READY TO INSPECT — FIELD CHECKLIST

Air curtain annual maintenance checklist

The annual air curtain service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The HVAC service tech on the annual visit, with the unit dropped or opened up. When: Once a year, scheduled ahead of the cold season so a worn bearing or a mis-aimed nozzle is caught before the doors are working all day.

Access and lockout

- [ ] Entrance traffic rerouted and the owner told before teardown
  Owner told the entrance runs without its curtain for the visit, doorway coned off or a spotter posted, lift or ladder set per the site's access plan.
  No photo required
- [ ] Fan, heater and control feeds locked, tagged and tried
  Every feed locked, tagged and tried, water valves shut on hydronic units. Test runs: covers on, tools clear, locks off by their owner, re-locked before hands go back in.
  1 photo required

Blower and bearings

- [ ] Blower wheel cleaned and checked for balance
  Wheel cleaned front and back of the blades, no cracked or missing tabs, spins true with no wobble or heavy vibration on start.
  2 photos required
- [ ] Motor bearings checked for wear and noise
  Shaft felt for play, bearings listened to under load for whine or growl, greased where the fittings allow.
  1 photo required
- [ ] Housing, scroll and motor openings vacuumed out
  Lint and dust cleared from the scroll, behind the wheel and the motor cooling openings, not just the intake screen, so the motor is not running hot.
  1 photo required
- [ ] Motor and controller terminations checked for tightness
  Terminals torque-verified or resistance-measured, re-torqued only where found loose, no heat marks on the motor leads, contactor or speed controller.
  1 photo required

Discharge and coverage

- [ ] Nozzle re-aimed to reach the floor across the opening
  Discharge angle set so the stream lands near the floor and holds full width, velocity felt as even from jamb to jamb, no weak center.
  2 photos required
- [ ] Stream velocity measured across the opening near the floor
  Anemometer readings at both jambs and the center compared with the commissioning or last year's figures, low spots traced to vanes, wheel or mounting height.
  1 photo required
- [ ] Mounting and anti-vibration hardware retightened
  Brackets and isolators checked and snugged, no cracked mounts, unit sits level to the head of the opening.
  1 photo required

Heating section where fitted

- [ ] Heating section serviced and discharge warmth confirmed
  Electric elements or hydronic coil cleaned and checked, connections sound, discharge felt warm through the run on a heat call.
  No photo required

- [ ] Electric heater safeties checked on electric units
  Electric units only: high limit proved by the manufacturer's test method and heat seen to stay off unless the fan is running, nothing jumpered.
  No photo required

- [ ] Hydronic valve and coil freeze protection checked on water units
  Hydronic units only: control valve strokes on a heat call, coil vented, and the freeze protection the design includes still set and working.
  No photo required

Return to service

- [ ] Unit closed up, locks off by their owner and restarted
  Covers and intake guard fastened, tools and rags out of the housing, each lock removed by whoever hung it, unit restarted and left on its door switch.
  1 photo required

- [ ] Motor current read against the nameplate after restart
  Running current taken under the site's energized-work procedure and PPE, compared with the nameplate full-load figure and last year's reading, heaters included where fitted.
  1 photo required

- [ ] Annual findings entered on the unit record
  Velocity readings, current, bearing and wheel condition and deferred work entered against the unit so next year's visit has figures to compare with.
  No photo required