

GRAND LIGHT

★ Lighting & Design Since 1929 ★



University & Educational Institutions
- 2026 EDITION -

★ Historic Lighting Restoration & Custom Lighting ★

RESOURCE BOOK



GRAND LIGHT

Lighting & Design Since 1929

**Lighting Restoration &
Custom Lighting Factory**

**104 Day Street
Seymour, Connecticut 06483
Telephone: 1-800-922-1469
Email: info@grandlight.com
www.grandlight.com**

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Section 1: Company Overview

Section 1.1 About Us

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Custom Fabricated Light Fixtures Installed On-Site

About Us

GRAND LIGHT
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New Grand Light, LLC - Lighting & Design

104 Day Street – Seymour, Connecticut 06483

Primary Contact – Ryan Stockman

Telephone: 800-922-1469

Email: info@grandlight.com Website: www.grandlight.com



Scan to Connect with Grand Light

Who is Grand Light?

Grand Light, located at 104 Day Street, Seymour, Connecticut, is an experienced restorer of historic lighting fixtures, a manufacturer of custom lighting fixtures, and has served the interior and exterior lighting needs of professionals for over 90 years by setting a standard of offering handcrafted, design-oriented, quality fine lighting products.



What is the Grand Light Mission?

Our mission is to continue to differentiate ourselves as the ultimate source for the highest quality lighting products and the very best professional service available. We realize our clients' complete satisfaction is the most meaningful measurement of our continued success and pride ourselves in providing unparalleled customer satisfaction in all we do.

Why Chose Grand Light?

Our lighting restoration and custom lighting capabilities include research for historic accuracy, drawings, mock-ups, metal fabrication, polishing, painting, welding, abrasive blasting, refining metal components, glass fabrication, replacing all electrical components, rewiring and testing in accordance to UL standards.

Our team of specialists is comprised of professional metal workers and glass blowers whose mission is to restore, create, or re-create lighting fixtures of the utmost quality and authenticity. Our lighting fixtures are wired in accordance with UL standards, and our team of artisans stands confidently behind their work with years of experience and dedication to quality craftsmanship.



American Artisans At Work Preserving History



Client Consultation and Photometric Demonstration

Stephen L. Stockman

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“It’s historical art, intricate, detailed. Electrical has a 100-year lifecycle, but at the end of that lifecycle they’re not just going to throw it out. That’s why we do what we do.”

- Steve Stockman



**Principle, Lighting Designer
Steve Stockman**

Steve, a forty year industry veteran, has held a variety of sales engineering, and senior management positions with General Electric Co. and Grand Light.

Steve is a graduate of Allegany College, Triangle Tech, and General Electric TMP Program, and has or currently participates in Industry Organizations such as IES, IALD, NAED, AIA, ALA, and APTNE.

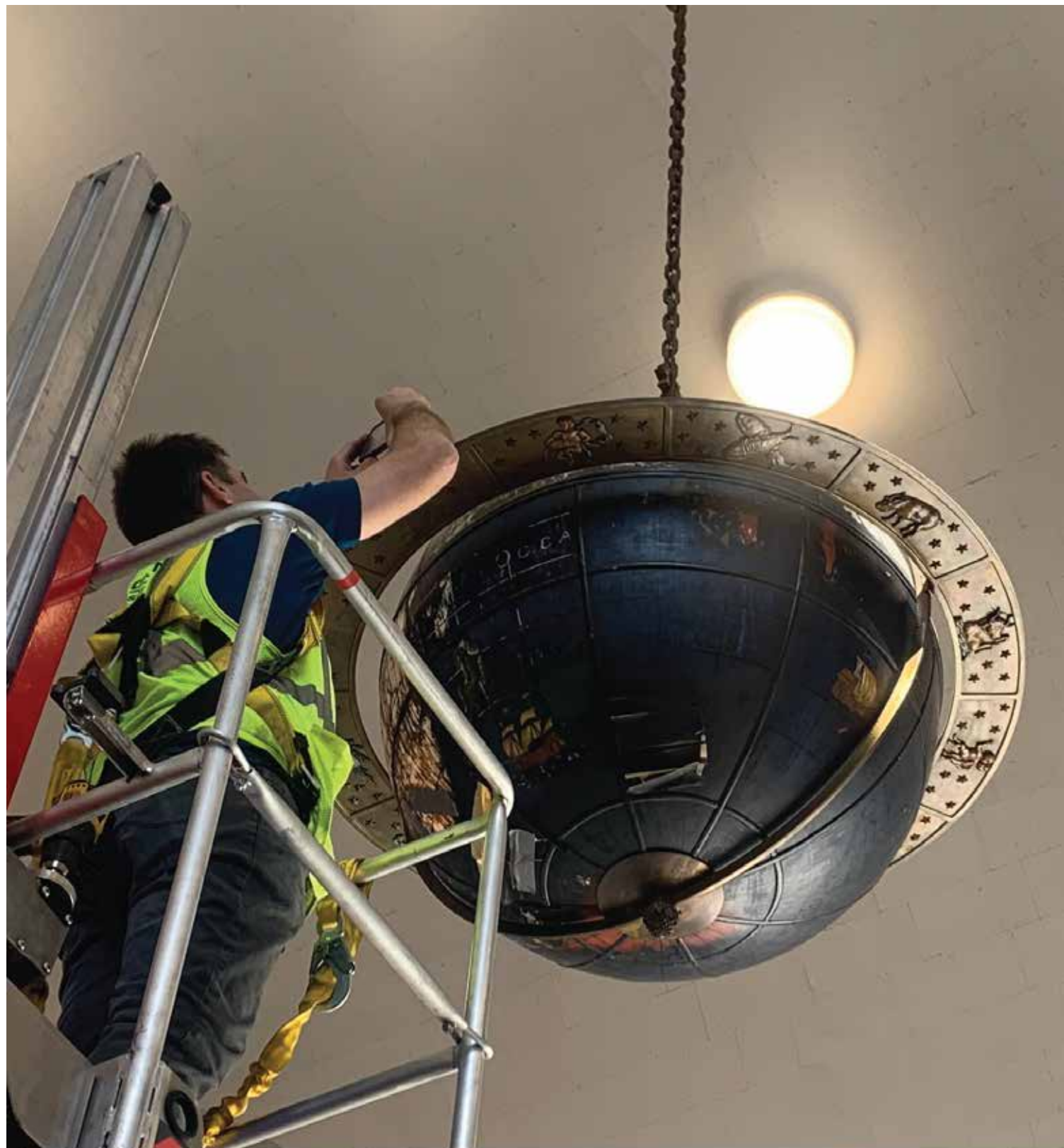
Steve is an active member of day-to-day operations providing oversight of all engineering, administration, including UL testing procedures for restoration, replication, and custom lighting products. Steve is a certified OSHA Hazard Recognition Training for the Construction Industry. Grand Light is an Underwriters Laboratories certified manufacturer for luminaires (Standard 1598).

Steve’s Participation in your Project will include:

- Develop overall project scope, timelines, manpower allocation, and vendor resources.
- Develop internal procedures consistent with achieving the project specification and delivery requirements.
- Develop project specific mechanical and/or electrical requirements.
- Develop project specific metal finishing procedures including research, recipes, testing, sampling, mockups, and production runs.
- Provide daily interaction with factory and administrative staff to ensure quality standards are upheld and the project is completed consistent with customer requirements.



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On-Site Survey & Fixture Condition Documentation

Ryan M. Stockman

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Scan to Connect with Ryan

“Those lighting fixtures existed before us and will remain long after, so it is quite an honor to have our artisans’ work immortalized”

- Ryan Stockman



**Vice President
Ryan Stockman**

Ryan Stockman, Vice President of Grand Light, is a nationally recognized lighting restoration expert. Backed by over 20 years' experience having held various sales, engineering, and manufacturing positions, he has led many of the company's award-winning restoration, replication, and custom lighting projects.

Over the past decade, he has gained experience modifying existing lighting systems with energy efficient LED retrofit kits for a variety of clients, including government, religious, educational and cultural institutions, architects, electrical contractors, and designers. His approach with LED retrofitting focuses on preserving the historic integrity of a fixture, while upgrading an existing lighting system with brighter, more efficient lighting.

Ryan's Participation in your Project will include:

- Development of all project specific administration and communication procedures
- Develop and maintain all customer relations and communications
- Provide project management and elaboration with company principal
 - A. Overall project scope, timelines, manpower allocation, and vendor resources
 - B. Internal procedures consistent with achieving the project specification and delivery requirements
 - C. Project specific mechanical and/or electrical requirements
 - D. Project specific metal finishing procedures including research, recipes, testing, sampling, mock-ups, and production runs
 - E. Provide daily interaction with factory and administrative staff to ensure quality standards are upheld and the project is completed consistent with customer requirements
- On-site supervision and management of Subcontractors and Grand Light Artisans



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Section 2: Pre-Project Planning

- Section 2.1** On-Site Survey
- Section 2.2** Historic Research
- Section 2.3** Formal Proposal



On-Site Electrical Inspection of Grand Chandelier

On-Site Survey

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Historic fixtures are individually inspected and documented during a site survey. Typically, an on-site evaluation involves a site visit to examine, identify, and document the existing condition and all mechanical, electrical, and finish deficiencies of each lighting fixture.

Site evaluations are common with large-scale restoration projects, and provide key insight into project cost projection, operation and maintenance considerations, design and construction principles, and required restoration processes.

Condition Reports

Condition reports include inventory of any damaged or missing components or glass, noticeable structural deficiencies, electrical assessment, material analysis, and finish conditions.

Reports may also include:

- Project Cost Projection
- Design & Construction Principles
- Recommended Restoration

Processes

- Operation & Maintenance Considerations
- Fixture Condition (Finish, Mechanical, Glass/Crystal, and Electrical Inspection)

Information Collected

- | | |
|---|--|
| ☒ Project Cost Projection | ☒ Operation & Maintenance Considerations |
| ☒ Design and Construction Principles | ☒ Recommended Restoration Processes |
| ☒ Type and Size of Fixture | ☒ Number of Fixtures |
| ☒ Number of Lamps per Fixture | ☒ Number of Lamps per Ballast |
| ☒ Type of Lamps and Ballasts | ☒ Fixture Condition |
| ☒ Unique Fixture Types or Features | ☒ Fixture Mounting Conditions |
| ☒ Room/Location Aesthetics and Design | ☒ Existing On-Site Conditions |



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Historical Archive Photograph Referenced for Historic Replication (Circa. 1900)

Historical Research

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Grand Light conducts thorough pre-project research, incorporating all findings, including historic archival material, to inform the decision making process. Historical photos, drawings, and documentation are meticulously reviewed to ensure our restorations and replications remain as faithful to the original as possible.



