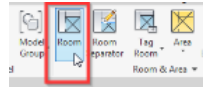# Revit tips for using the Winner export add-in

This document is a guide on how to obtain the best possible results when using the Winner Design export add-in. The add-in requires attention to certain aspects of the room definition and doors/windows and the following is describing these cases.

The room definition

A room is defined using **Room bounding**.

It snaps automatically to walls. The room exported by the add-in is directly related to the outline of the room boundary. The name of the room is also included in the export.

It is very important that the exported room has the correct measurements and that the outline includes the geometric shape of the entire room.

When a room is defined, some situations can result in non-optimal Winner Design exports:

- The room boundary not correctly snapped to the room wall
- Room boundary **rogue edges** problem
- Room separator not correctly placed.
- Splitting a room in two

A detailed description of each of the situations follows.

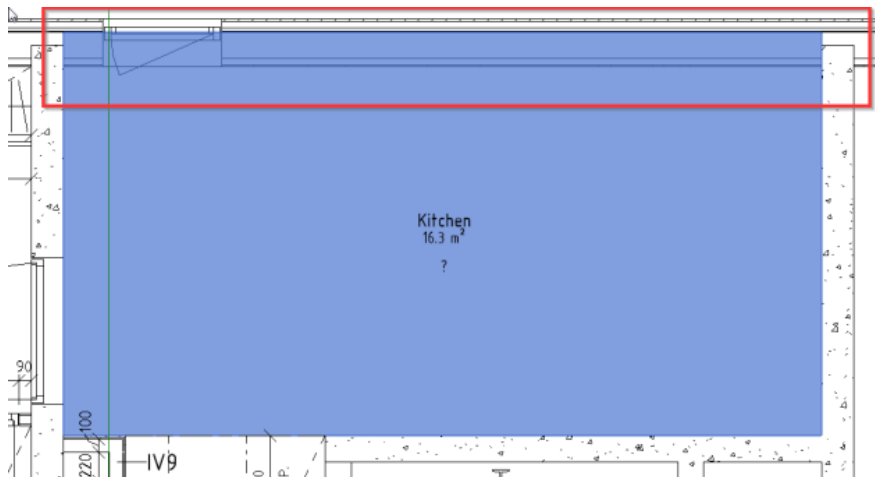## The room boundary not correctly snapped to the room walls

Figure 1.1

In this situation (Figure 1.1) the room boundary is not snapping to the wall properly, and as a result the measurements of the walls for this room will be exported incorrectly (the room will be too large).

Carefully placing a **Room separator** can solve this. It is important that it is placed on the inner side of the wall, as it would normally automatically do.
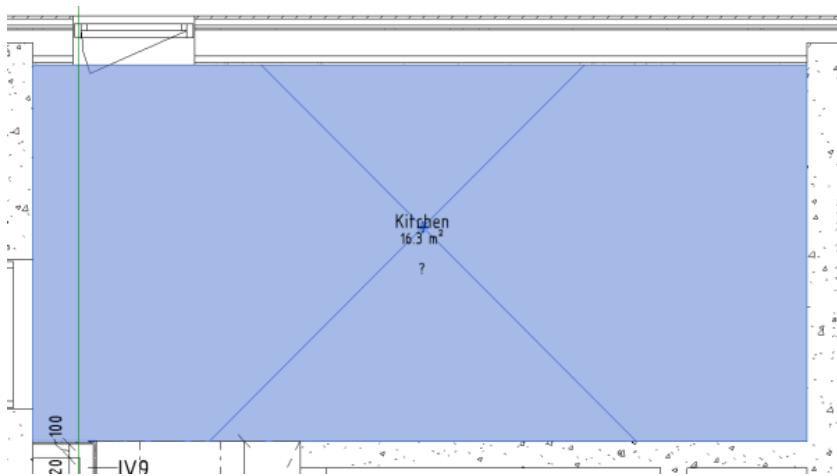

Figure 1.2

After a **Room separator** is correctly placed, it should look like this (Figure 1.2).

