READY TO INSPECT — FIELD CHECKLIST

Energy recovery ventilator (ERV) quarterly maintenance checklist

A quarterly energy recovery ventilator round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against IMC, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The HVAC or maintenance tech on the quarterly round, at the unit in the mechanical room or on the roof. When: Every quarter, since the ERV pulls outdoor air continuously and loads its filters faster than equipment that only runs on a call.

Before the doors open

- [ ] Four airstream temperatures read with the unit running
  Outdoor, supply, return and exhaust temperatures read at the controller or with a probe, and compared with the same season last year to show recovery is still working.
  1 photo required
- [ ] Outdoor intake and exhaust outlet checked for re-entrainment
  Intake screen clear of debris, snow or nesting, and no exhaust outlet, flue or plumbing vent discharging where the intake can draw it back in.
  1 photo required
- [ ] Every ERV feed locked and tagged before a door opens
  Fans, wheel and any preheat feed locked, a start tried; powered checks run under the procedure's temporary release (clear, guards on, locks off by their owner), then re-locked.
  1 photo required

Filters

- [ ] Filters on both the supply and exhaust airstreams changed
  Both airstreams' filters pulled and checked, replaced when loaded, gaskets seated so air isn't bypassing the filter.
  2 photos required
- [ ] Replacement filters matched to the rating on the unit schedule
  Size and efficiency rating printed on the new filters checked against the unit schedule or manual for each airstream, so a lower grade doesn't let dust reach the media.
  1 photo required

Recovery and drives

- [ ] Recovery wheel turning or core clear
  Wheel rotating freely with its belt intact, or the fixed core faces clear, no debris packed into the media, seals contacting the wheel.
  2 photos required
- [ ] Supply and exhaust fans running clean
  Both fans running without bearing noise or vibration, belts on belt-drive units tensioned and not glazed.
  1 photo required
- [ ] Wheel drive belt and pulley checked on wheel units
  Link or V belt not stretched or slipping, pulley set screw tight and the drive motor mount firm; fixed-plate and membrane cores have no drive and skip this.
  No photo required
- [ ] Brush seals and purge section checked for rub on wheel units
  Perimeter and purge seals looked at for flattened bristles, debris or rub marks on the wheel face, and wear listed for adjustment at the annual; cores skip this.
  No photo required
- [ ] Leaving face on the exhaust side checked for frost and water
  Exhaust leaving face of the wheel or core free of frost, ice or pooled water, and in cold weather the frost control seen cycling if the unit has one.
  1 photo required

Dampers and drains

- [ ] Outdoor-air and exhaust dampers operate
  Dampers stroking fully open and closed with the unit, linkages tight, no blades stuck or bent, closing off when the unit is down.
  No photo required

- [ ] Condensate drains flowing on both sides
  Drain pans and traps checked on the drain side, water flowing away, no standing water in the cabinet.
  1 photo required

Return to service

- [ ] Cabinet doors closed on their gaskets and guards back on
  Every access door latched on its gasket so the airstreams stay separate, fan and wheel guards refastened, and no tools or filter packaging left inside.
  1 photo required

- [ ] Lock removed by the tech who hung it and the ERV run
  Lock and tag taken off by their owner, the unit restarted, and both fans and the wheel or core airflow watched running before the tech leaves.
  1 photo required

- [ ] Quarterly findings and worn parts reported to the owner
  Filters used, seal and belt condition and the airstream temperatures sent to the owner, with any parts needed ahead of the annual.
  No photo required