Photographs



Drawings



Documentation

Historical Research & Generating Scope of Work

To specify the scope of work required for a project, Grand Light carefully considers all provided information in addition to meticulous historical studies.

For new replications of existing and non-existing lighting, work shall include complete studies of photographs, drawings, and available historic information. This allows for concise preparation and design of engineering drawings with complete bills of materials for the fabrication of each fixture.

Our Historical Archives Include:

- ☒ Edward F. Caldwell & Co.
- ☒ J. L. Mott Iron Works
- ☒ Lincoln Manufacturing Co.
- ☒ Virden Lighting
- ☒ A. W. Reiser Co.
- ☒ Bradley & Hubbard Mfg. Co.
- ☒ Bergmann & Co.
- ☒ Markel Lighting
- ☒ H. J. Peters Co.
- ☒ McKenney & Waterbury Co.
- ☒ Joseph E. Frechie & Co.
- ☒ Ward Hendrickson & Co.
- ☒ Victor S. Pearlman & Co.



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In-Factory Client Consultation and Fixture Restoration Progress

Formal Proposal

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Our Formal Proposals provide comprehensive documentation that defines the project scope, approach, timeline, and projected cost of the restoration. The goal is to present clients with a clear and transparent plan that supports confident decision-making throughout the process.

Process	Quantity	Unit Price	Total Price
Restoration of Existing Fixtures	10	\$1,200.00	\$12,000.00
Installation of New Fixtures	5	\$800.00	\$4,000.00
Electrical Work	1	\$2,500.00	\$2,500.00
Painting	1	\$1,000.00	\$1,000.00
Transportation	1	\$500.00	\$500.00
Total			\$20,000.00

Project Proposals

Grand Light's formal project proposals include all work and recommendations generated during survey and condition report feedback. These proposals are detailed documents which outline project summary, objectives, technical approach, allotted deliveries/pickups, budgetary options, special qualifications, and terms and conditions. Our proposals are often supplemented by illustrations including photographs, drawings, diagrams, and schedules.

Grand Light provides on-call support with our dedicated project management team, consisting of project managers and support staff, to assist in any questions, concerns, reviews, and documentation. We believe in an honest line of communication and transparency enables our team to stay ahead of your project and quickly identify any potential issues that may impact budgets, schedules, and designs.

Your Formal Proposal Includes:

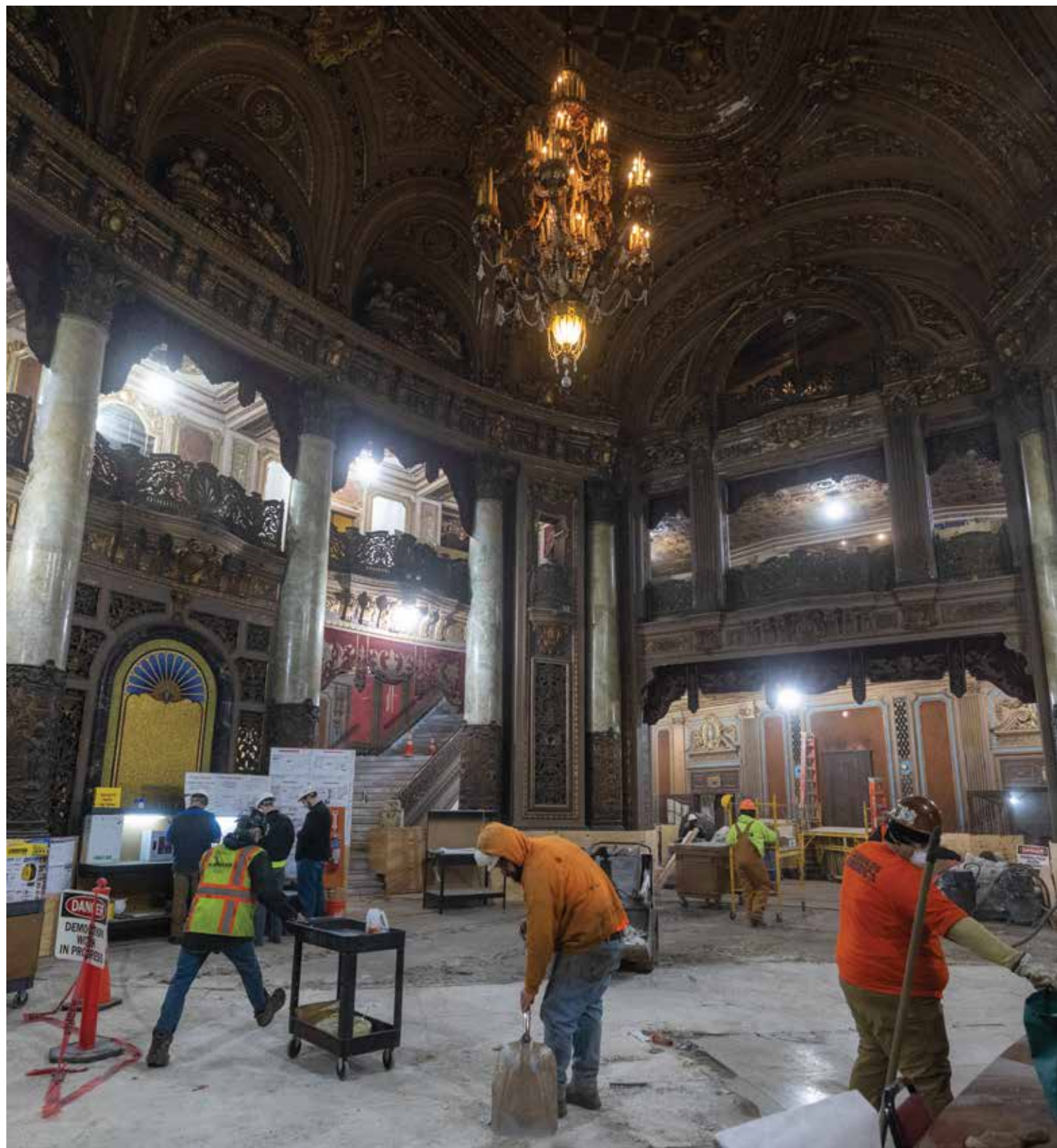
- ☒ Recommended Restoration Processes
- ☒ Budgetary Revisions with Alternative Options
- ☒ Projected Cost
- ☒ Terms and Conditions
- ☒ Delivery, Pickup, and Transportation
- ☒ Project Specific/Special Qualifications
- ☒ On-Call Project Managers for Review and Questions



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Section 3: On-Site Capabilities



On-Site Removal of Historic Theatre Light Fixtures

On-Site Capabilities

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Cleaning



Removal



Packing



Crating



Transportation



Installation

Grand Light's on-site capabilities are often an essential part of the restoration & custom lighting process. Grand Light specialists strive to ensure historic lighting fixtures are removed, cleaned, repaired, packed, transported, and installed in the safest and most conscientious methods possible. Our approach puts our customer first, with flexible on-site service scheduling offered at the client's convenience and without causing any disruption to daily activities. Work areas are left in the same manner it was found prior to leaving a site.



On-Site Equipment and Services

- Rigging, Lifts, Cranes
- Crystal Dressing/Removal
- Temporary Fixture Installation
- Packing & Crating
- Removal & Installation
- Transportation
- HSMI Cleaner
- Supervision & Instruction



Commercial Cleaning Services

Grand Light's on-site cleaning specialists utilize leading technology, decades of experience, and an unwavering commitment to providing superior historic lighting restoration results to our clients. Our specialists have a thorough understanding and extensive experience in cleaning a variety of surfaces including metal, wood, marble, plaster, and crystal using our proprietary cleaning solutions. These include our Hydrosonic Molecular Impact System (HSMI) and advanced ultrasonic technology.



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Section 4: Transportation & Storage

Section 4.1 Transportation Solutions

Section 4.2 Storage Solutions



On-Site Removal & Transportation of Historic Light Fixtures in the U.S. Capitol

Transportation Solutions

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Tractors



Trailers



Flatbeds



Box Trucks



Pickup Trucks

Grand Light possesses a fleet of specialized trucks, trailers, flatbeds, and tractors purpose-built for the safe and precise transportation of historic light fixtures. Each vehicle is configured to accommodate fragile and irreplaceable pieces, ensuring secure handling at every stage of transit. Our box trucks and trailers are fitted with custom engineered mounting, supporting, and bracing systems that provide the highest standard of protection in transit.

Our Transportation Fleet Includes:

- Specialized Box Trucks
- Specialized Trailers
- Flatbed Trailers
- Mahindra Tractor
- Pickup Trucks



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Historic Light Fixtures Stored in our Secured, Climate Controlled Warehouse

Storage Solutions

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Climate-Controlled



24/7 Professional Monitoring



State-of-the-Art Security System



Fully Insured

Utilizing our newly built, climate-controlled, and fully secured warehouse, Grand Light offers both short-term and long-term storage solutions to all luminaires, providing a safe, convenient, and secure location.

Our storage facilities are equipped with our 24/7 sophisticated and professionally monitored security system. Insurance options are offered to all fixtures for the duration of the storage time.

*Luminaire condition reports are offered to all stored luminaires and may include an inventory of any damaged or missing components or glass, noticeable structural deficiencies, electrical assessment, material analysis, and finish conditions.



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Section 5: Submittals

- Section 5.1** Submittals
- Section 5.2** Client Consultation
- Section 5.3** Computer Aided Design
- Section 5.4** LED Advantage



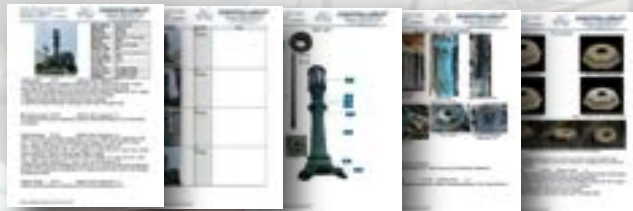
**Vice President Ryan Stockman Giving In-Factory Lighting Presentation:
“Adapting the Past to an LED Future”**

Submittals

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Grand Light prepares comprehensive submittal packages including bid documents, condition reports, shop drawings, and material samples. These incorporate detailed fixture analysis, restoration planning, and design coordination. Findings are reviewed with the design team to guide approvals, mock-ups, and precise execution.



