

# Layer Library Manager 2023

# *Tool to manage Layer library for AutoCAD and Verticals*

Compatible with AutoCAD 2017 to 2023

# Introduction:

The LayerLibraryManager is a powerful, easy to use tool to manage Layer library for AutoCAD. It comes from years of experience in AutoCAD and it is one of the AutoCAD productivity tools developed by CADManagerTools.

It is compatible with 32-bit and 64-bit AutoCAD and Vertical versions from 2017 to 2023.

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ayers = 23 nos.						
Name	Color	Line Type	Line W	Transp	Plot St	Description
A-WALL	5	Continuous	0.50	0	plot	Walls
A-WALL-CNTR	2	Center2	0.20	0	plot	Wall Center Lines
A-WALL-ELEV	5	Continuous	0.50	0	plot	Wall surfaces, 3D views
A-WALL-FIRE	2	Continuous	0.20	0	plot	Fire wall patterning
A-WALL-FNSH	1	Continuous	0.09	0	plot	Wall Finish Lines
A-WALL-FULL	5	Continuous	0.50	0	plot	Full-height walls, stair and shaft walls, walls to str.
A-WALL-HEAD	4	Continuous	0.40	0	plot	Door and window headers (appear on RCP)
A-WALL-JAMB	3	Continuous	0.30	0	plot	Door and Window Jambs (do not appear on RCF
A-WALL-MOVE	3	Continuous	0.30	0	plot	Moveable partitions
A-WALL-PATT	8	Continuous	0.15	0	plot	Wall insulation, hatching and fill
A-WALL-PRHT	3	Continuous	0.30	0	plot	Partial-height walls (do not appear on RCP)
A-WALL-FINE	1	Continuous	0.09	0	plot	Fine Lineworks
A-WALL-THIN	2	Continuous	0.20	0	plot	Thin Lineworks
A-WALL-MEDM	3	Continuous	0.30	0	plot	Medium Lineworks
A-WALL-WIDE	4	Continuous	0.40	0	plot	Wide Lineworks
A-WALL-THIK	5	Continuous	0.50	0	plot	Thick Lineworks
A-WALL-HEVY	6	Continuous	0.60	0	plot	Heavy Lineworks 🗸 🗸
<						>
	ayers = 23 nos. Name A-WALL A-WALL-CNTR A-WALL-CNTR A-WALL-FIRE A-WALL-FIRE A-WALL-FIRE A-WALL-FIRE A-WALL-FIRE A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-PRHT A-WALL-THIN A-	ayers = 23 nos.       Name     Color       A-WALL     5       A-WALL-CNTR     2       A-WALL-ELEV     5       A-WALL-FIRE     2       A-WALL-FIRE     2       A-WALL-FIRE     2       A-WALL-FIRE     4       A-WALL-FIRE     3       A-WALL-PATH     8       A-WALL-PATT     8       A-WALL-PRHT     3       A-WALL-FINE     1       A-WALL-PRHT     3       A-WALL-THIN     2       A-WALL-WEDM     3       A-WALL-THIN     5       A-WALL-THIK     5       A-WALL-HEVY     6	ayers = 23 nos.       Name     Color     Line Type       A-WALL     5     Continuous       A-WALL-CNTR     2     Center2       A-WALL-ELEV     5     Continuous       A-WALL-FIRE     2     Continuous       A-WALL-FIRE     2     Continuous       A-WALL-FISH     1     Continuous       A-WALL-FISH     5     Continuous       A-WALL-FISH     3     Continuous       A-WALL-FISH     3     Continuous       A-WALL-FISH     3     Continuous       A-WALL-PATT     8     Continuous       A-WALL-PATT     8     Continuous       A-WALL-PRHT     3     Continuous       A-WALL-FINE     1     Continuous       A-WALL-FINE     1     Continuous       A-WALL-THIN     2     Continuous       A-WALL-THIN     2     Continuous       A-WALL-WIDE     4     Continuous       A-WALL-THIK     5     Continuous       A-WALL-HEVY     6     Continuous	ayers = 23 nos.           Name         Color         Line Type         Line W           A-WALL         5         Continuous         0.50           A-WALL-CNTR         2         Center2         0.20           A-WALL-ELEV         5         Continuous         0.50           A-WALL-FIRE         2         Continuous         0.20           A-WALL-FINSH         1         Continuous         0.09           A-WALL-NSH         1         Continuous         0.40           A-WALL-HEAD         4         Continuous         0.30           A-WALL-PNSH         3         Continuous         0.30           A-WALL-PNSH         8         Continuous         0.30           A-WALL-PNSH         3         Continuous         0.30           A-WALL-PNT         8         Continuous         0.30           A-WALL-PRHT         3         Continuous         0.30           A-WALL-PRHT         2         Continuous         0.30           A-WALL-PRHT         3         Continuous         0.30           A-WALL-PRIM         3         Continuous         0.30           A-WALL-PRIM         3         Continuous         0.30	ayers = 23 nos.           Name         Color         Line Type         Line W         Transp           A-WALL         5         Continuous         0.50         0           A-WALL-CNTR         2         Center2         0.20         0           A-WALL-ELEV         5         Continuous         0.50         0           A-WALL-FIRE         2         Continuous         0.20         0           A-WALL-FISH         1         Continuous         0.09         0           A-WALL-FISH         1         Continuous         0.40         0           A-WALL-FISH         3         Continuous         0.30         0           A-WALL-FISH         3         Continuous         0.30         0           A-WALL-FINE         3         Continuous         0.30         0           A-WALL-PATT         8         Continuous         0.30         0           A-WALL-PRHT         3         Continuous         0.30         0           A-WALL-FINE         1         Continuous         0.20         0           A-WALL-PRHT         3         Continuous         0.30         0           A-WALL-FINE         1         Continuous	ayers = 23 nos.       Name     Color     Line Type     Line W     Transp     Plot St       A-WALL     5     Continuous     0.50     0     plot       A-WALL-CNTR     2     Center2     0.20     0     plot       A-WALL-ELEV     5     Continuous     0.50     0     plot       A-WALL-FIRE     2     Continuous     0.50     0     plot       A-WALL-FINSH     1     Continuous     0.09     0     plot       A-WALL-FINSH     1     Continuous     0.50     0     plot       A-WALL-FINSH     1     Continuous     0.50     0     plot       A-WALL-FINSH     3     Continuous     0.30     0     plot       A-WALL-MOVE     3     Continuous     0.30     0     plot       A-WALL-PRHT     8     Continuous     0.30     0     plot       A-WALL-PRHT     3     Continuous     0.30     0     plot       A-WALL-PRHT     2     Continuous     0.30     0     plot       A-WALL-PRHT     3     Continuous     0.30     0     plot       A-WALL-PRHT     3     Continuous     0.30     0     plot       A-WALL-THIN <t< td=""></t<>

