



eTlipse
elements2



TL FRAMES

GUIDE (ENGLISH)

April 14, 2024

TL ELEMENTS: FRAMES - DOORS/WINDOWS INSERTION \\ GUIDE

TL Elements FRAMES is a tool for filtering and manual selection of frame elements and walls; insertion of multiple windows/doors in walls at once with the use of parameters of elevation and horizontal offset; Sill creation and floors mergence by selected frames; moving, flipping and mirroring of multiple frame elements. You can use the core functionalities of the TL Elements lists to handle elements selection and visualization. The standard TL Elements integrated visualization tools are also available to improve this workflow.

This is a guide to get you started on the basics of the command. Please, keep in mind that, in addition to this and any other support material, TL Elements also provides helpful tooltips with descriptions of features that you may invoke by hovering your mouse over the buttons of the application.

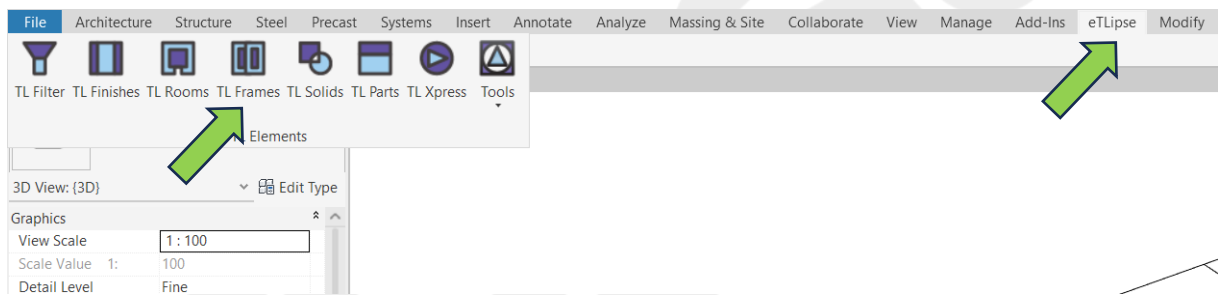
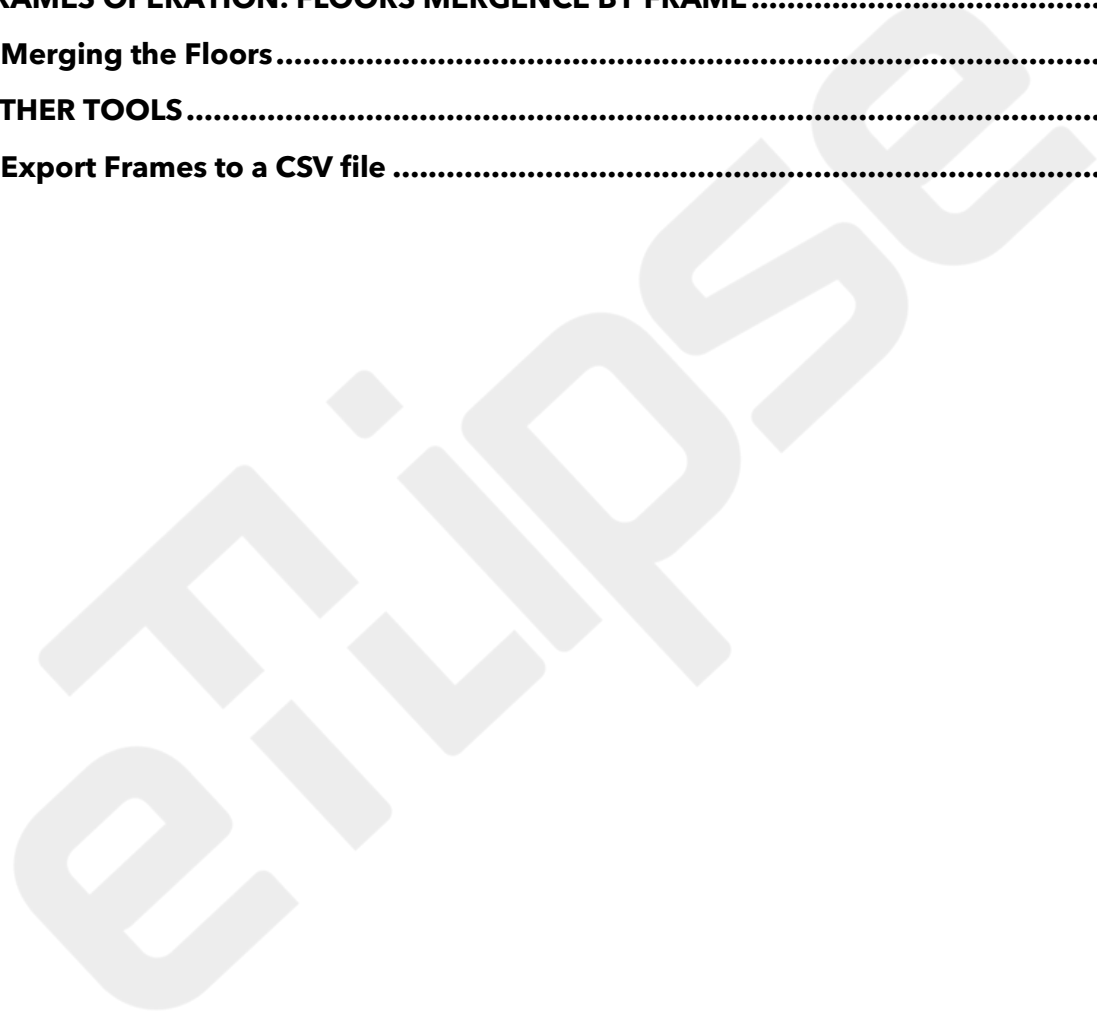


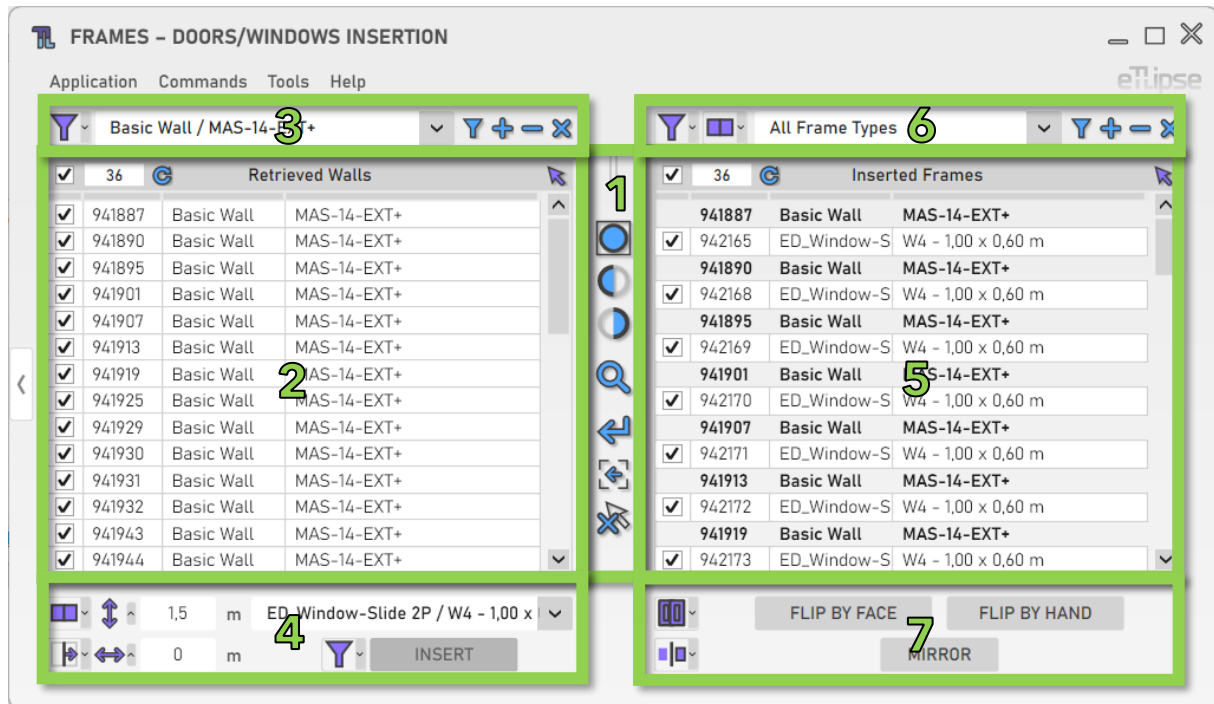
TABLE OF CONTENTS

TL FRAMES INTERFACE	5
USE OF REVIT GLOBAL PARAMETERS	6
WALLS RETRIEVAL.....	7
Retrieval Mode.....	7
Retrieving Walls by Type.....	7
Adding Walls by Type	8
Removing Walls by Type	8
Clearing the Walls List.....	9
Using TL Filter to fill the Walls List.....	9
FRAMES INSERTION	10
Frame Elevation.....	10
Insertion Offset Mode	11
Frame Horizontal Offset	11
Multiple Frames Insertion.....	12
Frame Type.....	12
Inserting Frames.....	13
FRAMES RETRIEVAL	14
Retrieval Mode.....	14
Retrieving Frames by Type.....	14
Adding Frames by Type	15
Removing Frames by Type	15
Clearing the Frames List	16
Using TL Filter to fill the Frames List.....	16
FRAMES OPERATION: FRAMES HANDLING	17
Mirroring Frames.....	17
Flipping Frames by Face.....	18
Flipping Frames by Hand	18
Move Frames Mode.....	19
Frame Edition Vertical Offset	19
Frame Edition Horizontal Offset.....	20
Moving Frames.....	20

FRAMES OPERATION: SILLS CREATION	21
Sill Elevation.....	21
Sill Depth.....	22
Sill Position Mode	22
Sill Type.....	23
Creating Sills	23
FRAMES OPERATION: FLOORS MERGENCE BY FRAME	24
Merging the Floors.....	24
OTHER TOOLS	25
Export Frames to a CSV file	25



TL FRAMES INTERFACE



As we can see in the image, the TL Frames user interface provides:

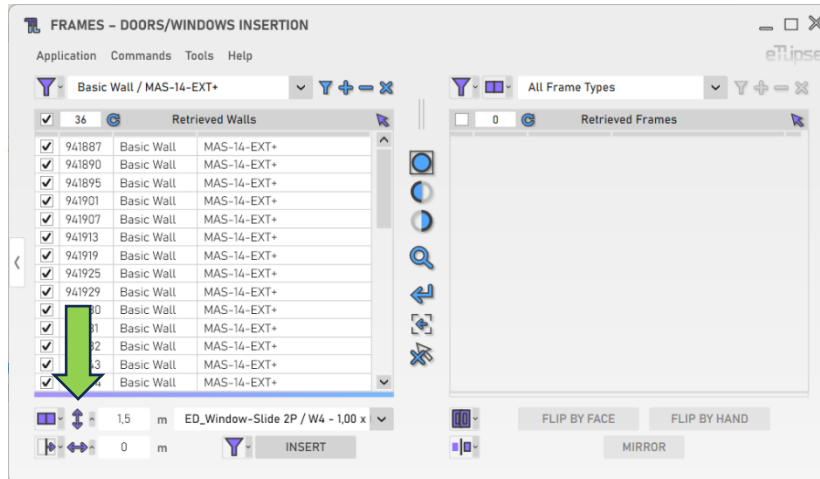
1. A set of visualization tools.
2. A list of elements of the Walls category (Walls Retrieval List).
3. A set of tools for basic walls filtering (to fill the Walls Retrieval List).
4. A set of tools for operations with the walls checked in the Walls Retrieval List.
5. A list of elements of the Doors/Windows categories (Frames Retrieval List).
6. A set of tools for doors/windows filtering (to fill the Frames Retrieval List).
7. A set of tools for operations with the doors/windows checked in the Frames Retrieval List.

To learn how to use the controls in lists and the visualization tools, please, refer to the "TL List" and "TL Visualization Tools" guides.

