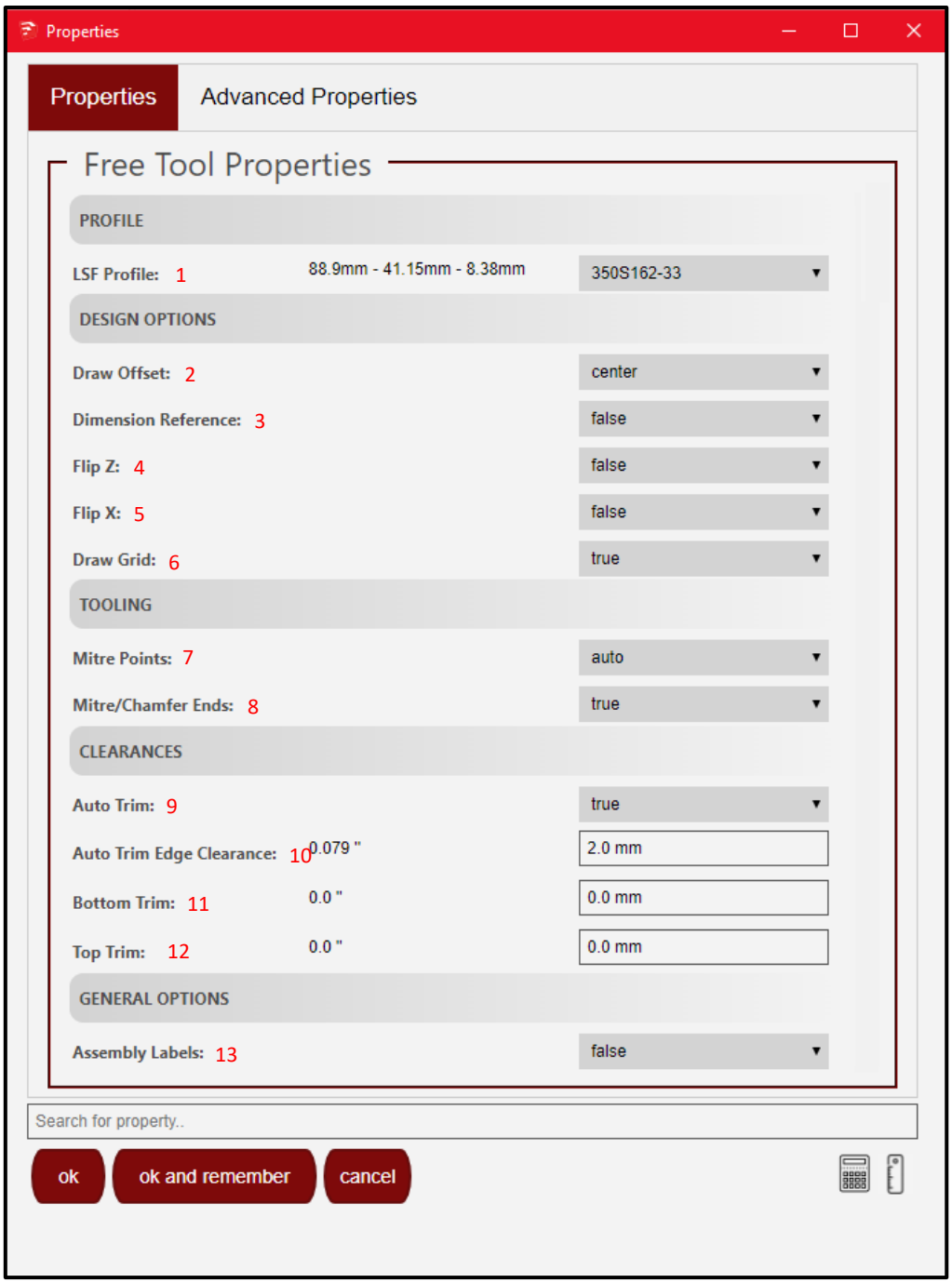
Free Tool module

How to create profiles using the free tool:

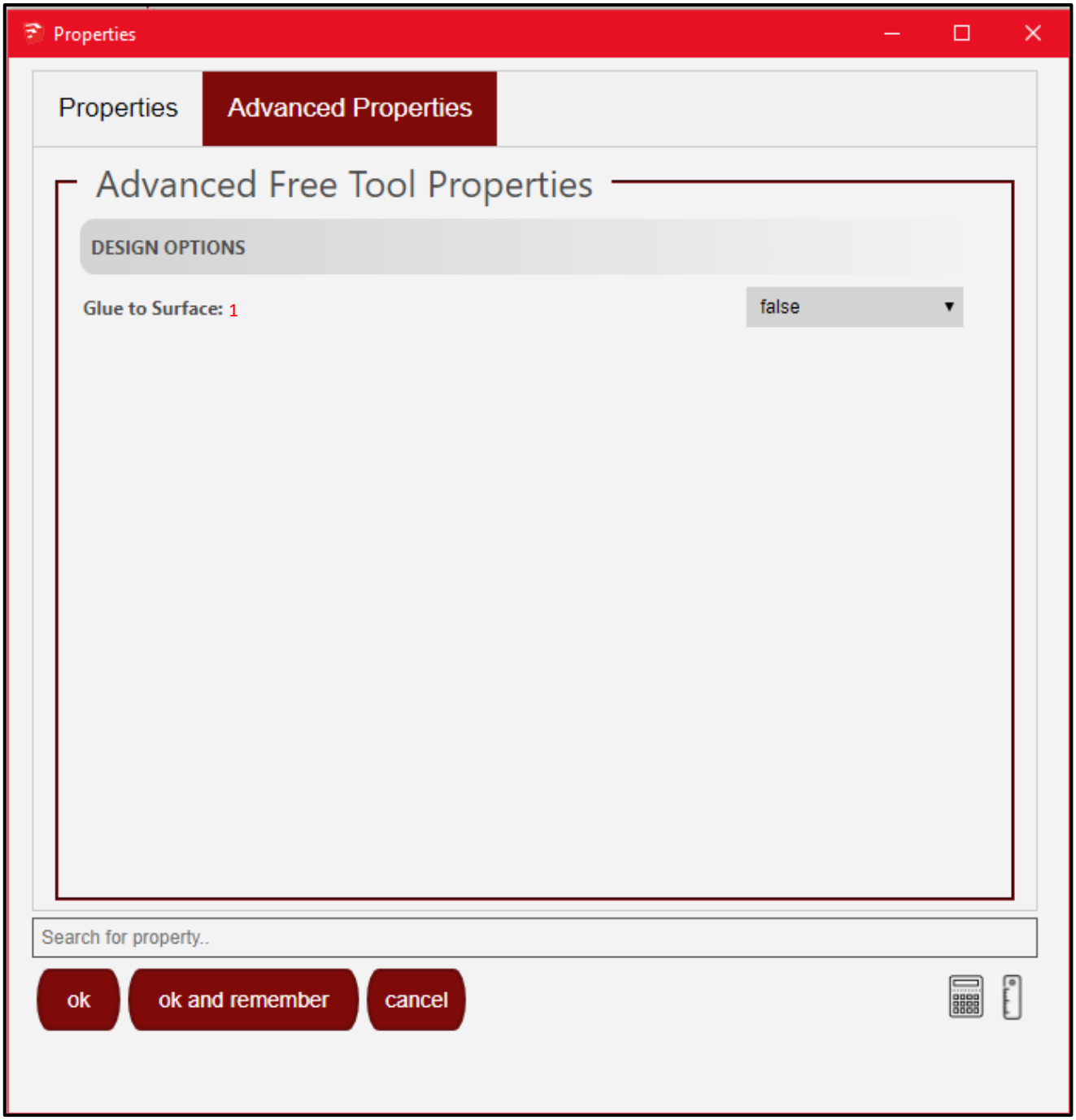
1. Begin by clicking on this icon in the free tool toolbar 

2. A properties menu will appear, any properties or profile specifications that need to be changed or configured may be done here.



1. LSF Profile

2. Draw Offset
3. Dimension Reference
4. Flip Z
5. Flip X
6. Draw Grid
7. Mitre Points
8. Mitre/Chamfer Ends
9. Auto Trim
10. Auto Trim Edge Clearence
11. Bottom Trim
12. Top Trim
13. Assembly Labels

