Victaulic Tools for BricsCAD®

User Manual

BricsCAD version v20, v21

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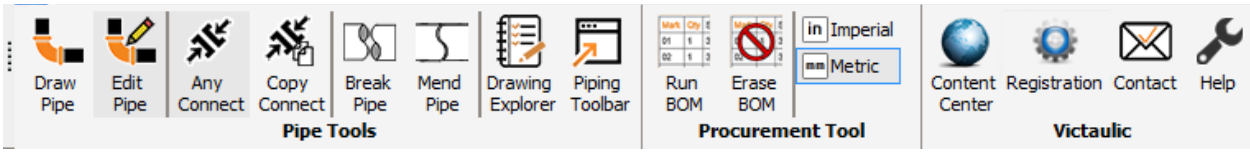
Introduction to Victaulic Tools for BricsCAD®

Victaulic has created a set of tools for BricsCAD® that increase drawing productivity and expand MEP modeling capabilities allowing your projects to be Faster From the Start.

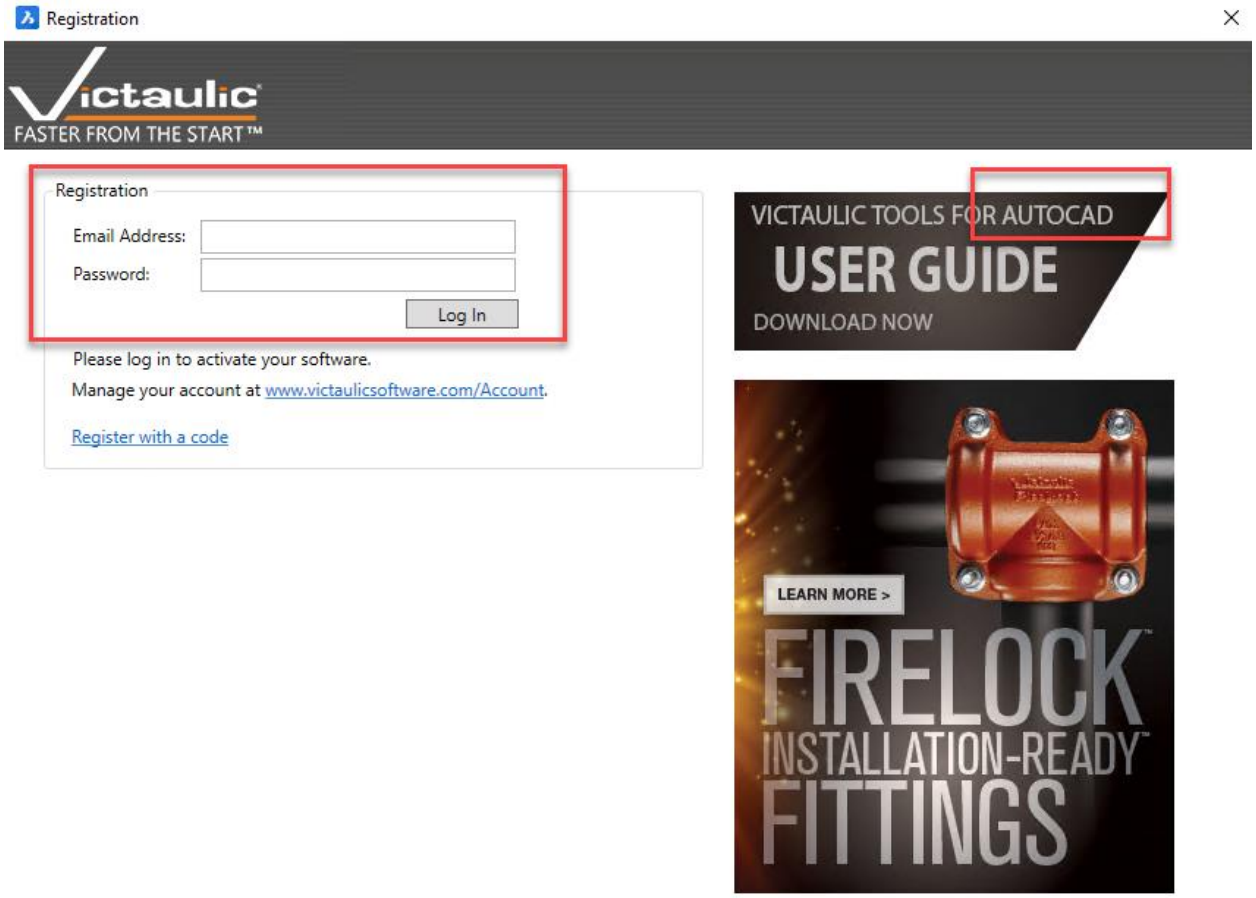


