

Appendix 1

CIC BIM User Guide for Preparation of Statutory Plan Submissions

ArchiCAD



December 2020

Disclaimer

Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this publication (Reference Materials), the CIC nevertheless encourages readers to seek appropriate independent advice from their professional advisers where possible. Readers should not treat or rely on this publication (Reference Materials) as a substitute for such professional advice.

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Preface

The Construction Industry Council (CIC) is committed to seeking continuous improvement in all aspects of the construction industry in Hong Kong. To achieve this aim, the CIC forms Committees, Task Forces and other forums to review specific areas of work with the intention of producing Alerts, Reference Materials, Guidelines and Codes of Conduct to assist participants in the industry to strive for excellence.

The CIC appreciates that some improvements and practices can be implemented immediately whilst others may take more time for implementation. It is for this reason that four separate categories of publication have been adopted, the purposes of which are as follows:

Alerts	The Alerts are reminders in the form of brief leaflets produced quickly to draw the immediate attention of relevant stakeholders to the need to follow some good practices or to implement some preventive measures in relation to the construction industry.
Reference Materials	The Reference Materials are standards or methodologies generally adopted and regarded by the industry as good practices. The CIC recommends the adoption of the Reference Materials by industry stakeholders where appropriate.
Guidelines	The Guidelines provide information and guidance on particular topics relevant to the construction industry. The CIC expects all industry stakeholders to adopt the recommendations set out in the Guidelines where applicable.
Codes of Conduct	The Codes of Conduct set out the principles that all relevant industry participants should follow. Under the Construction Industry Council (Cap 587), the CIC is tasked to formulate codes of conduct and enforce such codes. The CIC may take necessary actions to ensure compliance with the codes.

If you have read this publication, we encourage you to share your feedback with us. Please take a moment to fill out the Feedback Form attached to this publication in order that we can further enhance it for the benefit of all concerned. With our joint efforts, we believe our construction industry will develop further and will continue to prosper for years to come.

Foreword

I am glad to see the release of **CIC BIM User Guide for Preparation of Statutory Plan Submissions ArchiCAD (December 2020)**. This software specific user guide shall be read in conjunction with the **CIC BIM Standards for Preparation of Statutory Plan Submissions (December 2020)**.

This software specific user guide is only provided to demonstrate the feasibility of drawings generation with the Standards.

With the software specific user guides which contains step by step procedures of modelling, BIM users can easily apply the templates for the generation of statutory plan submission drawings.

Feedback on the CIC BIM User Guide for Preparation of Statutory Plan Submissions ArchiCAD (December 2020) from practitioners subsequent to the issuance of this publication will be considered in future revisions.

On behalf of the CIC, I would like to thank everyone who has contributed to producing this CIC BIM User Guide for Preparation of Statutory Plan Submissions ArchiCAD (December 2020), in particular to the members of the Task Force on BIM Standards.

Ar. Ada FUNG, BBS

Chairperson

Committee on Building Information Modelling

Construction Industry Council

December 2020

1. Hardware/ System Requirements

1.1 General

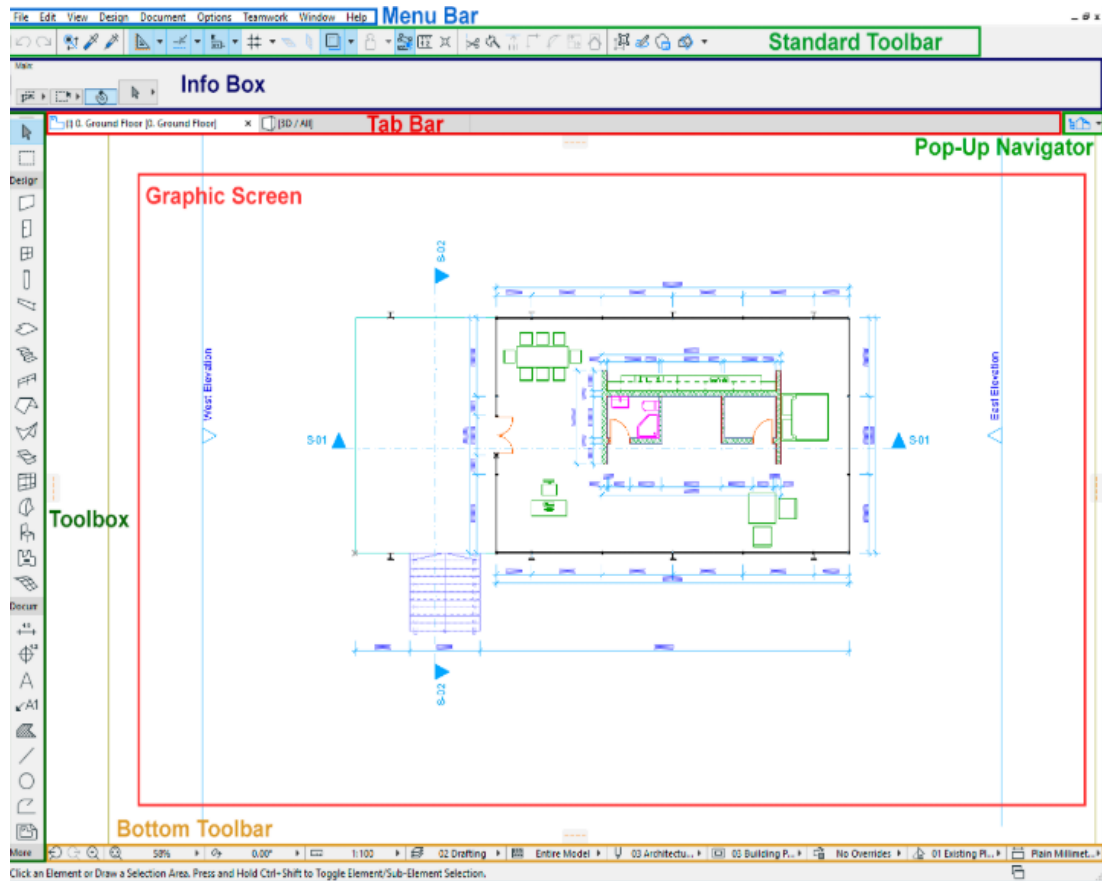
Hardware / system requirement for modellings, coordination and visualization on desktop/notebook computers and mobile devices should be determined by the BIM managers for different projects on a case by case basis. The minimum requirement varies for different applications, project sizes and operating systems.

https://www.graphisoft.com/support/system_requirements/AC23/

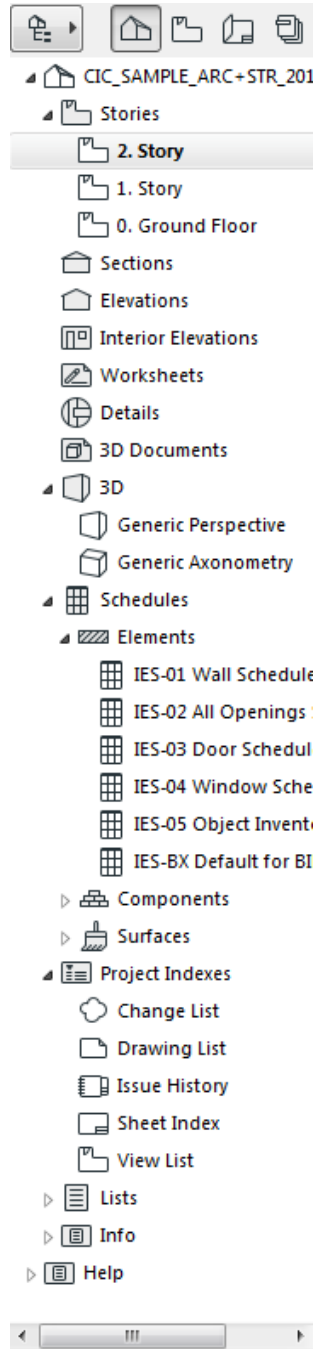
2. ArchiCAD Basics

2.1 User Interface

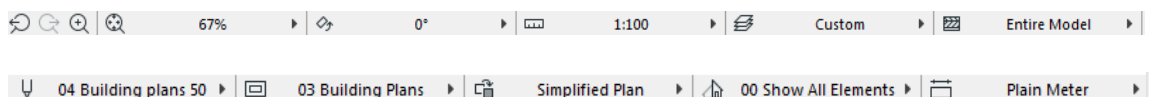
- In ArchiCAD, for all the projects, the user interface provides all the tools to work with the model. The user interface can be customized to feed various kinds of works.



- Pop-Up Navigator: manage the floor plan, view, schedules, layout plan and publish setting of the project.



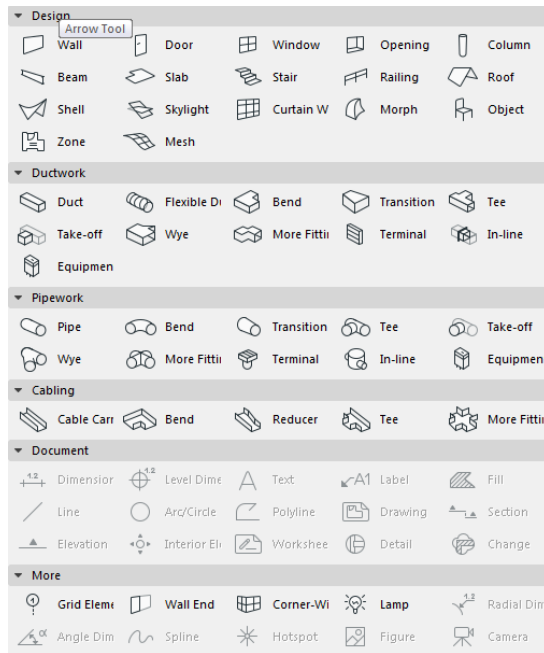
- Bottom Toolbar: help to navigate the view, set the scale of the drawing and zoom factor.



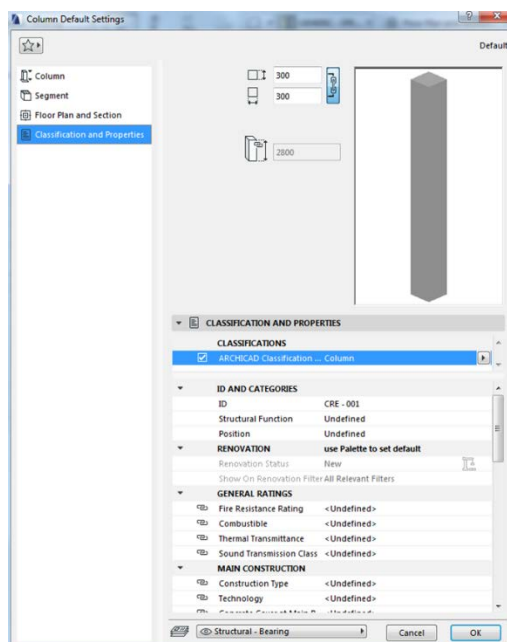
- **Menu Bar & Standard Toolbar:** all the commands and functions are listed for BIM modelling.



- **Toolbox:** List all the tool include MEP for building the 3D model and prepare for the documentation



- **Element Default Setting:** manage the properties (include IFC) of the selected element.



2.2 Difference of TPL, PLN&PLA file

There are several types of file format for you to choose when saving your works in ArchiCAD. The TPL file is for you when you want to save your current project setting as template for future use. The PLN file is the most used format type for ArchiCAD users. The major difference between PLN and PLA file is that PLA merged all library elements into an embedded library which can be open in anyplace without extra Library. For the PLN, it needs to connect to the Library which is in the cloud or somewhere else.

2.3 Embedded Library and Linked Library

In ArchiCAD, the library groups the elements with various classification standards. Based on the sources, there are three main types of Library which are embedded Library, linked Library and BIM cloud library.

Embedded Library

- Embedded Library can store the project-specific object that you create in the project. All objects in the embedded Library are always editable and available for the user to access in the project file.
- Embedded objects exist only in that particular project and can be used only in that project. If you delete an object from the Embedded Library, it is gone. If you edit an embedded object, that modification will occur immediately in the Embedded Library of that particular project

Linked Libraries

- The linked Library is the Library you added manually from linked folder to the project file. The default standard ArchiCAD library also belongs to the linked Library.
- In Teamwork mode, there are no linked libraries - only the Embedded Library, and BIM cloud Libraries.
- If the linked Library is missing, the elements belong to linked Library will only be shown in green dot in 2D view and missed in 3D view.
-

BIM Cloud Library

- Except for the linked Library, the user can also add the BIM cloud libraries which are located on the BIM cloud no matter it is a solo or teamwork project.
- Once the BIM cloud library is updated or refreshed, all the users will receive the changes, both solo and teamwork file.

2.4 Hotlink Modules

You can insert the content or model of external file (sources) into the host file through hotlink modules.

- The file type for the hotlink modules is .mod
- When managing the repetitive part of the model like a bedroom for a hotel, the hotlink module is a lightweight choice for users to manage the project
- Modules are stored in the host Project. If the source file is not currently available, the Module is still present and visible. However, the Module can't be updated.
- The placed Hotlink can only be edited as an entity. However, the user can choose to break Hotlink in order to edit the individual element of Hotlink.
- When the users choose to break the hotlink modules, the Module inside of the host file will no longer be updated.

Attributes of the Hotlink Modules

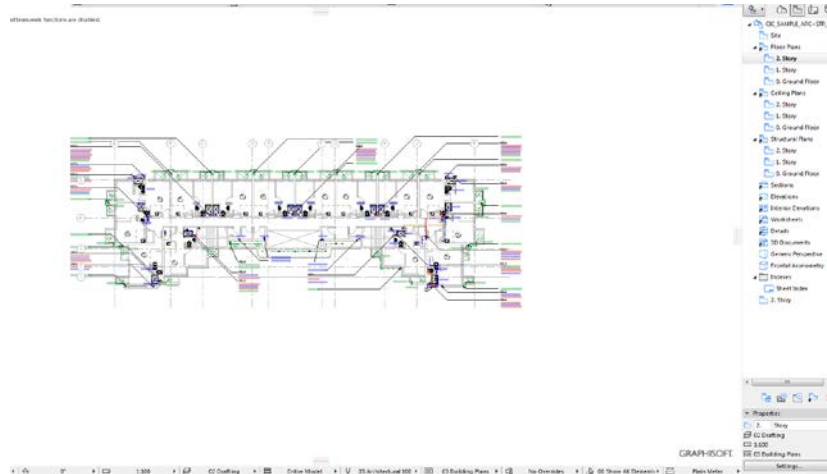
- If the elements of the Hotlink Module use attributes with the same names as attributes of the Host Project, the Host attributes will be applied
- If no attributes of that name exist in the Host, new attributes will be added to the Host Project.
- Attributes imported with Hotlink Modules will not be removed when deleting Hotlinks or Modules.
- Once an attribute is part of the host file, that attribute will not be updated by any attribute modifications in the source file.

IFC Hotlink Module and other file types

- Except for .mod format, the ifc file also can be used as a hotlink.
- In addition, for other file types like the 3dm, users can use Rhino software to import to ArchiCAD.

