

# PROJECT SPOTLIGHT



## 101 North Queen Street – Lancaster, PA

ETS Provides a Flexible Solution For Shell & Core Fitouts in the Historic Bulova Building

Anchored on the corner of Queen and Orange Streets, 101 North Queen is a destination in the making. With on-trend retail flanking the streets, tech-inspiring office spaces in the core of the building, and luxury residences crowning the complex, 101 North Queen offers enjoyment for everyone. The City of Lancaster's ever-changing façade welcomes visitors from far and wide with varied interests and tastes. Shopping, dining, working, and living are just the start when you're in the center of it all.

Energy Transfer Solutions, LLC teamed up with LG to provide HVAC solutions for 101 North Queen Street project in Lancaster PA. We've worked with the mechanical and general contractors to provide a flexible solution using LG's Variable Refrigerant Flow (VRF) in the renovation of a significant and long vacant historic building in the heart of downtown, while maintaining some of the historic character and staying within the original building constraints, as the property sees new life.

The flexibility the VRF system offers makes running parallel paths of design and construction easier to accomplish, saving both time and money. Our VRF allowed the flexibility to install heating and cooling systems while the owner was still securing tenants and trying to finalize the amount of floorspace leased. Some floors were left empty, while others were filled and occupied, all the while the VRF systems accommodated the flexible and shifting loads by varying compressor and fan speeds. Further, each system can be modified on the fly, with open spaces getting changed to office, retail, or even residential, without the initial tenants losing their HVAC. The style of indoor unit can be varied and changed as well: from fan coils to cassettes and even hot water generators for underfloor heating, the VRF can accommodate a variety of the tenant's design needs.

From the installation perspective, old buildings can be tricky. Floor to floor heights that don't allow for ductwork, additions that don't line up, and roof's that weren't designed to support large HVAC loads can all be difficult obstacles to overcome. VRF moves heat through smaller refrigerant pipes and not oversized ductwork, allowing longer runs without the loss of headroom. The designer was able to take a 16' floor to floor height and install double stacked mezzanine offices in the second floor core space, providing more leasable space for the owner while maintain the high ceilings and unobstructed views out large perimeter windows for the leasee. At the rear of the building, a later addition provided another heating and cooling challenge, but we were able to use indoor units that tucked nicely between steel girders and still met the needs of the design professional. We were able to install over 2.4 MMBH of cooling in just one corner of the roof because of our lower condensing unit weights, opening up more space for rooftop decks and penthouse suites. And before you ask about the noise, yes, we had that covered, with our low sound fans and the capability to limit fan speeds (and noise) when penthouse residents are home.

One of the features of LG's VRF is the ability of the controls to tenant meter the HVAC. As the spaces and required footprint of tenants changed over time, we could simply add or subtract heating and cooling zones as required to the tenant's bill, without the need to replace or upsize equipment. The master control contains an HTML 5 website software, allowing Zamagias Properties to provide their customers with a web based temperature controls system while limiting how much (or how little) of the building they can 'see' or adjust. Having flexible heating and cooling equipment is nice, but having a full functioning and flexible controls system is what makes this

property shine! The LG Variable Flow Refrigerant system allows continuous future changes as the building looks towards another century of operation.

101 North Queen, developed by Zamagias Properties, breathes new life into the former Bulova building on the corner of Queen and Orange Streets. More than 150,000 square feet of mixed-use real estate—retail, office, and residential—make up the four-story building. The Row, anchored by Starbucks, offers space for retailers, restaurants, and other service-based businesses on the ground floor. The Core consists of two floors of office space, anchored by business software company Cargas Systems. Luxury condos with unrivaled amenities, including private rooftop terraces, are planned for the fourth floor. The project is possible thanks to generous partnerships with many local companies, including PPM Real Estate, LeFevre Funk Architects, Community First Fund, RGS Associates, and Warfel Construction, among others. See yourself or your business at the premier destination in the City of Lancaster and know you'll be in the center of it all.

Downtown Lancaster is home to well over 300 merchants, services, restaurants, and cultural attractions on great retail corridors. The Row at 101 North Queen joins an eclectic mix of more than 160 retail shops and is centrally located on the corner of Queen and Orange Streets.

Seated in South Central Pennsylvania, Lancaster is a small, culturally-rich city reinforced by a strong arts and dining scene. With a population of nearly 60,000, and more than 8 million visitors to Lancaster County annually, it proves to be a coveted historic destination. Downtown Lancaster is a rapidly expanding location for company headquarters. With nearly 50,000 employees already working here, companies are recognizing the multitude of amenities the City of Lancaster offers to help acquire and retain the best talent. The Core at 101 North Queen is anchored by business software company Cargas Systems, founding the office suites as tech-savvy, environmentally conscious, and forward thinking.



PROJECT NAME  
101 NORTH QUEEN STREET

LOCATION  
LANCASTER, PA

ETS FEATURED PRODUCT  
LG VRF