

| Flip |  | click the plane to control the direction of the flip operation toggle between flip and copy |
| :---: | :---: | :---: |
|  | Ctrl |  |
| Lasso | Shift | add/subtract from selection |
|  | Alt | add to selection |
|  | Shift+Alt | subtract from selection |
| Line (L) | Alt | 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 |
| Look Around | Eye Height | specify eye height by typing a number and Enter |
| Move (M) | Ctrl | toggle copy mode, allows multiple consecutive |
|  | Shift | hold down to lock in current inference direction |
|  | Alt | 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 |
| Offset (F) | Alt | allow results to overlap |
|  | Distance | specify an offset distance by typing a number and Enter |
| Orbit (0) | Alt | hold down to disable "gravity-weighted" orbiting |
|  | Shift | hold down to activate Pan tool |
| Paint Bucket (B) | Ctrl | fill material - paint all matching adjacent faces |
|  | Shift | replace material - paint all matching faces in the model |
|  | Ctrl+Shift | replace material on object - paint all matching faces on the same object |
|  | Alt | hold down to sample material |
| Protractor | Ctrl | toggle guide creation |
|  | Arrows | toggle lock rotation plane |
| Push/Pull (P) | Ctrl | push/pull a copy of the face (leaving the original face in place) |
|  | Double-Click | apply last push/pull amount to this face |
|  | Distance | speciify a push/pull amount by typing a number and Enter |
| Rectangle (R) | Alt | start drawing from center |
|  | Dimensions | speciify dimensions by typing length, width and Enter (ie. 20,40) |
| Rotated Rectangle | Shift | lock in current direction/plane |
|  | Alt | lock drawing plane for first edge (after first click) |
|  | Dimensions, Angle | click to place first two corners, then type width, angle and Enter (ie. 90,20) |
| Rotate (Q) | Ctrl | 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 (ie. 3:12) |
| Scale (S) | Ctrl | 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 (ie. $1.5=150 \%$ ) |
|  | Length | specify a scale length by typing a number, a unit type, and Enter (ie. 10m) |
| Search (Shift+S) |  | search SketchUp command list for tools or commands |
| Select (Spacebar) | Ctrl | add to selection |
|  | Shift | add/subtract from selection |
|  | Ctrl+Shift | subtract from selection |
| Tape Measure ( T ) | Ctrl | 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 |
| Zoom (Z) | Shift | hold down and click-drag mouse to change Field of View |