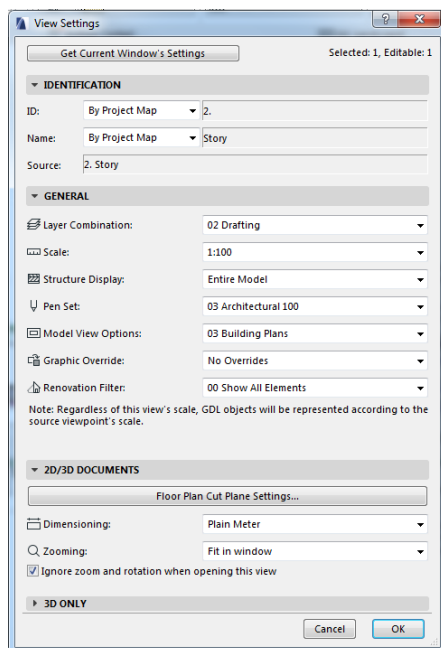
2.5 View Map

In View Map, all the view will store in here. The view is stored version of a viewpoint each view is defined by its adjustable View Settings that you configure for a particular purpose as you construct your Virtual Building.



When you save a view, the settings below will be saved

- Layer Combinations
- Scale
- Partial Structure Display
- Pen Set
- Model View Options Combination
- Graphic Override
- Renovation Filter
- Floor Plan Cut Plane
- Dimensions
- Zoom and Rotation



2.6 Layer Setting and Layer Combination

The main purpose of the layer in ArchiCAD is to separate elements logically. Not only the element will be grouped by the layer, but also the dimensions and symbols.

Layer

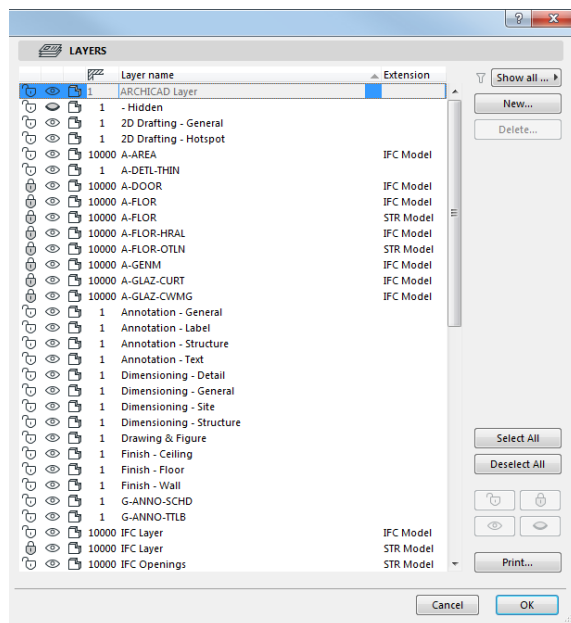
- An element can only belong to a single layer
- For each layer, you can define the following settings:

Lock/unlock: This can let users determine whether the element belongs to the layer can be edit or not.

Show/hide: The User can choose to show or hide the element of certain layers.

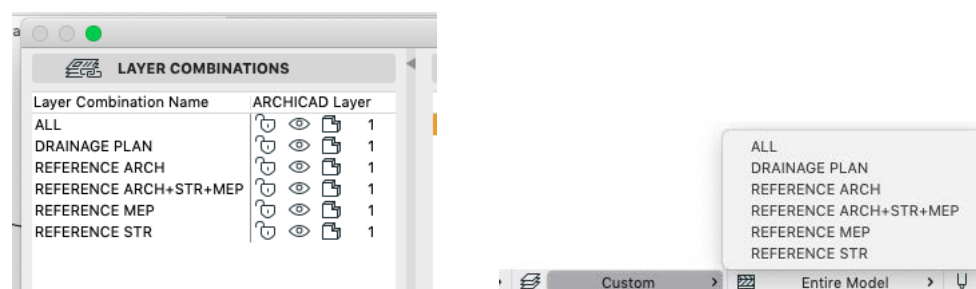
3D view mode: The user can choose different types of 3D style.

Layer intersection group: Help the user to control element intersections.



Layer Combination

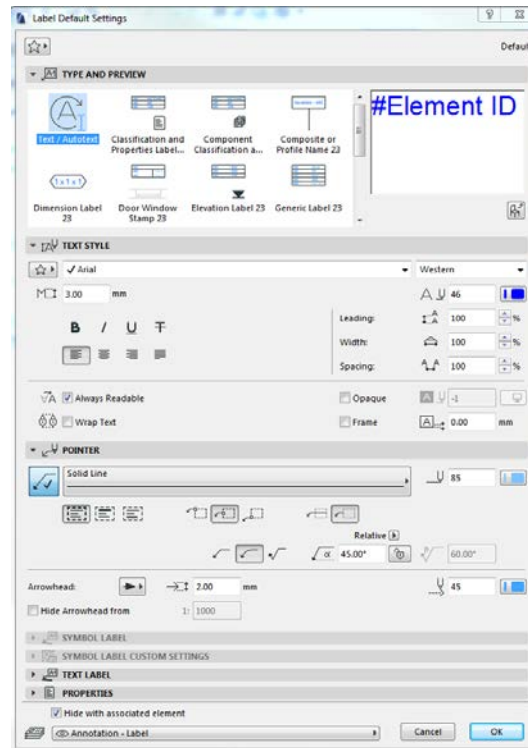
The layer combination is designed for you to access certain layers with specific settings quickly.



2.7 Symbol, Dimensions

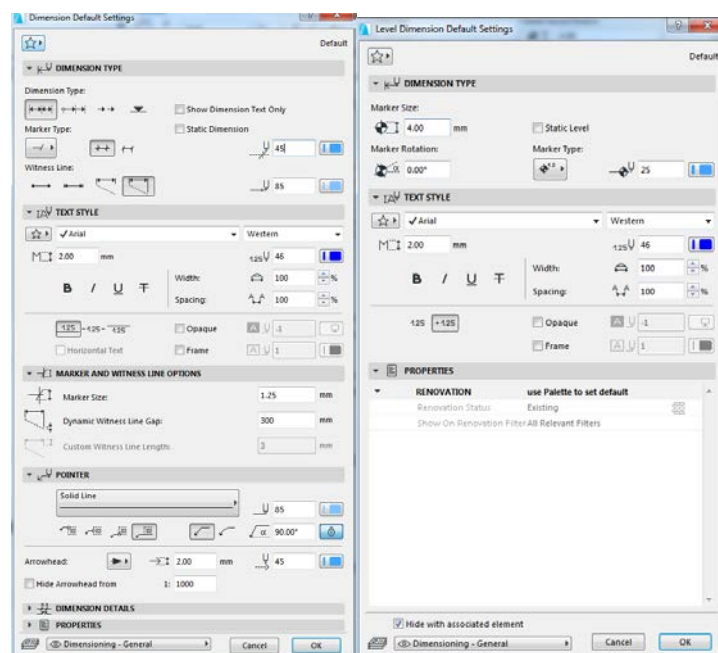
Symbol Tool

In toolbox, there are several symbol tools for users to identify the element in the drawing. The label function will act like the tag in Revit.



Dimension

In ArchiCAD, the dimension not only can be placed in 2D views like floor plan, section etc., but also the 3D view. The dimension in ArchiCAD will be automatically updated when the element is modified.



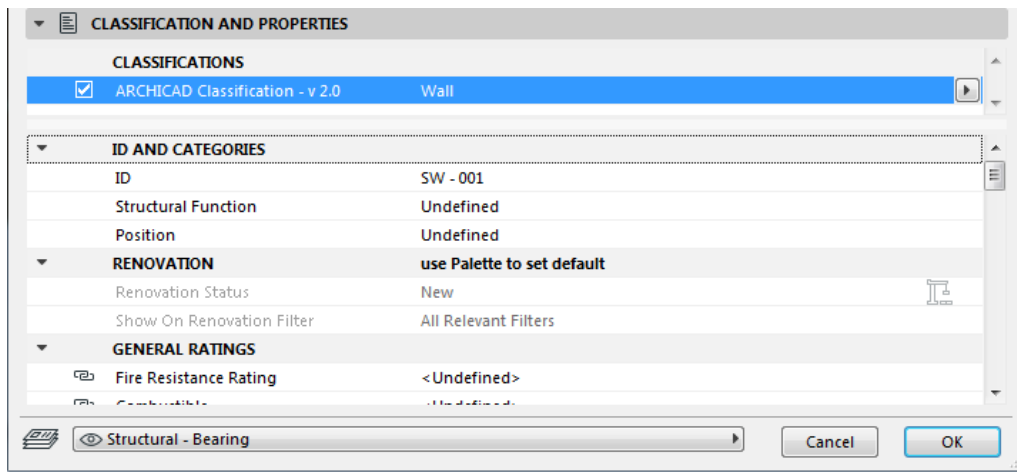
2.8 Properties and Classification

Properties

Properties are optional, user-defined data assigned to an element or Building Material to provide additional, searchable information of the element. The information in the property can be export within the IFC format.

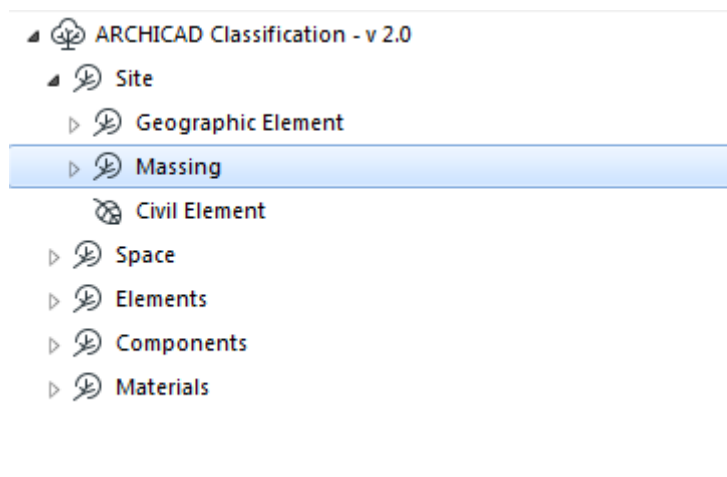
Properties Manager

In ArchiCAD, You can manage the property information through the property manager.



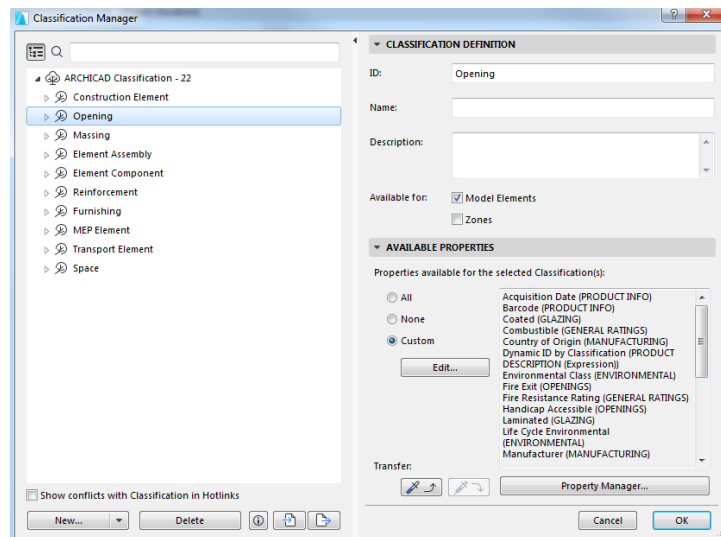
Classification

In ArchiCAD, users can use the classification to organize the project element and material and related data and ensure accurate data exchange with other applications.



Classification Manager

In ArchiCAD, the classification can also be edited through the classification manager.

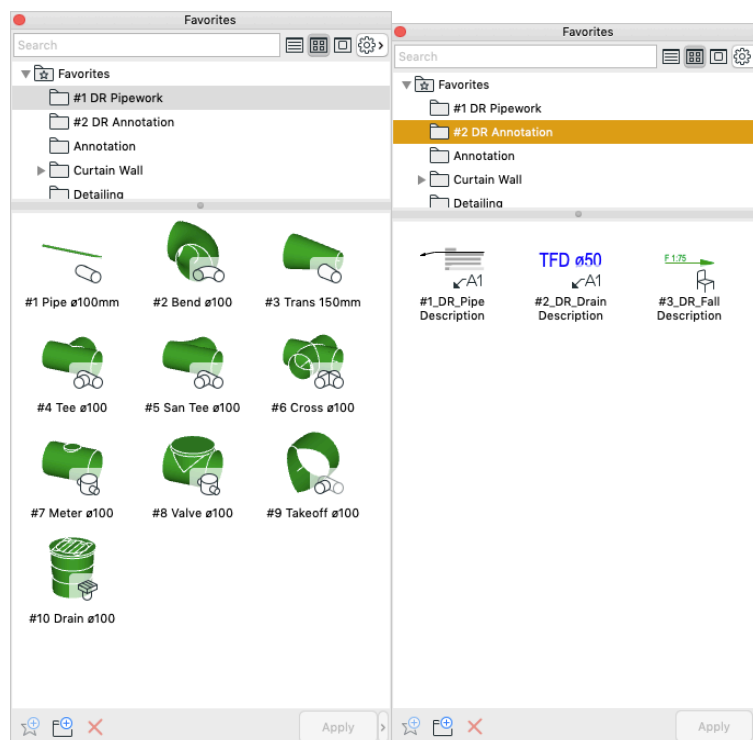


2.9 Favorites

In ArchiCAD, the user can also save the tool setting that you use frequently. The Favorites function not only can be used in the current project, the users also can export the favourites to the other project they want.

