INFRARED ROOF SCAN CHECKLIST

This is a checklist for commissioning and reading an infrared roof moisture survey. It covers what has to be true for the scan to work, what to agree before it happens, and what the report must contain to be worth the fee.

Infrared detects temperature, not water. Everything below follows from that.

IS THE ROOF A CANDIDATE?

CHECK	WHY IT MATTERS
☐ Surface type	Smooth membrane scans well; heavy ballast and gravel do not
☐ Surfacing reflectivity	Highly reflective surfaces can suppress the differences
☐ Insulation type	Absorbent insulation gives the clearest signal
☐ Build up and air gaps	Vented and air gapped systems read differently
☐ Known saturation	A uniformly wet roof can show no contrast at all
☐ Access	Walkable roof, or a drone with a radiometric camera

THE CONDITIONS ON THE NIGHT

REQUIRE	WHY
☐ Dry surface	Surface water masks everything beneath it
☐ Solar gain during the day	The roof has to be charged thermally
☐ Clear sky after dark	A cloudy sky slows radiative cooling
☐ Low wind	Wind evens out the differences the camera reads
☐ The post sunset window	Short, and the reason scans run in the evening
☐ No recent rain	A roof wetted that day is not scannable

WHAT TO AGREE BEFORE IT HAPPENS

AGREE	WHY
☐ Confirmation method	Probe, capacitance meter, nuclear gauge or core
☐ How many points will be confirmed	A sample, not an assertion
☐ Permission for core sampling	And who repairs the cores afterwards
☐ Who marks the roof	Marking paint on the roof itself aids later repair
☐ Deliverable format	A scaled plan, not only a set of images
☐ Rescheduling terms	Scans get moved for weather, and should

WHAT THE REPORT MUST CONTAIN

INCLUDE	WHY
☐ Scaled plan with anomalies outlined	Area, not dots, is what gets priced
☐ Total affected area with units	The figure that drives the decision
☐ Paired thermal and visible images	So an anomaly can be placed on the real roof
☐ Confirmation results	What was tested, where, and what was found
☐ Conditions on the night	Temperature, wind, sky, surface state
☐ Limitations	Areas not scanned, and why
☐ A recommendation	Repair, partial replacement, or replacement

READING THE RESULT

FINDING	WHAT IT USUALLY MEANS
☐ Small isolated areas	A repairable local failure, often at a detail
☐ A large continuous area	A recover is off the table; price a replacement

FINDING	WHAT IT USUALLY MEANS
☐ Wet areas along a perimeter	A perimeter detail or edge failure
☐ Wet areas around equipment	A curb, a fixing, or condensate discharge
☐ Wet areas with no path above	Water travelling laterally from somewhere else
☐ No anomalies at all	Useful, but not proof the roof is dry

WHAT TO DO WITH IT

1. **Ask whether the roof is a candidate first.** Some roofs cannot be scanned usefully.
2. **Let the surveyor move the date for weather.** A scan in poor conditions is worse than none.
3. **Insist that anomalies are confirmed physically.** An image alone is an inference.
4. **Hold out for an area figure.** That is the number that makes a decision.
5. **Repeat the scan in two years if it is borderline.** Spreading and static mean different things.

Want the reasoning behind this? Read the inspection methods and what an infrared inspection involves.

Walked by _____ Date _____ Roof _____