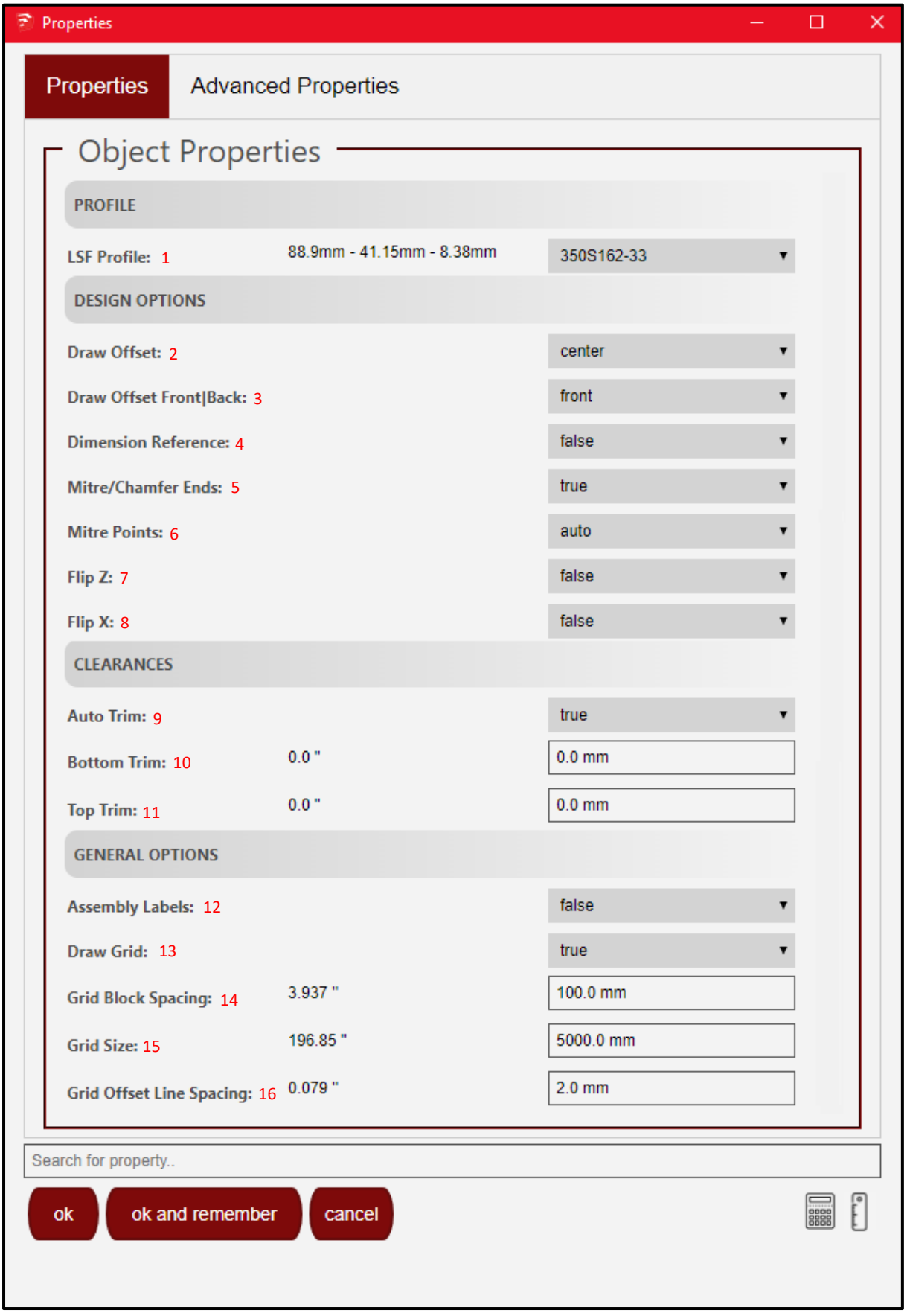


1. Glue to Surface

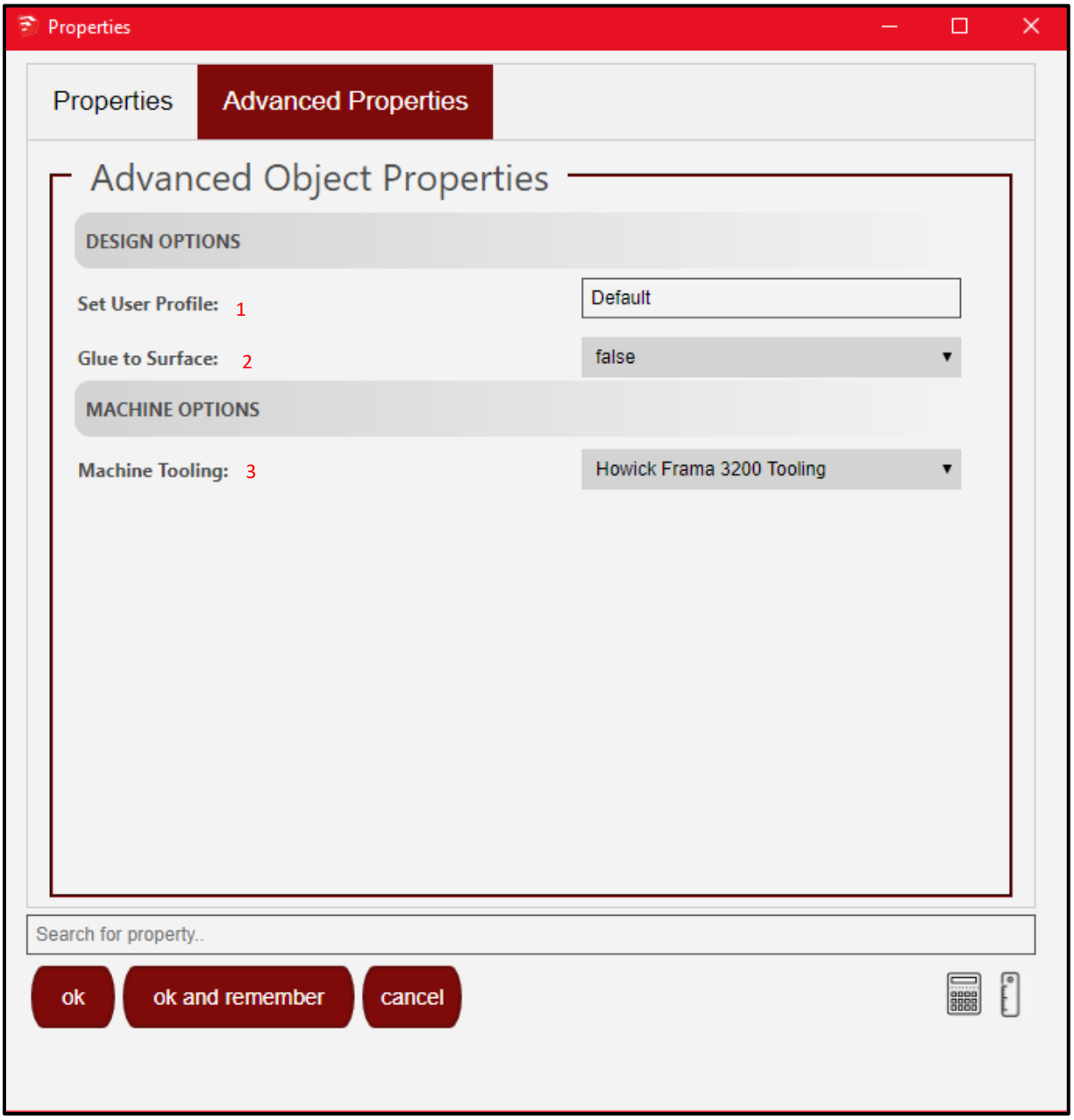
How to edit a free tool profile

1. To edit a Free tool profile, click on this icon 

2. A Properties menu will appear where the properties of profile can be changed



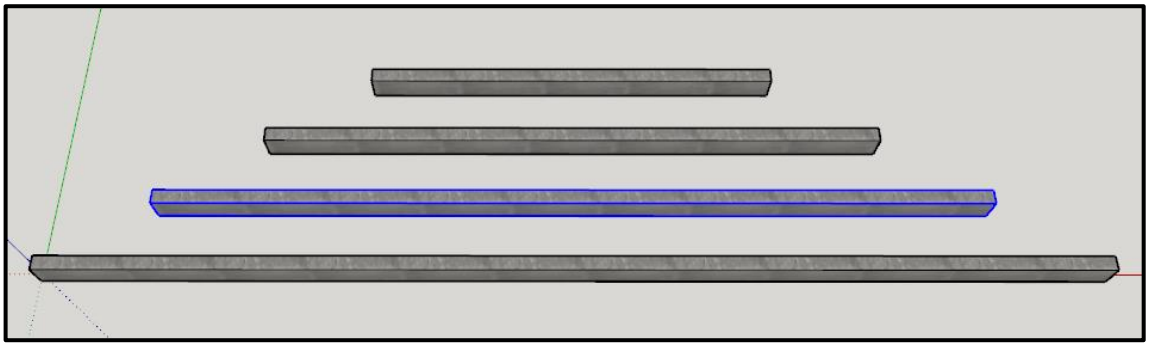
1. LSF Profile
2. Draw Offset
3. Draw offset front | back
4. Dimension Reference
5. Mitre/Chamfer ends.
6. Mitre points
7. Flip Z
8. Flip X
9. Auto Trim
10. Bottom Trim
11. Top Trim
12. Assembly Labels
13. Draw grid
14. Grid block spacing
15. Grid size
16. Grid offset line spacing



