SUMMER HEAT ROOF CHECKLIST

This is a checklist for what desert heat does to a commercial roof, and where to look for it. Run it in spring, before the monsoon walk, so that what you find can still be fixed in good conditions.

Heat damage does not leak while it is dry. It opens the paths, and the first storm uses them.

BEFORE YOU GO UP

Go early in the day. A roof surface here runs well above the air temperature by mid morning, and a hot membrane marks under foot traffic.

Take a camera, last year's photographs from the same standing positions, and water.

THE DETAILS, WHERE HEAT CONCENTRATES

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Sealant at terminations	Cracked, shrunken, pulled away from one side, or fallen out
☐ Sealant around penetrations	A gap at the top of a collar, a bead that has split along its length
☐ Seams and laps	An edge you can lift, a dirt line, a visible step
☐ Pipe boots and collars	Hardened, split at the top, standing away from the pipe
☐ Flashings at curbs	Corners that have slumped, fixings that have worked loose
☐ Metal to membrane junctions	Movement at the joint, sealant failed where two materials meet

THE MEMBRANE AND SURFACING

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Membrane texture	Noticeably harder, darker or more brittle than nearby areas

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Straight line splits	Short splits over a joint, a fastener line or a substrate edge
☐ Blisters	Raised, soft underfoot, larger than in last year's photograph
☐ Coating condition	Chalking, thinning, worn through at high points
☐ Granule or gravel loss	Bare patches, granules collecting at the outlets
☐ Color change	Areas that have gone noticeably darker and therefore hotter
☐ Shrinkage at upstands	The membrane pulling down and away from the wall

AROUND THE EQUIPMENT

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Condensate discharge	Running onto the membrane, a permanently damp patch, staining
☐ Unit bases and stands	Feet bearing directly on the membrane, pads moved or crushed
☐ Service routes	Scuffs, impressions, worn surfacing where crews walk
☐ Fixings and brackets	Loosened by vibration, sealant failed around the base
☐ Panels and covers	Left open, propped, or no longer fastening
☐ Cable trays and conduit	Resting on a hot membrane, fixings driven through the roof

THE TRAFFIC DAMAGE

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Walkway pads	Missing, lifted, or ending short of where people actually walk
☐ The route people really take	Wear where the shortcut is, not where the pads are
☐ Impressions in the membrane	Footprints, ladder feet, dropped tool marks
☐ Areas near hatches and ladders	The highest traffic on any roof, and the most worn

INSIDE THE BUILDING

LOOK AT	WHAT A PROBLEM LOOKS LIKE
☐ Ceiling finishes	Stains from a leak that has since dried out and been forgotten
☐ Insulation in the void	Compressed, displaced or stained material
☐ Comfort complaints below the roof	Spaces that run hot, which can point at wet or failed insulation
☐ Plant rooms	Evidence of a leak nobody reported during the last season

WHAT TO DO WITH IT

1. **Fix the details first.** Sealant, laps and collars carry most of the heat damage and most of the risk.
2. **Repair before you coat.** A coating over an open seam hides it rather than ending it.
3. **Put walkway pads where people walk.** Not where the drawing says they should.
4. **Photograph from the same positions every spring.** Heat damage is gradual and only shows in comparison.
5. **Schedule the work for spring or autumn.** Materials and crews both perform better outside midsummer.

Want the reasoning behind these checks? Read what the desert climate does to a roof and when a coating is the right answer.

Walked by _____ Date _____ Roof _____