



THE COMPLETE GUIDE — WORKFLOW COURSE

Walkable 3D Tours

The full playbook: how we turn a sketch, a CAD model, or a phone video into a browser-walkable tour of a space, and how that wins work.



What you will learn

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Pages 6 to 9 get into the actual tools and a little code. If you are a business owner, skim those, the rest is for you. If you are technical, that is where the real detail lives.

A flat plan is hard to feel

When someone is about to spend real money building or buying a space, "hard to feel" costs you the sale.

A floor plan is a top-down drawing with numbers on it. Even a beautiful rendered picture is still one frozen angle that someone else chose. Your client nods politely, but they cannot truly picture standing in the room. And what they cannot picture, they hesitate to pay for.

The expensive version of this problem shows up later: a wall in the wrong place, a room that feels smaller than imagined, a change order after the concrete is poured. Every one of those is a decision that could have been made earlier, for free, if the client had been able to walk the space first.

The cost of "hard to feel"

- Slower yes from clients who cannot visualize the outcome
- Change orders that eat your margin after the build starts
- Buyers who need an in-person showing before they will commit

A real walk-through of a space that does not exist yet

We turn your project into a tour your client walks through themselves, moving room to room, looking in any direction, getting a true feel for size and flow. It opens with one link. No app, no headset, nothing to download. It runs in a normal browser on a phone or a laptop.

Think of the controls people already know from games: move with the keys or an on-screen joystick, look around with the mouse or a finger, and a button to pop up to a top-down view of the whole property.

The one-line version

You hand us what you already have. We hand you back a link your client can walk through. That link helps you close the job, and almost no one else in your market offers it.

Plain English: it is like a video-game tour of your building, except it is your real design, and you send it as a link.

If you build it, sell it, or pitch it

Custom home builders

Remodelers

Real estate & developers

Architects & designers

Showrooms

Builders

Let a client walk their future home before a wall goes up. They commit faster and ask for fewer changes once they have felt the space.

Remodelers

Show the "after" next to the "before". The client sees exactly what they are paying for.

Real estate & developers

Let buyers tour a listing or a future development from anywhere, any hour, with no showing to schedule.

Architects & designers

Hand clients a way to experience your design instead of decoding a drawing set.

Three ways in, use whatever you have

1. A sketch or an idea

A rough floor plan, a napkin sketch, or just a description. We model the layout from there, and you can change it by talking.

2. An existing 3D model (CAD / SketchUp)

Already have a file from your architect or engineer? We convert it straight into a walkable web tour, at true real-world scale. This is the fastest path.

3. A phone video of a real space

Walk a finished room with your phone for a minute. We turn that footage into a photoreal 3D scene people can explore.

Most builders come in through path 2 (they already have a design). Realtors and remodelers often use path 3 (a real space already exists).

End to end, start to link

1

Capture

You send a sketch, a CAD file, or a phone video. We confirm real-world scale so the space feels true to size.

2

Convert

We turn the design into clean web 3D (a .glb file), or the video into a photoreal point cloud.

3

Build the scene

We drop it into our walkable viewer and set the starting point, the walk path, the lot boundary, gates, and labels.

4

Share & iterate

You get one link to send. We update it any time the design changes, including adding buildings just by describing them.

Turnaround: days, not weeks, because the entire pipeline is ours. No third-party studio, no per-seat software, no monthly hosting fee.

The tools we use, and why it costs us almost nothing

The "secret" of walkable tours is that the core technology is free and open. The value is in knowing how to put it together. Here is the honest stack.

- **Blender 5.1** + the **RedHaloStudio SketchUp Importer (0.27)** to read a SketchUp .skp with no SketchUp license. v0.27 ships a prebuilt binary for Blender's Python, which removed the old version-mismatch wall.
- **glTF / .glb** as the web 3D format, exported Y-up so it drops straight into the viewer.
- **Three.js** for the first-person walkable viewer, driven by a simple `scene.json`.
- **Gaussian splatting** (Postshot / vid2scene + a GaussianSplats3D viewer) for the phone-video path.
- **Esri World Imagery** for the address-to-satellite map layer, no API key.

