



Meeting Federal Government Building Standards and Achieving Certifications

with High Performance Fresh Air Ventilation Systems

EPA Act 2005 requires federal buildings to use 30% less energy than a building meeting the requirements of ANSI/ASHRAE/IESNA Standard 90.1 or the IECC while also meeting Indoor Air Quality (IAQ) standards ASHRAE 62.1 & 55.

CONVENTIONAL SOLUTION: Bring additional fresh air in with increased operational costs, larger equipment and extra materials.

BERNER'S SOLUTION: Introduce fresh air and humidity control using energy recovery for the same operational costs as a conventional system along with minimal maintenance (ASHRAE 90.1, 62.1-2 and 55).

The following are three design guides referenced by the federal government to help buildings satisfy EPA Act 2005 and other key federal mandates combined with Berner's ability to manufacture equipment that helps buildings meet these standards.

Whole Building Design Guide

(Executive Orders 13423 & 13514)

Berner's energy recovery equipment can help federal buildings meet/exceed these ASHRAE standards (as referenced by the Whole Building Design Guide).

Energy Efficiency

ASHRAE Standard 90.1

Ventilation, IAQ, Thermal Comfort

ASHRAE Standard 62.1

ASHRAE Standard 55

Moisture Control

ASHRAE Standard 55

Ozone Depleting Compounds

Berner's energy recovery systems reduce the amounts of refrigerant required to meet latent and sensible needs. When refrigerants are required, Berner complies with national guidelines and does not use OZONE depleting refrigerants.

LEED v3

(U.S. Green Building Council)

Berner's Fresh Air Ventilation with Energy Recovery may assist in obtaining the following credits under the LEED v3 building rating system:

LEED for New Construction and Major Renovation:

Energy & Atmosphere (EA) Prerequisites 2 & 3, Credits 1 & 4

Indoor Environmental Quality (IEQ) Prerequisite 1, Credits 2 & 7.1

LEED for Existing Buildings: Energy & Atmosphere (EA) Prerequisites 2 & 3, Credits 1 & 4

Indoor Environmental Quality (IEQ) Prerequisite 1, Credits 2 & 7.1

LEED for Schools: Energy & Atmosphere (EA) Prerequisites 2 & 3, Credits 1 & 4

Indoor Environmental Quality (IEQ) Prerequisites 1 & 3, Credits 2, 7.1, 9 & 10

Energy Star Buildings

New & Existing Buildings which are designed to bring in fresh air (ASHRAE 62.1) can reduce their energy usage (increase their energy savings) with Berner's Fresh Air Ventilation with Energy Recovery Systems (ASHRAE 90.1) to support:

- Earning a rating of 75 or higher
- The 2030 Challenge and AIA goal by selecting the Energy Reduction Target for 50 percent less than an average building.



Berner International Corp.

Fresh Air Ventilation with Energy Recovery Systems

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