



AutoCAD Plant 3D®

Content Installation Guide

Table of Contents

Introduction to Victaulic Content for AutoCAD Plant 3D®	2
01 – Project Setup and Configuration	3
Nominal Diameter Mapping	3
Custom SKEY Creation and Mapping	4
Create New Plant End Codes	6
Create New Joints Simple and Compound	9
02 – Content Installation	21
03 – Piping Specification Optional Settings	23
Fixed Length Piping	23
04 – Troubleshooting	25
Symbol Cannot be Found	25

Introduction to Victaulic Content for AutoCAD Plant 3D®

Victaulic has created content for AutoCAD Plant 3D® that will produce a detailed dimensionally correct model and allow for automatic placement of couplings at grooved connections.

The content can be found on the Victaulic website www.victaulic.com

01 – Project Setup and Configuration

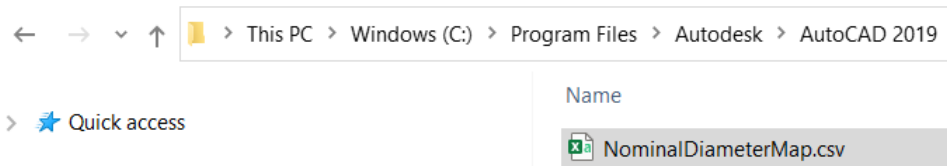
Nominal Diameter Mapping

Because Victaulic is a global company, the product range encompasses nominal sizes for several different standards. To accommodate these sizes in the catalog and piping specifications, it is necessary to modify the Autodesk delivered file NominalDiameterMap.csv found in the AutoCAD installation folder.

NOTE

It is recommended to make a copy of the file NominalDiameterMap.csv in the installation folder before completing the next steps. A copy of the modified file can be downloaded by clicking this link:

[Aask ACAD Plant 3D 00 Instructions.zip](#)



Ensure the following sizes are included and unique within the file. The UserDefinedDisplay does not need to be modified if the size is existing in the file nor do the comments need to be added.

SizeId	Nominal Size Value	Nominal Size Unit	Nominal Size Display	Alternative Size Value	Alternative Size Unit	Alternative Size Display	User Defined Display	Scope	Comments
1100	2.5 in		2 1/2"	73 mm		65 (73.0)	65 (2.5)	1	Modified for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 73mm.
1105	2.9 in		65 (76.1)	65 mm		65 (76.1)	65DN (2.5)	1	Added for Victaulic Content. This size aligns with DIN EN 10220 Srs 1 and EN 10255 with a nominal OD of 76.1mm. 1 It has no ASME equivalent.
1140	5 in		5"	141.3 mm		125 (141.3)	125 (5.0)	1	Modified for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 141.3mm.
1145	5.5 in		125 (139.7)	125 mm		125 (139.7)	125DN (5.0)	1	Added for Victaulic Content. This size aligns with DIN Srs 1 and EN 10255 with a nominal OD of 139.7mm. 1 It has no ASME equivalent.
1155	6.5 in		150 (165.1)	165.1 mm		150 (165.1)	150DN (6.0)	1	Added for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 165.1mm. 1 It has no ASME equivalent.
2220	65 mm		65 (76.1)	2.9 in		65 (76.1)	65DN (2.5)	1	Modified for Victaulic Content. This size aligns with DIN EN 10220 Srs 1 and EN 10255 with a nominal OD of 76.1mm. 1 It has no ASME equivalent.
2225	73 mm		65 (73.0)	2.5 in		2 1/2"	65 (2.5)	1	Added for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 73mm.
2300	125 mm		125 (139.7)	5.5 in		125 (139.7)	125DN (5.0)	1	Modified for Victaulic Content. This size aligns with DIN Srs 1 and EN 10255 with a nominal OD of 139.7mm. 1 It has no ASME equivalent.
2305	141.3 mm		125 (141.3)	5 in		5"	125 (5.0)	1	Added for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 141.3mm.
2325	165.1 mm		150 (165.1)	6.5 in		150 (165.1)	150 (6.0)	1	Added for Victaulic Content. This size aligns with DIN EN 10220 Srs 3 with a nominal OD of 165.1mm. 1 It has no ASME equivalent.

Custom SKEY Creation and Mapping

All attempts have been made to use delivered SKEYs for isometric drawing creation. However, there are a few cases where an appropriate SKEY did not exist. For this reason, a few custom SKEYs need to be added to the file *IsoSymbolStyles.dwg* and mapped in the file *IsoSkeyAcadBlockMap.xml* in the *Isometric* folder for the project in which Victaulic content is to be used.

Open the file *IsoSkeyAcadBlockMap.xml* in the *Isometric* folder for the project in which Victaulic content is to be used using an XML editor and add the following entries under the appropriate section.

```
<!-- Begin: Misc. symbols -->
<SkeyMap SKEY="FLOW" AcadBlock="FlowArrow" />
<SkeyMap SKEY="FLOR" AcadBlock="Floor_Symbol" />
<SkeyMap SKEY="RPAD" AcadBlock="ReinforcementPad" />
<SkeyMap SKEY="VR" AcadBlock="VicRing" />
```

```
<SkeyMap SKEY="VR" AcadBlock="VicRing" />
```

NOTE

It is recommended to make a copy of the files *IsoSymbolStyles.dwg* and *IsoSkeyAcadBlockMap.xml* in the project folder before completing the next steps. A copy of the modified files can be downloaded by clicking this link:

[Adsk ACAD Plant 3D 00 Instructions.zip](#)

```

<!-- Begin: Olets -->
<SkeyMap SKEY="SKSW" AcadBlock="Olet1" />
<SkeyMap SKEY="TH??" AcadBlock="Olet1" />
<SkeyMap SKEY="WTBW" AcadBlock="Olet1" />
<SkeyMap SKEY="HC??" AcadBlock="Olet-Half Coupling" />
<SkeyMap SKEY="LA??" AcadBlock="Latrolet1" />
<SkeyMap SKEY="FE??" AcadBlock="Ferrule-Flared" />
<SkeyMap SKEY="CGCLBR" AcadBlock="CG_ClampedBranch" />
<SkeyMap SKEY="MCCL" AcadBlock="Mech-Cross" />

```

```

<SkeyMap SKEY="CGCLBR" AcadBlock="CG_ClampedBranch" />
<SkeyMap SKEY="MCCL" AcadBlock="Mech-Cross" />

```

```

<!-- Begin: Valves -->
<SkeyMap SKEY="M3FL" AcadBlock="3WayValve" />
<SkeyMap SKEY="VZSC" AcadBlock="CapReliefValve" />
<SkeyMap SKEY="VFTV" AcadBlock="TestValve" />

