## **Section 6 – Air Distribution and Building Pressure**

## Ventilation Verification and Energy Optimization Assessment

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Verify Air Distribution and Building Pressurization** | | | | | | | | | | | |
|  | **Supply Outlets –** Measure and document supply air volume (CFM).   * Include individual outlet test report * Include duct pitot traverse report (if available) | | | | | | | | | | |
|  | **Return Inlets** – Measure and document return air volume (CFM).   * Include individual inlet test report * Include duct pitot traverse report (if available) | | | | | | | | | | |
|  | **Exhaust Inlets** – Measure and document return air volume (CFM).   * Include individual inlet test report * Include duct pitot traverse report (if available) | | | | | | | | | | |
|  | **With Power Exhaust disabled (if applicable), determine if**  **Measured Supply Air = Measured Outside Air + Measured Return Air**   * Document any discrepancies and determine the cause of significant discrepancies (i.e. leakage, ductwork serving other zones, inaccurate measurement location). * Document Building Pressure - Verify pressure differential is within tolerance of design and a negative pressure for contaminant rooms temporarily occupied by sick patrons. | | | | | | | | | | |
| **Supply Air** | | | | **Outside Air** | | | | | **Return Air** | | |
|  | | | **=** | |  | | | **+** | | |  |
| **Building or Zone Pressure** | |  | | | | **In w.c.** | **In relation to:** | | |  | |
|  | **With Power Exhaust enabled (if applicable), determine if**  **Measured Supply Air slightly greater than Measured Return/Exhaust Air**   * Document any discrepancies that do not match design intent. Determine the cause of significant discrepancies (i.e. leakage, ductwork serving other zones, inaccurate measurement location, power exhaust requires adjustment). * Document Building Pressure - Verify pressure differential is within tolerance of design and a negative pressure for contaminant rooms temporarily occupied by sick patrons. | | | | | | | | | | |
| **Supply Air** | | | | **Outside Air** | | | | | **Return & Powered Exhaust Air** | | |
|  | | | **=** | |  | | | **+** | | |  |
| **Building or Zone Pressure** | |  | | | | **In w.c.** | **In relation to:** | | |  | |
| Y/N | **Air Distribution -** Verify that inlets and outlets are balanced within tolerance of the system design as listed within design documents.   * If the original system design values are not available, document available information and note unavailability of system design values in the HVAC Assessment Report. | | | | | | | | | | |
|  | **Air Distribution Notes.** – Note how the air moves from supply to return. | | | | | | | | | | |
|  | **Repairs and Adjustment.**   * Document Required Repairs and Adjustments | | | | | | | | | | |
|  | Include relevant photographic documentation | | | | | | | | | | |

*This document is intended to be used solely as an aide when developing the methods, procedures, and forms used in the Ventilation Verification and Energy Optimization Assessment.  It is the responsibility of each contractor, supervisor, and technician to ensure that the methods, procedures, and forms used meet the requirements of the local mechanical codes.  The National Energy Management Institute Committee makes no representations, whatsoever, that drafting procedures or forms based on this document will meet that requirement of local mechanical codes and expressly disclaims any liability or responsibility regarding the use of this document.*