The tools can be found on the Victaulic website www.victaulicsoftware.com

1- Licensing

After downloading your copy of Victaulic Tools for BricsCAD, you will be asked to register your Victaulic Tools. Licenses can be managed from www.VictaulicSoftware.com/Store.

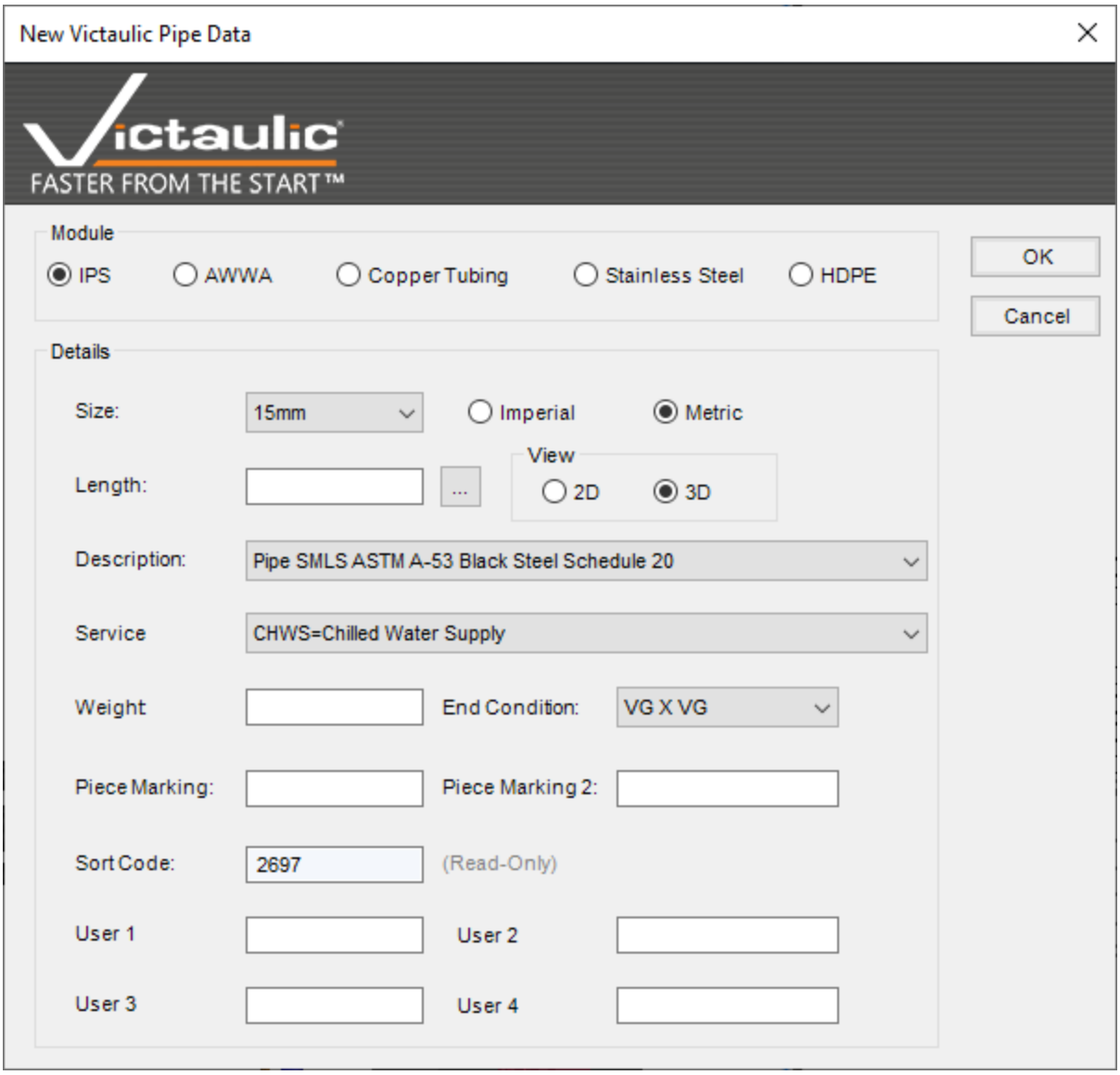
After registration, use the email address and password from the store to register your software. Multiple installations can be licensed using the same email address and password combination.