```

```

<SkeyMap SKEY="VFTV" AcadBlock="TestValve" />

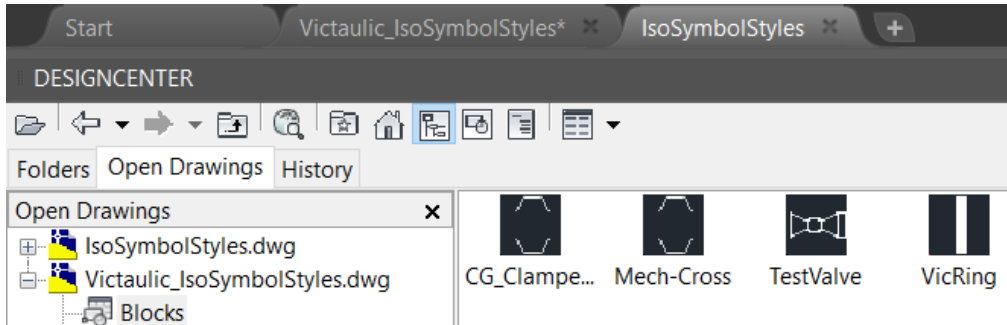
```

Open *Victaulic_IsoSymbolStyles.dwg* as downloaded from the Victaulic website and *IsoSymbolStyles.dwg* in the *Isometric* folder for the project in which Victaulic content is to be used.

[Adsk_ACAD_Plant_3D_00_Instructions.zip](#)

Copy the blocks CG_ClampedBranch, Mech-Cross, TestValve, and VicRing from *Victaulic_IsoSymbolStyles.dwg* to *IsoSymbolStyles.dwg*.

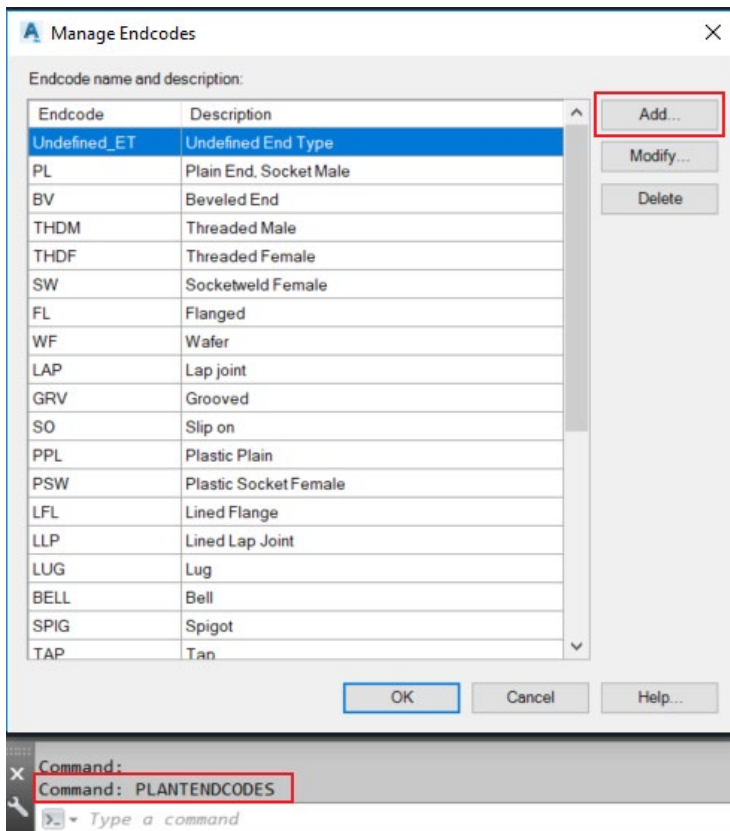
To copy the blocks, open the *Design Center* in AutoCAD P3D by typing *ADC* in the command line. Select the *Open Drawings* tab in the *Design Center*. Select *Blocks* under *Victaulic_IsoSymbolStyles.dwg*. Drag and drop the blocks from the *Design Center* to the *IsoSymbolStyles.dwg*. Delete the inserted blocks, save and close the drawings.



Create New Plant End Codes

Launch P3D and load any drawing in the project where the new end code is to be created.

Type *PLANTENDCODES* in the command prompt.



In the Manage Endcodes form, select *Add...*

- Endcode name is “CL”
- Description is “Victaulic Clamp”

The 'Add Endcode' dialog box is shown with the following fields and options:

- Endcode name:** CL
- Description:** Victaulic Clamp
- ☐ Can cutback
- ☐ Flange like
- ☐ Wafer like
- Buttons:** OK, Cancel, Help

In the Manage Endcodes form, select *Add...*

- Endcode name is “FLA”
- Description is “Victaulic Flange Adapter”
- Check "Flange Like"

The 'Add Endcode' dialog box is shown with the following fields and options:

- Endcode name:** FLA
- Description:** Victaulic Flange Adapter
- ☐ Can cutback
- ☒ Flange like
- ☐ Wafer like
- Buttons:** OK, Cancel, Help

In the Manage Endcodes form, select *Add...*

- Endcode name is “QVSD”
- Description is “Victaulic QuickVic SD IR”

The 'Add Endcode' dialog box is shown with the following fields and options:

- Endcode name:** QVSD
- Description:** Victaulic QuickVic SD IR
- ☐ Can cutback
- ☐ Flange like
- ☐ Wafer like
- Buttons:** OK, Cancel, Help

In the Manage Endcodes form, select *Add...*

- Endcode name is “VPE”
- Description is “Victaulic Plain End”

The 'Add Endcode' dialog box is shown with the following fields and options:

- Endcode name:** VPE
- Description:** Victaulic Plain End
- ☐ Can cutback
- ☐ Flange like
- ☐ Wafer like
- Buttons:** OK, Cancel, Help

In the Manage Endcodes form, select Add...

- Endcode name is “ALF”
- Description is “Victaulic Aquamine Female”

The screenshot shows the 'Add Endcode' dialog box. The 'Endcode name' field contains 'ALF'. The 'Description' field contains 'Victaulic Aquamine Female'. There are three checkboxes: 'Can cutback', 'Flange like', and 'Wafer like', all of which are unchecked. At the bottom, there are three buttons: 'OK', 'Cancel', and 'Help'.

In the Manage Endcodes form, select Add...

- Endcode name is “APG”
- Description is “Victaulic Aquamine Male”

The screenshot shows the 'Add Endcode' dialog box. The 'Endcode name' field contains 'APG'. The 'Description' field contains 'Victaulic Aquamine Male'. There are three checkboxes: 'Can cutback', 'Flange like', and 'Wafer like', all of which are unchecked. At the bottom, there are three buttons: 'OK', 'Cancel', and 'Help'.