Room boundary **rogue edges** problem
Sometimes a room boundary has edges that are not a natural part of a room. Typically, this can happen at doors/windows:
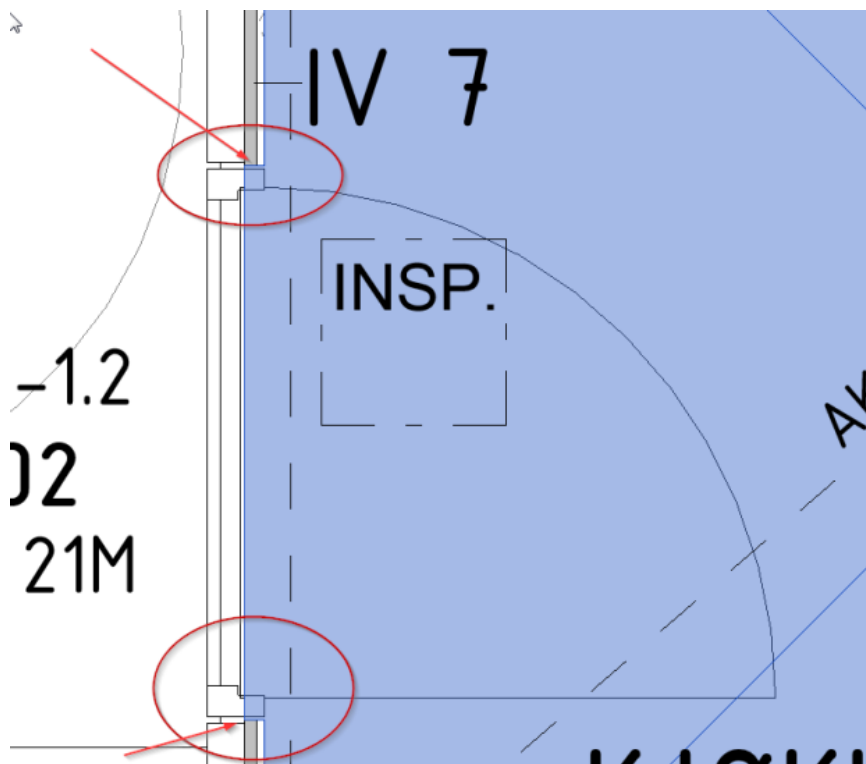

Figure 1.3

In this situation above (Figure 1.3) the boundary is not snapping correctly with the Door family. As the add-in exports all room edges as walls, the room definition above will lead to the export containing errors in the form of very short wall segments.

The issue above can be fixed by carefully drawing a **Room-separator**. (Figure 1.4, Figure 1.5).
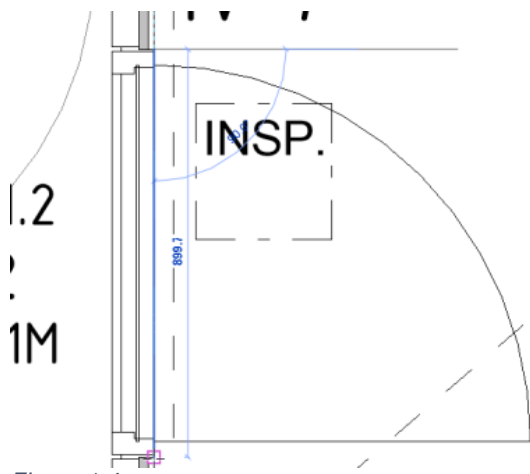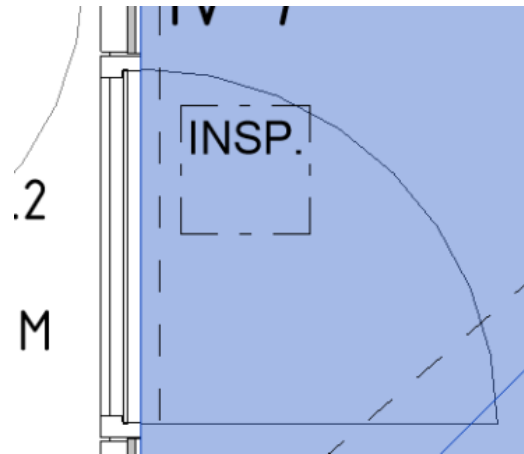

Figure 1.4

Figure 1.5

The room-separator should be drawn to be aligned with the inner side of the wall to get the correct result.