## Installation:

The installer that ran when you downloaded this plug-in from Autodesk Exchange has already installed the plug-in. You may need to restart AutoCAD to activate the plug-in. The command for command line is "CMT\_LLM".

For the first time set the Layer library location in the settings dialog box and click save to register the path and close the Layer Library Manager and re-launch Layer Library Manager, select the Layer standard from available names in the drop down list and select the discipline folder name and select the layer file available in the group collection that lists all available Layers in the selected file.

#### Setting up Layer library directory structure:

With little effort user can setup the directory structure which suites his/her companywide requirements, the sample is given below to arrange the layer library in folders.

The main layer library manager folder structure should be organized as below image

Arrange your layer library based on client specific Layer standards, in most cases the layer names differ from client to client.



Name the Main layer library folder of your choice; for example, "LAYERS" or "LAYER LIBRARY" etc...

- 1. Create Client specific layer standards folders under main folder.
- 2. Create Discipline wise folders under the client specific layer standards folder.
- *3.* Arrange layer files within each discipline folder.

### **User Interface Controls:**

er Standard:	Layers = 93 nos.						
3C-01 <b>(1)</b>	✓ Name	Color	Line Type	Line Weight	Transparen	Plot Status	Description
cipline:	C-ANNO-TABL-TEXT	2	Continuous	0.2	0	plot	Civil: Table text
Architecture	C-ANNO-TEXT [Profile View]	3	Continuous	0.3	0	plot	Civil: Annotation text
-Landscape -Structure	C-PROF-DIAG	2	Continuous	0.2	0	plot	Civil: Profile view band diagrams
-Plumbing	C-PROF-GRID	8	Continuous	0.15	0	plot	Civil: Profile view gridlines
Mechanical	C-PROF-TICK	1	Continuous	0.09	0	plot	Civil: Profile view tick marks
-Electrical	C-PROF-TITL	4	Continuous	0.4	0	plot	Civil: Profile view title text
	C-PROF-TTLB	2	Continuous	0.2	0	plot	Civil: Profile view border
up:	C-PROF-TEXT [Property Line]	3	Continuous	• 4	0	plot	Civil: Profile view text
GENERAL			0		0	a land	
ROADS	C-PROP-BNDY	4	Continuous	0.4	0	plot	Property: Boundary
-WATER	C-PROPEINE	121	Continuous	0.0	0	plot	Property, Eastern pattern
	C-PROP-TEXT [Alignment]	3	Continuous	0.3	0	plot	Property: Text
	C-ROAD-ALIN	1	CENTER2	0.20	0	plot	Roadways: Alignment
(3)	C-ROAD-ALIN-ARRO	1	Continuous	0.15	0	plot	Roadways: Arrow
<b>O</b>	C-ROAD-ALIN-EXTN	8	HIDDEN2	0.15	0	plot	Roadways: PVI extention lines
	C-ROAD-ALIN-TAGS	3	Continuous	0.3	0	plot	Roadways: Alignment segment indentifi
	C-ROAD-CNTR	1	CENTER2	0.15	0	plot	Roadways: Center line
in oyer Settings About	Layer [15] nos. inse Layer [C-ROAD-ALI	ted N] inserted and	made it current	5			Search Insuit Ex