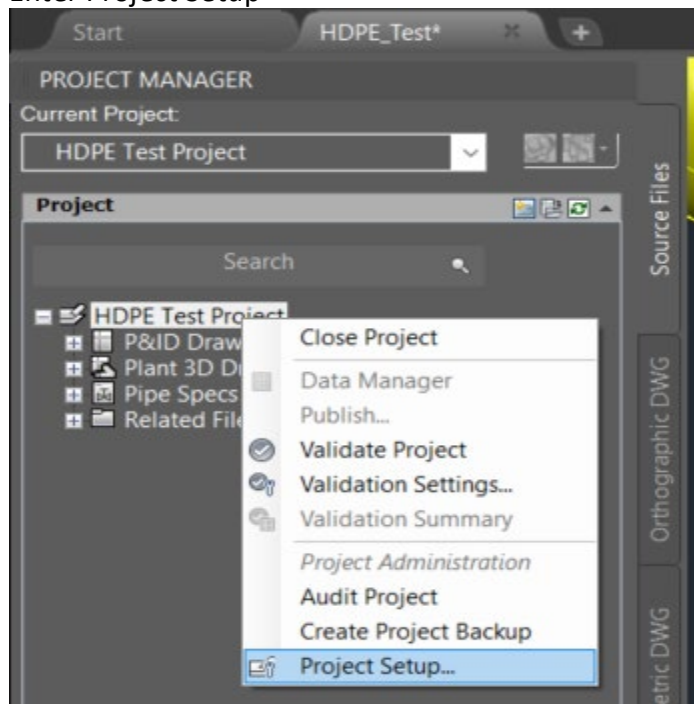
In the Manage Endcodes form, select Add...

- Endcode name is “AGR”
- Description is “Victaulic AGS Vic-Ring”

The screenshot shows the 'Add Endcode' dialog box. The 'Endcode name' field contains 'AGR'. The 'Description' field contains 'Victaulic AGS Vic-Ring'. There are three checkboxes: 'Can cutback', 'Flange like', and 'Wafer like', all of which are unchecked. At the bottom, there are three buttons: 'OK', 'Cancel', and 'Help'.

Create New Joints Simple and Compound

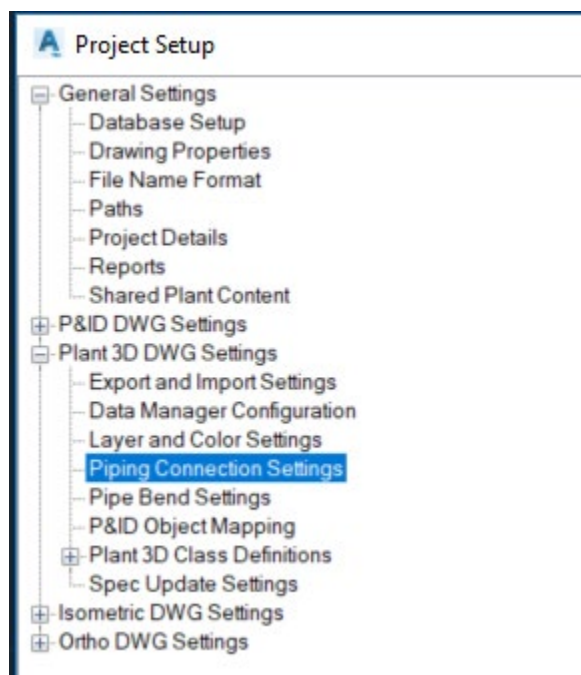
Enter Project Setup



NOTE

It is recommended to make a copy of the file DefaultConnectorsConfig.xml in the project folder before completing the next steps.

Navigate to Plant 3D DWG Settings -> Piping Connection Settings



Under Simple joints, find the joint named *Grooved joint* and select *Delete*

Joint setup

Simple joints

Name	End 1	End 2	Fasteners	Required Matches	Optional Matches	Imperial to Metric Connection
Flare Joint	FA	PL	Universal	Nominal Diameter	None	<input type="checkbox"/>
Fusion joint	PPL	PPL	Fusion Weld	Nominal Diameter	None	<input type="checkbox"/>
Glue joint	PPL	PSW	Glue	Nominal Diameter	None	<input type="checkbox"/>
Grooved joint	PL, GRV	GRV	Clamp	Nominal Diameter, Pressur...	None	<input type="checkbox"/>

On the right of the Joint Setup form under Simple joints, select *Add...*

Joint setup

Simple joints

Name	End 1	End 2	Fasteners	Required Matches	Optional Matches	Imperial to Metric Connection
Wafer wafer joint	WF	WF	Gasket	Nominal Diameter, Pressur...	None	<input type="checkbox"/>
Fusion joint	PPL	PPL	Fusion Weld	Nominal Diameter	None	<input type="checkbox"/>
Glue joint	PPL	PSW	Glue	Nominal Diameter	None	<input type="checkbox"/>
Stub-end lapped joint	LAP	BV, PL	Stub End, Buttweld	Nominal Diameter	None	<input type="checkbox"/>
Collared lapped joint	LAP	BV, PL	Collar, Buttweld	Nominal Diameter	None	<input type="checkbox"/>
Grooved joint	PL, GRV	GRV	Clamp	Nominal Diameter, Pressur...	None	<input type="checkbox"/>

Create a joint per the screenshot.

Add Joint

Joint name: VicClamp

Display name: Victaulic Clamp

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

- ☐ AGR
- ☐ ALF
- ☐ APG
- ☐ BELL
- ☐ BV
- ☐ C
- ☒ CL
- ☐ FA
- ☐ FL
- ☐ FLA
- ☐ FTG
- ☐ GRV
- ☐ LAP
- ☐ LFL

End 2:

- ☒ AGR
- ☐ ALF
- ☐ APG
- ☐ BELL
- ☐ BV
- ☐ C
- ☐ CL
- ☐ FA
- ☐ FL
- ☐ FLA
- ☐ FTG
- ☒ GRV
- ☐ LAP
- ☐ LFL

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...
Matching Values...
Delete

Fasteners


- ☐ Backing Ring
- ☐ Bolt Set
- ☐ Butt weld
- ☐ Clamp
- ☐ Collar
- ☐ Fusion Weld
- ☐ Gasket
- ☐ Gland
- ☐ Glue
- ☐ Reinforcement Ring
- ☐ Slip On
- ☐ Socket weld
- ☐ Stub End
- ☐ Tap Weld
- ☐ Thread
- ☒ Universal

Spec Filter...