1. Set user profile
2. Glue to surface
3. Machine tooling

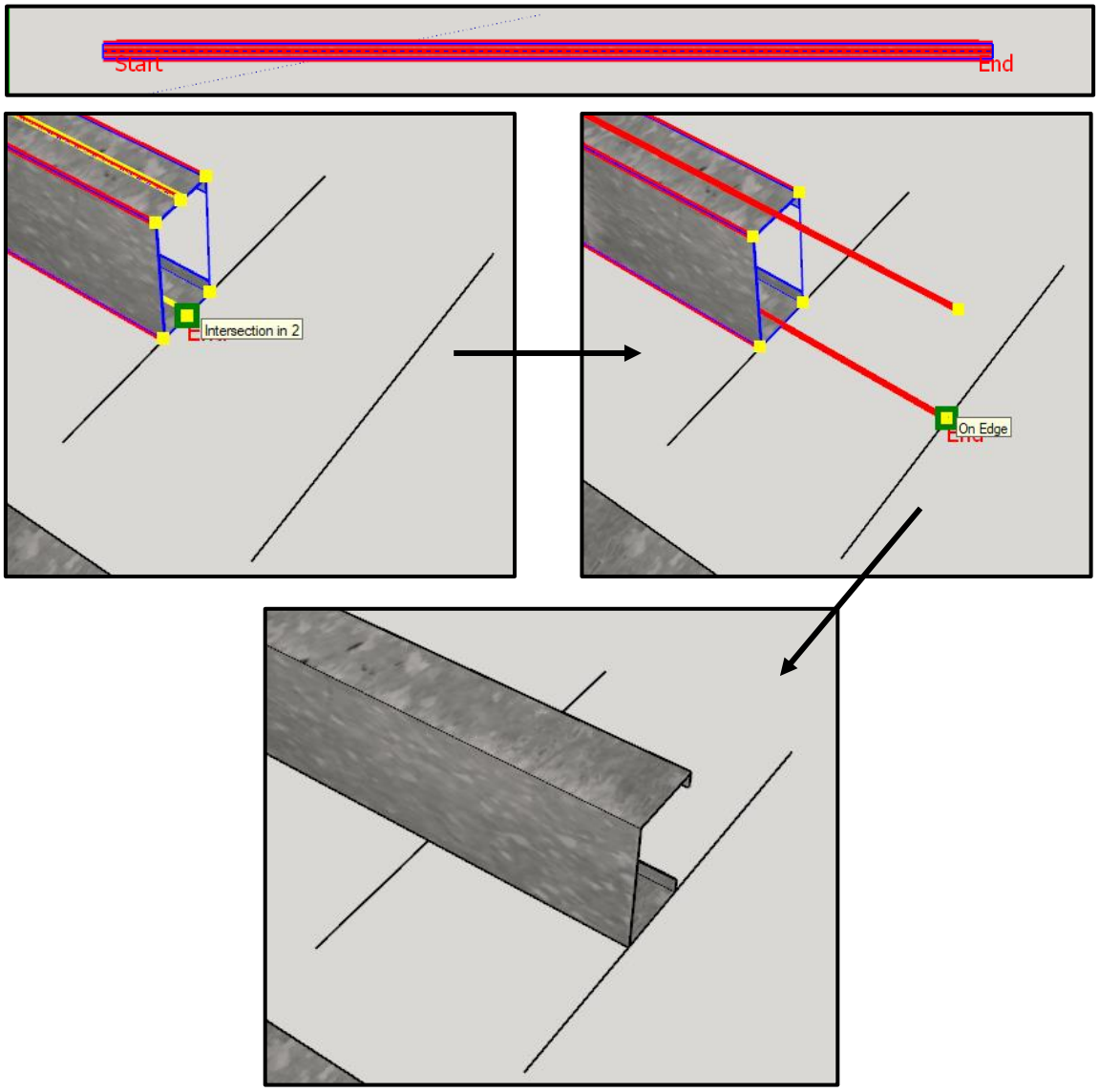
How to extend or move a free tool profile

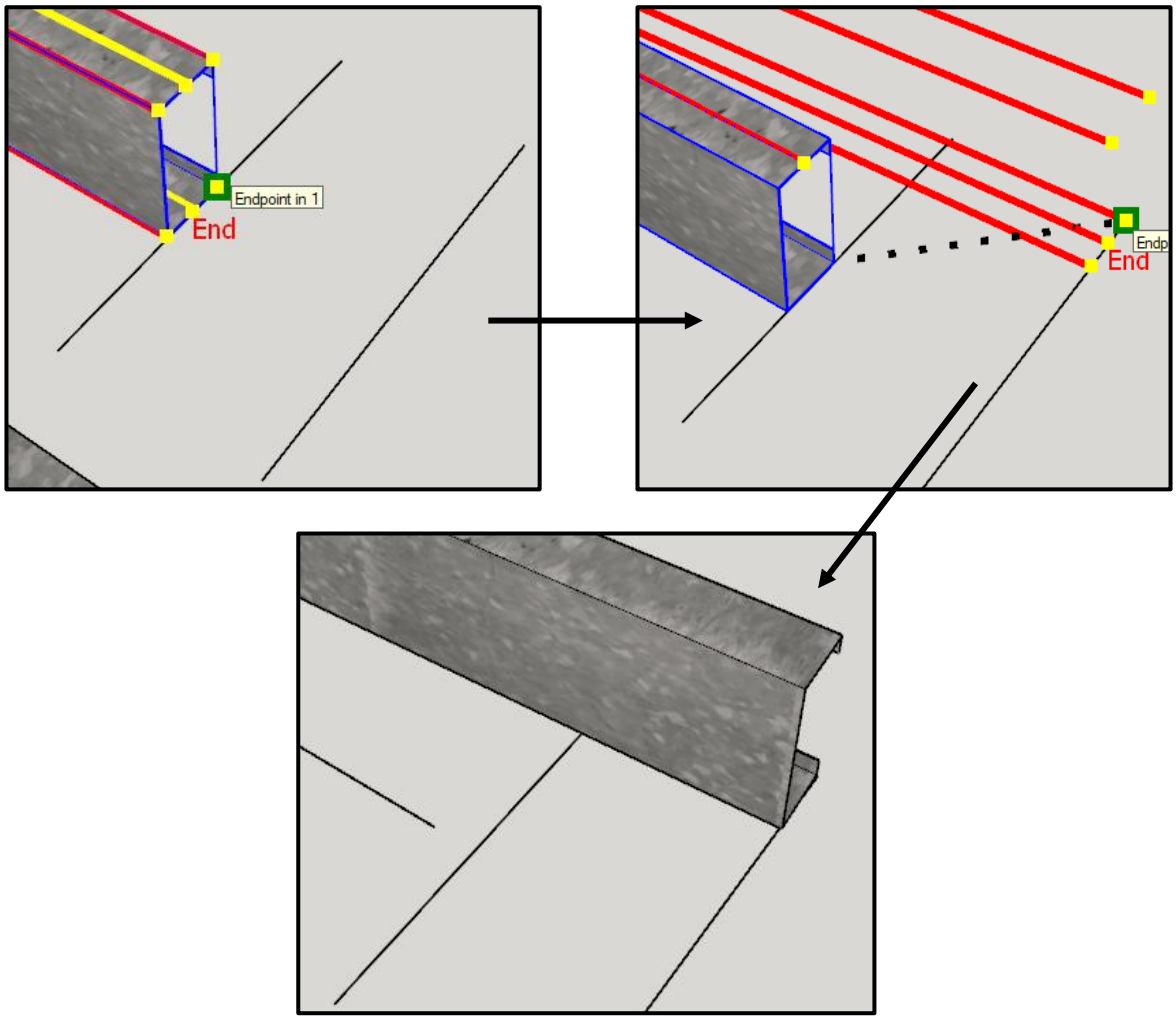
1. To extend or move a free tool profile first use the select icon  to select the profile that needs to be extended or moved.



2. After selecting the profile to edit, click on this icon 

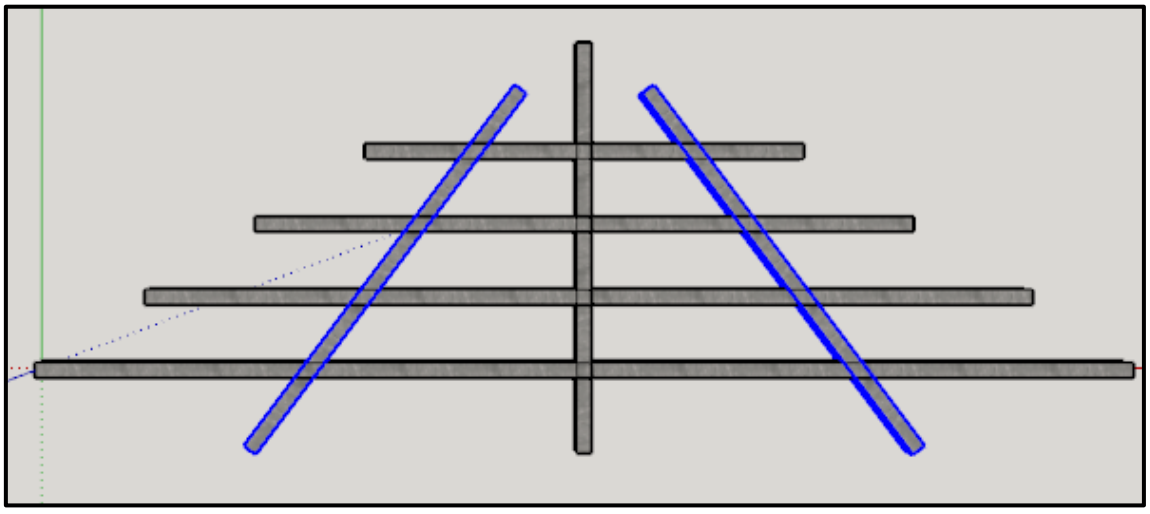
3. The program will highlight the start and end of the profile, hover over the corners of the profile to extend or move it, like shown below.




Endpoint in 1
End
Endp
End

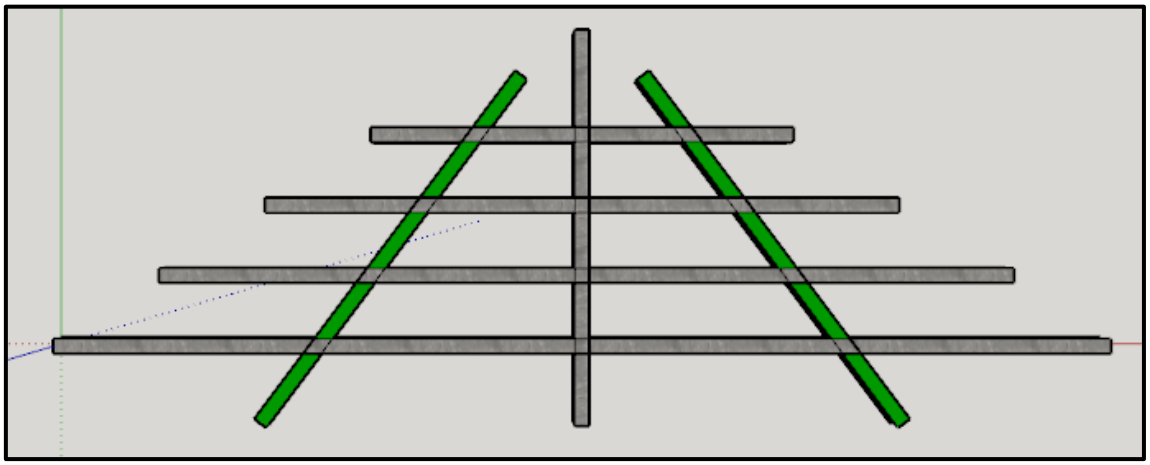
How to use the tooling options

1. The tooling option has two corresponding tools that further improve a structures strength etc,
2. To start tooling first select the profiles that have first priority using the select tool 



