

VAV BOX COMMISSIONING CHECKLIST

Project: [PROJECT NAME] Box tag: [VAV-X-XX]
 Served AHU: [AHU-X] Zone / room: [ROOM]
 Controller: [BACnet ID / DEVICE] Box size: [INLET DIA]
 Design CFM: Min [] Max [] Heat []
 CxA: [NAME] Date: [YYYY-MM-DD]

Mark each item: P = Pass F = Fail N/A = Not applicable

1. INSTALLATION (PRE-FUNCTIONAL)

- [] Box tag, size, and location match the drawings and schedule
- [] Straight inlet duct run meets manufacturer minimum (typ. 3 diameters)
- [] Flow sensor tubing connected high/low correctly, no kinks
- [] Damper actuator mounted, linkage tight, rotation direction verified
- [] Reheat coil piped (or electric heat wired) with isolation and control valve
- [] Zone sensor mounted at correct height, away from supply diffusers and heat sources
- [] Controller powered, addressed, and communicating on the network

2. POINT-TO-POINT

- [] Zone temperature reads within ± 1 °F of a calibrated reference
- [] Airflow reading present and stable with box under control
- [] Damper commands 0% / 100% and position feedback tracks
- [] Reheat valve (or heat stages) commands and responds
- [] Discharge air temperature sensor reads correctly (if installed)
- [] Setpoint adjust and occupancy override work from the zone sensor

3. AIRFLOW BALANCE

- [] Minimum and maximum cooling CFM entered per schedule
- [] Heating airflow setpoint entered per schedule
- [] Flow coefficient (K-factor) confirmed against TAB hood reading
- [] Measured airflow at min and max within $\pm 10\%$ of design

4. FUNCTIONAL SEQUENCE

- [] Cooling: zone above setpoint, airflow ramps from min toward max
- [] Deadband: airflow holds at minimum, no heating
- [] Heating: airflow goes to heating CFM, reheat modulates, DAT limit respected
- [] Unoccupied: box responds to setback setpoints
- [] Loss of communication / power: box fails to documented safe position
- [] Alarms (high/low zone temp, low flow) trigger and clear correctly

MEASURED AIRFLOW

Min CFM: design [] measured [] % []
 Max CFM: design [] measured [] % []
 Heat CFM: design [] measured [] % []

SIGN-OFF

Items failed: [] Logged in issues log: [Y/N]
 Overrides removed: [Y/N]
 Contractor: [NAME] Date: [YYYY-MM-DD]
 Verified by (CxA): [NAME] Date: [YYYY-MM-DD]
 Notes / exceptions: [DEFICIENCIES, DEVIATIONS]

Shine CX Authority – field practice checklist. Not a permit submittal.