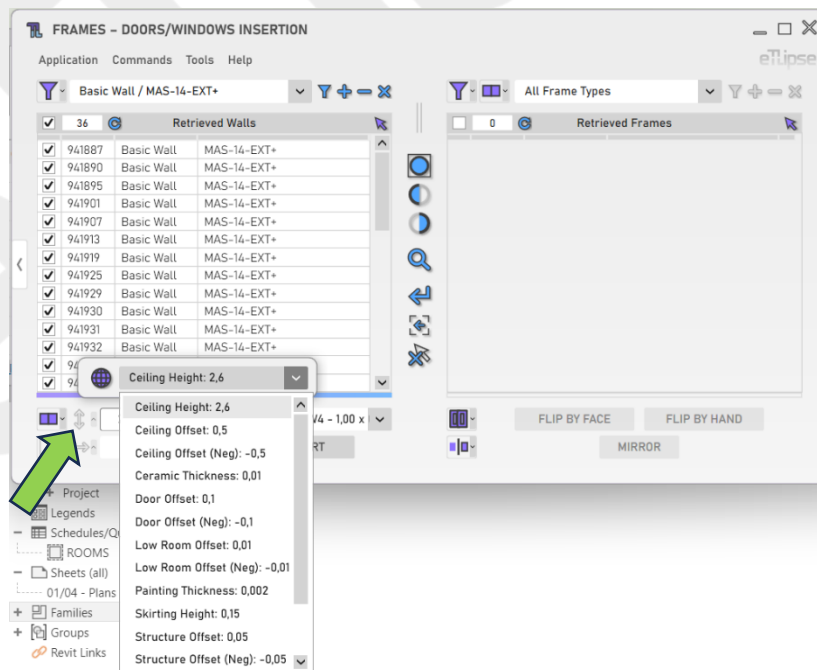
All numeric text boxes in the interface will assume values in the unit currently set for length in the active project (for the examples in this guide, it will be meter) and also can parse simple formulas of multiplication, division, subtraction and addition in this unit.

USE OF REVIT GLOBAL PARAMETERS

Before using any of the multiple features of TL Frames, we should note that every field for numeric value in its user interface can be locked and receive values from Revit global parameters. We must keep in mind that the global parameter must always match the unit type of the numeric field (fields for length values require length global parameters, fields for integer values require integer global parameter, etc.).



Every field is preceded by a button that opens the panel with the option to lock the values in the field to a Revit global parameter. In the image, we can see an example of this button next to a field that takes values for elevations of walls (in this case, values of length).



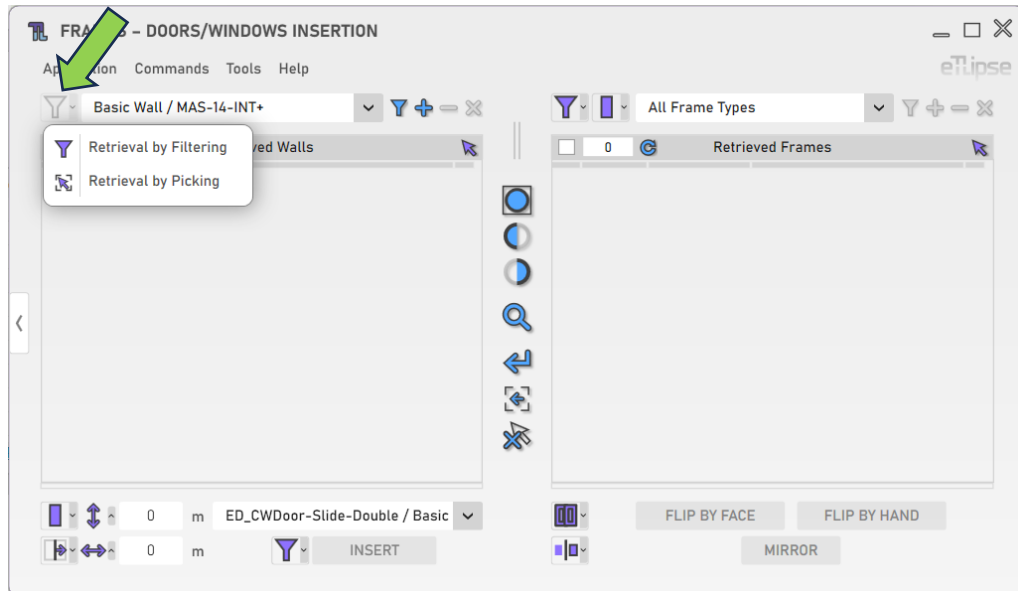
After clicking the button, we can click the "globe" icon to lock the field to one of the available global parameters of the respective unit type found in the active Revit project.

If no global parameter for the unit type of the field is found, the button to open the panel will be disabled.

WALLS RETRIEVAL

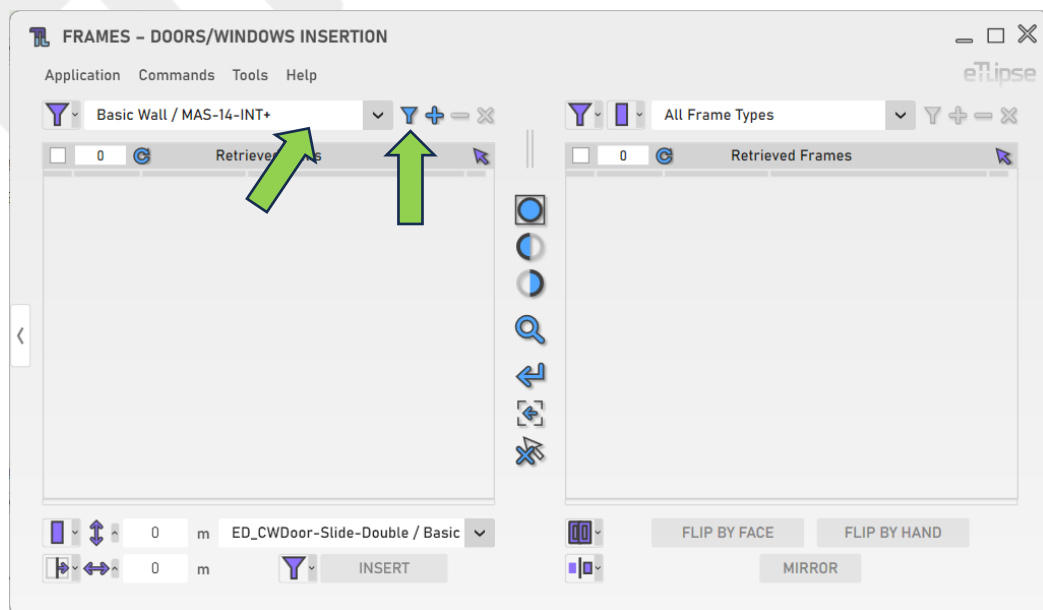
Retrieval Mode

You can retrieve walls in two ways: by filtering them by type (“Filtering”) or by picking the ones you wish in the Revit active view (“Picking”). You can set the retrieval mode in the “Toggle Retrieval Mode” dropdown box.



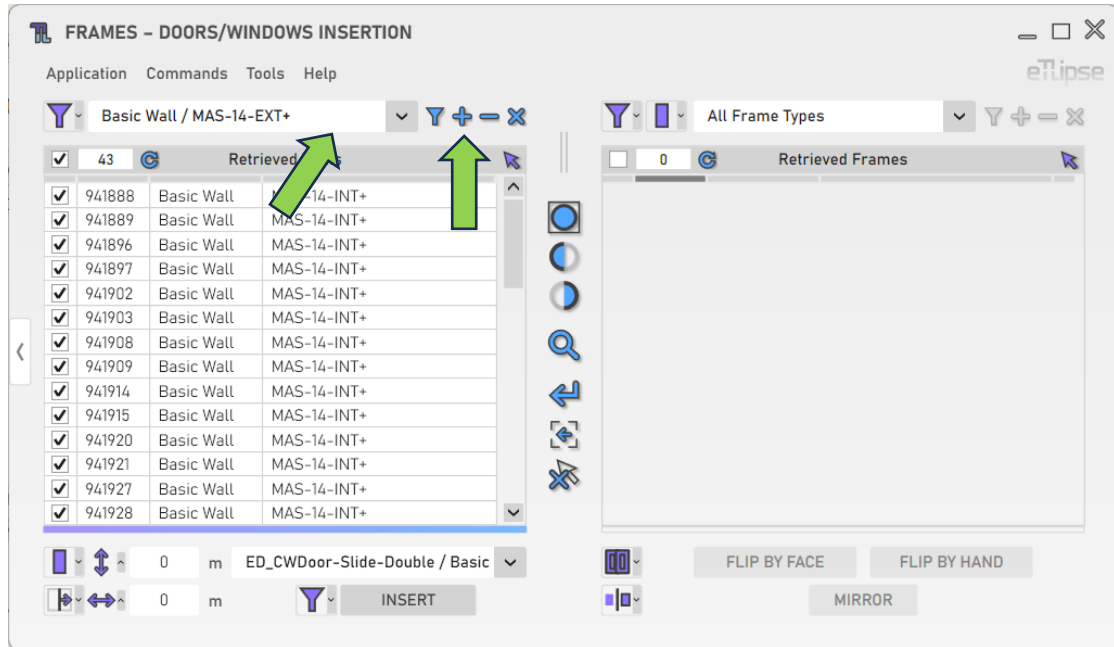
Retrieving Walls by Type

In order to retrieve and list basic walls of a type, you must choose a type in the “Wall Types” dropdown box and click the “Retrieve Walls” button. In Manual mode, you’ll have to pick the elements of the chosen type in the Revit active view. Keep in mind that, if there are elements already selected in the Revit view, these elements are going to be listed, instead.



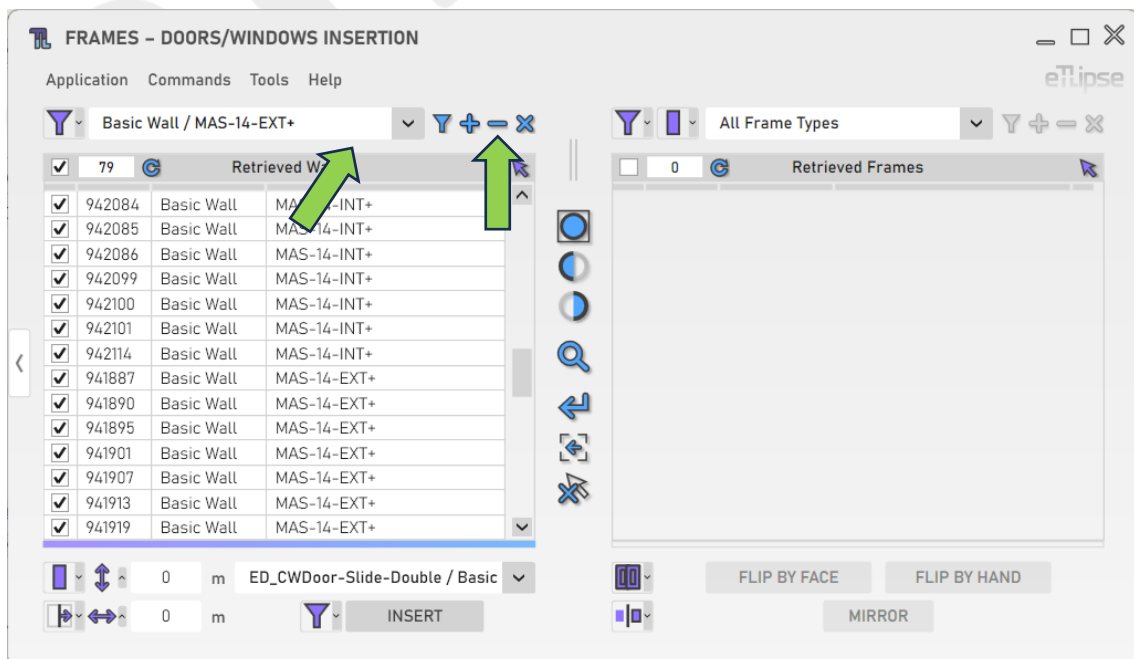
Adding Walls by Type

In order to add basic walls of a specific type to the list, you must choose a type in the “Wall Types” dropdown box and click the “Add Walls” button. In Manual mode, you’ll have to pick the elements of the chosen type you want to add in the Revit active view.