Add Cancel Help

Joint Name: VicClamp
Display Name: Victaulic Clamp
End 1: CL
End 2: AGR, GRV
Property: Nominal Diameter
Fasteners: Universal

Create a joint per the screenshot.


Add Joint
✕

Joint name:

VicFlgAdapter

Display name:

Victaulic Flange Adapter

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

☐ BELL
☐ FTG

☐ BV
☐ GRV

☐ C
☐ LAP

☐ CL
☐ LFL

☐ FA
☐ LLP

☐ FL
☐ LUG

☒ FLA
☐ MJF

<

>

End 2:

☐ BELL
☐ FTG

☐ BV
☐ GRV

☐ C
☐ LAP

☐ CL
☐ LFL

☐ FA
☐ LLP

☒ FL
☐ LUG

☐ FLA
☐ MJF

<

>

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter
<input checked="" type="checkbox"/>	Pressure Class

Add Property...

Matching Values...

Delete

Fasteners

☐ Backing Ring
☐ Glue

☒ Bolt Set
☐ Reinforcement Ring

☐ Buttweld
☐ Slip On

☐ Clamp
☐ Socketweld

☐ Collar
☐ Stub End

☐ Fusion Weld
☐ Tap Weld

☐ Gasket
☐ Thread

☐ Gland
☐ Universal

Spec Filter...

Add

Cancel

Help

Joint Name: VicFlgAdapter

Display Name: Victaulic Flange Adapter

End 1: FLA

End 2: FL

Property: Nominal Diameter, Pressure Class

Fasteners: Bolt Set

Create a joint per the screenshot

Add Joint

Joint name: VicBoltedBranchOut Display name: Victaulic Bolted Branch Outlet

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

<input type="checkbox"/> QVSD	<input checked="" type="checkbox"/> TAP
<input type="checkbox"/> RDA	<input type="checkbox"/> TC
<input type="checkbox"/> RDB	<input type="checkbox"/> THDF
<input type="checkbox"/> SL	<input type="checkbox"/> THDM
<input type="checkbox"/> SO	<input type="checkbox"/> Undefined_ET
<input type="checkbox"/> SPIG	<input type="checkbox"/> Universal_ET
<input type="checkbox"/> SW	<input type="checkbox"/> VPE

End 2:

<input type="checkbox"/> QVSD	<input checked="" type="checkbox"/> TAP
<input type="checkbox"/> RDA	<input type="checkbox"/> TC
<input type="checkbox"/> RDB	<input type="checkbox"/> THDF
<input type="checkbox"/> SL	<input type="checkbox"/> THDM
<input type="checkbox"/> SO	<input type="checkbox"/> Undefined_ET
<input type="checkbox"/> SPIG	<input type="checkbox"/> Universal_ET
<input type="checkbox"/> SW	<input type="checkbox"/> VPE

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...
Matching Values...
Delete

Fasteners

<input type="checkbox"/> Backing Ring	<input type="checkbox"/> Glue
<input type="checkbox"/> Bolt Set	<input type="checkbox"/> Reinforcement Ring
<input type="checkbox"/> Buttweld	<input type="checkbox"/> Slip On
<input type="checkbox"/> Clamp	<input type="checkbox"/> Socketweld
<input type="checkbox"/> Collar	<input type="checkbox"/> Stub End
<input type="checkbox"/> Fusion Weld	<input type="checkbox"/> Tap Weld
<input type="checkbox"/> Gasket	<input type="checkbox"/> Thread
<input type="checkbox"/> Gland	<input checked="" type="checkbox"/> Universal

Spec Filter...

Add Cancel Help

Joint Name: VicBoltedBranchOut
Display Name: Victaulic Bolted Branch Outlet
End 1: TAP
End 2: TAP
Property: Nominal Diameter
Fasteners: Universal

Create a joint per the screenshot

Add Joint

Joint name: QVSD Display name: Victaulic QVSD

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

<input type="checkbox"/> PL	<input type="checkbox"/> SPIG
<input type="checkbox"/> PPL	<input type="checkbox"/> SW
<input type="checkbox"/> PSW	<input type="checkbox"/> TAP
<input checked="" type="checkbox"/> QVSD	<input type="checkbox"/> TC
<input type="checkbox"/> RDB	<input type="checkbox"/> THDF
<input type="checkbox"/> SL	<input type="checkbox"/> THDM
<input type="checkbox"/> SO	<input type="checkbox"/> Undefined_ET

End 2:

<input type="checkbox"/> Universal_ET
<input checked="" type="checkbox"/> VPE
<input type="checkbox"/> WF

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Buttons: Add Property..., Matching Values..., Delete

Fasteners

<input type="checkbox"/> Backing Ring	<input type="checkbox"/> Glue
<input type="checkbox"/> Bolt Set	<input type="checkbox"/> Reinforcement Ring
<input type="checkbox"/> Buttweld	<input type="checkbox"/> Slip On
<input type="checkbox"/> Clamp	<input type="checkbox"/> Socketweld
<input type="checkbox"/> Collar	<input type="checkbox"/> Stub End
<input type="checkbox"/> Fusion Weld	<input type="checkbox"/> Tap Weld
<input type="checkbox"/> Gasket	<input type="checkbox"/> Thread
<input type="checkbox"/> Gland	<input checked="" type="checkbox"/> Universal

Spec Filter...

Buttons: Add, Cancel, Help

Joint Name: QVSD
Display Name: Victaulic QVSD
End 1: QVSD
End 2: VPE
Property: Nominal Diameter
Fasteners: Universal

Create a joint per the screenshot

Add Joint

Joint name: VicAquamine Display name: Victaulic Aquamine

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1: End 2:

<input checked="" type="checkbox"/> ALF	<input type="checkbox"/> FL	<input type="checkbox"/> ALF	<input type="checkbox"/> FL
<input type="checkbox"/> APG	<input type="checkbox"/> FLA	<input checked="" type="checkbox"/> APG	<input type="checkbox"/> FLA
<input type="checkbox"/> BELL	<input type="checkbox"/> FTG	<input type="checkbox"/> BELL	<input type="checkbox"/> FTG
<input type="checkbox"/> BV	<input type="checkbox"/> GRV	<input type="checkbox"/> BV	<input type="checkbox"/> GRV
<input type="checkbox"/> C	<input type="checkbox"/> LAP	<input type="checkbox"/> C	<input type="checkbox"/> LAP
<input type="checkbox"/> CL	<input type="checkbox"/> LFL	<input type="checkbox"/> CL	<input type="checkbox"/> LFL
<input type="checkbox"/> FA	<input type="checkbox"/> LLP	<input type="checkbox"/> FA	<input type="checkbox"/> LLP

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...
Matching Values...
Delete

Fasteners

<input type="checkbox"/> Backing Ring	<input type="checkbox"/> Glue
<input type="checkbox"/> Bolt Set	<input type="checkbox"/> Reinforcement Ring
<input type="checkbox"/> Buttweld	<input type="checkbox"/> Slip On
<input type="checkbox"/> Clamp	<input type="checkbox"/> Socketweld
<input type="checkbox"/> Collar	<input type="checkbox"/> Stub End
<input type="checkbox"/> Fusion Weld	<input type="checkbox"/> Tap Weld
<input type="checkbox"/> Gasket	<input type="checkbox"/> Thread
<input type="checkbox"/> Gland	<input checked="" type="checkbox"/> Universal

Spec Filter...

