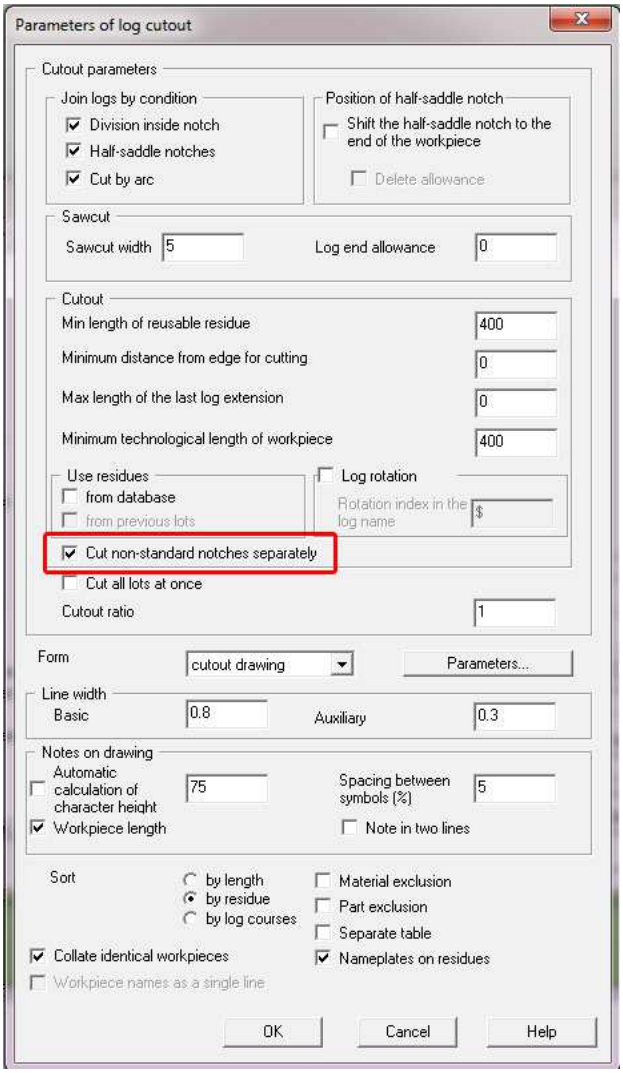
Boards

In K3-Cottage 7.4 you can edit any kind of filling with the boards. Now, whether a group of rafter boards, lathing of simply a group of boards, can be edited the whole group at once with no need to do it one by one. To perform this, simply choose ***House/Board/Edit Filling***, select the filling and specify the parameters in the card:

