



# SPECIFICATION FOR MELINK T&B

## I. Special Notice

The Owner shall provide the testing, adjusting, and balancing of the HVAC system. Its independent, certified, and national T&B firm is Melink Corporation.

The General Contractor shall be responsible for scheduling the testing, adjusting, and balancing directly with Melink Corporation at least 2 weeks in advance. Contact Tammy Muncy at (513) 271-1615 for scheduling. This work shall be performed after the HVAC system start-up and before turnover to Operations. Gas and electric power must be turned on, all doors and windows installed, and ceiling tiles in place.

## II. Testing, Adjusting, and Balancing

- The purpose of testing, adjusting, and balancing the HVAC system is to ensure optimal performance, comfort, and energy efficiency for the Owner's benefit.
- This service covers all heating and air-conditioning and exhaust ventilation systems.
- A certified report shall be submitted to the Owner within 1-2 weeks of completion. The T&B work shall be completed in accordance with the following checklist:

### A. General

1. Inquire about any design, equipment, and installation problems.
2. Compare installed system to mechanical plans.
3. Document design specifications for report.
4. Ensure all fans are running for balance.
5. Measure initial building pressure.

### B. Inspect the HVAC System

6. Inspect units and document any deficiencies.
7. Record unit nameplate data.
8. Check thermostats for proper wiring and settings.
9. Check for correct fan rotation (include condenser fans).
10. Check conditions of filters and coils.
11. Check position of outside air dampers.
12. Check gas lines and condensate lines.
13. Check belt tension and pulley alignment.
14. Check disconnect switches and covers.
15. Check any fan noise and vibration.
16. Check heating/cooling modes of RTUs.

### **C. Test and Balance the HVAC System**

17. Measure RTU supply and return airflows.
18. Adjust RPM as necessary to achieve design.
  - Check actual amps versus motor FLA.
  - Note adjustments made on pulleys.
  - Measure final RPMs.
19. Damper at branch takeoffs first and at diffusers second.
20. Check for drafts and hot/cold spots.
21. Ensure slightly positive building pressure.
  - Fine tune position of OA dampers.
  - Measure final building pressure.

### **D. Final Review**

22. Review report and data for completeness.
23. Discuss findings and results with superintendent.
24. Submit certified report along with recommendations to Owner.

Air quantities shall be balanced to within +/-10% of design as a general rule. However, in some cases, the air quantities may need to be adjusted differently in order to ensure acceptable comfort levels, proper hood capture, positive building pressure, etc.

Melink shall notify the superintendent of any deficiencies needing immediate attention, and the G.C. shall have the mechanical and electrical contractors available on call to promptly correct any such problems (i.e. burned out motors, failed thermostats, incorrect wiring, bad circuit breakers and starters, dirty filters, missing dampers, undersized RTU outside air intakes).

In the event Melink needs to reschedule a follow-up visit to test and balance any equipment not ready on the originally scheduled T&B date, the G.C. shall pay for the additional cost involved, including travel.