SOLERA | in4mo

USER GUIDE
Floorplanner

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Overview

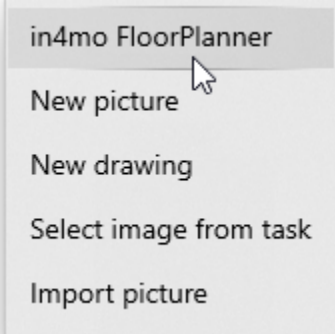
in4mo FloorPlanner is a drawing tool for sketching floor plans, which co-exists with the previous drawing tool. in4mo FloorPlanner is a feature that is available in inspection reports and is therefore available only on tablets and in the Windows app which is also available on PC.

By using the FloorPlanner, the illustrations of the floor plans will be more accurate and better displayed. The drawings will be done to scale, and measures can also be used in in4mo Cost Calculation (iCC). Possibilities to add windows and doors enables automatic calculations of both total wall area as well as actual area.

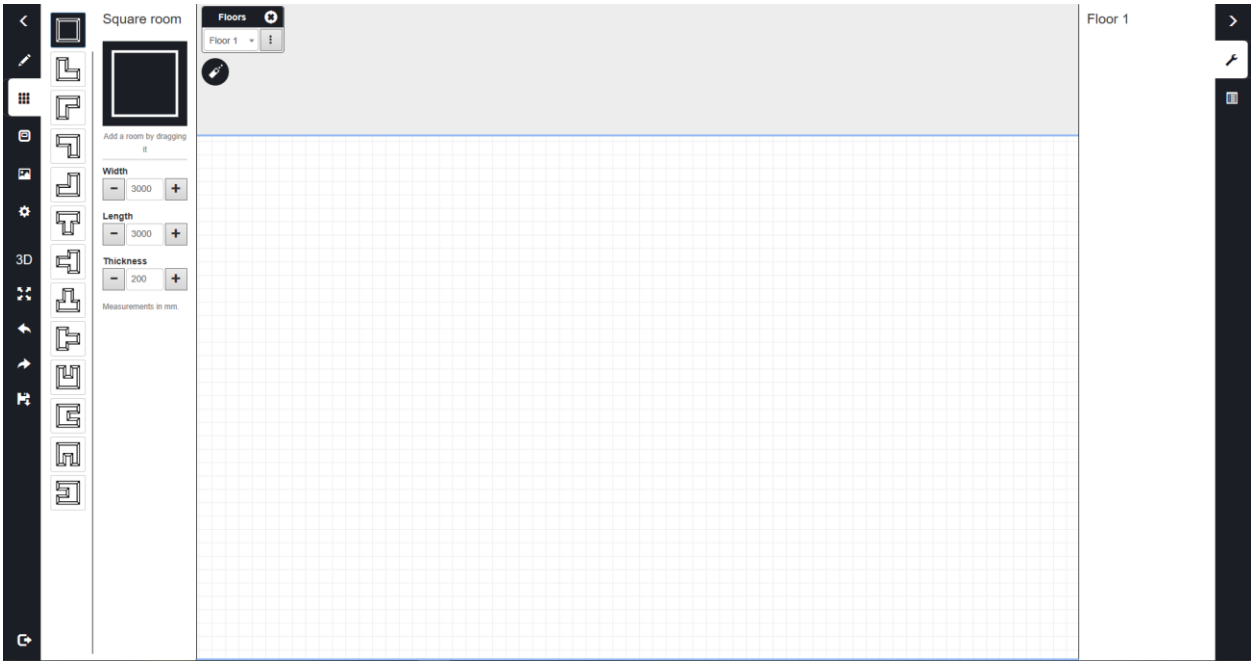
In this guide we will go through the different options in the in4mo FloorPlanner. This is a mere representation of the functionalities, not a standalone example of a good floor plan. The screenshots in this document are taken on a Windows device, but the tool works the same way on devices running Android or iOS (Apple devices), even if colours might deviate a bit in places.

How to use FloorPlanner

To use FloorPlanner, you must first open a report, then scroll to either the “Floor plan” section of the report, or to “Attachments” at the bottom. Press the empty field, then select “in4mo FloorPlanner”.



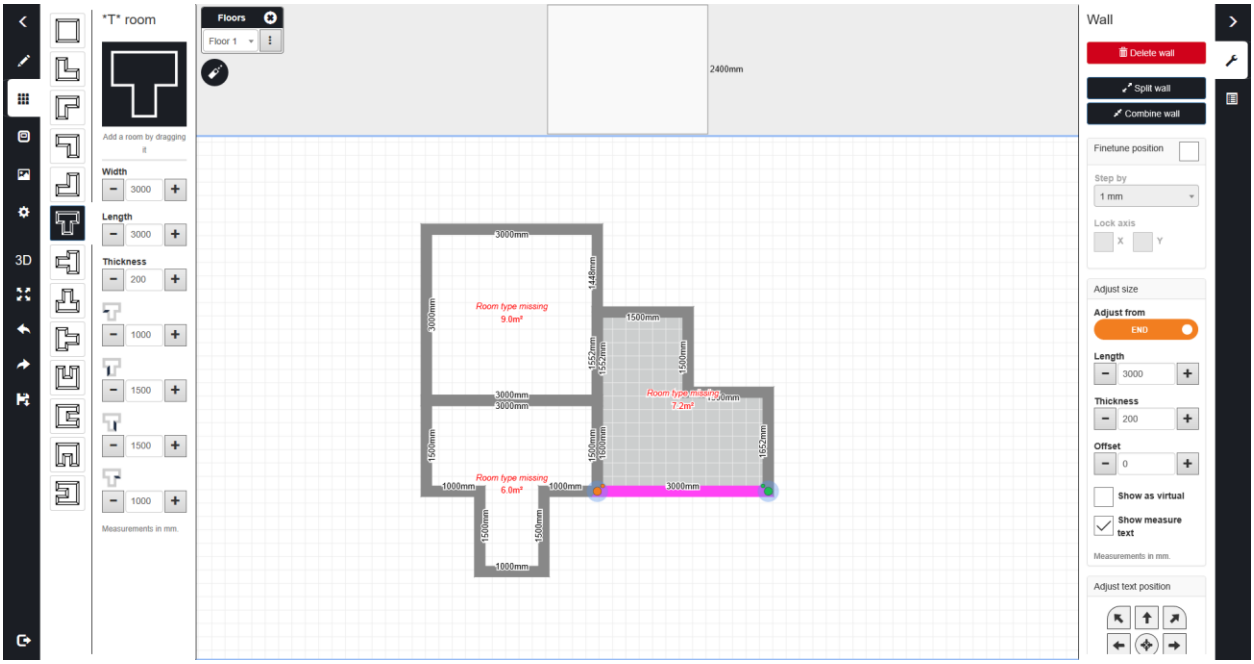
When you press in4mo FloorPlanner the following window opens.



There are several predefined room types in the default view, under the third icon. You select the room you want by pressing it, you can then change the dimensions of the room before you add it to the floor plan.

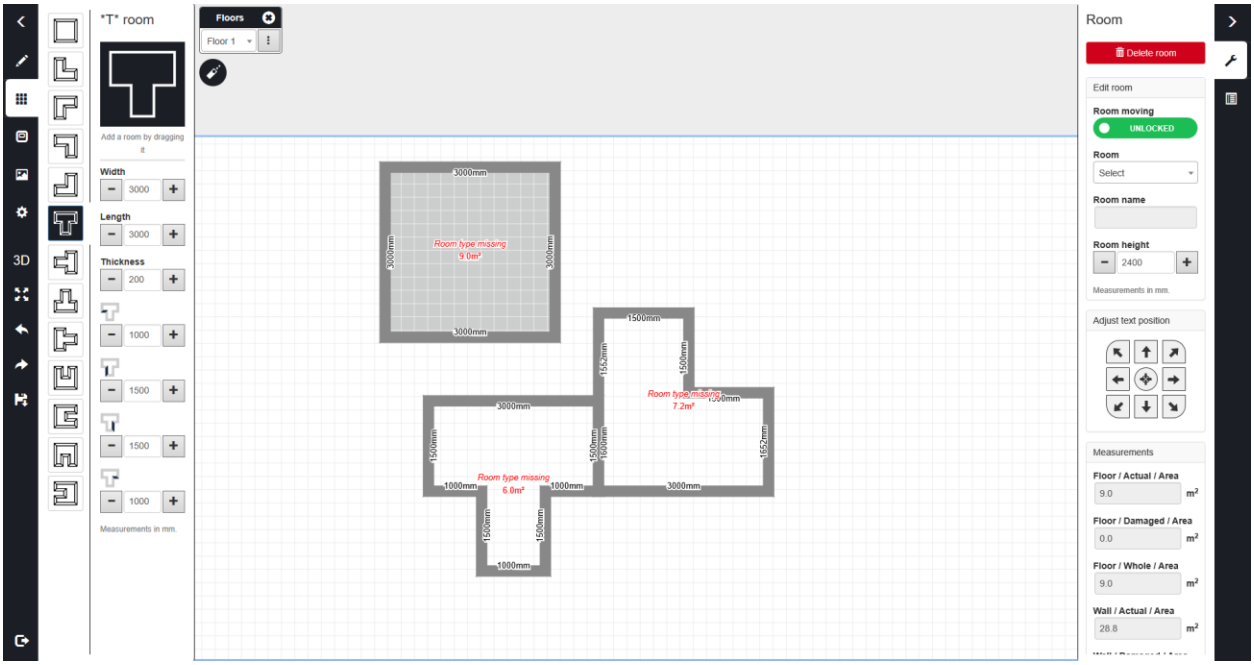
You add it by dragging it into the white area of the floor plan. You can change the dimensions of the room at any point, by selecting a wall and dragging it or by changing the measures on the right-hand side. Dimensions can also be changed using a Bluetooth measuring device. This is described in more detail later in this guide.

Selecting a wall will also let you delete it.

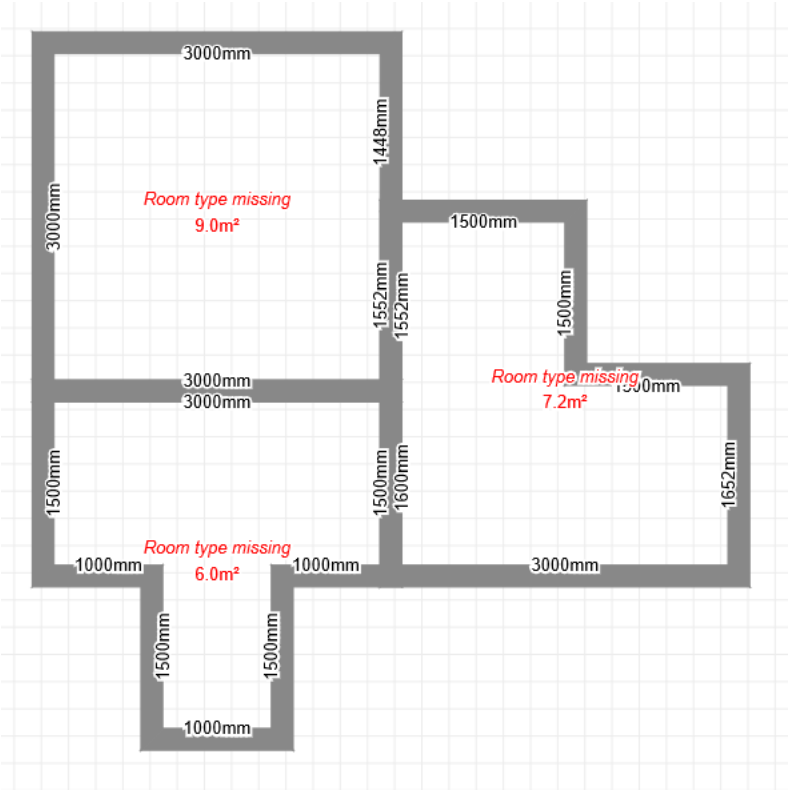


If you wish to delete an entire room, simply press it and choose *Delete room* on the right.