Project Submittals

Grand Light refers to contract bid documents and survey condition reports in addition to shop drawings, product data, samples, and submission procedures in generating a comprehensive submittal package. Our submittals include work scope supplemented with in-depth analysis of existing pre-restoration conditions, computer models/renderings, lighting control design/programming, and mechanical, electric, finish, and crystal/glass/acrylic component analysis.

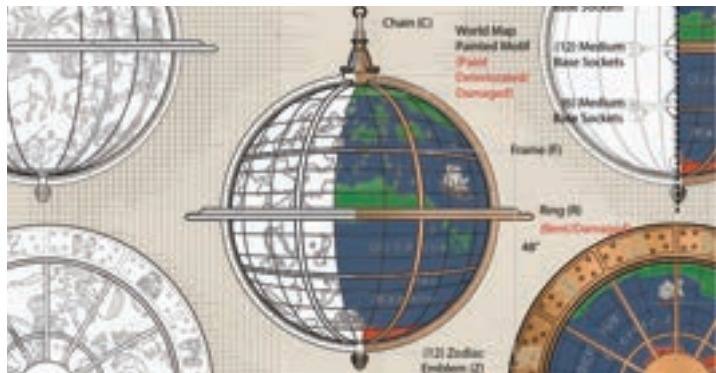
During this evaluation, Grand Light can go through each fixture type and sample the material to determine the process for cleaning and wiring, as well as identifying any component replications, repairs, or modifications. This information, including all on-site information, will be compiled in a submittal and sent along for design team review. Once this submittal is sent, we can schedule a time for the design team to come down to our factory to review the submittals along with each fixture and any mock-ups we put together during this process.

Grand Light can also provide shop drawings for both existing and custom fixtures that can depict critical information for mechanical and electrical construction, structural modifications, manufacturer, materials, finishes, lamping, voltage, ballast information and mounting details.

Samples of shades, glass diffuser material, metals and metal finish samples are submitted for approval prior to proceeding with mock-ups, fabrication, or restoration processes.

Your Project Submittal Includes:

- ☒ Work Scope
- ☒ Factory Evaluation & Analysis
- ☒ Pre-Restoration Condition Report
- ☒ Drawings
- ☒ Computer Models/Renderings
- ☒ Lighting Control Design/Programming



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In-Factory Client Restoration Progress Tour

Client Consultation

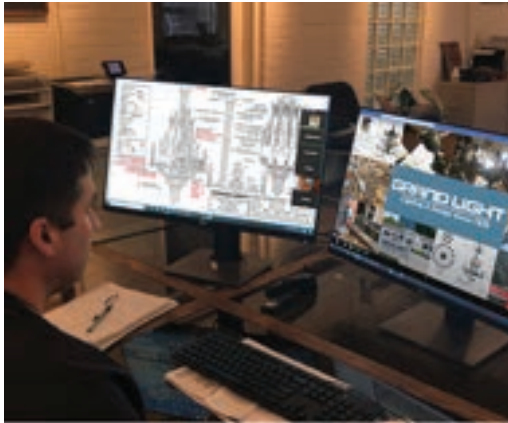
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At Grand Light, we believe in delivering the highest quality of professional service to our clients. On-demand consultations are available to clients at any stage of the restoration/fabrication, ensuring that the planning and action phases are collaborative and comprehensive. Mock-up fixture designs are provided to effectively convert concept into reality.

Communication & Consultation

Grand Light offers on-demand video conferences, phone calls, and in-person consultations to help our collaborators make informed, confident decisions at every stage of the restoration process. Whether at the initial planning stage or mid-project, our team is readily available to collaborate in real time. We use consultations to present concepts, explore design options, and reach decisions that best meet the needs of our partners.

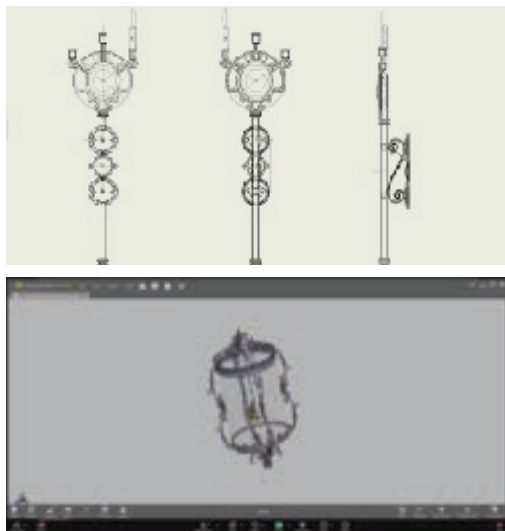
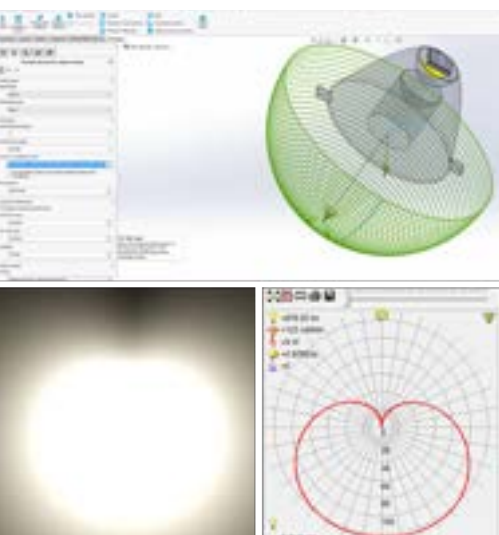
Given the unpredictable nature of historic restorations, responsive communication is essential. We maintain consistent, direct communication with our clients, allowing us to quickly identify and react to changing circumstances that may impact budgets, schedules, and designs.



Mock-Ups

When working on one-of-a-kind historic fixtures, it is crucial to develop a comprehensive restoration strategy before proceeding. Mock-ups serve as a bridge between concept and final product, allowing key decisions to be evaluated and refined in advance.

Depending on project needs, we create 2D architectural drawings and fully realized 3D models using advanced CAD software. These designs can be supplemented with finish samples, photorealistic renderings, photometric data, and to-scale 3D printed prototypes. Together, these tools allow our clients to clearly visualize the designs and make informed decisions.



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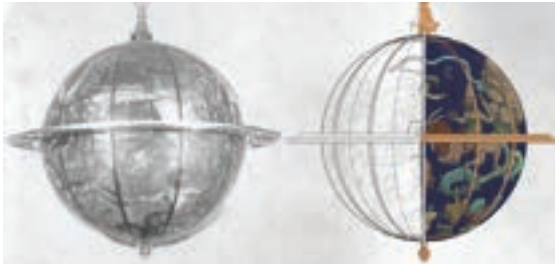
Photometric Data Simulation

Computer Aided Design

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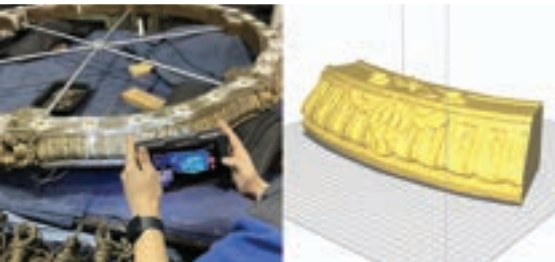
COMPUTER AIDED DESIGN PROCESSES

Grand Light utilizes advanced computer-aided design software to support our comprehensive lighting design process. Our engineering team is capable of producing precise drawings, renders, simulations, and prototypes with our state-of-the-art design technology.



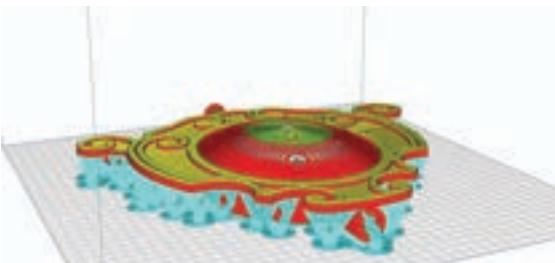
2D Drawings

During our on-site survey, each fixture is thoroughly photographed and documented. Based off of these findings, as well as all available historical documentation, Grand Light creates hand-drawn or computer-aided line drawings to serve as blueprints throughout the production process.



3D Scanning

Grand Light possesses a cutting-edge 3D laser scanner that allows our team to generate high-resolution models of individual components or entire fixtures. This portable technology enables us to quickly and precisely capture scans of intricate details in-shop or during on-site surveys.



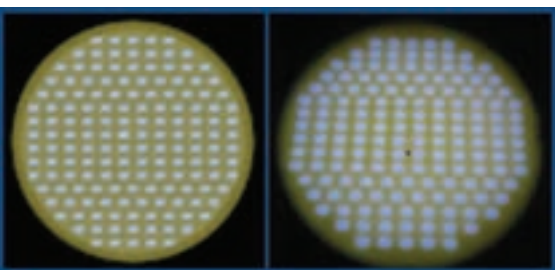
3D Modeling

CAD software such as SolidWorks, along with scanning technology, allows our team to produce highly accurate digital models of fixtures. Models are used to define dimensions, highlight the scope of work, and allow for a 360° visualization of the design so our collaborators make informed, confident decisions.



3D Printing

Our in-house 3D printer is used to fabricate to-scale physical prototypes of components or whole fixtures. 3D printed models are an efficient and cost-effective way to mock-up fixture modifications, replica parts, and verify the accuracy of dimensions.



Photometric Analysis

Using Photopia, a photometric analysis software, Grand Light is able to test how a light fixture will perform in a given environment. Photometric simulations help maximize illumination from a given energy input, confirm expected performance, and custom tailor optics to meet project-specifications.



