

FIELD GUIDE / 2026 EDITION

AR for Property: What Works, and What Disappoints

Placing a building on its real site through a phone, walking an unbuilt unit, and on-plan overlays in a sales suite — and when a panorama does the same job.

Dim Kuzmenko
Co-Founder, Maverick Frame Studio

maverickframe.com

START HERE

Three different things get called “property AR”

They share a name and almost nothing else. They cost different amounts, break in different ways, and only one of them reliably impresses a buyer standing in a field. Decide which one you are actually asking for before anybody quotes it.

WHAT IT IS	WHAT IT DOES WELL	WHERE IT DISAPPOINTS
On-site placement building on its real plot, through a phone	Answers the one question a site visit cannot: how big, and where. Height against the trees, distance from the boundary, the gap to the neighbour.	Needs the phone to work out where the ground is and how far away it is. Open sites, wind, glare and featureless grass all make that harder.
Walking an unbuilt unit a space that does not exist yet	Room proportion and ceiling height, understood physically rather than read off a plan. Strong in an empty shell or a large sales space.	Needs room to walk. In a small office it becomes a person shuffling into a wall while holding a phone at arm's length.
On-plan overlay in a sales suite, over a printed plan or a physical model	The most reliable of the three. A flat printed sheet is an easy thing for a camera to recognise, and the lighting is under your control.	Less dramatic. It supports a conversation rather than replacing one, which is usually what a good sales suite wants anyway.

If you are choosing one to start with, start with the third. It is the cheapest to produce, the least likely to fail in front of a buyer, and the one your sales team will actually pick up on a Tuesday afternoon without being reminded.



Maverick Frame production render.

STEP 01

Two things break it, and only two

When property AR fails in front of a client, it is almost never the modelling. It is scale or it is ground registration. Understand both and you can brief around them.

Scale — is it the right size?

The phone has to guess how far away the world is before it can decide how large to draw your building. Guess slightly wrong and a four-storey block reads as three, or as six. Nobody says “the scale estimate drifted”. They say it looks fake.

What helps: real-world units in the model, a known reference object in frame, and a calibration step where the user marks something of known size before the building appears.

Ground registration — is it standing still?

The phone builds a map of surfaces from what the camera sees. Flat, uniform ground gives it very little to hold on to, so the building slides, sinks or rotates as the viewer walks.

What helps: textured ground rather than mown grass, a marker or printed target placed on site, overcast light rather than hard midday sun, and a short stand-still moment before placement.

The five site conditions that decide whether it holds

01	**Ground texture**	Gravel, paving, tarmac and rough grass all track well. Fresh cut lawn, sand, snow and water track badly. Walk the site and look down before promising anything.
02	**Light**	Even overcast is the best condition. Hard sun with deep shadow and blown highlights is the worst, and it is exactly when you will be showing the site.
03	**Distance to the subject**	Phone tracking is confident at room distance and vague at fifty metres. A whole masterplan viewed from the road is the hardest case there is.
04	**Movement in frame**	Traffic, crowds, long grass in wind. Anything that moves makes the surface map less stable.
05	**Where the viewer stands**	Define two or three tested standing positions on the site and mark them. Free roaming sounds better and behaves worse.

Ask any studio quoting you site AR which of these five they have tested on **your** plot. If the answer is that it works fine in general, the demonstration will be the test.

STEP 02

What the model has to be to run on a visitor's phone

The model that produced your marketing stills will not run in AR. It is built for a render farm with unlimited time; a phone has a battery, a thermal limit and a few milliseconds per frame. This is a second build from the same source, and it should be priced and scheduled as one.

WHAT TO SPECIFY	WHY IT MATTERS ON A HANDSET
A reduced geometry version	Built for real-time, not decimated from the hero model at the last minute. Ask to see it moving on a phone before sign-off, not as a screenshot.
Baked lighting where possible	Shadows and bounce light calculated once and stored in the textures, rather than computed live. This is the single biggest saving available.
Texture budget, stated	Resolution and how many maps. Textures, not polygons, are usually what fills memory and makes a phone hot.
Materials merged	Fewer separate materials means fewer draw calls. A facade split into forty named materials for a render is forty problems in real time.
glTF / GLB and USDZ	The two formats most phone viewers expect. Ask for both, plus the working file, so you are not locked to one viewer.
Level-of-detail versions	A simpler version drawn when the building is far away. Essential for masterplans, optional for a single house.
A stated device floor	The oldest phone it is guaranteed to run on. Without this line, “it works” means it worked on the developer's handset.