A room can also be dragged to another location if needed. In order to do that the room needs to be selected and then unlocked. This is done by selecting *Unlocked* under *Room* (*Room moving*) on the right-hand side. A small padlock icon in the room indicates that the room is locked and cannot be moved. Locking one room will automatically lock the adjoining rooms as well. You can also adjust the height of the room here, by selecting the room and then adjusting on the right-hand side menu.



In cases where in4mo Cost Calculation (iCC) is in use, the text *Room type missing* will be displayed in each of the room(s) as shown in the image below. While this text is displayed in one or more rooms, you will not be able to save the floorplan before all rooms have a room type defined.



This means that a room type should be defined for the room measures to be usable in iCC. Room type is defined by pressing the room and selecting a room type from the *Room type* dropdown menu on the right. If a room type is already in use and needs to be added to some other room(s) as well (if there are e.g. several toilets) the other room(s) should be named.

Note that changes to the room dimensions will remove the room type so it's recommended that room types be defined only after the room shapes and measures have been finalized, otherwise the room types must be defined again.

After the rooms have been created, you have the basic structure of the floor plan after which you can start adding additional walls if needed, measurement lines, mark the damage, name the rooms, add household appliances, doors, windows and other icons.

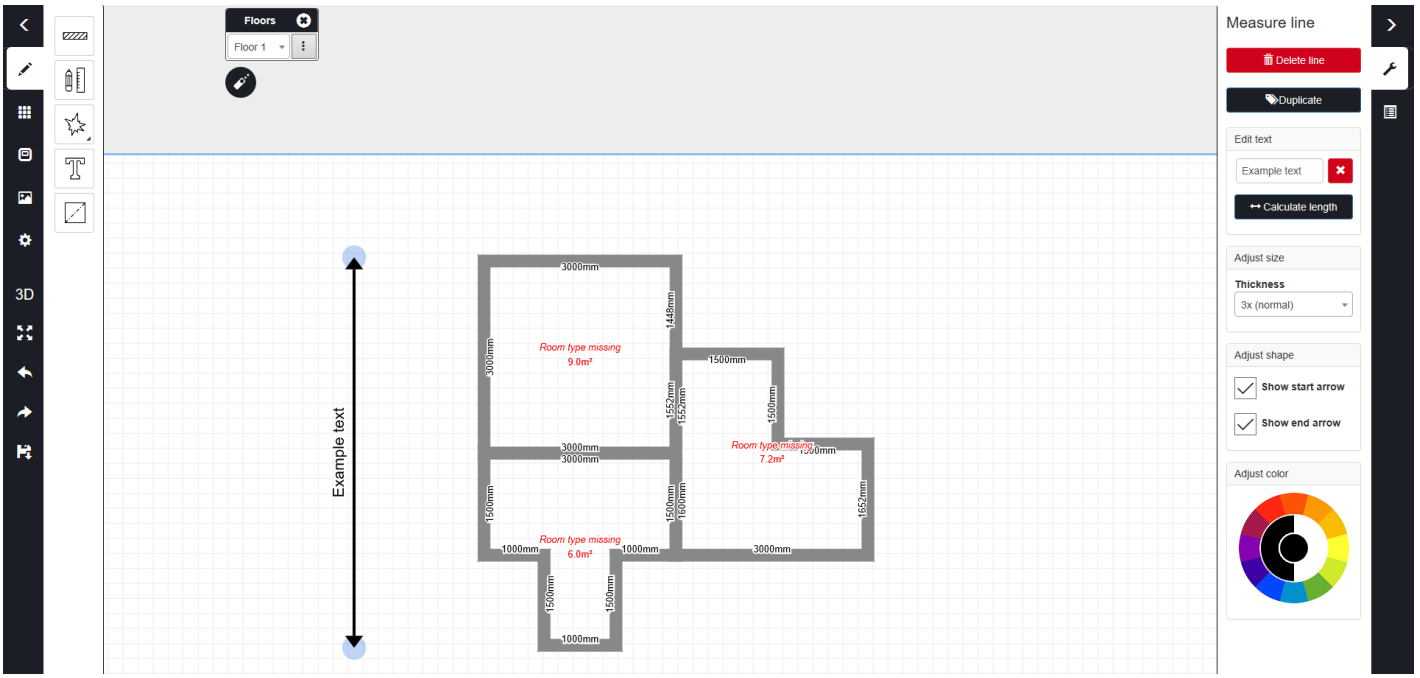
In this example, we start from the top.

Pressing this icon, the menu of the left disappears, and you can examine your floor plan in more detail. To open the menu again, press the arrow again.

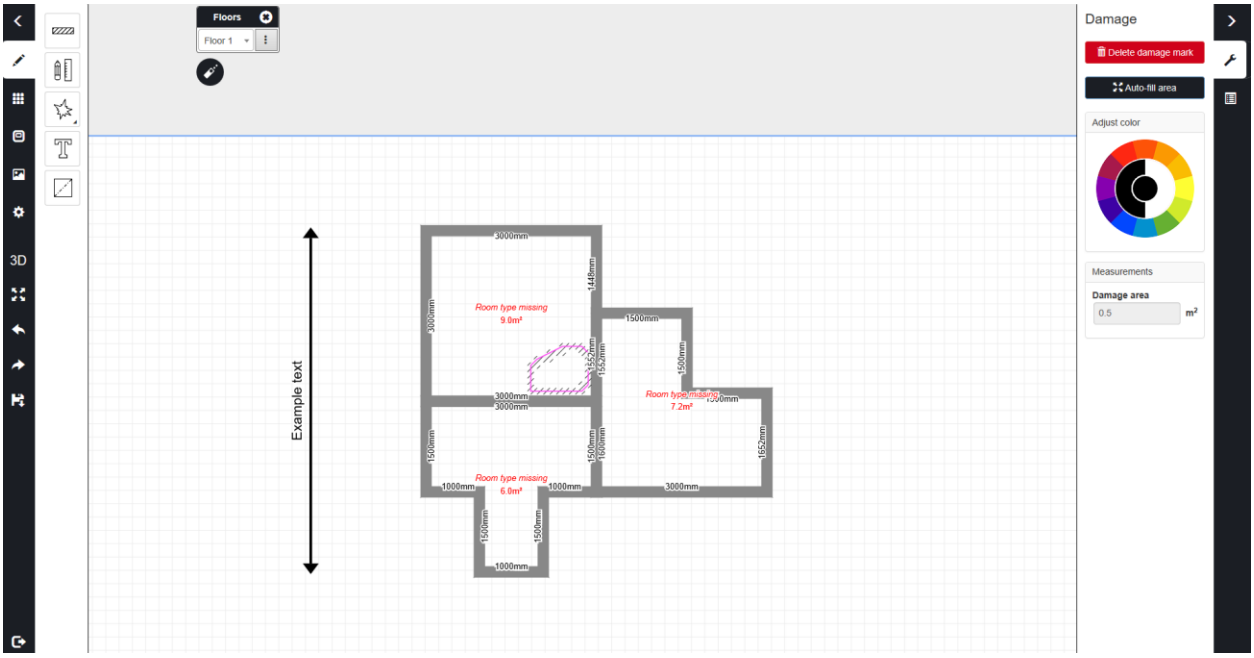
With the second icon on the list you can draw walls, add measurements, mark the damage and write text.

The walls are drawn, and measurements changed in the first section. By pressing the first icon you can manually create walls directly by dragging your finger in the white area.

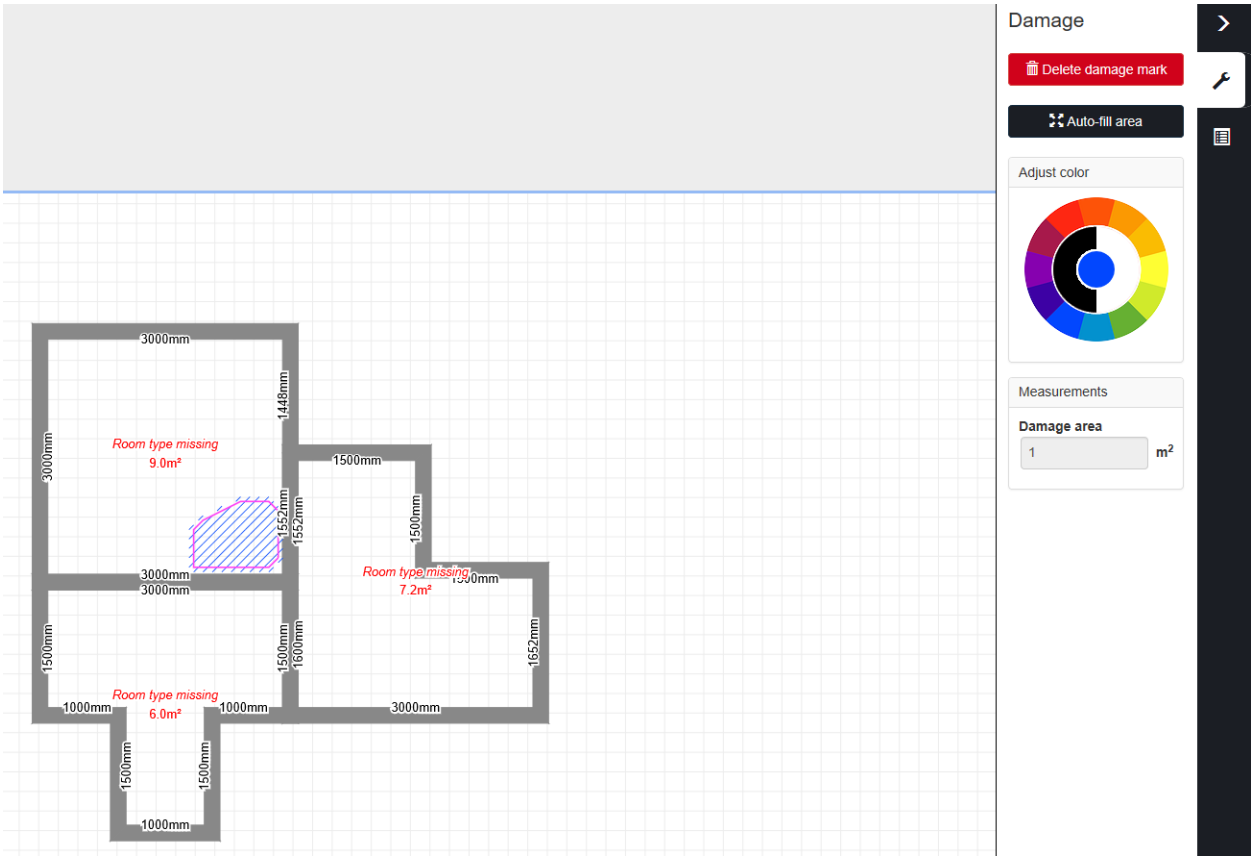
The second icon gives you the possibility to draw arrows with or without text. The size, colour and style of the arrow can be adjusted per own needs. Pressing *Calculate length* will replace the text with the length of the line.



