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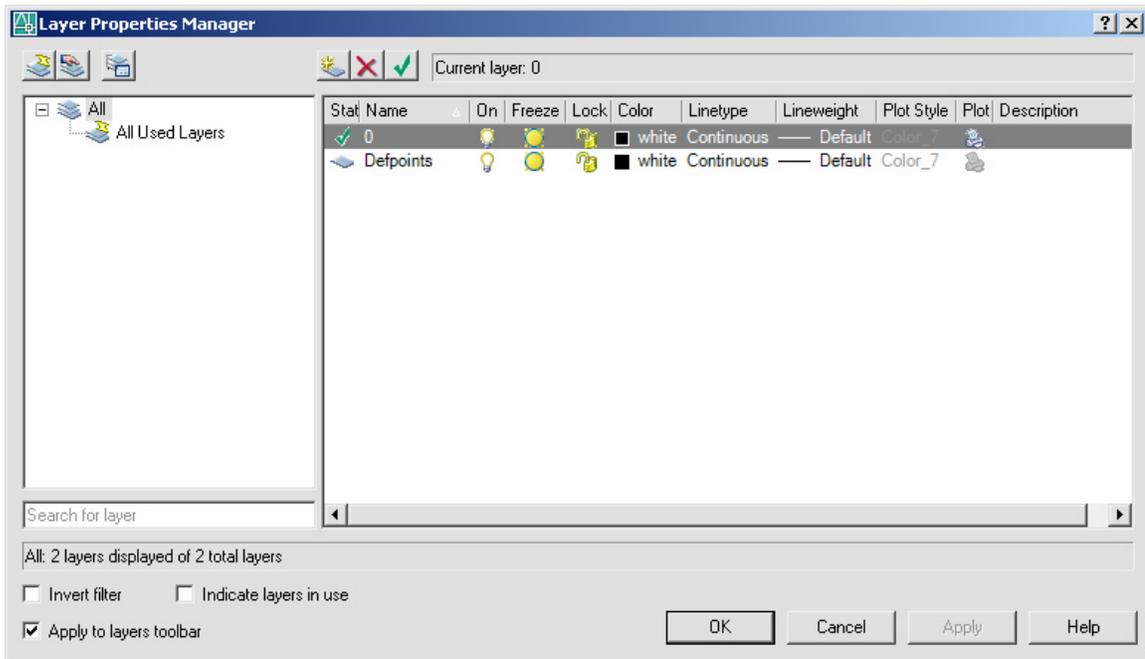
**Chapter 12**  
**Layers, Linetypes, Colors**

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# AutoCAD 2D Tutorial

## Introduction to Layers and Layer Dialog Box 12.1

1. **Choose** Format, Layer.  
**or**
2. **Type** LAYER at the command prompt.  
Command: **LAYER (or LA)**  
**or**
3. **Pick** the layers icon from the Layer Control box on the object properties toolbar.



# AutoCAD 2D Tutorial

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<b>?</b>	Lists layers, with states, colors and linetypes.
<b>Make</b>	Creates a new layer and makes it current.
<b>Set</b>	Sets current layer.
<b>New</b>	Creates new layers .
<b>ON</b>	Turns on specified layers.
<b>OFF</b>	Turns off specified layers.
<b>Color</b>	Assigns color to specified layers.
<b>Ltype</b>	Assigns linetype to specified layers.
<b>Freeze</b>	Completely ignores layers during regeneration.
<b>Thaw</b>	Unfreezes specified layers Ltype.
<b>Lock</b>	Makes a layer read only preventing entities from being edited but available visual reference and osnap functions.
<b>Unlock</b>	Places a layer in read write mode and available for edits.
<b>Plot</b>	Turns a Layer On for Plotting
<b>No Plot</b>	Turns a Layer Off for Plotting
<b>LWeight</b>	Controls the line weight for each layer

## TIP:

Layers can be set using the command line prompts for layers. To use this, type `-LAYER` or `-LA` at the command prompt

1. **Type** Command: **-LAYER** or **LA**
2. **Type** One of the following layer options  
`/?/Make/Set/New/ON/OFF/Color/Ltype/Freeze/Thaw:`

