Room Reading: from photos to Revit

On the web page · Room Reading

Your AI reads your photos of an existing room into a sketch plan and a register. You decide keep, strip or alter. The page draws two plans, your decisions and the constraints behind them, and gives you a file that goes straight into Revit. **It is a starting sketch, never a survey.**

> YOU NEED
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> - **6–10 phone photos of each room**, each with the compass bearing you faced. Turn on True North first. iPhone: Settings › Compass › Use True North. Android: use the compass in Google Maps.
> - **One dimension you taped yourself** in each room: a wall, a door or a window width.
> - Your site's location from Google Maps, for the sun. Claude, ChatGPT or Gemini, any plan.
> - For the last part, **Revit 2025, 2026 or 2027**.

Read each room with your AI

1. On **aia-site-reading.pages.dev**, open *Room Reading* and download the instructions for your AI and the interior style card.
2. Make a project (Claude or ChatGPT) or a Gem (Gemini). Paste the instructions in and add the style card as a file.
3. **One chat per room.** Upload that room's photos and answer its questions: bearings, where you stood, the taped dimension. It stops and asks before it draws.
4. Correct what it got wrong, then ask for the file. Save it named for the room, e.g. `lounge.json`.

Draw it

1. On the Room Reading page, add every room's file, your style card and your site's location.
2. Several rooms: list the shared walls in the box, one per line: `Lounge W01 = Bed 1 W01`.
3. Press *Draw my room*. Everything is grey: nothing is decided yet. That's correct.

4. Download everything. In `register_room.csv`, write **keep**, **strip** or **alter** for each element, with a note saying why. Add the CSV on the page and draw again.

Into Revit

1. Download *For Revit* (`room_checked.json`) and the Dynamo graph for your Revit year, both on the Room Reading page.
2. New project from the metric architectural template. **Manage › Dynamo**, open the graph, *Browse…* to `room_checked.json`, then *Run*.
3. Read the *Report* node, then open the view **RR – L1 – existing**. Strip is demolished in New Construction; keep and alter stay Existing.
4. Changed something? Draw again on the page, flip *Run again* in the graph and press *Run*. It replaces only what it placed.

> WORTH KNOWING
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> Can you install add-ins? The **pyRevit button** does the same in one click. Install pyRevit, unzip the button, add its folder under *pyRevit › Settings › Custom Extension Directories*, then use *RoomReading › Room to Revit*.

IF IT DOESN'T WORK

- **No sun hours:** the photos have no compass bearings or the site location is missing. Add both and draw again.
- **Two rooms don't meet:** check the wall names in the shared-walls box against each room's file. The run report says what it couldn't match.
- **Windows at the wrong height in Revit:** the reading had no sill height, so 900 mm was used, and the report says so. Measure, add it, run again.
- **A folding door came in as a plain door:** load a bifold family and swap the type.

> BEFORE YOU RELY ON IT
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> None of these tools is a survey, a planning certificate or planning advice, and Room Reading is not a hazardous-materials assessment or structural advice. The ground comes from a 5 m grid: fine for the lie of the land, never for floor levels or drainage. **An empty layer does not mean the site is clear.** Most Sydney councils publish no flood map on the Planning Portal, and South Australia and the Northern Territory publish no open planning data, so those rows say NOT CHECKED. Title, easements, the local plan and the planning certificate are always yours to check.

Questions go to office hours, straight after class.