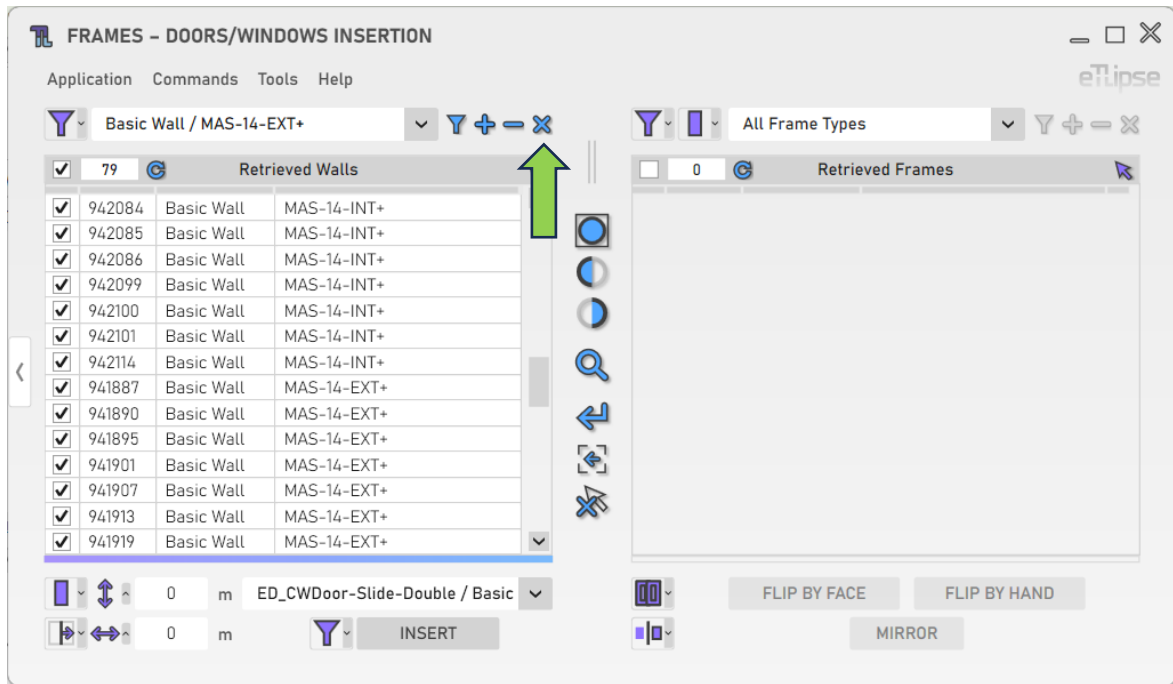
Removing Walls by Type

In order to remove walls of a specific type from the list, you must choose a type in the “Wall Types” dropdown box and click the “Remove Walls” button. In Manual mode, you’ll have to pick the elements of the chosen type you want to remove in the Revit active view.



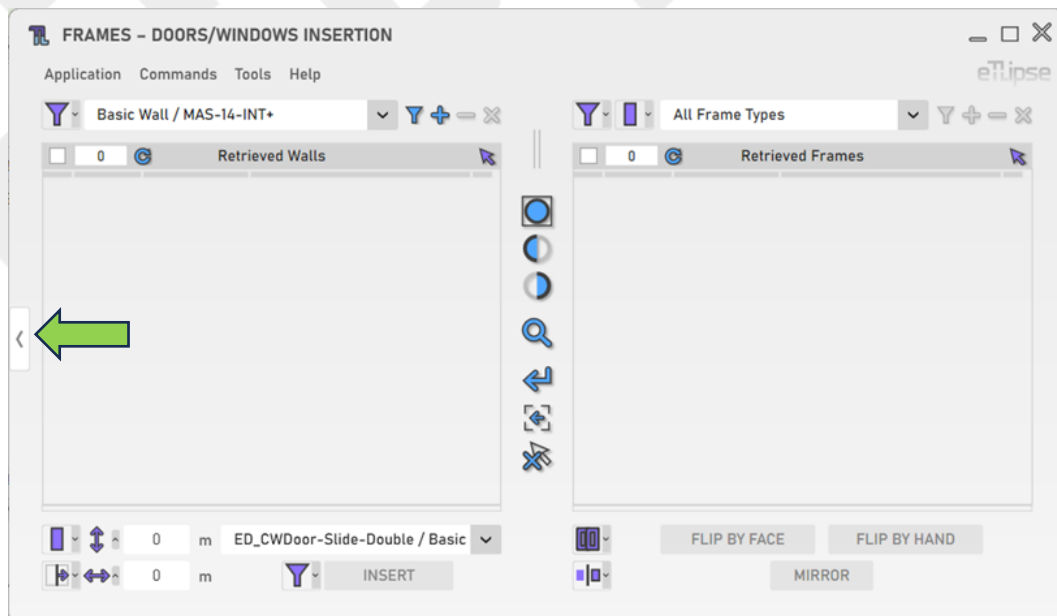
Clearing the Walls List

In order to clear the list, you must click the “Clear Walls Retrieval List” button.



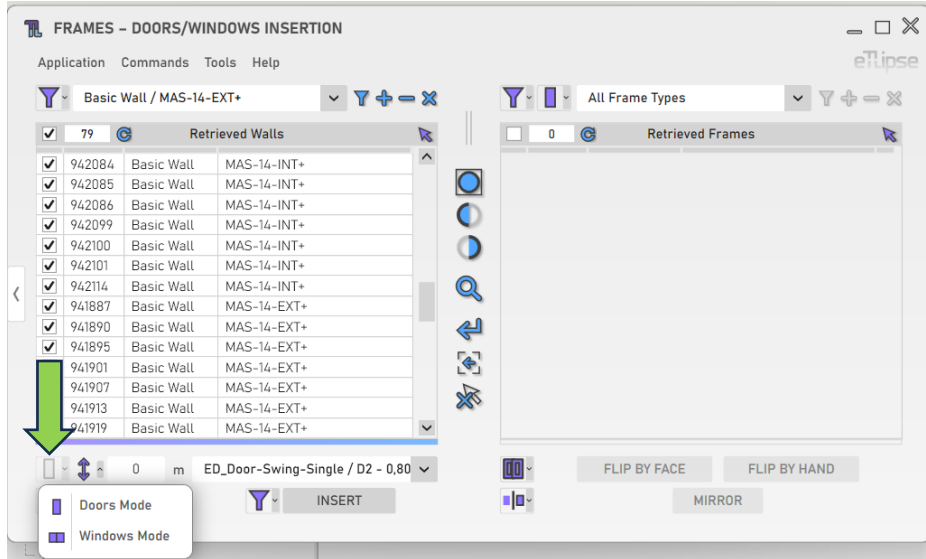
Using TL Filter to fill the Walls List

At any time, you can click the “Slide to TL Filter” arrow button to bring basic walls retrieved in TL Filter to the Walls Retrieval List.



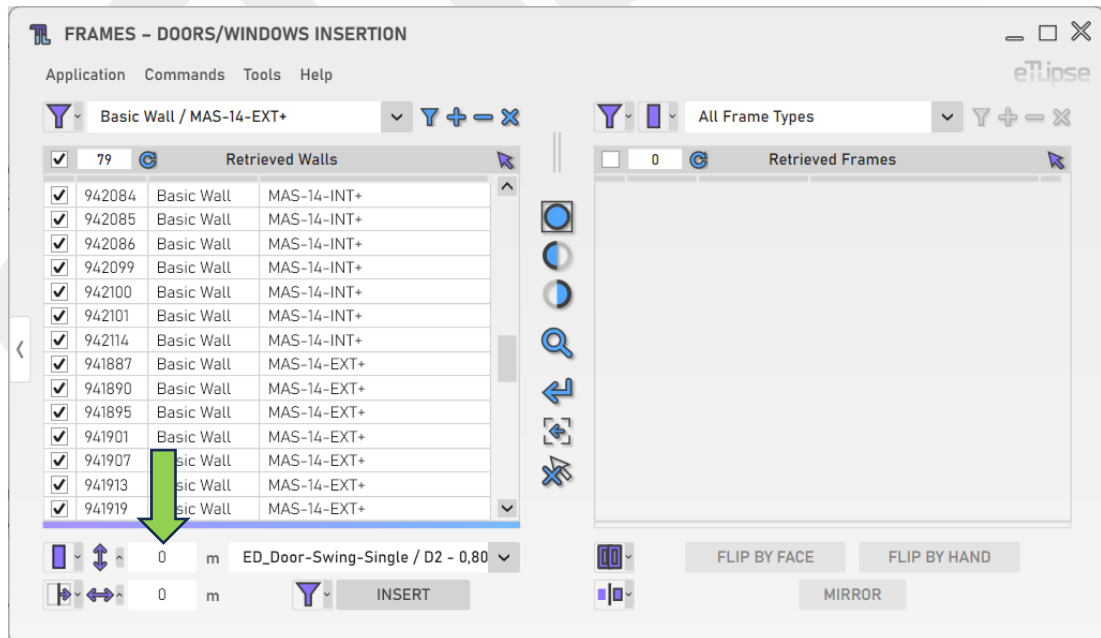
FRAMES INSERTION

Once you have checked walls in the Walls Retrieval List, you can perform operations of frames (doors or windows) insertion at these walls, according to the selected Frame Mode.



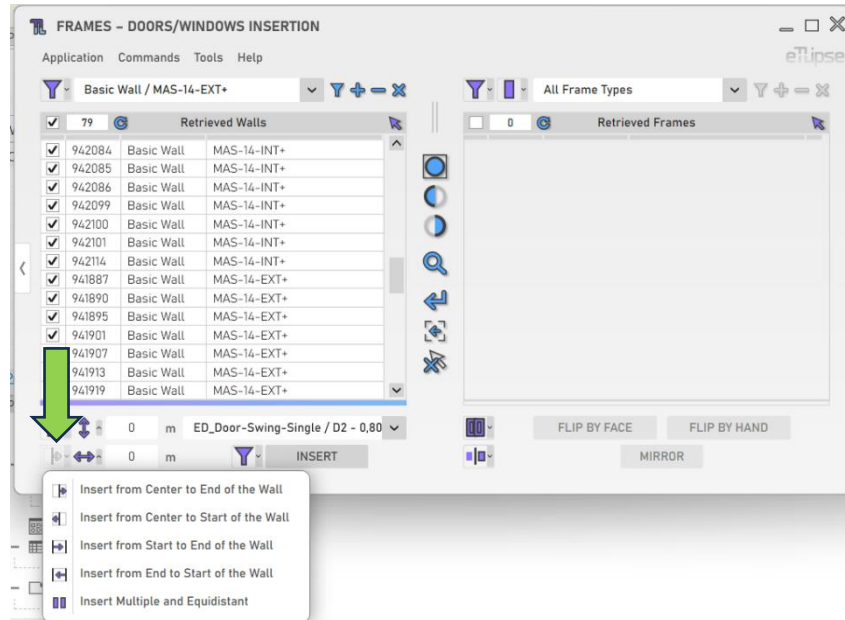
Frame Elevation

To set the elevation of the frames to be inserted, provide a length value in the indicated text box.



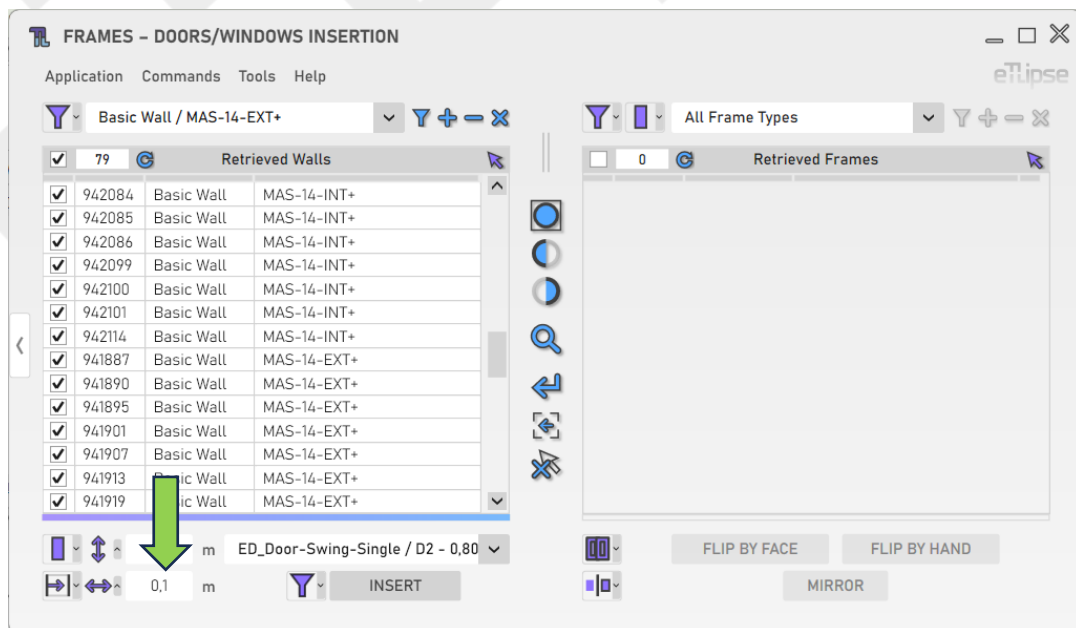
Insertion Offset Mode

It is possible to insert frame elements with an offset distance from the center of the wall or from the ends of the wall. To set this, choose an option at the "Toggle Insertion Offset Mode" dropdown box.