National World War I Memorial After LED Retrofitting



Integrated/Dedicated LED



Screw-In LED



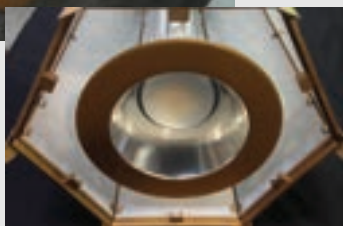
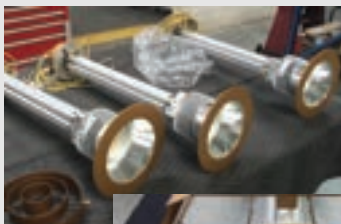
CFL to LED

Grand Light has over a decade of experience modifying existing lighting systems with energy efficient LED retrofit kits for a variety of clients, including government, religious, educational and cultural institutions, architects, electrical contractors, and designers. We pride ourselves on preserving the historic integrity of a fixture, while upgrading an existing lighting system with brighter, more efficient LED lighting.

Retrofitting your existing fixtures can be a cost effective way to improve the performance of a luminaire without the costs of replacing it. In general, having historic lighting fixtures retrofitted can drastically decrease electric bills, energy consumption, and increase the overall brightness of a room. When incandescent lamps are upgraded with an LED retrofit, the result is a room that is up to (3) times brighter, savings up to 80% in recurring energy costs, and extended operational lifespan.

LED ADVANTAGE

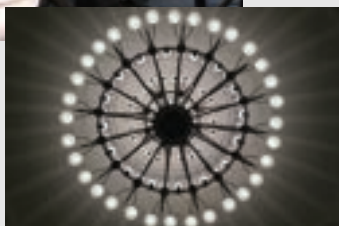
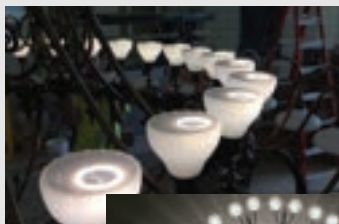
*Integrated/Dedicated
LED Retrofit Solutions*



- Customizable high output retrofit system incorporated into fixture's existing housing
- Utilizes specific chips and remote drivers built to last 20-25 years without maintenance
- High output, dimmable
 - Cons: Higher cost, difficult replacement, modification required

LED ADVANTAGE

*Screw-In LED
Retrofit Solutions*



- Utilizes established tried-and-true sockets
- Easy installation, no modification, easy replacement, no external drivers
- Variety of adjustable color temperatures and beam angles
- Reduced energy consumption
 - Con: Limited Dimming Options

LED ADVANTAGE

*CFL To LED
Retrofit Solutions*



- Designed to replace outdated CFL technology for pin lamps, reduce energy consumption and cost
- Easy installation, easy replacement, compact design
 - Con: LED System must be tailored to use a specific lamp/driver



Custom Dedicated LED Retrofit Modules

LED ADVANTAGE

Integrated/Dedicated LED Retrofit Solutions

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The **LED ADVANTAGE**

Custom designed LED retrofit kits made specifically to suit any luminaire and tested through photometric research, converting incandescent light fixtures to be fully compatible with classic UL 1598C Certified LED sockets.

- All-in-one energy-efficient design utilizing established tried-and-true sockets
- Easy installation: Conveniently replace old bulbs and trims in existing housing without requiring new wiring
- No extraneous modification needed
- Easy replacement
- No external drivers
- 50,000+ hour lifespans due to built-in LED diodes and drivers
- Dimmable
- Color Options: Amber, 2200K-5000K, Dim-to-Warm, RGBW, Tunable White 1800K-6500K
- UL 1598C Listed

System Spotlight: Adapting St. Peter's Church To An LED Future

Grand Light modified numerous historic pendant lights from an 1853 chartered church for an energy efficient lighting project. After significant product tests, calculations, and mock-ups; a custom integrated LED module was designed for installation in the existing fixtures, including a custom driver with diodes, and a downlight optic assembly for controlled lumen output. These enhanced the performance of the fixture while significantly decreasing each fixture's energy consumption via and required maintenance.

LED ADVANTAGE: "Beacon" System

- LED Boards implemented for even illumination for abnormally shaped diffusers arrangement
- Replacement for internal incandescent/fluorescent lamps
- Additional Optic assembly installed at the base of the system allowing for controlled downlight lumen output
- State-of-the-art heat sinks and airflow for regulation



3000K
1,200 Hours
60w Lamp

> 2700K
50,000 Hours
42w Downlight, 10w Strips

Exterior Kits

- Dimmable LED solutions specifically made for interior or exterior fixtures
- Custom design, layout, and easy drop in or mounting to accommodate fixture needs
- Metal parts fabricated for convenient driver implementation or mounting
- Easy installation and modifiable colors

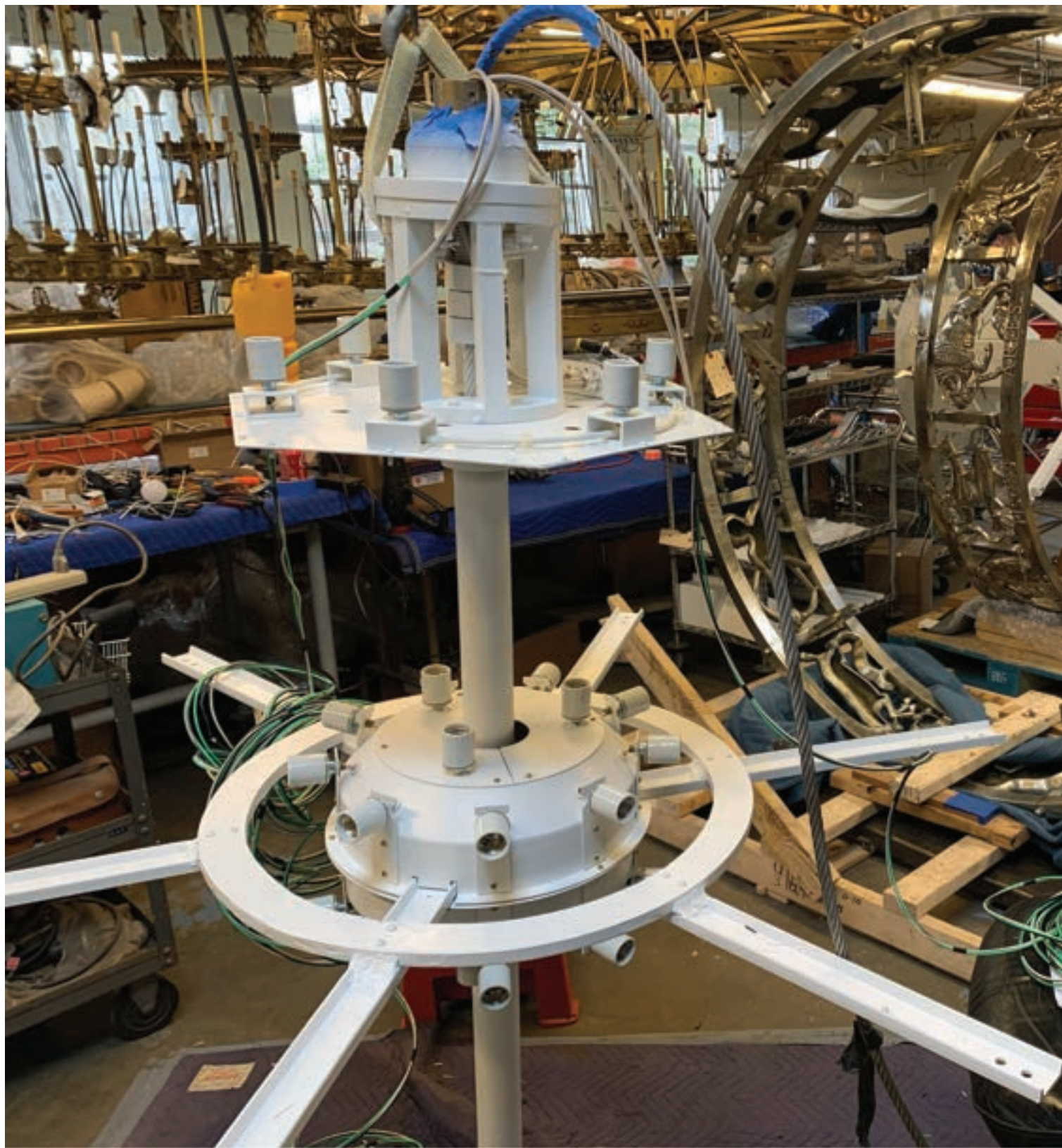
Interior Kits

- Multipurpose custom kits for extended linear distribution of light
- Highly adaptable to long or tall fixture designs
- Uplight & Downlight Compatible

Theatrical Kits

- Highly theatrical modifiable color with temperatures ranging from 1900K-10000K
- Wireless DMX decoding, allowing for convenient remote control
- Subtle, sleek, adaptive designs

Adapting The Past to The Future



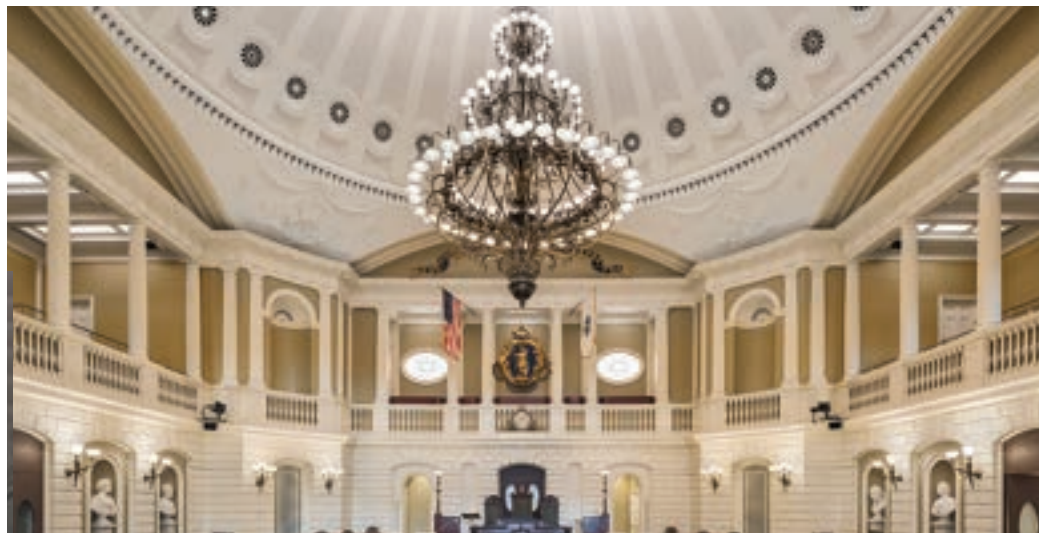
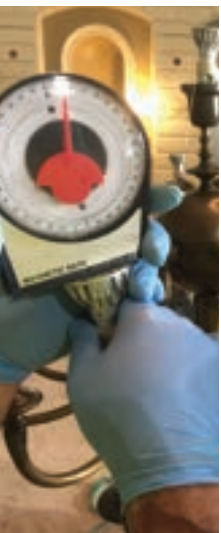
Custom LED Screw-In Retrofit Assembly

LED ADVANTAGE

Screw-In LED Retrofit Solutions

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The **LED ADVANTAGE**

Utilizing established tried-and-true sockets and making great technological strides in recent years, upgrading Incandescent to an LED System has never been easier.

