



## **LG and Columbia Square Project Profile**

### **Mixed-Use Hollywood Property Renovation Earns Coveted LEED® Gold Certification**

#### **Challenge:**

Originally built in 1938 as the home of CBS's Hollywood headquarters, Columbia Square previously housed the CBS Radio Network's West Coast facilities, as well as CBS's original Los Angeles television and radio stations. Throughout the years the complex grew famous in its own right and in 2009 was designated as a Los Angeles Historic-Cultural Monument. Thus, when Kilroy Realty embarked on the renovation of the complex, their goal was to create a modern interpretation of the iconic 4.7-acre studio lot. The new LEED® Gold, mixed-use development would revamp the Hollywood classic to become an urban oasis complete with workspaces, restaurants, walkable shopping and residential living.

#### **Criteria:**

As part of the large-scale 685,000 square foot project, the team desired to not only modernize the look and functionality of the complex but also improve its sustainability and certify it as a LEED project. This meant that the new HVAC system needed to not only effectively condition the spaces, but also be highly efficient and contribute points towards achieving LEED certification. In addition to superior efficiency, Kilroy wanted a solution that had an advantageous total cost of ownership. Lastly, the system had to have the design flexibility to accommodate the shell and core fit-out so that as tenants leased space within the property they could be incrementally built out and configured to meeting their various needs.

#### **Solution:**

The project initially called for a water source heat pump and package unit system, but it was determined this was not going to meet the needs of the design or have the necessary energy efficiency. As a result, the Columbia Square team working with LG's Applied Rep DMG Corporation, chose to switch to LG Variable Refrigerant Flow (VRF) technology to deliver on all their requirements. The solution was comprised of 1244 tons of VRF using 44 Multi V™ IV outdoor units. LG VRF was selected because its energy-efficient operation could support the buildings' numerous glass windows and open spaces while still delivering high energy efficiencies that contributed points towards achieving the esteemed LEED Gold designation.

The modularity of the LG VRF solution provided the needed flexibility for a two phased, core and shell approach to installation. In the first phase, the outdoor condensing units were set on the roof and piped down to the floor. In the second phase, the heat recovery boxes were installed, and the tenants selected their indoor units. High static ducted units were used in the commercial spaces. In the residential tower,



air handlers were installed so that they could be accessed from the hallway, making maintenance easier by allowing them to be serviced without disturbing the residents.

The combined modularity and efficiency gave Columbia Square the cost-effective solution they desired.

With the ability to operate the system incrementally, Kilroy Realty was not paying to condition unoccupied spaces. Additionally, they could use the heat recovery technology of LG's VRF system to balance the demands across the spaces to achieve even greater operational efficiency, which further reduced operating costs.

### **Results:**

The renovation was completed without diminishing the iconic structure, and in 2017 Columbia Square received the Conservancy Preservation Award.

The energy-efficient LG Multi V VRF system met all of Columbia Square's criteria with flawless performance and competitive all-in costs when compared to a traditional system. Kilroy Realty is pleased with the results of the system and are looking at ways to incorporate LG VRF in future projects.

"LG became a partner and really helped with our air conditioning solution," said Richard Mount, SVP of Construction Services, Kilroy Realty Corporation. They worked with us hand-in-hand as we developed the drawings for the project and as we worked on the engineering. They said they would support us and help us understand how it would all fit together, and they stepped up and got it done. I'm very satisfied, so much so that I'm working on two additional projects now where LG has become the spec for the project. We're using their performance as the guideline as we design these other buildings."

Jason Lord, Sales Engineer at DMG Corporation added, "LG is great, they are a strategic and very valuable partner for DMG. Any building owner looking to take advantage of the most state-of-the-art and efficient heating and cooling equipment on the market should take a strong look at LG VRF."