FAVIZ

Fa Australian Window Door Generator

Installation & User Guide · v01.60 · Autodesk 3ds Max 2023



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Contents

1. Overview
2. Requirements
3. Installation
4. License activation
5. Interface walkthrough
6. Quick start
7. Tips & troubleshooting
8. Uninstall
9. Support

1. Overview

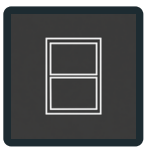
Fa Australian Window Door Generator creates parametric Australian-style aluminium windows and doors in 3ds Max from a simple outline (a Rectangle / closed spline, or selected faces of an Editable Poly). Every window is a group of real geometry parts (frame, sashes, glass, bars, tracks, hardware) linked to one **FA_WIN_** dummy that stores all settings, so it can be loaded and rebuilt at any time.

Window and door types


Awning


Bifold

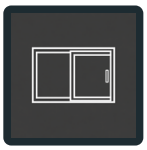

Corner


Double Hung


Fixed / Composite


Louvre


Sashless


Sliding

Key features

- 8 types: Awning, Bifold, Corner, Double Hung, Fixed / Composite, Louvre, Sashless (frameless sliding glass) and Sliding.
- Profile presets (Standard / Boutique Aluminium, sash ranges) with editable frame, sash, glass, mullion and transom sizes in mm.
- Fixed / Composite and Corner grids: each cell can be Fixed, Awning, Sashless, Sliding (multi-sash, multi-track), Double Hung, Louvre or Bifold (with battens).
- Live preview with draggable dividers, Align (Center / Exterior / Interior) and optional Realtime update.
- Hardware: awning friction stays, bifold hinge barrels, bottom tracks.
- Batch create, attach frame / glass into single objects, English and Vietnamese interface.

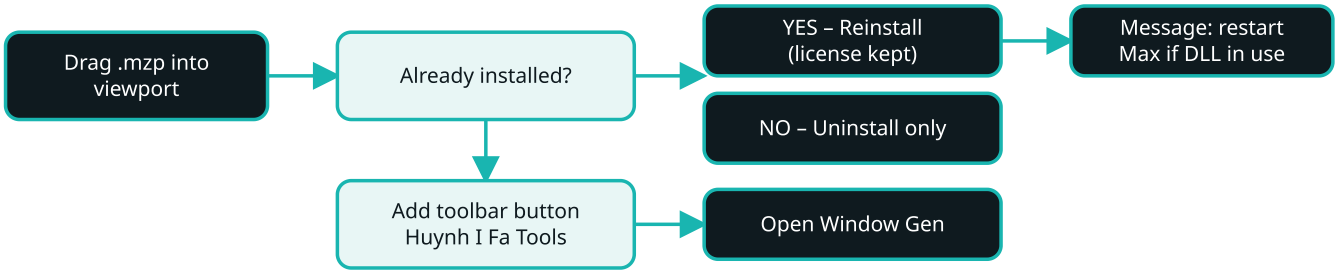
2. Requirements

- Autodesk 3ds Max 2023 (Windows 10 / 11, 64-bit).

- .NET Framework 4.8 (included with Windows 10/11).
- A license key for the computer (one machine per key). Internet is needed once for online activation; offline activation is also available.
- Any scene unit: all values in the tool are entered in millimetres.

3. Installation

1. Close other running copies of the tool. Drag the file **Fa Australian Window Generator Tool v01.60.mzp** into a 3ds Max viewport (or *Scripting › Run Script…* and choose the .mzp).
2. A message confirms the installation.
3. Add the toolbar button: *Customize › Customize User Interface › Toolbars*, Category **Huynh I Fa Tools**, drag **Window Gen** onto a toolbar.



Install / upgrade flow.

Upgrading from an earlier version

Drag the new .mzp in. When asked that the tool is already installed, choose **YES – Reinstall**. The old files are replaced in place and **your license is kept**. If 3ds Max reports that an older version is still loaded, restart 3ds Max and drag the .mzp in again.

> Files are installed for the current Windows user: scripts in the user scripts folder (`HuynhIFaTools`), icons in the user icons folder.