The CAD-to-web conversion, in two real lines (run headless):

```
# Blender 5.1 + SketchUp Importer 0.27
bpy.ops.import_scene.skp(filepath="design.skp")
bpy.ops.export_scene.glTF(filepath="model.glb", export_yup=True)
# blender --background --python convert_skp.py
```


One JSON file drives the whole tour

Our viewer is data-driven. We describe the scene in `scene.json` and the tour builds itself. That is how we turn changes around so fast.

```
{
  "glb": "model.glb",
  "spawn": { "pos": [0,1.7,20], "lookAt":[0,1.7,0] },
  "gate": { "style":"slide", "openDist":6 },
  "homeZone": { "walk":4.5, "ebike":15 },
  "buildBoundary": true
}
```

What that unlocks in the tour:

- **Walk + look** with WASD and mouse, on-screen joysticks on a phone, Shift to run.
- **Spawn point** so the client always starts facing the right way.
- **Smart gate** that slides or swings open as you approach, and **speed zones** (fast across the lot, normal indoors).
- **True lot boundary** drawn from the real survey, plus a top-down view (press V).
- **In-scene info cards** and a drag-to-edit layout mode, so we reposition buildings live.

From a one-minute walk to a 3D space

No CAD file? If the space already exists, your phone is enough. Here is how that path works.

1

Record

Walk the space slowly with your phone, covering each area from a few angles.

2

Read it

We use AI (Gemini) to read the whole video and pull the layout and rough dimensions.

3

Reconstruct

We turn the footage into a photoreal **Gaussian splat**, a 3D point cloud that looks like the real room.

4

Walk it

We load the splat into the same web viewer, so the experience is identical: one link, walk anywhere.

For US addresses we can also fly in from Google's photoreal 3D map of the real location before stepping inside. Elsewhere we use a satellite map plus the interior splat.

What we learned the hard way

Lock the real scale first

We verify against a known object (a regulation court, a door) so rooms feel the right size. A tour that is the wrong scale feels off instantly.

Clean the imported model

CAD exports carry junk (duplicate parts, a giant site plane). We strip anything outside the real cluster before publishing, or the file is huge and slow.

Spawn inside the boundary

If the starting point sits outside the lot fence, the boundary clamp traps the player. Always spawn inside.

Mind the file weight

A heavy scene (thousands of meshes) can choke a low-end device. We optimize the mesh so it runs on a mid-range phone.

Phone-video reconstruction needs a real GPU

Splat training is heavy. We pick the right path (local vs cloud) based on the footage so you are not waiting days.

