READY TO INSPECT — FIELD CHECKLIST

Expansion tank quarterly maintenance checklist

A quarterly expansion tank 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 manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The plumbing or maintenance tech on the quarterly mechanical round. When: Every quarter, paired with the pump or water-heater check since a waterlogged tank shows up first as the relief valve weeping or the pump short-cycling.

Charge and function

- [ ] Waterlogging checked by feel and tap
  Tank tapped top to bottom, air-side dome sounds hollow and the water side full, not full all the way up which points to a failed bladder taking on water.
  1 photo required
- [ ] Air valve checked for water
  Air valve depressed briefly; air blows out clean, water at the valve means the bladder has ruptured and the tank is waterlogged.
  No photo required
- [ ] System pressure read at the gauge nearest the tank
  Gauge at or near the tank read at operating temperature and compared with the cold fill pressure on the log; a rise well past last year's swing says the tank is not taking up expansion.
  1 photo required
- [ ] Plain steel tank water level read at the gauge glass
  On a plain steel tank, the gauge glass shows water in the normal band marked for that tank; a glass full to the top means the air cushion has been absorbed.
  No photo required

Connection and support

- [ ] Tank connection dry and tank supported
  No weeping at the system tap or air valve, tank carried by its bracket or stand and not hanging its water-filled weight on the pipe stub.
  2 photos required
- [ ] Tank line open to the system
  Any isolation valve on the tank line found fully open, and no closed or throttled valve between the tank and the system that would cut it off.
  1 photo required
- [ ] System relief discharge checked dry as a tank symptom
  The system relief valve on this loop is dry at its discharge; weeping when the system is hot is read first as a tank that has lost its cushion, not a bad valve.
  No photo required

Shell condition

- [ ] Shell and seams checked for corrosion
  No rust blistering, pitting or weeping at the shell seam, especially on the lower head where a slow leak collects.
  1 photo required
- [ ] Equipment tag legible and matching the tank record
  Nameplate and any site equipment tag readable and matching the tank record, so the right precharge, volume and rating follow this tank.
  1 photo required
- [ ] Insulation and jacket checked on a chilled water tank
  On a chilled water system, the tank and its line are insulated and dry, with no sweating that would rust the shell from the outside.
  No photo required

Air side and fittings

- [ ] Air-side fittings checked for a slow leak
  Leak detector on the air valve of a bladder or diaphragm tank, or on the gauge glass cocks and plugs of a plain steel tank, shows no bubbles or weep.
  1 photo required

- [ ] Air-side fittings resealed after the checks
  Air valve cap back on and snug on a bladder or diaphragm tank, or gauge glass cocks and drain on a plain steel tank shut and dry.
  1 photo required

Record

- [ ] Quarterly readings logged to the tank record
  System pressure, tap and air valve findings and any gauge glass level entered on the tank record next to last quarter's readings.
  No photo required

- [ ] Deficiencies reported to the owner with the tank tag
  Waterlogging, water at the air valve, a shell weep or a closed tank line written up to the owner by tank tag, since a failed bladder tank is replaced rather than recharged.
  No photo required