

Knowledge Bridge Configurator

User Manual V1.0

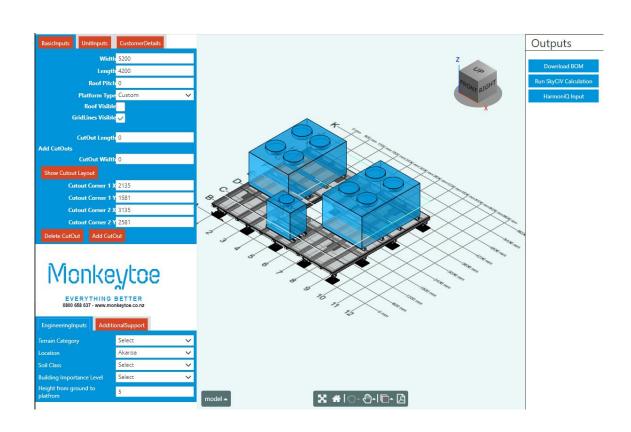




Table of Contents

Tal	ble of Contents	2
Ва	ckground	2
Ve	rsion History	2
1.	Basic KBridge Use	
2.	Building a Platform	5
3.	Cutouts	6
4.	Placing HVAC units on the platform	10
5.	Engineering Inputs	13
6.	Outputs	14

Background

This user manual outlines the basics of how to use the KBridge Online Configurator for Monkeytoe platforms, as well as the specifics of how to create a plan for a SmartGrip platform.

Version History

Version	Date	Author	Changes
0.1	2/04/20	Tim B	Initial Draft for Approval



1. Basic KBridge Use

Navigating around KBridge can be achieved by using the main control panel at the bottom of the KBridge window

a. Control Panel



i. Home view (ISO view of the model)



ii. The pointer is used to select. The closed fist icon is used to drag objects around the model

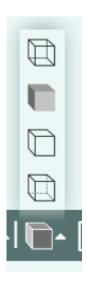


iii. The open hand tool is used for panning the view. The magnifying glass is for zooming. The mouse scroll wheel can also be used to zoom). The person Icon is used to rotate the model in 3D world.



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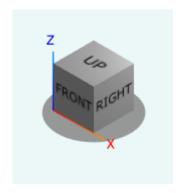
iv. The various cube icons are used to see different wireframe of complete views of the model



v. The PDF icon allows the user to download the current view into a PDF document.



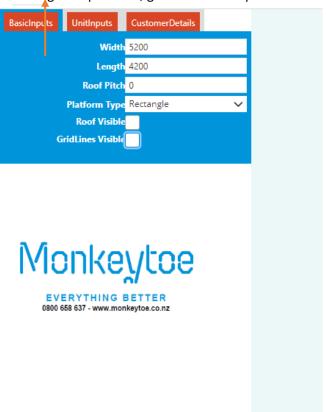
vi. The Geometric world box can be used for orientating the model into different views like top view or front view, or angles in between these. To go to a specific view, simply click on the desired highlighted area of the cube. Alternatively, you can spin the cube by clicking and dragging the cube around to change the model view as well.





2. Building a Platform

To configure a platform, go to the BasicInputs tab.



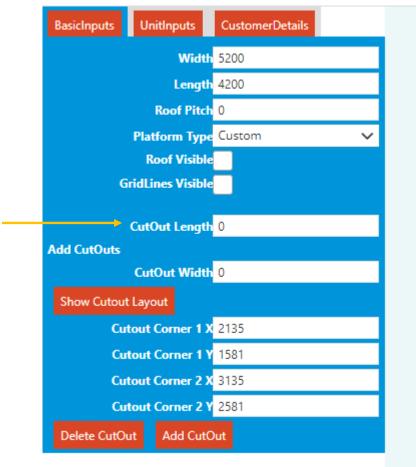
- a. **Width** is the measurement towards the edge of the roof. Primary bearers run along this axis.
- b. Length is along the roof
- c. Roof Pitch is the angle the roof is inclined towards the width axis
- d. Platform Type can be Rectangle, L shape or custom shape
- e. Roof Visible to make the roof visible in the model. (turn off when viewing Drawings)
- f. *Gridline Visible* make the configurable building Gridlines visible in the model. (turn off when viewing Drawings)
- g. After changes are made to the model parameters, a waiting graphic is shown in the model window, as per below. Please wait for this graphic to disappear before making more changes





