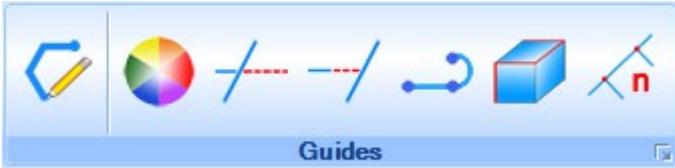## GUIDES

Guide options in viskar allows the user to create and edit 2D guide lines.

1.POLYLINE

To draw 2D section or guide lines the polyline option is used in VISKAR. Based on the user requirement guide lines can be drawn using options such as rectangle, center rectangle, table, polyline, circle, spiral, arc, steps, offset, new offset, mid, online. These options are explained below.

RECT – Rectangle. Select the polyline option from the modelling tab and enter RECT or right click the mouse & choose the RECT
   a) Pick a start point and give length & breadth dimensions of rectangle.
      b) Pick one corner point and then pick the diagonally opposite corner point with free hand option

CRECT – Center Rectangle. Select the polyline option from the modelling tab and enter CREC or right click the mouse & choose the CRECT
   a) Pick a start point and give length and breadth dimensions for rectangle.
   b) Pick the center point of the rectangle and then one of the corners with free hand option

TAB – Table. Draws a guide line or setion based on a table of X, Y and Z values given.Open or Closed.

DRAW – Draws a single or multi-segmented line. Several options for second and third pick points that can be changed with each segment. Open or Closed. User can drawn using this option

NP – N-Sided Polygon. Pick a center point, enter number of sides from 3 to 24 and pick second point. Enter the dimension which will be distance between the vertex points and the center point. Note the polygon drawn is always inscribed within a circle of the radius.

CIR – Circle. Pick center point, pick radius or enter value for radius.

SPIRAL – Spiral. Pick start point and end point. Enter spiral radius and enter the distance between each ring.

A – Arc will be three point arc which is center, start and end. Select the center point. Pick the start point and the endpoint. Note the arc sweeps clockwise or counter-clockwise with respective to the start point direction.

S – Steps. Pick the start point (can be either the very top or very bottom riser). Enter the riser value and then the tread value and pick the total run of stair.

OFF- offset, is the method of picking a point from a single first point, pick the first point, and enter the X, Y and Z directions respectively by placing the mouse over the directions

NOFF - new offset, it is similar to offset with a new first point

ONL - Online, pick the first and the second from points in a direction and distance , enter the distances in X, Y and Z direction by placing the mouse over the respective directions.

MID -midpoint, a method of picking a point centered between the first and the second from points

Note: that the recently used guide type becomes the default tool on the toolbar.

2.GUIDE PROPERTIES

Guide Properties option allows the user to set the default colour for guide lines.

  ➢ **Select modelling tab → guides properties → select the colour → Apply**

3.TRIM GUIDES

Trim option allows the user to trim the guides. Select all guides that are to be trimmed and used to trim, select segments to delete.

Note: the object to be trimmed must intersect the trimming object

> **Select modelling tab → trim guides → select entities→ select entities to be trimmed**

4.EXTEND GUIDES

Extend option allows the user to extend the guide to a target guide for extension. Select a guide to be extended, select the target guide.

> **Select modelling tab → extend guides → select the line to extend→ select target entity**

5.CONVERTION OF LINES AND POLYLINES

This option is used to convert lines to polylines and vice versa. Select the entities to be converted, select the type of conversion to be done.

Lines to polylines – Selected lines will be converted to a single polyline if possible.

> Select modelling tab → conversion of lines and polylines→ Select the lines → Enter → Select lines to polylines.

Polylines to lines – Converts selected polyline into individual guide lines.

> Select modelling tab → conversion of lines and polylines→ Select the polyline → Enter → Select polyline to lines.

6.EDGE POLYLINE

Edge polyline allows the user to draw lines over the edges instantly. There are two options available in edge polyline. After selecting the edge polyline, to draw lines only on the selected edges of an object, select the **EDGES** option and to draw lines on all the edges of an objects, select the **OBJECT** option.

> ➢ **Select modelling tab → Edge polylines→ Select the method of conversion → Select the edges or the object.**
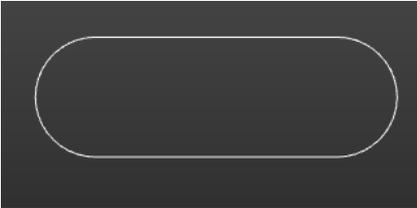
7.DIVIDE GUIDES

This option allows the user to divide the selected guide into specified number of segments.

> ➢ **Select modelling tab → divide guides → select object to divide → enter number of segment**
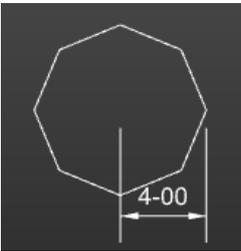
Note: Divide option is applicable only on arcs, circle and lines.

EXERCISES

1.Draw a 3' square

2.Draw a rectangle 10' x 4'

3.Draw a circle 12'-2 3/4" in diameter.

4.Change the guide colour property to orange and continue.

5.Draw a set of stairs with a tread height of 7", 11" treads and a total run of 78".

6.Draw a polyline shape using several options, switch between arcs and lines.

7.Draw an octagon with an inscribed radius of 4'-0"

8.Divide a guide line into (5) segments. Select various guide types to see where it does work and where it may not.

9.Draw several lines and trim a few. Draw some that cross and others that do not to see where it works and where it does not. Move the mouse over the guides to see the effect.

10.Convert several guides to polylines. Mouse over the guides to see the effect.

11.Convert several guides to lines. Mouse over the guides to see the effect.

12.Select a guide and see if the grips can be used to edit guides. Strat grip center grip end grip.

13.Right click a guide and try a few options that seem helpful

14.Window select all the guides and delete. Note how the grid lines are unaffected. Undo and repeat with a crossing window