2-Draw Pipe

To place pipe in a drawing, simply select the "Draw Pipe" button.

The New Victaulic Pipe Data dialog box (shown below) will be displayed



A choice of pipe modules is available including IPS, AWWA, Copper Tubing, Stainless Steel and HDPE. The options under the Size, Description, Service, End Condition and Sort Code fields will change depending on which Module is selected.

All pipe 2D or 3D is drawn with a centerline, an information attribute located at the middle point of the centerline and two placement nodes located one on each end of the centerline. The cylinder that represents the pipe is drawn on the user's current layer. This makes it easy to control the color for different size and/or service pipe runs. Centerlines are drawn on layer "CL" which is red and uses the

"CENTER" line type. Information attributes are on layer "Info" and are white whereas the placement nodes are on layer "Nodes" and are cyan by default. The BricsCAD Layer Properties Manager can be used to modify all of the preset color and line type values.

Note: The nodes are provided to make it easier to join pipe with Vic/Blocks-2D or 3D components. By

turning on the BricsCAD "Node" Object Snap, pipe can be connected to the nodes contained in each Vic/Blocks-2D or 3D coupling and flange.

To assist with the placement of pipe, items in the Details area of the New Victaulic Pipe Data dialog box will default to match the information of the last piece of pipe placed in the drawing. The information will reflect the data of the last pipe selected if the "Edit Pipe" or "Properties" utilities are used prior to placing a new piece of pipe.

Take note of the Length: Here is where you can enter your desired pipe length.

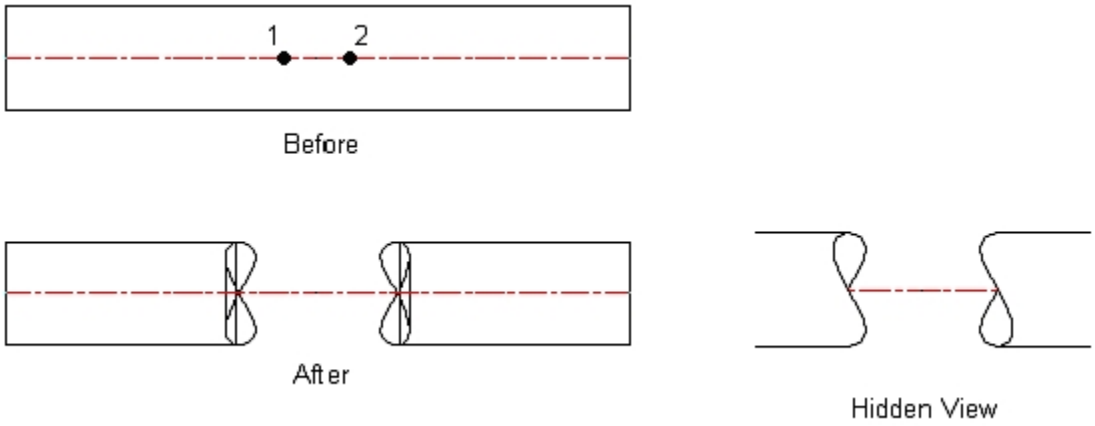
Select the ellipsis button to the right to determine your length by picking two points in your model.