# AutoCAD 2D Tutorial

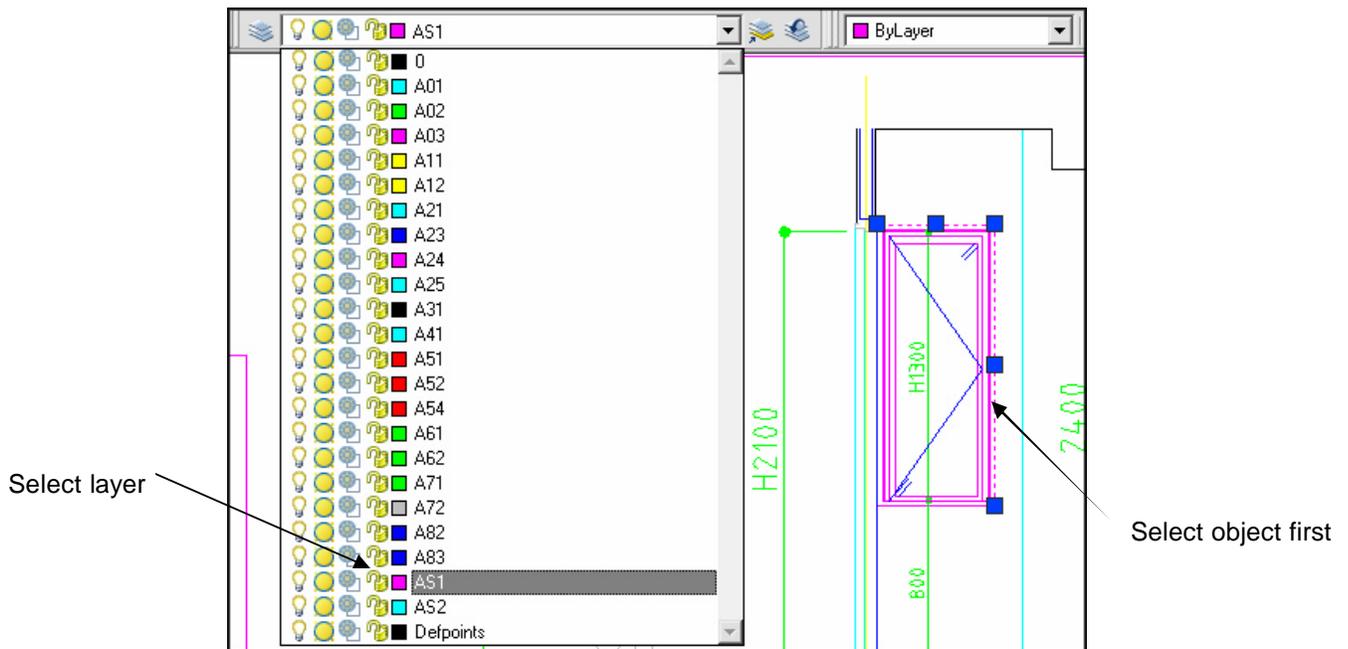
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## Layer Shortcuts 12.2

### Changing the Layer of an Object

1. **Click** Once on the object to change.
2. **Select** the desired layer from the Layer Control Box dropdown.

AutoCAD will move the object to the new layer.



# AutoCAD 2D Tutorial

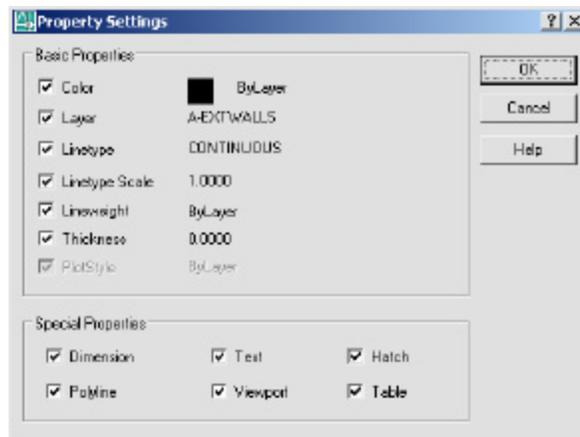
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## Making a Layer Current

1. **Click** once on the Make Object's Layer Current icon. 
2. **Select** object whose layer will become current:

## Match Properties

1. **Choose** Modify, Match Properties.  
**or**
2. **Click** the Match Properties Icon from the Standard toolbar.  
**or**
3. **Type** Command : **MATCHPROP** or **MA**
4. **Select** the object whose properties you want to copy (1).
5. **Select** the objects to which you want to apply the properties (2).