- Layer Standard : List layer standard list
  - 1. Discipline list : List discipline list
  - 2. Layer group list : List layer group file
  - 3. Layer list : List layer information from the selected layer file
  - 4. Report log: Reports the status of the insert layer operation
  - 5. Edit layer file: Opens the selected layer file for editing in "Notepad" application
  - 6. Settings : Opens settings dialog
  - 7. About : Opens About dialog
  - 8. Help : Opens help file

10. Insert : Insert selected layers; Single layer can be inserted by double click on the layer name

11. Exit : Exit the application

#### **Creating layer file:**

Create layer file using any text file editor with below format and sub-heading for layer can be added within open and closing square braces

Example: [CIVIL LAYERS]

In addition to the square braces ([]) blank lines, only Hyphens (----), and only Underscore (\_\_\_\_) are allowed to subdivide the layer list, refer to layer files installed in the installation folder.

Special double semicolon (; ;) is treated as comment and will not be loaded to Layer list

Example: ;; The below layers are newly added for project ####-####

#### Layer format:

Layer name | Color | Linetype | Line weight | Transparency | Plot status | Description

Each layer property is separated with pipe symbol () and if user prefer to set up with different symbol than the default then it should be modified in settings dialog and layer format.

🕘 00_Architecture.lay - Notepad — 🗖	×
File Edit Format View Help	
[ANNOTATION]	^
A-ANNO-DIMS 2 Continuous 0.2 0 plot Dimensions	
A-ANNO-KEYN 2 Continuous 0.2 0 plot Key notes	
A-ANNO-LEGN 2 Continuous 0.2 0 plot Legends and Schedules	
A-ANNO-NOTE 2 Continuous 0.2 0 plot Notes	
A-ANNO-NPLT 8 Continuous 0.09 0 Noplot Construction Lines, non-plotting info	
A-ANNO-REDL 1 Continuous 0.09 0 plot Redline annotation	
A-ANNO-REVC 4 Continuous 0.4 0 plot Revision Clouds	
A-ANNO-REVS 3 Continuous 0.3 0 plot Revisions	
A-ANNO-SYMB 2 Continuous 0.2 0 plot Symbols	
A-ANNO-TEXT 2 Continuous 0.2 0 plot Text	
A-ANNO-TTLB 201 Continuous 0.09 0 plot Border and Title Blocks	
	~

#### 1. Layer name:

The sample given is based on AIA layer standard and layer name should not contain any of the below special characters

"<>/\"":;?\*|,="

#### 2. Color:

It supports Index color and True color

a. Index color value range should be between 1 – 255

b. True color value should be in RGB format and each color code should be separated with comma (,)

Example: 255,127,0

#### 3. Linetype:

The linetype value other than "Continuous" should have the reference to linetype and file name to load it during layer insertion.

By default, the linetype path is set to AutoCAD roaming profile support folder and the path will vary based on the AutoCAD version.

For AutoCAD 2014 in Windows 7/8/8.1, the linetype path is set to "C:\Users\USERNAME\AppData\Roaming\Autodesk\AutoCAD 2014\R19.1\enu\Support

Layer Library Path:	
ME\AppData\Roaming\Autodesk\ApplicationPlugins\CADManagerTools LayerLibraryManager.bundle\Contents\Layers	
Linetype File Paths:	
C:\Users\USERNAME\AppData\Roaming\Autodesk\C3D 2016\enu\Support	
Linetype File Names:	
acadiso;acad	

In the settings dialog, User can add multiple linetype file paths and file names separating with semi colon (;) for linetypes to be searched and user can set it to different linetype file name/file path than the default one, if he/she is using custom linetype name which is stored in network locations.