Incandescent to LED Screw-In Retrofit Kits:

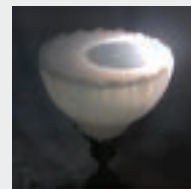
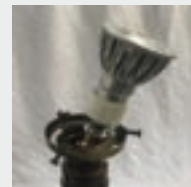
- Utilizes Classic Screw-In Sockets
- No modification to existing fixture housing
- Low maintenance
- Easy replacement
- Significantly reduced energy usage
- Significantly longer lifespan
- Reduced costs over time
- Variety of Adjustable Color Temperatures before final installation (2200k-5000k)
- Improved Safety
- UL 1598C Listed

System Spotlight: Breathing New “Light” Into Beacon Hill

The renowned Massachusetts State House Senate Chamber renovation project required the development of adjustable screw-in LED uplights that highlighted the dome of the Senate Chamber. A custom shade was designed and replicated from the historic original, while incorporating an acrylic lens to reflect light downward without interfering with the precise optics of the GU10 lamp. The retrofit solution resulted in the Senate Chamber dome being properly illuminated in addition to the remainder of the room.

LED ADVANTAGE: “Photon” Kit

- (80) GU10 Uplights
- 2700K Color Temperature
- 7.5W (390 lm)
- 25,000 Hour Lifespan
- Adjustable Beam Angle
- Precision Ambient Illumination
- Dimmable



50W
~ 16 lm/W
v
7.5W
52 lm/W



Integrated Screw-In Assembly

- 2200K - 5000K Color Temperature
- Up to 120W, 14,400lm
- Directional Lighting Options
- 0 - 10V Dimming



LED Screw-In Lamps

- 2200K - 5000K Color Temperature
- Safe for Enclosed Fixtures & Damp Environments
- Dimmable



Directional GU10 Lamp

- 2700K - 4000K Color Temperature
- Dimmable
- 7.5W - 9W, 390lm - 490lm
- Beam angles: 10°, 25°, 36°, 60°

Adapting The Past to The Future



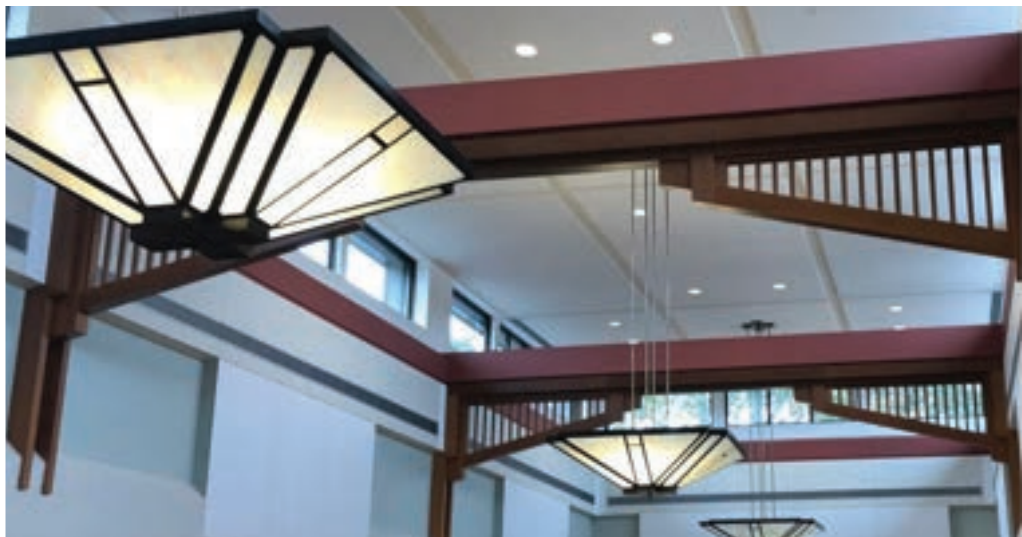
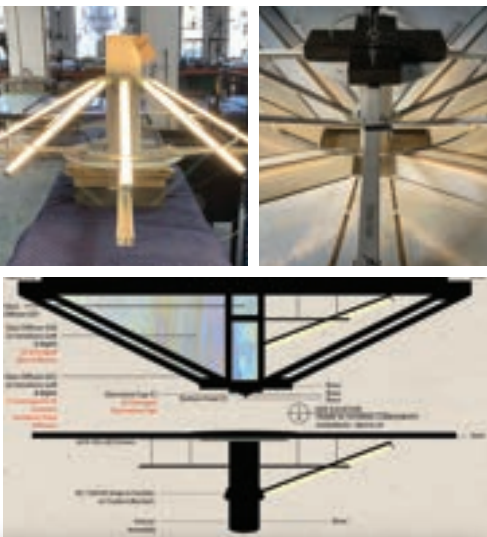
Custom Pin-Base LED Retrofit Module Wiring

LED ADVANTAGE

CFL To LED Retrofit Solutions

GRAND LIGHT

Lighting & Design Since 1929



The **LED ADVANTAGE**

Designed specifically to replace outdated CFL technology for pin lamps, Grand Light's exclusive LED conversions can offer significant reduction in energy consumption and costs by more than half per lamp.

Pin Based Retrofit Kits include:

- Increased Energy Efficiency & Safety
- Longer Lighting Lifespan
- Reduced costs over time
- Compact Design
- Variety of Color Temperatures, Dimmable
- Instant brightness with no warmup time
- 50,000-100,000 Hour Lifespan, No Maintenance Required
- Easy Installation and Replacement
- UL 1598C Listed

System Spotlight: Fairfield University's DiMenna-Nyselius Library

Grand Light retrofitted numerous, large pendant lights for this renowned University for an energy efficient lighting project. Grand Light's LED retrofit solution utilized (8) PLL 2G11 Base, 3000k LED Kits reducing the total energy consumption of the entire configuration to 50W per lamp, while increasing the maximum output to 5,000lm and a 50,000 hours lifespan. The custom retrofit systems were seamlessly integrated without additional modification to the fixtures, preserving their historical value.

LED ADVANTAGE: "Saber" Kit

- (8) PLL 2G11 Base Lamps
- 3000K Color Temperature
- 50W (5,000 lm)
- 50,000 Hour Lifespan
- (4) 32W LED Drivers
- Lutron Controller
- 0 - 10V Dimming



32W LED Driver



PLL 2G11 Base, 3000K LED Lamp



55w Fluorescent
4,128 Lumens

> 50w LED
5,000 Lumens



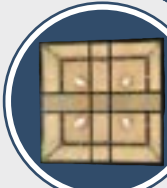
T5 & T8 Retrofits

- 3000K - 5000K Color Temperature
- Dimmable Controller Compatibility
- Simplified Installation & Maintenance
- Up To 50 - 70% Energy Savings
- 50,000 - 100,000 Hour Lifespan



2 & 4 Pin Retrofits

- 2700K - 5000K Color Temperature
- Dimmable Controller Compatibility
- Adjustable CCT & Lighting Direction
- Compact Design
- 25,000 - 50,000 Hour Lifespan



PLL Retrofits

- 3000K - 6500K Color Temperature
- Dimmable Controller Compatibility
- Ballast Bypass Options
- Adjustable CCT
- Up To 50,000 Hour Lifespan