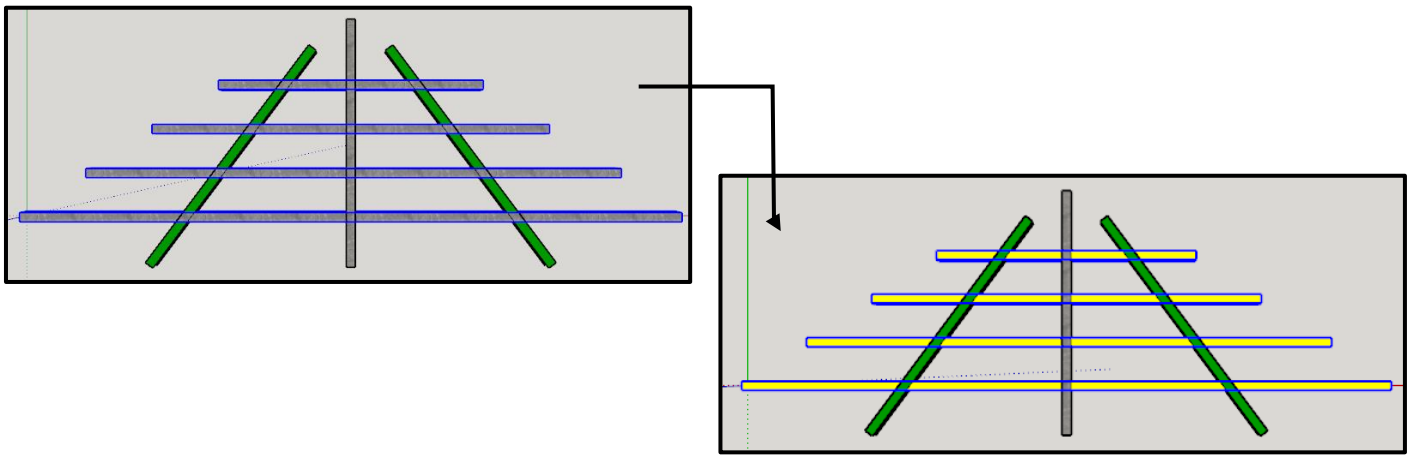
3. Thereafter use the “Tag 1” tool 

to tag the profiles as first priority, they should turn green.

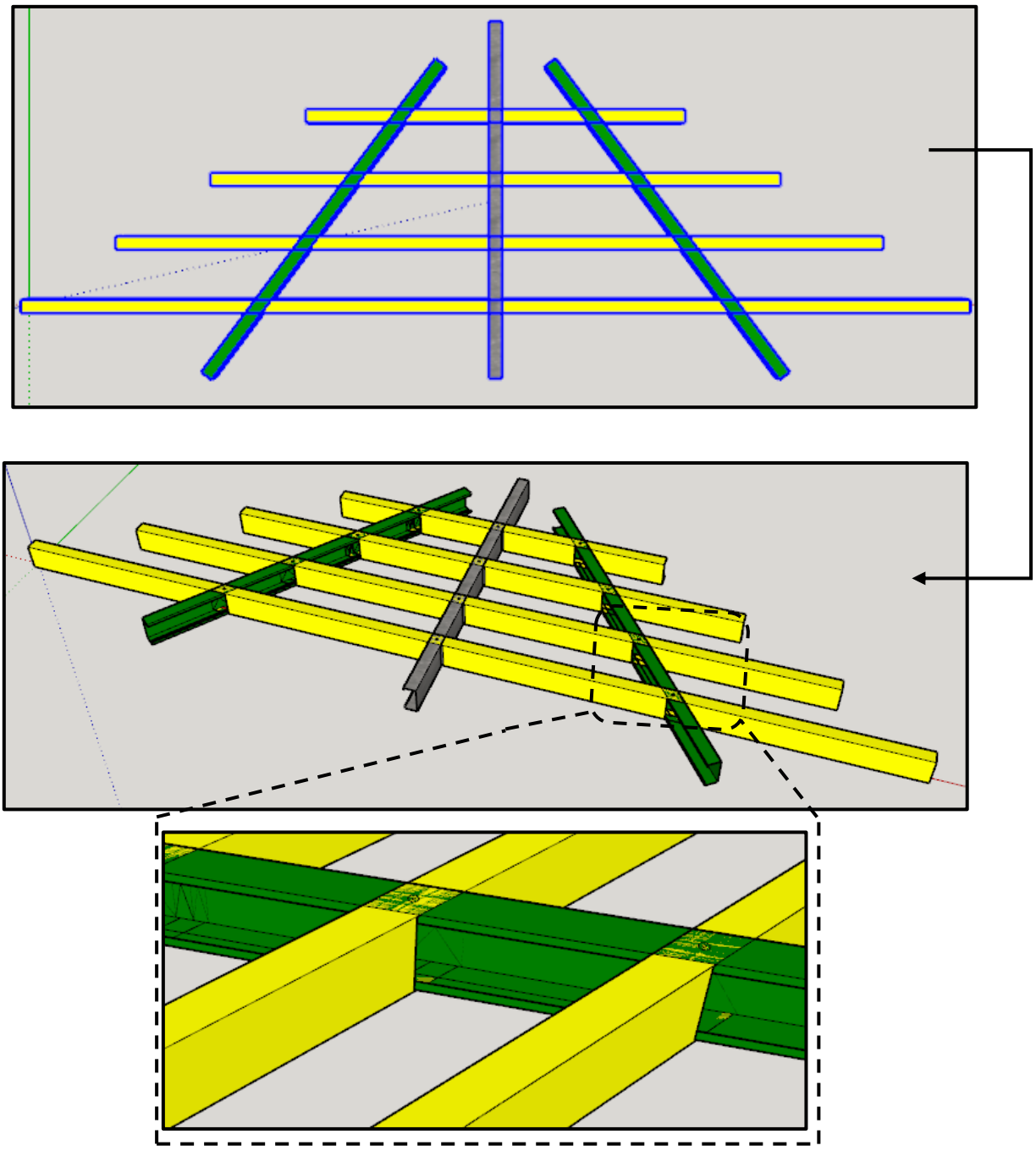


4. Thereafter select the profiles with second priority and then use the “Tag 2” 

tool to tag the selected profiles, they should turn yellow.



5. Once all profiles have been tagged (if required), select the entire frame and click on the tooling icon 



Some tool you may need to use

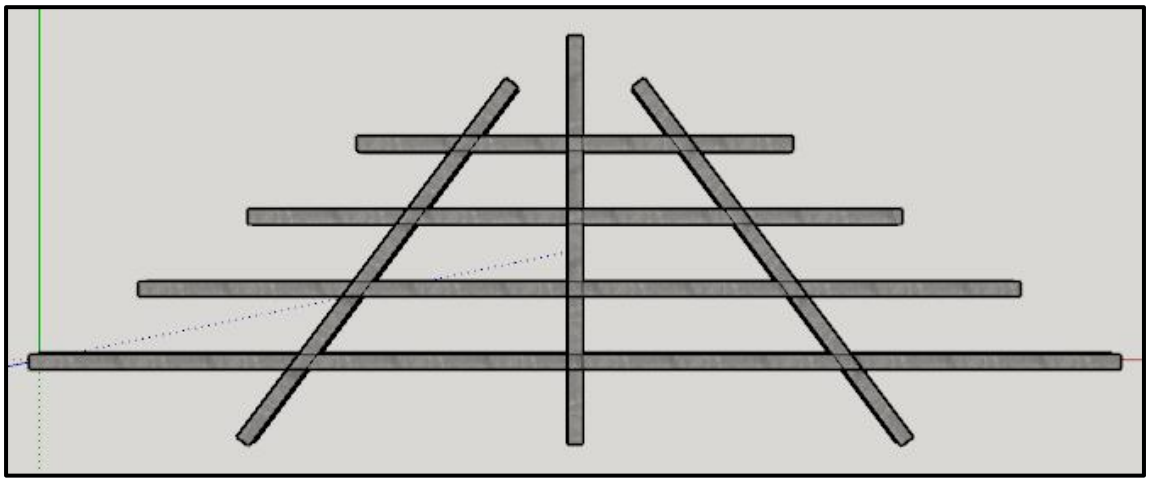
1. The Refresh tool rendering tool 
    a. This tool refreshes the tooling on selected profiles and frames
2. The rotate profile tool 

    a. This tool rotates a single selected profile 180°
3. The move back or front tool 
    a. This tool moves a selected profile back or front for example on or under a line.
4. The reset tool 

    a. This tool reset/removes all tooling from selected profiles or frames.

