

CHAPTER 12 EXERCISES

Because of the complexity of an architectural project, many architects and/or engineers might work on the same project. For this reason it is necessary for each individual to maintain consistency with the layer names and objects that are created on each layer. The American Institute of Architects (AIA) has developed a standard for layer names in architectural drawings.

The standard begins by assigning a major category to each type of architectural element. Layer names begin with one letter designating the category. The table below lists the letter given for each of the major categories.

- A Architectural, interiors, and facilities management
- S Structural
- M Mechanical
- P Plumbing
- F Fire protection
- E Electrical
- C Civil engineering and site work
- L Landscape

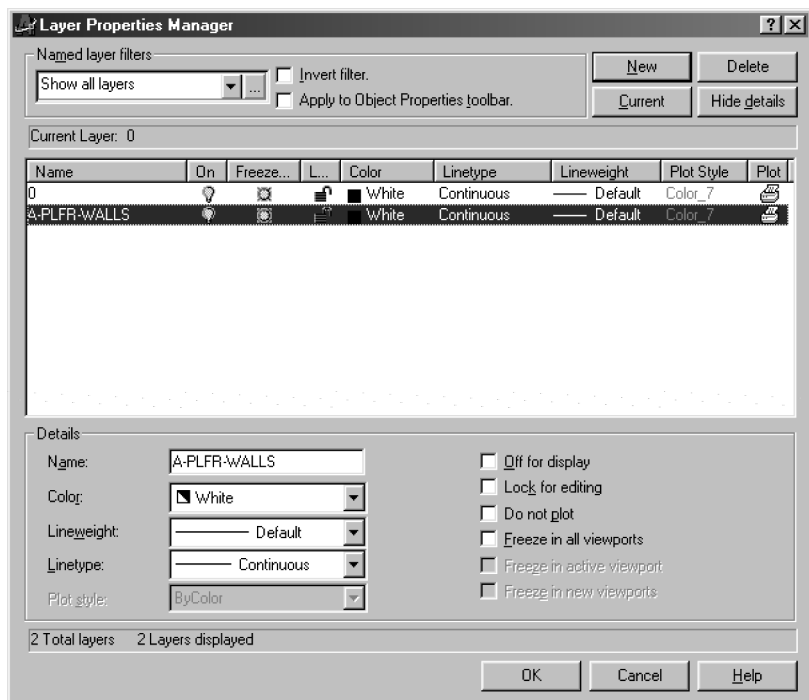
The second designator in the layer name is the minor group; for example, the architectural major group (A) contains minor groups for walls, doors, and furniture.

A third item in the layer name is known as the modifier. For example, we could create a layer called A-DOOR-WOOD. A is the major group (Architecture), DOOR is the minor group, and WOOD is the modifier.

1. Layers

- A. Open **PLAN.DWG** you worked with in previous chapters and open the *Layer Properties Manager* dialog box by any method. Click on the *New* button and enter the name **A-PLFR-WALLS** and click *OK*. Open the dialog box again and compare it with Figure AR12-1.