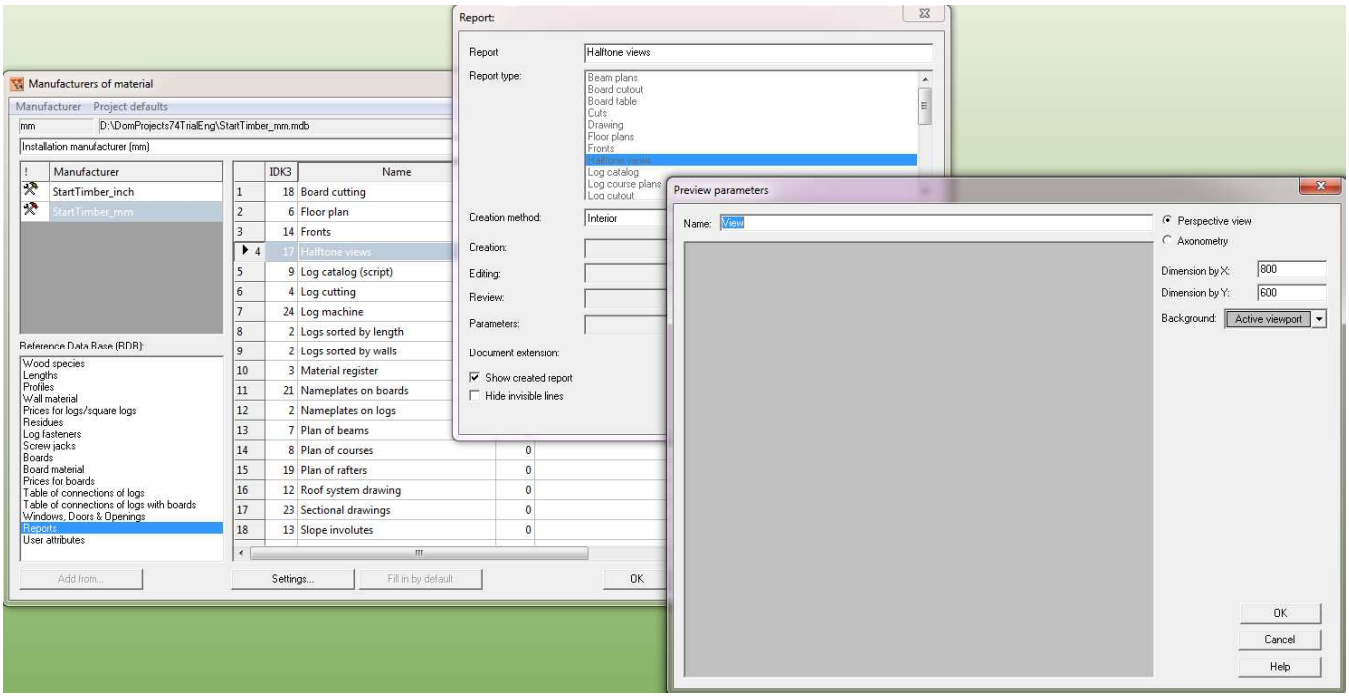


Reports

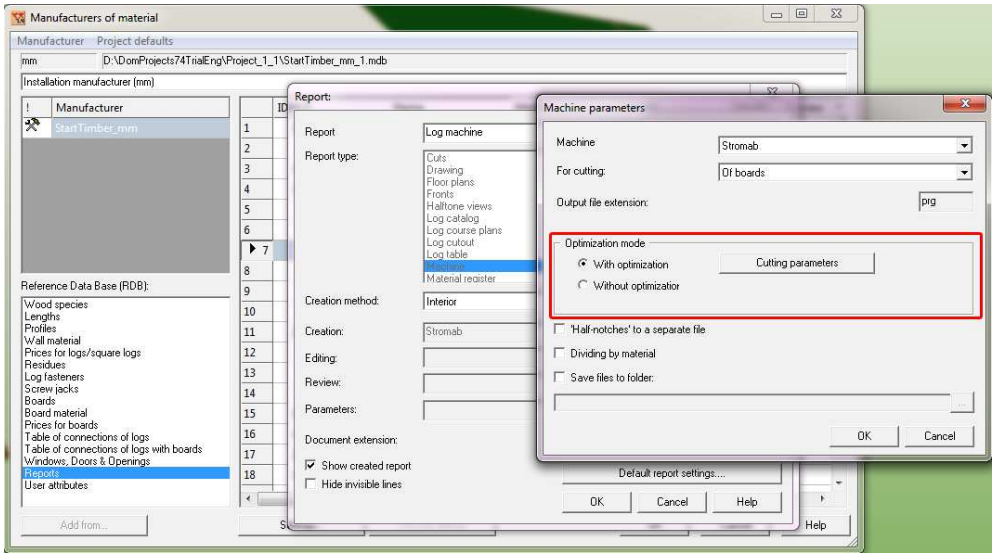
1. Automatic placement of notes and dimensions on drawings has been improved further. Drawing notes don't overlap each other anymore.
2. The **Log cutting** report has got the new parameter **Cut non-standard notches separately**. The parameter enables the mode where all project details containing at least one non-standard notch are cut separately and fall into a special table.



3. **Halftone views** report. Now when saving this report in the manufacturer catalogue the designer can set its default parameters. The card with parameters appears when the registration card is correctly filled in:



4. **CNC machine** report. At the stage of saving of this report in the manufacturer catalogue the optimization mode can be selected. With the **Optimization** mode enabled the cutting tables are formed together with the report and can be viewed right away. Cutting parameters are set by clicking the corresponding **Cutting parameters** button.

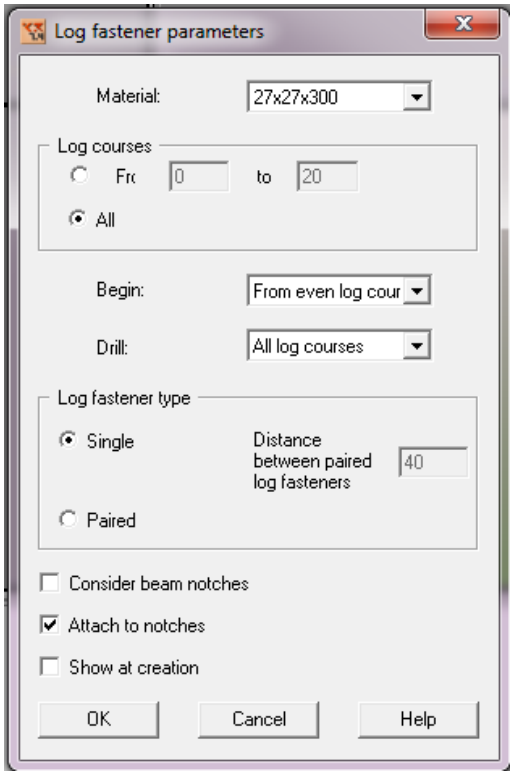


Extension from file

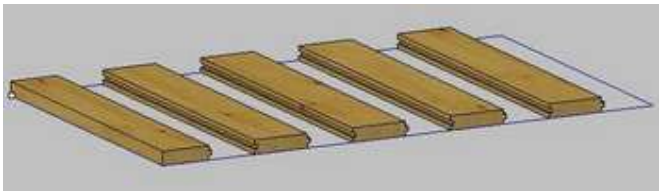
The all new command **Files/Add** gives an opportunity to add one project into another. Such function makes it possible to gather a group of houses and objects in one project and to see how the designed house would look surrounded by the other buildings.

Such imported projects doesn't affect the reports and cannot be modified by using the commands from **House** menu.

