

Case Study:

Belmonte Middle School Auditorium, Saugus, Massachusetts



Background

Originally known as the Saugus Middle School, the Belmonte Middle School was renamed in 1970 after Augustine J. Belmonte, a Saugus police officer killed in the line of duty.

In 2020, when the middle school grades were relocated to the town's new high school complex, Cooper Lighting Solutions helped renovate the Belmonte School building so it could be converted into an elementary school.



- Cost Savings
- Simplified Install
- Aesthetics
- Safety

Challenge

The Belmonte School building was built in the mid-1960s so, not surprisingly, the school's very high auditorium ceiling contained asbestos. Asbestos remediation is prohibitively expensive, so the ceiling literally could not be touched, not even for lighting installation. Asbestos-containing materials that are in good condition are relatively safe if left untouched. As a result, the existing downlights could not be moved to new locations.

Additionally, the design team requested that the lighting be controlled to be at their brightest setting when the school fire alarm is triggered.

Solution

Cooper Lighting Solutions was able to avoid penetrating the asbestos ceiling and avoid the need for 900 linear feet of pipe – in the process, saving time and money.

Typically, in a project like this, lighting control and power would have required wires in a tube to reach the auditorium lights. Instead, Cooper Lighting Solutions proposed a more aesthetically pleasing solution by retrofitting the auditorium's existing lighting with our wireless lighting control and lighting control products:

- WaveLinx PRO battery-operated, surface-mounted sensors communicated to the powerpack wirelessly.
- WaveLinx PRO lighting control powerpacks were installed next to the existing lighting panel to avoid impacting the space design.
- The lighting was connected to the BMS (Building Management Systems) via a hub provided by an HVAC manufacturer to bring the lights to 100% when a fire alarm is triggered.



Product Used

- 1 WaveLinx PRO Mobile App
- 2 WaveLinx PRO Room and Area Controls
- 4 WaveLinx PRO Wallstations
- 36 WaveLinx PRO Switchpacks and Load Controllers
- 18 WaveLinx PRO Occupancy Sensors

— turn over

Case Study:

Belmonte Middle School Auditorium, Saugus, Massachusetts

Results

Savings: The contractor saved installation time and costs since no wiring was involved and no walls needed to be opened to install the new lighting.

Pleasing Appearance: No wiring also meant no tubing was added to the interior brick and rock walls, preserving their tidy appearance.

Improved Security: The lighting system was configured so that school lighting automatically switches to 100% luminosity when the fire alarm is on, providing students and staff with more visibility in the event of a fire.

“All lighting controls should come like these... they are so simple.”

Jordan Duarte, Foreman, Griffin Electric