Below are the valid formats for linetype value

A. C-ROAD-ALIN|1|CENTER2|0.20|0|plot|Roadways: Alignment

In this format, only linetype is given and no linetype file path is referenced and the following condition will be applied

**Condition #1: If** the specified linetype already exist in the current drawing then the existing linetype is assigned to layer and no search will be done.

**Condition #2:** The linetype name will be searched and loaded from the file names given in the settings "Linetype File Names"

The linetype filename search will stop, if the specified linetype found in the first linetype file name, if not then the search will resume to next available file name.

Condition #3: The "Continuous" linetype will be assigned to layer if the specified linetype is not found

#### B. C-ROAD-ALIN|1|CENTER2;acadiso|0.20|0|plot|Roadways: Alignment

In this format, linetype "CENTER2" and file name "acadiso" is given and no linetype file path is referenced and the following condition will be applied

**Condition #1: If** the specified linetype already exist in the current drawing then the existing linetype is assigned to layer and no search will be done.

**Condition #2:** The specified linetype will be searched in the specified file names available in the available "Linetype File Paths" and if found then the linetype will be loaded.

The linetype search will not continue to next available file name.

Condition #3: The "Continuous" linetype will be assigned to layer if the specified linetype/file name not found.

User can add extra spaces between the linetype names and file name, so as to see only the linetype name in the list but not linetype file name, in this case use only blank spaces (use space bar for gap but not tab key)

C-ROAD-ALIN|1|CENTER2; ;acadiso|0.20|0|plot|Roadways: Alignment

#### C. C-ROAD-ALIN|1|CENTER2 ;P:\CAD Libray\Linetypes\acadiso|0.20|0|plot|Roadways: Alignment

In this format, linetype name "CENTER2" and file name with path is given and note that there is no file name extension is required

**Condition #1: If** the specified linetype already exist in the current drawing then the existing linetype is assigned to layer and no search will be done.

Condition #2: The specified linetype will be searched and then the linetype will be loaded.

The linetype filename search will not continue to next available file paths.

Condition #3: The "Continuous" linetype will be assigned to layer if the specified linetype/file name not found

#### 4. Line weight:

The units for lineweight format is in Millimeter (mm) but the corresponding lineweight value in inches is applied to drawing in inches.

In addition to lineweight in mm, the Default value is accepted The below lineweight format are valid. C-ROAD-ALIN|1|CENTER2|0.20|0|plot|Roadways: Alignment C-ROAD-ALIN|1|CENTER2|0.2|0|plot|Roadways: Alignment C-ROAD-ALIN|1|CENTER2|Default|0|plot|Roadways: Alignment

#### 5. Transparency:

The valid range for transparency is between 0 to 90. C-ROAD-ALIN|1|CENTER2|Default|<mark>0</mark>|plot|Roadways: Alignment C-ROAD-ALIN|1|CENTER2|Default|20|plot|Roadways: Alignment

#### 6. Plot Status:

Plot: Layer is set as plottable. Noplot: Layer is set as Not plottable. C-ROAD-ALIN|1|CENTER2|Default|0|plot|Roadways: Alignment C-ROAD-ALIN|1|CENTER2|Default|0|Noplot|Roadways: Alignment

#### 7. Description:

Add layer description and the description should not contain the pipe character (|) C-ROAD-ALIN | 1 | CENTER2 | Default | 0 | Noplot | Roadways: Alignment

#### Settings:

]	Settings - Layer Library Manager	
Layer Library Path:		
ME\AppData\Roaming\Autodes	k\ApplicationPlugins\CADManagerTools LayerLibraryManager.bundle\Contents\Layers	••••
Linetype File Paths:		
C:\Users\USERNAME\AppData	Roaming\Autodesk\C3D 2016\enu\Support	
Linetype File Names:		
acadiso;acad		
<ul> <li>Overwrite layer properties</li> </ul>	Layer Properties split letter	
Set as current Layer	Close application on Layer insertion	
Start application with last acces	ssed Layers	
	Save Clos	e

#### Layer Library Path:

Set up the layer library directory structure and assign the layer library manager start up location, this process is the one time set up.

#### Linetype File Path:

By default, the linetype path is set to AutoCAD roaming profile support folder and the path will vary based on the AutoCAD version.

For AutoCAD 2014 in Windows 7/8/8.1, the linetype path is set to "C:\Users\USERNAME\AppData\Roaming\Autodesk\AutoCAD 2014\R19.1\enu\Support

User can add multiple linetype file paths separating each one by semi colon (;), All the paths added here will be used for linetype search

#### Linetype File Names:

By default, the linetype file names are set to acadiso and acad , separated by semi colon (;) All the file names added here will be used for linetype search.

