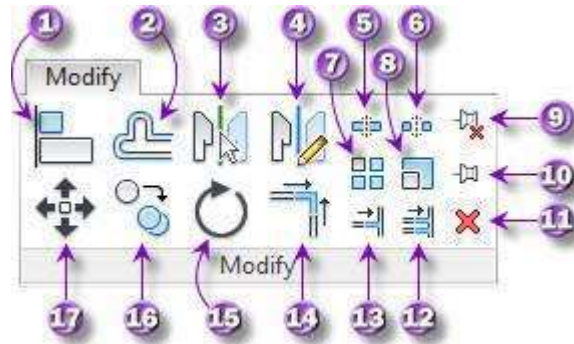# ARCHITECTURAL MODELING USING REVIT

MODIFY TOOLS

INTRODUCTION TO MODIFY TOOLS

Introduction:

     In a complex family, assembling and putting parts together are made easier with the Modify tools.

     These are the modified tools we are going to see in MODIFY Tab which is at the main menu bar.

     To understand how these tools work, open the Default metric template. Draw simple wall or any shapes then follow the procedure explained below:

Note: The letters after the name of the tool are the default keyboard shortcuts.

Align (AL):

     This tool is used to align an element or multiple elements to a selected element. In the family environment, it is generally used to align and lock elements to reference planes. To use it, you first select the element or reference plane where you want the object to align to. Next, click the second object.

Offset (OF):

     This tool copies or moves an element at a specified distance entered in the Offset box in the Options bar. The offset can also be done interactively by selecting the Graphical button option.

Mirror-Pick Axis (MM):

     This tool mirrors a copy or duplicates an element about an axis. The axis can be a model line, symbolic line, reference plane, reference line or an edge of an extrusion. The selected element (or multiple elements) is copied and flipped to the other side of the clicked axis.

Mirror - Draw Axis (DM):

     When this tool is chosen, the cursor functions similarly to a line   tool. However, it draws an invisible line that acts as the mirror axis. After drawing the invisible line, the selected element is copied and flipped to the other side of the drawn axis.

Split Element (SL):

     The Split Element tool is used to cut or split lines, arcs, circles and ellipses while in sketch mode. It can also be used to cut model lines, symbolic lines and reference lines.

Split with Gap:

The Split with Gap tool is used to cut or split lines, arcs, circles and ellipses while in sketch mode. It creates a gap in the lines, and there was a particular limit for this gap.

Array (AR):

This tool creates a duplicate or multiple instance of one or more selected elements. The duplicates can follow a linear or circular path. The number of instances and their locations relative to one another can be specified in the Options bar. There is also an option to group and associate selected elements that are being arrayed.

Scale (RE):

This tool resizes model, symbolic and reference lines. In Edit mode, it resizes profiles used in masking regions, filled regions, extrusions and split faces. The Options bar contains an option to scale an element graphically or numerically.

Unpin (UP):

This tool unpins or unlocks an element that has been locked by the pin tool.

Pin (PN):

This tool is used to lock an element in place. A pinned element cannot be moved or edited.

Delete (DE):

This tool removes a selected element from the drawing area. It is the equivalent of pressing the Delete key.

Trim/Extend Multiple Elements:

This tool trims or extends more than one element to a boundary. The boundary can be a model line, symbolic line, reference plane or reference line. It is also available in the sketch mode for extending or trimming lines and arcs.

Trim/Extend Single Element:

This tool trims or extends an instance of an element to a boundary. The boundary can be a model line, symbolic line, reference plane or reference line. It is also available in the sketch mode for extending or trimming an element to a boundary.

Trim/Extend to Corner (TR):

This button trims and extends elements to form a corner. It is also available in the sketch mode for extending or trimming lines and arcs to form a corner.

Rotate (RO):

This tool rotates one or more elements around a center point, which is the rotation axis. In plan, elevation and section views, the rotation axis is perpendicular to the view. In a 3D view, the rotation axis is perpendicular to the work plane.

Copy (CO):

This tool creates a duplicate of an element that can interactively be placed by dragging it to a desired location. The listening dimension can also be used to specify a specific distance. This copy function, however, does not store the element in the clipboard.

Move (MV):

With this tool, an element can be precisely or interactively moved to a desired location. The listening dimension can also be used to enter a specific distance.