



# Victaulic Tools for AutoCAD®

User Manual

AutoCAD 2018, 2019, 2020, 2021, 2022

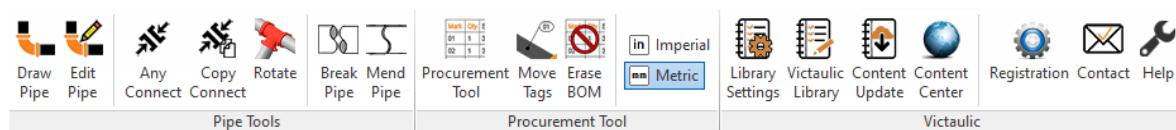


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## Introduction to Victaulic Tools for AutoCAD®

Victaulic has created a set of tools for AutoCAD® 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](http://www.victaulicsoftware.com)



# 1-Licensing

After downloading your copy of Victaulic Tools for AutoCAD, you will be asked to register your Victaulic Tools. Licenses can be managed from [www.VictaulicSoftware.com/Store](http://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.

Registration

**Victaulic**  
FASTER FROM THE START™

Registration


Email Address:

Password:

Log In

Please log in to activate your software.  
Manage your account at [www.victaulicsoftware.com/Account](http://www.victaulicsoftware.com/Account).  
[Register with a code](#)

Update Software

 Your software is up to date.

Current Version:	Latest Version:
21.5.7548	21.1.7544

New Features:

- First Build for AutoCAD 2021

**FIRELOCK**  
INSTALLATION-READY  
FITTINGS  
[LEARN MORE >](#)

**REFUSE-TO-FUSE™**  
SYSTEM FOR HDPE PIPE  
[LEARN MORE >](#)



## 2-Draw Pipe



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 AutoCAD 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-3D or 2D components. By turning on the AutoCAD "Node" Object Snap, pipe can be connected to the nodes contained in each Vic/Blocks-3D or 2D 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



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

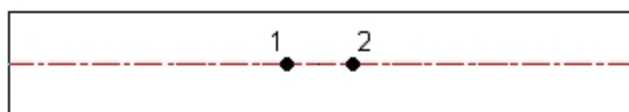
### 4-Break Pipe



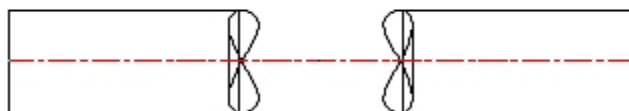
Break  
Pipe

When the "Break Pipe" utility is used, the "Nearest" AutoCAD 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.





Before



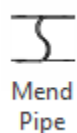
After



Hidden View

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

Mark	Qty	
01	1	2
02	1	3

### 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.



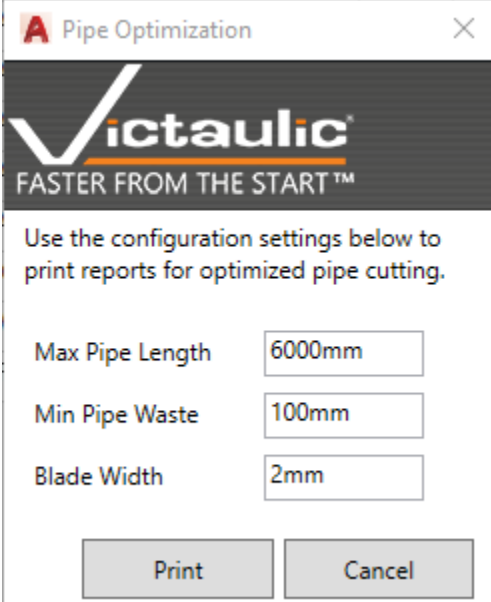


7. Export a CSV file from your selection using the Export BOM button.

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.



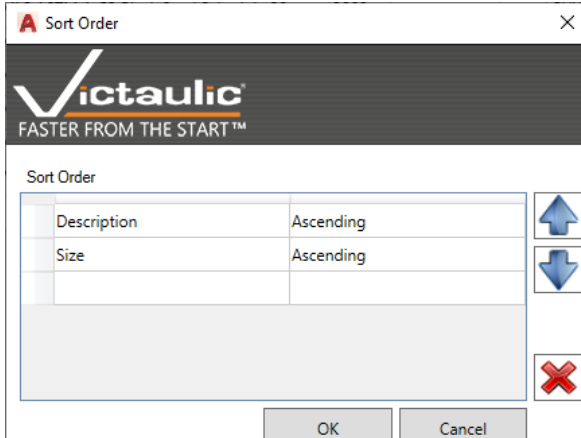
The 'Pipe Optimization' dialog box features the Victaulic logo and the tagline 'FASTER FROM THE START™'. It contains a text prompt: 'Use the configuration settings below to print reports for optimized pipe cutting.' Below this, there are three input fields: 'Max Pipe Length' with a value of '6000mm', 'Min Pipe Waste' with a value of '100mm', and 'Blade Width' with a value of '2mm'. At the bottom, there are 'Print' and 'Cancel' buttons.