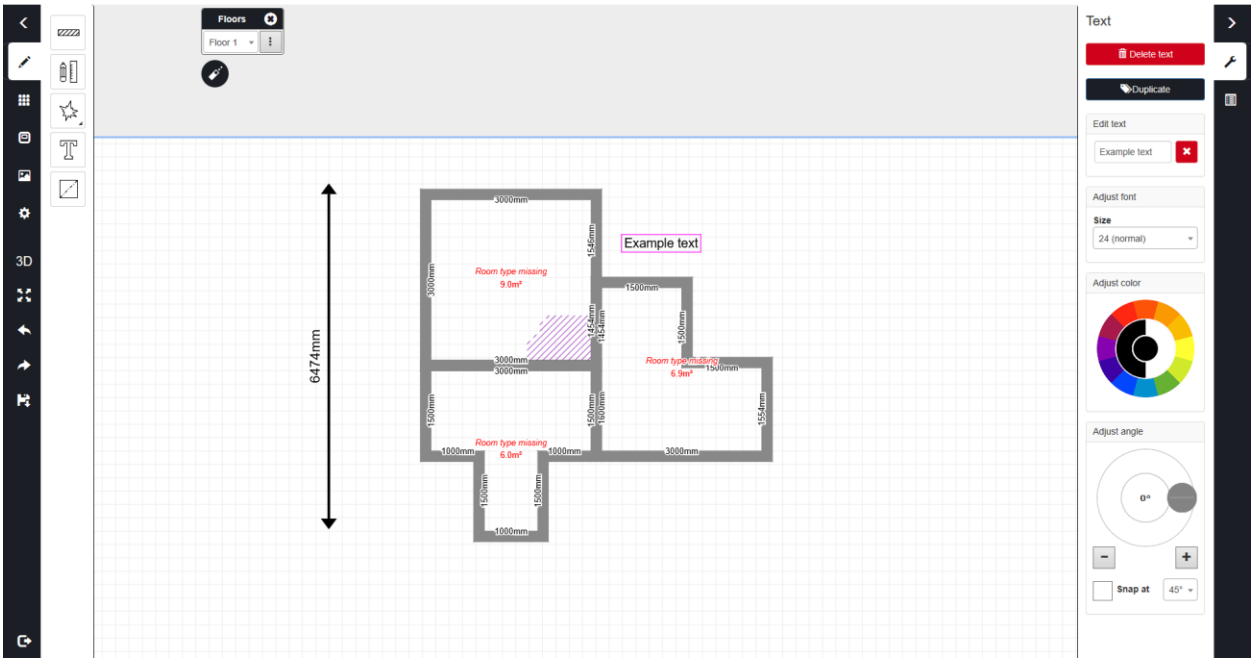
The third icon lets you mark the damage and adjust the colour of it.



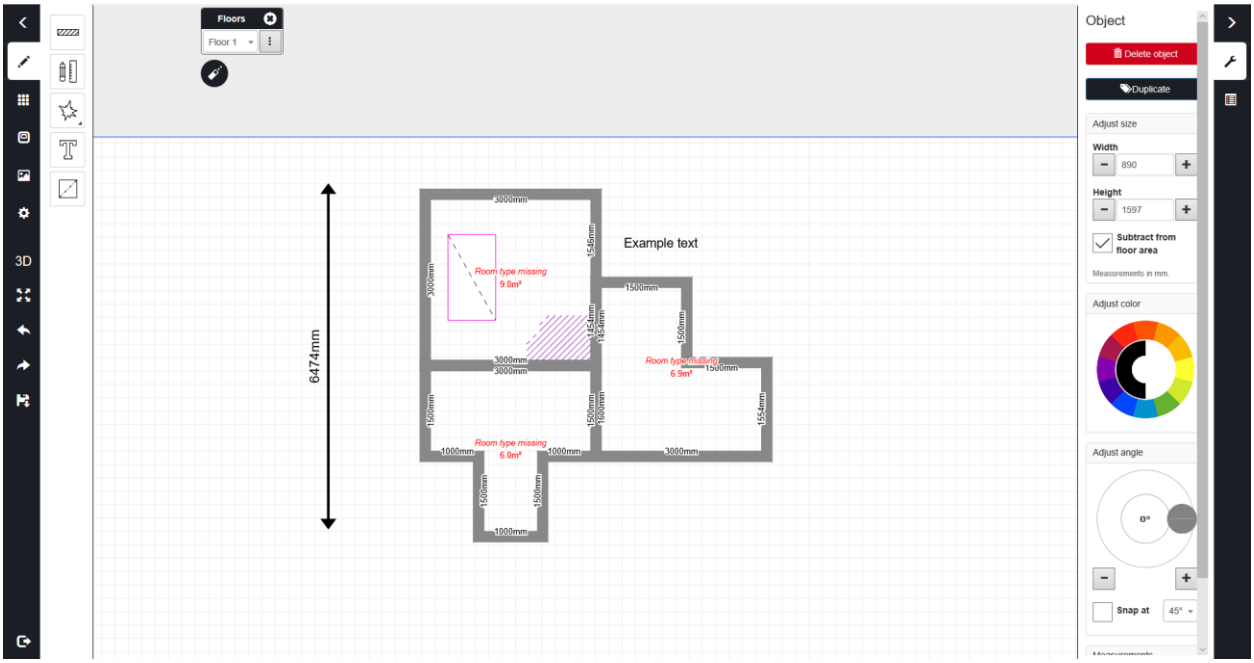
The size of the damage area is shown on the right. This size can be used in cost calculations of iCC cases. By pressing Auto-fill area the drawn damage area will be filled, and the total size of that area will be shown.



The fourth icon lets you add text to the picture to explain the floor plan better. The size, colour and angle of the text can be modified from the menu on the right.



The last icon lets you add objects to the floor plan. These objects can be subtracted from the floor or wall area. This could be e.g. a kitchen island that is in a kitchen but not on the same floor as the rest of the kitchen, you can then add the object that will represent the kitchen island.

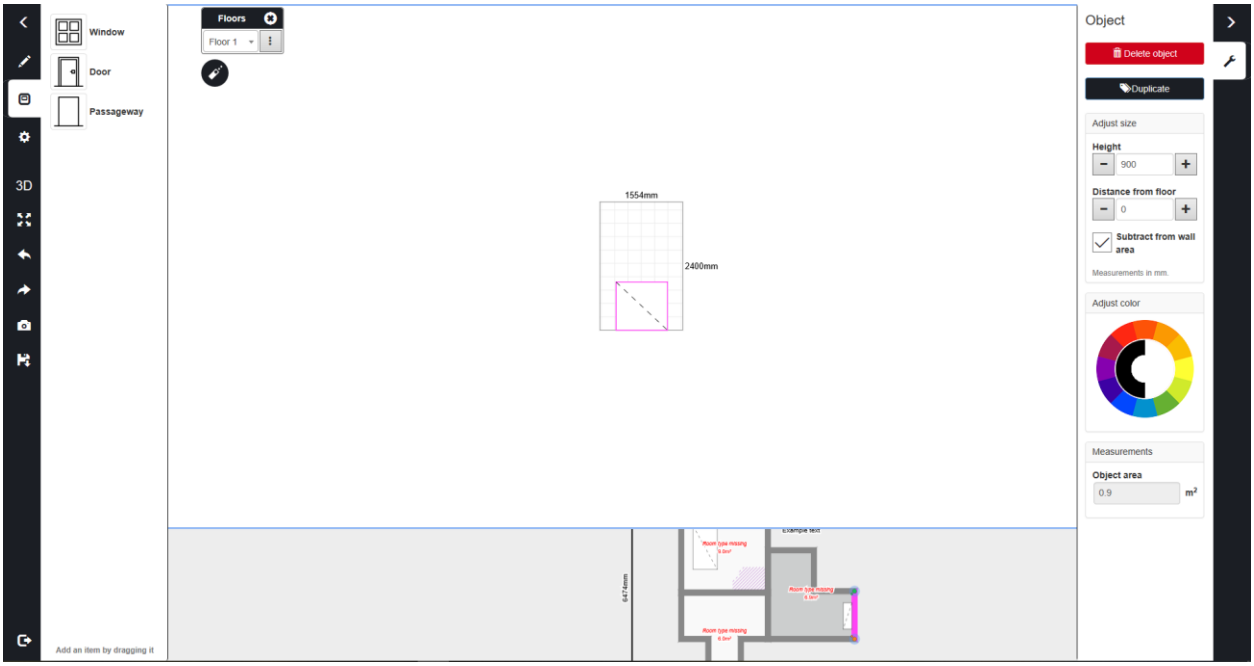


To add an object, you choose the fifth icon, and then you draw the object on the floor plan where you want it. You can change the size, colour and angle on the right-hand side. If the *Subtract from floor area* is marked, the area that is covered by the object will not be included in the floor area in the room.

Objects can be moved by pressing and dragging them to where you want them. By pressing the object quickly, you change between the room and the object.

If the object also effects the wall area, the object will have to be placed so that it touches the wall(s) effected.

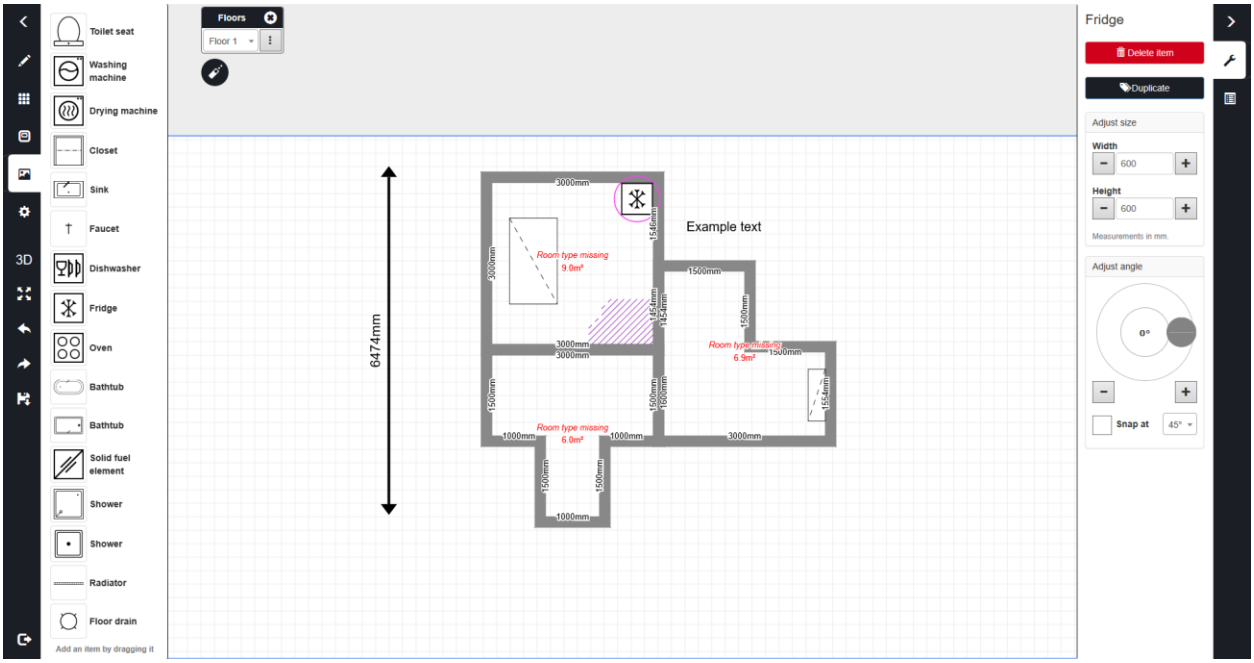
To subtract the area of the object from wall area, press the wall, go to the grey area in the top of the page, then you press the object and mark the box *Subtract from wall area*. Please note that if an object is moved so that it no longer is connected to the floor, it will no longer be subtracted from the floor area.



