

Plate-and-frame heat exchanger quarterly maintenance checklist

A quarterly heat exchanger 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 mechanical or building maintenance tech on the quarterly round, reading the exchanger in service. When: Every quarter while the exchanger is running under load, so a slipping approach temperature is caught as early fouling rather than a comfort complaint.

Performance

- ☐ **Approach temperature read across both circuits**
Inlet and outlet temperatures taken on both sides under load and the approach compared to what the exchanger normally holds, a widening approach flags fouling before it becomes a complaint. 2 photos required
- ☐ **Pressure drop across the unit observed**
Differential across each side compared to normal; a climbing drop with no valve change points at scaling or debris packing the plate gaps. 1 photo required

Leaks

- ☐ **Plate pack and connections checked for external leaks**
No weeping along the plate pack edges or at the port connections, no drip trail down the frame, dry under the unit. 2 photos required
- ☐ **No sign of cross-contamination between circuits**
Neither circuit showing the other's pressure, color or make-up behavior, which would say a plate or gasket is passing internally. 1 photo required