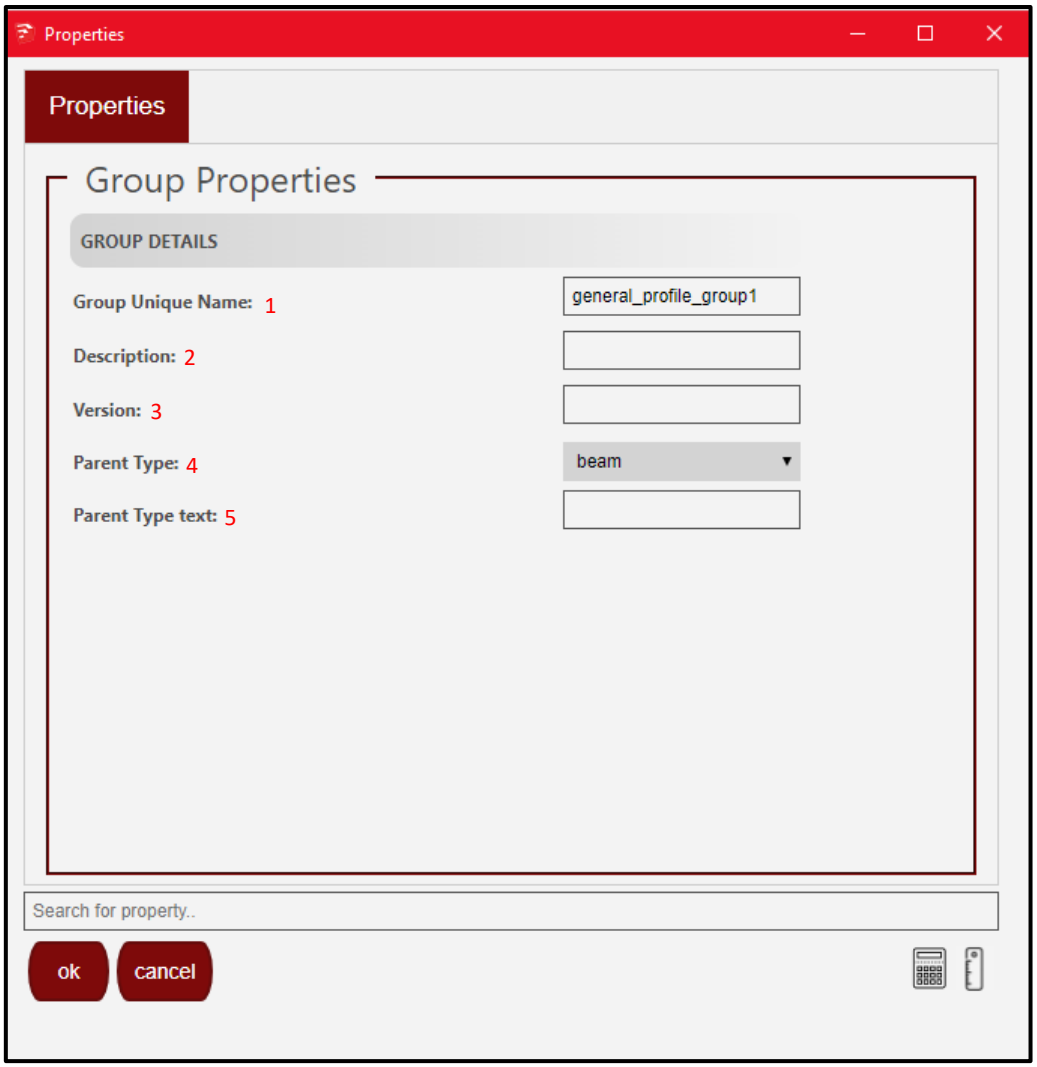
How to group free tool profiles

1. To group a collection of profiles, begin by selecting the profiles you want to group using the select tool 



2. Thereafter, click on this icon 

3. A properties menu will appear where options like Group name and description are available



1. Group unique name
   This option is required in order to name the profile group

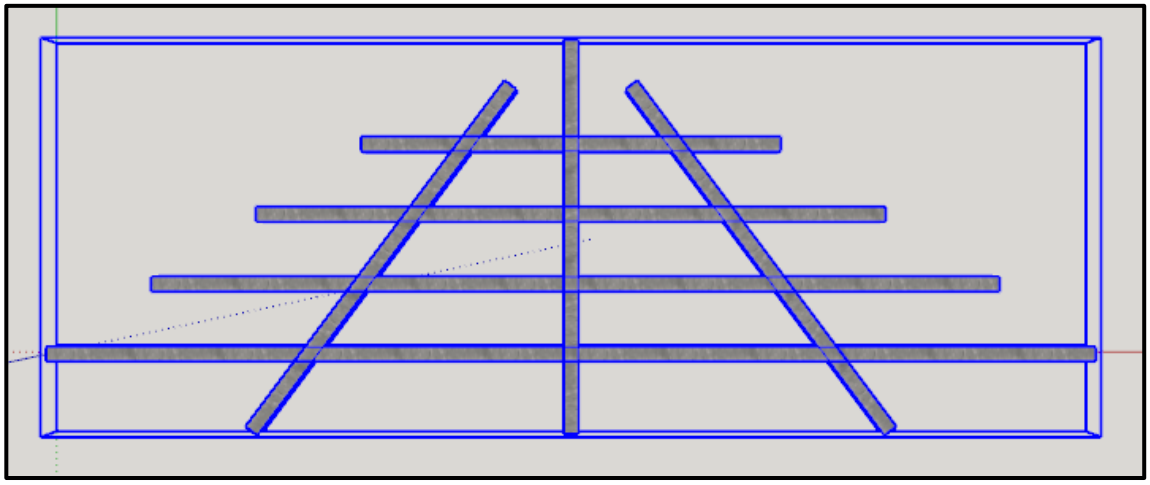
2. Description
   This is used to describe your group or add additional information.

3. Version
   Sets a version of a certain group in order to keep track of the frame or product.

4. Parent type
   This is to give your group a class for example: beam, wall, roof etc.

5. Parent type text
   This option is used for custom classes etc.

4. After clicking the ok button, the profiles will be grouped.



5. If a group needs to be converted to a component, select the group using the select tool and click on this icon

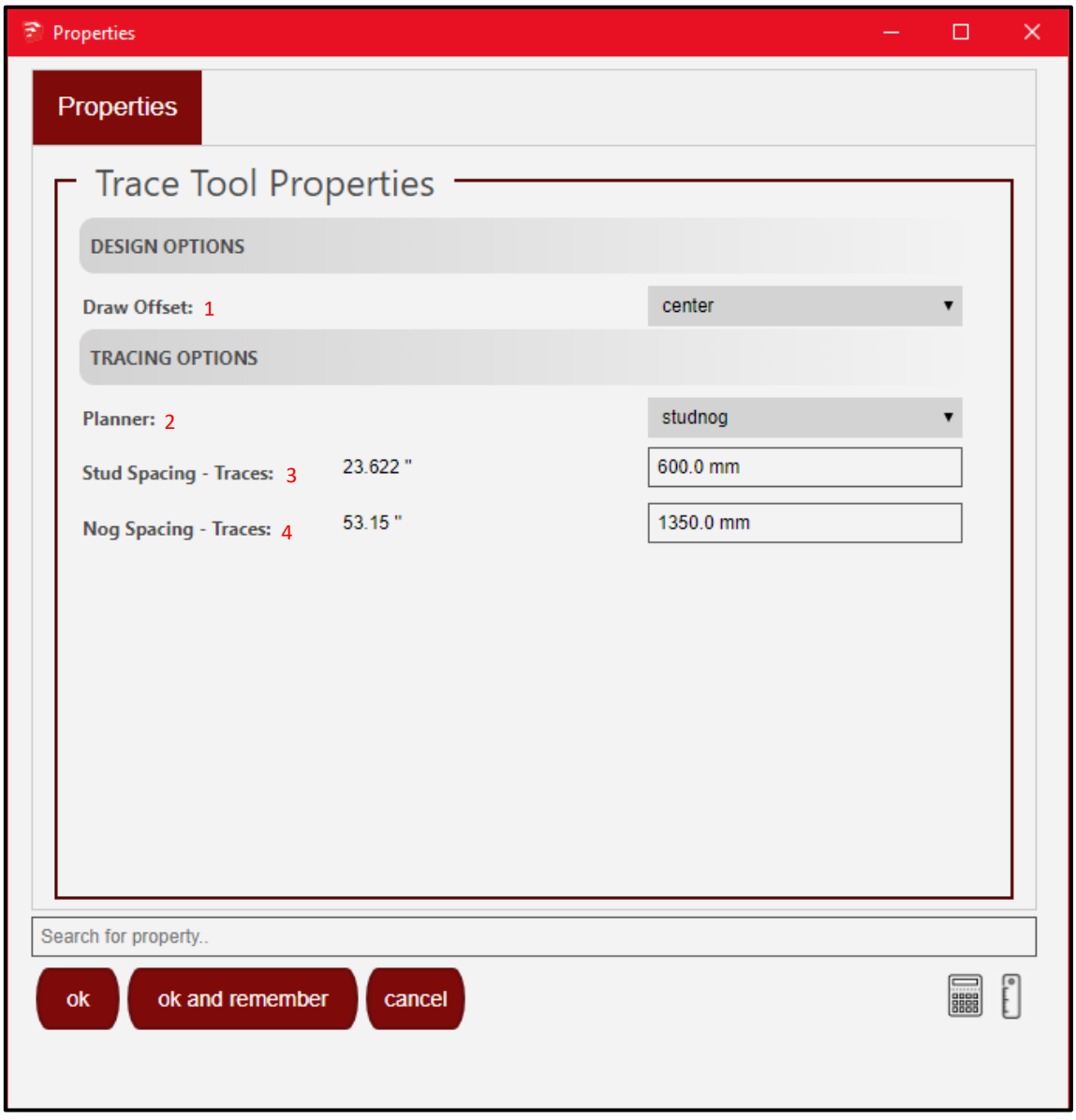
6. To explode a group, select the group using the select tool, and click on this icon

How to use the trace tool with the free tool

1. The trace tool consists of two parts, 1 and 2, “Trace 1” is used to draw or “Trace” a frame. “Trace 2” is used to generate `the frames/profile from “Trace 1”

2. To begin click on the “Trace 1” tool 

3. A properties menu will appear



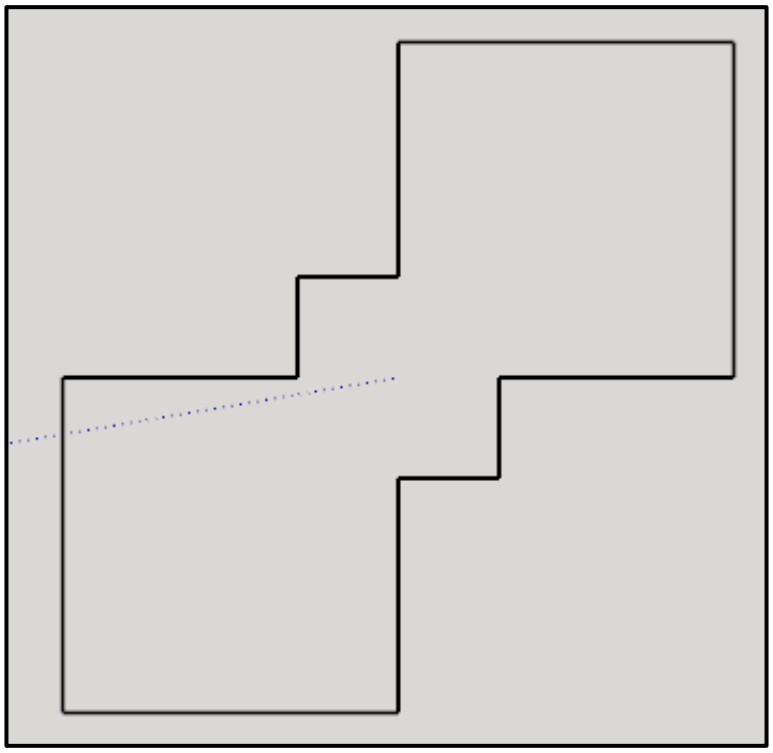
1. Draw offset
   Changes the offset of the profile: Left, Right or centre.