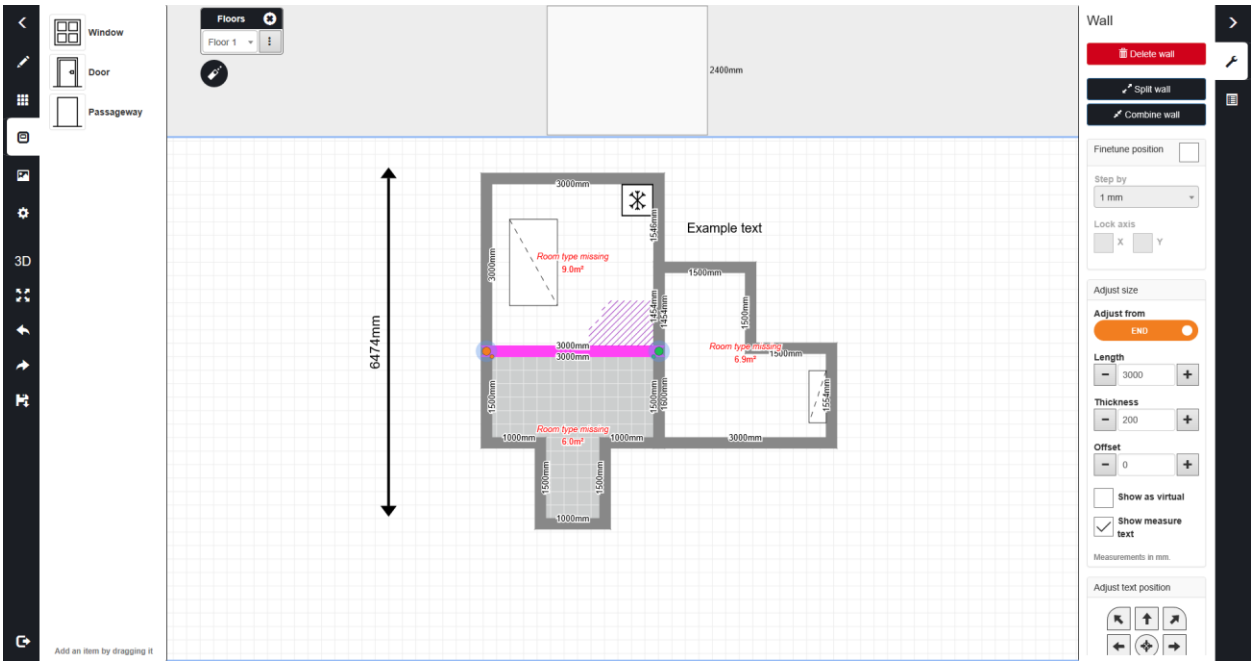
Under the third icon the ready room types can be found, as shown in the beginning of these instructions. Rooms are added to the floor plan by pressing the desired room and dragging it to the white area, the dimensions can be changed before and after adding if needed.

Under the fourth icon windows, doors and passageways can be added directly to the walls. Select the door/window you need and drag it to the wall where it should be, on the right-hand side you can change the dimensions of the door/window.

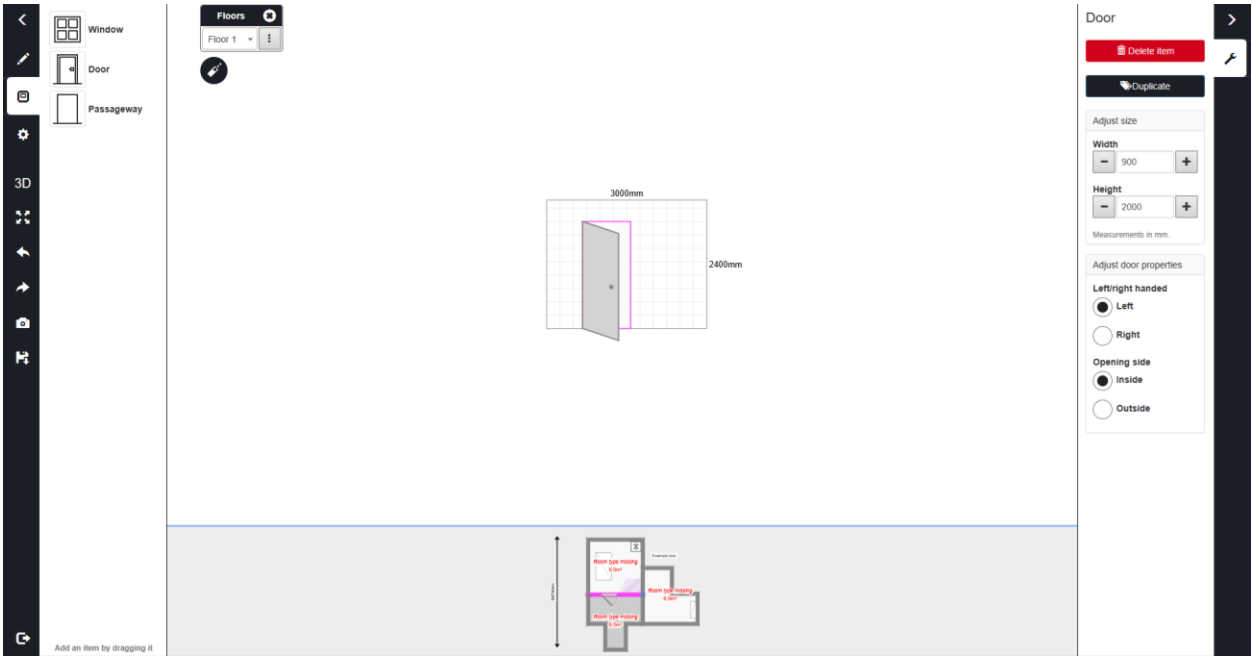
Under the fifth icon, clipart icons can be found which can be added to the floor plan to represent household items and details in the apartment/house. The size and angle of the items can be modified, as well as the distance from the floor, and it is possible to subtract the area of the items from the room or floor area. Clipart images are also shown in the FloorPlanner 3D view.



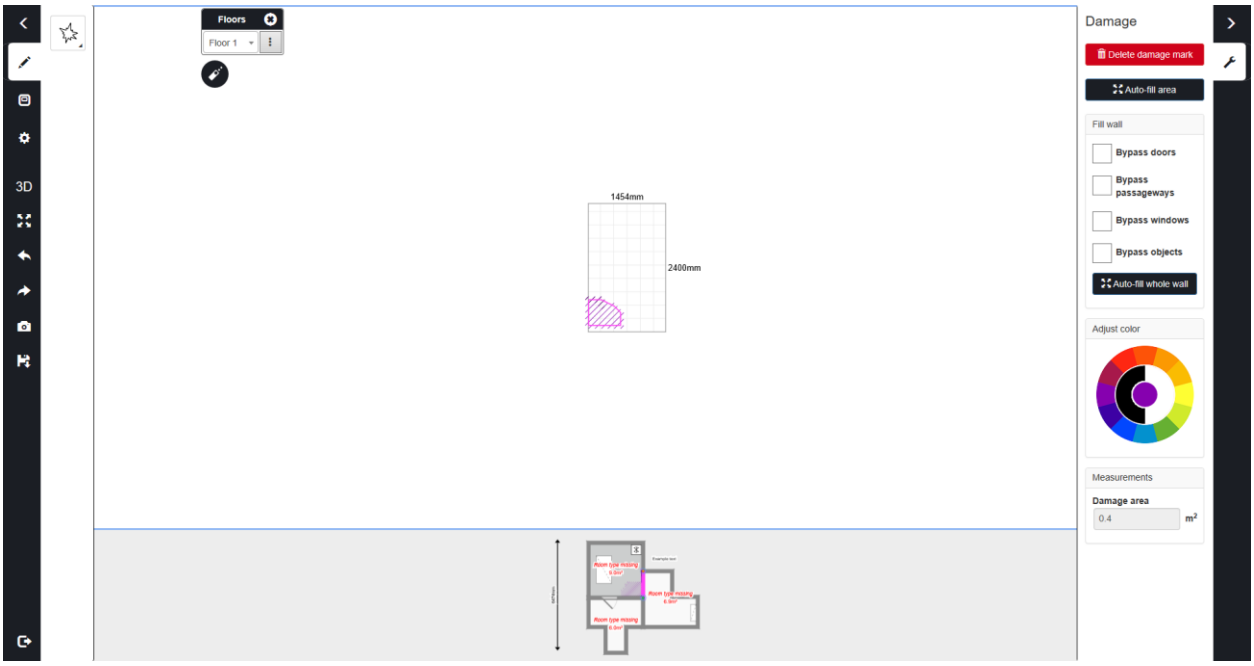
Doors, windows, and passageways can also be added to the floor plan by pressing the wall in which you wish to add door(s)/window(s).



Once you have pressed the wall, press the grey area shown at the top of the floor plan or add directly to the floorplan.



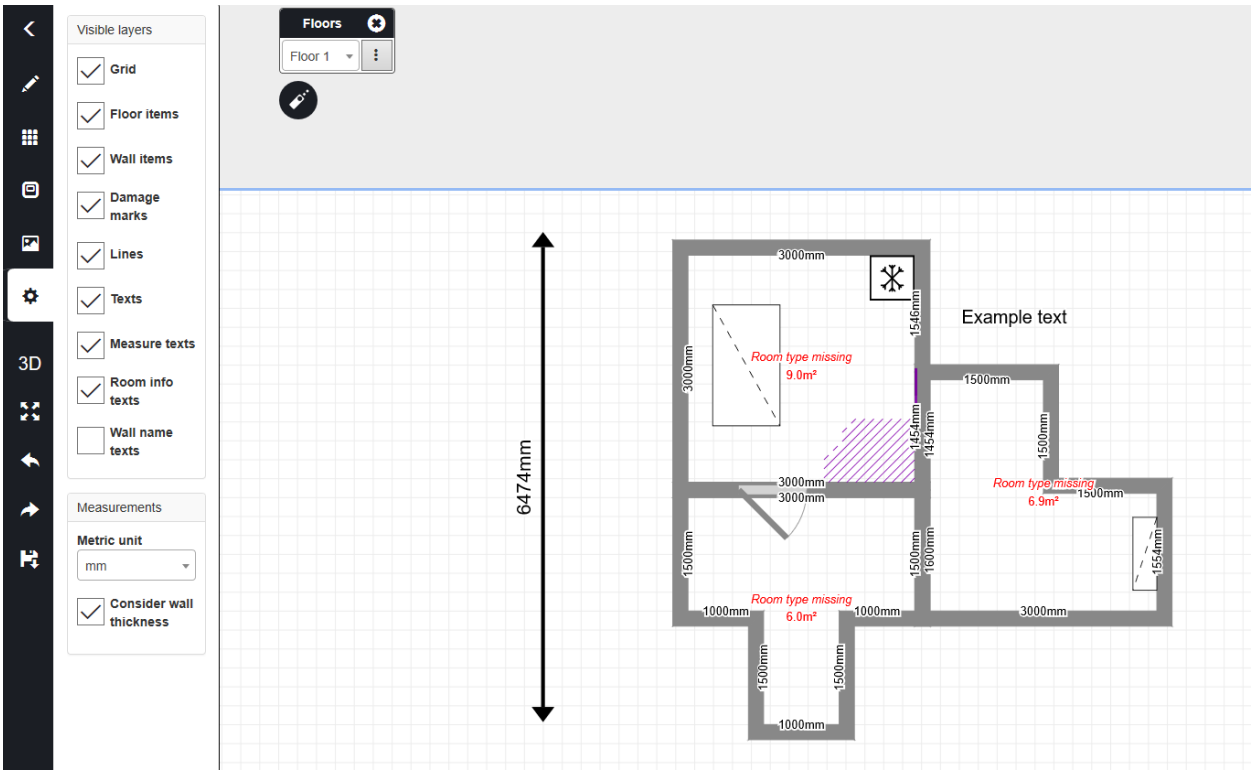
When you press the grey area, you will see the wall you selected in more detail.
You can add damages to the walls by pressing the pencil icon, you then draw on the wall where the damage is.



