

Airside Performance Check

Scheduled CFM

_____ CFM

Measured CFM

_____ CFM

Fan Speed/VFD

_____ %

Duct Static

_____ in. w.g.

01 Confirm the Demand

- ☐ Verify occupancy, schedule, and setpoints.
- ☐ Check thermostat and BAS status/alarms.
- ☐ Review economizer position and operation.
- ☐ Confirm discharged air temperature.
- ☐ Confirm required CFM from load calculation.

02 Verify the Fan

- ☐ Confirm fan rotation and airflow direction.
- ☐ Check belt-drive condition and alignment.
- ☐ Verify VFD mode, command, and feedback.
- ☐ Compare measured RPM to commanded.
- ☐ Check fan and motor performance/amps.

03 Follow the Pressure

- ☐ Measure total external static pressure (TESP).
- ☐ Break out duct static: supply and return.
- ☐ Compare to baseline or design TESP.
- ☐ Identify high pressure zones or anomalies.
- ☐ Check filters and coils for pressure drop.

04 Check the Installation

- ☐ Inspect for closed or modulating dampers.
- ☐ Check for obstructions and collapsed duct.
- ☐ Verify diffuser/grille quantities and settings.
- ☐ Look for leakage at ducts and cabinets.
- ☐ Ensure test ports are accurate and clean.

Condition

Interpretation

Measured CFM is below scheduled AND TESP is high.

System is restricted. Find and remove the restriction.

Measured CFM is below scheduled AND TESP is normal/low

Check fan performance, drive, speed command, or demand.

Measured CFM is at or above scheduled AND complaint remains.

Look for leakage or control issue. Balance or control the system.

TESP is high but CFM is at or above scheduled

Fans may be overspeeding. Verify need before any increase.

TESP is low and CFM is below scheduled

Check measurement accuracy, damper positions, and bypass.

Need another set of eyes on an airside application?
Contact Us at info@varitecsolutions.com or call our local office
www.varitecsolutions.com/contact