The sales-suite reality nobody budgets for

Suites are often in a basement, a converted unit or a portakabin on site. Mobile signal is poor, the guest wi-fi is shared with the card machine, and a first-time visitor is not going to install an app before they will look at your building.

So: two or three charged devices that you own and control, the experience pre-loaded on them rather than downloaded on arrival, a tested offline mode, and a named person whose job it is to check each morning that they still work. Handing a buyer a link and hoping is how most of these projects quietly stop being used in month two.

STEP 03

When a panorama does the same job for less

This is the honest part. For a large share of property marketing, AR is the expensive answer to a question a 360 panorama or six good stills already answers. Run the table before you commission anything.

WHAT THE BUYER NEEDS TO UNDERSTAND	CHEAPEST THING THAT DOES IT	IS AR WORTH IT?
What the finished rooms look like	A set of stills	No. Stills are better looking, sharper and work in every channel.
How the rooms connect	360 panoramas, linked	Rarely. A linked panorama tour does this well and runs on any browser.
How big the room feels	Panorama, or AR walk	Sometimes. If you have the floor space in the suite, the AR walk genuinely adds something.
How the building sits on this plot	Site AR	**Yes.** This is the case AR is actually for, and nothing else answers it on site.
How big it is against the neighbours	Site AR, or a verified montage	Yes for selling. For a planning audience, a documented montage is the instrument, not a phone.
Which unit is which, on a plan	On-plan overlay	Yes, and it is the cheap end of AR.
What the finishes options are	A stills matrix	No. Comparable images side by side beat anything interactive for a choice like this.

A reasonable order to spend in

Stills first, because everything else in your marketing needs them anyway. Then panoramas, which reuse the same scene and cost far less than they look like they should. Then AR, once the model exists and is paid for. Commissioning AR first means paying for the model twice.

Before you sign, ask for this

A test build of one element, on your plot or in your suite, on a device you supply, before the full scope is committed. Any studio confident in the work will agree to it. The cost of that test is small next to the cost of finding out at the launch event.

WORKING WITH A STUDIO

Cost, and how to brief it

Two things people ask us before anything else. Both answers are short.

COMMISSIONED WORK	FREELANCER	STUDIO
Single exterior still	$100 – 300	$250 – 600
Single interior still	$120 – 350	$300 – 700
Package, 5–8 views	$600 – 1,500	$1,500 – 4,000
Animation, per minute	$1,000 – 3,000	$3,000 – 8,000

Market ranges we are willing to publish. Turnaround and revision-round figures are deliberately not in this table: ours vary too much by project type to state as a benchmark, and an invented number here would be worse than none.

How to brief it — shorter is better

This is the opposite of what most people assume. Four things:

- What you need — **how many images, and of what**
- The plans and elevations, as they are
- A few reference images for mood and light
- One clear line on what the images are *for*

Inflating a small job into a fifty-page specification backfires: taken literally it comes out ugly, and it misleads the people doing the work. Tell them the intent and let the team that does this daily handle the detail.

The mistake that costs the most

The biggest failure we see is not choosing the wrong vendor. It is **timing**. People start looking only after the first supplier has already failed and the deadline is on fire, then choose in a panic.

Line up and vet rendering partners **before** you need one. One, ideally a few, briefed and ready to take work. It costs an afternoon now and saves a project later.

10+
YEARS RENDERING VISUAL STORYTELLING

350+
BRANDS & AGENCIES EMPOWERED GLOBALLY

95%
CLIENT SATISFACTION RATE

40%+
OF OUR COMMISSIONS NOW INCLUDE MOTION OR 360

MAVERICK
FRAME
STUDIO

When the image has to hold up, talk to us

We are a CGI studio: architectural and product rendering, 3D modelling, animation, 360 tours and VR. Ten years, 350+ brands and agencies, and the kind of work that still looks right when somebody counts the windows.

Send us the plans and a line on what the images are for. You get a scope and a price, and no obligation to use either.

START HERE

maverickframe.com/contacts

SEE THE WORK

maverickframe.com/gallery

WRITTEN BY

Dim Kuzmenko
Co-Founder



Maverick Frame production render. · Cost ranges are market ranges as of 2026 and are not a quotation.