

















# Tgi3D® SU Plugin v1.28 Quick Reference

(rev. 1.2.6)







## Tgi3D Toolbar

	Tgi3D Select Tool
	Tgi3D Move Tool
	Construction Point Tool
	Cross Section Tool
	Set World Coordinates
	Warper
	Channel Extrude
	Image-Based Surface Modeler
	Tgi3D Settings

## Tgi3D Image-Based Surface Modeler

	Initial Estimate
	Single-Segment Surface
	Multi-Segment Surface
	Refine-Estimate
	Upsample Mesh
	Flip if necessary
	Image-Based Surface Modeler Help

## Lock and Fix Status under Tgi3D Move Tool

	No Lock	Locked in current View	Locked in another view
No fix			
Fixed			

## Tgi3D Move Tool

Purpose	Action	Instructions
Move a vertex	Left mouse drag	Press and hold the left mouse button on the vertex and drag
Convert a line to a Bézier curve	Ctrl + left mouse click <b>(Windows)</b> alt/option + left mouse click <b>(Mac)</b>	<b>(Windows)</b> Press and hold Ctrl key and click or drag the left mouse button anywhere on the line <b>(Mac)</b> Press and hold 'alt/option' key and click or drag the left mouse button anywhere on the line
Stretch or stress a Bézier curve	Left mouse drag	Press and hold the left mouse button anywhere on the Bézier curve and drag
Restrict movements to a plane Snap to another vertex	Shift	Press and hold Shift key while executing any other action in move tool to restrict movement to a plane determined by the closest face. You can snap the vertex on move to another vertex if you press and hold the Shift key during move. Snap occurs when you release the mouse button after a green circle with an 'Endpoint' highlight is displayed.

## Tgi3D Select Tool

Purpose	Action	Instructions
Select a face and its edges	Left mouse click	Position the cursor over the face to be selected and click the left mouse button.
Select multiple faces	Left mouse drag	Press the left mouse button and drag over multiple faces while holding down the left mouse button.
Bounded face selection	Left mouse double click	Double clicking the left mouse button over a face selects all the entities (edges and faces) physically connected to that entity until a boundary in the form of a hard edge
Incremental Bounded face selection	Ctrl + Left mouse double click <b>(Windows)</b> alt/option + Left mouse double click <b>(Mac)</b>	<b>(Windows)</b> Pressing Ctrl key and double clicking the left mouse button over a face selects all the entities (edges and faces) physically connected to that face until previous selection or a boundary is encountered. <b>(Mac)</b> Pressing 'alt/option' key and double clicking the left mouse button over a face selects all the entities (edges and faces) physically connected to that face until previous selection or a boundary is encountered.
Select boundary edges	Ctrl + left mouse click <b>(Windows)</b> alt/option + left mouse click <b>(Mac)</b>	<b>(Windows)</b> Pressing Ctrl key and left-mouse click on an edge grows the selection on same type of edges connected to that edge. <b>(Mac)</b> Pressing 'alt/option' key and left-mouse click on an edge grows the selection on same type of edges connected to that edge.
De-select	Shift + left mouse click	Position the cursor over a face that has already been selected, press and hold the Shift key and click the left mouse button
De-select multiple entities	Shift + left mouse drag	Press and hold the shift key and the left mouse button while dragging the cursor over the faces to be deselected.

## Cross Section Tool

Purpose	Action	Instructions
Expand or shrink	Left mouse drag	Press and hold the left mouse button on the highlighted (magenta) cross section and drag.
Translate longitudinally	Shift + Left mouse drag	Press and hold the left mouse button together with the Shift key on the highlighted (magenta) cross section and drag.
Translate transversely	Ctrl+ Left mouse drag ( <b>Windows</b> )  alt/option + left mouse drag ( <b>Mac</b> )	<b>(Windows)</b> Press and hold the left mouse button together with the Ctrl key on the highlighted (magenta) cross section and drag.  <b>(Mac)</b> Press and hold the left mouse button together with the 'alt/option' key on the highlighted (magenta) cross section and drag.
Create cross section	Left mouse double click	Double click on the highlighted (green) edge of the extrusion to create a new cross section passing through the indicated point.

## Channel Extrude Tool

Purpose	Action	Instructions
Select and extrude	Left mouse click	Left click on the edge, curve, group or component to be extruded.
Incremental select	Shift + Left mouse click	Press and hold the Shift key and left click on the elements to be extruded. The extrusion is performed when you release the Shift key.

## Shortcut Keys under Tgi3D® SU Tools

Purpose	Action	Instructions
Fit curve to edge (PhotoScan only)	J	Hit J key to align the selected curve on an edge in the image.
Fit end points to edge (PhotoScan only)	K	Hit K key to align the selected curve over the edges on the image by moving the end points only.
Match images (PhotoScan only)	N	Hit N key to align the selected surface patch(es) over the locked and the current image by color matching. Use Shift + N to perform long range search.
Smooth	U	Hit U key to smooth the selected surface patches. Use Press 'Shift+U' to reach to the steady state of the smoothing quickly.
Redistribute and smooth	Y	Hit Y key to redistribute the vertices on a mesh while smoothing surface. Press 'Shift+Y' to reach to the steady state of the redistribution quickly.
Plane optimization	D	Hit D key to completely planarize almost planar surfaces. Press 'Shift+D' to reach to the steady state of the planarization quickly.
Temporarily remove the drawing	W	Press W to temporarily remove the drawing to observe the finer details in the picture underneath