

ALTA DIAGONAL OFFICE BUILDING BARCELONA, SPAIN

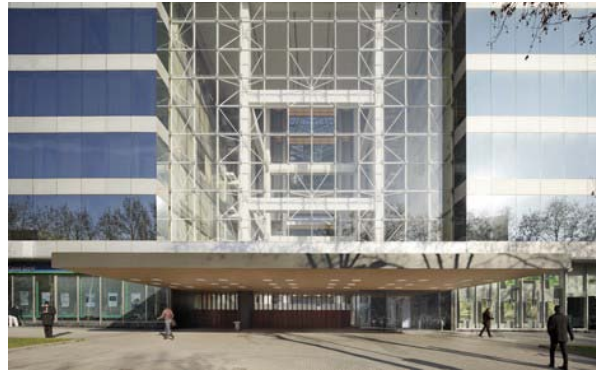
KEY PARAMETERS

- Type of Facility – Existing Building (EB)
- Function – Office Building
- Area – 9 stories, 93,500 square feet
- Project Completed – 2012

Challenge: Sustainable design in a complete renovation of one of Barcelona's most distinctive buildings in the heart of the city's financial district. The building's owner sought to transform an iconic downtown building into one that would meet the demands of today and in the future, including a design for LEED® Gold certification. One of the measures implemented was the use of energy saving indoor air quality technologies.



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LEED® GOLD.



ALTA DIAGONAL



Solution: Eight (8) Dynamic V8 Air Cleaning Systems were installed in large custom air handling units to filter incoming outdoor air and clean recirculated indoor air.

Results: The owners were able to achieve the following design objectives:

- **LEED® Gold Certification:**

1. Energy & Atmosphere - EA1 encourages the use of strategies for saving energy. Relative to

passive filters, the Dynamic V8 saves energy through lower static pressure resistance and lower fan energy.

2. Indoor Environmental Air Quality – IEQ1 which specifies a MERV 13 minimum prerequisite for air filtration. IEQ 5 which requires indoor chemical and pollutant source control to minimize particulate and gas phase pollutants. The Dynamic V8 achieves MERV13-15+ efficiency and controls ultrafine particles in addition to odors and gas phase contaminants.

- *Regulation of Thermal Installations in Buildings (RITE)* – Spanish and EU compliance standards for IAQ and building energy performance.
- *Increased comfort* for building occupants through improved indoor air quality.
- *Reduced Equipment Maintenance* – Dynamic V8 Air Cleaning Systems extend filter maintenance intervals from every few months (for traditional passive filters) to every several years.

For more information, photos, and a video of the building, visit www.altadiagonal.com/en/.

TEAM

- Owner – Deka Immobilien Europe
- Engineering – PGI Engineering
- General Contractor – Bovis Lend Lease
- Architects – Josep Ma. Fargas, Tous I Fargas & Jordi Badia, BAAS

MECHANICAL SYSTEMS

- HVAC – Airlan Industrial S.A.
- Ventilation – Aire Limpio

www.DynamicAQS.com