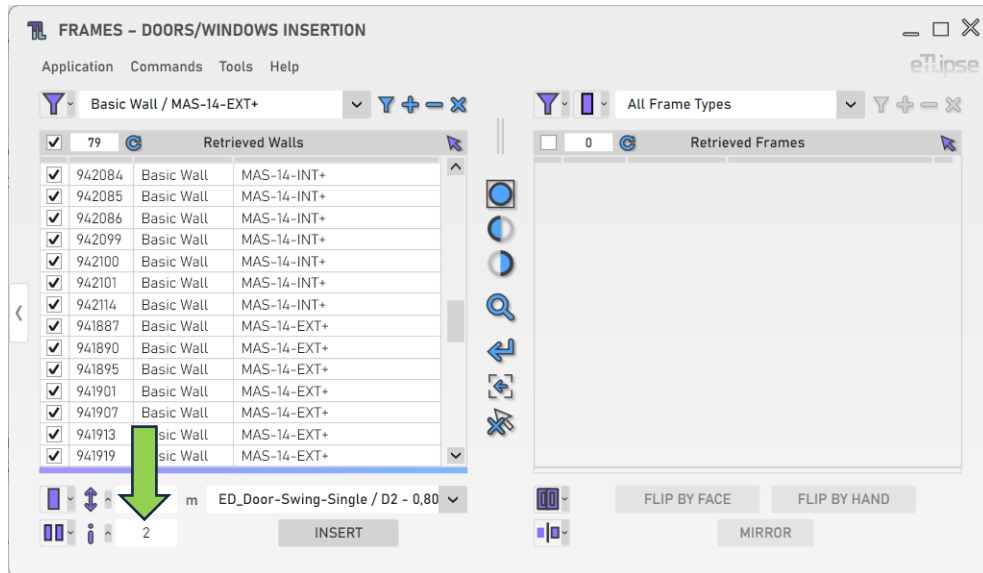
Frame Horizontal Offset

To set the horizontal offset of the frames to be inserted, provide a length value in the indicated text box. Positive values will increase the offset in the direction set by the selected Insertion Offset Mode. Negative values will increase this offset in the opposite direction.



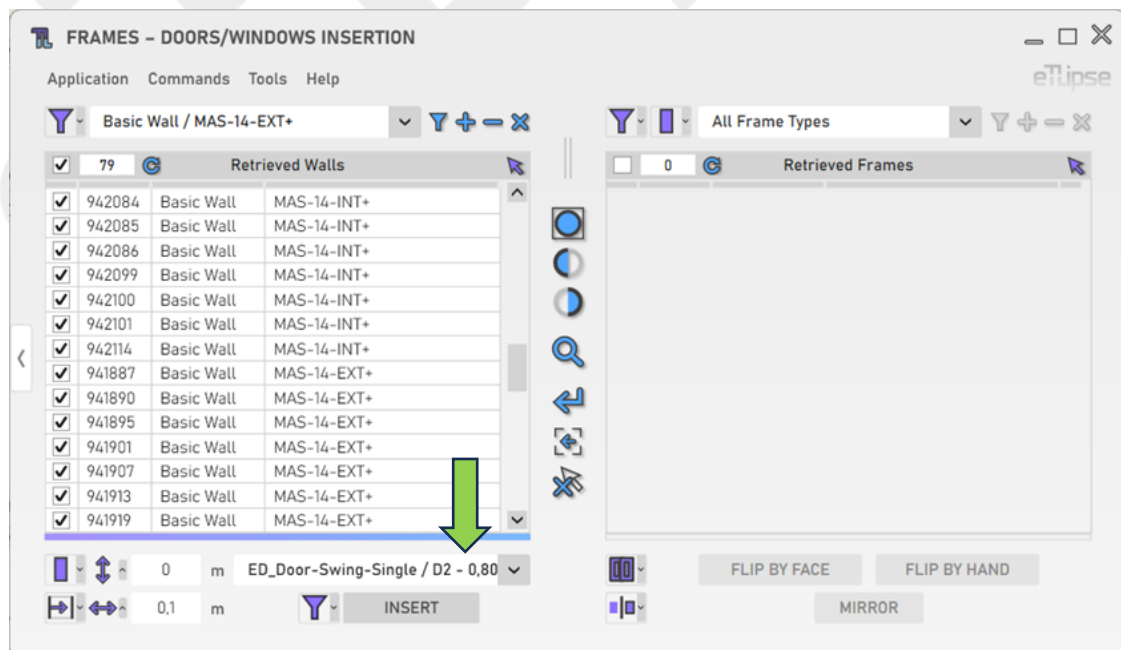
Multiple Frames Insertion

The last option at the “Toggle Insertion Offset Mode” dropdown box is the “Insert Multiple and Equidistant” mode, which allows the user to place multiple frames at the same wall at once. In this mode, the “Frame Horizontal Offset” field is replaced by the “Number of Frames” field, which will set the number of frames to be inserted at each checked wall.



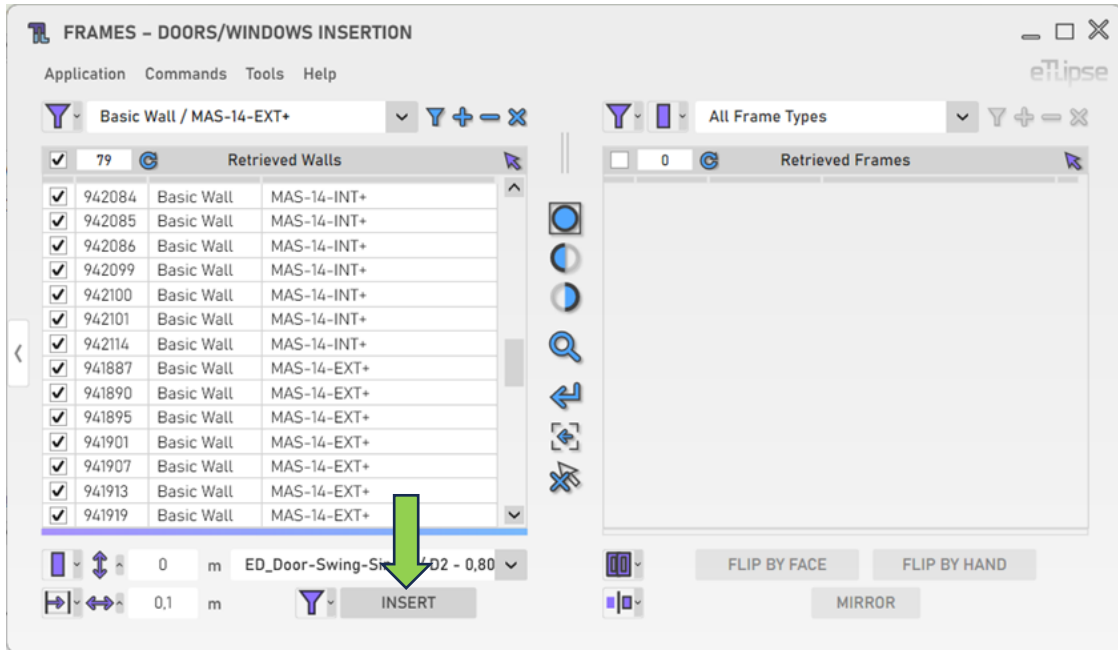
Frame Type

To set the type of the frames to be inserted, choose a frame type at the “Frame Type” dropdown box.



Inserting Frames

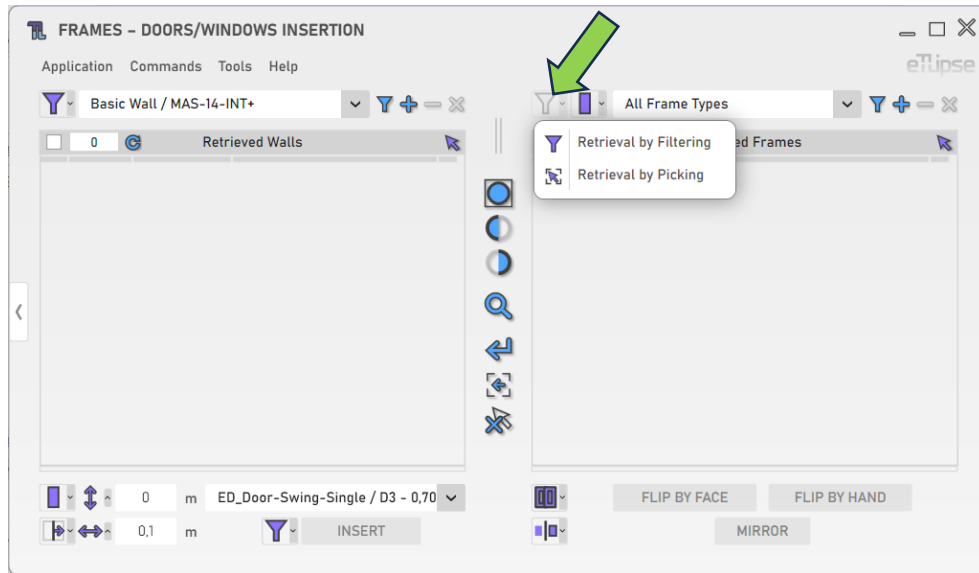
To insert the frames with the provided settings, click the “Insert Frames” button.



FRAMES RETRIEVAL

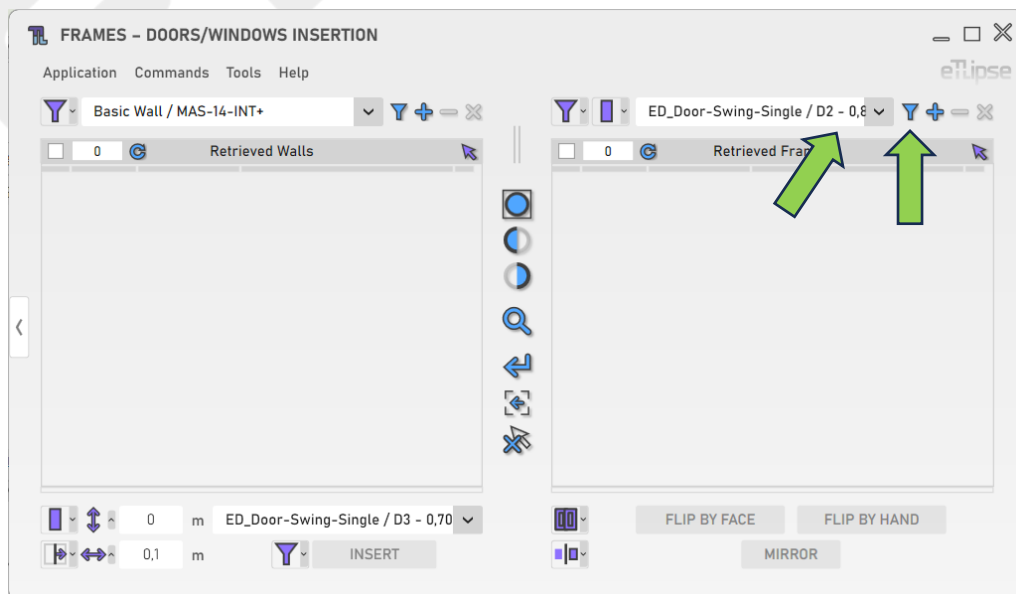
Retrieval Mode

You can retrieve doors/windows in two ways: by filtering them by type (“Filtering”) or by picking the ones you wish in the Revit active view (“Picking”). You can set the retrieval mode in the “Toggle Retrieval Mode” dropdown box.



