

## LUC Alfie Practice Center

### Project Highlights and Results

- 3-story, 30,200 square foot athletic practice facility designed in compliance with the City of Chicago Lake Front Protection Zoning Ordinance.
- LEED Gold designation under LEED v4.0 New Construction.
- Building's 1st and 3rd levels contain NCAA basketball and volleyball courts, complete with film review spaces.
- Additional building features include lounges, restrooms, support and storage spaces, and pedestrian skybridge to adjacent Gentile Arena / Norville Athletic Center.

### Project Background

<b>Owner:</b>	Loyola University Chicago (LUC)
<b>Location:</b>	Chicago, IL (Lake Shore Campus)
<b>Team/Team Lead:</b>	Don McLauchlan, Steve Maze, Claudine Harig, Bhupendra Tailor, Nick Capretta
<b>Elara Role:</b>	MEPPFIT Engineering Design
<b>Type:</b>	New Construction
<b>Budget Cost:</b>	\$16,000,000

### Project Overview

<b>Building Type:</b>	Higher Education, Athletic Facility
<b>Building Attributes:</b>	3-Levels; 30,200 SF
<b>Initial Construction:</b>	2019
<b>MEPPFIT Systems:</b>	VAV/FPVAV with HW reheat; HW radiant panels in sports court; utilized existing campus boiler water, chilled water, fire protection, and DW utility systems.

### Innovation

- LEED Gold designation under LEED v4.0 New Construction.
- Specified insulating ceramic paint as used by NASA in lieu of insulation on spiral ducts to meet architectural goals for a clean, hard round surface in the exposed ceiling.
- Attained variance from City of Chicago to reduce gymnasium ventilation values by 55% which allowed for reduction in ductwork, decreased air handler and coil sizing, and allowed for the air handling unit to fit inside the building rather than on the roof to extend the unit's life, enhance ease of maintenance, eliminate the need for glycol in the HW coil, and further decrease project costs.
- Designed custom indoor air handler unit with hot and chilled water coils and energy recovery wheel to condition the air. Custom AHU allows 100% of outdoor air in economizer conditions to enter the AHU without passing through the energy wheel for unnecessary pressure drops. The design enabled supply and exhaust fans to utilize less horsepower and to be reduced in size.
- Green roof