Room separator not correctly placed

If a room separator is not placed with care, small errors can make its way to the Winner Design export. Small errors can lead to big problems for a kitchen planner as expensive things like a pre-cut worktop needs precise data.

In the example below, a room separator does not hit the wall exactly and this results in an extra, very short (11 mm), edge that is exported as a wall.
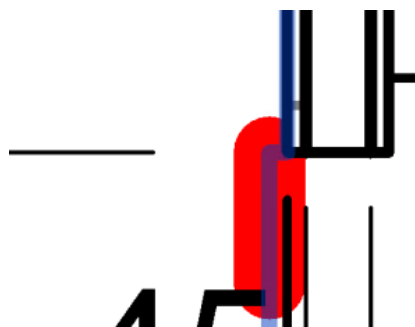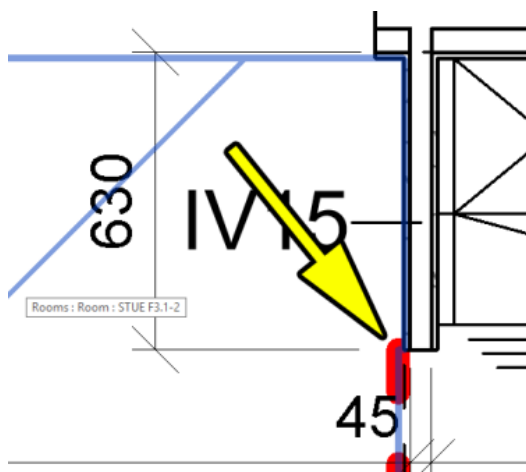
Splitting a room in two

In some situations, one big room is divided into two areas with a room separator. This can be for both name and area reasons. A typical example is a kitchen/living room that is separated into a *kitchen* and a *living room* area.

Ideally, these kinds of rooms should be exported as one big room by temporarily removing the room reparatory when exporting. This will result in the best export. If this is not possible, it is a minimum requirement that the **room boundary** covers the entire room in question. Below is an example of a kitchen/living room combo that is separated into a kitchen part and a living room part (Figure 1.6):
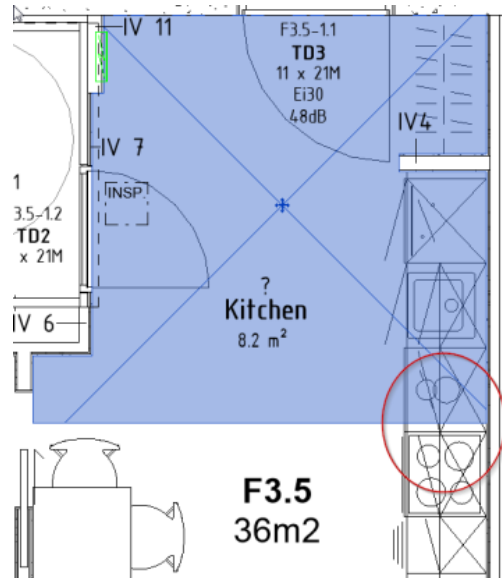

Figure 1.6

The kitchen room above, defined by the room separator, will cut into the kitchen cabinets, making the export unusable.

Exporting doors and windows

The exporter tries to include doors and windows that belong to the selected room, but there are a couple of things to be aware of that can lead to export problems related to doors/windows:

- Room separators cutting doors/windows.
- Elements belonging to the wrong category.
- Width/height parameter problems.