The setting store in the Favorites

- The information in classification and property
- Fill settings like the fill text
- Library part



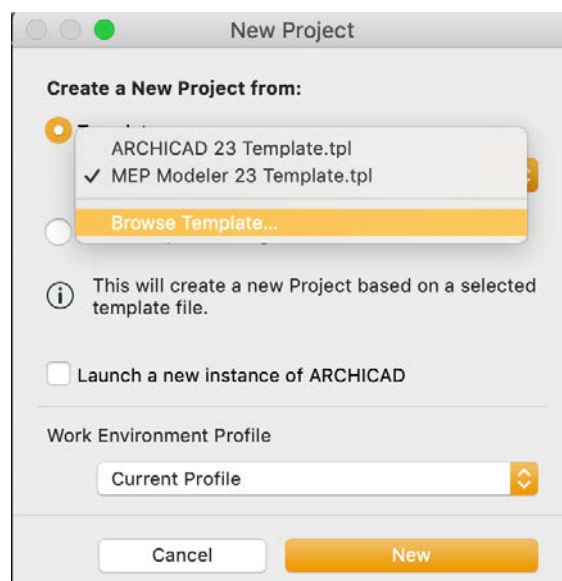
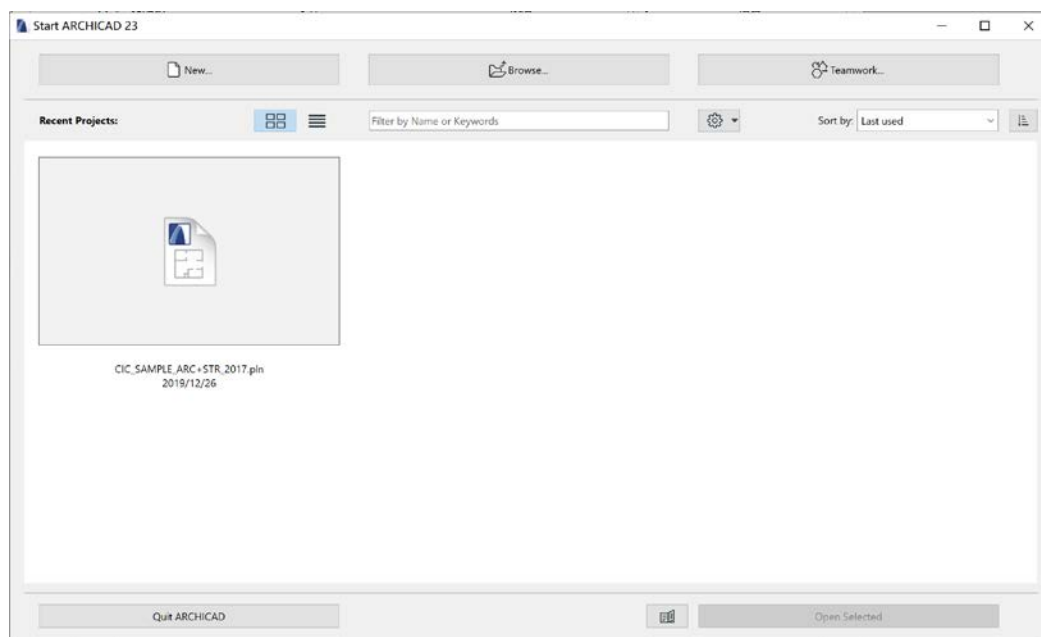
3. Getting Start

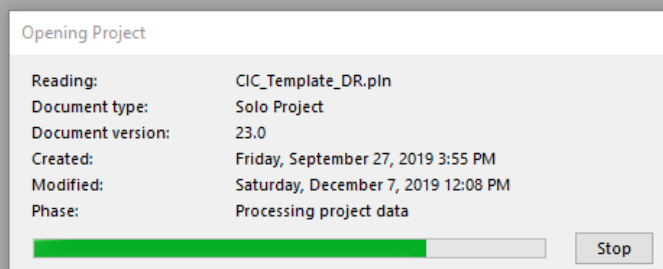
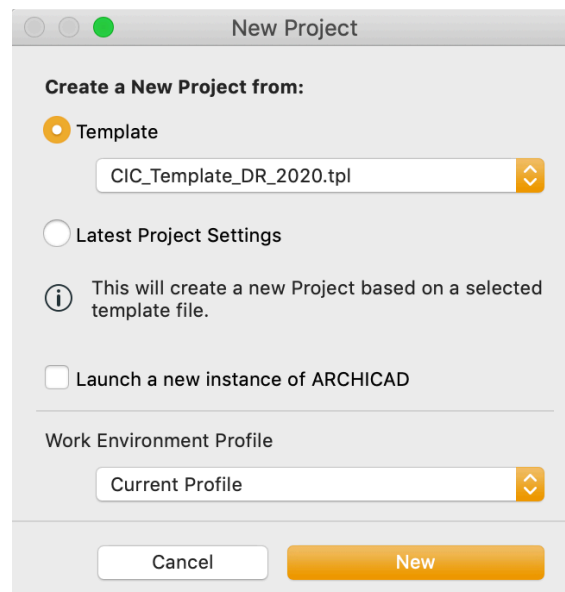
In this Chapter, it mainly discusses about how to use the template to create your own drainage plan submission. This part not only will show the example within the template, but also introduce the method to create your own drainage plan for submission.

3.1 Open Drainage Template Project

Open a new project in ArchiCAD 23 by following steps:

Open ArchiCAD → Click “Browse” button and choose CIC_Template_DR. Tpl for drainage submission plan. → Click “Selected”.

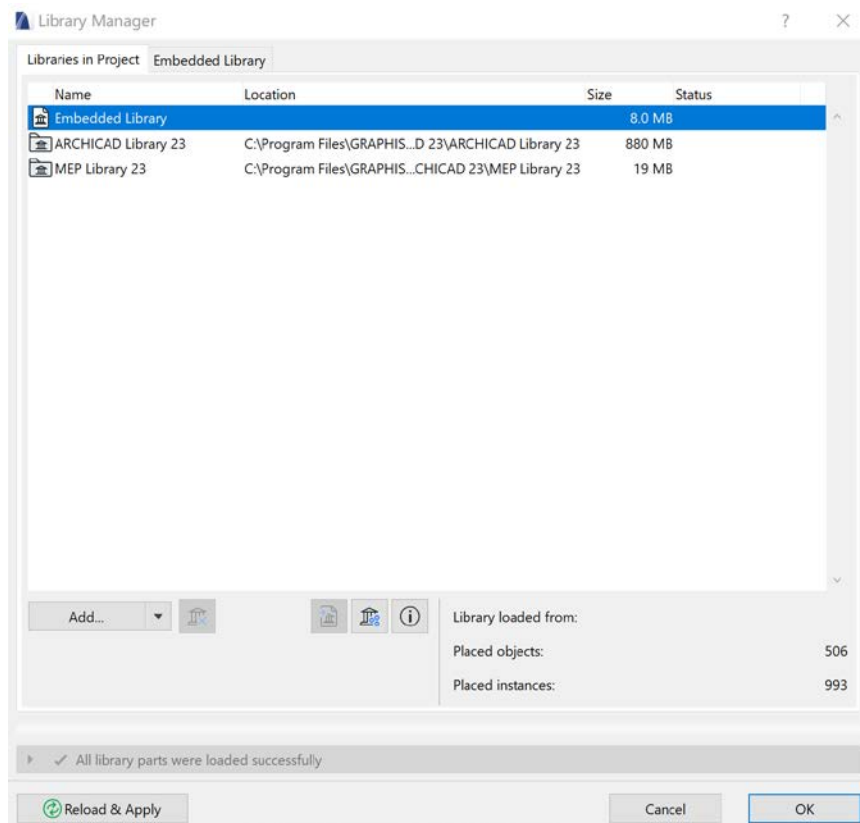
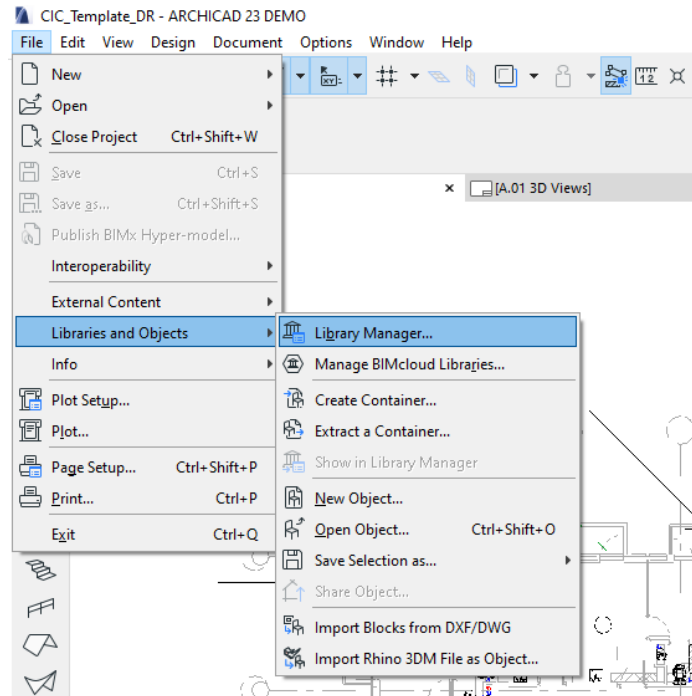




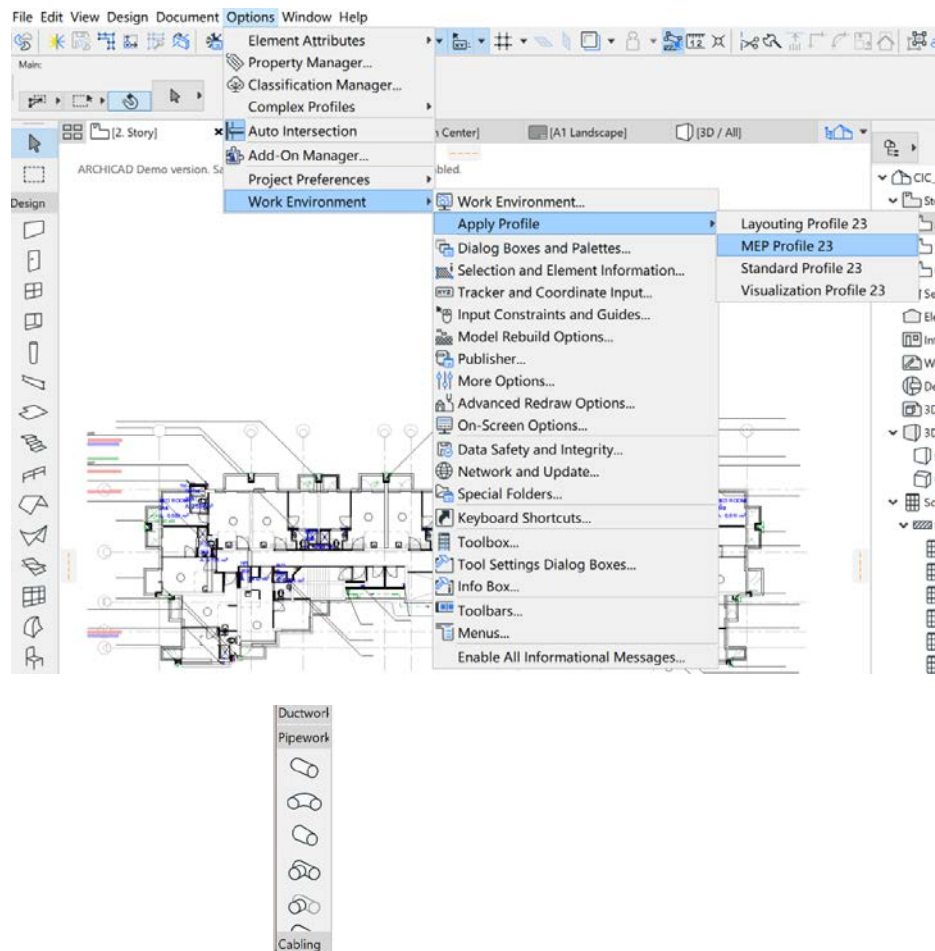
3.2 Set MEP Working Environment

Click the File → Library and Object → Library Manager

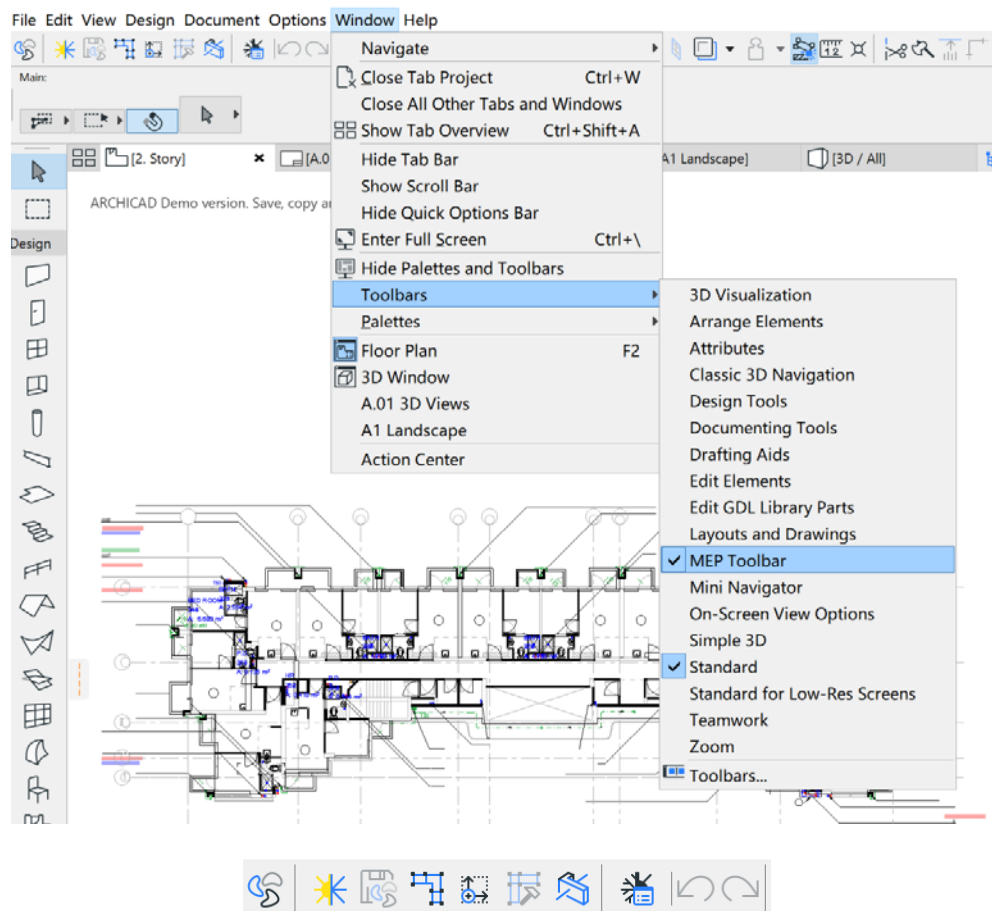
Click Add to import the MEP Library 23 or any customized library. And click OK.




In order to show the MEP tool in the toolbox, Select Option→Working Environment → Apply Profile →MEP Profile.

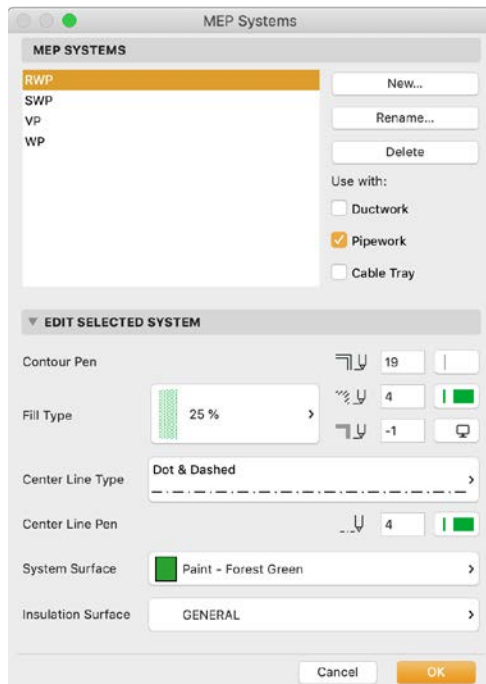


To quick access the MEP edited tool, Select Window→Toolbar→MEP Toolbar

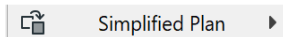


Click the MEP System Setting .

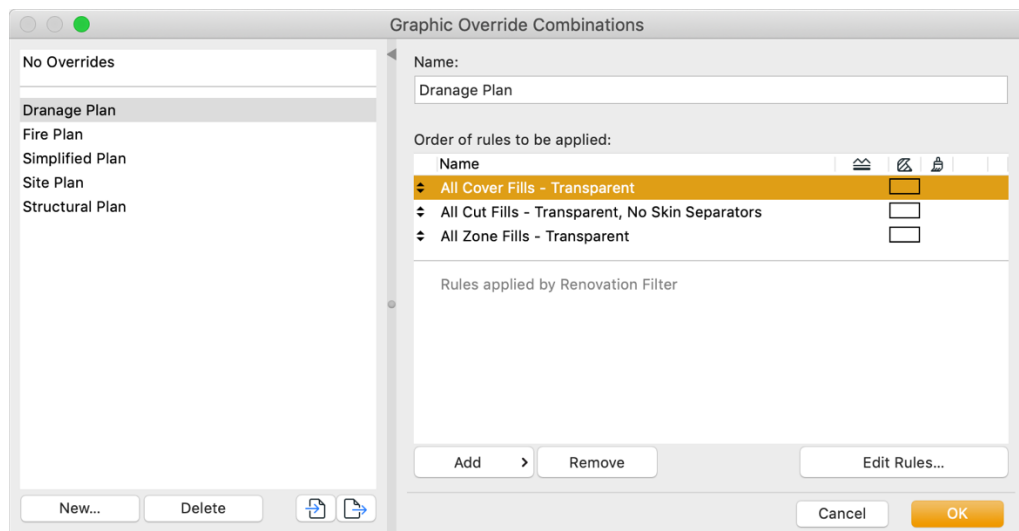
In MEP settings, create the drainage systems and choose it to use with pipework. The Edit Select System is mainly used to distinguish the system by giving a different colour. For drainage plan, we did it as shown. Later we mainly use the graphical override to display only the Axis lines.



