## **Section 1 - Overview**

## Ventilation Verification and Energy Optimization Assessment

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| **Unit** | |  |
| **Model Number** | |  |
| **Serial Number** | |  |
| **SEER Rating**  **Seasonal Energy Efficiency Ratio** | |  |
| **Refrigerant** | |  |
|  | **Filtration -** Review system capacity and airflow to determine the highest Minimum Efficiency Reporting Value (MERV) filtration for eliminating contagions, replace or upgrade filters where needed, and verify that such filters are installed correctly. | |
|  | **Ventilation Rate** - Calculation of the required outside air rates for each occupied area based on the anticipated occupancy and physical verification that the ventilation rate meets or exceeds the minimum ventilation set forth by the local jurisdiction in all modes of operation.   * Outside Air * Exhaust Air | |
|  | **Ventilation System Operation** - Physically test all ventilation components for proper operation.   * Economizer * Demand Control Ventilation | |
|  | **Air Distribution** -   Verify all ventilation is reaching the served zone, how air is distributed, and that there is adequate distribution.   * Inlet Total * Outlet Total | |
|  | **Building Pressure -** Verify a slight positive building pressure and a negative pressure for contaminant rooms temporarily occupied by sick patrons. | |
|  | **General Maintenance.** Verify coil condition, condensate drainage, cooling coil air temperature differential (entering and leaving dry bulb), heat exchanger operation, and drive assembly. Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report | |
|  | **Operational Controls -** Review of HVAC control sequences to verify systems will maintain intended ventilation, temperature and humidity conditions during operation.  Verify a daily flush is scheduled in accordance with current ASHRAE recommendations and any applicable local or state guidance. | |
|  | **CO2** **Monitoring -** To ensure proper ventilation is maintained during building operation, at least one CO2 monitor shall be installed in each zone of the building. | |
|  | **Limited or No Existing Mechanical Ventilation (If Applicable)** - In cases where there is limited or no existing mechanical ventilation, the assessment would then focus on avlaible options and provide the design professional with documentation required to provide ventilation options with limited assumptions. | |
|  | **HVAC Assessment Report -**Preparation of an HVAC Assessment Report that includes documentation of all verifications and deficiencies. | |
|  | **Energy and Ventilation Upgrades -** Upon completion of the HVAC Assessment Report, a design professional shall review and determine if upgrades can be made to the HVAC system to increase energy efficiency, filtration, disinfection, and ventilation. | |

*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.*