Figure AR12-1

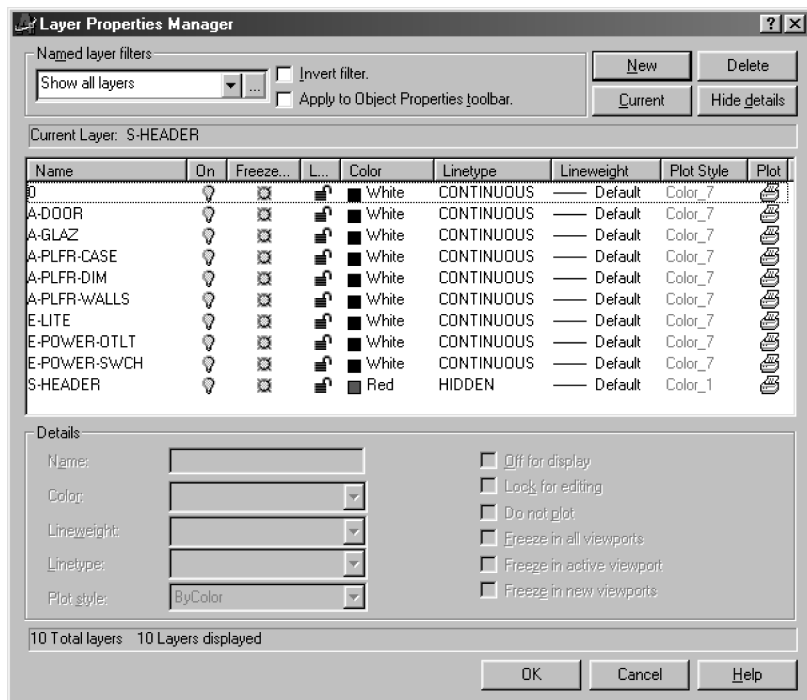


B. Create the additional layers given in the table below.

Layer Name	Major Group	Minor Group	Modifier
A-PLFR-WALLS	Architecture	Floor Plan	Walls
S-HEADER	Structural	Header	
A-DOOR	Architecture	Doors	
A-PLFR-DIMS	Architecture	Floor Plan	Dimensions
A- GLAZ	Architecture	Windows	
E-LITE	Electrical	Lighting	
E-POWER-SWCH	Electrical	Power	Switch
E-POWER-OTLT	Electrical	Power	Outlet

When finished, compare your *Layer Properties Manager* dialog box to Figure AR12-2.

Figure AR12-2



2. Modify Properties, Layer

Next move the walls to the proper layer. Select the lines on the drawing, then select the *Properties* icon button. Select the *Layer* option in the *Properties* dialog box, then select **A-PLFR-WALLS**.

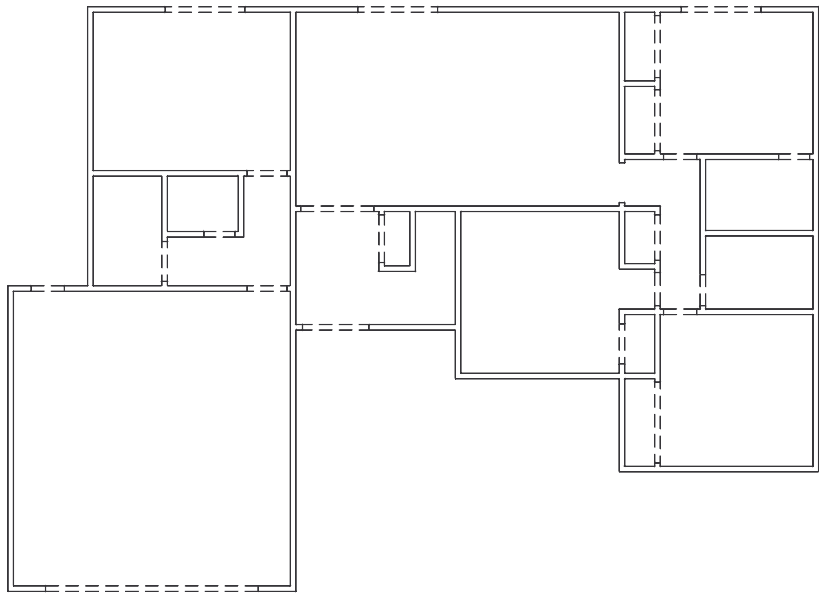
3. Modify Properties, Layer, Linetype

Open the *Layer Properties Manager* and select the **S-HEADER** Layer. Select the *Color* square and change the color to red. Change the linetype by clicking on *Linetype*, then *Load*, then *Hidden*, then *OK*. Make this layer the *Current* layer and select *OK*.

4. *Line, Ltyscale*

Zoom in to the garage (or use *View* and *Restore* the view) and draw two *Lines* from *Endpoint* to *Endpoint* at the opening for the garage door. Continue drawing these hidden lines for all of the openings in the floorplan as shown in Figure AR12-3. When finished set the *Ltyscale* to 48 and save PLAN.DWG.

Figure AR12-3



5. Plot Plan

Complete the drawing shown in Figure AR12-4. Use layers for each linetype. Do not dimension. *SaveAs* PLOTPLAN.

Figure AR12-4