#### **Overwrite Layer Properties:**

Enable this option to force the existing layer properties (color, lineweight, transparency, plot status and description) from the standard layer library.

#### Set As Current:

Enable this option to set the layer being inserted as current layer and this option will not take effect if more than one layer is selected for insertion.

This will work with double click on the layer to insert and make it as current as well.

#### Start application with last accessed layers:

Enable this option to start the application with last used layers, if unchecked the application will start with first item selected from the Layer standard, Discipline and group folders.

#### Layer properties split letter:

Each layer property is separated with pipe symbol () and if user prefer to set up with different symbol than the default then it should be modified in here and layer format.

#### Close application Layer properties split letter:

Enable this option to close the application on the completion of the layer insertion.

#### Search Layer:

Search and loads the matching result into the layer list, the search is validated in all layer properties.



#### Search in current list:

This option searches and loads the matching layer from the current list layers only.

#### Search in all groups:

This option searches and loads the matching layers from all the layer files listed in the group folder.

#### Search in all Discipline:

This option searches and loads the matching layers from all the layer files available in the discipline folders.

			Layer L	ibrary Mana	ger 1.0				
ayer Standard:		Layers 6 nos							
ABC-01 S iscipline: S 13 Accontent E 33 Landscap A 34 Jandscap A 35 Plumbing A 36 Mechanics 77 Electrical R C 17 Accontent R 27 Celling B 34 Elevation- 19 Construction 19 Accontent N 19	V	Name A-EQPM-MOVE A-FLOR-CSWK A-FLOR-OPNG A-FLOR-WDWK A-FURN-FILE A-WALL-MOVE	Color 2 3 52 3 2 3 3	Line Type Continuous Continuous Continuous Continuous Continuous Continuous	Line Weight 02 03 02 03 02 03 02 03 02 03	Transparen 0 0 0 0 0 0 0 0	Plot Status plot plot plot plot plot plot plot	Description Moveable equipment Casework (manufactured c Slab openings and depres Architectural woodwork (fiel File cabinets Moveable partitions	File Name ABC-01 \01 ABC-01 \01 ABC-01 \01 ABC-01 \01 ABC-01 \01 ABC-01 \01
8	<b>()</b>							Back	

The search result is populated including its file name for easy identification on the file name for editing and the search button is renamed to "Go Back" and the Layer standard, Discipline list and group list is disabled. Click on the "Go Back" button to return to Main dialog.

#### Sorting:

Click on the layer list header to short in Ascending/Descending order

A>> -Indicates shorting in Ascending order

Z>> -Indicates shorting in Descending order

The sorting can be toggled either ascending or descending and to revert it back to default layer listing, the application should be closed and restarted.

Layolo ovinos.		
Name	A>> Color	Line Type
A-ELEV-MEDM	3	Continuous
A-SECT-IDEN	3	Continuous
A-SECT-MBND	3	Continuous
A-SECT-MEDM	3	Continuous
A-ELEV-MEDM-HIDN	3	Hidden2
A-SECT-MEDM-HIDN	3	Hidden2
A-ELEV-WIDE	4	Continuous
A-SECT-WIDE	4	Continuous
A-ELEV-WIDE-HIDN	4	Hidden2
A-SECT-WIDE-HIDN	4	Hidden2
A-ELEV-OTLN	5	Continuous
A-ELEV-THIK	5	Continuous
A-SECT	5	Continuous
A-SECT-THIK	5	Continuous

# **Right Click Menu:**

Right click menu on layer list view enables easy access to some of its features

Insert Layer:	Inserts selected layers
Search Layer:	Opens layer search dialog
Edit Layer File:	Opens the selected layer file for editing and reselecting the same file from the group list reloads the updated file.
Edit Settings:	Opens setting dialog for editing

Select All Ctrl+A: Selects all layers for insertion and use Control + A key combination for quick selection

be	Line Weigh	nt Transpa	ren Plot Statu	us Descri
ous	0.30	0	plot	Mediu
bus	0.30	Λ	plot	Comp
ous	0.30	Insert Layer	r	Materi
ous	0.30 🔍	Search Laye	er	All Me
2	0.30			Mediu
2	0.30 🏅	Edit Layer I	le	Mediu
ous	0.40 🎤	Edit Setting	js	Wide l
ous	0.40	Colored All	Chill A	All Wic
2	0.40	Select All	Ctri+A	Wide [
2	0.40	0	plot	Wide [
ous	0.50	0	plot	Buildir
ous	0.50	0	plot	Thick I