Add Cancel Help

Joint Name: VicAquamine
Display Name: Victaulic Aquamine
End 1: ALF
End 2: APG
Property: Nominal Diameter
Fasteners: Universal

Create a joint per the screenshot

Add Joint

Joint name:

VP

Display name:

Victaulic VicPress

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

☐ LLP
☐ LUG
☐ MJF
☐ MJM
☐ MJP
☒ P
☐ PFS

☐ PL
☐ PPL
☐ PSW
☐ QVSD
☐ RDB
☐ SL
☐ SO

End 2:

☐ Universal_ET
☒ VPE
☐ WF

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...

Matching Values...

Delete

Fasteners

☐ Backing Ring
☐ Bolt Set
☐ Butt weld
☐ Clamp
☐ Collar
☐ Fusion Weld
☐ Gasket
☐ Gland

☐ Glue
☐ Reinforcement Ring
☐ Slip On
☐ Socket weld
☐ Stub End
☐ Tap Weld
☐ Thread
☒ Universal

Spec Filter...

Add

Cancel

Help

Joint Name: VP

Display Name: Victaulic VicPress

End 1: P

End 2: VPE

Property: Nominal Diameter

Fasteners: Universal

Create a joint per the screenshot

Add Joint

Joint name: Display name:

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

<input type="checkbox"/> AGR	<input type="checkbox"/> FA
<input type="checkbox"/> ALF	<input type="checkbox"/> FL
<input type="checkbox"/> APG	<input type="checkbox"/> FLA
<input type="checkbox"/> BELL	<input type="checkbox"/> FTG
<input type="checkbox"/> BV	<input type="checkbox"/> GRV
<input type="checkbox"/> C	<input type="checkbox"/> LAP
<input checked="" type="checkbox"/> CL	<input type="checkbox"/> LFL

End 2:

<input checked="" type="checkbox"/> PL	<input type="checkbox"/> SPIG
<input type="checkbox"/> PPL	<input type="checkbox"/> SW
<input type="checkbox"/> PSW	<input type="checkbox"/> TAP
<input type="checkbox"/> QVSD	<input type="checkbox"/> TC
<input type="checkbox"/> RDB	<input type="checkbox"/> THDF
<input type="checkbox"/> SL	<input type="checkbox"/> THDM
<input type="checkbox"/> SO	<input type="checkbox"/> Undefined_ET

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...
Matching Values...
Delete

Fasteners

<input type="checkbox"/> Backing Ring	<input type="checkbox"/> Glue
<input type="checkbox"/> Bolt Set	<input type="checkbox"/> Reinforcement Ring
<input type="checkbox"/> Buttweld	<input type="checkbox"/> Slip On
<input type="checkbox"/> Clamp	<input type="checkbox"/> Socketweld
<input checked="" type="checkbox"/> Collar	<input type="checkbox"/> Stub End
<input type="checkbox"/> Fusion Weld	<input type="checkbox"/> Tap Weld
<input type="checkbox"/> Gasket	<input type="checkbox"/> Thread
<input type="checkbox"/> Gland	<input type="checkbox"/> Universal

Spec Filter...

Add Cancel Help

Joint Name: VR

Display Name: Victaulic VicRing

End 1: CL

End 2: PL

Property: Nominal Diameter

Fasteners: Collar

Create a joint per the screenshot

Add Joint

Joint name: VHDPE

Display name: Victaulic HDPE Plain End

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

Connection settings

End 1:

- ☐ AGR
- ☐ ALF
- ☐ APG
- ☐ BELL
- ☐ BV
- ☐ C
- ☒ CL
- ☐ FA
- ☐ FL
- ☐ FLA
- ☐ FTG
- ☐ GRV
- ☐ LAP
- ☐ LFL

End 2:

- ☐ Universal_ET
- ☒ VPE
- ☐ WF

Required	Property
<input checked="" type="checkbox"/>	Nominal Diameter

Add Property...
Matching Values...
Delete

Fasteners

- ☐ Backing Ring
- ☐ Bolt Set
- ☐ Buttweld
- ☐ Clamp
- ☐ Collar
- ☐ Fusion Weld
- ☐ Gasket
- ☐ Gland
- ☐ Glue
- ☐ Reinforcement Ring
- ☐ Slip On
- ☐ Socketweld
- ☐ Stub End
- ☐ Tap Weld
- ☐ Thread
- ☒ Universal

Spec Filter...

Add Cancel Help

Joint Name: VHDPE

Display Name: Victaulic HDPE Plain End

End 1: CL

End 2: VPE

Property: Nominal Diameter

Fasteners: Universal

On the right of the Joint Setup form under Compound joints, select *Add...*

Compound joints				
Name	End 1	End 2	Connection Part	Imperial to Metric Connection
Auto flange joint	FL, WF, LUG	BV, PL, Universal_ET	Flange	<input type="checkbox"/>
Mixed auto flange joint	FL, WF, LUG	BV, PL, Universal_ET	Flange	<input checked="" type="checkbox"/>
Auto sleeve joint	MJM	MJM, MJP, PL	Sleeve	<input type="checkbox"/>

Add...

Modify...

Delete

Create a joint per the screenshots.