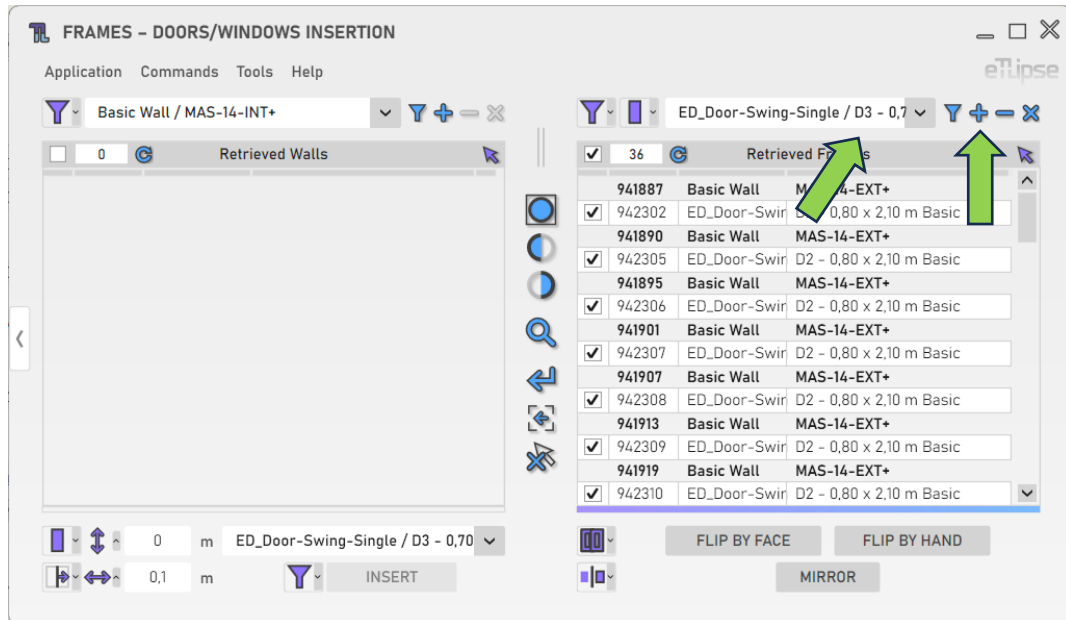
Retrieving Frames by Type

In order to retrieve and list frame elements (doors or windows, depending on the selected Frame mode) of a type, you must choose a type in the “Frame Types” dropdown box and click the “Retrieve Frames” button. In Manual mode, you’ll have to pick the elements of the chosen type in the Revit active view. Keep in mind that, if there are elements already selected in the Revit view, these elements are going to be listed, instead.



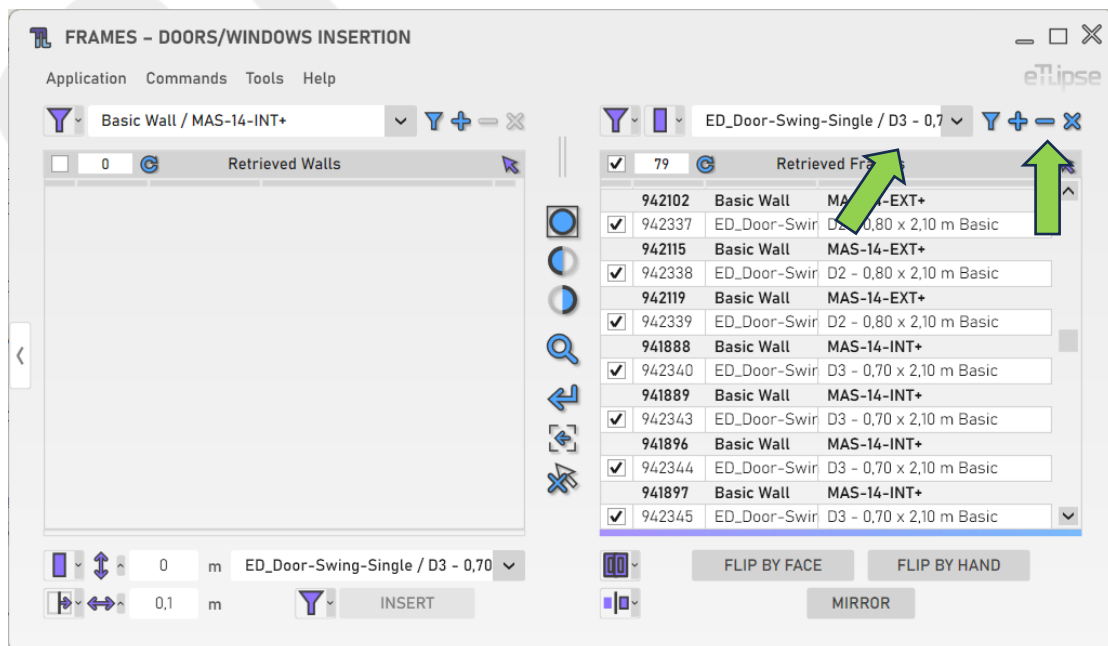
Adding Frames by Type

In order to add frame elements (doors or windows, depending on the selected Frame mode) of a specific type to the list, you must choose a type in the "Frame Types" dropdown box and click the "Add Frames" button. In Manual mode, you'll have to pick the elements of the chosen type you want to add in the Revit active view.



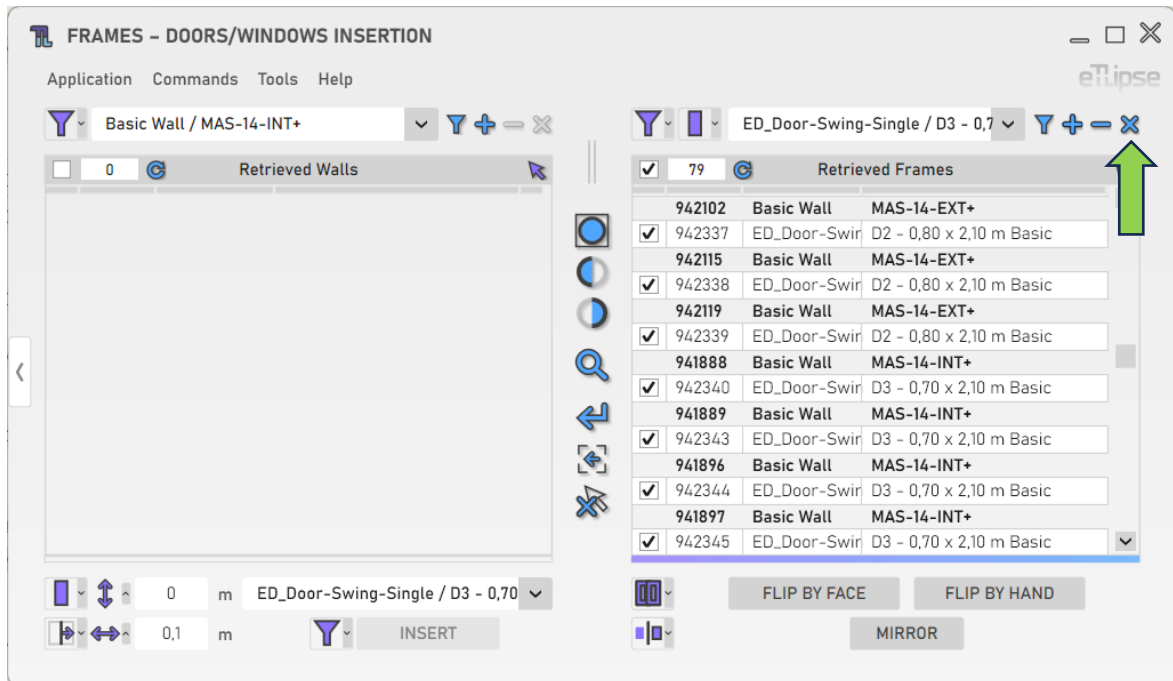
Removing Frames by Type

In order to remove frame elements of a specific type from the list, you must choose a type in the "Frame Types" dropdown box and click the "Remove Frames" button. In Manual mode, you'll have to pick the elements of the chosen type you want to remove in the Revit active view.



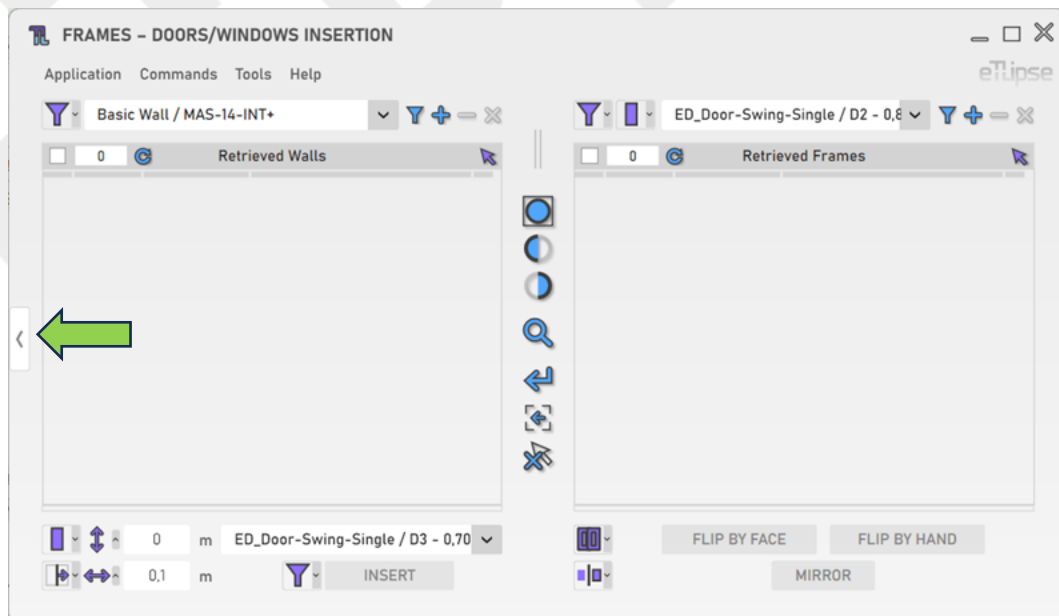
Clearing the Frames List

In order to clear the list, you must click the “Clear Retrieved Frames” button.



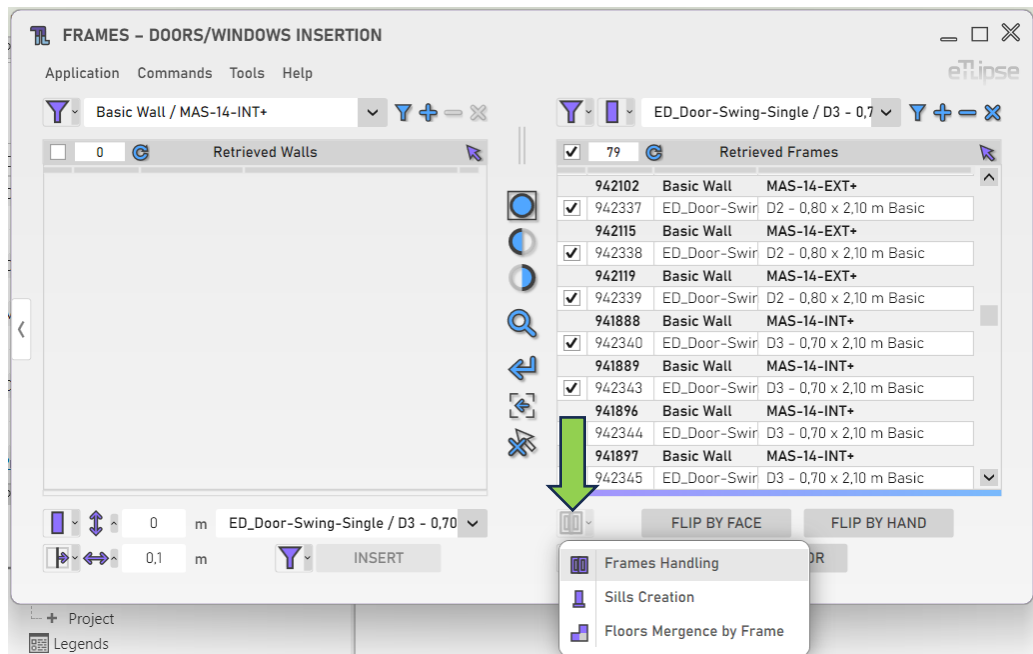
Using TL Filter to fill the Frames List

At any time, you can click the “Slide to TL Filter” arrow button to bring frame elements retrieved in TL Filter to the Frames Retrieval List.