Room separators cutting doors/windows

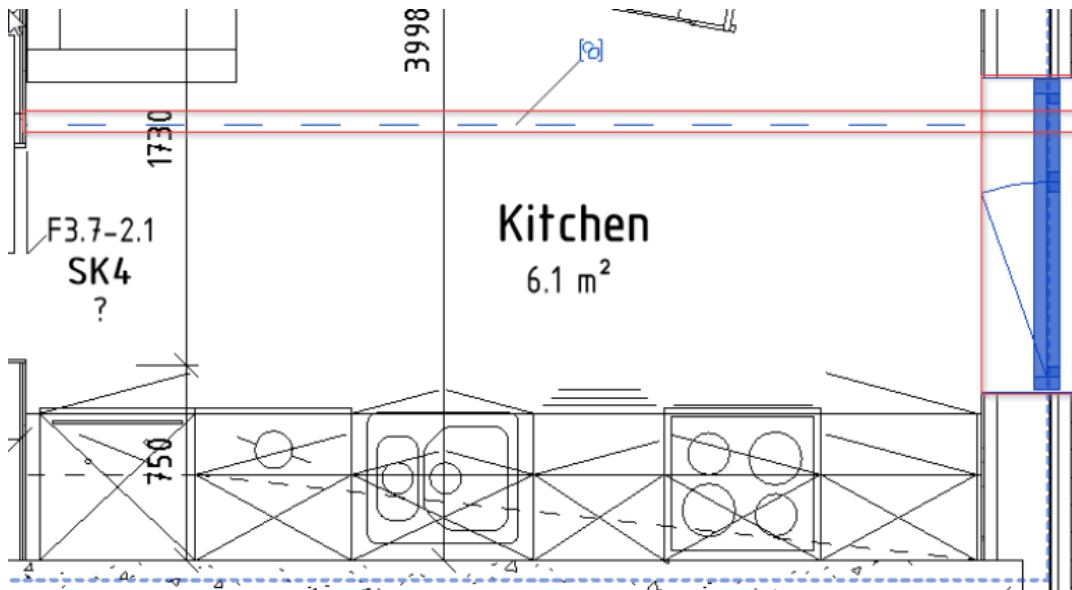Misplaced room separators can create problems for the add-in.

Figure 2.1

The image above (Figure 2.1) shows that the "Room separator" is cutting the window to the right. It is not advised to let room separators cut doors/windows like this and it will result in bad exports.
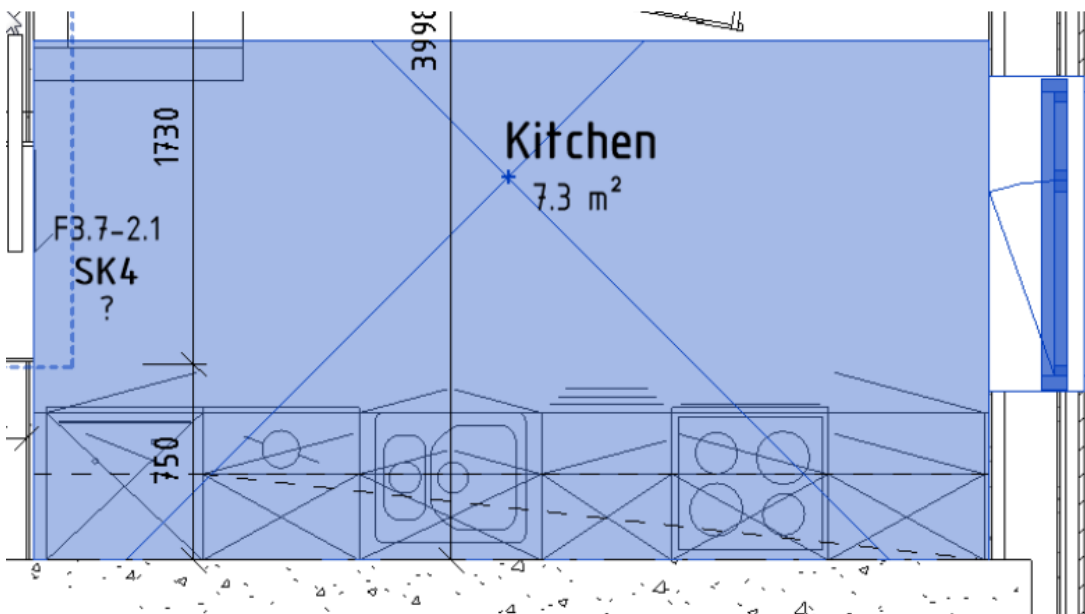

Figure 2.2

In the image above (Figure 2.2), the **Room separator** has been moved upwards a bit and the window is now properly placed inside the bounding area of the room. This will result in an export with the window properly included.

Elements belonging to the wrong category

The exporter assumes that **only** windows belong to the windows category and that **only** doors belong in the doors category. There have been examples where columns etc. has been defined as windows and this result in very bad Winner Design exports.

Width/height parameter problems

Because a Revit user can create a custom Family with custom named parameters, the exporter can only support the default parameters that comes built-in with the family category **Windows** and **Doors**. Both doors and windows share some common parameters that are automatically assigned by their category.

