

CASE STUDY: MAIN PLACE

THE SITUATION:

Hines Development is the preeminent developer of green buildings in the U.S., with over 30 million square feet of green buildings built or currently under construction - more than any other developer in North America. Hines wanted to create a 21st century icon for downtown Houston. At 46 stories, this building at Main Place will be Houston's next great downtown landmark.

Hines is no stranger to building world-class office buildings that attract the best tenants. Wylie Associates, the MEP consulting engineer on the project, was tasked with designing a cost effective mechanical system that consumed low amounts of energy and reduced the per floor mechanical room footprint. The challenge: how could tenant space be saved, the floor-by-floor AHUs have quiet performance, and energy consumption be minimized?

Although it seemed like competing objectives, Air Zone International was ready to embrace the challenge.

OUR SOLUTION:

Designing a building to better ASHRAE 90.1: 2004 Baseline Building Performance is no easy task - especially when that building is located in a hot, humid climate. According to Wylie Associates, the Air Zone Vertical Upblast Air Towers contributed in a significant way toward the building's overall operating cost savings. Why are Air Zone's air columns more energy efficient than other solutions? Our Direct Drive Plenum Fans with High Efficient Motors use up to 6% less energy than "standard" offerings, and our ultra low leakage casing design ensures optimal performance.

Of course, the real key to making this design application work is to build units that are quiet enough to be positioned in the tenant space. Constructing a column unit with MERV 13 Filters, CW coils, UV Lights, and an open mechanical room return plenum that can meet rigorous NC 42 sound requirements in an independent lab at the maximum CFM was a challenge - but Air Zone met these requirements.

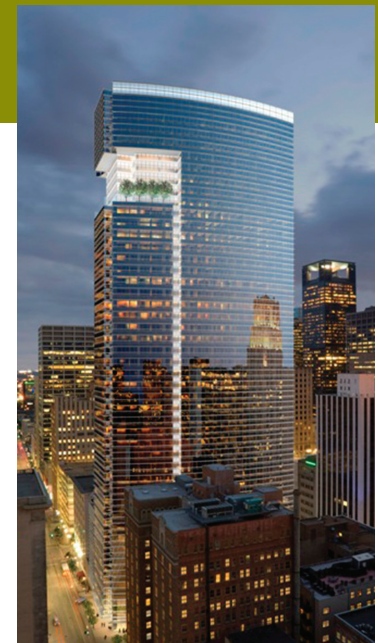
THE RESULTS:

Exact clients like Hines want air units that will last a long time. Our relationship with Hines is one that we value greatly, and we take customer service very seriously.

Our column units successfully passed NC 42 sound levels where other manufacturer's equipment has had challenges.

Our vertical column units are economical, especially compared to the costs they avoid. It has been estimated that every square foot of tenant space saved is worth \$600 for the building's valuation. Our compact footprint was estimated to have saved 50SF per floor when compared to traditional core mechanical rooms with horizontal units.

Air Zone's column units are used in hospitals, laboratories, offices and factories. They are versatile, rugged and quiet. The compact vertical column unit footprint allowed the design team to minimize the floor space required for mechanical rooms significantly compared to similar building types. Call today to see what Air Zone can build for you.



Block 93: Main Place
Houston, Texas

960,000 SF
LEED Silver

Developer: **Hines**
Architect: **Pickard Chilton**
Consulting Eng: **Wylie Associates**

- 100 Vertical Upblast Air Columns
- 12,000 CFM each
- 41/42 NC Certified Sound Performance
- CW Coils and UV Lights
- Direct Drive Plenum Fan with Patented Easy Rollout