Two buttons are shown side-by-side: 'Sorting...' and 'Columns...'.

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.

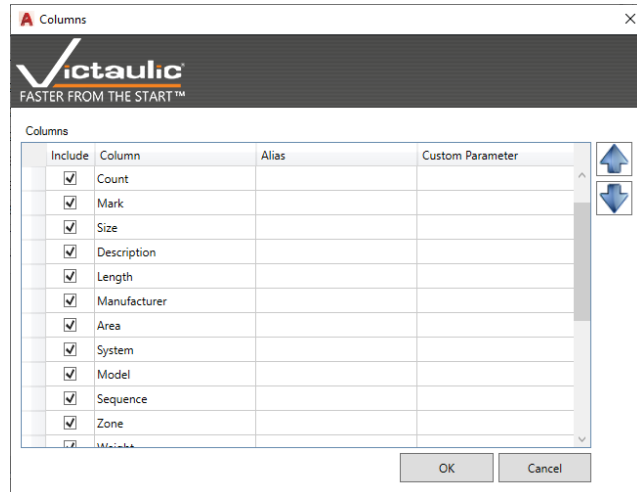


The 'Sort Order' dialog box features the Victaulic logo and the tagline 'FASTER FROM THE START™'. It contains a table titled 'Sort Order' with two columns: 'Description' and 'Ascending'. The table has two rows: 'Description' and 'Size'. To the right of the table are two blue arrows (up and down) and a red 'X' button. At the bottom, there are 'OK' and 'Cancel' buttons.

Description	Ascending
Size	Ascending



Columns - The Columns window gives you a list of predefined columns that can be added or removed from your bill of material. The column order can be changed by using the up and down arrows.



## 7-Erase BOM



Erase  
BOM

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

## 8-Move Tags



Move  
Tags

The "Move Tags" routine allows for the relocation of any material tag that is in conflict with another drawing element.



## 9-Library Settings



Select each module to expand and shrink the corresponding product ribbon. Choose your library style to be 2D or 3D blocks.