Setup Compound Joint
✕

Joint name:

Display name:

☐ This joint connects imperial to metric components
[Learn more about Imperial to Metric Connections](#)

End 1:

☒ AGR
☐ ALF
☒ APG
☐ BELL
☐ BV
☐ C
☐ CL
☐ FA
☐ FL
☐ FLA
☐ FTG

Connection Component:

Coupling

End 2:

☒ AGR
☐ ALF
☒ APG
☐ BELL
☐ BV
☐ C
☐ CL
☐ FA
☐ FL
☐ FLA
☐ FTG

Preview

AGR, APG, GRV, VPE End - VicClamp Joint - Coupling - VicClamp Joint - AGR, APG, GRV, VPE End

Add

Cancel

Help

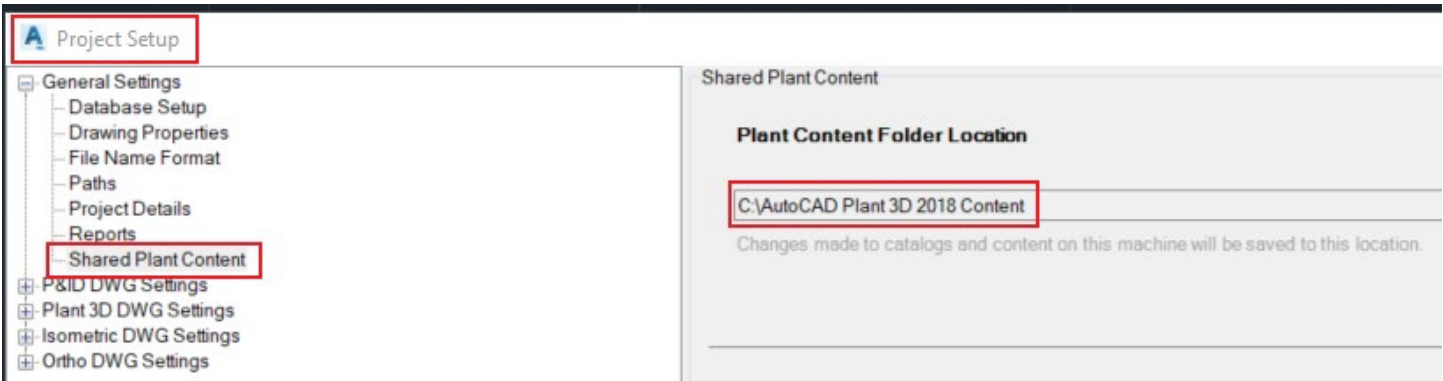
Joint Name: AutoVicCoupling
 Display Name: Auto Victaulic Coupling Joint
 End 1: AGR, APG, GRV, VPE
 End 2: AGR, APG, GRV, VPE

I-VDC | 14131 | Rev I | UPDATED 3/9/2023
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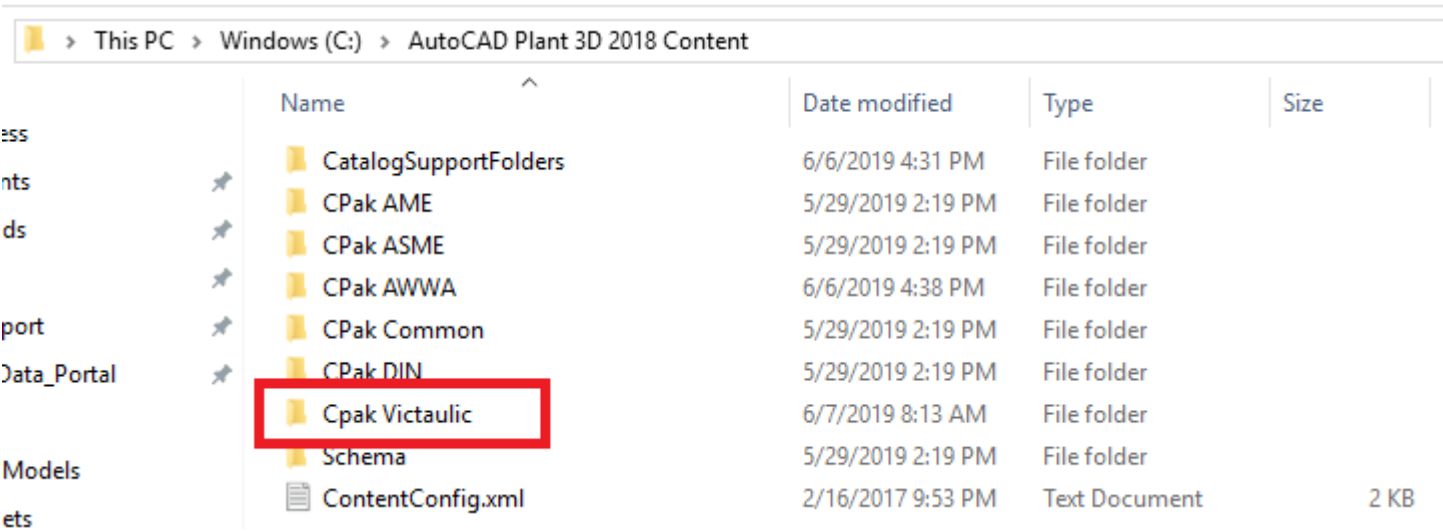
Page | 19

02 – Content Installation

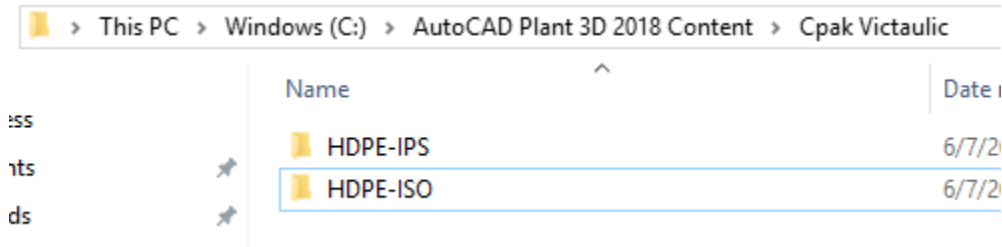
Find the location of the AutoCAD Shared Content folder. The default location is: C:\AutoCAD Plant 3D 2018 Content. Adjust this location for network location and software version.



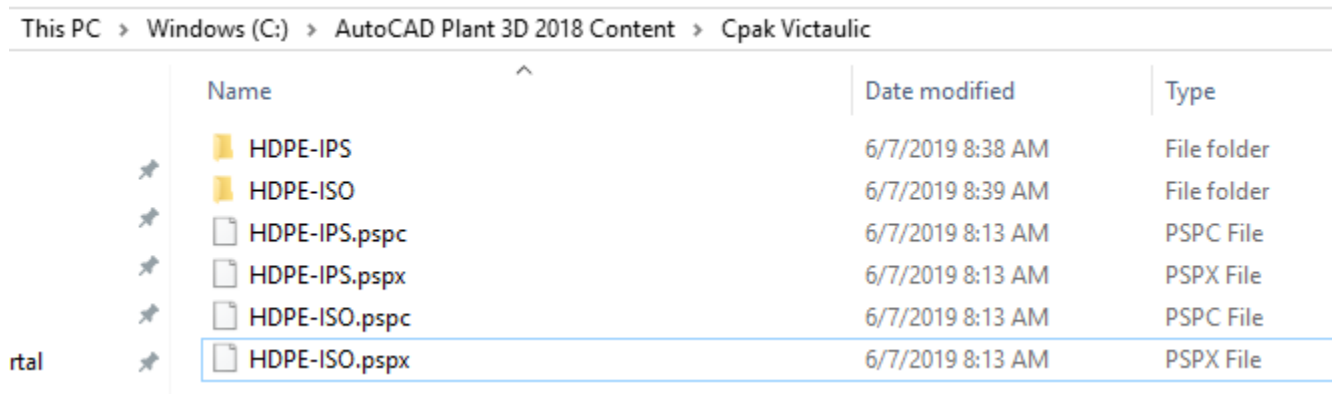
Create a new Catalog folder under the Shared Content folder.