A family does not always have required parameters and even if it does, the parameters do not always have a correct value. Two values that are required by the WD exporter add-in are **Width** and **Height**. If the **Dimension** properties of an element includes Width and Height (see Figure 2.2.b below) all is good.
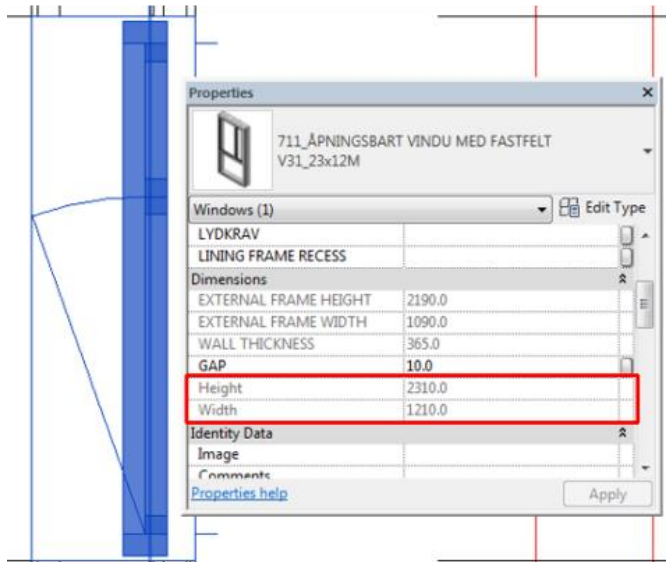

Figure 2.2b

If the Width/Height parameters are missing, please follow the guidelines below to make sure that your doors and windows are exported with a correct set of parameters. This guide will use a window as an example, but the concept is identical for doors. **NB! The general setup of a family may vary.**

Step by step guide for adding the required Width and Height parameter

Select a window element and double left-click it to **Edit family** (alternatively, right-click and select **Edit Family** from the menu (Figure 2.3).
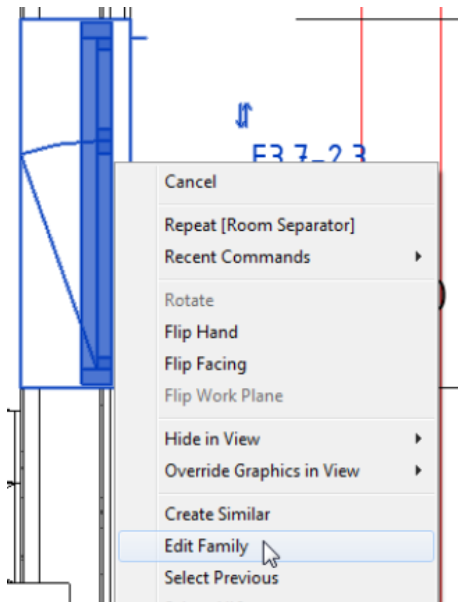

