

This guide covers some of the most commonly using AutoCAD commands used to modify or manipulate objects in a drawing.

Copy

- Icon: 
- Command: COPY
- Location: *Modify* panel on the *Modify* ribbon
Modify toolbar
- Description: Copies a drawing object
- Procedure:
1. Select the object(s) to copy and right click or hit enter. Continue to click on objects to add to the selection set. Hold the shift key and click an object to remove it from the selection set.
 2. Click on a base point
 3. Click on a second point to copy the object to. You can continue to copy the object by selecting points in the drawing until you hit the ESC key to exit the copy command.

Move

- Icon: 
- Command: MOVE
- Location: *Modify* panel on the *Modify* ribbon (Pull down arrow on *Modify* panel to display additional command options)
Modify toolbar
- Description: Moves a drawing object
- Procedure:
1. Select the object(s) to move and right click or hit enter. Continue to click on objects to add to the selection set. Hold the shift key and click an object to remove it from the selection set.
 2. Click on a base point
 3. Click on a second point to move the object to.

Rotate

- Icon: 
- Command: ROTATE
- Location: *Modify* panel on the *Modify* ribbon
Modify toolbar
- Description: Rotates a drawing object
- Procedure:
1. Select the object(s) to rotate and right click or hit enter. Continue to click on objects to add to the selection set. Hold the shift key and click an object to remove it from the selection set.
 2. Click on a base point that you want to rotate the object(s) around
 3. Specify a rotation angle. You can either manually rotate the object by moving the mouse and clicking in the drawing area, you can type in a value for the rotation angle, or you can use the reference option by typing 'R' at the command line and hitting Enter. With the reference option, you can select two points on the object you are rotating and then a third point where you want to rotate the object to.

Stretch

- Icon: 
- Command: STRETCH
- Location: *Modify* panel on the *Modify* ribbon
Modify toolbar
- Description: Stretches objects in the drawing. Objects such as circles, ellipses, and blocks, cannot be stretched.
- Procedure:
1. Select the object(s) to stretch and right click or hit enter. Objects that are partially enclosed by a crossing window are stretched. Objects that are completely enclosed within the crossing window, or that are selected individually, are moved rather than stretched.
 2. Click on a base point to represent the starting point of the stretch length.
 3. Click on a second point to represent the ending point of the stretch length.

Scale

Icon:



Command:

SCALE

Location:

Modify panel on the *Modify* ribbon
Modify toolbar

Description:

Expands or shrinks drawing objects

Procedure:

1. Select the object(s) to scale and right click or hit enter. Continue to click on objects to add to the selection set. Hold the shift key and click an object to remove it from the selection set.
2. Click on a base point to represent the point to scale objects from .
3. Specify a scale factor. You can either manually scale the object by moving the mouse and clicking in the drawing area, you can type in a value for the scale factor, or you can use the reference option by typing 'R' at the command line and hitting Enter. With the reference option, you can select two points on the object you are scaling and then a third point that represents the length that you want to have between the first two points you selected.

Offset

Icon:



Command:

OFFSET

Location:

Modify panel on the *Modify* ribbon
Modify toolbar

Description:

Offsets drawing objects a given distance or through a point.

Procedure:

1. Specify the distance to offset the object.
2. Select the object to offset. Only one object can be offset at a time.
3. Select the side of the object where you want it to be offset to.

Mirror

Icon:



Command:

MIRROR

Location:

Modify panel on the *Modify* ribbon
Modify toolbar

Description:

Mirrors objects about a base line

Procedure:

1. Select the object(s) to mirror and right click or hit enter.
2. Click on the first point of the mirror line.
3. Click on the second point of the mirror line.
4. Specify whether you want to erase the source object or not. If you answer no, a copy will be made that is a mirror image of the original object.

Trim

Icon:



Command:

TRIM

Location:

Modify panel on the *Modify* ribbon
Modify toolbar

Description:

Trims object(s) using a cutting line defined by another drawing object.

Procedure:

1. Select the object that you want to use as a cutting line to trim the object you want to modify and right click or hit enter.
2. Select the object(s) that you want to trim. You can select objects individually or window to select multiple objects. When you use a window, all of the objects that the window overlaps will be trimmed.

NOTE: If the object that you want to trim does not intersect with your cutting line, type E at the command line (for Edge) and then select the object(s) you want to trim. This will cause the object(s) to be trimmed at the point where it would intersect with the cutting line.

Extend

- Icon: 
- Command: EXTEND
- Location: *Modify* panel on the *Modify* ribbon (pull down arrow next to *Trim* command)
Modify toolbar
- Description: Extends object(s) using an extension line defined by another drawing object.
- Procedure:
 1. Select the object that you want to use as an extension line to extend the object you want to modify and right click or hit enter.
 2. Select the object(s) that you want to extend. You can select objects individually or window to select multiple objects. When you use a window, all of the objects that the window overlaps will be trimmed.

NOTE: If the object that you want to extend does not intersect with your extension line, type E at the command line (for Edge) and then select the object(s) you want to extend. This will cause the object(s) to be extended to the point where it would intersect with the extension line.

Erase

- Icon: 
- Command: ERASE
- Location: *Modify* panel on the *Modify* ribbon
Modify toolbar
- Description: Erase objects
- Procedure:
 1. Select the objects(s) that you want to erase. You can continue to click on objects to add them to the set of items to erase. If you want to remove an object from the set, hold down the shift key and select it again.

Explode

- Icon: 
- Command: EXPLODE
- Location: *Modify* panel on the *Modify* ribbon
Modify toolbar
- Description: Explode objects into individual components or segments
- Procedure:
 1. Select the objects(s) that you want to explode. You can continue to click on objects to add them to the set of items to explode. If you want to remove an object from the set, hold down the shift key and select it again.

Break

- Icon: 
- Command: BREAK
- Location: *Modify* panel on the *Modify* ribbon (Pull down arrow on *Modify* panel to display additional command options)
Modify toolbar
- Description: Breaks an object between two points
- Procedure:
 1. Select the first point where you want to break the object
 2. Select the second point where you want to break the object

Break at Point

- Icon: 
- Command: N/A
- Location: *Modify* panel on the *Modify* ribbon (Pull down arrow on *Modify* panel to display additional command options)
Modify toolbar
- Description: Breaks as objects at one point
- Procedure:
 1. Select the object that you want to break
 2. Select the point along the object where you want the object to be broken.

Fillet

Icon:



Command:

FILLET

Location:

Modify panel on the *Modify* ribbon
Modify toolbar

Description:

Places an arc fillet between two objects

Procedure:

1. When you start the command, you will be asked to select the first object. At this point, you will have the option to specify the radius of the arc that will be placed between the objects by typing R at the command line and then providing a value for the curve radius.
2. Select the second object.

Chamfer

Icon:



Command:

CHAMFER

Location:

Modify panel on the *Modify* ribbon (pull down arrow next to Fillet command)
Modify toolbar

Description:

Bevels the edge of objects a given distance along each edge from the corner.

Procedure:

1. When you start the command, you will be asked to select the first object. At this point, you will have the option to specify the distances that will be provided from the intersection point at the corner by typing D at the command line and then providing values for the chamfer length on each side.
2. Select the second object.