


Move Tool

Perform the translation of selected objects and/or vertices

► Overview and Basic Principles

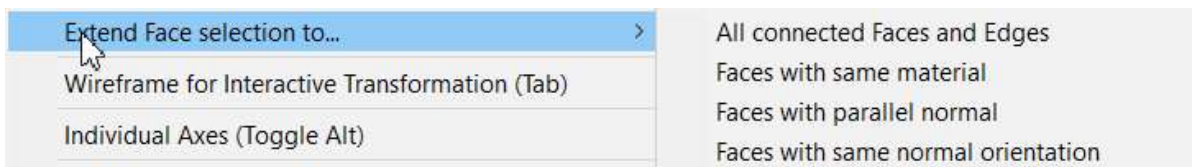
The Move tool works as the SketchUp Move tool with additional features

- **Step 1: Selection**
 - **With Preselection:** You can go directly to Step2 or optionally modify the preselection
 - **Implicit Selection:** With no active selection, a click will select the hovered object and start the transformation
 - **Interactive Multiple Selection:** Select one or several objects and/or vertices (see sections below)
- **Step 2: Translating the objects**
 - **Click** the origin and gently move the selection - **Click** again to validate
 - **MouseDown-Drag-Release** is supported
 - **Direction and Plane** can be forced (see below) before and during translation
- **Step 3: Adjustment after translation (when picto  is displayed)**
 - **VCB** to modify the distance, multiple and divide
 - **Ctrl** to toggle **copy mode**
 - **Note:** these inputs can be used during the translation

► Object Selection

Interactive selection and Preselection are supported

- **Shift** (no click): **Add / Remove** object to the permanent selection
- **Shift-Click-Drag**: **Rectangle** selection for objects
- **Click-Drag** with starting point in the **void space**: **Rectangle** selection for objects
- **Toggle Ctrl-Shift**: to extend selection when hovering an entity
 - over an **edge**: extend the edge by continuity
 - over an **face**: extend to all connected faces and edges
 - over an **component**: extend to all other instances in the current context
- **Contextual menu**: for advanced options to extend selection



- **Esc**: **Clear** the selection or preselection
- **Shift-Esc**: **Restore** the selection after clear or transformation

► Vertex Selection

Select Vertices (Interactive selection only)

- **Shift**: **Add / Remove** vertex to Permanent selection
- **Ctrl-Click-Drag**: **Rectangle selection** for Vertices
- **Alt-Click-Drag**: **Lasso selection** for Vertices

► Direction or Plane of Translation

Constrain the translation along a specified direction or a plane

- **From axes** (model and local) - During selection and translation
 - **Arrows** for forcing **direction** along Axes (repeat for local axes)
 - **Ctrl-Arrows** for forcing **plane normal** from Axes (repeat for local axes)
- **Lock and Inferences** - During translation only
 - **Toggle Shift**: Lock / Unlock direction
 - **Alt Down**: Temporarily disable inferencing
- **Borrow direction or plane normal from entities in the model** - During Selection only
 - **Long Alt Down** or **Enter** on edge, guidelines, face center to **borrow Vector**
 - **Long Alt Down** or **Enter** on face, edge center, section plane to **borrow Plane**
 - **Ctrl** + **Long Alt Down** or **Ctrl**+**Enter** on edge, guidelines, face will force **borrowing plane**
- **Cancel forced direction**
 - **Arrow-Down** or **Esc** to cancel the forced direction

► Setting distance

Can be used during or after Translation

- **VCB**: **distance** in model units, positive or negative - Formula accepted (ex: 5)
- **VCB**: **distance** in specified units (ex: 5cm)

► Copy mode - Multiple - Divide

Can be used during selection and during / after Translation

- **Toggle Ctrl**: Enable / Disable **Copy mode**
- **VCB Multiple**: nx or xn or $*n$ [ex: $3x$ or $x3$ or $*3$ or $3*$]
- **VCB Divide**: $n/$ or $/n$ [ex: $3/$ or $/3$]
- **VCB Single Copy**: $1x$
- Note: Copies are selected when finishing the transformation or exiting the tool