Figure 2.3

This will open a new 3D view showing a visual representation of the element (Figure 2.4). It will also bring up some new menu buttons in the top left corner of your screen (Figure 2.5).
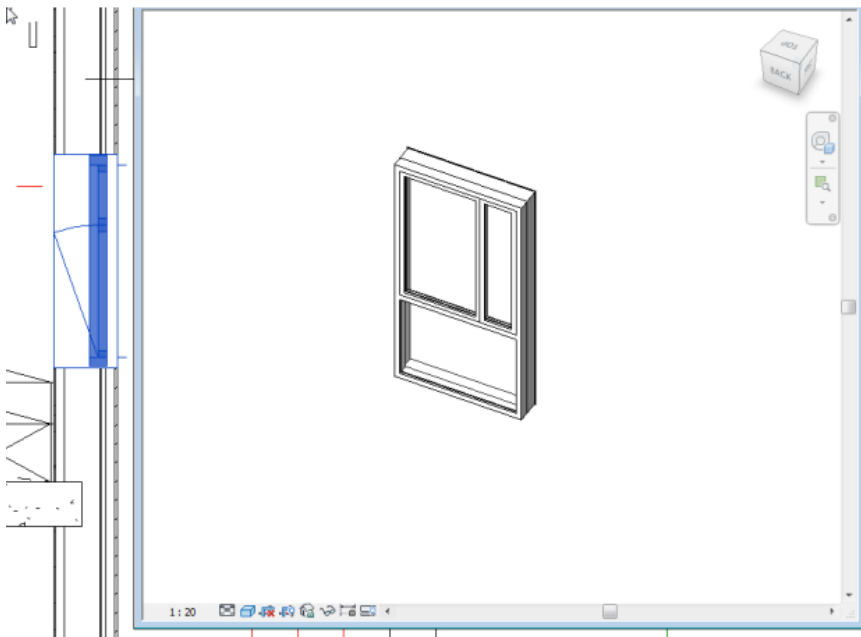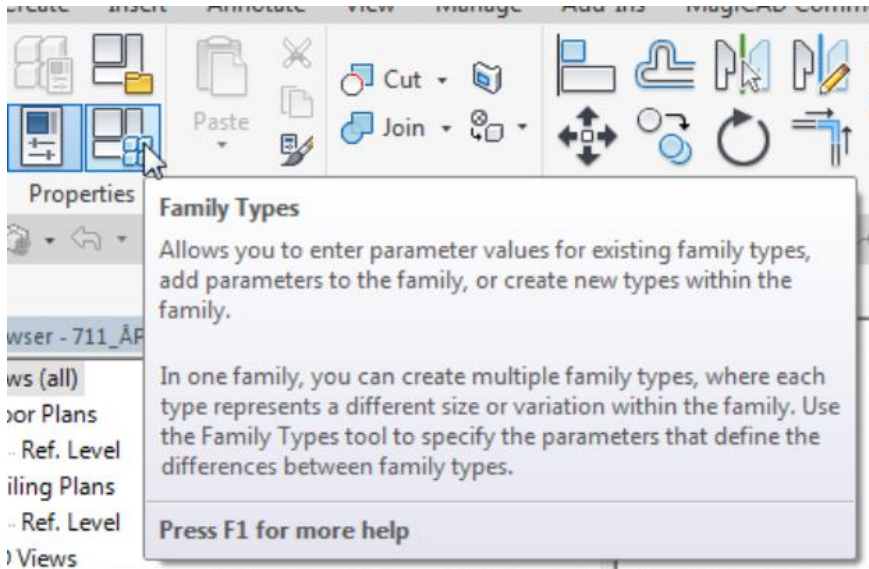

Figure 2.4

Figure 2.5

Push the **Family Types** button to begin evaluating your family parameters (Figure 2.5).

The purpose of this guide is to ensure that your family parameters are correct and that it has made the parameters available. It will not cover any other topic related to family parameters or its basic functionalities.

Figure 2.6

The above image (Figure 2.6) is representative for the specific window used for this example and it might look at bit different for other objects. Please notice that it contains two parameters listed that are called **Width** and **Height** under the category **Dimension**.

Some formulas help define the parameters, but this depends a lot on how the family has been designed. Figure 2.6 shows that the **Width** parameter has a value of 1210.00. By measuring the width on the window element, this can be confirmed (Figure 2.7).
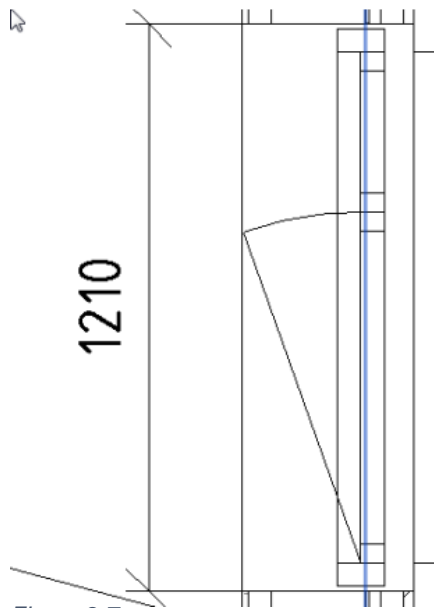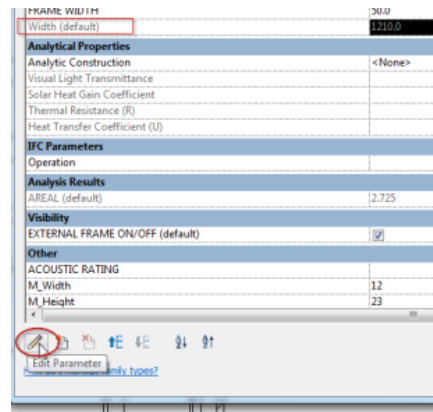