Adapting The Past to The Future



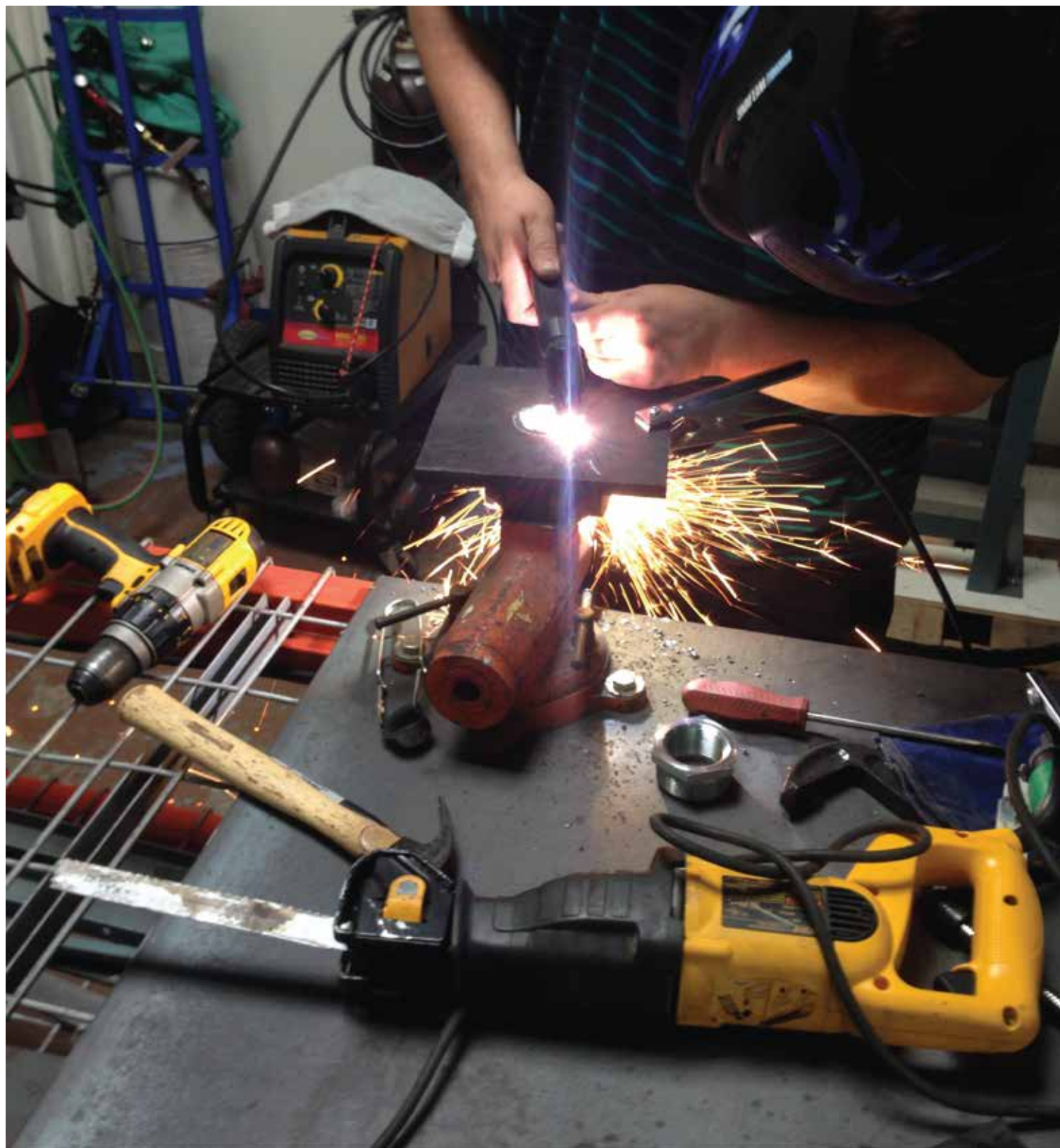
Section 6: In-Factory Capabilities

Section 6.1 Mechanical Capabilities

Section 6.2 Finishing Processes

Section 6.3 Electrical Capabilities

Section 6.4 Crystal, Glass, & Acrylic



Welding Repair of Historic Light Fixture Base

Mechanical Capabilities

GRAND LIGHT

Lighting & Design Since 1929



Inspection & Documentation



Repair



Modification



Fabrication

Grand Light's mechanical capabilities are an essential part of the restoration and custom lighting process. Utilizing only the best material, Grand Light strives to ensure only the highest quality of standards go into crafting each lighting fixture; from minor components to the complete fabrication of full sized luminaires.

Using the explicit instructions provided by custom drawings, our factory staff then transforms concepts into finished products incorporating the highest regard for accuracy.

Grand Light's technicians inspect and document any mechanical flaws or damage on every lighting fixture prior to any mechanical repair, replacement, or modification.

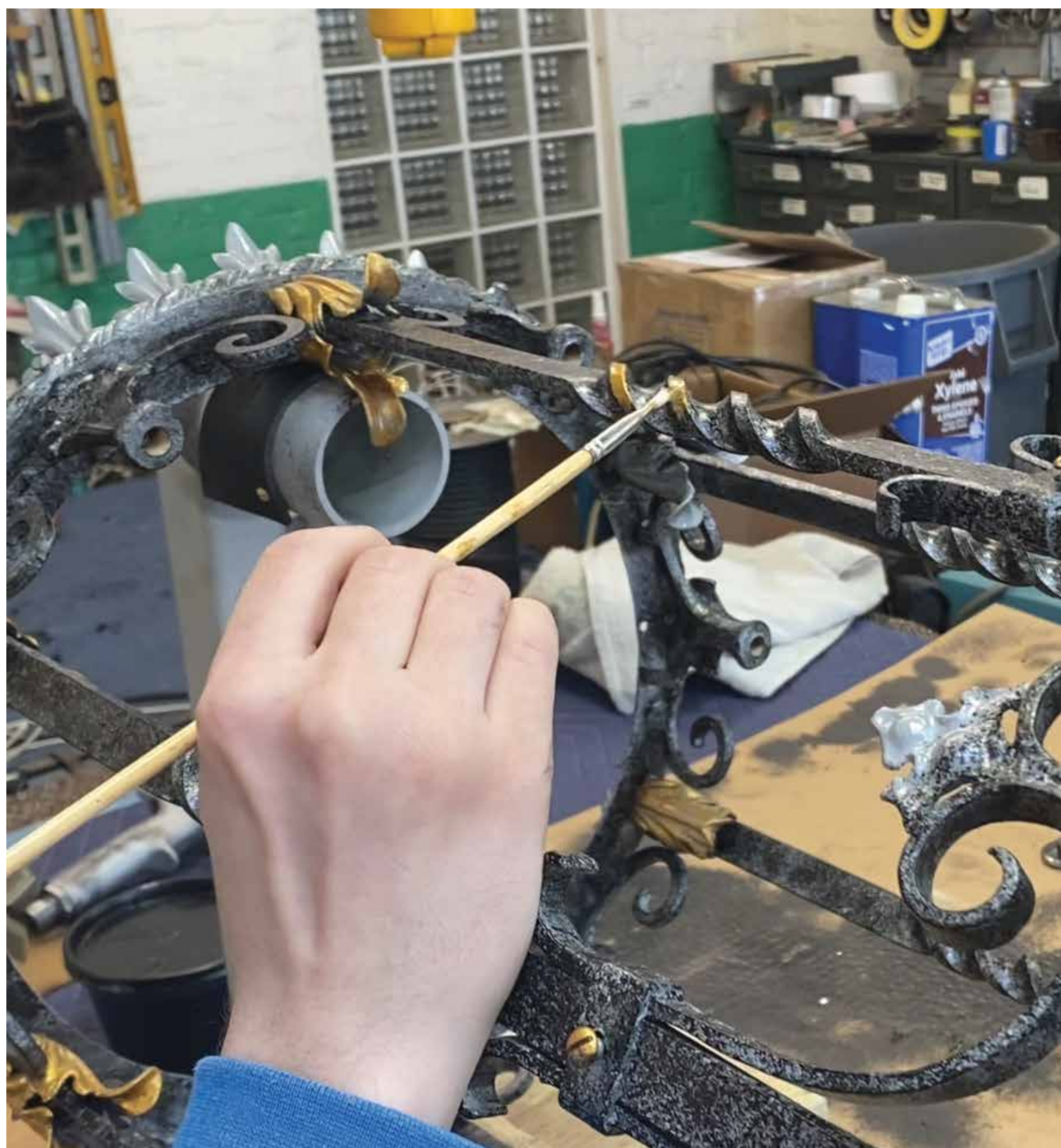
Project documentation, submittals, and reports are made available to clients for approval including work scope, schedule, record of materials, special provisions, and evaluation recommendations based on a lighting fixture's mechanical integrity.

Our Mechanical capabilities include:

- **Inspection & Documentation**
- **Metal Fabrication**
- **Glass & Acrylic Fabrication**
- **Welding**
- **Lost-Wax Casting**
- **Sodium Silicate & Resin Sand Casting**
- **Custom Tooling & Components**
- **Spinning, Stamping, & Hydroforming**
- **Metal Forming & Forging**



American Artisans At Work Preserving History



Hand Painting Intricate Finish Detail

Finishing Processes

GRAND LIGHT
Lighting & Design Since 1929



Cleaning



Surface Preparation



Painting



Polishing/Buffing



Patina Application



Protective Coatings

As a part of the restoration process, our artisans explore the intricate details of preserving the historic integrity of lighting fixtures including color matching and sheen of the original finish.

Custom lighting finishes are available in custom painted colors, sheen, and textures, as well as custom patina colors on bronze, copper, and brass components.

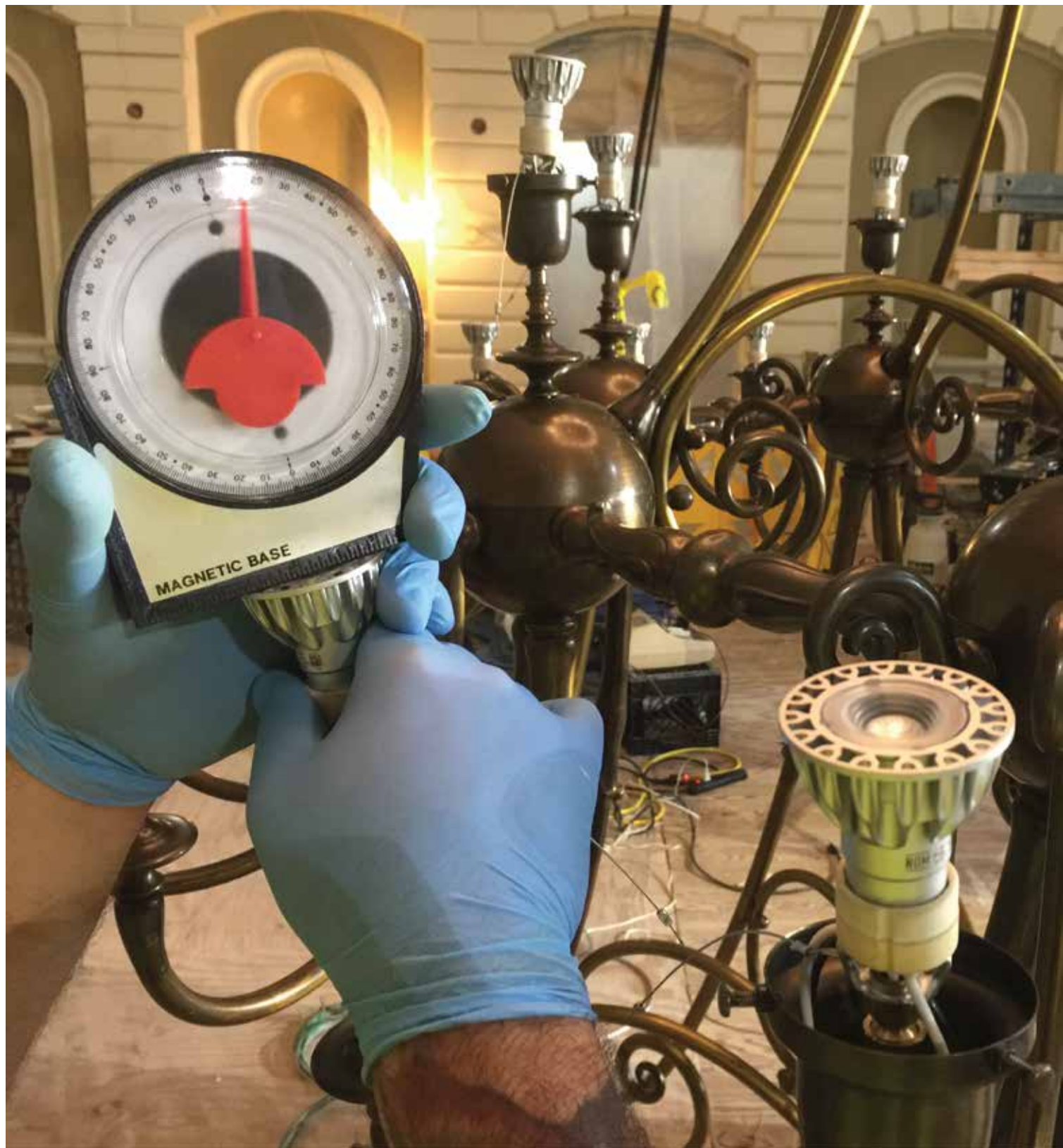
Each surface is cleaned and inspected to determine the optimal surface profile to achieve the desired finish. To alter the surface of an existing luminaire, our processes involve a wide range of capabilities including metal polishing as well as media blasting to remove old finishes and foreign material in preparation for a refinish.

