



VIRTUAL WALL™

Ultimate Energy Efficiency by Combining
Best-In-Class HVAC Technologies

Combining the most energy efficient technologies in heating, cooling, ventilation and controls!

Virtual Wall is an integrated system designed to control a facility's heating, cooling and/or ventilation systems to achieve optimal energy usage in large, open spaces with mixed use between occupied and unoccupied areas.

Achieving the perfect balance between ventilation and energy efficiency

Based on building activity and occupancy, the Virtual Wall solution simultaneously meets:

- Ventilation requirements per ANSI/ASHRAE 62.1*
- Energy efficiency requirements per ANSI/ASHRAE 90.1**

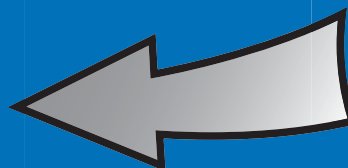
Resulting in improved indoor air quality, comfortable air temperature, relative humidity, and reduced operating costs.

*Ventilation for Acceptable Indoor Air Quality

**Energy Standard for Buildings

Providing central management of best-in-class HVAC Systems

- ROBERTS GORDON® CORAYVAC® low-intensity, infrared heating systems
- RAPID® direct-fired, make up air handlers
- ADDISON® 100% dedicated outdoor air systems



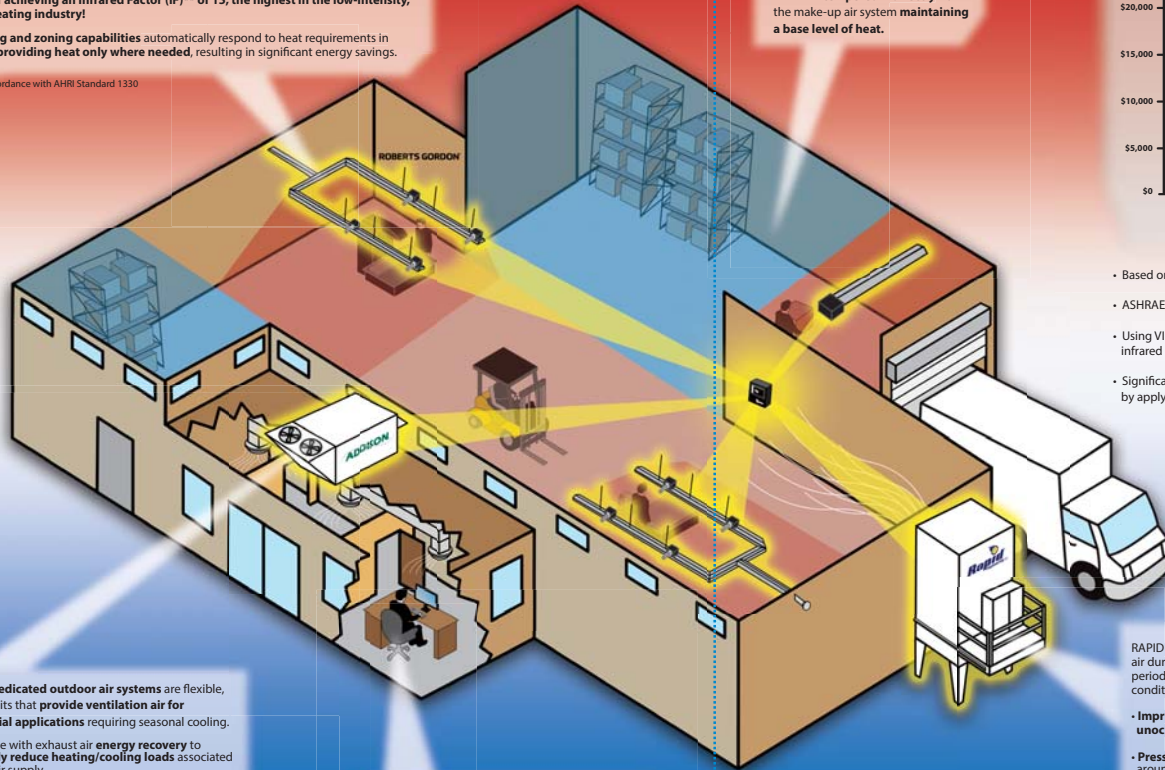
Customization, optimization, integration made simple

Custom designed ROBERTS GORDON® Infrared Heating systems provide **even heat and uniform comfort** throughout occupied spaces, resulting in the **most efficient way to heat large buildings**. Infrared energy passes directly through space to heat objects and occupants below. As warmth is absorbed, energy re-radiates in the space.

- Capable of achieving an Infrared Factor (IF)** of 15, the highest in the low-intensity, infrared heating industry!
- Modulating and zoning capabilities automatically respond to heat requirements in each area, providing heat only where needed, resulting in significant energy savings.

**Rated in accordance with AHRI Standard 1330

Unoccupied spaces such as storage areas are **tempered indirectly** from the make-up air system **maintaining a base level of heat**.



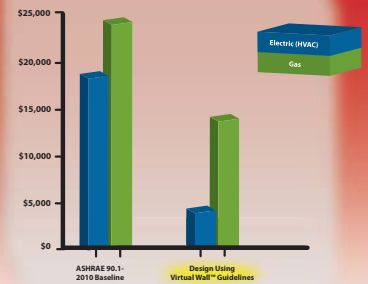
ADDISON® dedicated outdoor air systems are flexible, packaged units that **provide ventilation air for non-industrial applications** requiring seasonal cooling.

- Configurable with exhaust air **energy recovery** to **dramatically reduce heating/cooling loads** associated with fresh air supply.
- Responds to building changes to reduce ventilation rates during low occupancy periods.
- Innovative options deliver optimum energy efficiency, while **meeting ventilation code requirements in commercial spaces**.

The Facilities Manager has convenient **control over all HVAC systems from a single access point**. Users can easily control space conditions by partitioning large spaces into separate zones.

Up to 60% energy savings!*

Annual Energy Usage



- Based on 100,000 square foot facility
- ASHRAE 90.1 – 2010 Baseline design using Indirect Fired MUA
- Using VIRTUAL WALL™ design guidelines: 40% of heat-loss satisfied by infrared equipment; 60% by Direct Fired Make Up Air
- Significant energy savings related to HVAC equipment were realized by applying VIRTUAL WALL™ design guidelines!*

RAPID® direct-fired air management systems bring in tempered air during heating periods and non-tempered air during warmer periods to efficiently establish and maintain a mild, pressurized condition in the facility.

- **Improved indoor air quality and deliver base level heating for unoccupied areas.**
- **Pressurization forces airborne particulate out**, reduces drafts around openings and improves comfort during colder months.
- Direct-fired burner increases operating efficiency by delivering all the available heat to the space.
- **Combustion creates natural humidity**, which enhances comfort and reduces bothersome static electricity that can negatively impact production processes.



VIRTUAL WALL™



VIRTUAL WALL™

Convenience of working with the designer, manufacturer and consultant, all from the same company!

- Custom designed HVAC solution that will ensure high air quality, comfort, energy savings, and convenience.
- Dedicated, experienced professional support team provides service before, during, and after equipment installation.
- Proven results from reliable equipment, years of successful applications and breakthrough energy savings for industry leading companies.



1250 William Street, Buffalo, NY 14206 USA

Telephone: +1.716.852.4400 • Fax: +1.716.852.0854 • Toll Free: 800.828.7450

www.specifiedair.com

SASVWF 0317 Orig