2. Planner
   This changes the profile to the type its intended to be used for: Studnog, stud or nog.

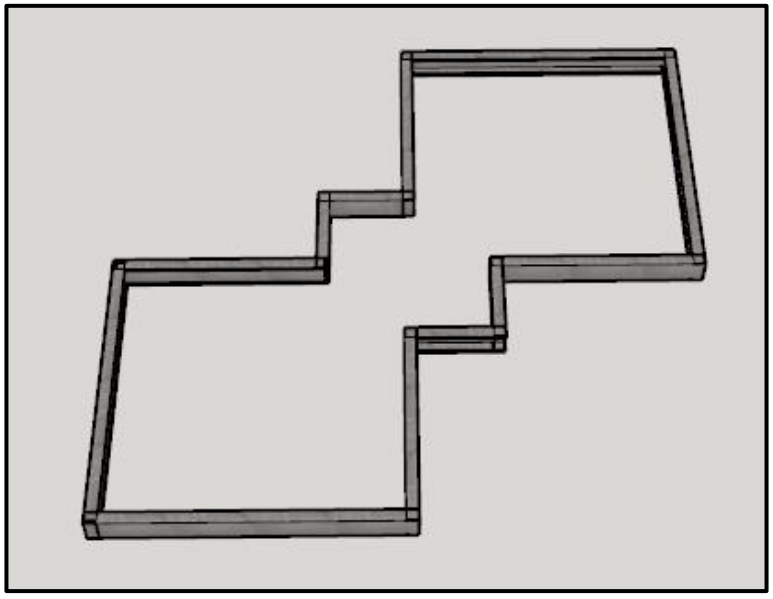
3. Stud Spacing – Traces
   Changes the stud spacing for traces

4. Nog Spacing – Traces
   Changes the nog spacing for traces

4. After clicking the ok button on the properties menu begin tracing/drawing. After drawing select your trace using the select tool.

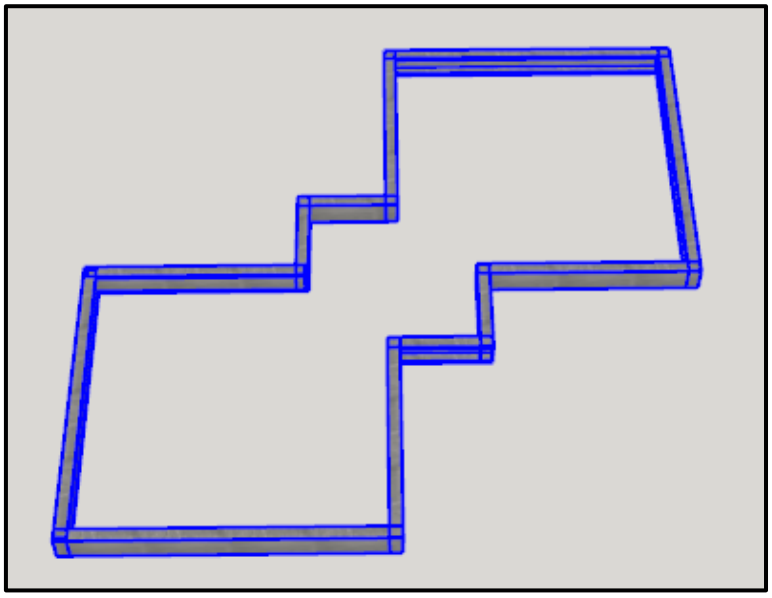


5. After tracing use the “Trace 2” tool  to generate your trace.

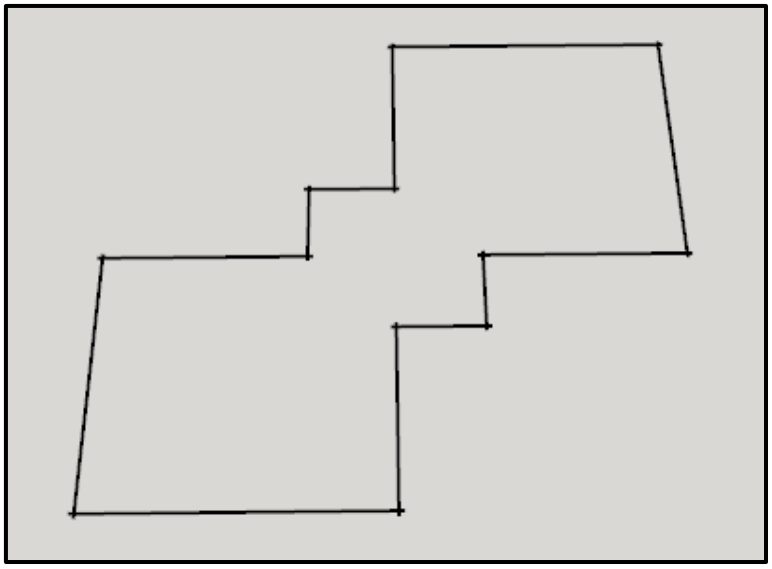


How to convert generated profile into trace lines

1. To convert generated profiles back into trace lines, first use the select tool  to select the profiles that need to be converted.



2. Thereafter click on this icon 

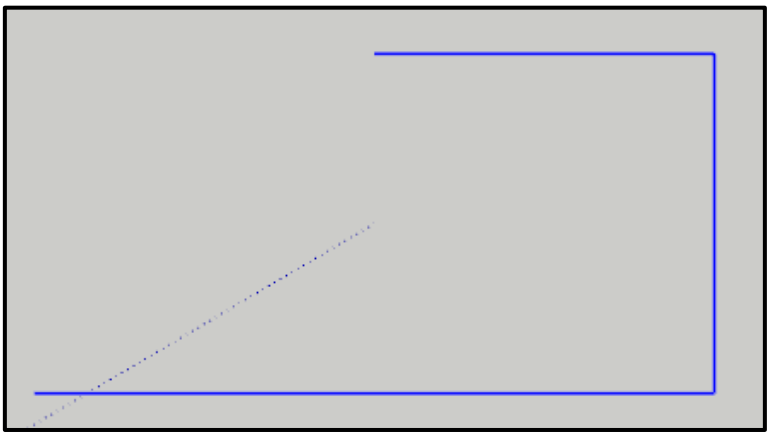


Smart select

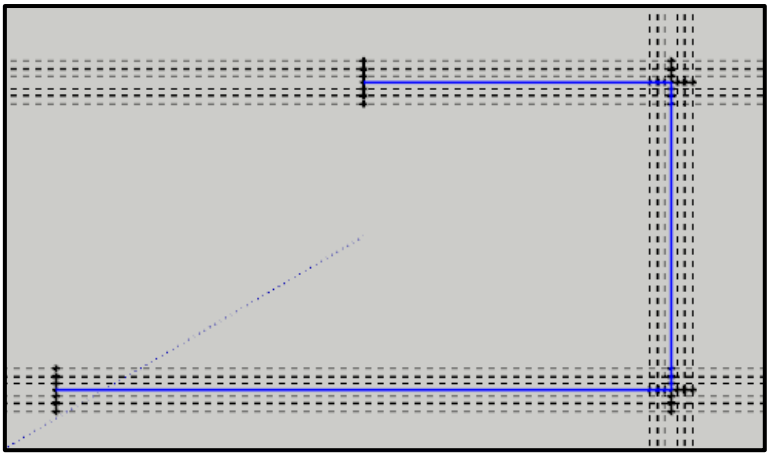
1. Smart select is used to select all traced objects that have been generated.

How to add and delete offset construction points to a trace

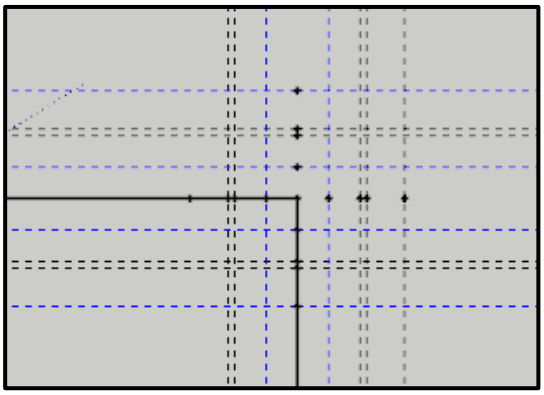
1. To add offset construction points to a trace first select the profiles that need the construction points added to using the select tool.



