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TECHNOLOGY AND SMART BUILDING SERVICES FOR MULTI-FAMILY DEVELOPMENTS

www.ledesigngroup.com

## Transforming the Built Environment With Value-Driven Technology Design

Leading Edge Design Group (LEDG) specializes in technically complex mission-critical projects. We are strategic partners, thoughtful designers, implementation specialists, and trusted program managers. A certified minority business enterprise (MBE), LEDG has worked with some of the most progressive, high-performing organizations in the private and public sectors since 2007.





In the built environment, technology should seamlessly enhance occupant experiences operating efficiently in the background without causing friction or disruptions. It's the technology that vexes and bewilders that is remembered. At Leading Edge Design Group (LEDG), we understand this dynamic well. Our approach revolves around thoughtful planning and design, aimed at creating seamless experiences and optimizing building performance through the integration of modern building systems.

The current paradigm is flawed. Just as you wouldn't enlist a traffic consultant for sustainability consulting, why rely solely on an MEP firm for your building's technology design and strategy? LEDG is reshaping this mindset. With a deep understanding of the multifamily development space, we are uniquely positioned to collaborate closely with developers and architects from the outset, establishing a robust and adaptable technology infrastructure layer that anticipates future needs.

LEDG's expertise extends beyond mere infrastructure. We specialize in developing technology integrations and experiences that elevate occupant satisfaction while maximizing building efficiency—a strategy poised to deliver tangible value. Technology becomes an asset, seamlessly woven into the fabric of the facility, campus, or community to enrich lives and provide actionable insights.

### Our expertise spans across a diverse range of projects. LEDG services include:

#### **Technology**

- Low Voltage Design
- Security Access Control, CCTV, Visitor Management
- Managed WiFi Planning & Design
- Smart Home/In-Room Experience
- Cellular DAS
- Internet Service Provider Coordination/Planning
- Public WiFi

#### **Smart Buildings**

- Campus/Multi Building Digital Master Planning
- Digital Strategy
- Systems Integration Planning & Design
- Systems Acceptance Testing
- Cyber Security
- Amenity Activation



#### **Multi-Family Project Examples**

- 1. Multi-Use/Multi-Family  $\longrightarrow$
- 2. City-Wide Redevelopment Project Multi-Family  $\longrightarrow$
- 3. Private, Ivy-League University  $\longrightarrow$
- 4. Top 10 Living Destination  $\longrightarrow$
- 5. Assisted Living  $\longrightarrow$





### Multi-Use/ Multi-Family

LEDG created the digital strategy and owner's integration requirements for a project that seamlessly blends retail, office, hotel, residential, and public parking facilities. Our strategic approach and innovative technology design ensured a 28-story living experience that seamlessly integrates residents into all aspects of building technology. From parking and building access to amenity bookings and availability, our design facilitates a digitally activated living environment. Notably, the inclusion of micro units enables affordable rental rates without compromising on quality or design standards.

450 1st Avenue



### City-Wide Redevelopment Project – Multi-Family

A bold redevelopment project spanning 10 acres in a major US city aims to be an interconnected, inclusive, and equitable urban environment that nurtures, inspires, and links arts and sciences, as well as people and events. As part of the redevelopment, LEDG provided the digital strategy, owner's integration requirements, technology and low voltage design for a 24 floor, 374-unit residential building that included retail space on the 1st floor. Working with the architect, LEDG created a sustainable, healthy, and innovative design that incorporates advanced technology and robust infrastructure providing value to the owner, residents, visitors, and community through unique user experiences and expected financial returns.

Volpe Redevelopment



## Private, Ivy-League University

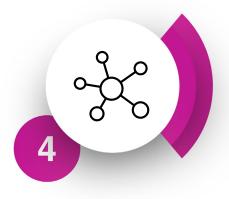
This 46,000 square foot campus building underwent a transformative renovation, guided by the expertise of LEDG. Their comprehensive services encompassed meticulous planning, innovative design, and invaluable consultative support, ensuring a seamless integration of cutting-edge technology into the facility.