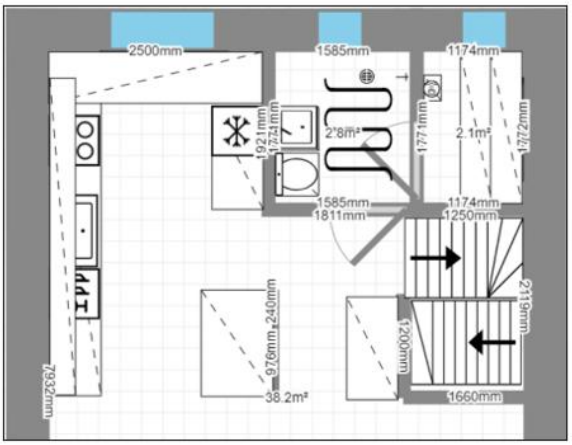
In the settings, you can decide which elements you wish to have visible in the floor plan. If you for example wish to have the floor plan in the inspection report without the

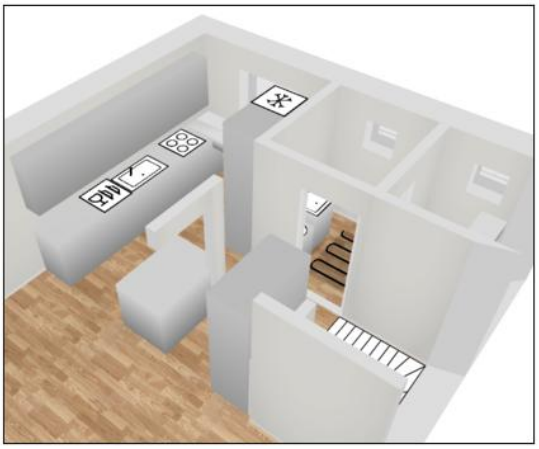
damage marks and measurements texts, untick those layers. The hidden layers will be saved in the floor plan, but they will not be shown in the report.

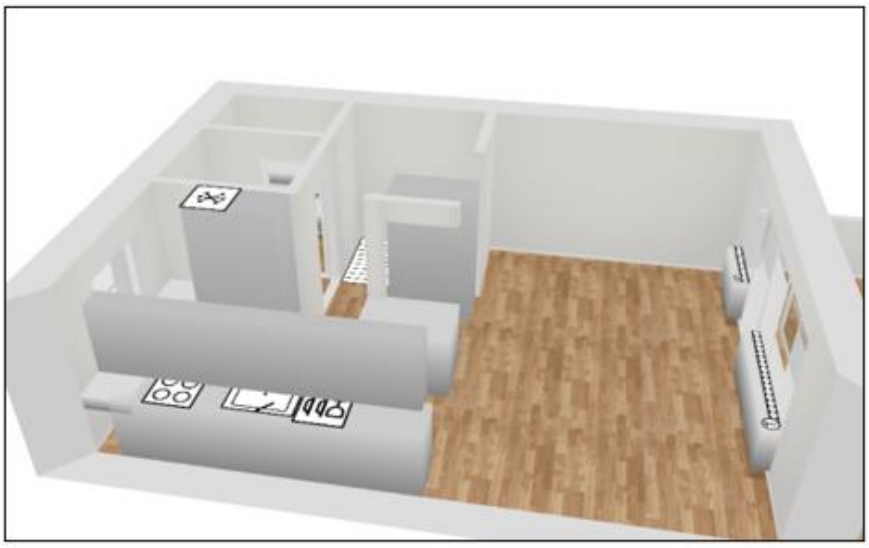
Additionally, you can change the unit and threshold for editing under the settings.

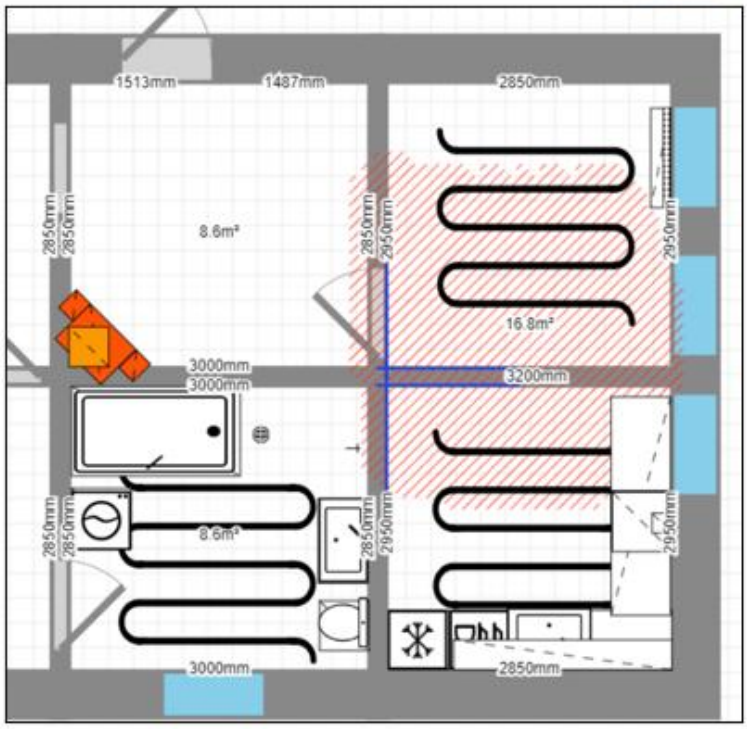


3D The 3D button allows you to view the floor plan in 3D. In this view the tool shows the damaged area, as well as possible objects and clipart that have been added to the drawing. Together with the possibility of taking snapshots of the 3D image, it is possible to take informative snapshots to e.g. add to reports. To return to the normal view, press the 2D button.








1513mm
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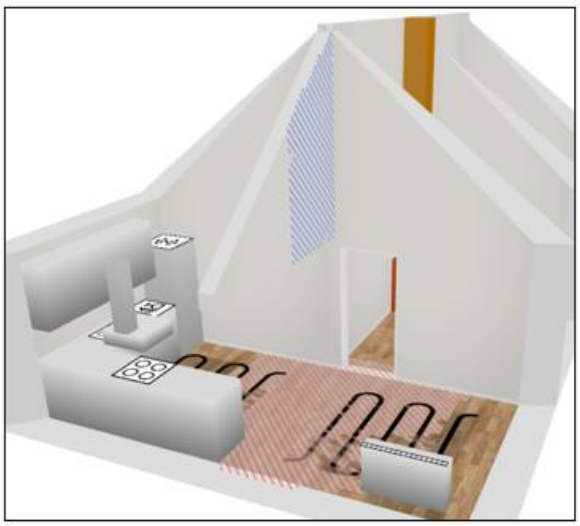
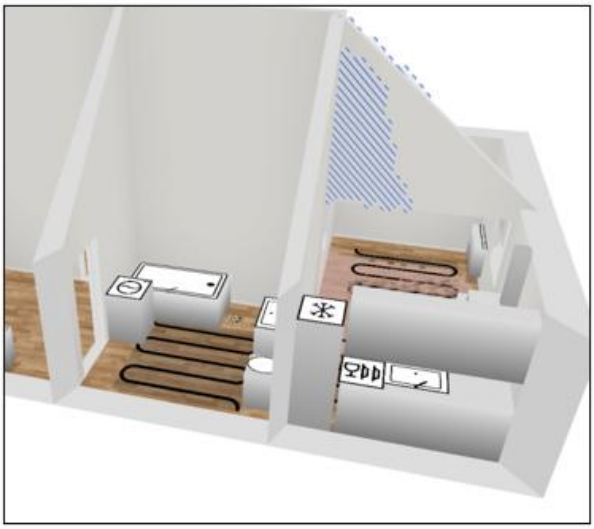




 This button will re-center the floor plan and size it to fit the screen.

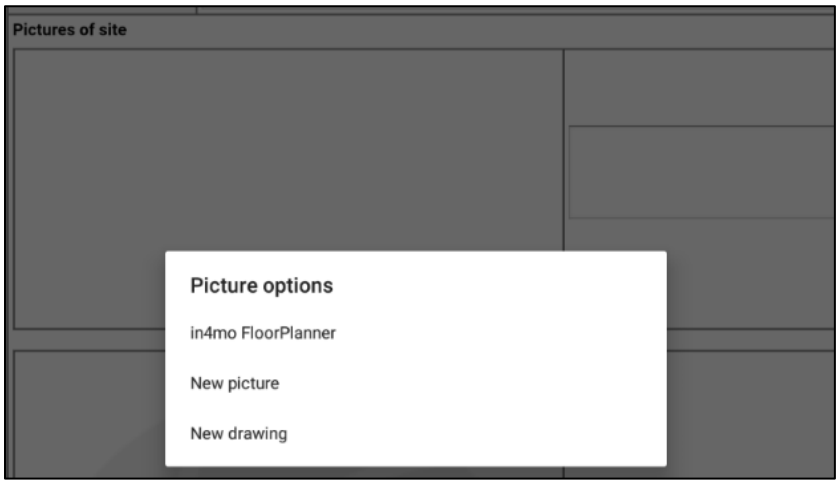
 By pressing the undo button, you undo the last change.

 By pressing the redo-button you bring back the last thing that was removed with the undo-button.

 Save the floor plan.

 Exit the in4mo FloorPlanner. Once you press this button, the system will ask you if you wish to save the floor plan before exiting.

It is possible to copy the floor plan made with FloorPlanner into the empty picture fields in the report section **Pictures of site**.



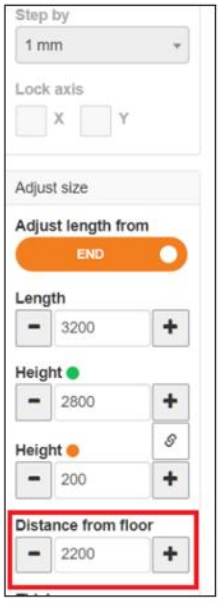
However, please beware while doing this as the system only saves one version of the floor plan. Thus, if you edit the floor plan under the picture section and save it and later wish to modify the original floor Plan displayed in the section **Floor plan**, you will get the latest saved version of the floor plan, which is not necessarily the original floor plan you just clicked to modify. If you do not edit the earlier versions of the floor plan, the system will keep a picture of them in the report. Hence, please make sure the floor plan in section **Floor plan** does not need any changes before copying it.

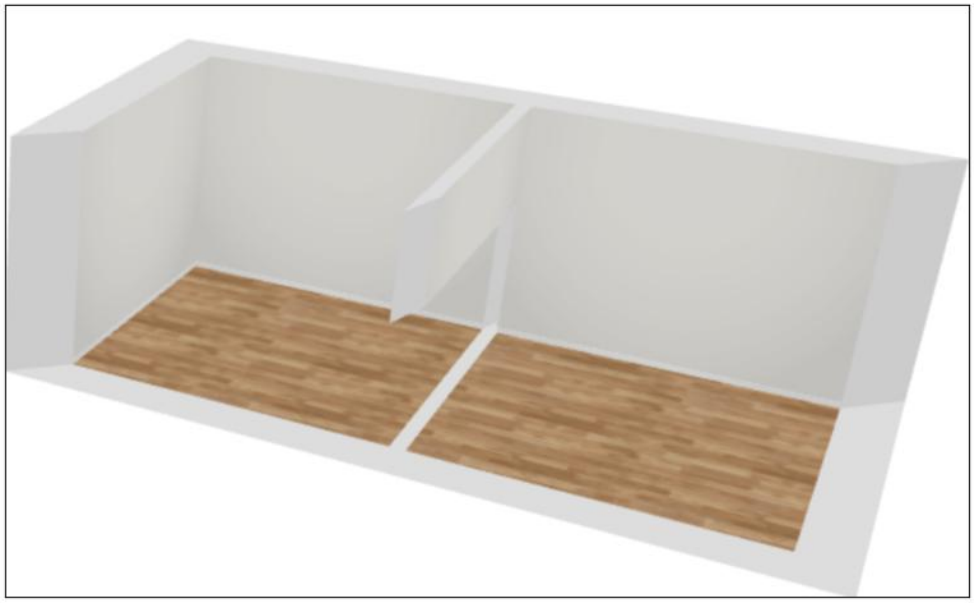
Additional Wall Functionality

There are different features in FloorPlanner that allow users to adjust walls to the specific needs for each wall.

(Interior) Walls That Don't Start From the Floor

Sometimes buildings have walls that don't extend from the ceiling all the way down to the floor. This can be either for structural reasons or because piping and/or wiring is enclosed in the ceiling. To allow for such walls to be added to the floorplans, you will find a 'Distance from floor' parameter in the wall menu.