3. Cutouts

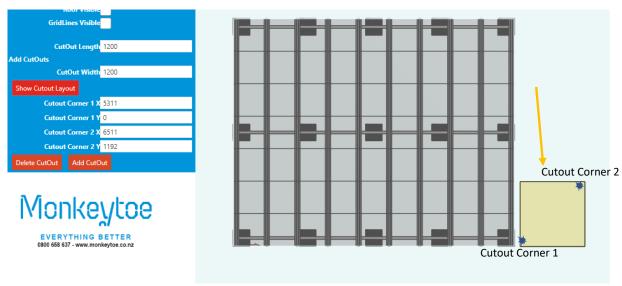
a. When the Platform type is set as custom, a set of inputs appear in the *BasicInputs* Tab to customise the platform shape using cut-outs.



b. Input the length and width of the cutout required and click the *Show Cutout layout* button.

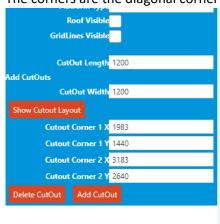
A draggable cutout layout will appear near the platform



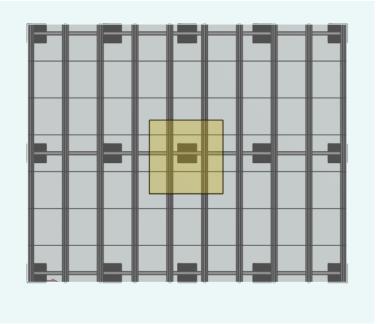


c. Drag and place the Layout to where you want hole to be cutout. Adjust finely in the *Cutout corner* inputs.

The corners are the diagonal corner points of the layout rectangle.

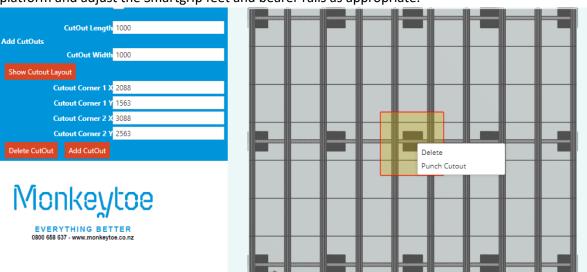




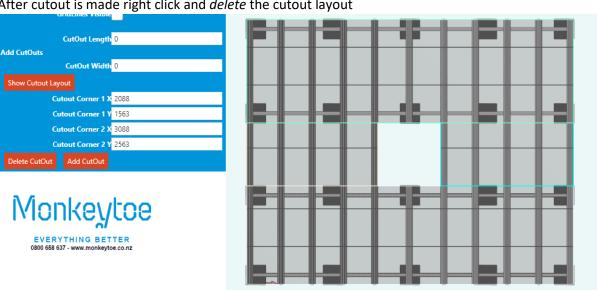


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d. Right click on the cutout and click 'Punch Cutout'. This will make the cutout in the platform and adjust the Smartgrip feet and bearer rails as appropriate.



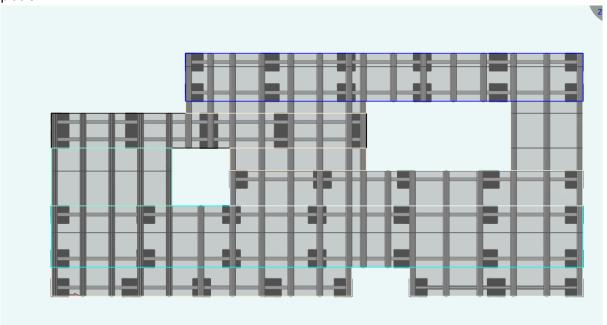
After cutout is made right click and delete the cutout layout



You can create multiple cutouts with same layout by dragging and placing it in different areas, then right clicking and clicking 'Punch Cutout' again.



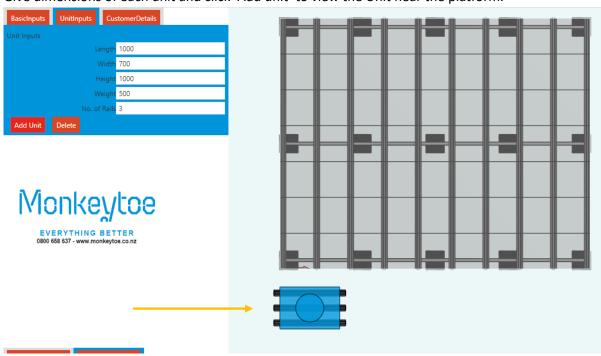
g. You can also create multiple cutout layouts and create complex shapes with the platform.



h. Cutouts can be deleted using the 'Delete Cutout' Button. This will delete the last added cutout.