4. License activation

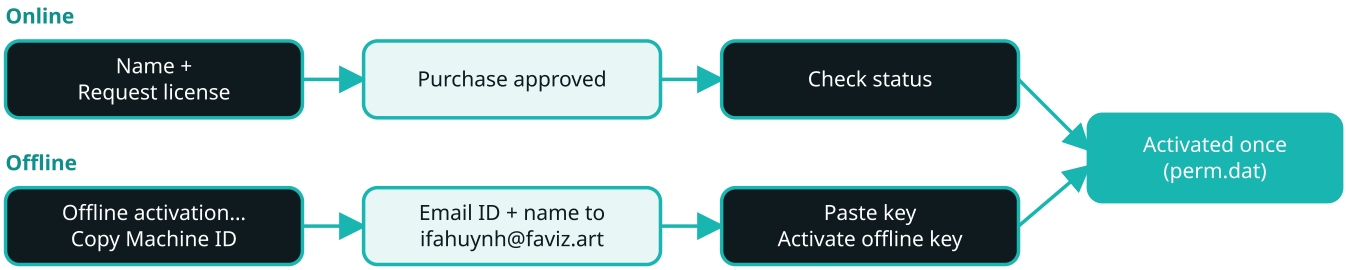
The first time you open the tool, the license window appears.

Online

1. Enter your name and click **Request license**.
2. After your purchase is approved, click **Check status**. The tool activates and opens.

Offline (no internet / blocked network)

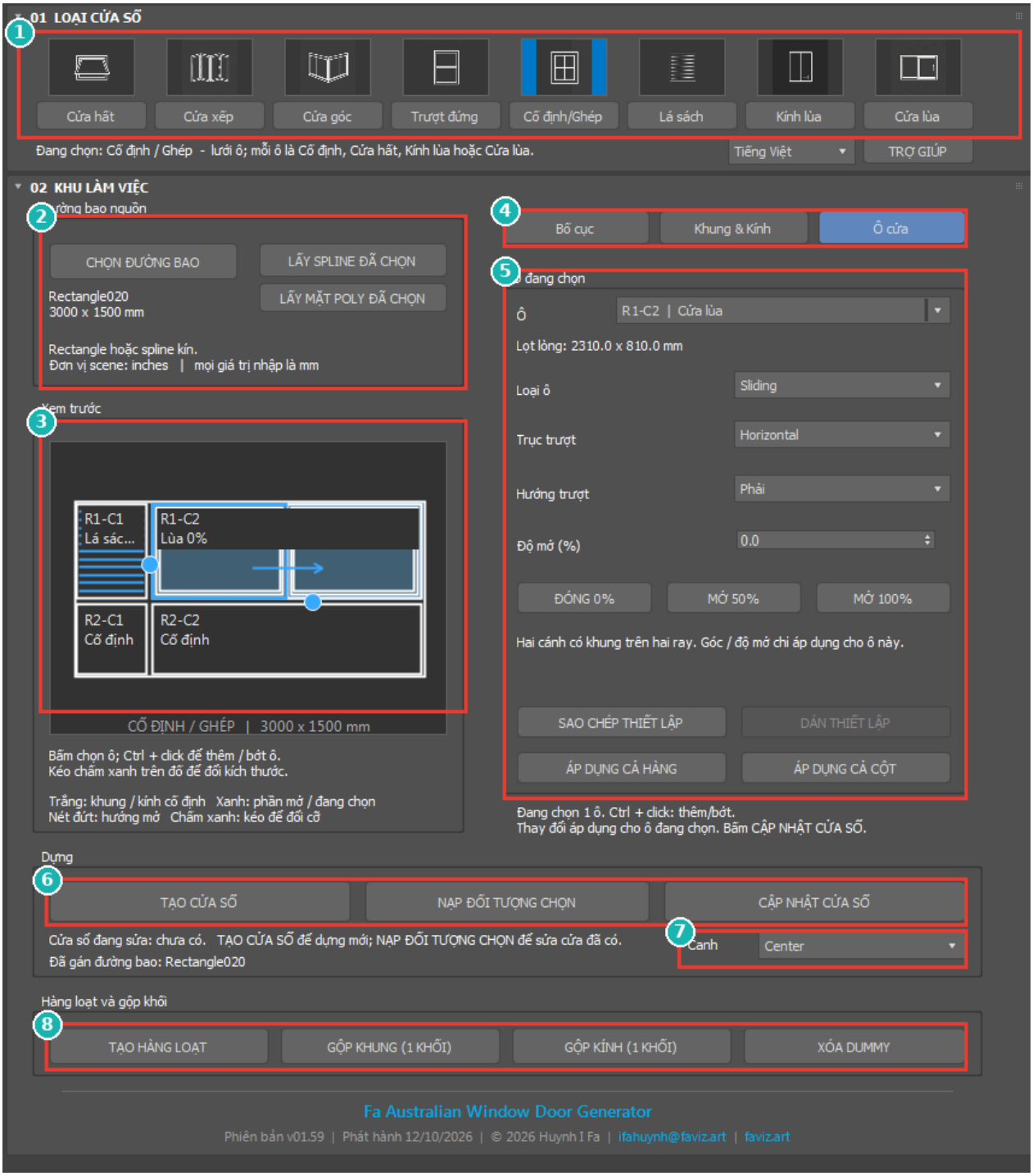
1. Click **Offline activation…**, then **Copy Machine ID**.
2. Email the Machine ID with your name to **ifahuynh@faviz.art**.
3. Paste the offline key you receive and click **Activate offline key**.