**Victaulic : Library Settings**

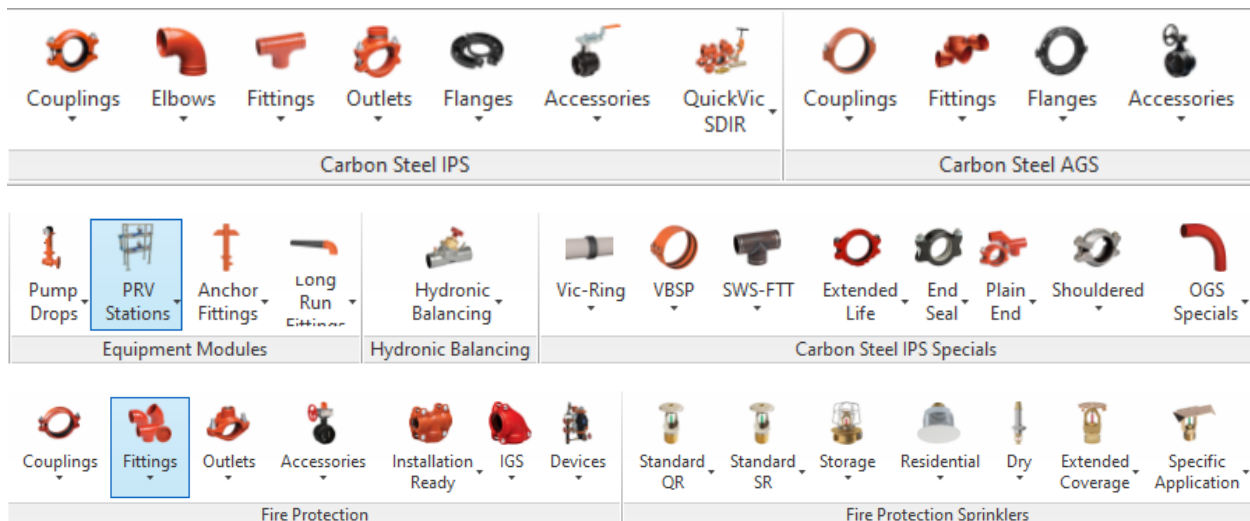
**Victaulic**  
FASTER FROM THE START™

Select Library Style : ☐ 2D ☒ 3D










































Choose modules to be shown in ribbon

- ☒ **Carbon Steel IPS** - Victaulic® Carbon Steel Non-Fire Protection Products (PHA, HVAC, Compressed Air,...) Up To DN300/12in
- ☐ **Carbon Steel AGS** - Victaulic® Carbon Steel Advanced Grooved System From DN350/14in And Up
- ☐ **Equipment Modules** - Victaulic® Catalog Items
- ☐ **Hydronic Balancing** - Victaulic® Products For Hydraulic Balancing
- ☐ **Carbon Steel IPS Specials** - Victaulic® Non-Standard products - Special Application Products
- ☐ **Fire Protection** - Victaulic® Carbon Steel OGS Grooved Fire Protection Products Up To DN300/12in
- ☐ **Fire Protection Sprinklers** - Victaulic® Fire Sprinklers Heads
- ☐ **Stainless Steel** - Victaulic® Stainless Steel Original Grooved System Schedule 10S Products Up To DN300/12in
- ☐ **Stainless Steel AGS** - Victaulic® Stainless Steel Advanced Grooved System Products From DN350/14in
- ☐ **Stainless Steel StrengThin 100** - Victaulic® Thinwall Stainless Steel StrengThin™ 100 (Europe Only) Grooved System Products Up To DN300/12in
- ☐ **Stainless Steel Vic-Press** - Victaulic® Stainless Steel Vic-Press System For Schedule 10S
- ☐ **Ductile Iron AWWA** - Victaulic® American Water Works Association Products
- ☐ **Copper** - Victaulic® Copper Products
- ☐ **HDPE** - Victaulic® High Density Poly Ethylene (HDPE) Products
- ☐ **OGS-200** - Victaulic® OGS-200 Grooved High Performance Products For Steam And Chemicals
- ☐ **PGS-300** - Victaulic® PGS-300 CPVC/PVC products
- ☐ **Aluminum** - Victaulic® Aluminum Products
- ☐ **JIS** - Victaulic® Japanese Industrial Size Products

OK Cancel





											
Couplings	Fittings	Outlets	Flanges	Accessories	Specials	Couplings	Fittings	Flanges			
Stainless Steel						Stainless Steel AGS					
											
Couplings	Fittings	Flanges	Accessories	Specials	304 SS	316 SS	Accessories				
Stainless Steel StrengThin 100						Stainless Steel Vic-Press					
											
Couplings	Fittings	Flanges	Accessories	Specials	Couplings	Fittings	Accessories	Australia Copper	Couplings	Fittings	Accessories
Ductile Iron AWWA					Copper				HDPE		
											
Couplings	Fittings	Specials	Accessories	Couplings	Fittings	Accessories	Couplings	Fittings	Couplings	Fittings	Accessories
OGS-200				PGS-300			Aluminum		JIS		