3-Edit Pipe

The size, length, description and service information can be revised through a dialog box interface by clicking the "Edit Pipe" button and selecting any pipe created with the Victaulic Utilities routine

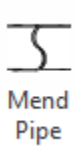
4-Break Pipe

When the "Break Pipe" utility is used, the "Nearest" BricsCAD Object Snap is turned on and the user is prompted for a start and end point for the break. The pipe centerline is the intended target for these points (1 and 2 below). This utility has no effect on the actual cut length shown in the bill of material and the broken pipe is treated as one item.



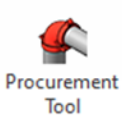
Note: It is important to keep in mind that, as shown above, the actual pipe break is offset from the points selected.

5-Mend Pipe



The "Mend Pipe" utility is used to return a pipe broken with the "Break Pipe" command to its original state. When this command is used on a pipe with multiple breaks, all breaks on the selected pipe will be mended.

6-Procurement Tool



The procurement tool is a selection-based bill of material tool. The Procurement Tool allows you to window select items for a simple, selection.

1. Set your sorting and columns using the buttons (see following text).

2. Set your Vic Mark numbering format. All tags will use the Vic Mark attribute.

3. Auto Mark Components and Clear Mark will only modify selected lines above. If you select no lines above then it will run on the entire list of items. This will enable you to renumber specific areas of the material list.

4. When a line is selected you can reorder the material list per your needs. The Auto Mark Components batch action will follow the set order of items in the list.

5. When a line is selected you can use the Locate button to zoom in on this product in your model.

6. Select the Font Type for your Bill of Material. Clicking Insert Table will place a Tablelike formatted bill of material in your view or sheet. The optional check box Place Tags automatically place material tags on the drawing that correspond to the bill of material.

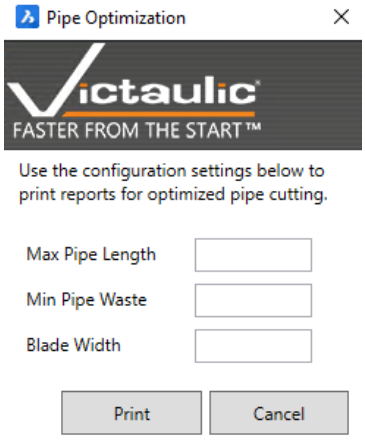
7. Export a CSV file from your selection using the Export BOM button.

Select all lines of the material list and use CTRL+C to copy to clipboard. Next, paste as text in a text box within your sheet or document.

8. An HTML report can be generated giving accurate pipe length estimates along an efficient method of cutting

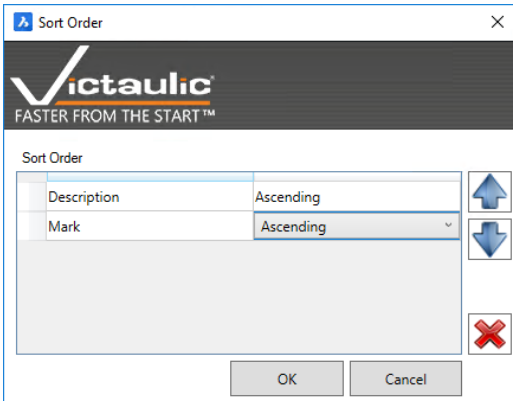
to minimize material waste. Target pipe length, blade width, and minimum waste can be adjusted to improve

accuracy of optimization report.



Sorting and Columns allows you to

customize the look of your bills of material.