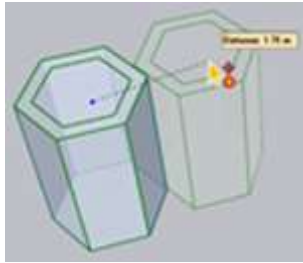
► Wireframe and XRay during Interactive Transformation

Wireframe an XRay help catch inferences in the model which would be otherwise hidden by the objects while transformed

- **TAB** or **Contextual menu** to toggle the **Wireframe mode**
 - This can be activated during Selection and Transformation
 - A small wireframed cube is shown next to the cursor



- The translation is simulated with a wireframe instead of moving objects

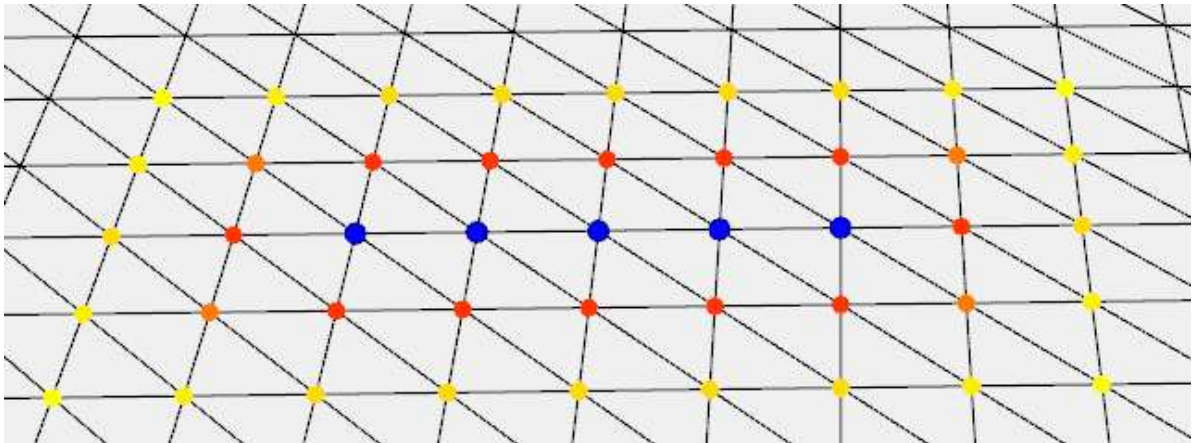


- The wireframe state is saved across Sketchup sessions
- **Shift-TAB** or **Contextual menu** to toggle **Xray mode**
 - By default, the Xray mode is activated *automatically* when you start the transformation
 - This behavior can be changed in the **Default Parameters**

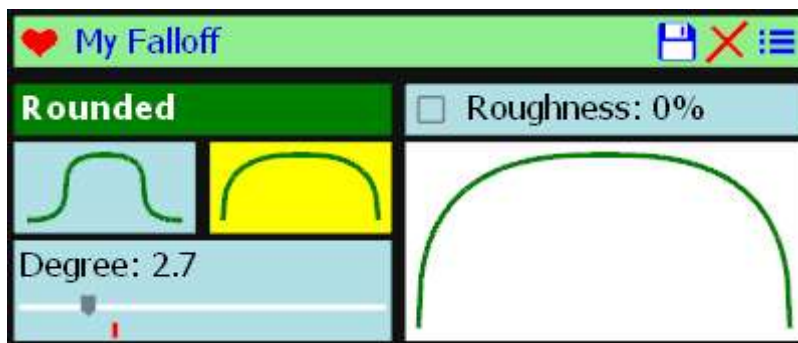
► Smoove Vertices

Move vertices and their neighbours within a radius with interpolation

- **Ctrl+MouseWheel** to start smoooving and set the radius
- **Neighbour vertices** are shown in red to yellow around the selected vertex or vertices



