



This leading fashion retail store entered the Santa Monica Place shopping area, a high-traffic destination since the 1980s, in the fall of 2010. The original AHU was constantly needing repairs which led the building owner to inquire for a reliable, maintenance-free, efficient, cost effective, and time sensitive solution.

## JOB PROFILE

## **Luxury Department Store**

## Project at a Glance

#### Location Area Served

Santa Monica, CA 20,000sqft - 7days/week

#### Situation

Replace the outdated belt driven plenum fans with a maintenance-free ECM fan array system to decrease the building's facility expenses and secure minimal downtime.

### Solution

Exceeding the building owner's expectations with a Q-PAC system that was easy to install and maintenance-free, with reduced energy costs and built-in redundancy.

Q-PAC's simplicity allowed the contractor to deliver without any downtime. Building owner is 100% satisfied due to disruption-free installation; and maintenance-free, redundant, cost effective, and reliable solution.

## Challenges

The AHU's belt driven plenum fans required constant maintenance. Replacing the fans with new AC motors and wheels would require a crane and additional manpower; this was a poor option due to disruption of retail hours, other neighboring businesses, and because the unit could only be accessed via a ladder. The building owner wanted minimal downtime and added redundancy due to the on-going maintenance battle to keep the building's air moving.

### **Actions**

- I. Our rep, Vertical Systems, used Q-PAC's QUIPS Selection Tool and worked closely with our team, to configure and custom design 4 ECM fan arrays tailored to the building's existing AHU designs and sizing constraints.
- 2. Q-PAC fabricated a modular fan integration system for ergonomic handling that matched existing fan's power supplies. Our pre-assembled wire harnesses and Quick Connect boxes that arrive in a kit with plug and play instructions, enabled the installing contractor, Retrofit Technology, to deliver a quick start up.

### Results

An experience that was 100% satisfactory for the rep, installing contractor, and building owner. A Q-PAC Fan System with our Fan Integration Technology was quickly installed to deliver a maintenance-free, 100% redundant solution for the life of the fans. Q-PAC's modularity and simplicity, allowed the installing contractor to complete the project without the need for specialized work force, cranes or other lifting equipment in eight hours. Our smaller footprint increased available space inside the unit, providing for easy access in the future. Our Q-PAC Premium Fan System also provided a simpler, more user friendly control system including fan alarms and individual fan monitoring at all times.

# Notable Highlights

- 8-hour installation & zero downtime
- Operating HP decreased 15%
- Built-in redundancy
- Maintenance-free

#### Q-PAC