License activation: online or offline.

You only activate once: the license is then stored permanently on this computer (`%LOCALAPPDATA%\FaWiz\FAWG\perm.dat`) and the tool works without internet. One key = one computer. Reinstalling or upgrading does not remove it.

5. Interface walkthrough



1 Window type · 2 Source outline · 3 Preview · 4 Tabs (Layout / Frame & Glass / Panels) · 5 Selected cell · 6 Create / Load / Update · 7 Align (Realtime update sits below it in v01.60) · 8 Batch & attach. Screenshot from the tool with the Vietnamese interface; switch to English with the language list in 01.

01 Window type

Click one of the 8 type buttons. The line below describes the current type. Choose the interface language (English / Tiếng Việt) and open **QUICK HELP** on the right.

02 Workspace – Source outline

- **PICK WINDOW OUTLINE**: click a Rectangle or closed spline; its size is shown in mm.
- **USE SELECTED SPLINE**: use the selected spline.

- **USE SELECTED FACES**: select faces on an Editable Poly / Edit Poly; each planar rectangular face becomes one window outline (hidden rectangle *<object>_FaceOutline_NN*). The face normal is the exterior side. Not for Corner.
- Corner: pick **Side A** and **Side B** (two outlines meeting at the corner post); **SWAP** exchanges them.

Preview

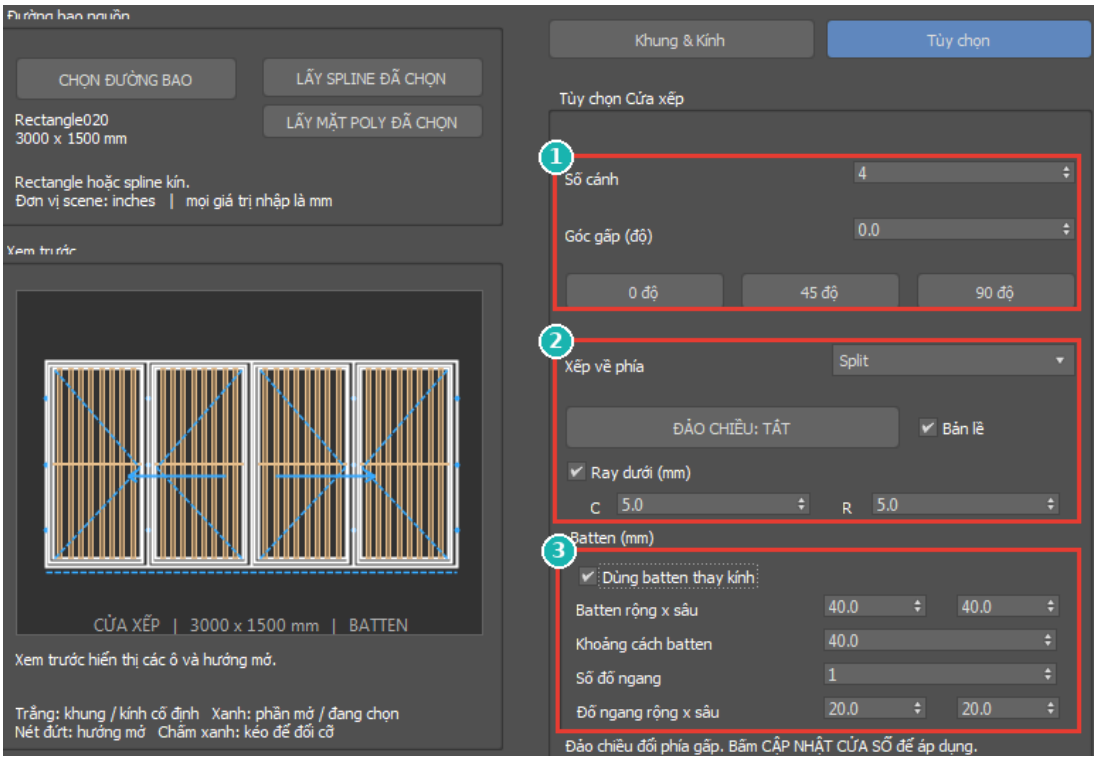
Shows the window to scale. Drag the blue handles to resize columns / rows; click a cell to select it, Ctrl+click to add/remove cells. White = frame / fixed glass, blue = opening parts / selection, dashed = opening direction.