Click the Graphical Override on the bottom toolbar.




In the dropdown menu, Choose Drainage Plan only to display the Axis Line. Choose No Overrides in order to display the Elements Fill on 2D.



3.3 Set up Project Preferences and MEP Preferences

Click the Option →Project Preferences →Working Units

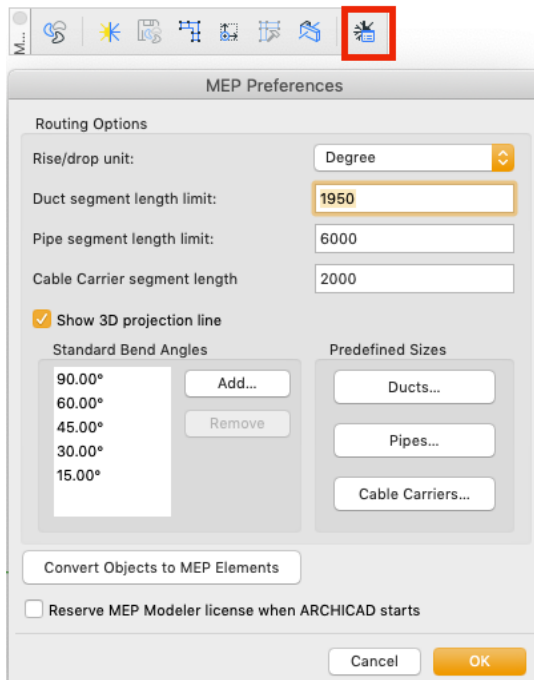


The 'Working Units' dialog box is used to configure the units for the project. It contains the following settings:

Unit Type	Unit	Decimals	Example
Length Unit	millimeter	0	1234
Area Unit	square meter	2	1.23
Volume Unit	cubic meter	2	1.23
Angle Unit	decimal degrees	0	61°
Layout Unit	millimeter	0	1234
Numbers without Units (Font sizes, Pieces, etc.)		2	1.23

Buttons: Cancel, OK

Click the MEP Toolbar for the MEP Preferences



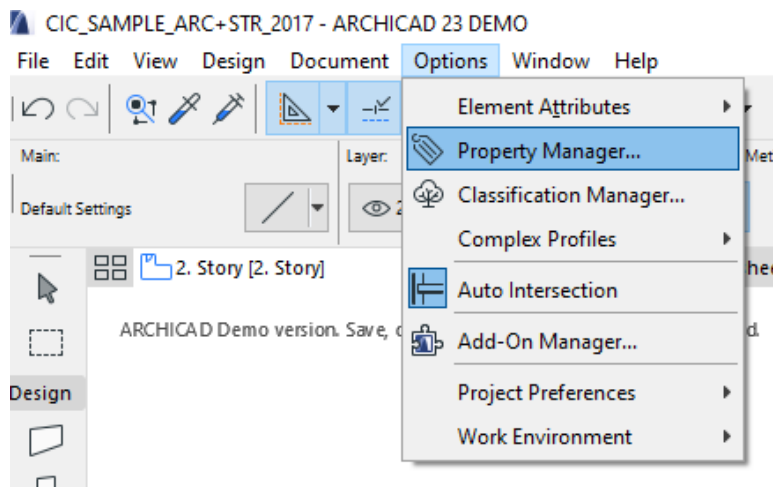
The 'MEP Preferences' dialog box is used to configure the settings for the MEP (Mechanical, Electrical, Plumbing) system. It contains the following settings:

Setting	Value
Routing Options	
Rise/drop unit:	Degree
Duct segment length limit:	1950
Pipe segment length limit:	6000
Cable Carrier segment length:	2000
Show 3D projection line	<input checked="" type="checkbox"/>
Standard Bend Angles	90.00°, 60.00°, 45.00°, 30.00°, 15.00°
Predefined Sizes	Ducts..., Pipes..., Cable Carriers...
Convert Objects to MEP Elements	<input type="checkbox"/>
Reserve MEP Modeler license when ARCHICAD starts	<input type="checkbox"/>

Buttons: Cancel, OK

3.4 Create custom property.

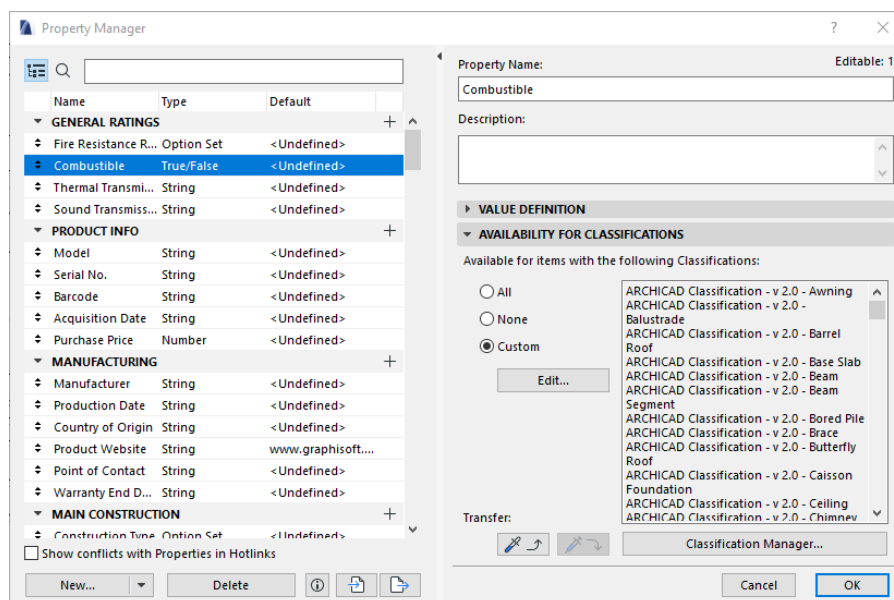
The template is the reach of detail properties related to drainage plan. If you want to add extra properties, select Option→Property Manager



In Property Manager, you can create a new property by click the new bottom on the left.

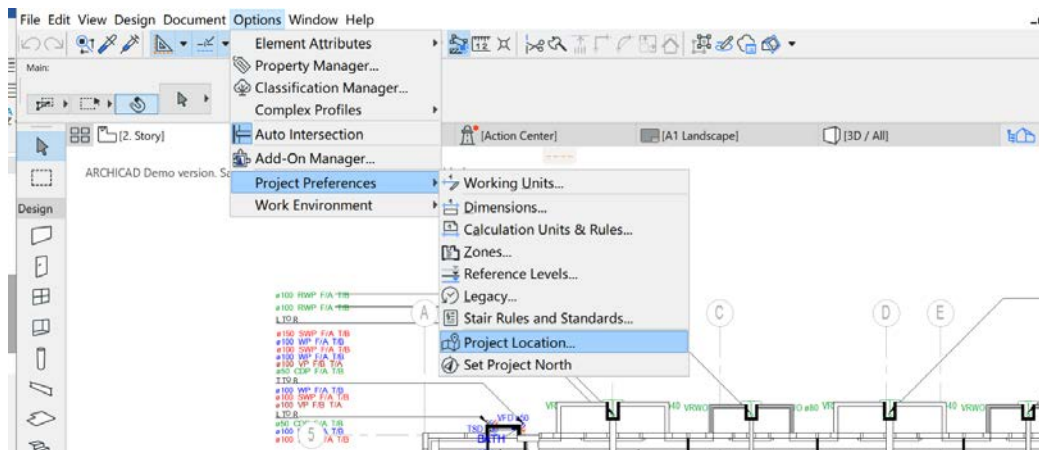
The user can also edit in detail of the created property. Like to define this property will available for which classification item.

- For Classification function, please refer to 2.9 Property and Classification



3.5 Create Site Boundary

In the menu bar, select “Option” → “Project preference” → “Project Location”



Input the location reference like the Latitude, Longitude, Altitude and etc to the project location settings or import any location data file like the .kmz for google earth.

A screenshot of the 'Project Location' dialog box. It contains the following fields and controls:

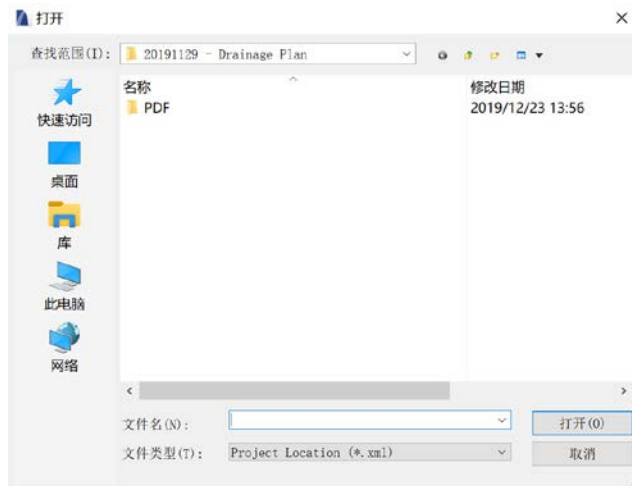
- Project Name: [Text Field] [Edit...]
- Site Full Address: [Text Field] [Edit...]
- Latitude: [22° 15' 0.0000"] [N] [Dropdown]
- Longitude: [114° 10' 0.0000"] [E] [Dropdown]
- Time Zone (UTC): [(UTC+08:00) ... 港特別行政區, 烏魯木齊] [Dropdown]
- Altitude (Sea Level): [23.00] [m]
- Project North: [90.00°] [Dropdown]

At the bottom, there is a note: "Note: Changing Project Location will affect the Sun position, including in 3D Views and Cameras with stored Date and Time." and buttons for "Show in Google Maps...", "Cancel", and "OK".

The ArchiCAD mainly support three types of location data:
The XML format

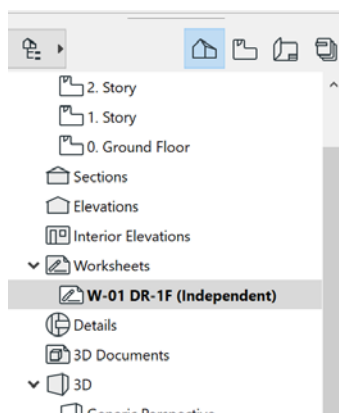
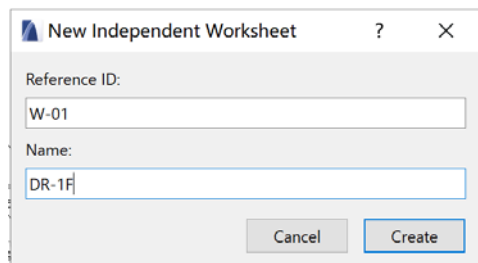
The Google Earth (.kmz) format

The SketchUp (.skp) format

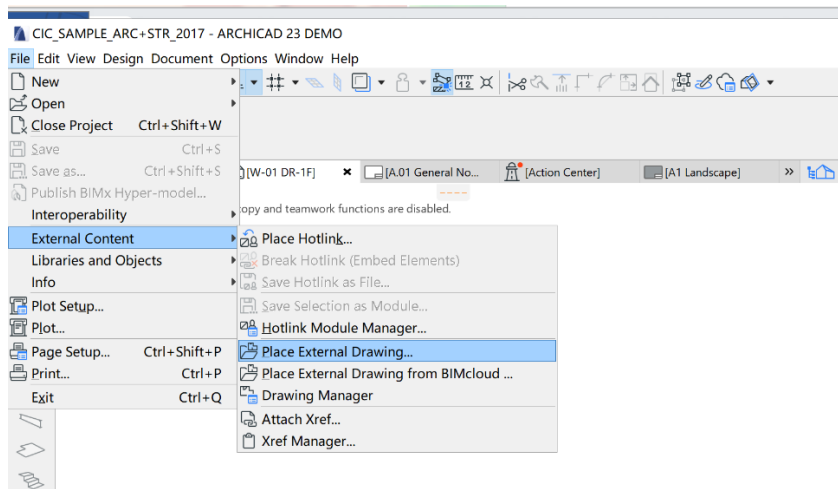


3.6 Import Drainage Drawing

Create a new worksheet in the Project Map and give a name like DR-1F. Click the worksheet in the Project Map

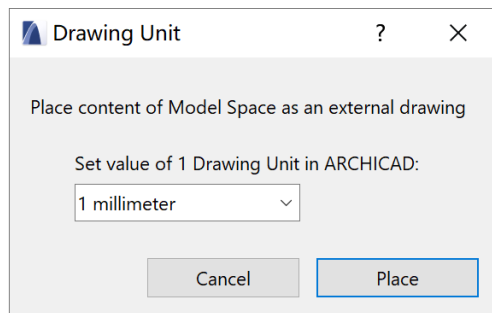


Click “File”→ “External Content”→”Place External Drawing”.



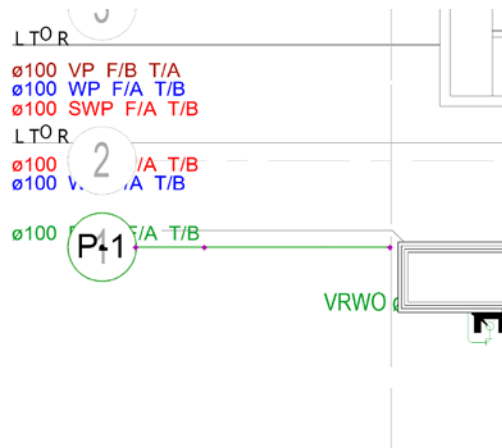
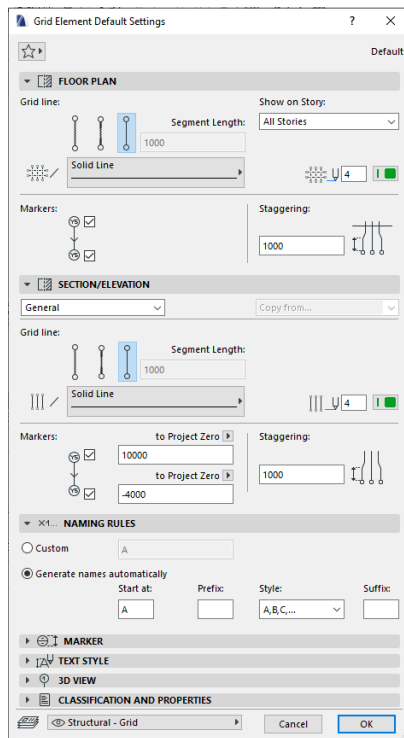
Choose the drawing in the folder and place the drawing.

Select the units of the drawing according to the project requirement.