LEDG's involvement extended to the intricate design of various technology and low-voltage systems. These included the implementation of robust cabling and connectivity solutions, tailored to support a spectrum of functions such as voice communication, data transmission, and wireless connectivity. Additionally, the deployment of a fiber optic intra-building backbone facilitated efficient communication pathways within the structure, complemented by strategic integration with the broader campus fiber optic network.

Furthermore, LEDG addressed the intricate demands of IT network infrastructure, catering to diverse needs ranging from HVAC control to lighting management and beyond. By meticulously coordinating these systems, the hall now stands as a beacon of technological sophistication, seamlessly harmonizing functionality with architectural excellence.

Dartmouth College





## **Top 10 Living Destination**

LEDG was pivotal in developing an autonomous building housing 31 apartment units. The main objectives were to minimize energy consumption, construction expenses, and operational and maintenance costs while enhancing occupant well-being, safety, comfort, and building systems' longevity and adaptability.

LEDG engineered a sophisticated network design that seamlessly integrates various occupant and building operational systems. These include but are not limited to lighting, HVAC, indoor air quality management, window shades, monitored security measures, water systems, and other specialized systems accessible only to tenants or staff. This comprehensive approach ensures optimal functionality and efficiency, elevating the overall living experience while promoting sustainability and resource conservation.

Holiday Isle Residences

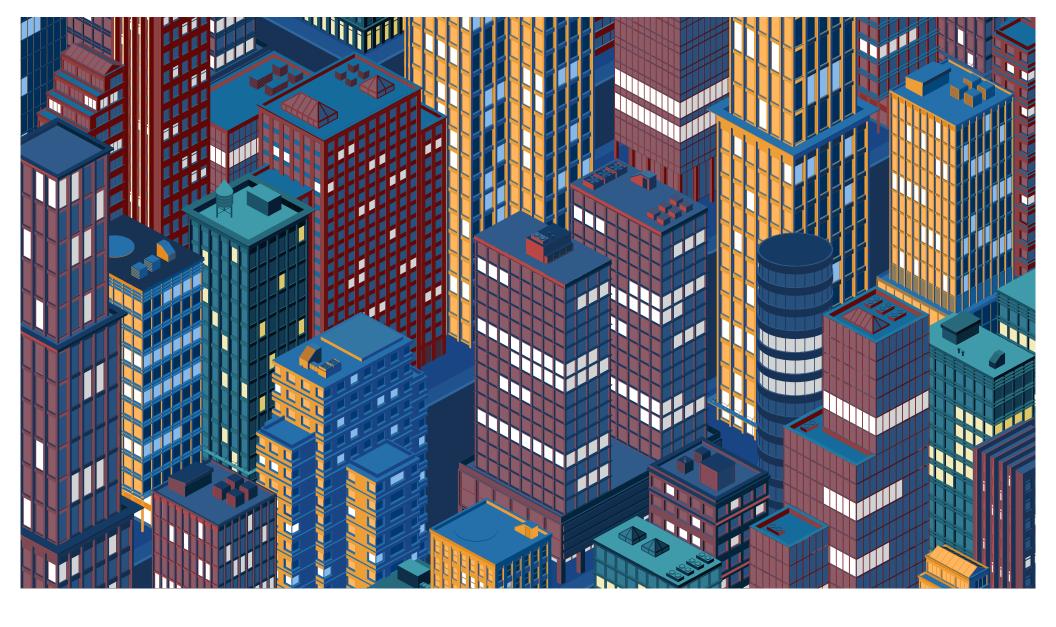


# Assisted Living

LEDG specializes in comprehensive planning, design, and consulting services tailored for independent living, assisted living, and memory care facilities, typically spanning over 200 units and 200,000 gross square feet. The owner's vision was to seamlessly integrate technology for the benefit of residents, ensuring facilities are not only equipped for current needs but also prepared for future advancements.

Led by experienced RCDD designers, LEDG offers a holistic approach to facility design, encompassing cabling and connectivity solutions to support essential systems such as voice, data, wireless networks, nurse call systems, CATV, and card access. Additionally, our expertise extends to the implementation of Audio-Visual theater systems, fiber optic backbone infrastructure, structured cabling, and complete Information Communications Technology (ICT) design, empowering facilities with integrated HVAC, lighting, and other vital building systems.

Harmony Senior Living



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