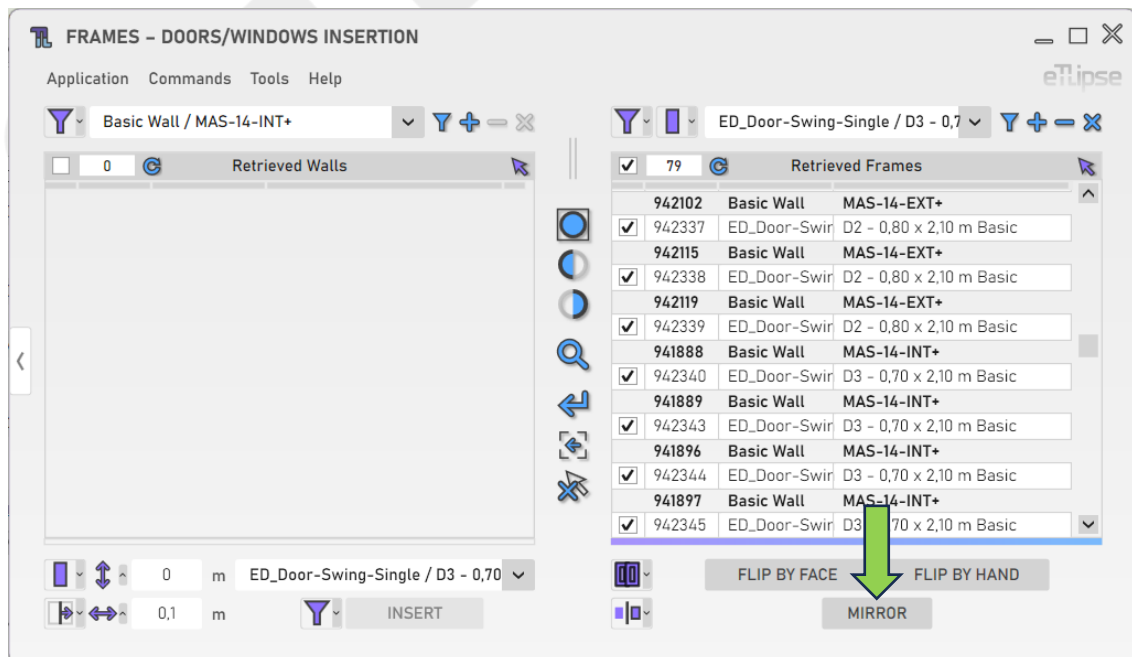
FRAMES OPERATION: FRAMES HANDLING

In order to access the tools for flipping, moving and mirroring of frame element checked in the Frames Retrieval List, the “Frames Handling” mode must be selected at the “Toggle Frames General Operation Mode” dropdown box.



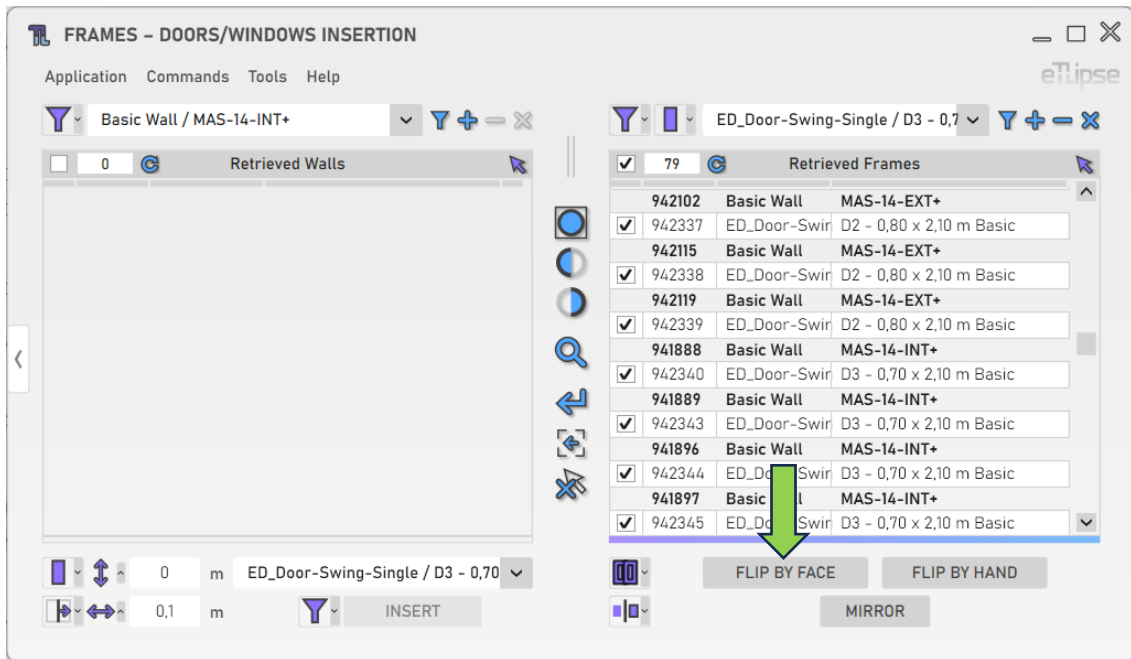
Mirroring Frames

To mirror the placement of each checked frame in their respective host wall, click the “Mirror Frames” button.



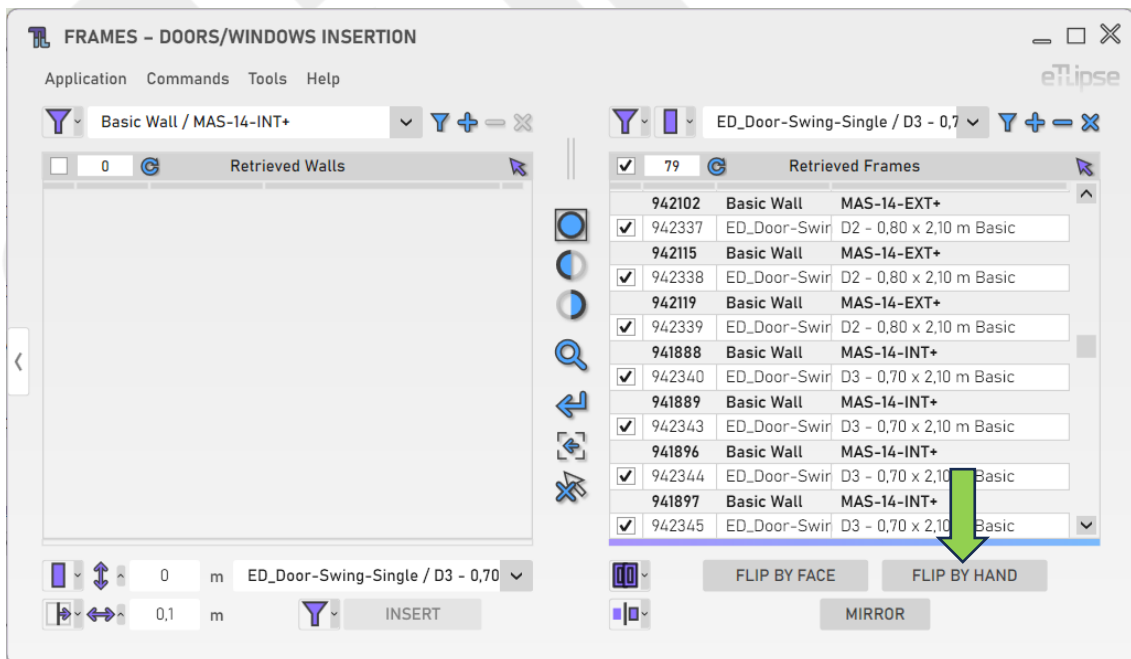
Flipping Frames by Face

To flip each checked frame by their face, click the "Flip Frames by Face" button.



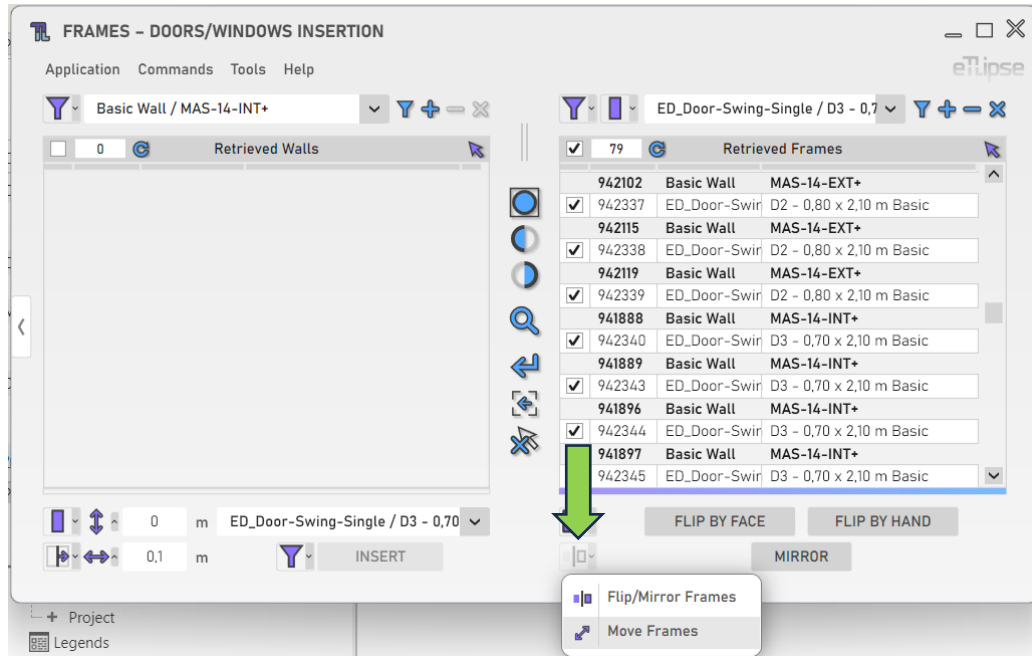
Flipping Frames by Hand

To flip each checked frame by their hand, click the "Flip Frames by Hand" button.



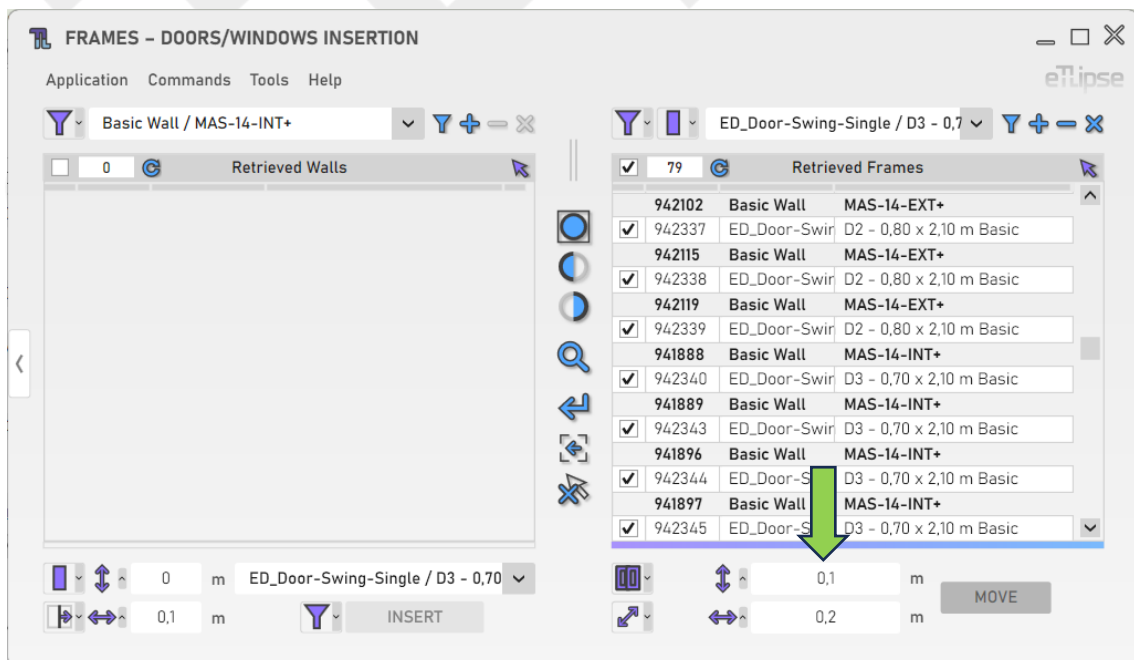
Move Frames Mode

In order to move the placement of each checked frame in their respective host wall, you must enable the "Move Frames" mode at "Toggle Frames Handling Mode" dropdown box.