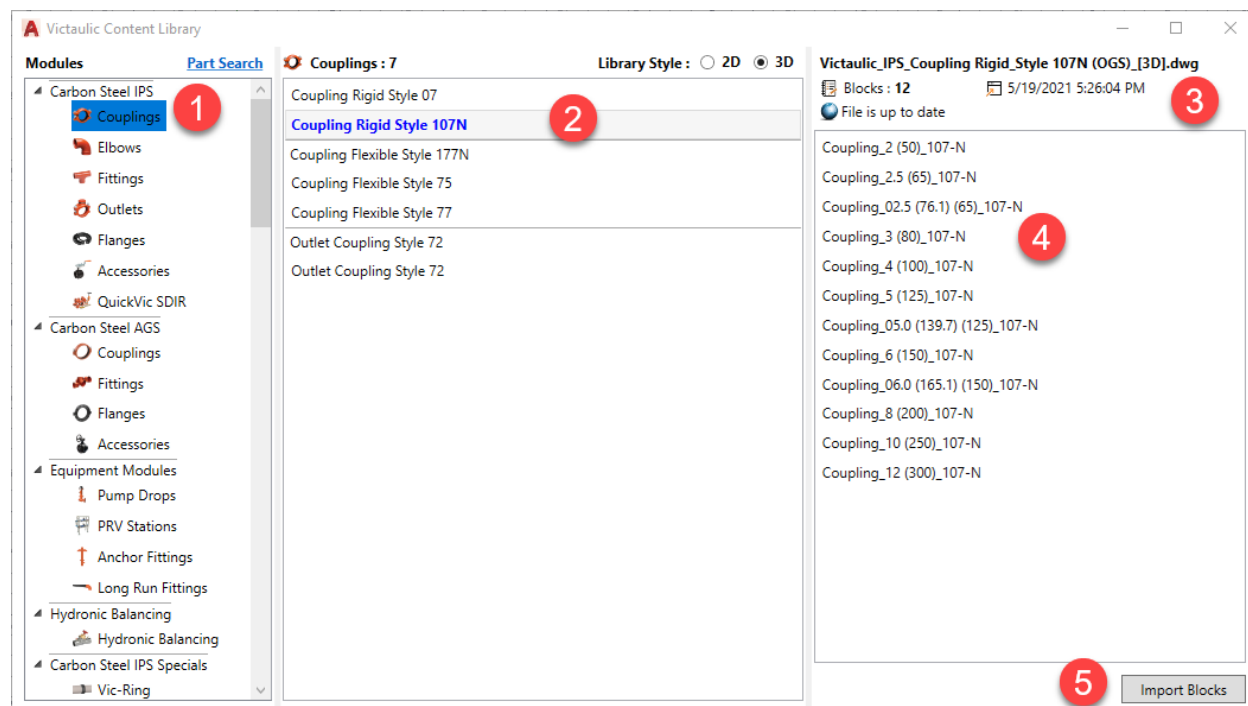


## 10- Victaulic Library



Victaulic  
Library

Opens the Victaulic Library page. Here you can pick the Victaulic elements you want to insert into your model.



1. Select product module
2. Select a component
3. Verifies if the product is already available on your system.
  - If not found, you can directly download the block from here:

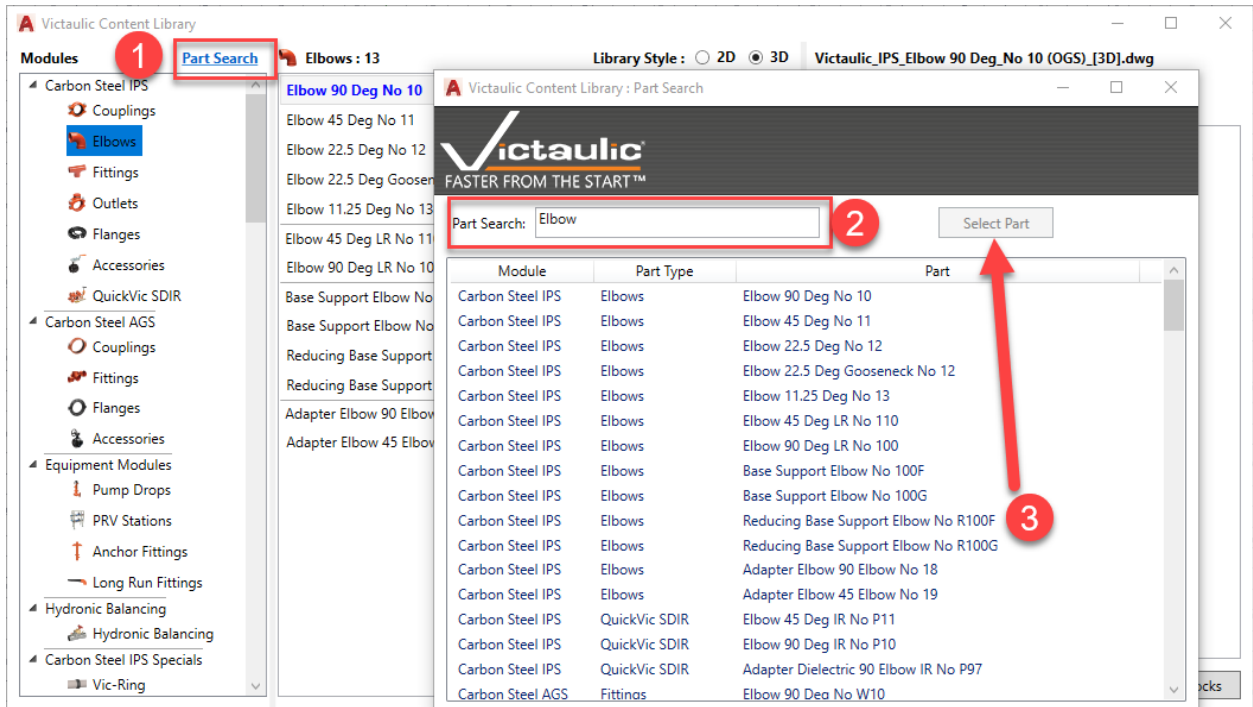
Victaulic\_IPS\_Coupling Rigid\_Style 07 (OGS)\_[3D].dwg  
File Not Found