# AutoCAD 2D Tutorial

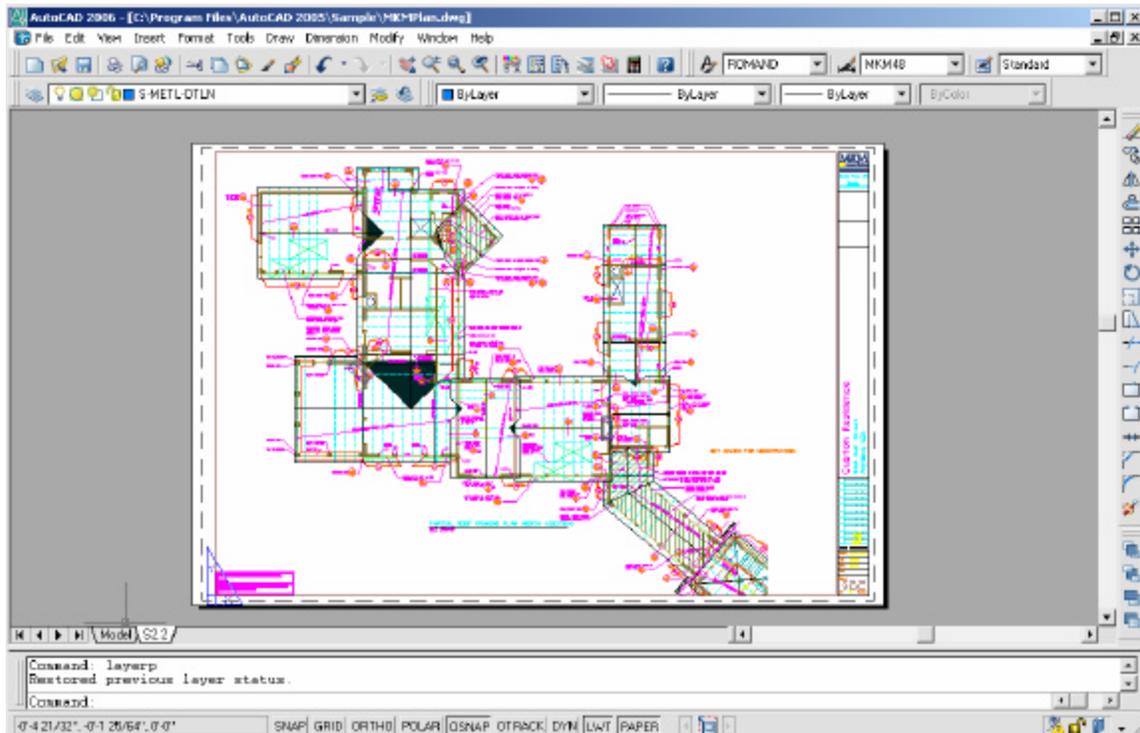
## Layer Previous 12.3

1. **Open** an AutoCAD drawing with layers.
2. **Turn** layers on/off.
3. **Zoom** or perform any AutoCAD Command.
4. **Type** LAYERP at the command prompt.

