

LUC Francis Residence Hall

FIRST PLACE

ASHRAE Excellence in Engineering Award
Chapter Level

Project Highlights and Results

- 8-story, 133,400 square foot residence hall to achieve minimum LEED Silver designation (submitted under LEED v4.0 New Construction).
- 133 student dormitories (410 beds) on floors 2-8 with semi-private bathrooms, laundry room, and student lounge on each floor.
- Ground floor includes faculty apartments, common areas, offices, conference room, classrooms, multi-purpose room, fitness center, community kitchen, lounge, and café.
- Installed MEPFP systems will accommodate potential Phase II building extension with additional residence spaces.

Project Background

Owner:	Loyola University Chicago (LUC)
Location:	Chicago, IL (Lake Shore Campus)
Team/Team Lead:	Brian Malone, Bhupendra Tailor, Tareq Abdelrahim
Elara Role:	MEPFPIT Engineering Design
Type:	New Construction
Construction Cost:	\$35,000,000

Project Overview

Building Type:	Higher Education, Residential
Building Attributes:	8-Stories; 133,400 SF
Initial Construction:	2019
MEPFPIT Systems:	DOAS with CO ₂ Controls, VRF Air-Source Heat Pumps, Airside Energy Recovery, Ultra Water Conserving Toilets, Occupancy Based Controls for Plug Loads

Innovation

- Mechanical system sustainability design features, include; heat recovery VRF units and DOAS system with CO₂ controls, energy recovery from exhaust air, high efficiency boilers, and variable speed compressors for VRF units.
- Natural ventilation design elements include a first-floor motorized façade that opens entirely to the adjacent grade providing a connection between indoor and outdoor elements.
- Plumbing system sustainability design features, include; ultra-low flow water closets, low-flow showers, and separate irrigation/non-potable loop.
- Electrical system sustainability design features include LED lighting/automatic light controls, automatic plug load control, and power monitoring.