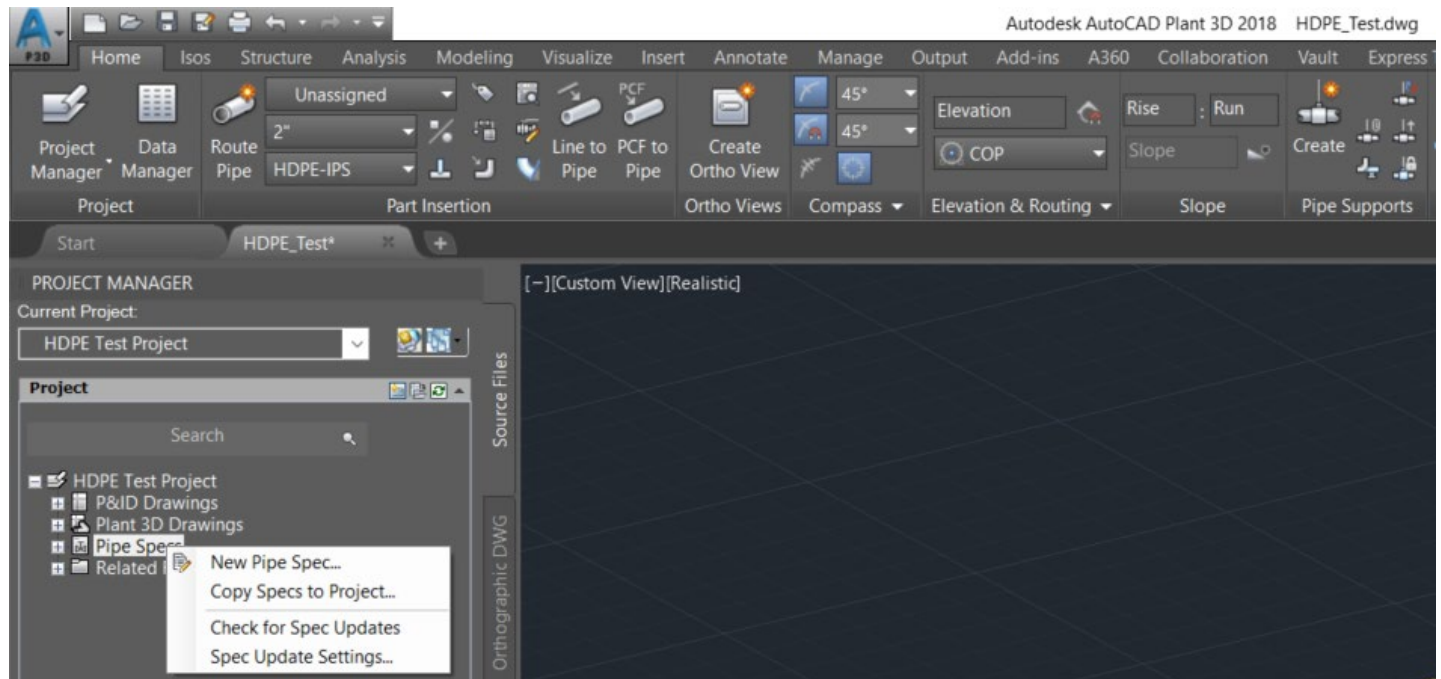
Copy the folder(s) from the downloaded/unzipped content into the newly created folder.



Move the spec files from within each of the sub-folders into the catalog folder.



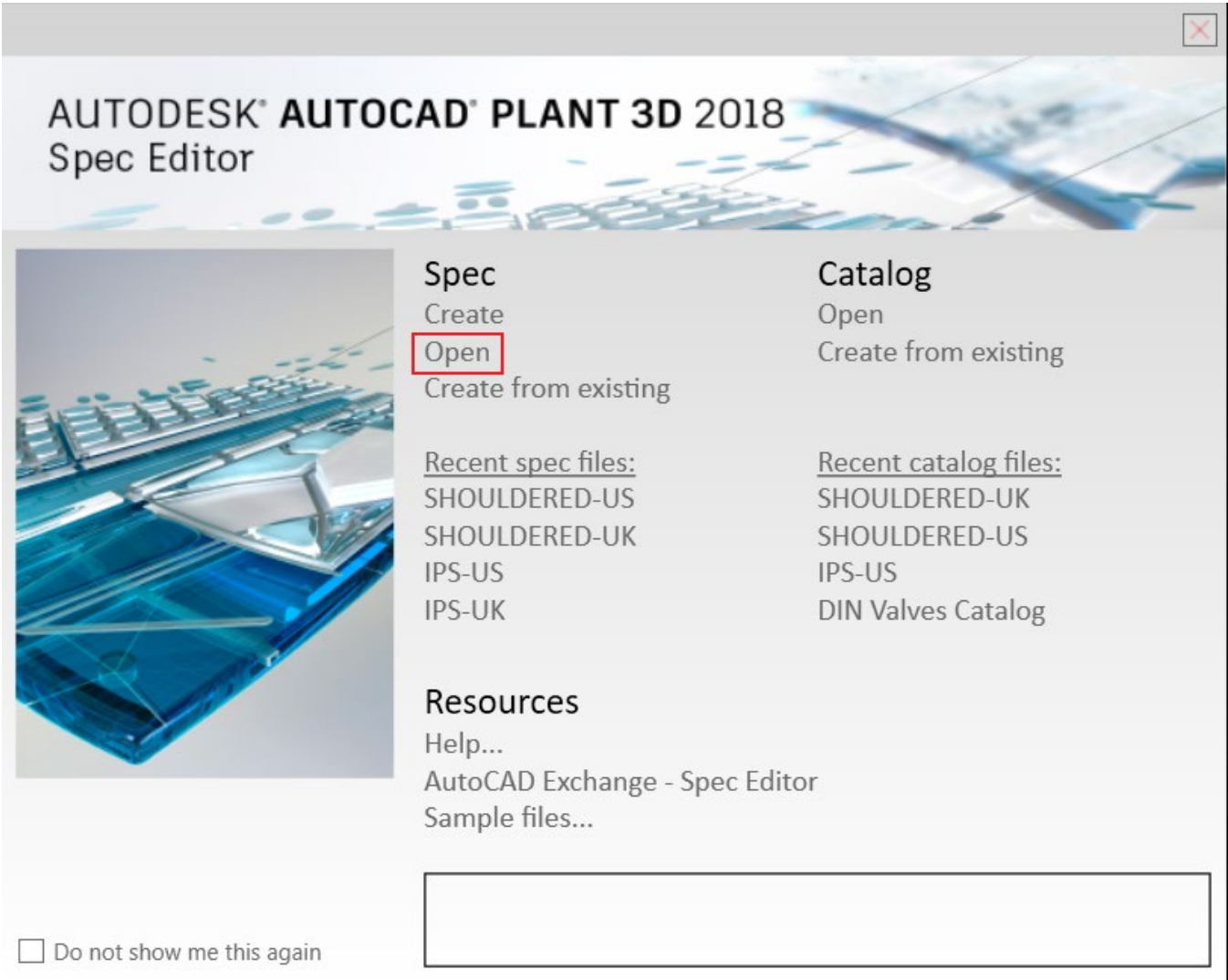
From within Project Manager, with the desired project current, right-click *Pipe Specs* and select *Copy Specs to Project...* Browse to the Catalog folder under the Shared Content folder and select the desired piping specification file(s).



