

Project Summary

Preface

The summary below provides a quick understanding of how well your HVAC systems are balanced for the design criteria. The summary concludes with a quick understanding of your building environment and possible suggestions for each of your systems after testing has been performed. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred. Our focus is to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

Facility Identification and TAB Requirements

The mechanical equipment to be tested, adjusted, and balanced includes All Roof Top Units (RTU), All Exhaust Fans (EF), All Variable Air Volume boxes (VAV) all Fan Coil Units (FCU), and all associated air devices.

RTUs

Each of the RTUs was measured at their terminal devices utilizing a flow hood. The VAVs were calibrated by creating a factor. The sum of the flow through each VAV is the total flow for the corresponding RTU. Each terminal diffuser was balanced to within +/-10% of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this tolerance is noted throughout the report.

General Exhaust Fans

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within +/-10% of the design. Each terminal device was balanced to within +/-10% of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance, the ORs were all noted as being positively pressurized. All areas of the building are comfortable and performing as intended.

Return Trip

A return trip was completed on 12/20/2023 with special attention given to air changes per hour (ACH) to rooms on the second floor.

Housekeeping next to Decon was bumped up to 92 CFM of exhaust. This makes the ACH 11.7 in that room. The requirement is 10.

Biohazard back hallway behind recovery was increased to 165 CFM exhaust which makes 10.8 ACH. The requirement in this room is 10 ACH.

Sterile storage next to OR4 was increased to 177 CFM of supply. This increases the ACH in that room to 4.1. The requirement is 4.0 ACH.