Our artisans can match any color or finish utilizing a variety of processes involving powder coat, spray, hot or cold patina custom recipes and color blending an existing finish.

Grand Light exercises meticulous techniques that are unparalleled in the application of protective coatings including UV resistant lacquer with various customized sheens and tints. Finishes requiring a protective wax are hand buffed with multiple coats of our museum grade clear and tinted waxes.



American Artisans At Work Preserving History



On-Site Positioning of Adjustable Screw-In LED Uplights

Electrical Capabilities

GRAND LIGHT

Lighting & Design Since 1929



Inspection & Documentation



Retrofitting



Wiring



UL Testing

Grand Light's electrical capabilities are often an essential part of the restoration and custom lighting process. Utilizing only UL listed products, Grand Light strives to meet the highest quality of standards in finalizing each lighting fixture; from rewiring, to LED retrofitting, and the conversion of gas powered fixtures to electric.

Using the explicit instructions provided by custom specifications, our technicians transform concepts into finished products incorporating the highest regard for accuracy. Grand Light technicians inspect and document any electrical deficiencies on every lighting fixture prior to the replacement and rewiring of electrical components.



Our Electrical capabilities include:

- **Inspection & Documentation**
- **Wiring Methods**
- **UL Testing**
- **LED Retrofits**
 - **Integrated/Dedicated LED**
 - **Screw-In LED**
 - **CFL to LED**
 - **DMX Controlled RGBW LED**

LED *ADVANTAGE*

Energy efficient retrofitting increases the lighting quality of an area while minimizing total energy consumption. Retrofitting consists of updating the lighting element, wiring, and components, with the intent of improving energy consumption and reducing maintenance costs. When incandescent lamps are upgraded with an LED retrofit, the result is a room that is up to (3) times brighter, savings up to 80% in recurring energy costs, and extended operational lifespan.

Savings can also be achieved through the implementation of energy efficient lamps, photocells, motion detectors, and light lifts. All of these, often in combination, can significantly reduce operating costs and provide long term return on investment.



American Artisans At Work Preserving History



Fabrication of Custom Prismatic Soda Lime Glass Diffuser for Exterior Mounted Lantern

Crystal, Glass, & Acrylic

GRAND LIGHT

Lighting & Design Since 1929



Cleaning



Fabrication



Modification



Surface Treatment



Reproduction



Pinning & Dressing

Grand Light specializes in the cleaning, repair, fitting, custom fabrication, replacement and replication of crystal, glass, and acrylic components of varying types, sizes, and color.

Grand Light offers a wide variety of custom, high quality architectural light diffusers, available in an array of styles, types, and sizes. Our glass and acrylic capabilities offer you the flexibility to customize your own design or replicate existing designs.

These quality diffusers are available by custom order, and exclusively made to your unique specifications.

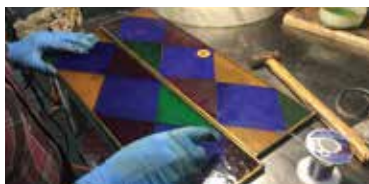
Our artisans also have countless years of experience pinning, stringing, and dressing crystal components of historic luminaires.



Our Crystal, Glass, & Acrylic restoration services include:

- **Ultrasonic & Acid Treatment Cleaning**
- **Casting, Blowing, & Cutting**
- **Etching, Frosting, & Pattern**
- **Staining, Tint, & Color**
- **Slumping**
- **Repair**
- **Pinning & Dressing**
- **Modification**
- **Replacement & Replication**

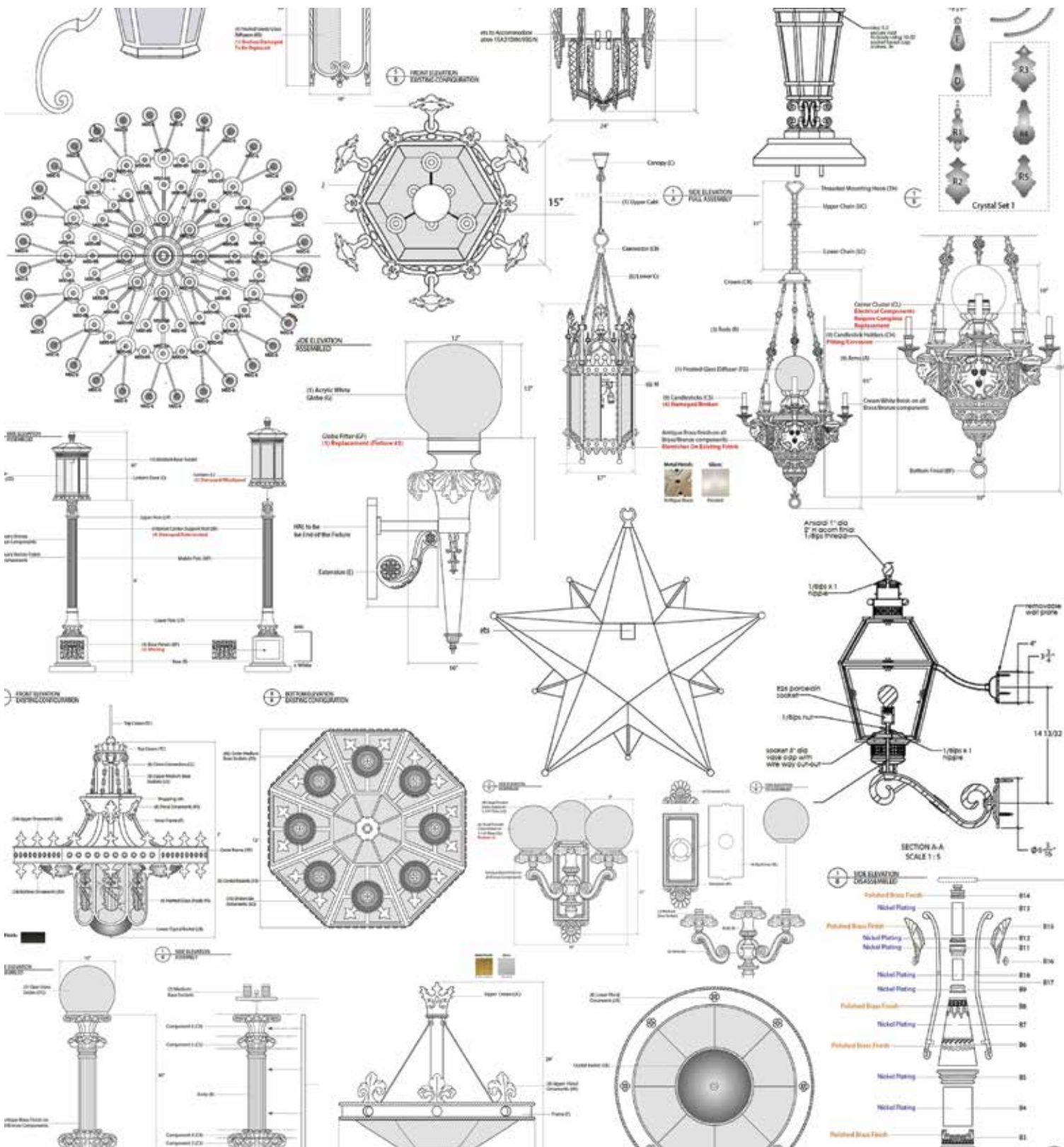
Grand Light artisans specialize in the cleaning of crystal, glass, and acrylic components. Using our advanced ultrasonic cleaning technology combined with our proprietary HSMI Cleaner, we provide a deeper, more efficient clean that enhances each piece.



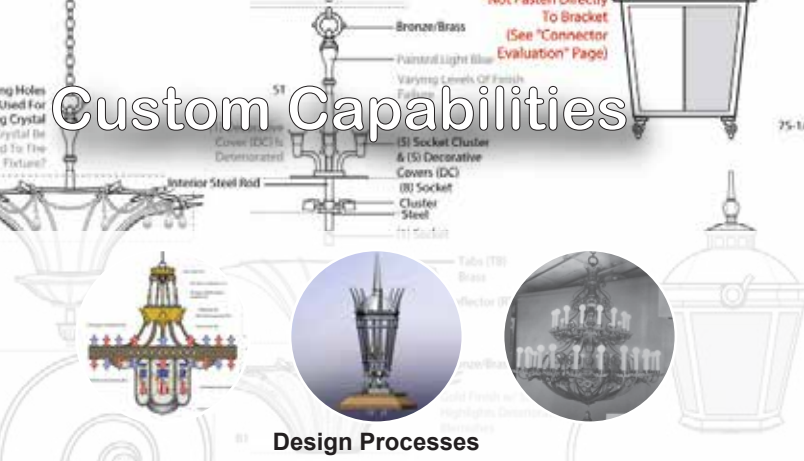
American Artisans At Work Preserving History



Section 7: Custom Capabilities



2D Light Fixture Line Drawings Used in Submittal Reports



Custom Capabilities

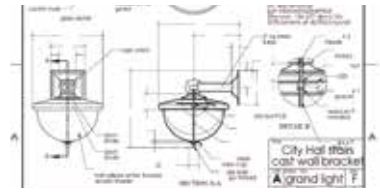
Design Processes



Manufacturing and Fabrication

With decades of restoration experience, Grand Light has developed an extensive collection of historic light fixture designs. Our design database includes 2D drawings, 3D models, photographs, and historic archival materials from past restoration projects.

Referencing existing fixtures, historical photographs, and archival documentation, Grand Light provides made-to-order fabrications of individual components or complete light fixtures.



