

### Large Tool Set

- Select (Spacebar) Lasso
- Paint Bucket (B) Eraser (E)
- Make Component Tag
- Line (L) Freehand
- Rectangle (R) Rotated Rectangle
- Circle (C) Polygon
- Arc 2 Point Arc (A)
- 3 Point Arc Pie
- Move (M) Push/Pull (P)
- Rotate (Q) Follow Me
- Scale (S) Offset (F)
- Tape Measure (T) Dimensions
- Protractor Text
- Axes 3D Text

- Flip Field of View
- Orbit (O) Pan (H)
- Zoom (Z) Zoom Window
- Zoom Extents Previous
- Position Camera Walk
- Look Around Section Plane

### Solid Tools

- Outer Shell Intersect (Pro)
- Union (Pro) Subtract (Pro)
- Trim (Pro) Split (Pro)

### Sandbox (Terrain)

- From Contours From Scratch
- Smoove Stamp
- Drape Add Detail
- Flip Edge

### Standard Views

- Iso
- Front
- Back
- Top
- Right
- Left

### Style

- X-Ray
- Wireframe
- Shaded
- Monochrome
- Back Edges
- Hidden Line
- Shaded with Textures

### Dynamic Components

- Interact
- Configurator Tool
- Component Attributes

### Location

- Add Location
- Toggle Terrain

### Warehouse

- 3D Warehouse
- Share Component
- Send to LayOut (Pro)
- Extension Warehouse
- Share Model
- Classifier (Pro)

**Middle Button (Wheel)**


Scroll	Zoom
Click-Drag	Orbit
Shift+Click-Drag	Pan
Double-Click	Re-center view

Tool	Operation	Instructions
<b>2 Point Arc (A)</b>	Bulge	specify bulge amount by typing a number and Enter
	Radius	specify radius by typing a number, the R key, and Enter
	Segments	specify number of segments by typing a number, the S key, and Enter
<b>3 Point Arc</b>	Option '+' or '-'	use Option '+' or Option '-' to change the number of segments.
	Arrows	lock direction; up = blue, right = red, left = green, and down = parallel/perpendicular
<b>Circle (C)</b>	Shift	lock current inferences
	Radius	specify radius by typing a number and Enter
	Segments	specify number of segments by typing a number, the S key, and Enter
<b>Eraser (E)</b>	Option	soften/smooth (use on edges to make adjacent faces appear curved)
	Shift	hide
	Option+Shift	unsoften/unsmooth
<b>Field of View</b>		drag the mouse or manually enter a value using the Field of View box
<b>Follow Me</b>	Command	use face perimeter as extrusion path
	<i>Expert Tip!</i>	first Select path, then choose the Follow Me tool, then click on the face to extrude

<b>Flip</b>		click the plane to control the direction of the flip operation
	Option	toggle between flip and copy
<b>Lasso</b>	Shift	add/subtract from selection
	Option	add to selection
	Shift+Option	subtract from selection
<b>Line (L)</b>	Shift	lock in current inference direction
	Arrows	lock direction; up = blue, right = red, left = green, and down = parallel/perpendicular
	Length	specify length by typing a number and Enter
<b>Look Around</b>	Eye Height	specify eye height by typing a number and Enter
<b>Move (M)</b>	Option	toggle copy mode, allows multiple consecutive
	Shift	hold down to lock in current inference direction
	Command	auto-fold (allow move even if it means adding extra edges and faces)
	Arrows	lock direction; up = blue, right = red, left = green, and down = parallel/perpendicular
	Distance	specify move distance by typing a number and Enter
	External Copy Array	X copies in a row: move first copy, type a number, the X key, and Enter
	Internal Copy Array	X copies in between: move first copy, type a number, the / key, and Enter
<b>Offset (F)</b>	Command	allow results to overlap
	Distance	specify an offset distance by typing a number and Enter
<b>Orbit (O)</b>	Option	hold down to disable "gravity-weighted" orbiting
	Shift	hold down to activate Pan tool
<b>Paint Bucket (B)</b>	Option	fill material – paint all matching adjacent faces
	Shift	replace material – paint all matching faces in the model
	Option+Shift	replace material on object – paint all matching faces on the same object
	Command	hold down to sample material
<b>Protractor</b>	Option	toggle guide creation
	Arrows	toggle lock rotation plane
<b>Push/Pull (P)</b>	Option	push/pull a copy of the face (leaving the original face in place)
	Double-Click	apply last push/pull amount to this face
	Distance	specify a push/pull amount by typing a number and Enter
<b>Rectangle (R)</b>	Option	start drawing from center
	Dimensions	specify dimensions by typing length, width and Enter ( <i>ie. 20,40</i> )
<b>Rotated Rectangle</b>	Shift	lock in current direction/plane
	Command	lock drawing plane for first edge (after first click)
	Dimensions, Angle	click to place first two corners, then type width, angle and Enter ( <i>ie. 90,20</i> )
<b>Rotate (Q)</b>	Option	rotate a copy
	Angle	specify an angle by typing a number and Enter
	Slope	specify an angle as a slope by typing a rise, a colon (:), a run, and Enter ( <i>ie. 3:12</i> )
<b>Scale (S)</b>	Option	hold down to scale about center
	Shift	hold down to scale uniformly (don't distort)
	Amount	specify a scale factor by typing a number and Enter ( <i>ie. 1.5 = 150%</i> )
	Length	specify a scale length by typing a number, a unit type, and Enter ( <i>ie. 10m</i> )
<b>Search (Shift+S)</b>		search SketchUp command list for tools or commands
<b>Select (Spacebar)</b>	Option	add to selection
	Shift	add/subtract from selection
	Option+Shift	subtract from selection
<b>Tape Measure (T)</b>	Option	toggle create guide or measure only
	Arrows	lock direction; up = blue, right = red, left = green, and down = parallel/perpendicular
	Resize	resize model: measure a distance, type intended size, and Enter
<b>Zoom (Z)</b>	Shift	hold down and click-drag mouse to change Field of View