Tabs

- **Layout**: layout (Standard, Single / Multi Transom, Fixed Sidelights, Metro, 2x2 Grid or custom grid), exact column widths and row heights in mm, **EQUAL WIDTHS / HEIGHTS**.
- **Frame & Glass**: Range and Profile presets, *Edit preset dimensions* to override frame width/depth, sash width/depth, glass thickness, mullion and transom sizes; **RESET PRESET**.
- **Options** (per type) or **Panels** (Fixed / Corner cells).

Type options

- **Awning**: open angle, Mirror (opening side), Hinges (friction stays).
- **Sliding**: panels (2–8), tracks, sliding direction (Left / Right / Split), open %, bottom track.
- **Sashless**: direction and open %. **Double Hung**: two sashes on separate tracks.
- **Bifold**: panel count, fold angle, stack side, Mirror, Hinges, bottom track, *Use battens instead of glass* (batten W × D, spacing, horizontal rails, rail W × D; default 25 × 25 mm, spacing 25 mm).
- **Louvre**: blade height, thickness, pitch, angle, Mirror.



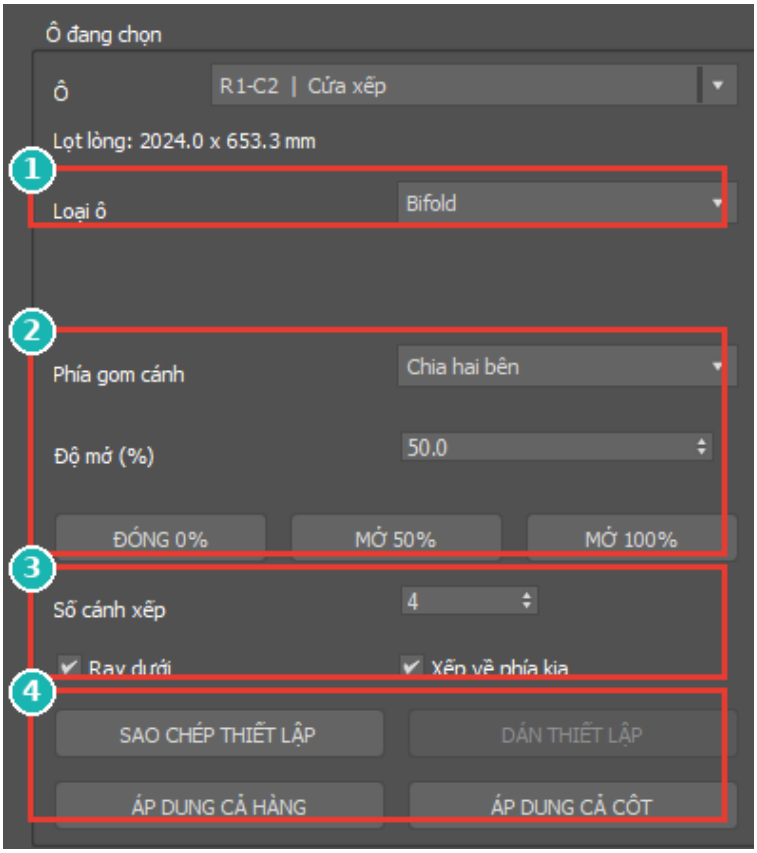
Bifold options: 1 leaves and fold angle presets · 2 stack side, Mirror, hinges, bottom track · 3 battens instead of glass (shown with the earlier 40 mm defaults; v01.60 defaults are 25 mm). Screenshot from the tool with the Vietnamese interface; switch to English with the language list in 01.

Quick presets: every angle has 0 / 15 / 30 / 45 / 90° buttons (limited to the type's maximum) and every open % has 0 / 50 / 100% buttons.