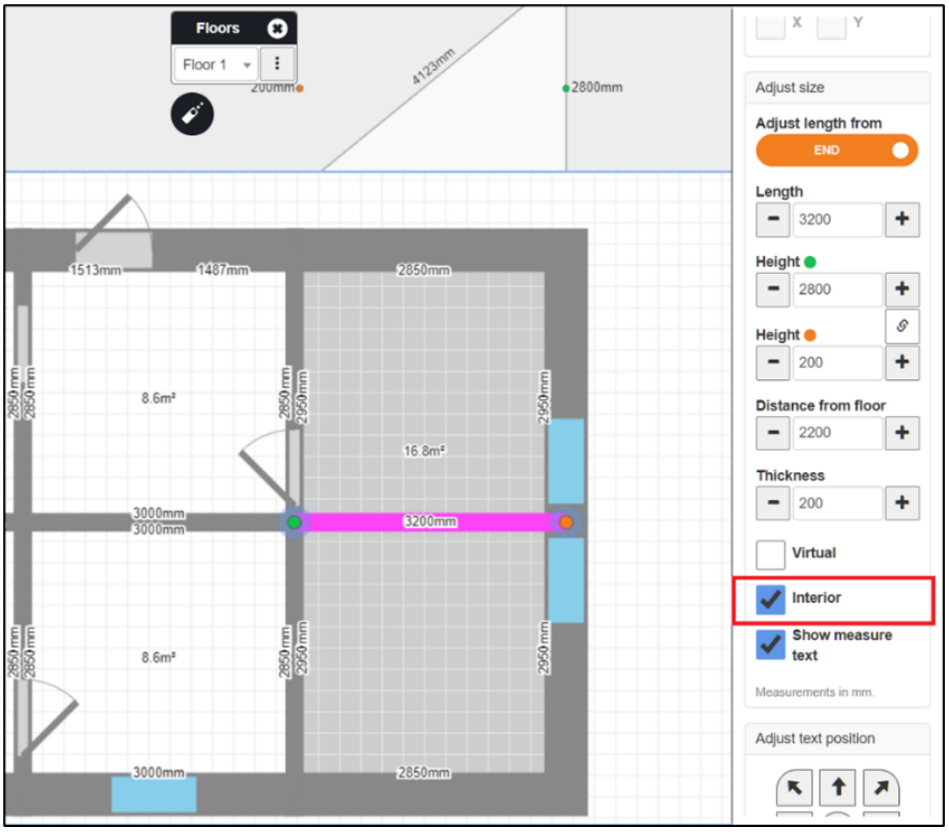




Often these smaller wall-like elements don't necessarily divide a space into separate rooms, and in those cases, they should be added to the floorplans as 'interior walls'.

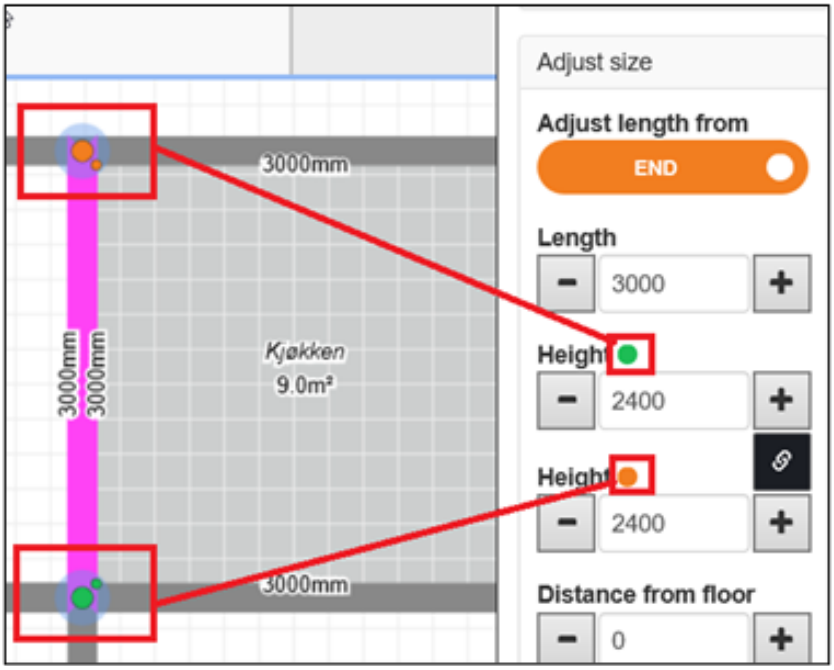
These 'interior walls' are actual wall-like structures that don't split the area into separate rooms and are not to be mixed with the already existing functionality called 'virtual walls', which are not actual walls or wall-like at all, but do separate the area into two rooms. Virtual walls are used e.g. to separate an open concept kitchen from the living room that is in the same space.

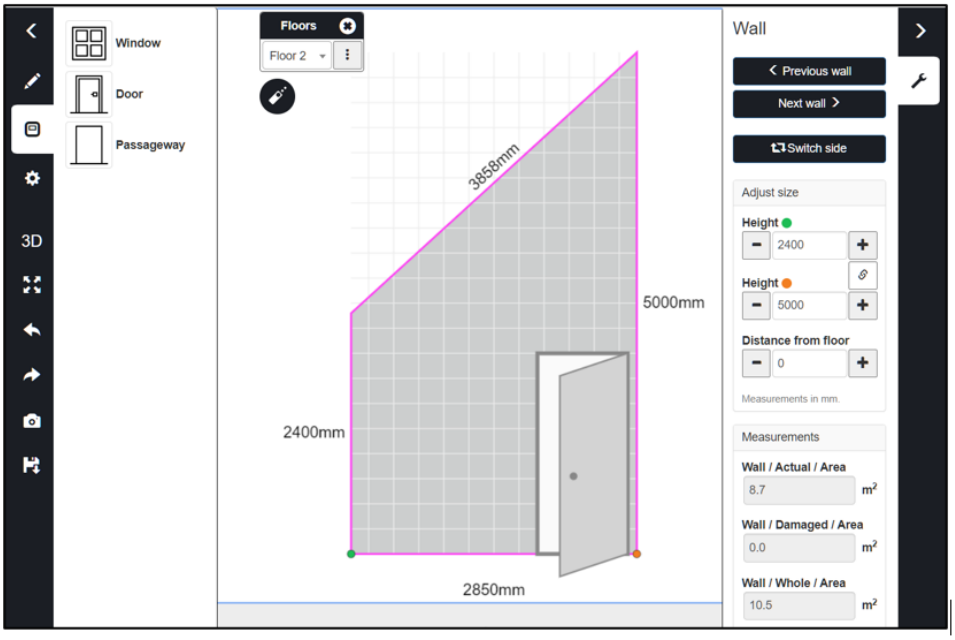
A wall can be defined as an interior wall by filling the checkbox 'interior wall', in the wall menu. Note that this checkbox is available only for walls which do not start from the floor. Also note that a wall cannot be both virtual and interior, so both boxes cannot be checked simultaneously.



Sloping Ceilings

In rooms with sloping ceilings, you want to be able to define different wall heights for different walls of the room. This is possible by defining two heights for the ceiling or wall, which is easy with the help of the different colours assigned to the two ends of walls.

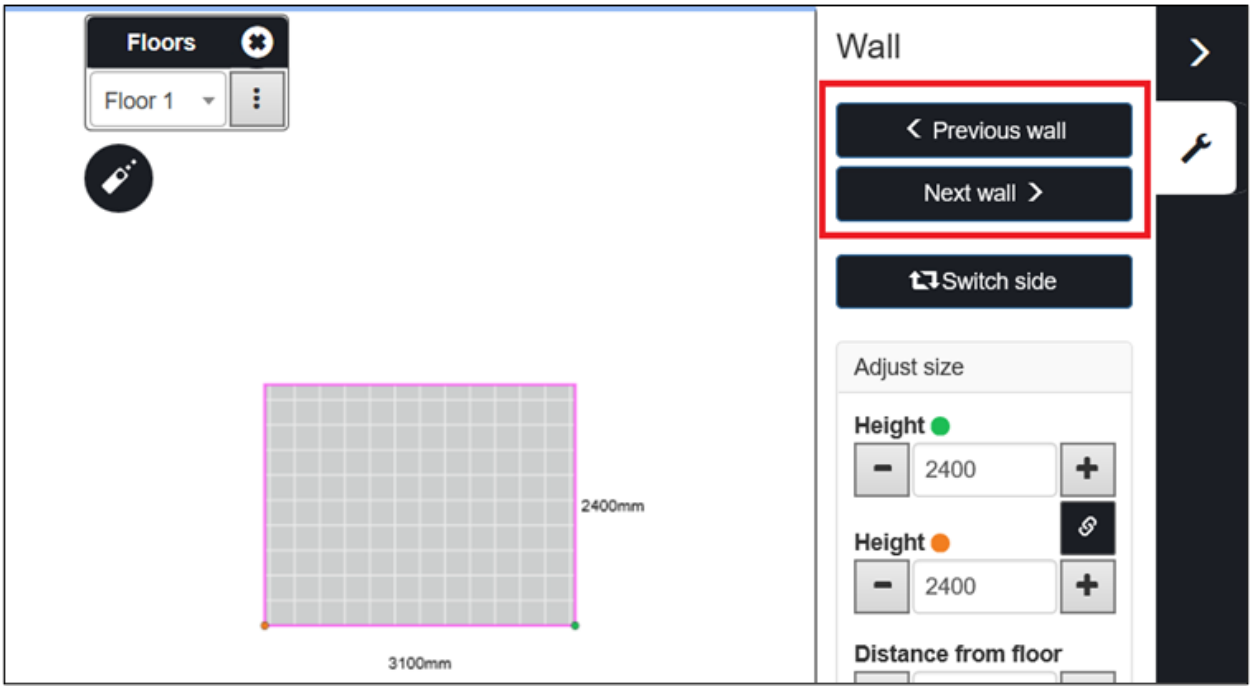




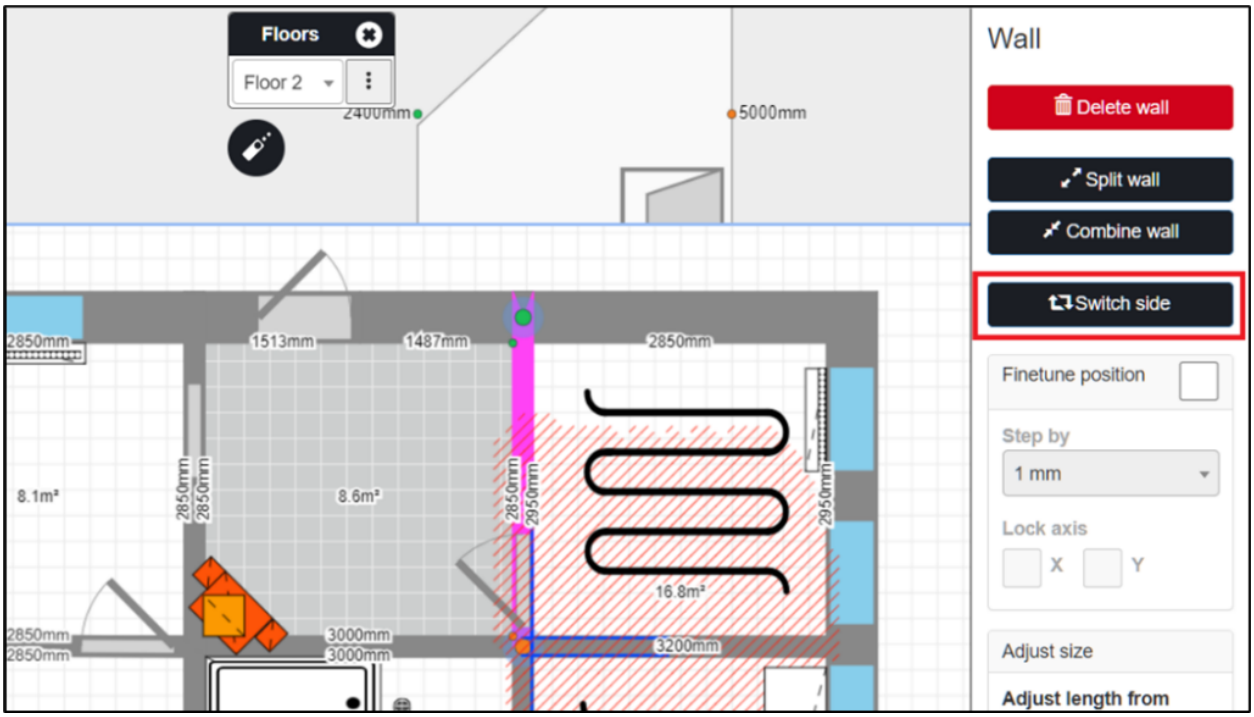
The sloping ceiling is considered in the wall measurements that FloorPlanner calculates automatically and can also be observed in the 3D view.