<b>Tools</b>		<b>Page</b>			
Select (Space)	Polygon	Add Page	Pan	Align Left	Object Snap Off
Line (L)	Offset	Duplicate Page	Zoom	Align Right	Grid Snap On
Freehand	Text (T)	Delete Page	Zoom In	Align Top	Grid Snap Off
Arc	Label	Previous Page	Zoom Out	Align Bottom	
2 Point Arc (A)	Linear Dimension (D)	Next Page	Actual Size	Align Vertical Centers	
3 Point Arc	Angular Dimension	<b>Edit</b>	Zoom to Page	Align Horizontal Centers	
Pie	Table	Undo	Zoom Extents	Space Horizontally	
Rectangle (R)	Erase	Redo	Start Presentation	Space Vertically	
Rounded Rectangle	Style (B)	Group	<b>Arrange</b>	Center Vertically	
Bulged Rectangle	Split	Ungroup	Bring to Front	Center Horizontally	
Lozenge	Join	<b>View</b>	Bring Forward (Shift =)	Flip Left to Right	
Circle (C)		Show Grid	Send Backward (Shift -)	Flip Top to Bottom	
Ellipse		Hide Grid	Send to Back	Object Snap On	

To add other tools, right-click the top of your document window and choose "Customize Toolbar"

Tool	Operation	Instructions
<b>Circle (C)</b>	Double-Click	create circle identical to previous one drawn
<b>Linear Dimension (D)</b>	Option	hold down to unconstrain dimension orientation
	Command	hold down to switch leader direction
	Double-Click	repeat previous dimension offset
<b>Ellipse</b>	Option	start drawing from center
	Shift	constrain to circle
	Double-Click	create ellipse identical to previous one drawn
<b>Join</b>	Click	join line segments by clicking on each in turn
<b>Line (L)</b>	Shift	lock in horizontal or vertical direction
	Length	specify length by typing a number and Enter

<b>Label</b>	Command	hold down to flip text to other side
	Option	hold down to unconstrain second segment
	Click > Double-Click	create one-segment leader line
	Click > Click > Click	create two-segment leader line
	Click-Drag	create curved leader line
	Edit Label Text	double-click label text to edit
<b>Offset</b>	Edit Leader Line	double-click leader line and move endpoints or line segments to edit
	Command	offset both sides of an open path
<b>Polygon</b>	Up/Down	tap up or down arrow to change number of segments for curved lines
	Shift	lock in current inference direction
<b>Rectangle (R)</b>	Double-Click	create polygon identical to previous one drawn
	Sides	specify number of sides by typing a number, the S key, and Enter
	Option	start drawing from center
	Shift	constrain to square
<b>Rectangle, Rounded</b>	Double-Click	create rectangle identical to previous one drawn
	Dimensions	specify dimensions by typing width, height and Enter (ie. 20,40)
<b>Rectangle, Bulged</b>	Up/Down	tap up or down arrow while drawing to change corner radius
<b>Select (Spacebar)</b>	Up/Down	tap up or down arrow while drawing to change bulge amount
	Click-Drag	move selected entities
	Click-Drag+Command	hold down to select entities without moving
	Option	hold down while moving to create a copy
	Distance	specify move distance by typing a number and Enter
	External Copy Array	X copies in a row: move first copy, type a number, the X key, and Enter
	Internal Copy Array	X copies in between: move first copy, type a number, the / key, and Enter
	Option (selecting)	hold down while clicking to add to selection
	Shift (selecting)	hold down while clicking to add/subtract from selection
	Option+Shift (selecting)	hold down while clicking to subtract from selection
	Shift (scaling)	hold down while scaling to scale uniformly (don't distort)
Command	hold down to scale about center	
Shift (rotating)	hold Shift while hovering over a rotation grip to set a custom start angle	
<b>Style</b>	Click	sample style properties (stroke, fill, color, pattern, font, size, arrow, etc)
	Click Again	apply sampled style properties
<b>Split</b>	Click	split line(s) at click point
<b>Table</b>	Double-Click	create table identical to previous one drawn
	Cells	specify cell number by typing column number, row number and Enter
<b>Text</b>	Click	create an unbounded text box
	Click-Drag L to R	hold down to create a left-aligned bounded text box
	Click-Drag R to L	hold down to create a right-aligned bounded text box
	Click-Drag+Option	hold down to create a center-aligned, center-anchored, bounded text box
<b>Other Tips</b>	Snaps	right-click on anything but a drawing element to switch between snaps
	Line Weights	use the Styles tab in the SketchUp Model dialog to change line weights
	Dimension Edit	double-click dimensions to edit individual entities with the Shape Style panel
<b>Mouse Wheel</b>	Scroll	Zoom
	Click-Drag	Pan