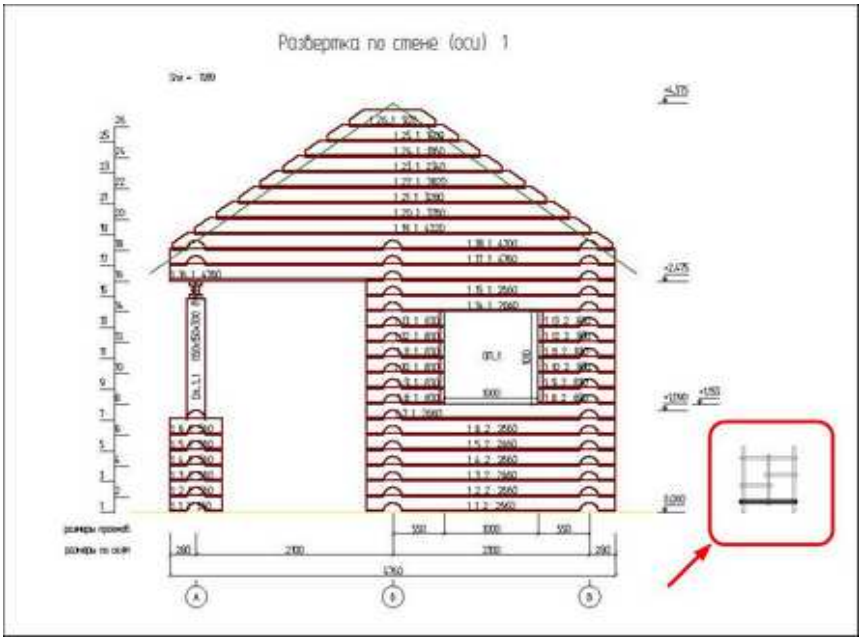
1. The log fastener (through bolt, channel) parameter card has got the new parameter **Attach to notches**. It allows placement of fasteners, through bolts or channels into center of a notch. In the drawings the hole from such a through bolt will appear only in the log into which the through bolt has been added. All the logs of the other crossing wall would be left without drillings.



2. In K3-Cottage 7.4 when running the command House/Board/Filling/Create the system automatically verifies the step of filling with boards to prevent their interpenetration/overlapping. The step of filling with boards cannot be smaller than the board width and is automatically enlarged to avoid interpenetration.



3. The multiediting of openings command now checks for coincidence of identical openings in a wall. If some of the openings of the wall are completely the same, the system leaves only one of them.
4. In the current version the designer can add the floor plan scheme to the **Wall involutes** report. The position of the wall from the involute would be depicted in such floor plan. This option is regulated by the **Position on the plan** parameter.

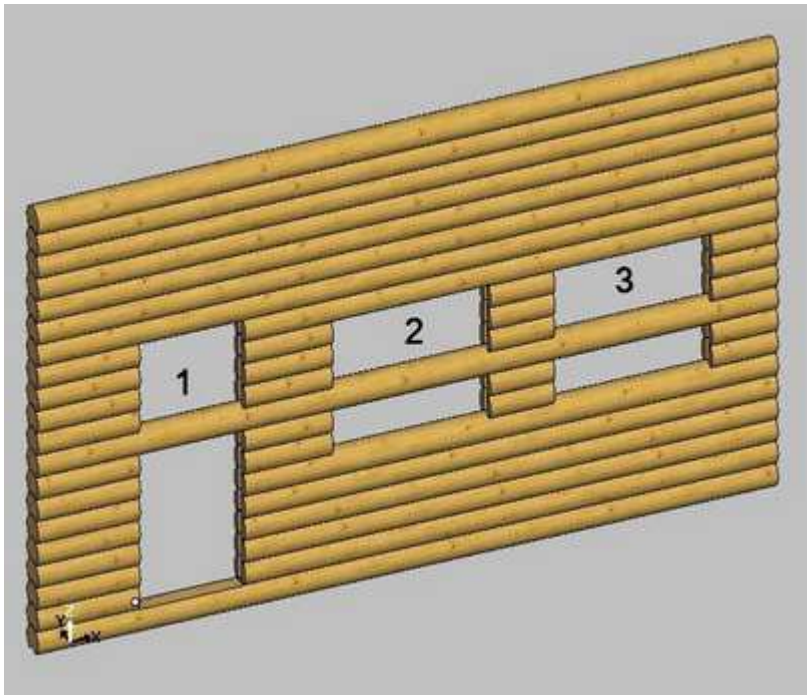


Corrections

1. At the project saving the standard and the compensatory grooves property settings are saved correctly.

Attention! Starting from the current update Standard and Compensatory grooves are assigned automatically to the project main material when project opened for the first time. All the previously created projects would have these grooves enabled at the first run in the K3-Cottage 7.4. Verify the groove properties and uncheck the unnecessary grooves to continue the correct work on your projects.

2. The deleting of the mounting logs belonging to several openings of one wall has been improved. Now the system deletes the exact indicated log although in the previous versions the leftmost mounting log was deleted, regardless the designer's choice.


1
2
3