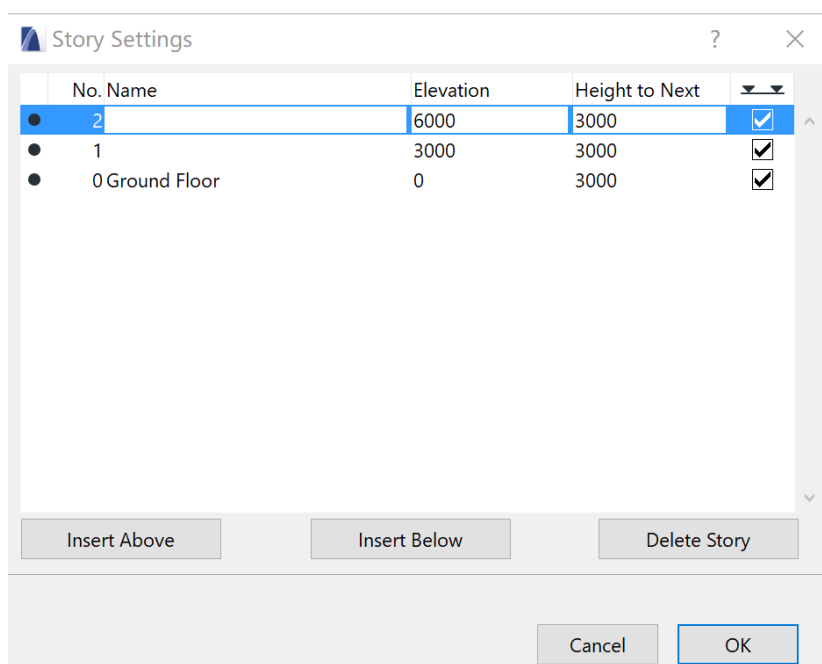
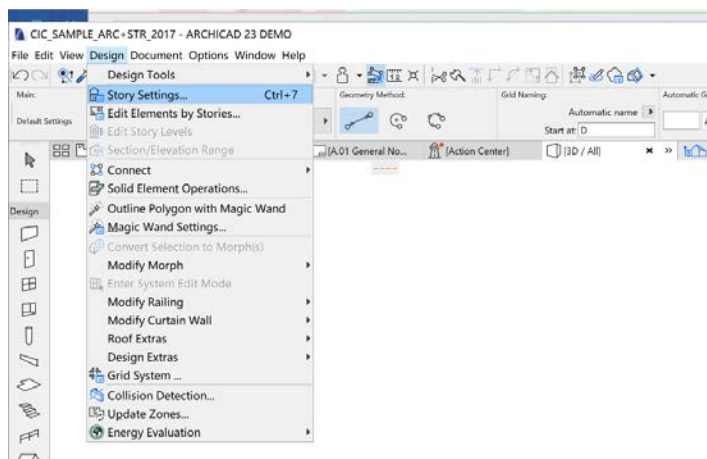
3.7 Create Grid and Manage Floor Setting

Based on the drawing, add the grid symbol in the toolbox. In the default dialogue box, the user can select the select detail setting based on their needs for both floor plan and section plan.





For floor setting or story setting in ArchiCAD, Select Design→Story Setting. In the setting, box defines the floor height and elevation of each floor in your project.

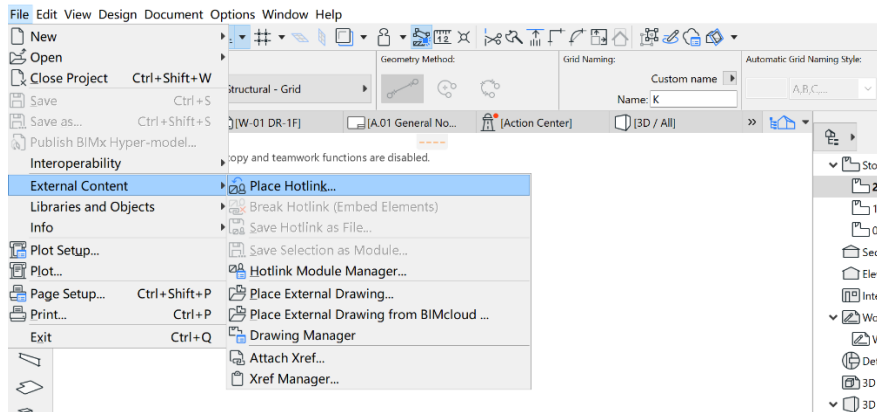


3.8 Import Hotlink modules

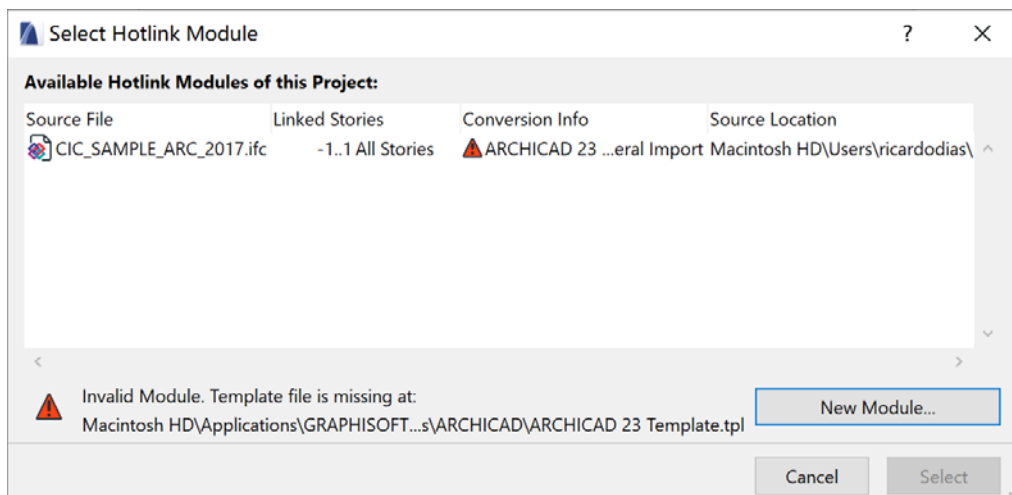
In most of the cases, the user needs to import the architecture or structure model to the project file. In ArchiCAD, those modules are imported through Hotlink.

Choose one of the floor plans in 2D view

Keep the floor plan on the main screen, Select File→ External Content →Place Hotlink.
Choose the Module you want to place.




In the selecting box, input the module file you want (ifc or .mod) and click OK.





After choosing the modules, choose to keep the elevation as story structure of the host project if you have already set the location and elevation of the modules.
Place the Hotlink.


HOTLINK SETTINGS


Master Layer:  Model Unit - Module

Master ID:


Orientation:  0.00° 

☐ Adjust angle of fixed-angle elements to reflect Hotlink rotation

Elements' Elevation:  ☐ Adjust Elevation to Story Structure of Host Project
☒ Keep Elevation as in Story Structure of Hotlink Source

Additional Offset:  0

☒ Relink all Doors/Windows to Wall Base

Top Linked Elements:  ☐ Adjust Height to Story Structure of Host Project
☒ Keep Height as in Story Structure of Hotlink Source

Note:
The Hotlink only can place in the floor plan view.

4. Creating Model Object

NOTE: You may use the predefined Favorites saved within the template as a reference. Changing the MEP System it will automatically display the correct colour both in 2D Drainage Plan and in 3D.

4.1 Drainage Element

In the drainage plan, the following object will be modelled through ArchiCAD.

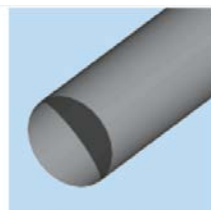
- Pipe segment
- Pipe fitting
- Pipe Equipment

4.1.1 Drainage Pipe, Bend, Transition Tool and Pipe Tool.

In Toolbar, click the tool under the pipework.



On the left of the default setting, select the pipe element



Pipe Straight 23



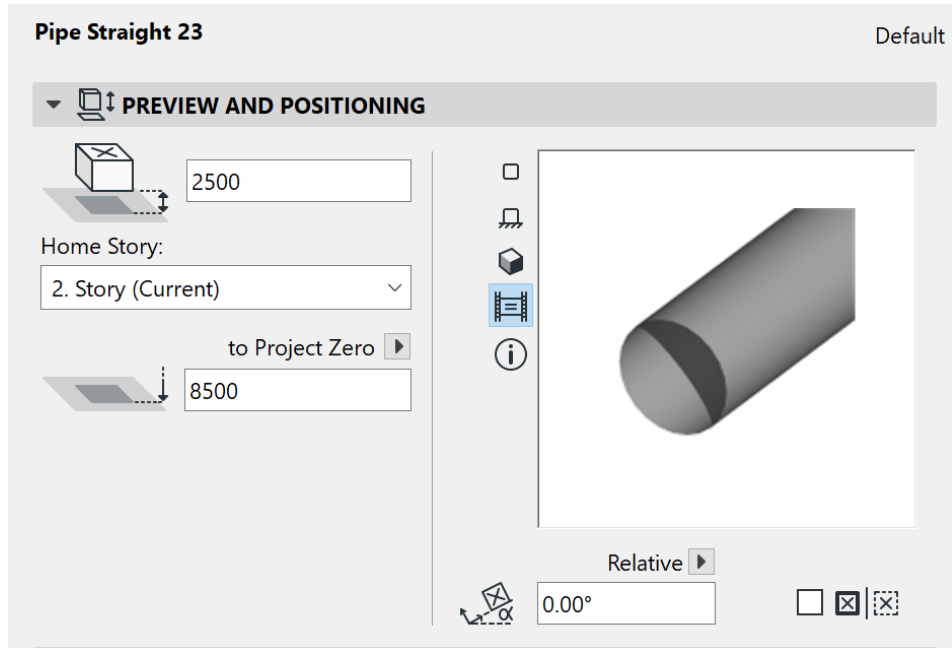
Pipe Sanitary Tee 23



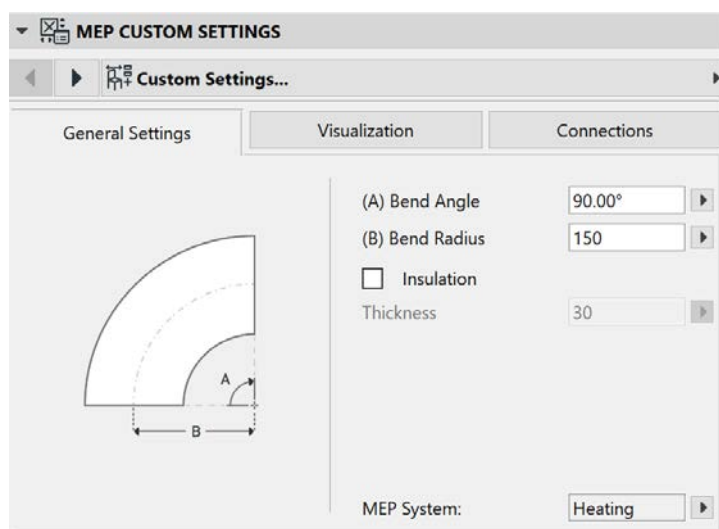
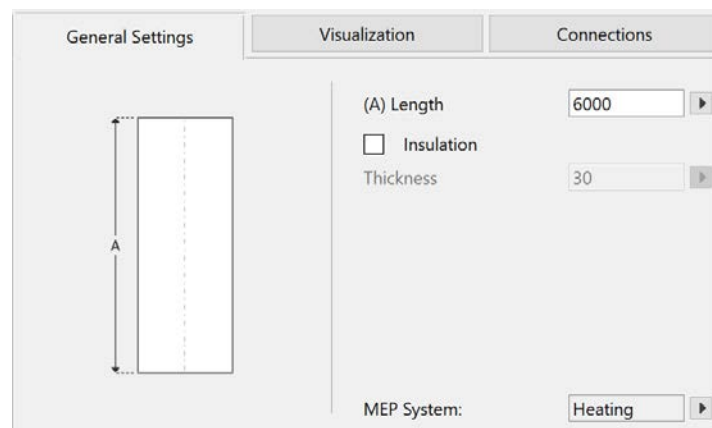
Pipe Tee 23

In preview and position, set the home story to define the pipe is belong to which story. And also set the height of the pipe.

Also, the user can preview the pipe in floor plan view, 2D and section view.

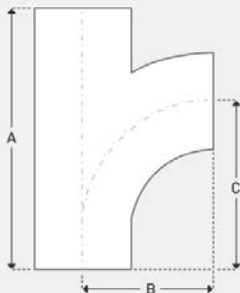


In the general setting of MEP custom setting, the user can set the geometric information of the pipe and define the MEP system it belongs to.



Custom Settings...

General Settings Visualization Connections



(A) Length 500

(B) Branch Radius 200

(C) Branch Offset 330

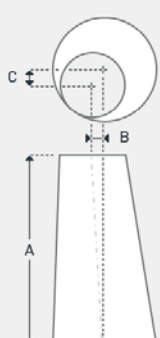
☒ Insulation

Thickness 30

MEP CUSTOM SETTINGS

Custom Settings...

General Settings Visualization Connections



(A) Length 250

Angle 12.52°

(B) Offset 0

(C) Offset 56

☒ Insulation

Thickness 30

MEP System: Heating

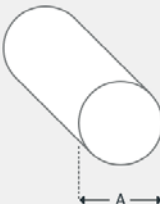
Click the connection in MEP custom settings section. Give a diameter, connection type and pipe thickness for the pipe.

MEP CUSTOM SETTINGS

Custom Settings...