Figure 2.7

Figure 2.8

Click on the **Width parameter** and click on **Edit parameter** (Figure 2.8).
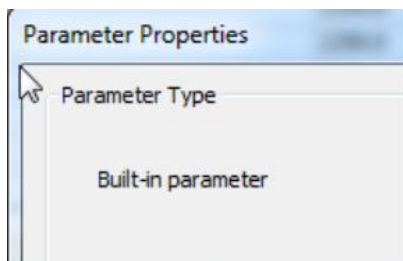

Figure 2.9

The image above (Figure 2.9) confirms that it is a **Built-in parameter**. You now know this is the correct parameter and that it has the correct value. This concept applies for **Height** and **all other built-in parameters**.

You can now close the **Parameter Properties** window (Figure 2.9) and **Family Type** window (Figure 2.6).

The next step is to make sure it is made available and set as default. While still staying inside the **Family Editor** (Figure 2.4), go to the project browser. Select and open **Ref. Level** for Ceiling Plan or Floor Plan (Figure 2.10).
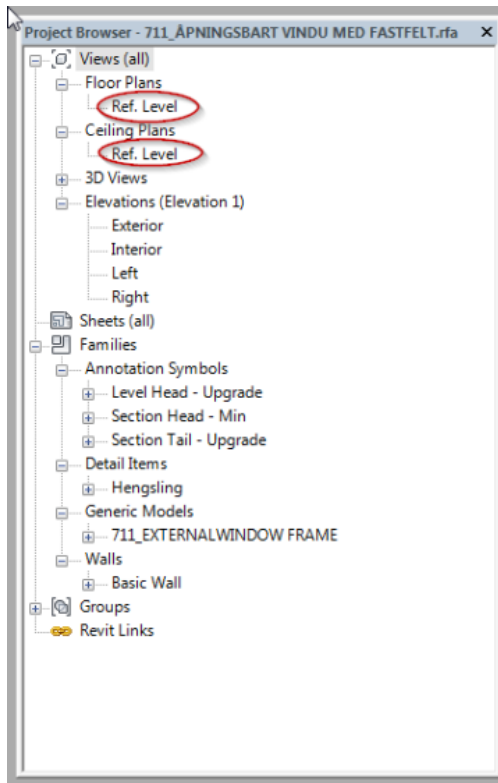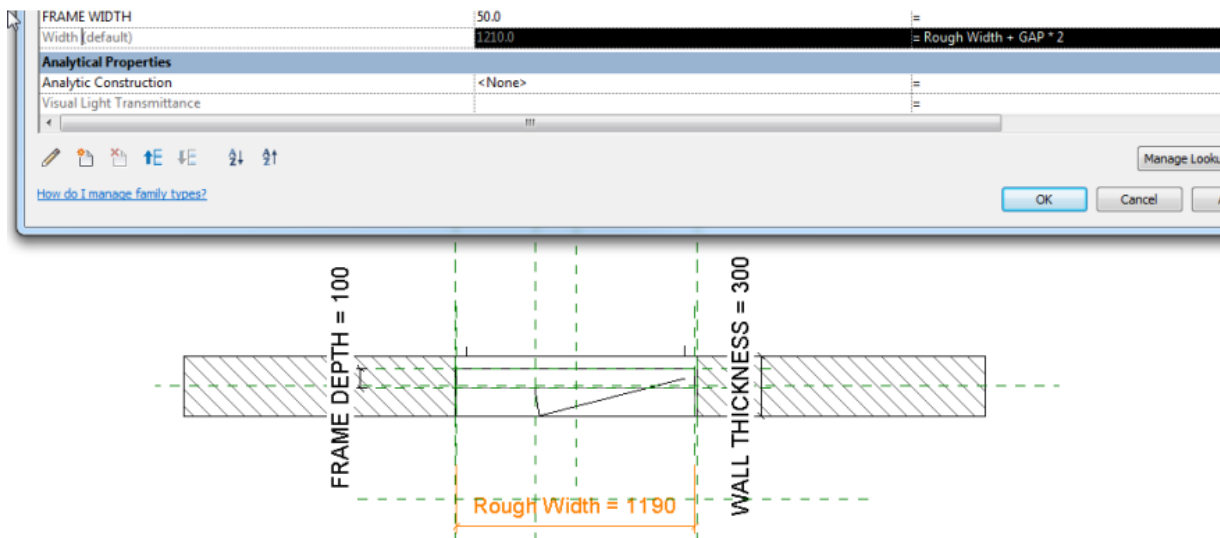
Figure 2.10