Command: LAYERP

or

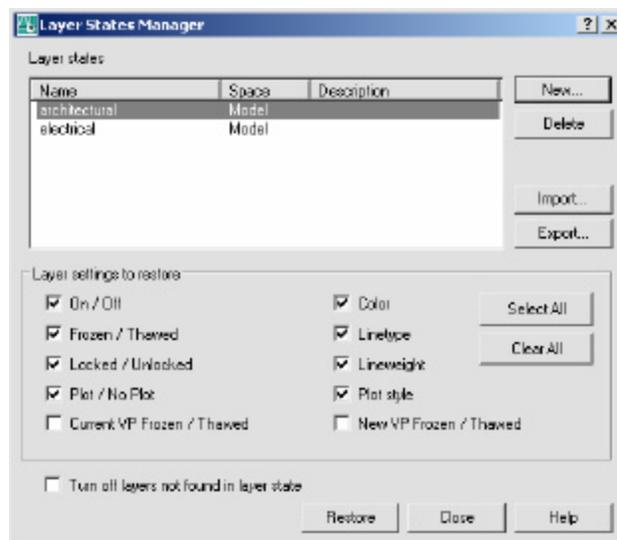
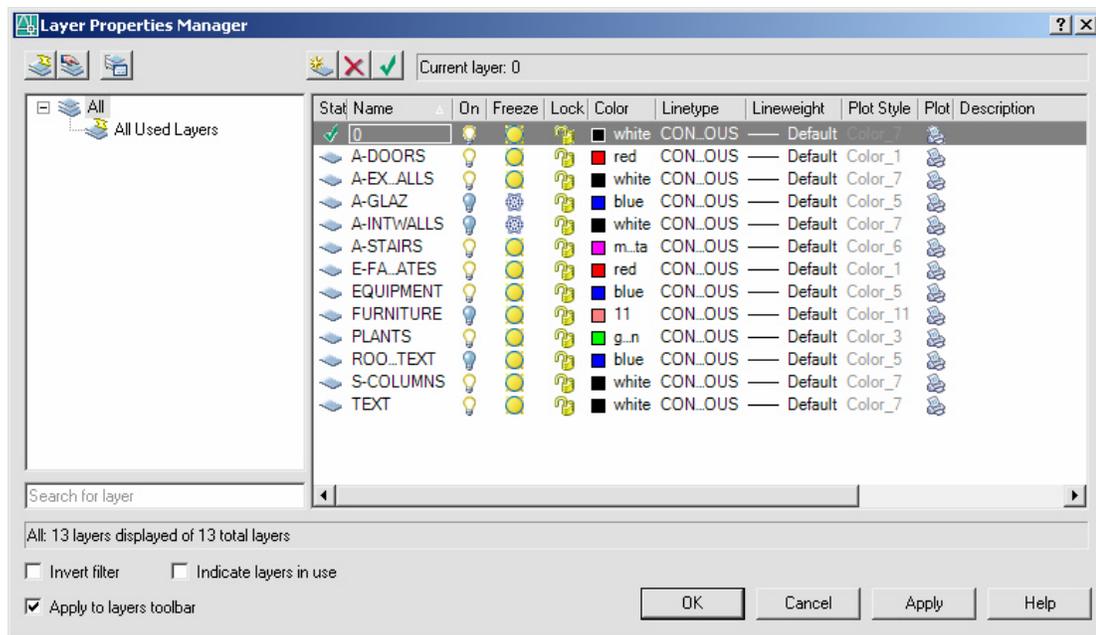
5. **Click** the Layer Previous icon.



# AutoCAD 2D Tutorial

## Layer States 12.4

1. **Choose** the layer icon.
2. **Select** various layers to be ON,OFF,FROZEN,LOCKED, etc.
3. **Choose** the Save State button.
4. **Choose** Restore State to restore the layer settings.

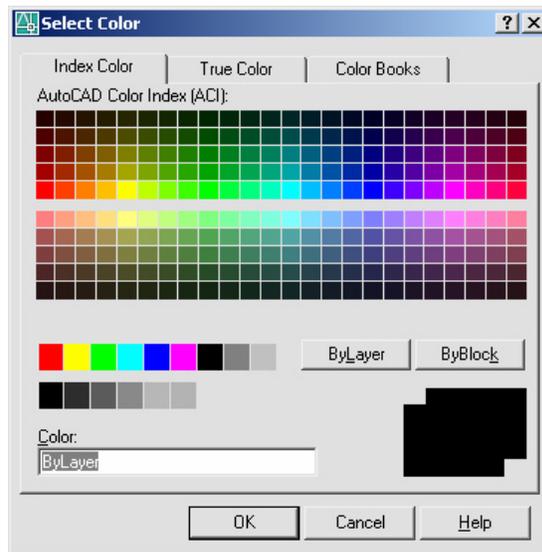


# AutoCAD 2D Tutorial

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## Color Command 12.5

1. **Choose** Format, Color.  
**or**
2. **Type** DDCOLOR at the command prompt.  
Command: **DDCOLOR or COL**  
**or**
3. **Choose** Color on the Object Properties toolbar and then select a color from the list or select Other to display the Select Color dialog box.



### TIP:

These settings ignore the current layer settings for color.

### By Layer

If you enter bylayer, new objects assume the color of the layer upon which they are drawn.

### By Block

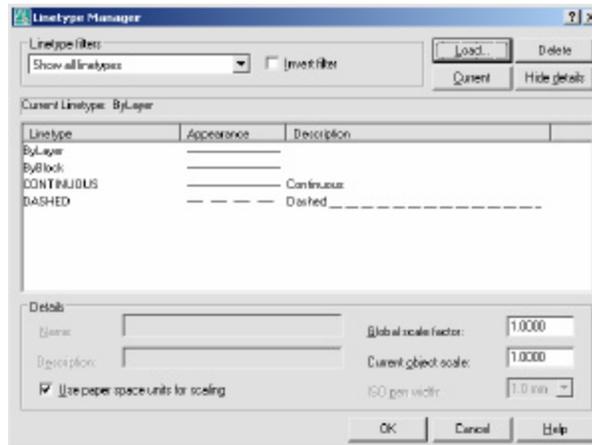
If you enter byblock, AutoCAD draws new objects in the default color (white or black, depending on your configuration) until they are grouped into a block. When the block is inserted in the drawing, the objects in the block inherit the current setting of the COLOR command.