General Settings Visualization Connections

Main 1



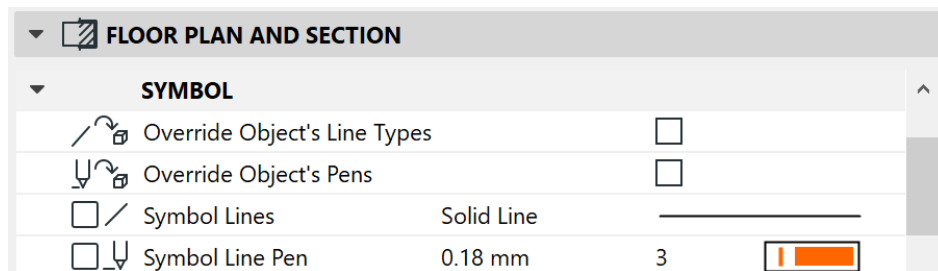
Nominal Size nom 100

(A) Diameter 108

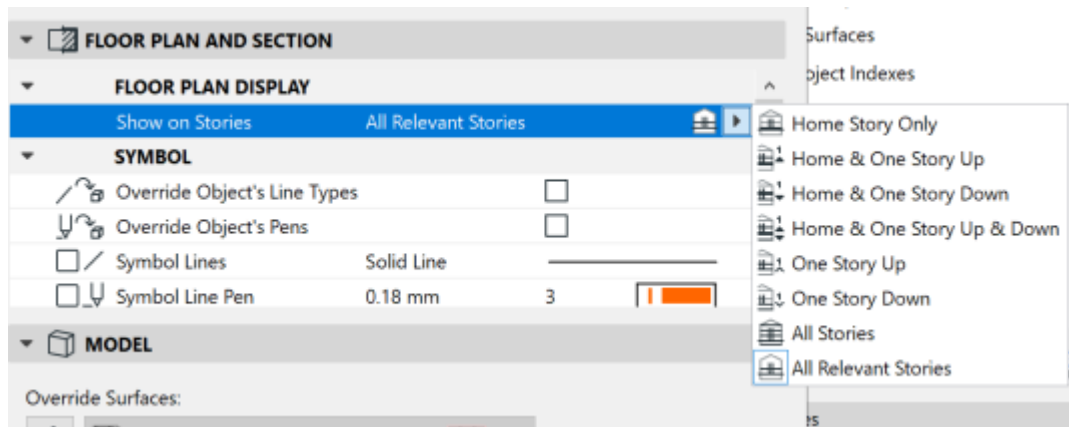
Nom. Wall Thickness 4

Connection Type Welded

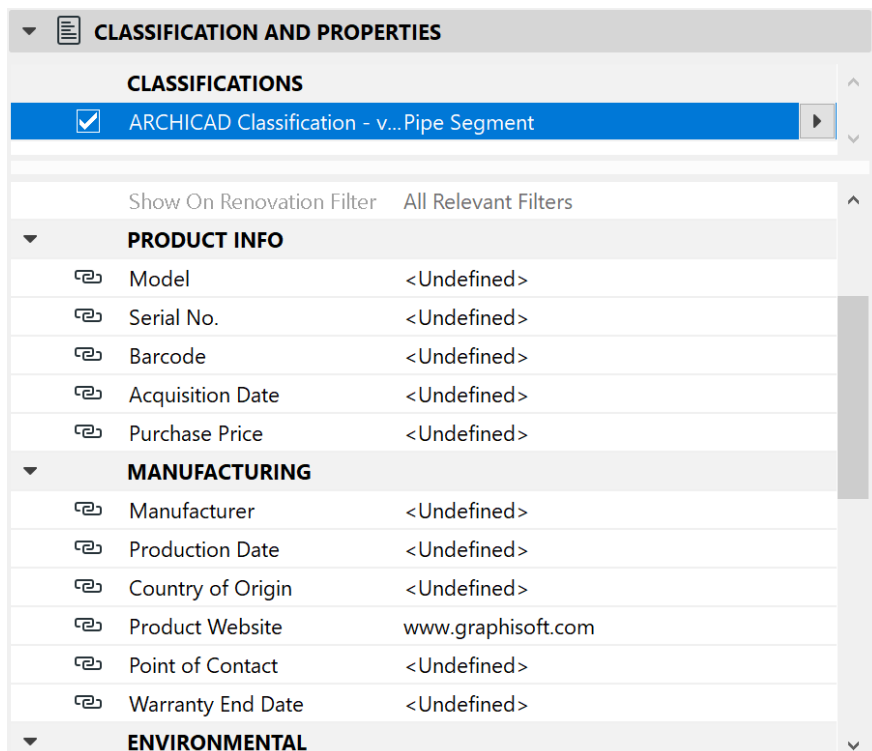
Define the symbol of the pipe in floor plan and section settings.



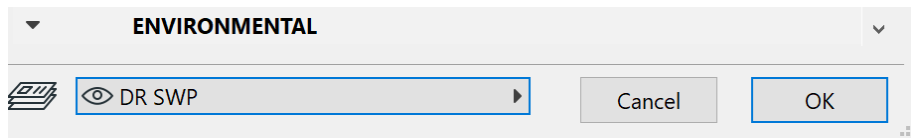
Define the display setting of the pipe in Floor Plan Display



In classification and properties section, input the pipe's information.



Lastly, give a layer for the pipe. And click OK.



4.2 MEP Routing

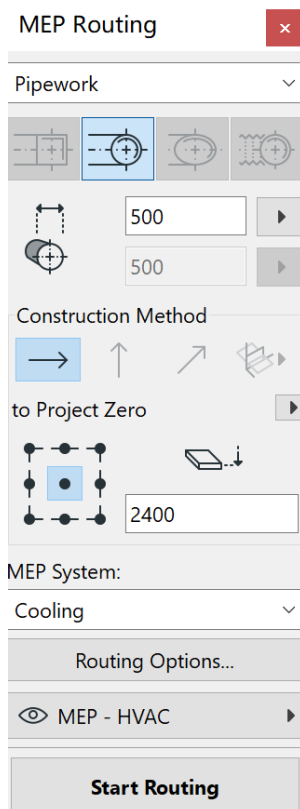
In ArchiCAD, the main method to create the pipe is Routing Function.

Click the  in the standard toolbar to open the routing menu.

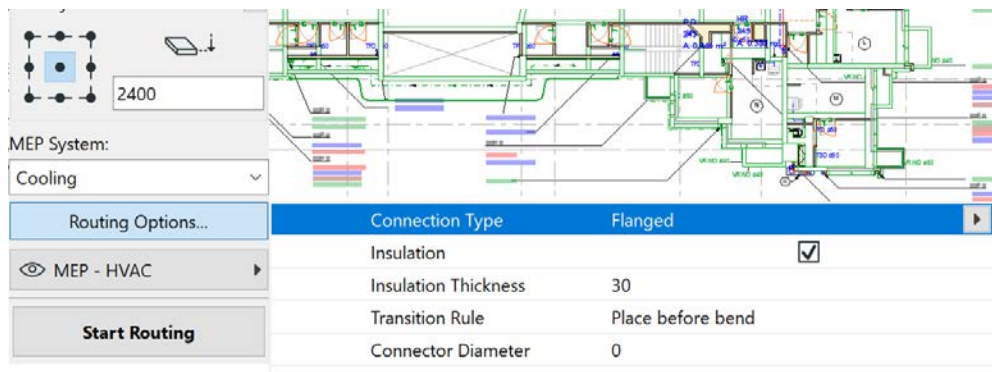
Set the diameter of the pipe, construction method, drawing point, MEP system, routing option, and layer. The rest of the setting or information will be followed by the settings in the toolbar.

The black dots under the "to Project Zero" is mainly for you to choose the reference line location.

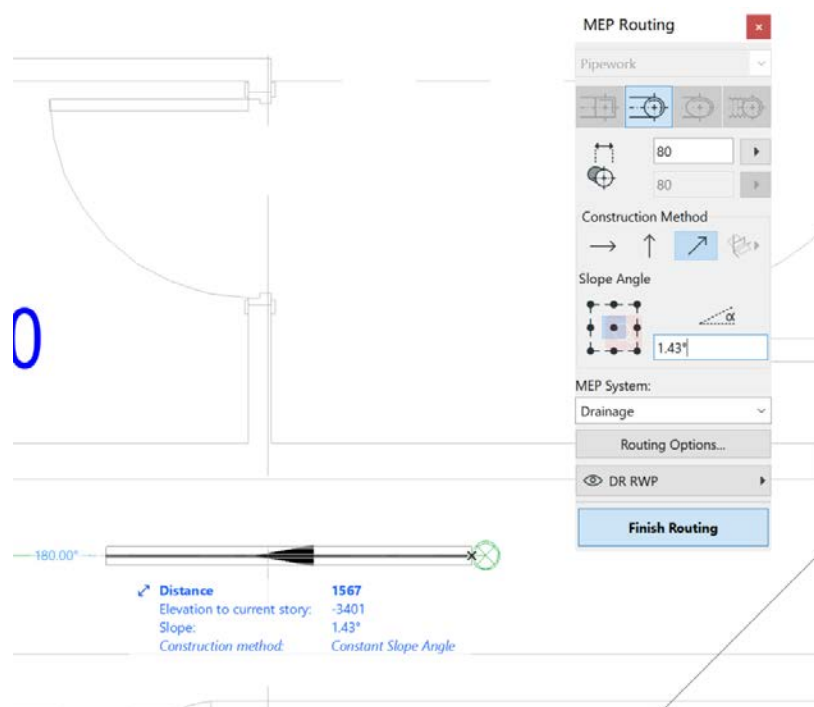
Reference Line is relevant only during a Routing operation, and indicates the anchor point of the routed elements when you click on the screen to place them.



In the routing option menu, the user can set the several major setting of the pipe like the connection type.

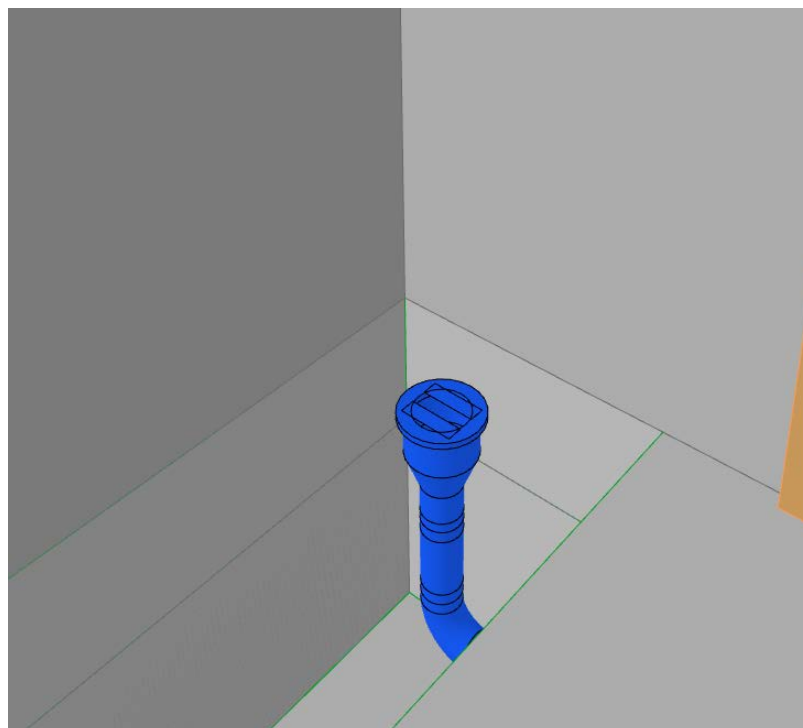
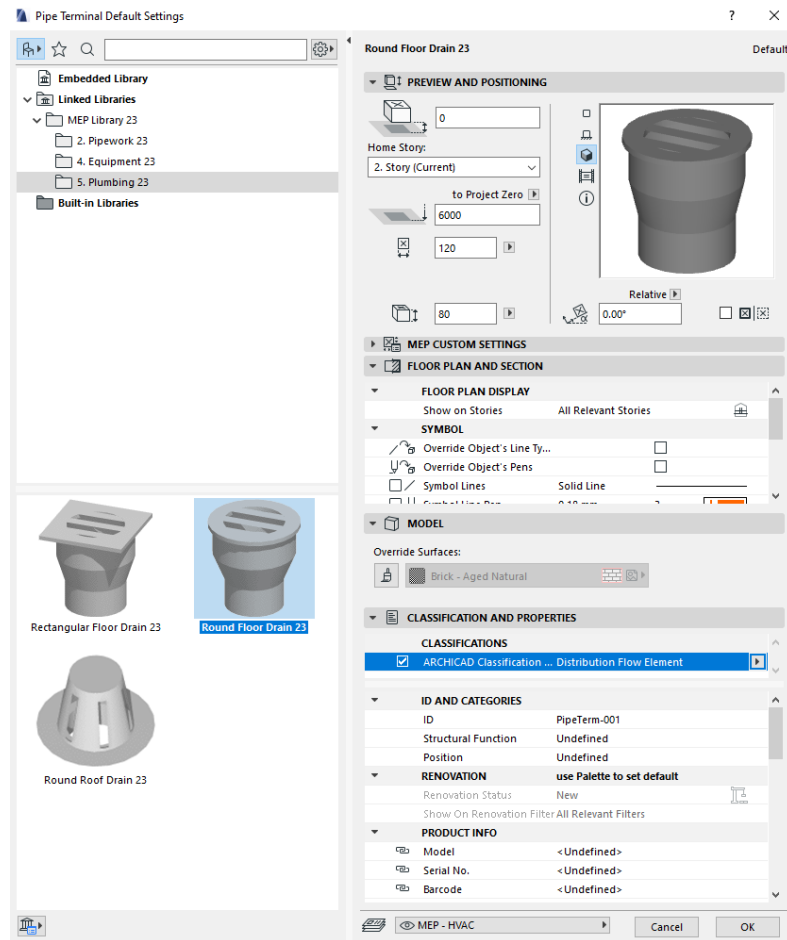


Click start routing to draw the pipe and input the slop angle of the drainage pipe.
When finishing the routing, double click the right bottom of the mouse.



4.3 Pipe Terminal Tool

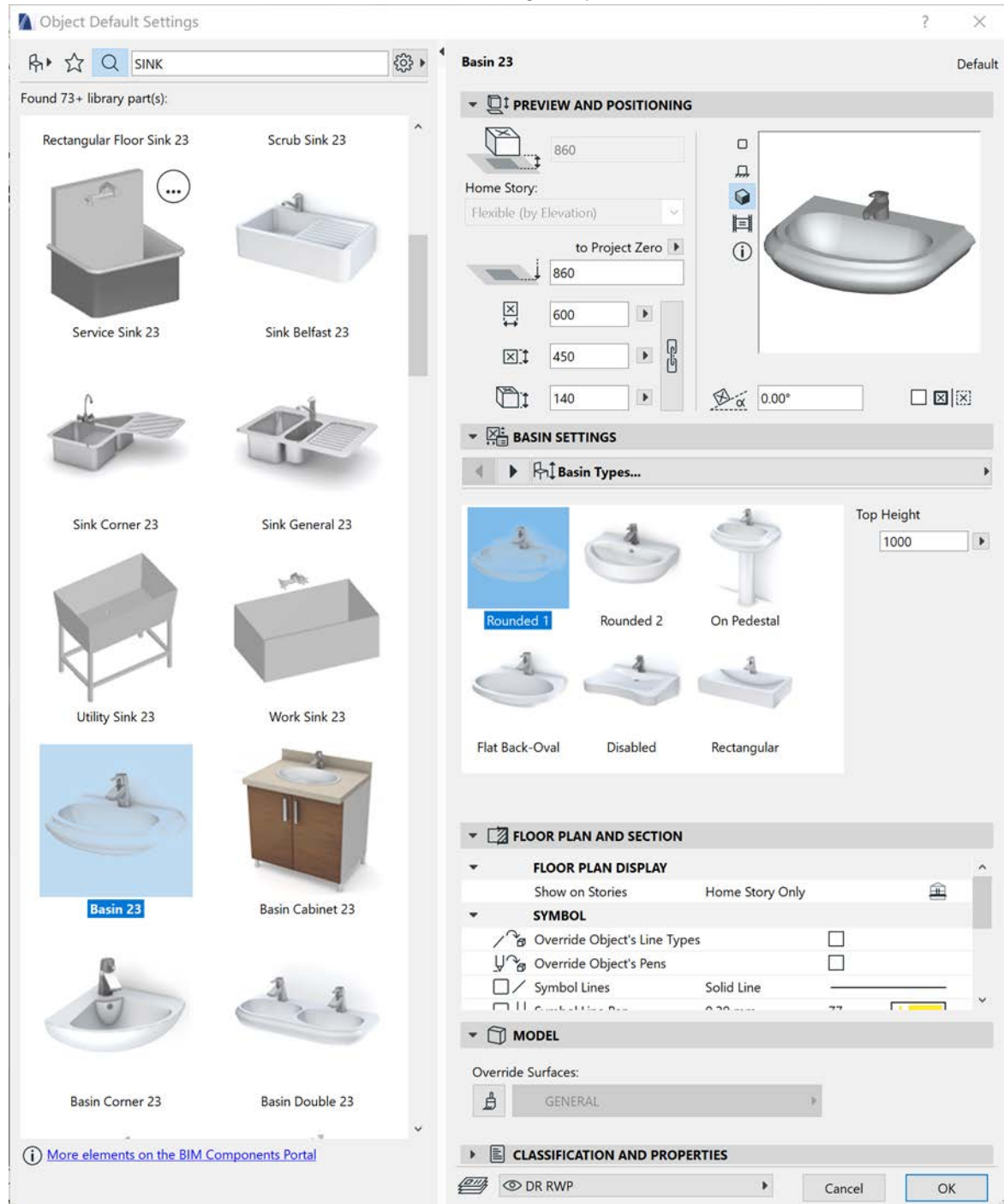
In Toolbar, click “Pipe Terminal Tool” select the relative Library → place it into the position in 2D or 3D



4.4 Drainage Equipment

In the toolbar, click Equipment Tool  in Toolbar. Select relative Library.