03 – Piping Specification Optional Settings

Fixed Length Piping

Launch AutoCAD Plant 3D Spec Editor and select the Spec in which the change is to be made.



Select the Pipe component for which Fixed Length is to be used and select *Edit Parts...*

Autodesk AutoCAD Plant 3D Spec Editor 2018

File Edit Specs Catalogs Tools Help

Spec Sheet: C:\AutoCAD Plant 3D Projects\Victaulic Content Testing\Spec Sheets\IPS-US.psp

Min Size	To	Max Size	Long Description	Part Use Priority	Branch In Use
1 1/2"	to	6"	VIC-OUTLET COUPLING STYLE_72	●	✓
4"	to	12"	VIC-O-WELL STYLE 924	●	✓
4"	to	8"	VIC-T BOLTED BRANCH OUTLET 920 (GRV.)	●	✓
4"	to	8"	VIC-T BOLTED BRANCH OUTLET 920 (THRD.)	●	✓
2"	to	6"	VIC-T BOLTED BRANCH OUTLET 920N (GRV.)	●	✓
2"	to	6.25in	VIC-T BOLTED BRANCH OUTLET 920N (THD.)	●	✓
10"	to	12.25in	VIC-T SPIGOT OUTLET_926 (AS/NZ)	●	✓
10"	to	12"	VIC-T SPIGOT OUTLET_926 (AWWA)	●	✓
10"	to	12"	VIC-T SPIGOT OUTLET_926 (IPS)	●	✓
----- Pipe -----					
3/4"	to	12"	IPS PIPE		✓
----- Reducer -----					

Edit Parts... Add Notes to Group Add to Spec Remove from Spec

Add a length in the *Fixed Length* column and check the *Use Fixed Length* box. Be cognizant of the units.

Edit Parts

Part List Edit Properties

Catalog parts in selected group:

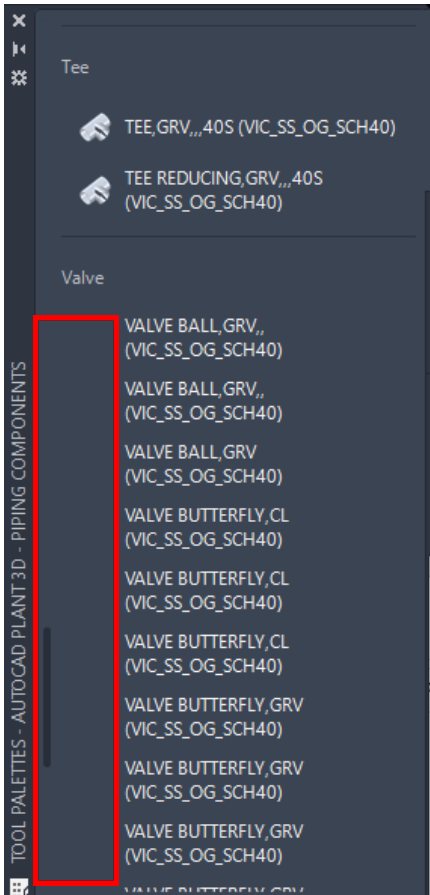
Shop/Field	Fixed Length	Use Fixed Length	Cut Length	Minimum Cut Length	Linear Weight	Linear Weight Unit	Port Name	Nominal Diameter	Nominal Unit	Matching Pipe O
	240	✓				LB/FT	S1	0.75	in	1.05
	240	✓				LB/FT	S1	1	in	1.315
	240	✓				LB/FT	S1	1.25	in	1.66
	240	✓				LB/FT	S1	1.5	in	1.9
	240	✓				LB/FT	S1	2	in	2.375
	240	✓				LB/FT	S1	2.5	in	2.875
	240	✓				LB/FT	S1	3	in	3.5
	240	✓				LB/FT	S1	3.5	in	4
	240	✓				LB/FT	S1	4	in	4.5
	240	✓				LB/FT	S1	4.25	in	4.25
	240	✓				LB/FT	S1	4.5	in	5
	240	✓				LB/FT	S1	5	in	5.563
	240	✓				LB/FT	S1	5.25	in	5.25
	240	✓				LB/FT	S1	6	in	6.625
	240	✓				LB/FT	S1	6.25	in	6.25
	240	✓				LB/FT	S1	8	in	8.625
	240	✓				LB/FT	S1	8.5	in	8.5
	240	✓				LB/FT	S1	10	in	10.75
	240	✓				LB/FT	S1	12	in	12.75

Tip – You can type a value in the first cell, copy that value to the clipboard, use the CTRL key to select the other cells, and paste the value.

04 – Troubleshooting

Symbol Cannot be Found

Victaulic content is created in an older version of the software, 2019. In the newer versions of the software the path to the custom parts may get broken. This is evident by the tool palette not populating and receiving an error that the symbol cannot be found when trying to model a custom part e.g. valves, coupling, etc.



There is an easy fix for this:

1. If it does not already exist, create a folder under your shared content location named *CatalogSupportFolders*.
2. Create a folder under *CatalogSupportFolders* named to **exactly match** the name of the Catalog you are trying to use.
3. Copy the 200 and DWG folders and their contents that you downloaded to this folder.

NOTE

It may be necessary to remove the piping specification from the project and reload it after completing these steps.