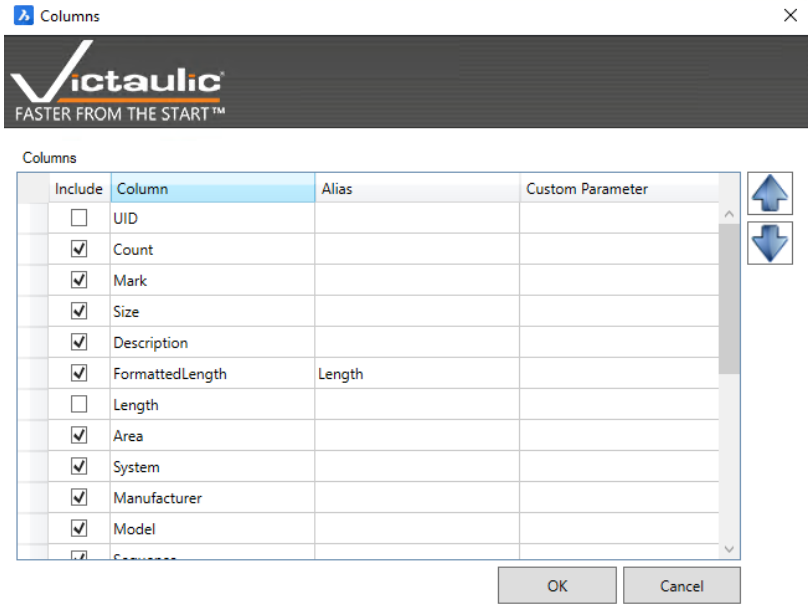


Sort Order - To change the sort order select the

left side then use the up down arrows to move.

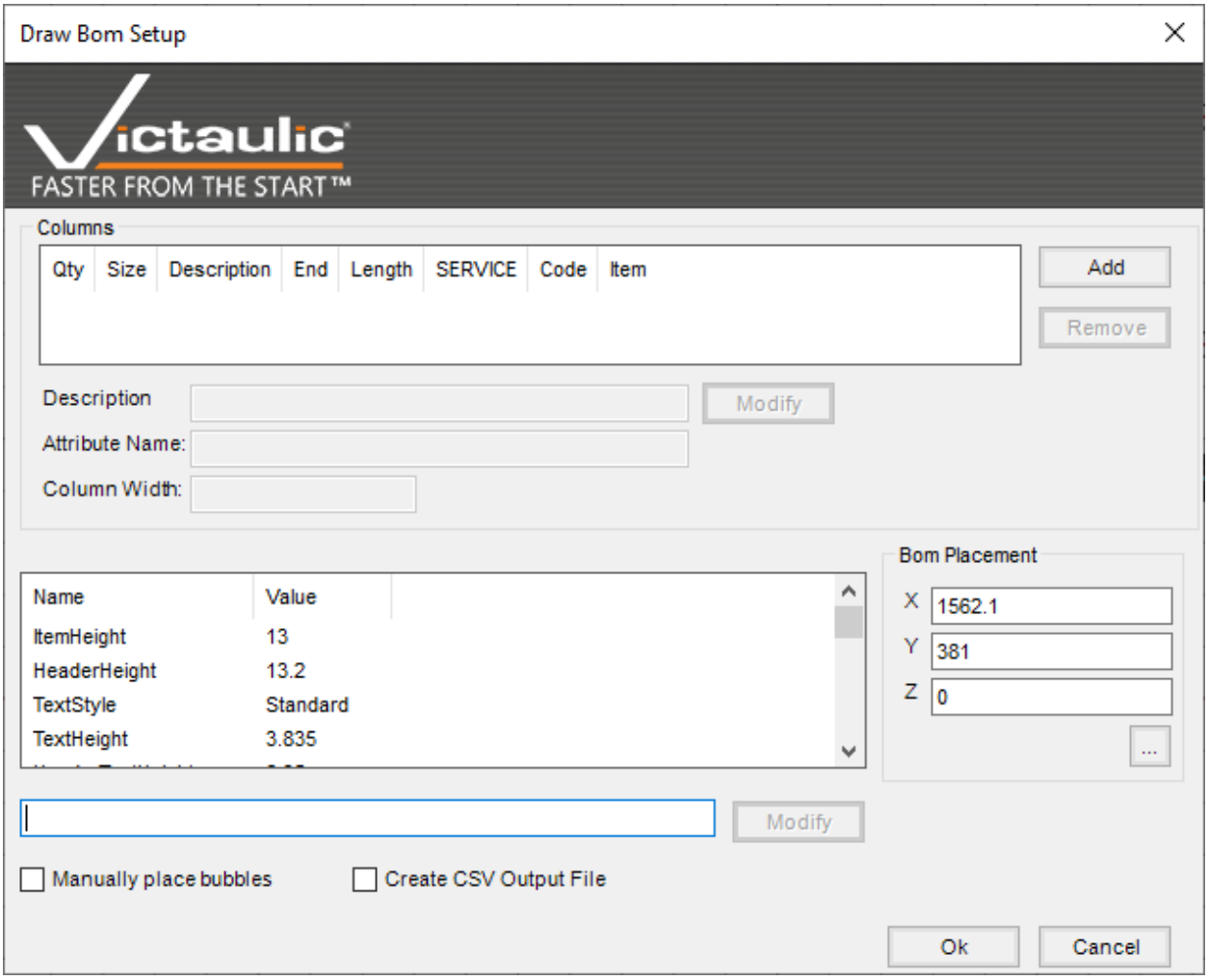
Sorting priority starts with the first record then

