

User Manual: Bezier Chain Editor v8.4.2

Below is a step-by-step visual guide ("slide-stripe") on how to use the plugin for editing Bezier curves chains.

■ SLIDE 1: PREPARATION AND PLUGIN LAUNCH

How to start working with a curve:

- **Step 1:** Select a single continuous chain of edges in the model. If the edges do not form a chain, the plugin will throw an error.
- **Step 2:** Go to the top SketchUp menu and select Tools → Bezier Chain Editor v8.4.2.
- **Step 3:** Control points will appear on the screen: Bezier anchor nodes (squares) and their handles (whiskers).

■ SLIDE 2: BASIC EDITING (MOUSE)

Controlling curve geometry:

- **Moving nodes:** Left-click and hold an anchor node or a handle and drag it in the desired direction (or click, move the mouse, and click again to lock).
- **Smoothing and Corners:** Double-click the left mouse button on an anchor node (square) to toggle its type between "smooth" and "corner".
- **Adding a node:** While holding the ALT key, click anywhere on the curve line to add a new node.
- **Deleting a node/handle:** While holding the ALT key, click on an existing node or handle to delete it.

■ SLIDE 3: USING KEYBOARD MODIFIERS

Precise direction control:

- **SHIFT Key (Snapping):** Hold to lock movement strictly along the vertical axis (Z), in the horizontal plane (XY), or to lock along the "magenta axis" (tangent direction).
- **CTRL Key (Copy/Mirror):** Hold while moving to create a copy of the geometry or to synchronize/mirror the length and angle of the opposite node handle.
- **ESC Key (Cancel):** Press to reset the current movement or cancel the action.

■ SLIDE 4: VCB PANEL (KEYBOARD PARAMETER INPUT)

Configuring segmentation and ribbon:

Enter commands directly from the keyboard while the tool is active (all dimension numbers are always calculated in the current Scene units).

- **Segmentation:** Enter a number and the letter S (or s, Ѕ), for example **24s** → Enter, to divide the curve into 24 equal segments.
- **Creating a Ribbon:** Enter a number and the letter W (for example, **150w**) to generate a 3D ribbon of the specified width. For a bisector ribbon, enter WW (for example, **150ww**). To disable the ribbon, enter **0w**.
- **Precise offset:** While dragging a node or handle, simply enter a numerical value and press Enter to set the exact length of the movement vector.

■ SLIDE 5: APPLYING AND EXITING

Saving the result to the model:

- **Double-click in empty space:** To finish working, apply all geometry changes (form a ribbon or a curve), and exit the plugin, simply double-click the left mouse button in any empty space on the screen (outside the control nodes).
- *Note:* To cancel all work entirely and exit the plugin, repeatedly press ESC until the tool is completely reset.