- **Selected entities** (vertices, faces, edges,) will move by the **full specified distance**
- **Neighbours** will move along the same direction but with an **interpolated distance**
- The **falloff method** can be set via the Falloff Editor displayed as a palette

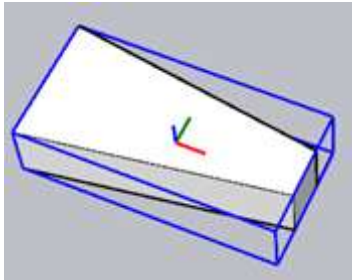


- The **falloff method family** can be set by **MouseWheel** or **Click** in the field
- Some method families have a **parameter** which can be varied (**MouseWheel** or **Click**)
- You can optionally choose a falloff **at the top and bottom** of the smoooved shape
- **Roughness** creates random variations around the general shape (**MouseWheel**)
- **Favorites** can be created for easier recall. Favorites are preserved across Sketchup sessions
- When smoooving is active, press **Esc** to **exit the Smoove mode**

► Individual Translation

Each object will move along its local axes

- **Toggle Alt** or **Contextual menu**: Toggle Individual mode
- The local axes are displayed for each object



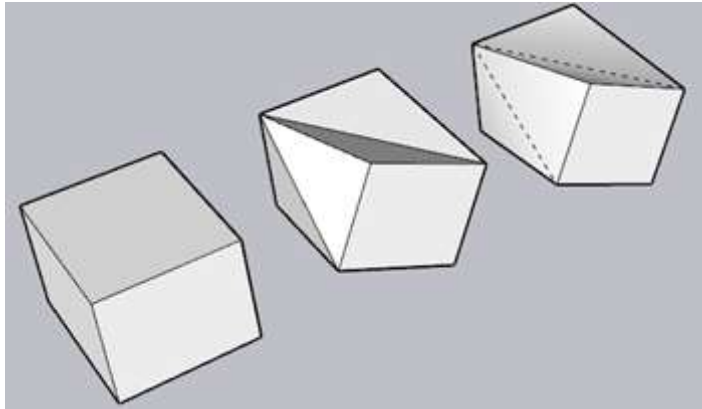
- VCB inputs for distance and multiple are supported in Individual mode

► Autosmooth edges created by Autofold

This option can be enabled / disabled via the context menu

The transformation of vertices, edges and faces can create **new edges by autofold**

Autosmooth applies to edges which would **split existing faces**



Those edges will be set to **Soft**, **Smooth** and **No Cast Shadows** (convention for quad diagonals)

► Double-Click, Undo/Redo and other actions

Relevant actions are accessible from the contextual menu - Some have a shortcut

- **Double-Click** shortcuts
 - **Double-Click** on entity to **Repeat** the last transformation on the current selection
 - **Double-Click** in void space to **Exit tool** (if Alt is down, then it is repeat)
 - **Ctrl+Double-Click**: **Go inside one level** when hovering a group or component; **Close Active** otherwise
 - **Alt+Double-Click**: **Go inside deep level** when hovering a group or component; **Close All Active** otherwise
- **Undo** and **Redo** are supported from within the tool
- **Backspace** to remove inference marks and bounding boxes

► Shortcut to Launch the Tool (optional)

You can launch a FredoSketch tool by calling twice the SketchUp equivalent tool

When the SketchUp tool is active, launch it again to start the FredoSketch equivalent tool

This behavior can be enabled / disabled in the Default Parameters

Launch FredoSketch tool when calling twice the Sketchup equivalent tool



- Typing **M** twice or **Double-Click** on the SketchUp Move tool icon  will launch FredoSketch::Move

► Cursor symbols

Symbols next to the cursor indicate the state of the tool