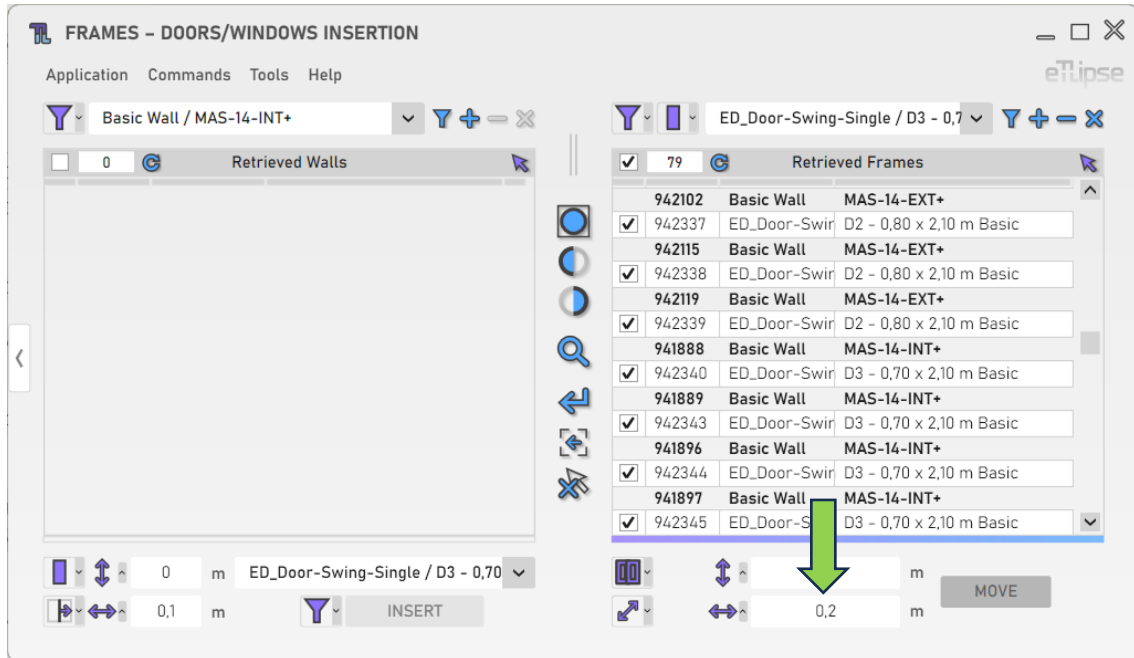
Frame Edition Vertical Offset

To set the value for the vertical translation offset of the checked frames in their respective host walls, provide a length value in the indicated text box.



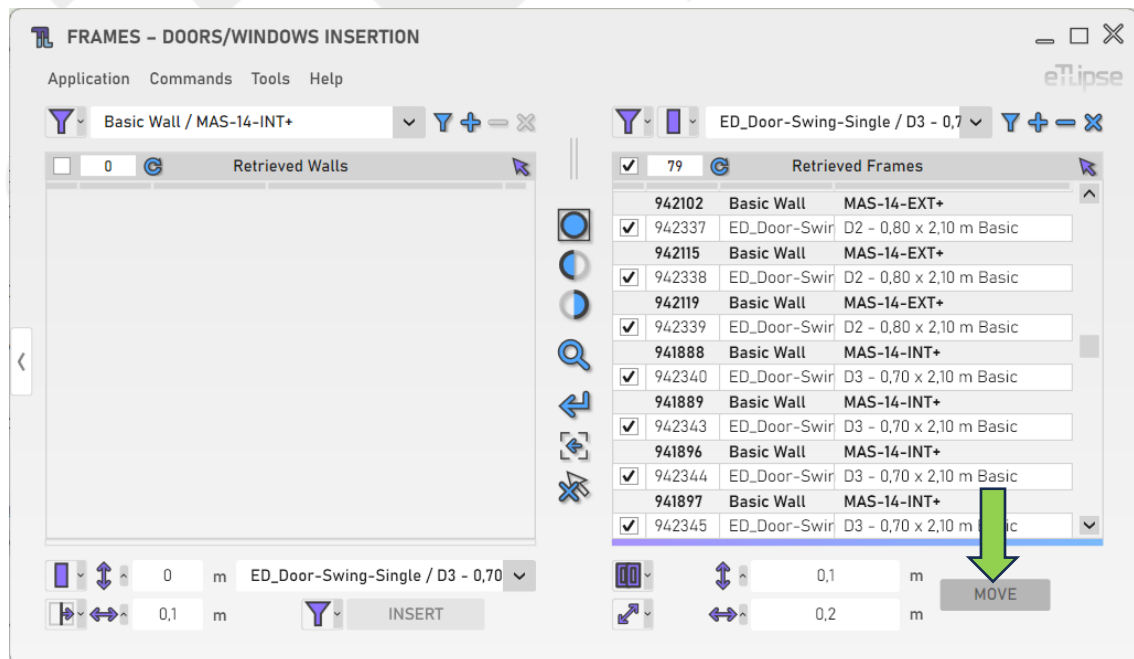
Frame Edition Horizontal Offset

To set the value for the horizontal translation offset of the checked frames in their respective host walls, provide a length value in the indicated text box.



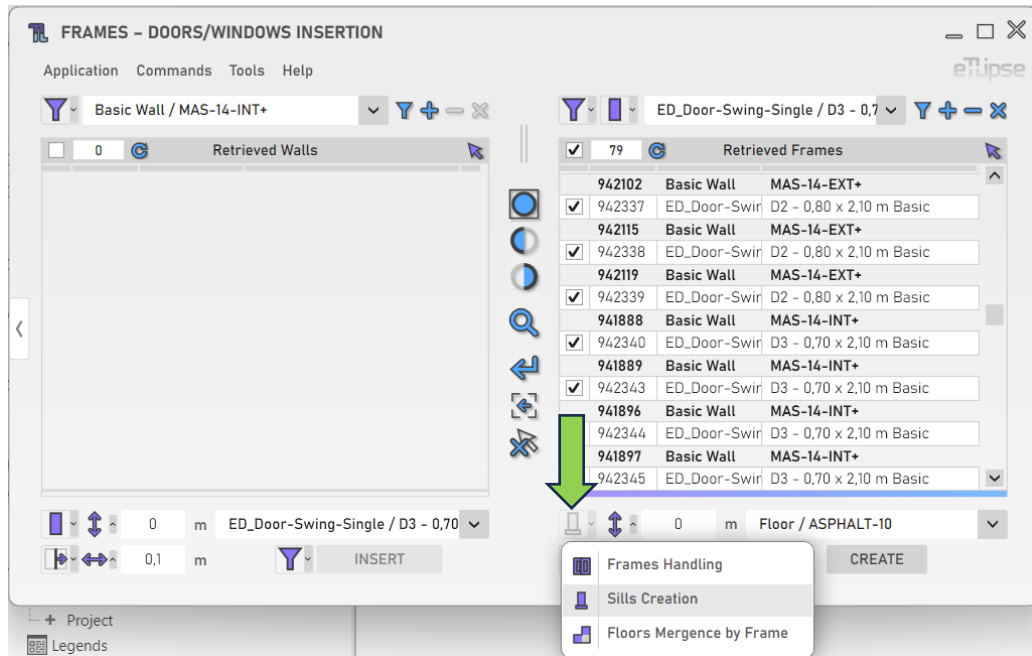
Moving Frames

To move the placement of each checked frame in their respective host wall, click the "Move Frames" button.



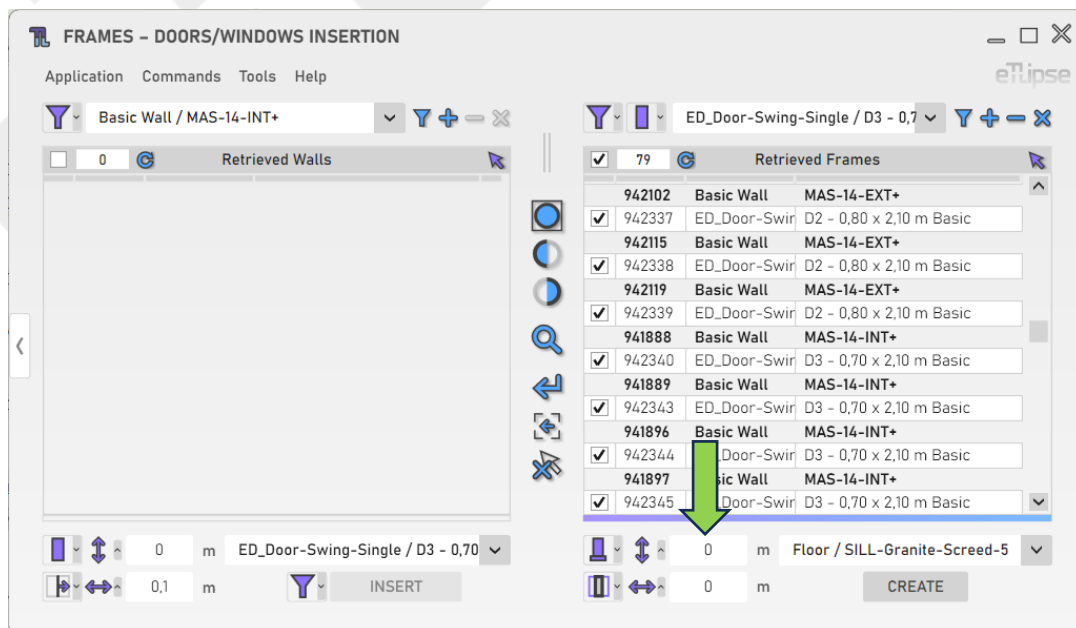
FRAMES OPERATION: SILLS CREATION

In order to access the tools for creation of a sill element for each frame element checked in the Frames Retrieval List, the “Sills Creation” mode must be selected at the “Toggle Frames General Operation Mode” dropdown box.



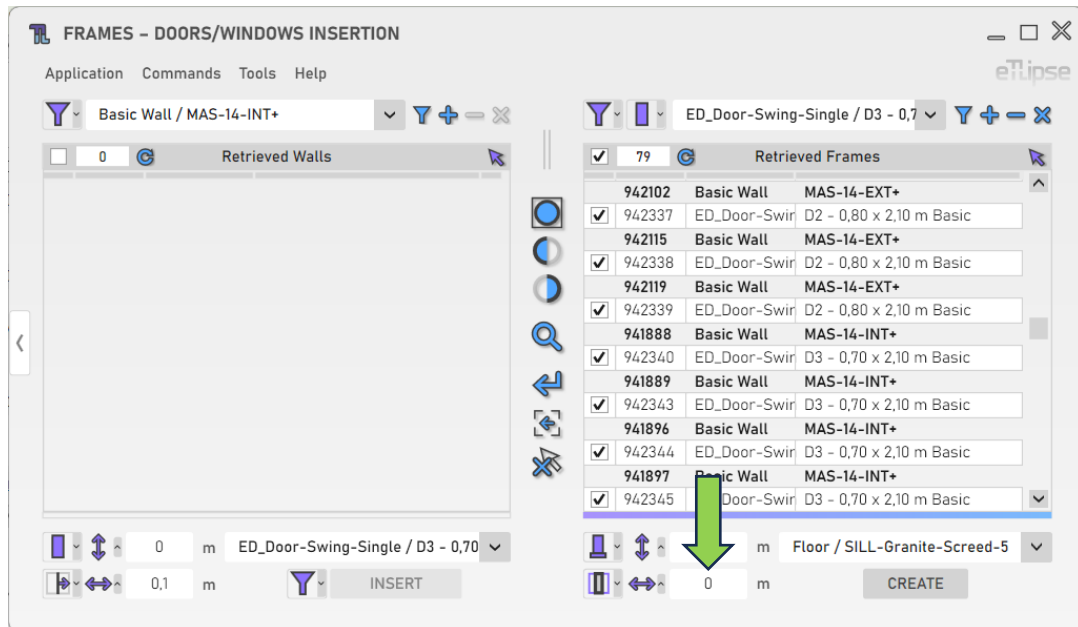
Sill Elevation

To set the elevation of the sills to be created, provide a length value in the indicated text box.