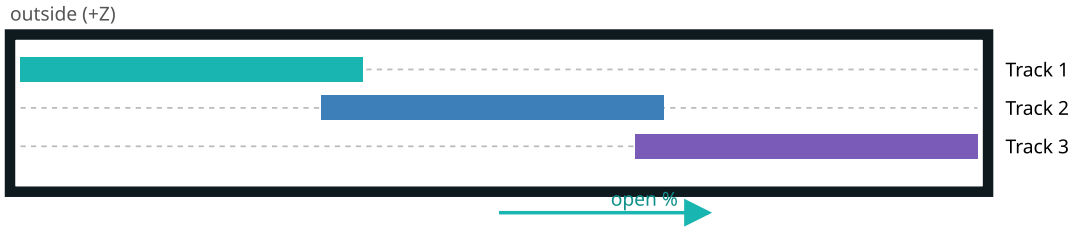
Panels (cells) – Fixed / Composite and Corner

Select a cell, then set its **Panel type**: Fixed, Awning, Sashless, Sliding, Double Hung, Louvre or Bifold.

- **Sliding cell**: axis, travel direction, open %; *Sashes / tracks* – more than 2 sashes or tracks uses the full sliding layout with a *Stack side*; optional bottom track.
- **Bifold cell**: leaves, stack side, open % (0–100% = fold 0–90°), *Fold to other side* (on by default), bottom track, battens with the same settings as the Bifold type.
- **Louvre cell**: blade size, pitch, angle, *Mirror blades* (on by default).
- **COPY / PASTE SETTINGS**, **APPLY TO ROW / COLUMN**. Corner: choose Side A / B.



Bifold cell (earlier v01.60 build): 1 panel type · 2 stack side, open % and presets · 3 leaves, bottom track, fold to other side · 4 copy / paste, apply to row / column. The final v01.60 adds the batten rows under Panel type. Screenshot from the tool with the Vietnamese interface; switch to English with the language list in 01.



Top view: 3 sashes on 3 tracks, overlapping at the meeting stiles; Stack side = where the sashes gather.

Sliding cell with 3 sashes / 3 tracks (top view).

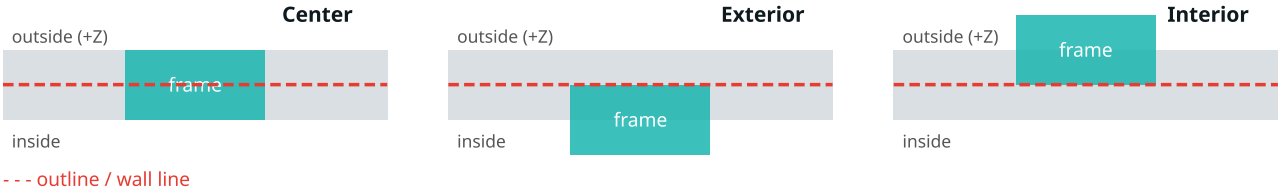


Top view, Stack side = Split: leaves fold to both jambs (red = hinges).
Fold to other side flips the folding to the other face; Open 0–100% = 0–90°.

Bifold leaves folding (top view).

Build

- **CREATE WINDOW** builds a new window. **LOAD SELECTED** loads a generated window's settings into the panel. **UPDATE WINDOW** rebuilds the active window with the current settings (one undo step).
- **Align**: *Center* (frame centred on the outline), *Exterior* (outer face on the outline), *Interior* (inner face on the outline). Corner windows offset each side correctly at any corner angle.
- **Realtime update**: when on and a window is active, every change rebuilds it automatically after a short pause. Off by default.



Align: frame position relative to the outline (section).

Batch and attach

- **BATCH CREATE**: one window for each selected outline (not Corner).
- **ATTACH FRAME / ATTACH GLASS**: merge the frame parts or the glass of the selected windows into one object each.
- **DELETE DUMMY**: removes the FA_WIN_ dummy; parts stay but can no longer be loaded / updated.