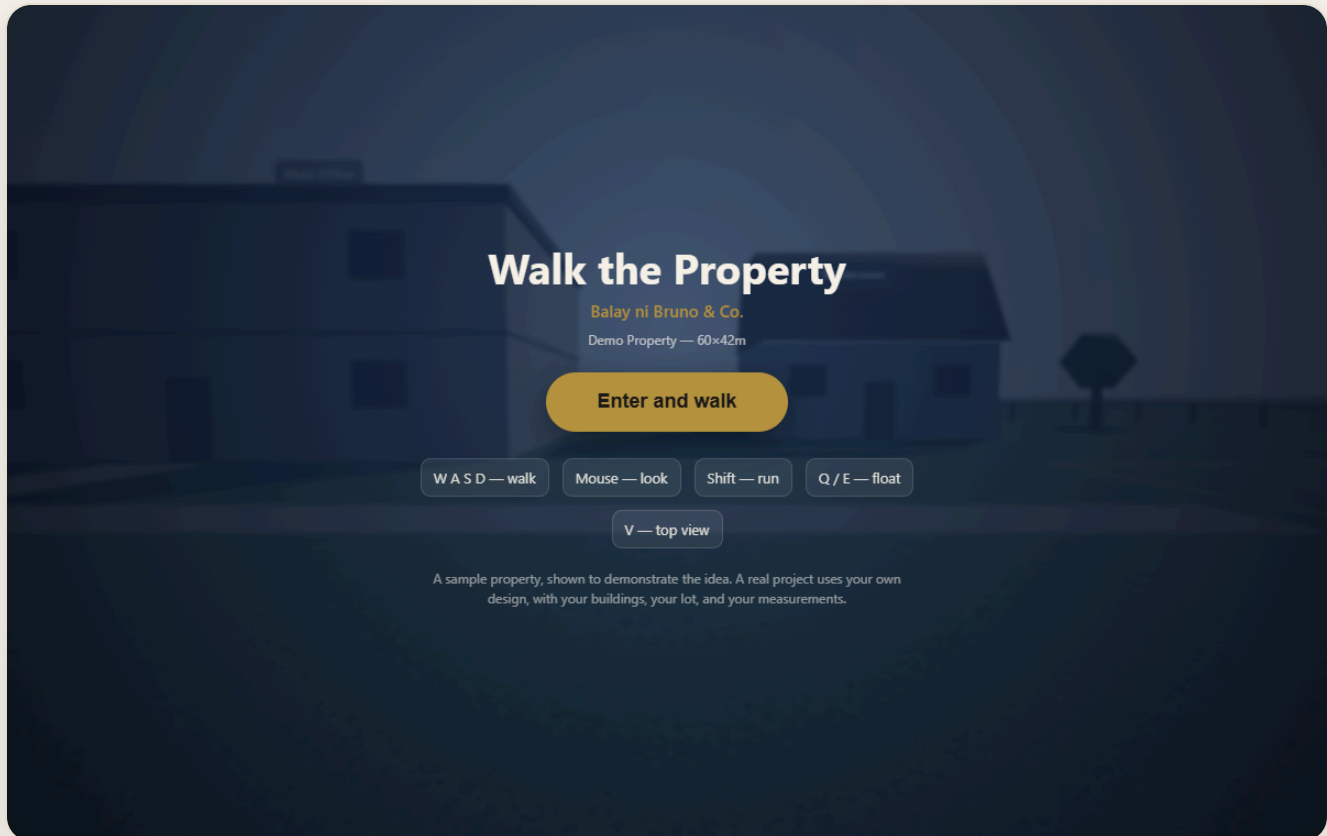
A 600 sqm property, walkable in days

We took an engineer's CAD design of a real family compound and turned it into a walkable tour, in-house, end to end.

- **Source:** the engineer's SketchUp file, converted to web 3D with the stack on page 8.
- **True scale, confirmed:** a regulation pickleball court in the design measured correctly, proving the whole model was 1:1.
- **The real lot:** the exact 600 sqm survey boundary, with a fence and a front gate that slides open as you walk up.
- **The tour route:** in through the gate, past the court, to the house entrance, exactly how you would actually arrive.
- **Branded in-scene cards** that float in the space with the property facts.

That same setup works for any builder's project or any realtor's listing. We swap in your model, your boundary, your route.

It opens like this, in any browser



- **One click to enter** and start walking. No app, no sign-up.
- **Simple controls** on screen, with a top-down view one button away.
- **True to scale**, built from real measurements.
- **Works on a phone or laptop**, so clients tour from the couch.

How it actually wins work

Close the build faster

A client who has walked the home commits with confidence, and stops second-guessing the layout.

Cut change orders

Layout decisions get made inside the space, while changes are still free, not after the pour.

Sell property remotely

Out-of-town buyer? Send a link. They tour the place at midnight without a showing.

Win the pitch

Investors and partners finally see the plan instead of nodding at a drawing they cannot picture.

Stand out

Almost no one in your market hands clients a walkable tour. It makes you look a step ahead, because you are.

"A buyer who can walk the home is a buyer who can picture living there."

Do I need special software or a headset?

No. It opens in a normal browser on a phone or computer. Nothing to install.

Is there a monthly fee to keep it online?

The core technology is free and open, so there is no platform charging you rent to keep the tour running.

What if I do not have a 3D model yet?

A sketch, an idea, or a phone video is enough. We can also add buildings just by describing them.

How long does it take?

Days, not weeks, because the whole pipeline is ours.

Want one for your next project?

Send us the design you already have, or tell us what you are planning. We build the whole thing for you, and we are happy to put a quick demo together first.

[Book a Strategy Call](#)

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