Easy Navigation Between Walls

In the wall view one can easily move to other walls inside the same room by utilizing the navigation buttons. This eliminates the need to go to the floor view to select another wall to work on.

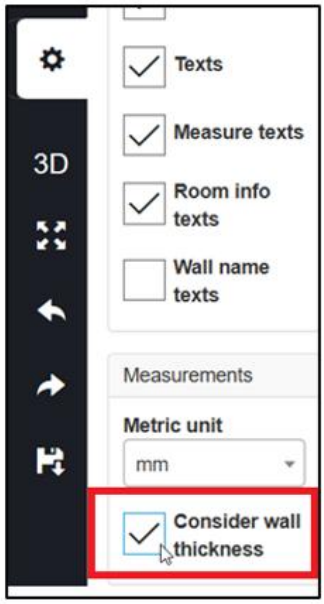


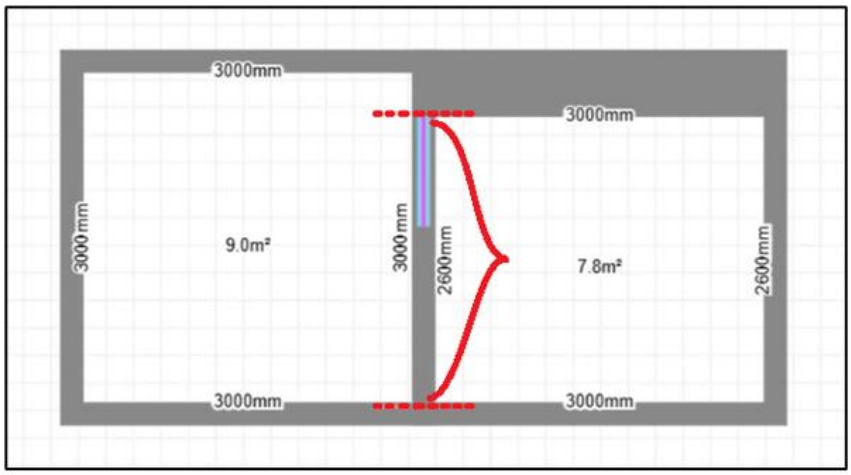
In the floor view one can also switch to the other side of an inner wall by using the “Switch side” button.



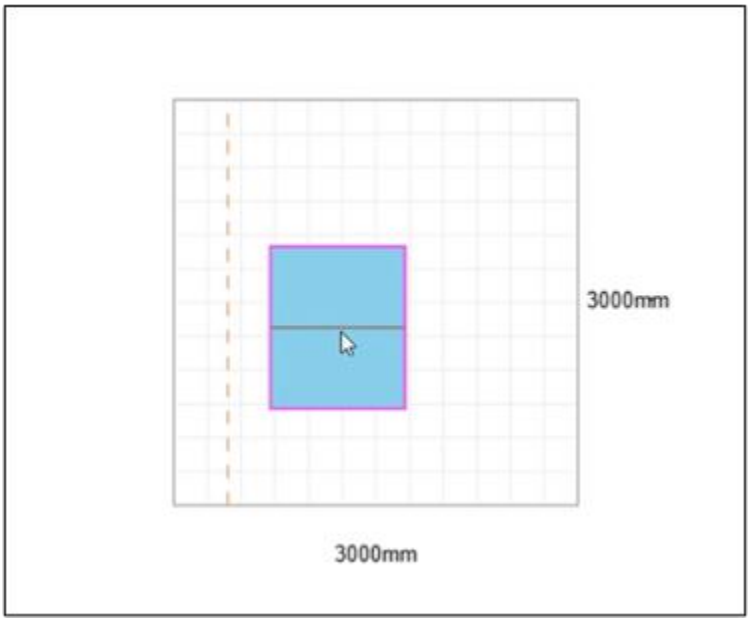
Wall thickness

When a user has the wall thickness setting activated, FloorPlanner will consider the measurements of both sides of a wall, and will only allow for windows, doors and passageways to be placed within an area that is shared by both sides of the wall.





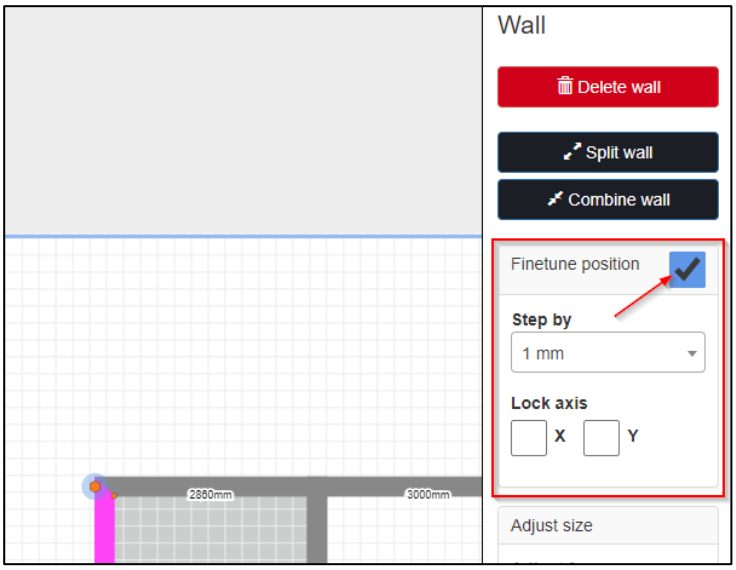
In the wall view, the frame within which the item can be position will be shown by a dotted line, indicating that the measurements on the other side of the wall are different and therefore affect where the item can be placed.



For a more detailed guide on how the wall thickness feature works, please refer to our FloorPlanner Wall Thickness and Finetuning guide.

Finetuning Tool

The Finetuning Tool provides additional control over the walls and corners of your floor plan.



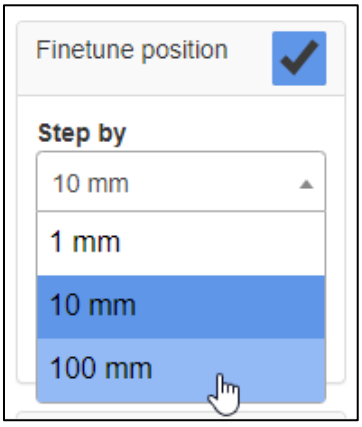
You can use the Finetuning tool in both *Consider/Ignore wall thickness* modes, by ticking the *Finetune position* checkbox on the right-hand side menu bar when a wall is selected.

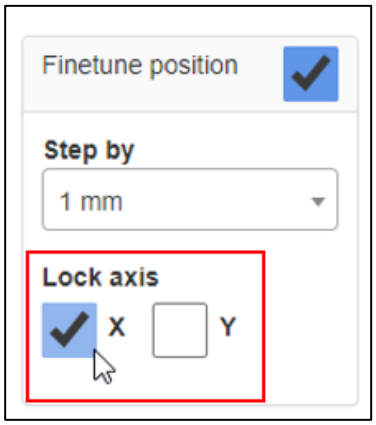
The functionality then enables you to **drag the walls and wall corners** with the precision of your chosen unit. 1 mm steps are selected by default, but this can be adjusted to 1 cm (10mm), or 10 cm (100mm) rates by selecting these options from the *Step by* dropdown list.

By default, the feature allows you to drag freely both vertically and horizontally. However, you can further limit this by locking the axis directions:

- Ticking the 'X' checkbox locks the horizontal dragging, and the walls can only be moved up or down.
- Ticking the 'Y' checkbox locks the vertical dragging, and the walls can only be moved sideways.

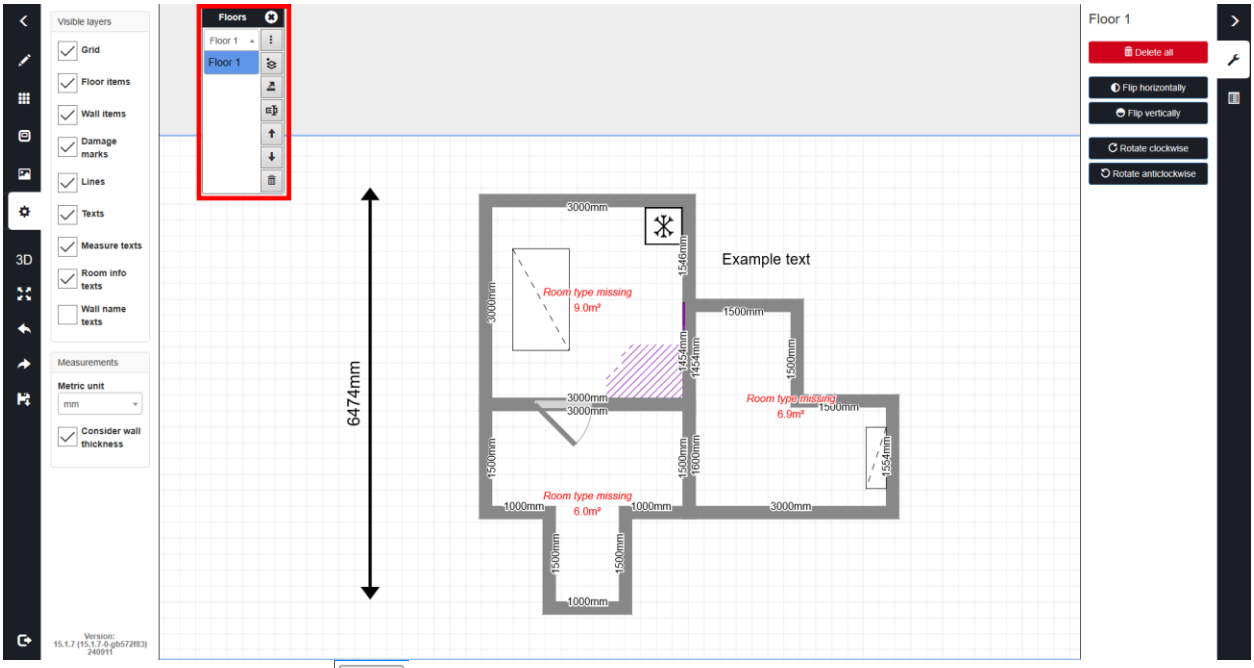
Note, you can only lock one axis direction at a time.





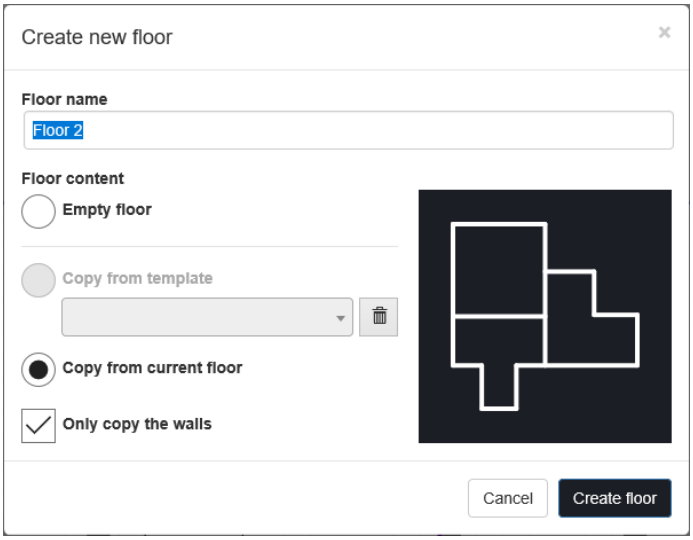
Adding several floors to the floor plan

The tool allows you to make a floor plan with up to ten floors. The floor you begin with is per standard called *Floor 1*, the floor menu is displayed over the drawing field.



