

Lumenelle™ Custom Lighting Solution for Steinmetz H.S.



Steinmetz Academic Centre – Chicago, IL

In January 2004, Lumenelle, Inc. and Brook Electrical Distributors, Inc. of Lincolnshire, IL collaborated to provide a lighting solution at Steinmetz High School in Chicago for Jin Electric Company. The auditorium was being remodeled and the recessed aisle fixtures needed to be replaced due to their deteriorating condition. Steinmetz Academy was built nearly a century ago and the auditorium is very ornate with very elaborate plaster work. The Architect and Electrical Engineer were unable to find a lighting fixture that would fit (even with modification) into the existing recessed fixture housings. Using off-the-shelf fixtures would have required tearing out parts of the wall around each of the 38 fixtures to replace the old fixture housings. The walls have a texture finish that would have been costly and time consuming to restore if the fixture housings were replaced. It became apparent that a custom solution made the most sense.

The challenge was to design a recessed fixture that would seamlessly replace a fixture that was designed prior to most electrical safety codes with one similar in style, yet meets all of the present code requirements for recessed fixtures and be UL Listed and ADA compliant.



Original Fixture Removed From Auditorium

To accomplish this, the following steps were performed:

- A visit to survey the jobsite was performed involving Lumenelle, Brook Electric, Jin Electric, and the Steinmetz Building Engineer.
- The conditions and circumstances were evaluated to find the right solution to satisfy the requirements of the project.
- A preliminary design specification was prepared and submitted to the client for approval.
- After approval, the fabrication drawings for several required custom parts were created.
- The fixtures were constructed.
- A fixture was submitted to Underwriters Laboratories for compliance testing and UL listing.
- The fixtures were delivered to the client on-time.

Just because something does not exist, does not mean that you have to settle for something else.

Our motto is **“If you can image it, you can have it...”**

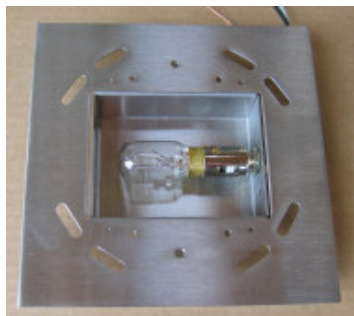
The Lumenelle Solution – WF901-SP01



Lumenelle WF901-SP01 Installed

Lumenelle not only designed a fixture that will fit Steinmetz auditorium but a fixture that:

- ❖ can be recess mounted in a standard 4 11/16 square electrical box.
- ❖ can be used as a ceiling fixture, wall fixture, or step light.
- ❖ incorporates a DC Bayonet socket permitting the fixture to be used at line voltage or class 2 (low voltage), in a wide range of voltages, depending on the lamp chosen. DC Bayonet lamps are available at 120, 130, 145, 155, and 230 volts (line voltage) and at 2.5, 4, 6, 7, 8, 12, 28, 34, 40, 45 volts (low voltage).
- ❖ can be mounted in a standard 4x4 cast aluminum electrical box and used as deck lighting (with additional weatherproofing kit) at either line voltage or using a standard low voltage outdoor lighting transformer.
- ❖ is so low profile that even when surface mounted using a 4x4 cast aluminum electrical box, will comply with the Americans With Disabilities Act.



Front View



Back View



Mounted in 4x4 Cast Aluminum Box

In the end, Lumenelle and Brook provided a solution to a problem rather than simply a light fixture.