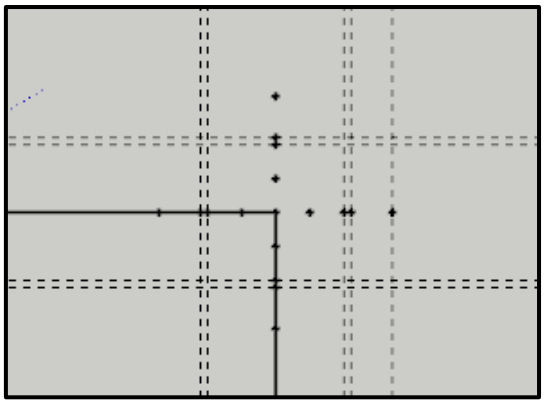
2. Next, click on this icon 



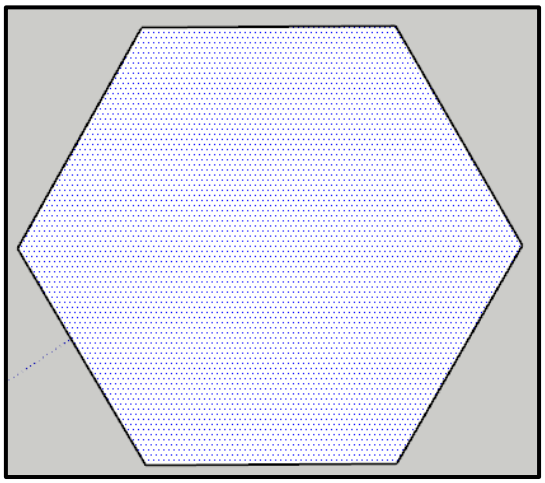
3. To delete offset construction lines first select the points/lines that need to be deleted using the select tool.



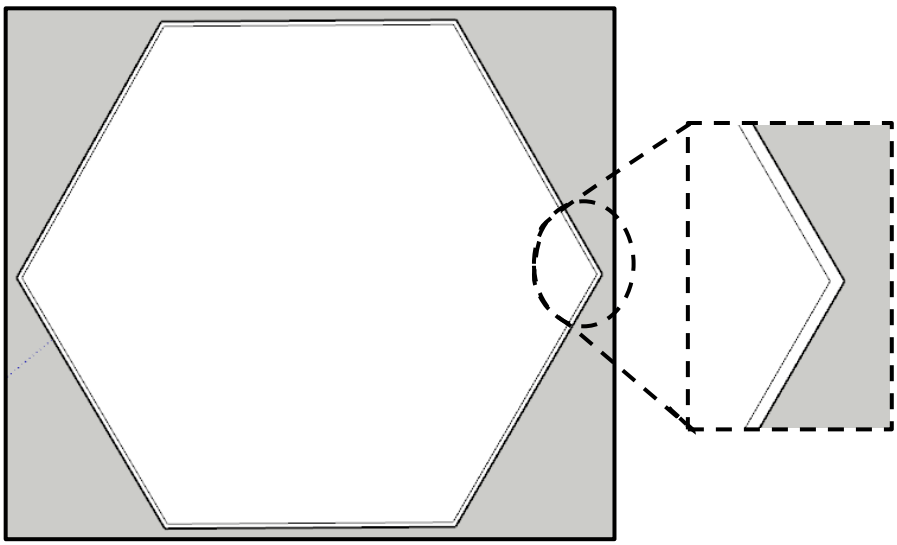
4. Thereafter, click on this icon to deletes the selected points 



5. To add a simple offset to a face, select the face using the select tool 

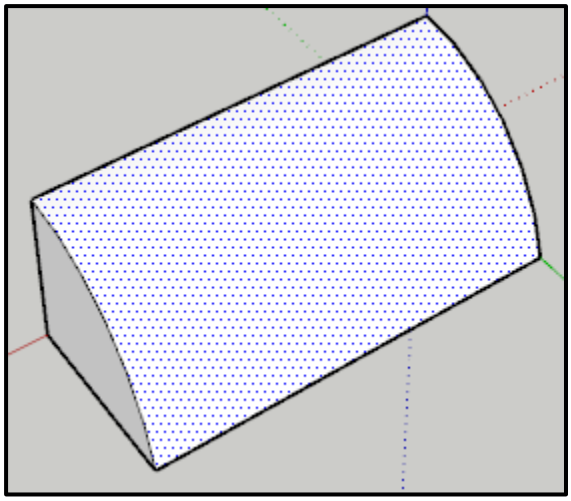


6. Thereafter, click on the offset icon 

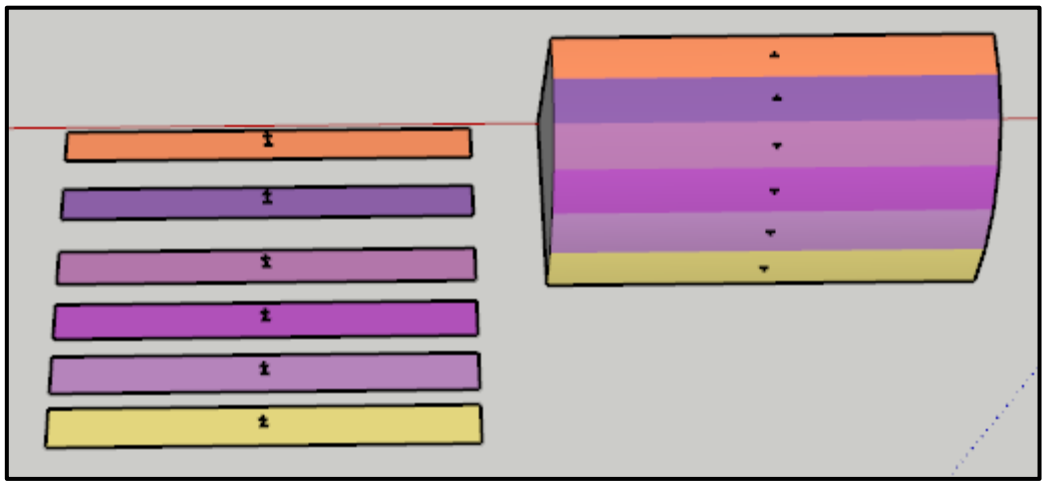


How to use the free tools Copy and flatten tool

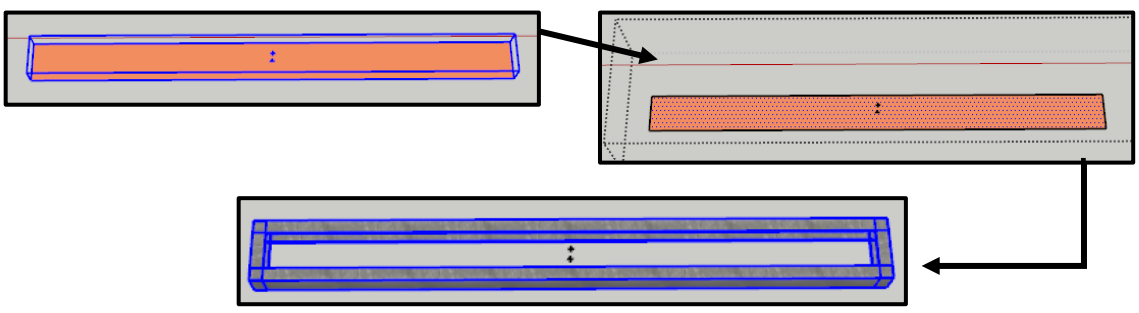
1. Using the select tool select a face that needs to be generated into a frame.



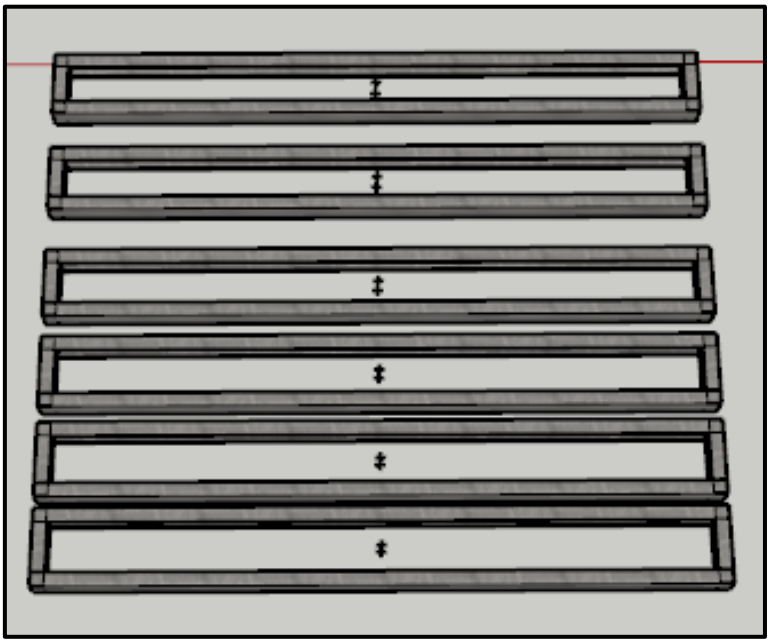
2. Next select the copy and flatten icon  the program will automatically select all quadrilaterals in the face and flatten/lay them out to be generated into frames.



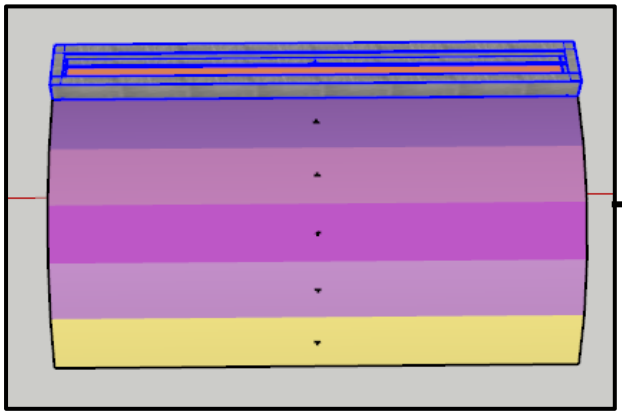
3. Next, select a single-coloured face by double clicking on the face using the select tool. Thereafter using the "Trace 2" tool  generate the frames.