To add more floors, click  , which will open a window where you can name the new floor and choose what floor you want to create.

If you select *Empty floor* an empty page will open, and you can start from scratch. If you pick *Copy from current floor,* you will have the option to pick a template that you have previously saved (floor templates are explained further later in the guide). By selecting *Copy from current floor,* the new floor will be copied from the floor you are viewing when you add the new floor. If you don't want the new floor to add any other content from the current floor or template, you can mark the box *Only copy walls*. A preview of the new floor is shown in the box to the right.

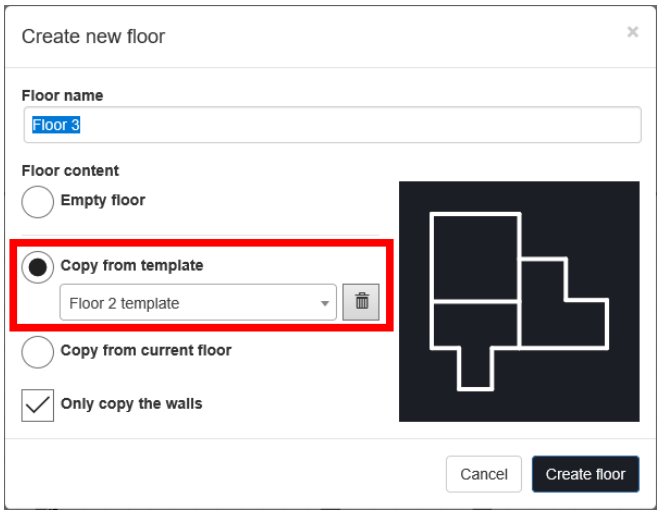


When you have added several floors, you can swap between the floors in the floor menu, by selecting floor in the dropdown menu.

The button  allows you to change the name of the floor. The floors will automatically be named floor 1, floor 2 and so on, but you may change this should you want to.

The button  allows you to save the floor as a template. Floor templates can later be used on other cases, on the same unit and account. This can be useful if you are working with several apartments with the same layout.

The templates will by default be given the name of the floor plus a number; Floor 1 template, Floor 2 template and so on, but you may change the name should you want to. It's a good idea to give them names that makes them easily recognizable later.



Keyboard Commands

When having a keyboard available, there are several useful keyboard shortcuts and commands that can be utilised, which make it faster and easier to work in FloorPlanner:

- **UNDO**: Ctrl + Z
- **REDO**: Ctrl + Shift + Z or Ctrl + Y
- **SAVE**: Ctrl + S

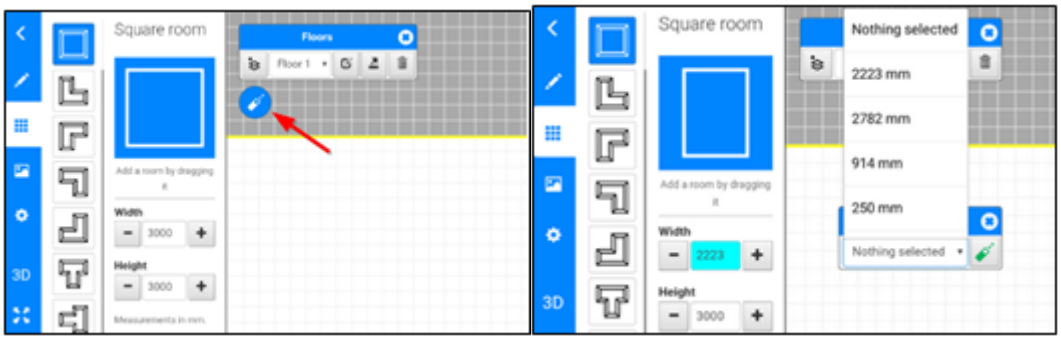
Various floorplan objects can also be moved using the **arrow keys** on the keyboard:

- **In Floor View**: Use the arrow keys to move objects, clipart, texts, lines, damage, and walls.
- **In Wall View**: Use the arrow keys to move doors, openings, windows, objects, and damage area.

Using Hilti and Leica Measuring Devices in in4mo Task Reporter

In in4mo Task Reporter it is also possible to connect both a Leica (Disto Series) and a Hilti (PD-I) distance measurement device and utilize the measured values directly in the in4mo FloorPlanner tool or in the workplan.

To connect a measuring device, make sure that Bluetooth is turned on, both on the tablet and on the measuring device. In in4mo FloorPlanner, click on the icon showing a measuring device. The available device will be shown in a list and can be selected to connect.



Select the field where you want to input values, for example the width of the room. And then measure with the device. The measured value will now automatically be inserted in the field.

Alternatively, you can make several measurements with the measuring device, and then when selecting an input field in in4mo FloorPlanner, the latest measurements will be shown in the list and can be chosen.

The measurements can also be used when drawing walls free handed. The last measurement will be used when drawing the wall. This way it is possible to measure and write without selecting specific values.

It is also possible to connect the measuring device and use the measurements when filling out the values in the work plan. The measures can only be used for work items with corresponding units in in4mo and the measuring device.

Using measurements from in4mo FloorPlanner in the workplan (iCC)

Measurements you add to the floorplan can be used for the work plan in in4mo Cost Calculation (iCC). Since it is possible to add doors and windows in the tool, it enables the calculation of gross and net wall area.

When work plan items are added to a workplan on a case where there is a floorplan with measurements, made in the in4mo FloorPlanner, it will be possible to use these measurements for the work plan items.

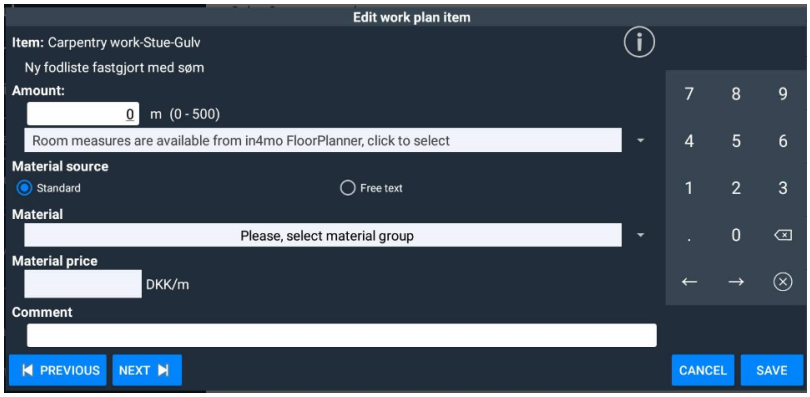
When a work plan is created and measurements are to be added for the work plan items, it will be possible to add the measurements added to the in4mo FloorPlanner. If you choose to use the measurements from the floorplan, these measurements will be imported to the work plan item, and other items with the same unit in the room and structure.

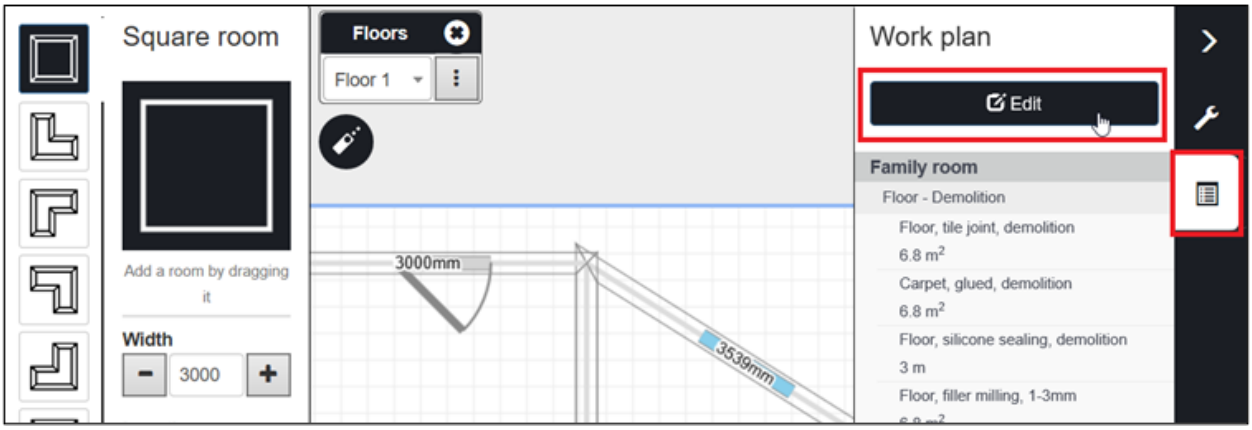
iCC in FloorPlanner

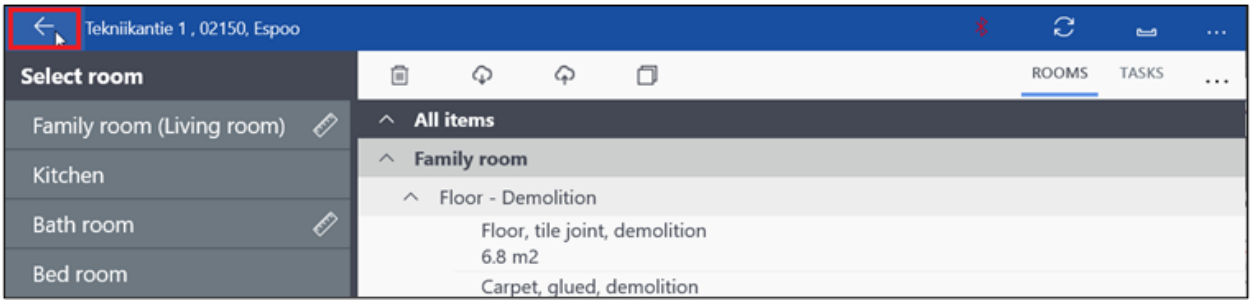
When a task/case contains iCC work items, users with the authority to see them, will see a workplan tab in the right-side menu in the FloorPlanner tool, which can help give an overview of the costs involved.

The workplan shows the work items of the chosen room, or if none are selected it will show all the work items of the case/task. If an object or structure is selected, the work items of the room the structure or object belong to are shown (if the room is an iCC room).

It is possible to move directly between FloorPlanner and the workplan, which is done by pressing the Edit button on the Workplan tab. This prompts a question to save all changes made to the drawing, and once the choice has been made the workplan view opens. After the necessary changes or additions have been made to the workplan, one can return to the floorplan by pressing the back-button, and the changes will be reflected in the drawing.


Edit work plan item
Item: Carpentry work-Stue-Gulv
Ny fodliste fastgjort med søm
Amount:
0 m (0 - 500)
Room measures are available from in4mo FloorPlanner, click to select
Material source
Standard
Free text
Material
Please, select material group
Material price
DKK/m
Comment
PREVIOUS
NEXT
CANCEL
SAVE


Square room
Add a room by dragging it
Width
3000
Floors
Floor 1
3000mm
3539mm
Work plan
Edit
Family room
Floor - Demolition
Floor, tile joint, demolition
6.8 m²
Carpet, glued, demolition
6.8 m²
Floor, silicone sealing, demolition
3 m
Floor, filler milling, 1-3mm


Tekniikantie 1 , 02150, Espoo
Select room
Family room (Living room)
Kitchen
Bath room
Bed room
ROOMS
TASKS
All items
Family room
Floor - Demolition
Floor, tile joint, demolition
6.8 m2
Carpet, glued, demolition