# AutoCAD 2D Tutorial

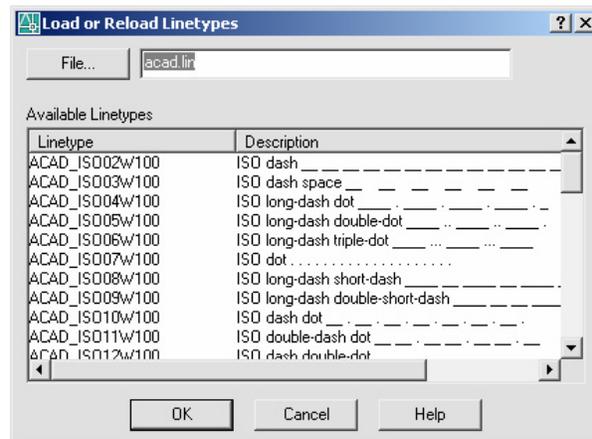
## Linetypes 12.6

### Loading and Changing Linetypes

1. **Choose** Format, Linetype...  
**or**
2. **Type** DDLTYPE at the command prompt.  
Command:DDLTYPE or LT
3. **Choose** Load... to see a list of available linetypes.



4. **Choose** the desired linetype to assign.



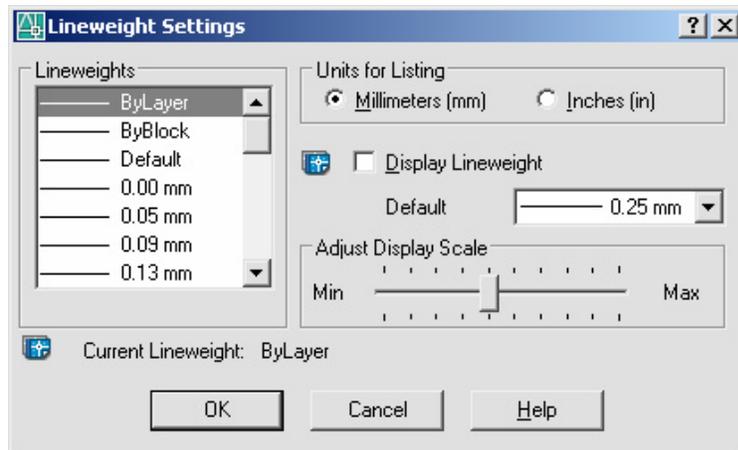
5. **Click** OK.

# AutoCAD 2D Tutorial

## Lineweights 12.7

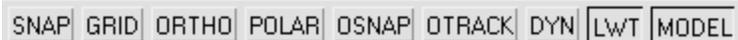
### Loading and Changing Lineweights

1. **Choose** Format, Lineweight...  
**or**
2. **Type** LINEWEIGHT at the command prompt.  
Command: **LINEWEIGHT** or **LWEIGHT**  
**or**
4. **Pick** a lineweight to make current from the Object Properties menu.



#### TIPS:

- Lineweights can also be assigned to layers.
- The Display Lineweights feature can be turned on/off on the status bar to show or not show lineweights in the drawing, thus making regenerations faster.



- Lineweights are displayed using a pixel width in proportion to the real-world unit value at which they plot. If you are using a high-resolution monitor, you can adjust the lineweight display scale to better display different lineweight widths.

# AutoCAD 2D Tutorial

## Object Properties 12.8

1. **Choose** Modify, Properties.  
or
2. **Click** the Properties icon.   
or
3. **Type** DDCHPROP or DDMODIFY at the command prompt.  
Command: **DDCHPROP** (CH) or  
**DDMODIFY** (MO)
4. **Pick** Objects whose properties you want to change  
Pick a window for DDCHPROP, single object for DDMODIFY.  
Select objects:(select)
5. **Press** ENTER to accept objects.  
Select objects: (press enter)
6. **Choose** One of the following properties to change.

