

## 29 North Wacker

### FIRST PLACE

ASHRAE Excellence in Engineering Award  
Chapter, Regional, and International Levels

### Project Highlights and Results

- LEED O+M designation
- 28% reduction in building's energy usage intensity despite 230% increase in occupancy.
- Entire upgrade project completed with building occupied throughout construction.
- Additional project benefits include reduced noise, improved occupant comfort, reduced maintenance, improved air quality, and reduced carbon emissions.

### Project Background

<b>Owner:</b>	Sun Life Assurance Company
<b>Location:</b>	Chicago, IL
<b>Team/Team Lead:</b>	Don McLauchlan, Matt Swanson
<b>Elara Role:</b>	MEP Engineering Design
<b>Type:</b>	Energy Retrofit
<b>Construction Cost:</b>	\$4,800,000

### Project Overview

<b>Building Type:</b>	Commercial Office with Retail
<b>Building Attributes:</b>	10 Stories, 140,000 SF
<b>Initial Construction:</b>	1962
<b>MEPPFIT Systems:</b>	High efficiency condensing boiler plant, high-efficiency CHW plant, active chilled beams, VAV, Garage CO System, DDC

### Innovation

- All retrofits and upgrades completed in phases to accommodate ongoing retail and commercial office activity.
  - Installation of new chiller and boiler plant took place during shoulder months so that the lack of heating and cooling would not affect building occupants.
  - Installation of new terminal units was phased to retrofit unoccupied areas first.
  - Improvements to occupied areas took place during off-hours to minimize tenant disruption.
- Chilled beam units initially installed with supply duct pressure reduction devices to receive high static pressure from the existing air handling unit (AHU). Upon replacement of the AHU with a low static pressure unit, the pressure reduction devices were removed for normal operation.