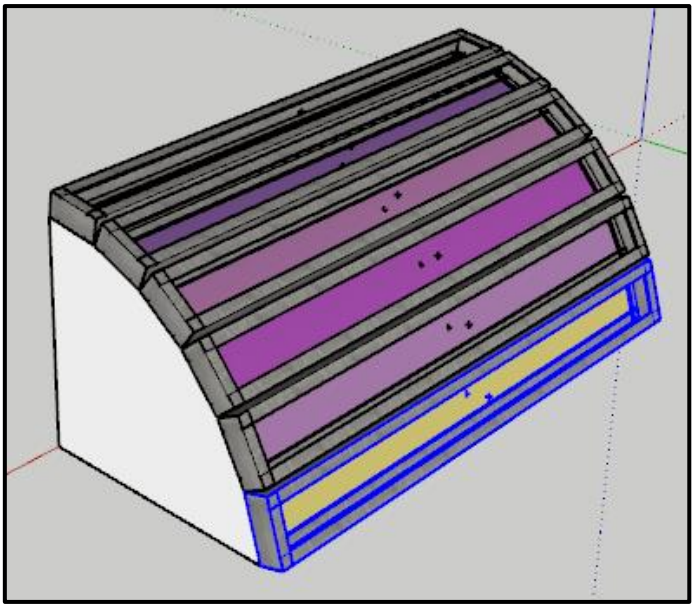


4. Do the same for all the other faces.



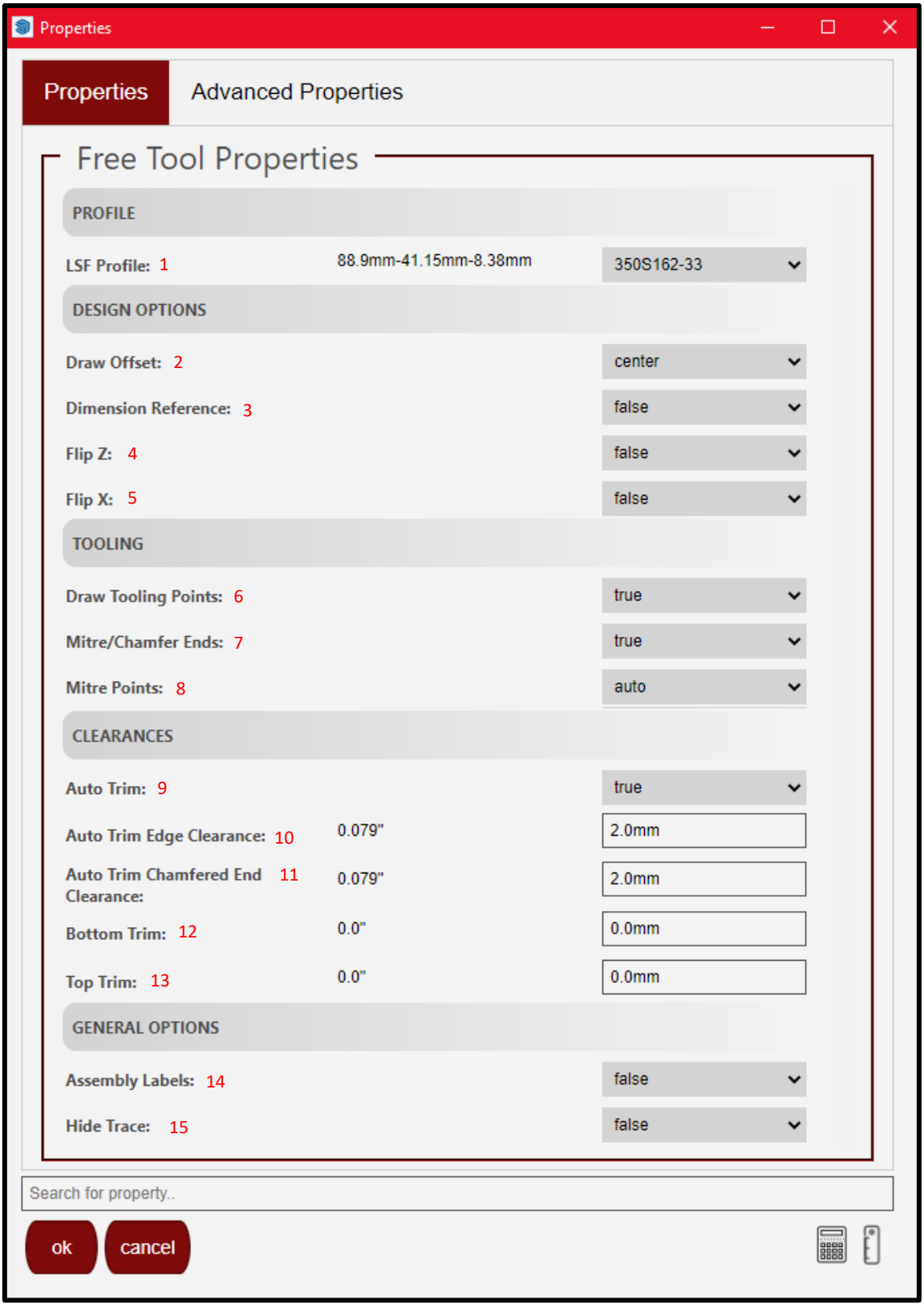
5. The next step is to re align the frames to corresponding colour and place. That is done by selecting the frame and then clicking on this icon 



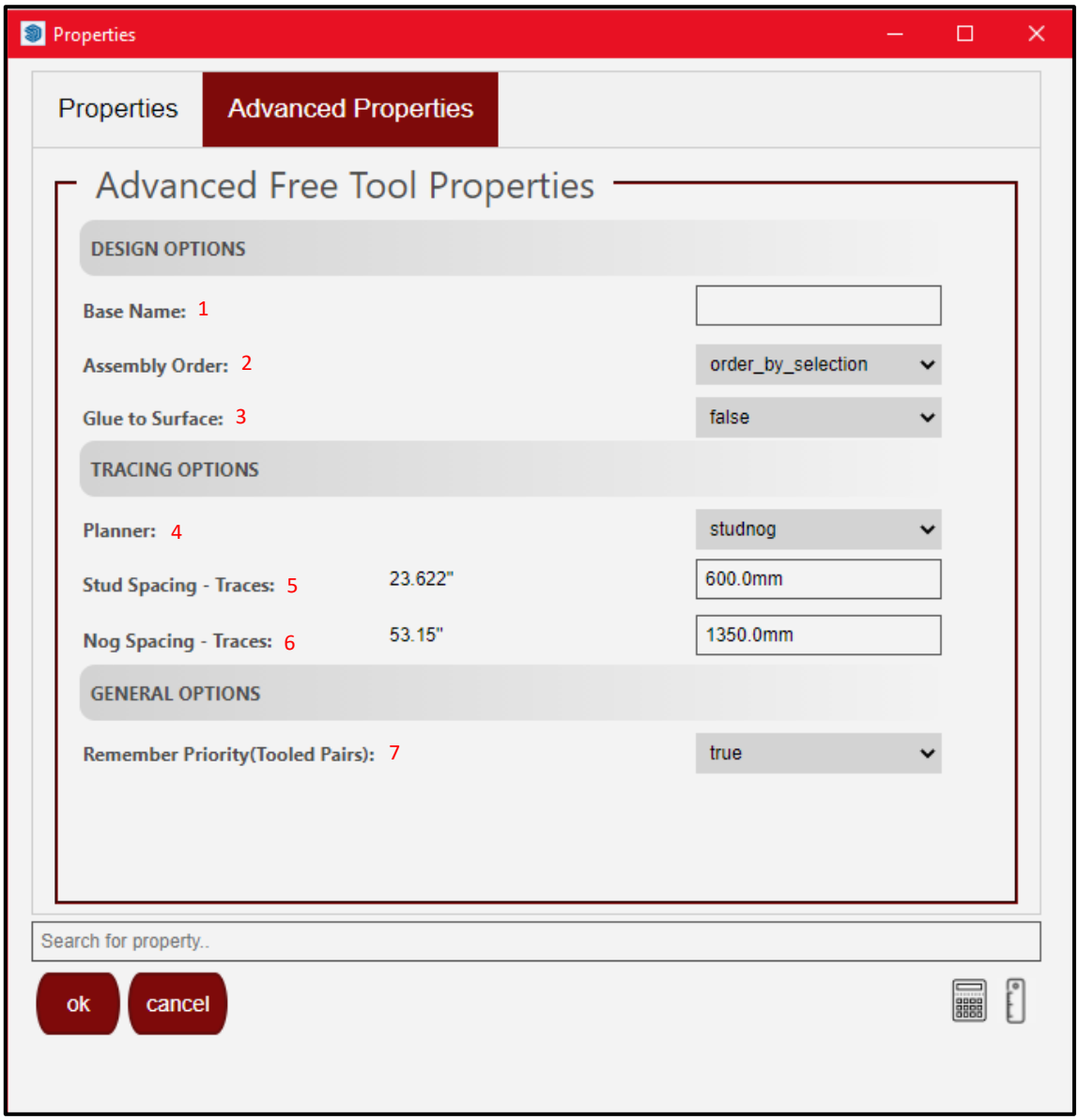


How to change free tool settings

1. To change free tool settings, click on the blue gear icon  a properties menu will thereafter pop-up



1. Lsf profiles
2. Draw offset
3. Dimension reference
4. Flip z
5. Flip x
6. Draw tooling points
7. Mitre/chamfer ends
8. Mitre points
9. Auto trim
10. Auto trim edge clearance
11. Auto trim chamfered end clearance
12. Bottom trim
13. Top trim
14. Assembly labels
15. Hide trace



1. Base name
2. Assembly order
3. Glue to surface

4. Planner
5. Stud spacing – traces
6. Nog spacing – traces
7. Remember priority (Tooled pairs)