moves down.



7-Run BOM

The "Run BOM" button launches a totally customizable bill of material utility that allows the user to create a list of all piping components in the current drawing. The bill of material can be placed on the drawing (model- or paper space) or exported, via an .csv (comma delimited file), to a Microsoft Access database, or a Microsoft Excel spreadsheet. This utility will also automatically place material tags on the drawing that correspond to the bill of material. Alternately, there is a switch that allows for the manual placement of tags as the bill of material is generated.



Note: All Vic/Blocks-2D or 3D components also contain an information attribute that allows the "Run BOM" routine to include all Victaulic couplings, flanges, fittings, valves and specialty items in the bill of material. See Attribute Data Fields for a complete listing of available fields that can be incorporated into the bill of material.

Attribute Data Fields:

SIZE = Nominal Pipe Diameter
DESC = Component Description
WGHT = Component Weight
P/N_1 = Component Part Number 1
P/N_2 = Component Part Number 2
SORT = Component Sort Code
USER_1 = User Data 1
USER_2 = User Data 2
USER_3 = User Data 3
SIZE_MM = Nominal Pipe Diameter (Metric)

ITEM = Component Bill of Material Item Number *
QUANTITY = Component Item Quantity *

Note: Field names marked with an asterisk (*) are controlled by the VTFB. Item numbers are assigned and quantities are totaled by the "Run BOM" utility.

8- Erase BOM

The "Erase BOM" button automatically removes the bill of material and all tags from the drawing if the piping must be revised.

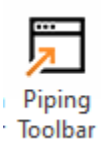
9- Drawing Explorer

Opens BricsCAD Drawing Explorer, defaulted to the preloaded Victaulic CAD library. Here you can find a basic set of Vicblocks for AWWA, Copper, HDPE, IPS and Stainless Steel. Full libraries can be downloaded: https://www.victaulic.com/resource-software/

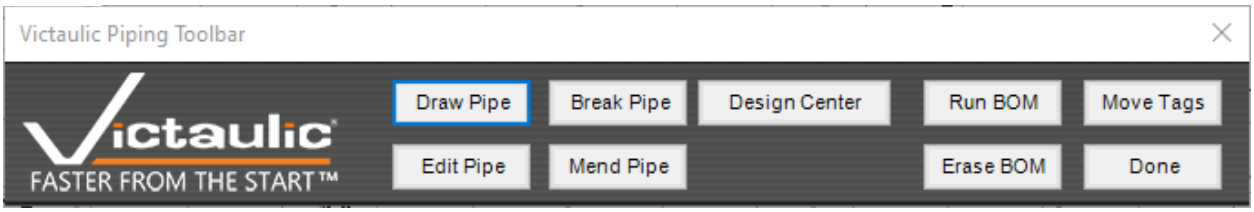
10- Content Center

Opens Victaulic Resource Software page. Here you can download the full Victaulic BricsCAD 2D or 3D DWG libraries: https://www.victaulic.com/resource-software/