Choose the item on the left and edit it on the right if you want.



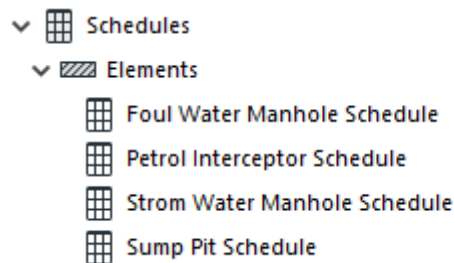
If you want to create your drainage equipment, please refer to the following guide as a reference.

<http://gdl.graphisoft.com/reference-guide/gdl-guide>

5. Configuring Schedules

5.1 Open the Schedule

After finishing the modelling, click Project Map on the Pop-Up Navigator. In here, you can see the schedule of the drainage plan.



5.2 Strom Water Manhole Schedule

Strom Water Manhole Schedule						
Manhole NO.	Pipe Diameter (mm)	C.L	I.L	D.T.I.L	Depth (mm)	Type
STMH	225	3.43	2.43	2.28	755	T1

Automatic update item	Depth
Manually Input item	Manhole NO., Pipe Diameter, C.L., I.L., D.T.I.L., Type

5.3 Foul Water Manhole Schedule

Foul Water Manhole Schedule						
Manhole NO.	Pipe Diameter (mm)	C.L	I.L	D.T.I.L	Depth (mm)	Type
FTMH	150	3.42	2.42	2.27	1980	T1
SMH-01	150	-5.85	-6.6	-6.3	1750	E
WMH-01	150	-5.85	-6.6	-6.3	1750	E
WMH-02	150	-6.6	-6.85	-5.55	1750	E

Automatic update item	Depth
Manually Input item	Manhole NO., Pipe Diameter, C.L., I.L., D.T.I.L., Type

5.4 Petrol Interceptor Schedule

Petrol Interceptor Schedule				
Petrol Interceptor NO.	C.L	I.L	B.L	Depth (mm)
PI-01	5.9	6.9	8.4	2500

Automatic update item	Depth
Manually Input item	Petrol Interceptor NO., C.L., I.L., B.L

5.5 Sump Pit Schedule

Sump Pit Schedule							
Sump Pit NO.	Sump Pit Size (LxWxD)	C.L	I.L	B.L	Pump NO.	Pump Duty (Each)	
						FLOW (l/s)	HED (m)
SWPP-02	2000(L)x1500(W)x600(D)	-5.85	-6.5	-7.5	SSP02-01,02	6	20
SWPP-03	2000(L)x1500(W)x600(D)	-5.85	-6.5	-7.5	SSP03-01,02	3	20
SWPP-04	2000(L)x1450(W)x600(D)	-5.85	-6.5	-7.5	SSP04-01,02	3	20

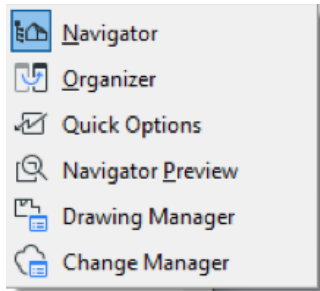
Automatic update item	Sump Pit Size
Manually Input item	Sump Pit NO., C.L., I.L., B.L., Pump NO. Pump Duty

6. tandardizing View Setting and Prepare Layout Production

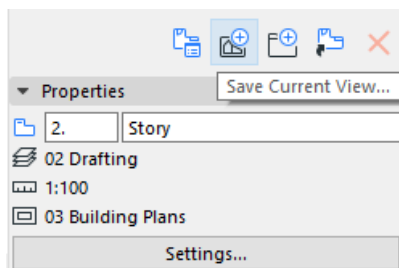
6.1 Saving view

After finishing the drainage modelling, the user can save specific floor plan or 3D perspective view in view map for drainage submission

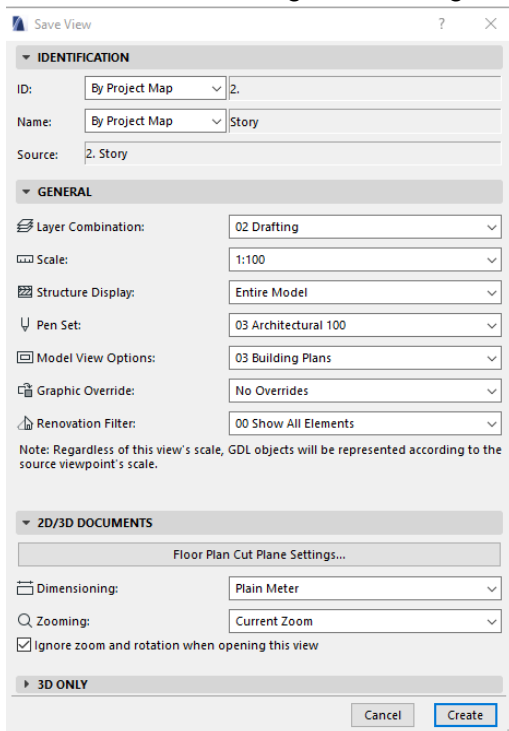
Click Project Chooser  and choose Navigator.



Click the view map and click save current view.



In the save view dialogue, set the general setting and click create.

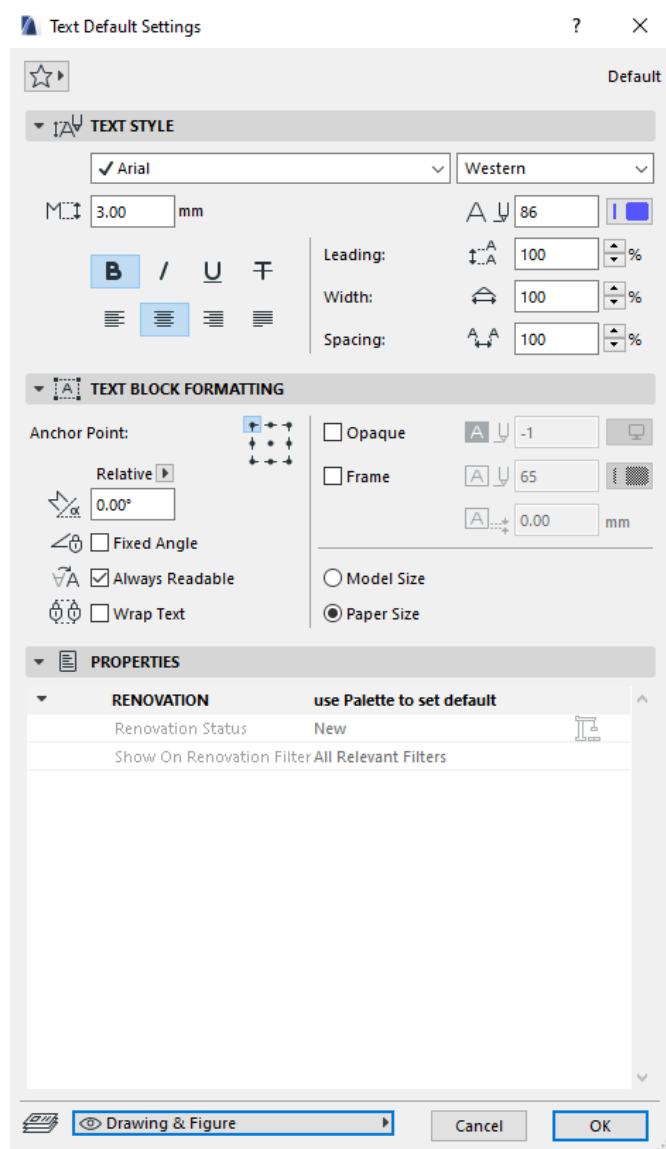


6.2 Create Typical Detail and General Note

In ArchiCAD, there are two ways to generate a general note and detail drawing. The first one is to edit them through ArchiCAD.

Right-click the worksheet in Project Map to create a new worksheet and give a name like general note.

In worksheet, choose the text tool in the toolbar to text the general note. Choose the Drawing & Figure layer for general note and typical detail.

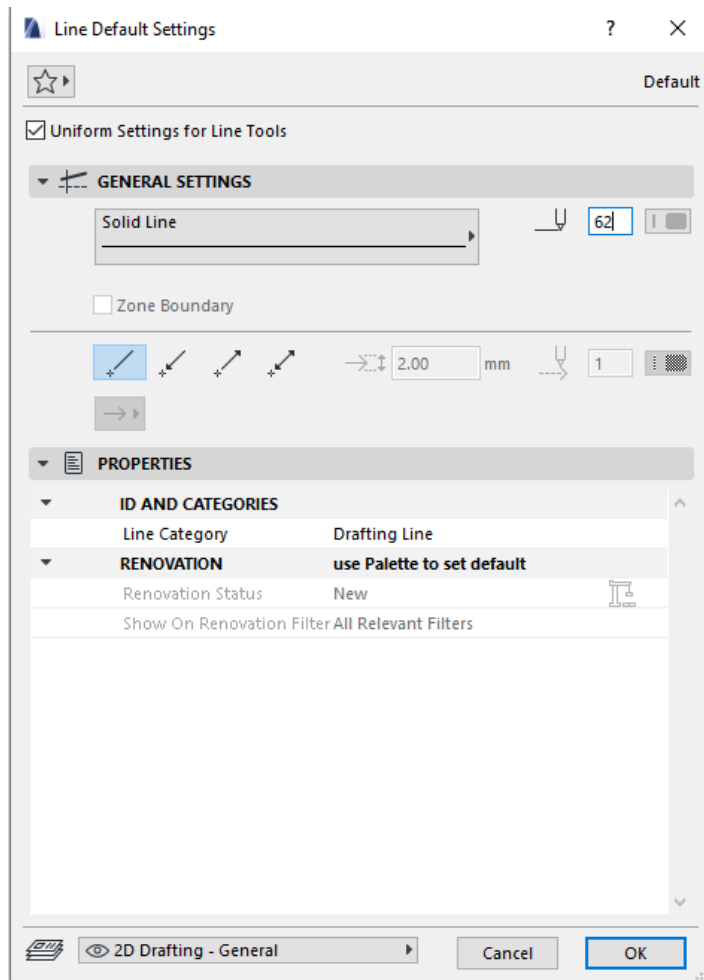


GENERAL NOTES

1. THE WHOLE DRAINAGE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE BUILDING ORDINANCE AND BUILDING REGULATIONS AND THE CURRENT REGULATIONS OF HONG KONG ENVIRONMENTAL PROTECTION DEPARTMENT.
2. ALL DIMENSIONS AND PIPE SIZES SHOWN ON THE DRAWINGS ARE IN mm UNLESS OTHERWISE STATED.

For Detail Drawing, also create a worksheet for it.

Use the different tool to draw the typical detail drawings.



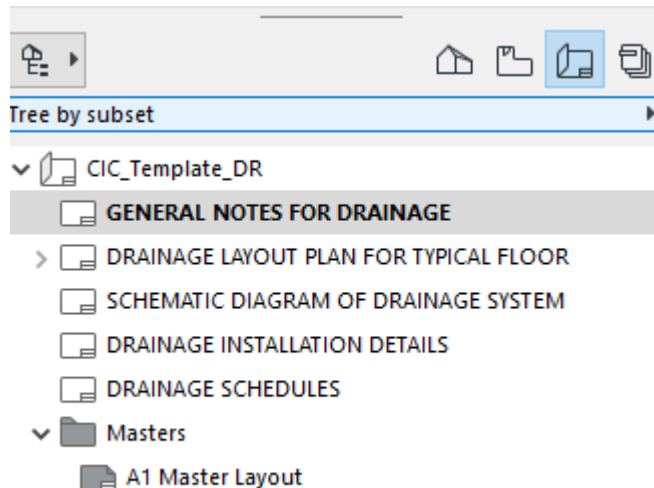
Furthermore, the user can also generate on other software like AutoCAD and import as external drawing in the format of PDF or DWG.

7. Creating Layout

7.1 Title Block in Master Layout

In Drainage template, the title block includes standardized view and location of BD's approval stamp chop and RSE's name chop.

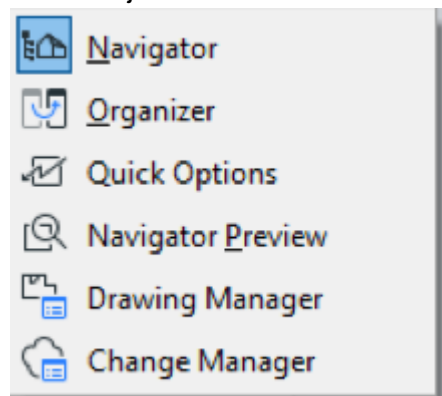
The user can click Layout Book→Masters to see the title block



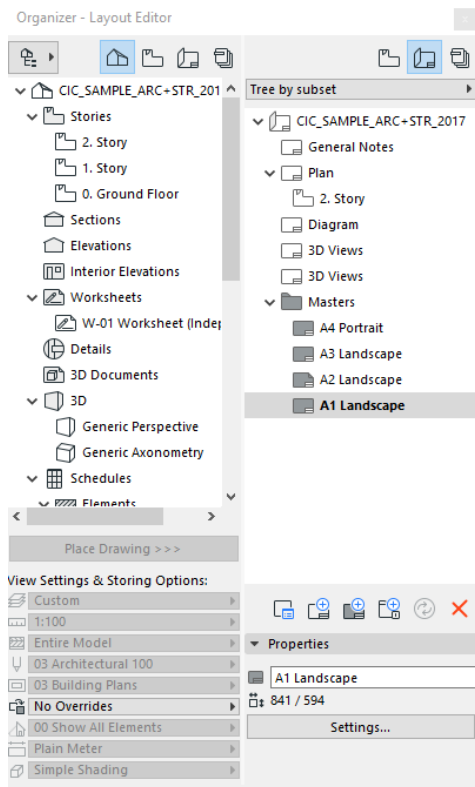
7.2 Create Layout

In the template, there are some example sheets. You can also create other layout based on your needs.

Click Project Chooser  and choose Organizer.



You can drag any floor plan, 3D view, index etc. into the layout.



7.3 Layout List

The example of the layout list can be found in the Sheet Index of view map. If the user adds a new layout, it will automatically update.