Check and Download from Victaulic Cloud

- If already available on your system it will check if a newer component is available on Victaulic.com and give you the opportunity to update the block.
4. Select the size or sizes you want to place into your model.
  5. Import the select size(s)



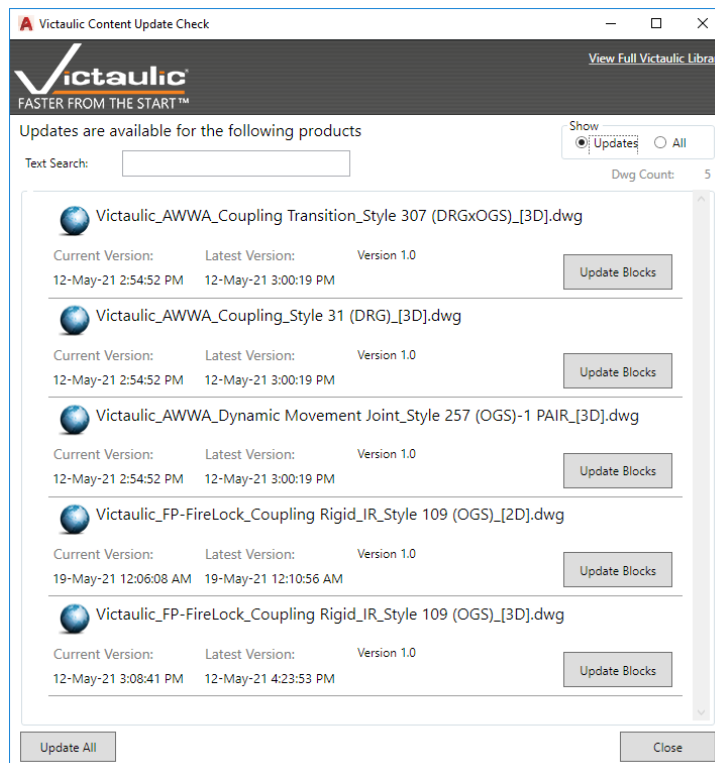
If you do not immediately find your desired product you can use the search function:



## 11- Content Update



Verifies if the used Victaulic components are up to date.





## 12- Content Center

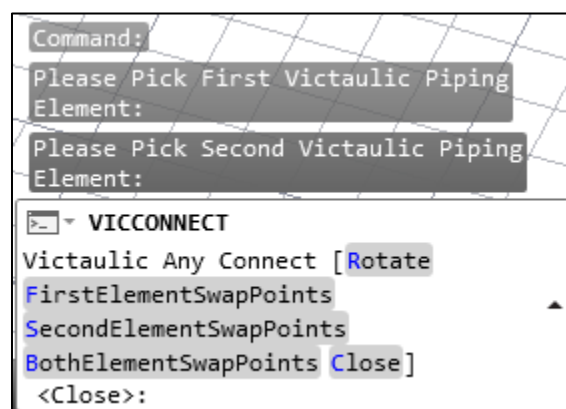
Opens Victaulic Resource Software page. Here you can download the full Victaulic AutoCAD 3D or 2D DWG libraries: <https://www.victaulic.com/resource-software/>