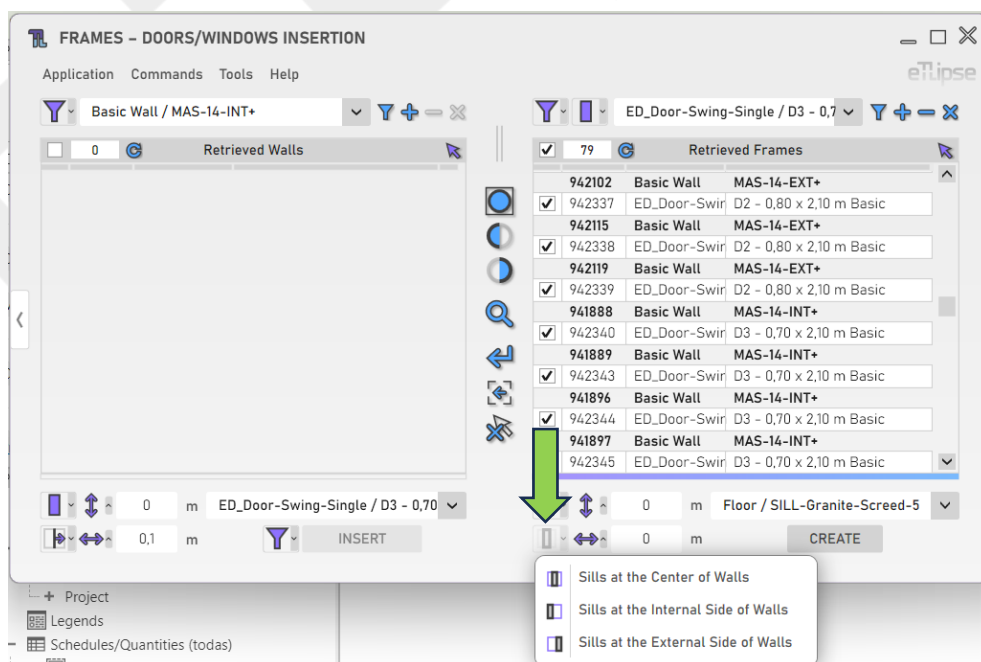
Sill Depth

To set the depth of the sills to be created, provide a length value in the indicated text box. If the value is 0, the sill depth will be executed with the respective host wall thickness value.



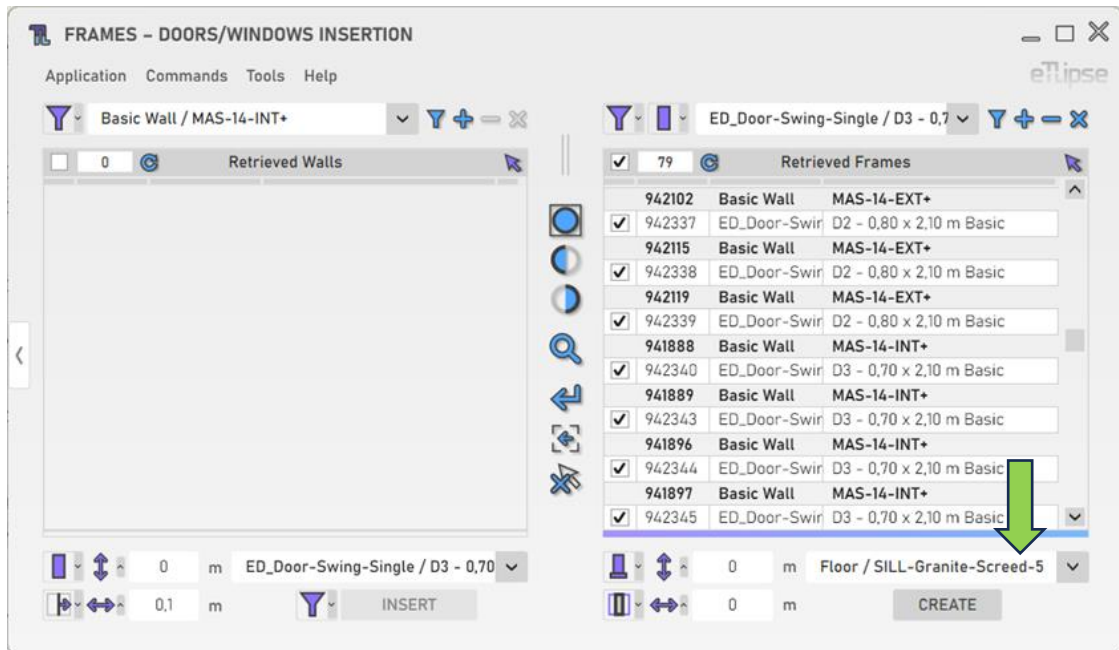
Sill Position Mode

There are three available modes to set the position of the sill along the depth of the host wall: at center of walls, at the internal side of walls and at the external side of walls. To choose one of these modes, you must access the "Toggle Sill Position Mode" dropdown box.



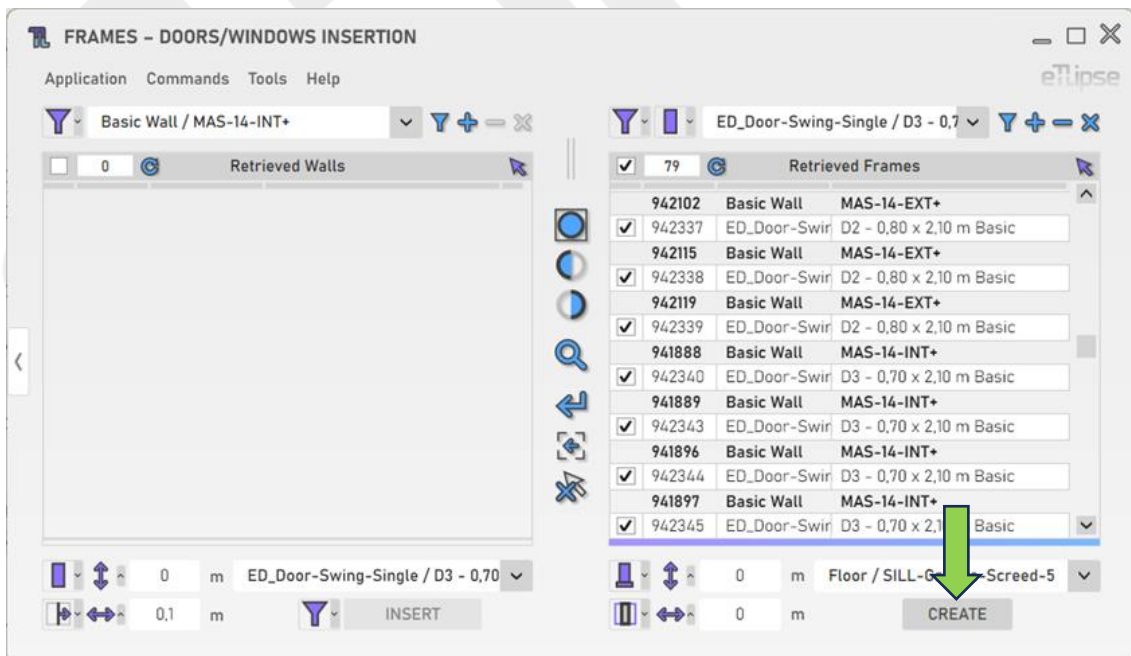
Sill Type

To set the floor type of the sills to be created, choose a floor type at the "Sill Type" dropdown box.



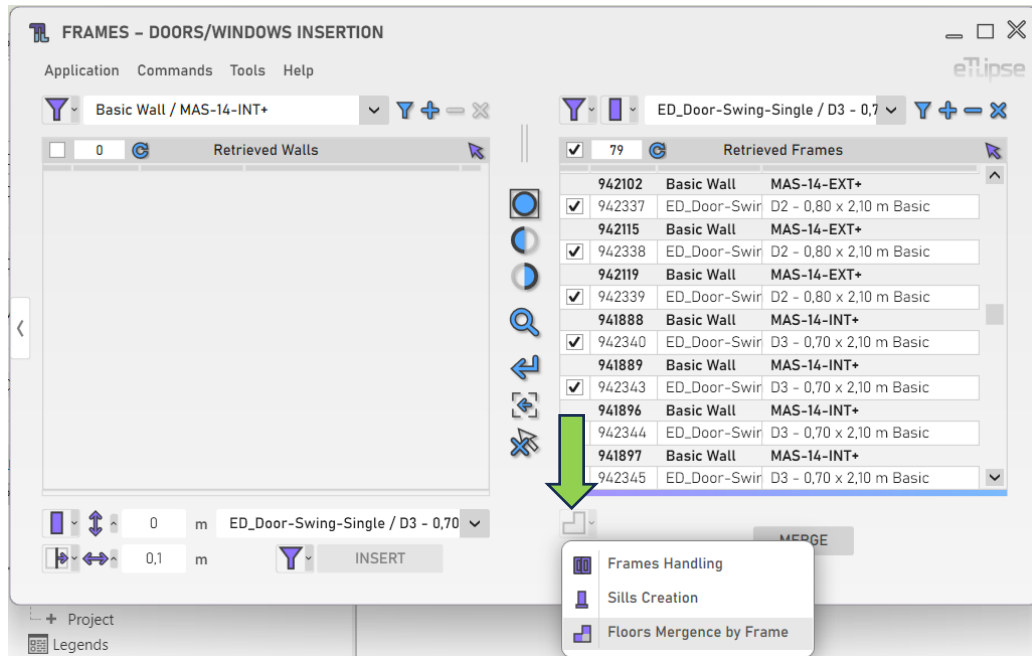
Creating Sills

To create a sill instance for each checked frame, click the "Create Sills" button.



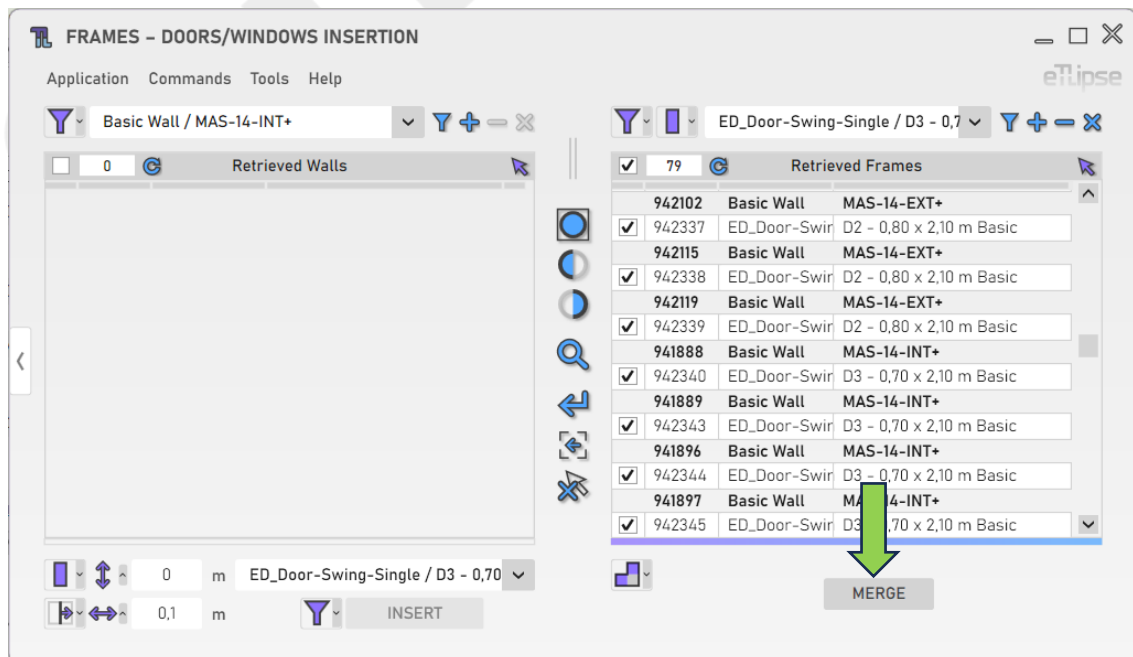
FRAMES OPERATION: FLOORS MERGENCE BY FRAME

In order to access the tools to merge floors of the same type and elevation separated by each frame element checked in the Frames Retrieval List, the "Floors Mergence by Frame" mode must be selected at the "Toggle Frames General Operation Mode" dropdown box.



Merging the Floors

To merge the floors with the same type and elevation separated by each checked frame element, click the "Merge Floors Under Frames" button.



OTHER TOOLS

Export Frames to a CSV file

You can export a table with the current list of frames to a .csv file. To do so, you just need to go to the menu "Tools>Export to .CSV".