11- Piping Toolbar



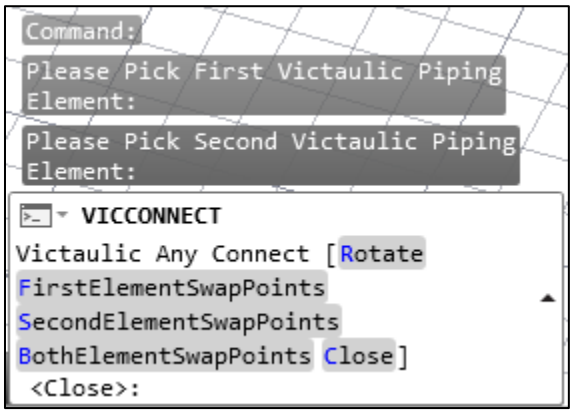
Opens the “Victaulic Utilities” tool palette. This tool palette gives you the basic Victaulic Tools for BricsCAD commands. “Done” will close this tool palette.



12- Any Connect

The Any Connect button moves and connects components based on the user’s selection. Click the first element (consider this your anchor point or target element); then click on the second element and the second element will move and align on the nodes facing each other. After placement you have the options:

- Rotate: Keystroke “R” will rotate the second element with increments of 90°.
- FirstElementSwapPoints: Keystroke “F” second element will connect to other node points of target object.
- SecondElementSwapPoints: Keystroke “S” second element will swap node points connected to first element.
- BothElementSwapPoints: Keystroke “B” will swap node points simultaneously of first and second element.
- Close: Keystroke “C”, Escape button or Enter will close this command.

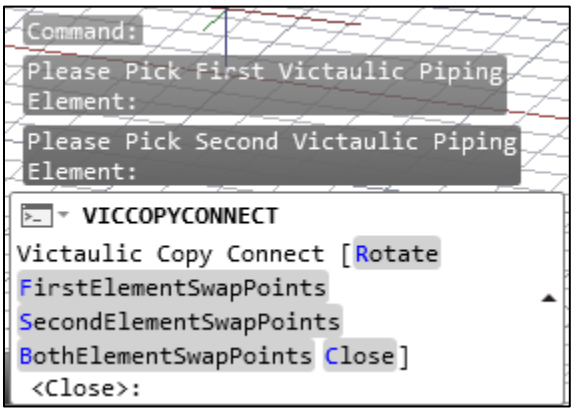


13- Copy Connect

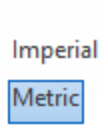
The Copy Connect button copies and connects components based on the user’s selection. Click the first element (consider this your anchor point or target element); then click on the second element, the second element will be copied and aligned on the nodes facing each other. After placement you have the options:

Rotate: Keystroke “R” will rotate the second element with increments of 90°.

- FirstElementSwapPoints: Keystroke “F” second element will connect to other node points of target object.
- SecondElementSwapPoints: Keystroke “S” second element will swap node points connected to first element.
- BothElementSwapPoints: Keystroke “B” will swap node points simultaneously of first and second element.
- Close: Keystroke “C”, Escape button or Enter will close this command.



14- Imperial - Metric



Toggle button to switch your unit settings between Imperial and Metric. This will influence your Run BOM settings and Draw Pipe size selection.

15- Registration

Multiple installations can be licensed using the same email address and password combination. Use the email address and password from our store to register your software. The registration window shows your current version of VTFA and the latest version number. When a newer version is available you can download this version directly via this window.