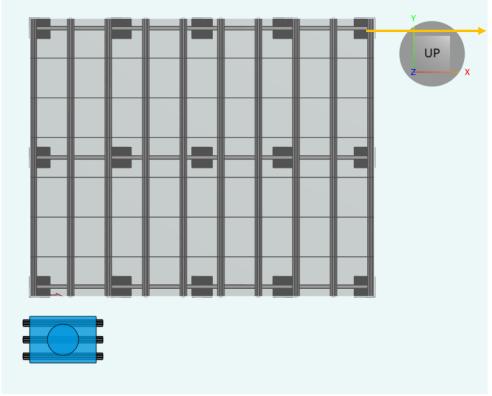


- 4. Placing HVAC units on the platform
 - a. Click on the *Unit Inputs* tab to revel HVAC unit inputs.
 - b. Give dimensions of each unit and click 'Add unit' to view the Unit near the platform.

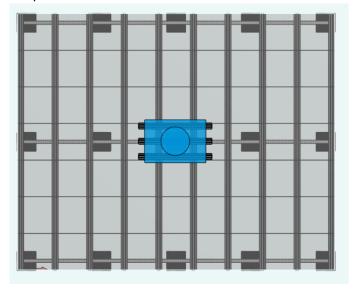




c. If you are in any other view click on the box ath the top right cornor and go into 'UP' view. This allows for easier dragging and placement of the unit on the platform.

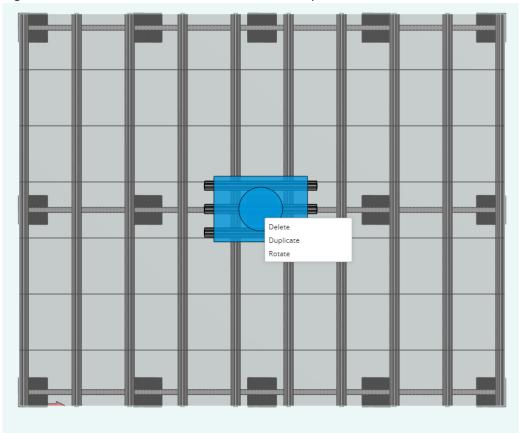


d. Click on the *Dragging Tool* (closed fist) and drag the unit to the required location on the platform





e. Right Click on the Unit to reveal Menu to Rotate, Duplicate or delete the unit.





5. Engineering Inputs

a. Click on the 'Engineering Inputs' tab to input data regarding the Location, Terrain, Soil Class, Building importance level and height from ground to the platform.



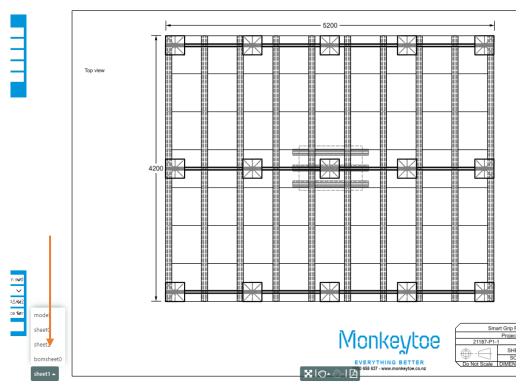
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6. Outputs

- a. The configurator can generate three main outputs:
 - Drawings
 - BOM
 - SkyCiv input JSON

b. Drawings

Click on the tab at the bottom left corner to reveal the drawings



Sheet0 is an ISO view

Sheet1 is the Top View

Sheet2 is the Side Views

BomSheets is the Bill Of Materials tables

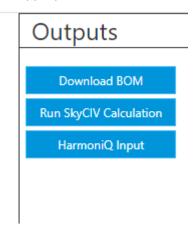
Click on the PDF icon at the icon to download whichever view is on display.





c. BOM

- i. The configurator can generate two types of BOM tables One for assembly, and one to load into HarmoniQ for stock usage
- ii. The BOM for assembly can be downloaded using the 'DownloadBOM' button
- **iii.** The BOM for importing into HarmoniQ can be downloaded using the 'HarmoniQ Input' button. The results of this file can be copied and pasted into the appropriate area in HarmoniQ.



d. SkyCIV Input

SkyCIV is a cloud engineering software which does structural analysis.

- i. The configurator generates a model of the created platform with added loads and engineering data for SkyCiv.
- **ii.** This can be downloaded in JSON format from the Run SkyCIV Calculation Button.
- **iii.** The downloaded JSON file can be opened in SkyCIV to run Structural analysis of the platform. See the separate SkyCiv user manual for how to complete this.