Figure 2.11

Earlier it was possible to see a formula that was defining the parameter **Width** (Black line in Figure 2.11 and same menu as Figure 2.8). It says (= Rough Width + GAP*2).

We can see that the **Rough Width** parameter is highlighted in the **Ceiling Plans Ref. Level** window when the **Width** parameter is selected. This means that the **Width** parameter is dependent on the **Gap** parameter and the **Rough Width parameter**.

Select the **Rough Width** (Figure 2.11) parameter from the **Ceiling Plans Ref. Level** (Figure 2.10).
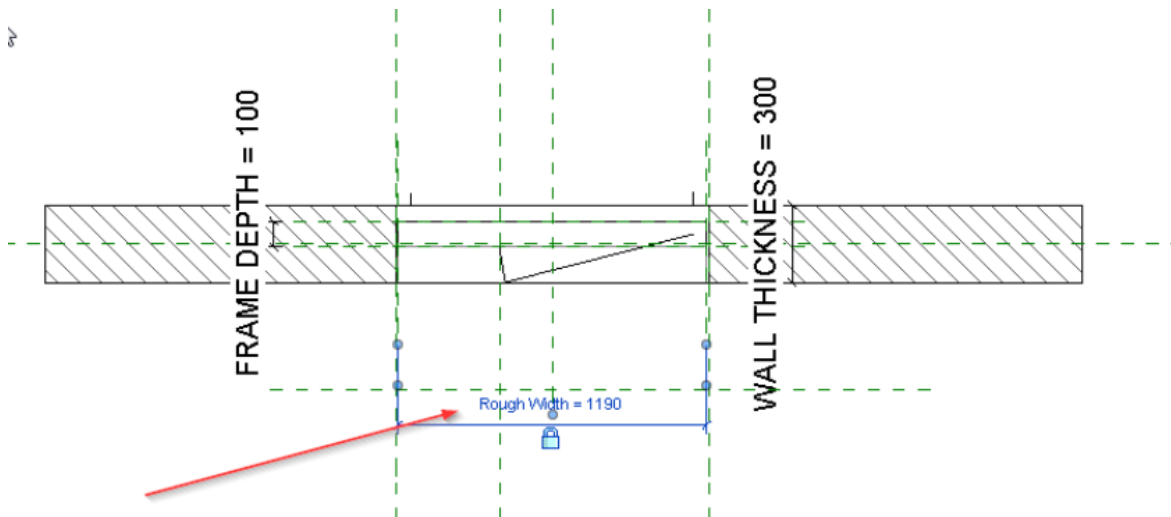
Figure 2.12

While the **Rough Width** parameter is selected as an example for this example (Figure 2.12), you got some options appearing on the top menu of the screen (Figure 2.13).

Figure 2.13

The **Width** parameter does not need to have a formula, and the setup of other parameters can vary from family to family. The goal is to set the **Width** and **Height** parameter to **instanced** by ticking the box shown above (Figure 2.13).

You can confirm that you have done this correctly by going back to Family types. If done correctly, the Width and Height will read (default) next to it. The exporter can now read these values.

Figure 2.14

Another good indicator is when now selecting the element and looking at the properties window, the **Width** and **Height** parameter is visible under **Dimension** category.

For more information on creating or editing Family Parameters, it is suggested visiting Autodesk website.

Summary

To ensure the best possible Winner Design export results:

Ensure that the room boundary correctly describes the physical room to be exported
Ensure that room separators are not misplaced
Ensure that only true windows/doors belongs to the windows/doors category
Ensure that windows/doors has Width/height parameters with correct values

Remember that you only need to follow the points above for rooms that are to be exported with the Winner Design export add-in.