

# CUSTOM AIR HANDLING UNITS

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*Beyond Compare*



 **NORTEK**<sup>™</sup>  
AIR SOLUTIONS

# NORTEK AIR SOLUTIONS CUSTOM DESIGN CAPABILITY

## *Stands Apart*

Nortek Air Solutions custom air handling units offer a flexible design to meet the fit, efficiency and reliability requirements of a wide range of industries.

See how Nortek Air Solutions goes above and beyond to provide a top-rated system unmatched by leading competitors.



## BASE CONSTRUCTION

Nortek Air Solutions AHU

VS

BRAND "X" AHU

**Structural tube base rail** provides unmatched strength and favorable thermal properties versus a c-channel base.



**Structural c-channel base rail** is secondary in strength, thermal properties and rust prevention. In the field, c-channel base rails tend to collect debris and water, leading to corrosion.

# SOUND PROPERTIES

## Nortek Air Solutions AHU

VS

## BRAND "X" AHU

**FANWALL® cubes come standard with patented Coplanar Silencer® enclosures.** Cubes are lined with perforated aluminum and acoustic insulation to provide up to an 18dB reduction in discharge sound power. There is also the option for an active noise control component which provides up to 22dB reduction in sound power at the blade pass frequency in lower octave bands.



**Standard units have open fan cells with no sound attenuation.** There is an optional add-on that provides up to 10dB reduction in vertical applications, but it does not allow for a backdraft damper.

# BACKDRAFT DAMPER

## Nortek Air Solutions AHU

VS

## BRAND "X" AHU

**AHUs come standard with a near zero system effect backdraft damper.** The backdraft damper allows the system to continue to operate efficiently when a fan either goes down and needs maintenance or is turned off. It will close off the inlet to a fan that is not operational to prevent air recirculation.



**Open inlet with no prevention for recirculation.** If a fan goes down, the cell with the inoperable fan will see significant recirculation of air decreasing the efficiency of the air handler while also creating turbulence in the airflow.

# SYSTEM OPTIMIZATION

## Nortek Air Solutions AHU

VS

## BRAND "X" AHU

**System optimization controls** allow on/off control of individual fan cubes to match requirements in variable airflow applications with the optimum number of fans and motors operating at peak efficiency.



**Only option is to ramp up and down the entire fan array.** This is inefficient as it runs the motors in the bottom of their efficiency curve to achieve lower CFM output. This becomes costly both in kWh and maintenance.

# MIAMI-DADE CERTIFICATION

## Nortek Air Solutions AHU

VS

## BRAND "X" AHU

**Ranked in the three highest spots on Miami-Dade County's High Velocity Hurricane Zone rating compliances for AHU cabinets in North America.** Nortek Air Solutions' welded frame AHU passed testing at 220 pounds per square foot (PSF), steel integrated thermal break frame (ITF) passed at 135PSF and aluminum ITF passed at 125PSF. This sets Nortek apart from the competition by offering the best hurricane-rated units in the industry.



**Ranked at an underwhelming 6th place** among competition at 80PSF for its steel cabinet.

# OSHPD/IBC CERTIFICATION

## Nortek Air Solutions AHU

VS

## BRAND "X" AHU

**Manufactured and tested the largest coil (184 inches in width) ever to receive OSHPD certification.** Nortek received OSHPD certification for California and IBC certification for all other states. Nortek products were tested with aluminum, steel and stainless-steel bases. Air measuring systems, ionization filters, control systems (including redundant VFD systems) and UV lights underwent testing. Units also included vibro acoustics sound traps.



**Bases limited to steel only.** Limited options to have a truly custom unit for projects requiring OSHPD certification.

# CUSTOM SOLUTIONS *For Your Needs*

Offering a broad range of options with units ranging from 1,000 – 300,000+ CFM, Nortek Air Solutions customizes a solution to meet your indoor or outdoor application needs for new construction, renovation and repair projects. Our design and manufacturing expertise, coupled with flexible packaging options: fully assembled, shipped in sections, or transported in pieces, helps to reduce installation time and costs for our customers while minimizing building disruptions.



## **SINGLE-SOURCE RESPONSIBILITY**

Nortek Air Solutions designs and manufactures its own key components – coils, fans, dampers, humidifiers – which improves its flexibility and response time to customers. The comfort of not having to worry about added design/production time as well as the installation hassle of assembling components on the jobsite is why more and more customers choose Nortek Air Solutions.



## **CUSTOM CONFIGURATIONS**

- Steel, aluminum or stainless-steel construction
- FANWALL TECHNOLOGY®
- Factory tested, ARI Certified™ performance on cooling and heating coils
- Sectional construction for ease of transport and installation
- Knockdown construction done either at the factory or jobsite

## FOR MORE INFORMATION

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*locate your local representative by visiting [www.nortekair.com](http://www.nortekair.com)*



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