Header Options				
Freeze Index Header				
DRAWING LIST				
	Drawing No.	Drawing Title	Size	Rev.
1	M001	GENERAL NOTES FOR DRAINAGE	A1	-
2	M002	SCHEMATIC DIAGRAM OF DRAINAGE SYSTEM	A1	-
3	M003	DRAINAGE LAYOUT PLAN FOR TYPICAL FLOOR	A1	-
4	M004	DRAINAGE INSTALLATION DETAILS	A1	-
5	M005	DRAINAGE SCHEDULES	A1	-

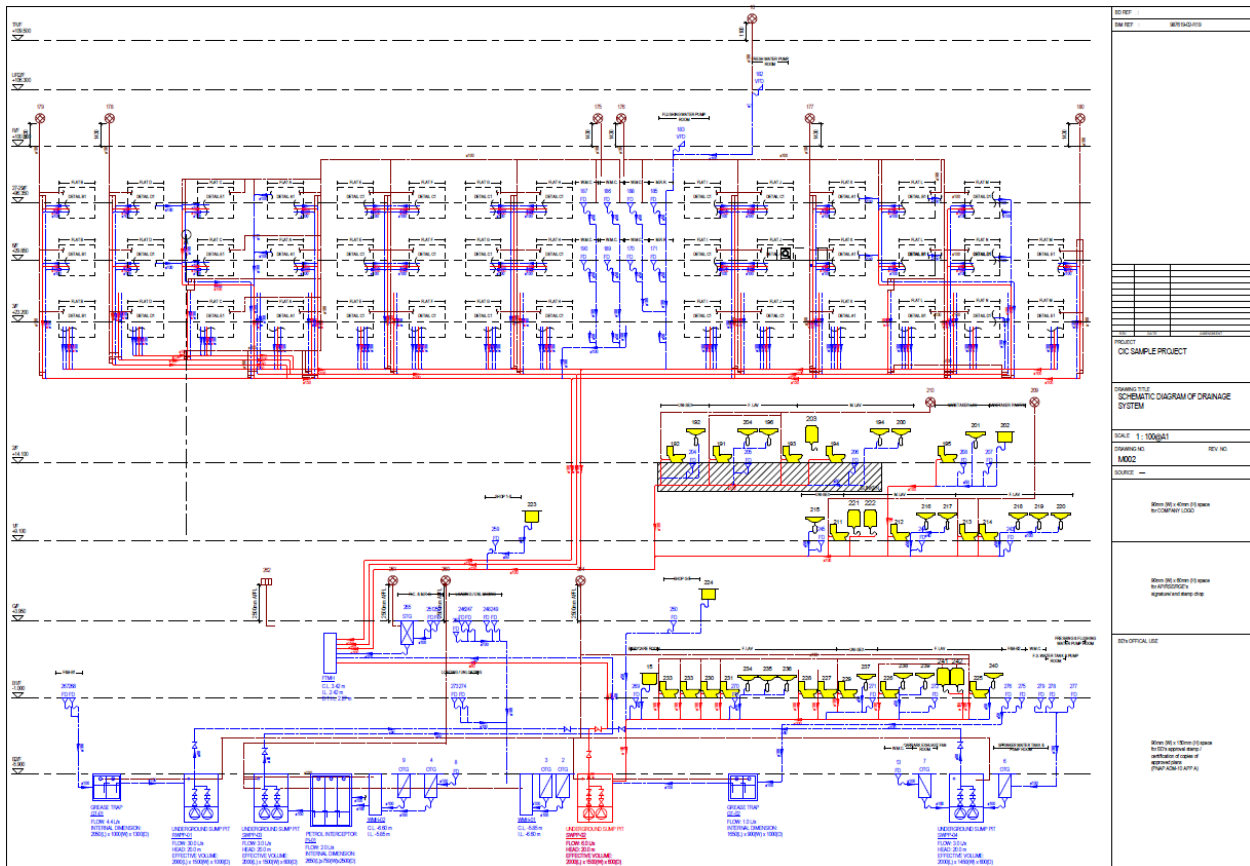
7.4.1 General Notes for Drainage

In Layout Book, click General Book

Layout Type	Layout Name
Drafting Layout	General Note

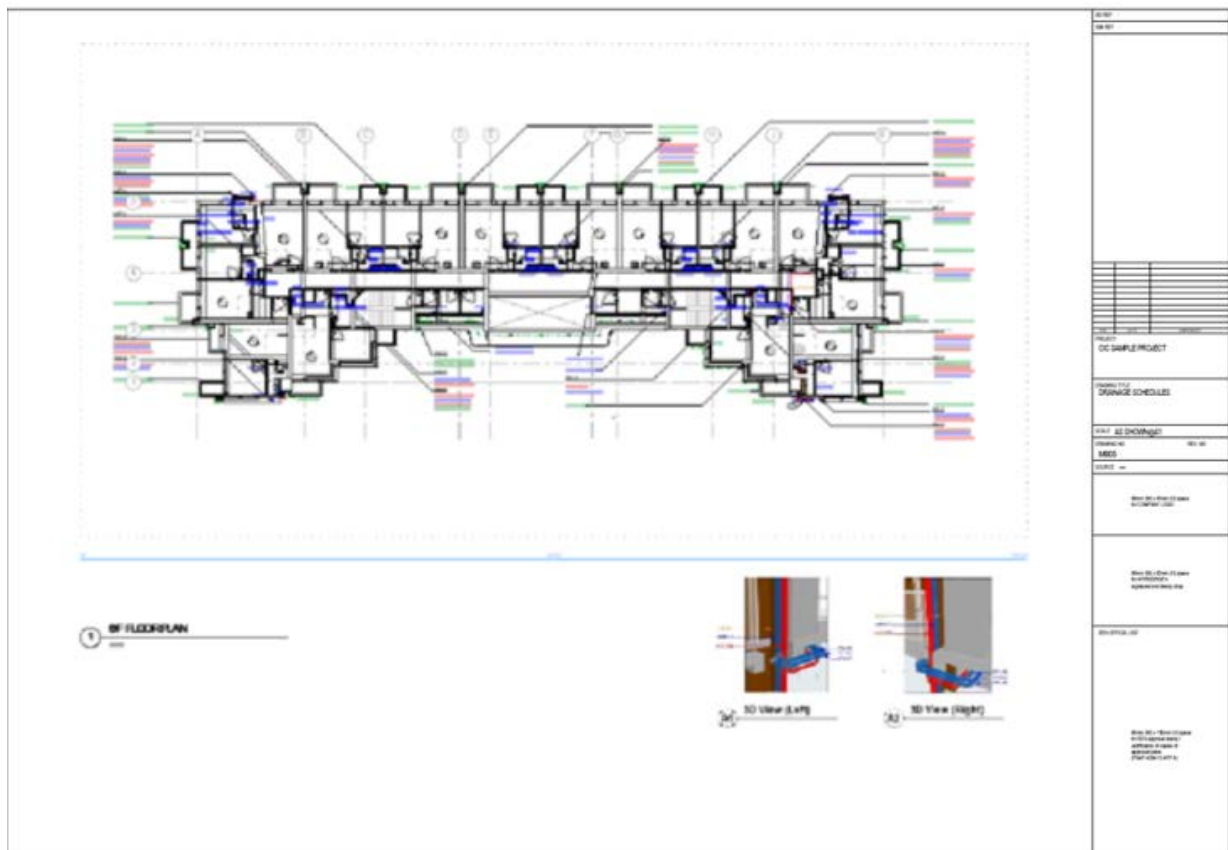
7.4.2 Schematic Diagram of Drainage System

In Layout Book click “SCHEMATIC DIAGRAM OF DRAINAGE SYSTEM”



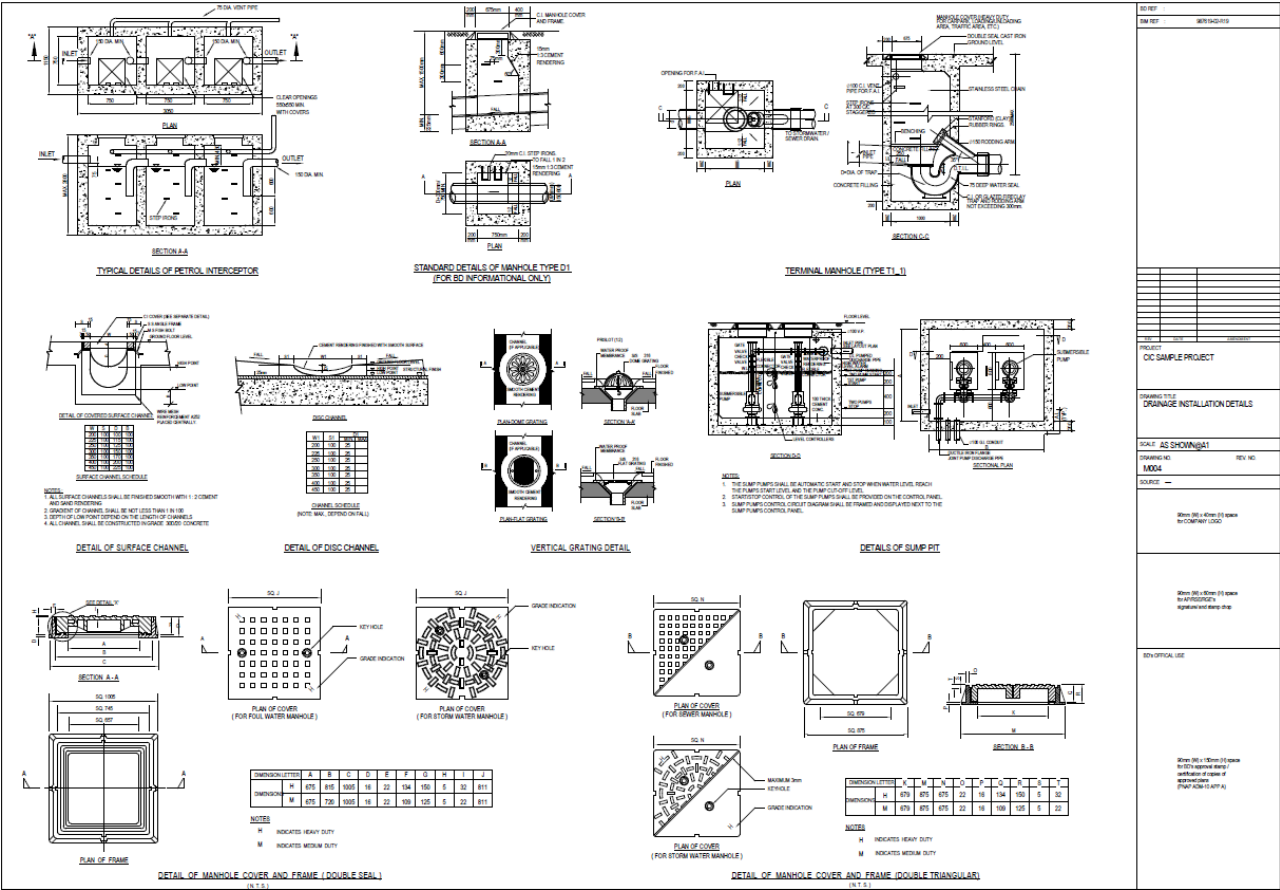
Layout Type	Layout Name
Elevation	Drainage Schematic

7.4.3 Drainage Layout Plan for Typical Floor



Layout Type	Layout Name
Floor Plans	6/F Floor Plan
3D View	3D View (Right), 3D View (Left)

7.4.4 Drainage Installation Detail



Layout Type	Layout Name
Drafting View	Drainage Installation

7.4.5 Drainage Schedules

STORM WATER MANHOLE SCHEDULE						
MANHOLE NO.	PIPE DIAMETER (mm)	C.L	I.L	D.T.I.L	DEPTH (mm)	TYPE
STMH	225	+3.43	+2.43	+2.28	765	T1

(Grand Total): 1

MANHOLE NO.	PIPE DIAMETER (mm)	C.L.	I.L.	O.T.I.L.	DEPTH (mm)	TYPE
FTMH	150	+3.42	+2.42	+2.27	1980	T1
SMH+01	150	-8.85	-6.8	-6.3	1750	E
WMH+01	150	-8.85	-6.8	-6.3	1750	E
WMH+02	150	-6.6	-6.85	-6.55	1750	E

PETROL INTERCEPTOR SCHEDULE				
PETROL INTERCEPTOR NO.	C.L.	I.L.	B.L.	DEPTH (mm)
PH-01	+5.9	+6.9	+6.4	2500
Grand total: 1				

SUMP PIT NO.	SUMP PIT SIZE (LxW)	C.L.	L.L.	B.L.	PUMP NO.	PUMP DUTY (EACH)
						FLOW (g/s) HD (m)
SUMP-01	3000(L) x 1500(W) x 1000(D)	-8.85	-6.5	-7.5	SP01P-01	3.0 20
SUMP-02	3000(L) x 1500(W) x 600(D)	-8.85	-6.5	-7.5	SP02P-01,02	6.0 20
SUMP-03	3000(L) x 1500(W) x 600(D)	-8.85	-6.5	-7.5	SP03P-01,02	6.0 20
SUMP-04	3000(L) x 1500(W) x 600(D)	-8.85	-6.5	-7.5	SP04P-01,02	3.0 20
SUMP-05	3000(L) x 1480(W) x 600(D)	-8.85	-6.5	-7.5	SP05P-01,02	3.0 20

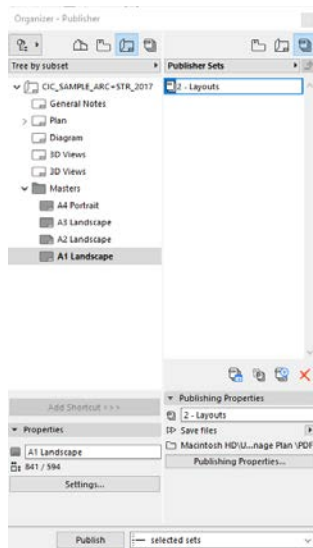
[illegible]

Layout Type	Layout Name
Schedule	Foul Water Manhole Schedule
	Petrol Interceptor Schedule
	Storm Water Manhole Schedule
	Sump Pit Schedule

8. Exporting Model as Deliverables

8.1 Exporting Layout as PDF and DWG

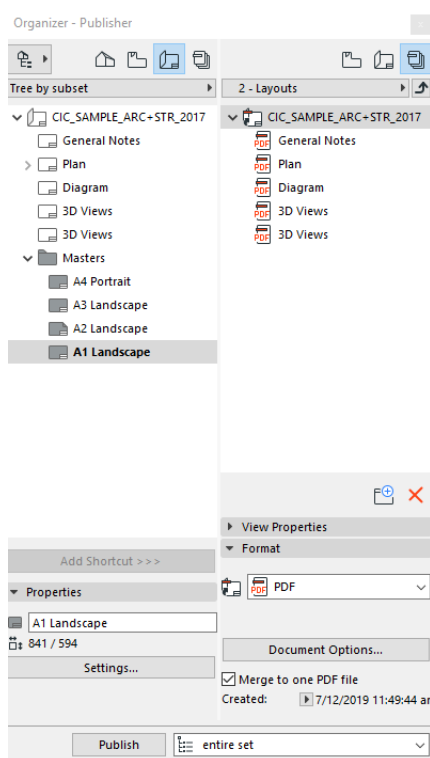
In Organizer, Choose one side as Layout Book one side as Publisher Sets. Create a new publish set to publish the layout.



Drag the layout you want to publish into the Publish Set you create.

Double click the set and choose the publish format as PDF or DWG and do some other customization for your PDF or DWG.

Click Publish button to create the PDF or DWG.



Feedback Form

CIC BIM User Guide for Preparation of Statutory Plan Submissions ArchiCAD December 2020

To improve future editions of this publication, we would be grateful to have your comments.

(Please put a "✓" in the appropriate box.)

1. As a whole, I feel that the publication is:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comprehensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the publication enable you to understand more about the subject?	Yes		No		No Comment
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
3. Have you made reference to the publication in your work?	Quite Often		Sometimes		Never
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
4. To what extent the publication benefits you?	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Supply chain Information/data integrity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project Collaborations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Overall, how would you rate our publication?	Excellent	Very Good	Satisfactory	Fair	Poor
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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