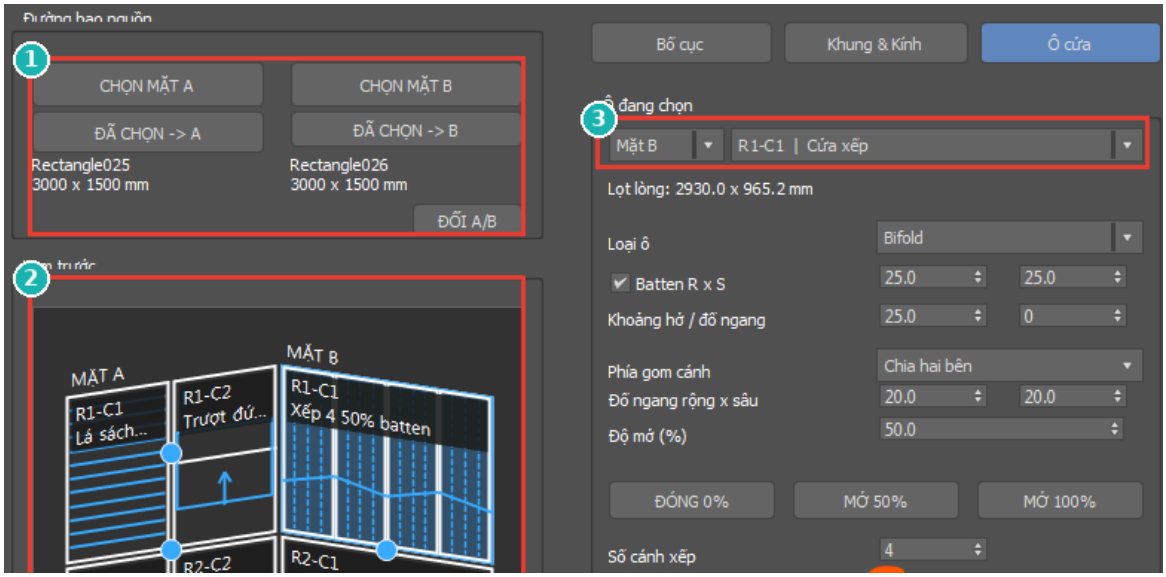
All created objects go onto the layer **Window Door Gen**.

6. Quick start

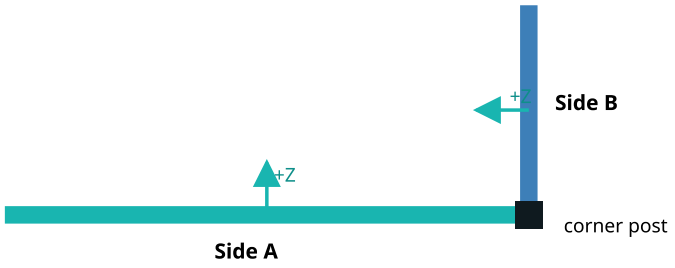
A. Fixed window with a sliding cell

1. Draw a Rectangle 3000 × 1500 mm in the wall plane (Front view).
2. Type **Fixed / Composite**, click **PICK WINDOW OUTLINE** and click the rectangle.
3. Layout tab: choose *2x2 Grid* (or a custom grid) and drag the dividers.
4. Panels tab: click the top-right cell, Panel type **Sliding**, Sashes 3 / tracks 3, Stack side Right, press **OPEN 50%**.
5. Choose Align *Exterior*, then **CREATE WINDOW**. Tick **Realtime update** to fine-tune live.

B. Corner window



Corner window: 1 Side A / B outlines · 2 preview of both sides · 3 side and cell selector. Screenshot from the tool with the Vietnamese interface; switch to English with the language list in 01.



Plan view: two outlines meet at the corner post. Each side's +Z (outside) is its outline normal. Align offsets each side along its own normal.

Corner plan.

1. Draw two rectangles that meet at the corner (Side A and Side B).
2. Type **Corner**, pick Side A and Side B.
3. Panels: choose Side A / B and set cells (e.g. Louvre on A, Bifold with battens on B).
4. **CREATE WINDOW**. The corner post closes the joint; Align offsets both sides consistently.

7. Tips & troubleshooting

- **"Could not generate this window"**: the outline is smaller than the frame / sash widths, or a cell is too small for its type – reduce panel count, sash width or divider sizes.
- UPDATE asks to LOAD first when the panel shows another window: LOAD, edit, then UPDATE.
- Ctrl+Z undoes a whole CREATE / UPDATE. After undo, the active window is found again automatically.
- Many sliding tracks need a deeper frame: the standalone Sliding type deepens the frame automatically.
- Opening sides are relative to the outline normal (+Z = exterior). Use Mirror / Align to flip.
- License window keeps appearing: check the internet connection or use offline activation; after hardware changes request a new key.
- Install says files are in use: restart 3ds Max and install again.

8. Uninstall

Use the toolbar command **Uninstall Window Gen** (category Huynh I Fa Tools), or drag the .mzp in and choose **NO – Uninstall only**. Your license stays on the computer. Remove the toolbar button via Customize User Interface if needed.

9. Support

Email: **ifahuynh@faviz.art**
Website: **faviz.art**
Please include your 3ds Max version, the tool version (v01.60, shown in the footer) and a screenshot of any message.