## 13- 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.



## 14- Copy Connect

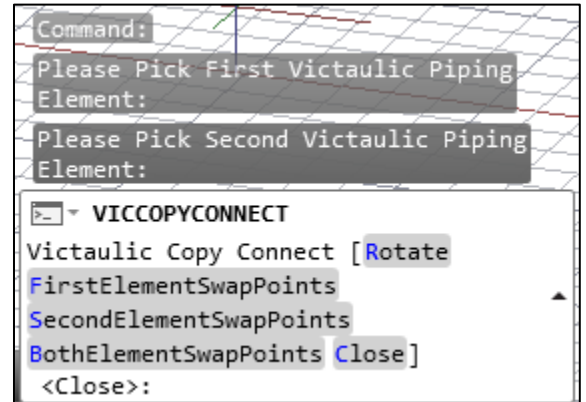


The Copy Connect button copies and connects components based on the user's selection. Click the first element (consider this your anchor point or target element); then click on the second element, the second element will be copied and aligned on the nodes facing each other. After placement you have the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

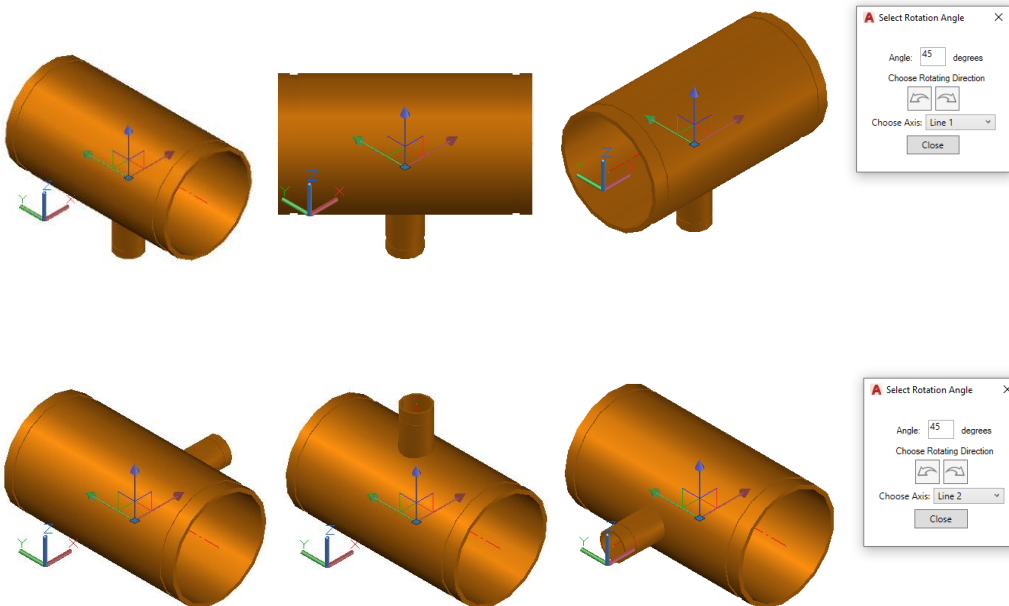


## 15- Rotate Selection



Rotate

Select the block or blocks you wish to rotate click the Rotate Selection button and the Select Rotation Angle window will appear. Specify the angle and watch your selection rotate. Choose Axis will appear when you have more than one axis. Allowing you to select the different axis to rotate around.



## 16- 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.




## 17- 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.

Registration

  
FASTER FROM THE START™

Registration


Email Address:

Password:

Log In



Please log in to activate your software.  
Manage your account at [www.victaulicsoftware.com/Account](http://www.victaulicsoftware.com/Account).  
[Register with a code](#)

Update Software



An update is available for your software.  
Current Version: 1.0.5      Latest Version: 19.1.7544  
New Features:  
- First Build for AutoCAD 2019

Download



## 18- Important Information

To customize or update the pipe data shown in the Victaulic Pipe Data window, you can edit the \*.ini files. These files are located:

C:\ProgramData\Autodesk\ApplicationPlugins\Victaulic Tools for AutoCAD 2019.bundle\Contents

AWWA.ini - Copper.ini - HDPE.ini - IPS.ini - Pressfit.ini - StainlessSteel.ini

New Victaulic Pipe Data

**Victaulic**  
FASTER FROM THE START™

Module

☒ IPS ☐ AWWA ☐ Copper Tubing ☐ Stainless Steel ☐ HDPE

Details

Size: 15mm ☐ Imperial ☒ Metric

Length:  ... View ☐ 2D ☒ 3D

Description: Pipe SMLS ASTM A-53 Black Steel Schedule 20

Service: CHWS=Chilled Water Supply

Weight:  End Condition: VG X VG

Piece Marking:  Piece Marking 2:

Sort Code: 2697 (Read-Only)

User 1:  User 2:

User 3:  User 4:

OK Cancel