Grand Light provides a diverse set of custom manufacturing capabilities, enabling us to reproduce just about any type of light fixture design.

Our engineers create precise 2D drawings and 3D models that inform each stage of fabrication. These designs are brought to life in our manufacturing process, resulting in seamless reproductions that capture the historic aesthetic and character of the original piece.

Our Manufacturing Capabilities Include:

- Metal Fabrication
- Glass & Acrylic Fabrication
- Welding
- Lost-Wax, Sodium Silicate, & Resin Sand Casting
- Custom Tooling & Components
- Metal Spinning, Stamping, & Hydroforming
- Metal Forming & Forging





Section 8: Project Portfolio

Property History

The Stephen A. Schwarzman Center at Yale University is a new student commons and public events space that will serve as a central hub dedicated to cultural programming and student life at the heart of the campus. The Schwarzman Center project renovated the historic Commons Dining Hall and three floors of the adjacent Memorial Hall. Both limestone Beaux-Arts style buildings were designed and built to commemorate the university's 1901 bicentennial, with the Commons designed by the architectural firm Carrère and Hastings (New York Public Library, Henry Clay Frick House) while Memorial Hall was designed by architect Henry Bacon (Lincoln Memorial).

Completed in 2021, the reimagined 88,300-square-foot complex is designed to draw together students and faculty from all of Yale's institutions and, with the help of state-of-the-art technology, enable virtual engagement with the outside world in a dynamic way never done before at Yale.

Project Description

Grand Light specialist removed and restored 100+ historic lighting fixtures, including large, hand forged iron chandeliers, wall sconces, pendants, and ceiling lights.

In addition to the historic lighting restorations, the project required the fabrication of numerous custom lights including massive stairwell chandeliers, wall sconces, pendant, and ceiling lights.

Client

Yale University

Client Project Managers

Robert A.M. Stern Architects, LLP
Ducci Electrical Contractors, Inc.

Date Awarded

2018

Completion Date

2019

Project Webpage

<https://grandlight.com/portfolio/yale-university-stephen-a-schwarzman-center/>

Awards

Traditional Building - 2023 Palladio Award Renovation & Restoration
2023 IALD International Lighting Design Awards - Award of Merit
2023 IES Illumination Awards - Merit Award
2023 Architizer Awards - Architect + Light Popular Choice Winner
Foodservice Equipment & Supplies 2023 Facility Design Project of the Year
Interior Design's 2022 Best of Year Award - Higher Education
LIT 2022 Lighting Design Awards - Interior Architectural Illumination



Property History

Located in the heart of today's Central Campus, the Sterling Memorial Library is one of Yale's most prominent buildings, as well as being the largest of all the Yale libraries. Completed in 1930, it was designed by architect James Gamble Rogers and later named for its benefactor, John William Sterling.

It currently houses approximately 4 million volumes on 16 floors of bookstacks. It was built in the Collegiate Gothic style, resembling a European Gothic cathedral, with its 60-foot ceiling, cloisters, clerestory windows, sidechapels, and a circulation desk altar.

Project Description

Grand Light completed the historic lighting restoration of Yale University's Sterling Memorial Library Manuscripts & Archives interior lighting fixtures. This project included the removal and pickup of fifty large bronze pendant lights and ceiling mounts, and over 200 glass shades.

The fixtures were completely disassembled and components were tested in order to develop an appropriate method of conservation. Each component was ultrasonically and hand cleaned with a proprietary cleaning solution, touched-up where applicable, and protected with multiple coats of a museum grade wax in order to restore the original finish.

New glass shades were replicated from originals and etched to transmit light levels, calculated by the design team, from a custom internal lighting cluster developed to fit specific LED lamps.

The largest pendant light, previously used to illuminate such literary works of Charles Lindbergh, Eero Saarinen, Eli Whitney, and the Gutenberg Bible, was modified with custom LED down lights and up lights for drastically improved floor light levels. The eight down lights consisted of adjustable accent lights with snoot and cross louver accessory in an antique brass patina finish facing downward mounted on the exterior. The up lights, mounted on the crown of the fixture, were four adjustable accent lights in a matching antique brass patina finish.

All fixtures were rewired with UL listed components, HIPOT tested in accordance with UL standard 1598, and received new energy efficient LED lamps. All exposed conductors were enclosed in fiberglass braided sleeving and were color matched to the fixture finish.

Client

Yale University

Client Project Managers

Ed Puleo, Project Manager, All-Brite Electric, Inc.

Date Awarded

2017

Completion Date

2017

Project Webpage

<https://grandlight.com/portfolio/yale-university-sml-manuscripts-archives/>



Cornell University - War Memorial

Property History

Cornell University is a private Ivy League research university located in Ithaca, New York. The War Memorial on Cornell University's West Campus was dedicated in 1932 and commemorates Cornell's 264 casualties during World War I. The cloister joining the two towers contains sixteen panels engraved with the names of Cornell students, alumni and faculty who died in World War One.

Project Description

Grand Light was commissioned to restore three different types of historic outdoor lanterns for the Cornell War Memorial, 20 two-foot-tall lanterns, 2 that were 3' tall, and another 2 at 4' for a total of 24 fixtures. Before the project began, our artisans visited Cornell to perform a preliminary analysis and returned to our Connecticut factory to create a comprehensive survey outlining the entire scope of work.

This submittal was one of the earlier implementations of our modern 3D capabilities. In factory, our engineering department used Computer Aided Design software to create a 3D model sketch of one of the lamp types. This sketch was used for various simulations, and to find hypothetical data, such as testing the lumen output via photometric software, as well as creating more accessible mock-ups of how different modifications would work.

A new up-light LED Driver was added to the top of each 2' tall outdoor lantern, and by converting our to-scale 3D models into 2D drawings, we could precisely choose what kind of module would most suit the fixtures. Once installing a module to match our mock-up, our artisans tested the lamps against different surfaces, confirming that our photometric data acquired in the pre-restoration process was accurate and to Cornell's standard.

Additionally, each fixture was media blasted, waxed, and refinished. The existing glass/acrylic diffusers were replaced with a new set of brand new stunning clear amber seedy frosted glass diffusers. Missing and damaged mechanical components were replaced, and once all of this was completed, including the new retrofitted LED configuration, our artisans brought the lanterns back to the Ithaca War Memorial where they could continue to honor our veterans for centuries to come.

Client

Matco Electric Corporation

Client Project Manager

Skip Duff

Date Awarded

2024

Completion Date

2025

Project Webpage

<https://grandlight.com/portfolio/cornell-university-war-memorial/>



American Artisans At Work Preserving History

Deerfield Academy - Dining Hall

Property History

Deerfield Academy is an independent college-preparatory boarding school located in Deerfield, Massachusetts. Founded in 1797, it is one of the oldest secondary schools in the United States. Deerfield's historic dining hall hosts traditional sit-down meals seven days a week for students and faculty, and remains a centerpiece of school culture and tradition.

Project Description

This project entailed the restoration of the dining hall's pendant and wall sconce lighting fixtures. All fixtures were disassembled and ultrasonically cleaned, hand cleaned, or walnut blasted to conserve the existing antique brass finish. Each received a UV resistant protective museum grade top coating. The fixtures had their electrical components replaced and rewired with UL listed products. Mechanical components were fully refurbished and replaced when necessary. Each fixture had their glass diffusers ultrasonically and hand cleaned, receiving replacement diffusers for any missing or damaged sections.

Grand Light removed and transported the historic pendant and wall sconce light fixtures from Deerfield Academy. Following a complete restoration process, the fixtures were safely packed and transported back to the job site to be installed at a date in the near future.

The project entailed the disassembly of each of the fixtures so that they could be thoroughly cleaned and have their antique brass finish preserved. Patina repairs were utilized when necessary to blend with the existing finish. UV resistant protective lacquer was applied to ensure the fixtures would be preserved over time.

Any missing or structurally compromised mechanical components were replaced or repaired. This included the replacement of support chains, finials, decorative knobs, and backplates. The glass diffusers of the fixtures were carefully ultrasonically and hand cleaned or replaced with new matching diffusers when applicable. Grand light technicians fully replaced and rewired the electrical components of the fixtures with UL listed products.

Client

Wayne J. Griffin Electric Inc.

Client Project Managers

Tommy Lee

Date Awarded

2024

Completion Date

2025

Project Webpage

<https://grandlight.com/portfolio/deerfield-academy-dining-hall/>



Property History

Adams House is one of the twelve undergraduate residential Houses at Harvard University, located between Harvard Square and the Charles River in Cambridge, Massachusetts. Its name commemorates the services of the Adams family, including John Adams, the second president of the United States, and John Quincy Adams, the sixth president.

The residential halls of Adams House (Claverly, Randolph, Westmorly and Old Russell) were originally private "Gold Coast" dormitories built from 1893-1902 to provide luxurious accommodation for rich Harvard undergraduates. They, along with the white clapboarded Apthorp House (1760), one of the most distinguished Colonial residences of Cambridge (and now the faculty deans' residence) predate the rest of Harvard's Houses by several decades.

Project Description

Grand Light team fabricated multiple massive 47-foot stairwell chandelier, designed to be installed throughout four flights of stairs. After fabrication, the raw steel components were completed with a beautiful quaker bronze finish and new light seedy acrylic diffusers.

Additionally, new exterior lantern replications were fabricated to match the styling of an existing lantern. A close attention to detail was required for our metalworkers to accurately recreate the intricate detailing and elaborate scroll aesthetics of the original lanterns. The new fixtures' finishes were matched with the restored lanterns, receiving a new satin black finish on all iron components. New frosted seedy glass panels were custom cut and installed in both the restored and replicated lanterns.

Client

Cambridge, Massachusetts

Client Project Managers

Independent Electric Supply

Date Awarded

2018

Completion Date

2020

Project Webpage

<https://grandlight.com/portfolio/harvard-university-adams-house-custom/>



Property History

Harvard University, established in 1636, is the oldest institution of higher education in the United States. Harvard University's Dunster House was constructed as part of a House Plan proposed by University President Abbott Lawrence Lowell to construct seven dormitories to separate upperclassmen from freshmen.

Project Description

Grand Light restored twenty-eight original luminaires ranging from large chandeliers, wall sconces, pendant lights, and exterior lanterns. These fixtures underwent several different restoration techniques ranging from cleaning and conservation of the existing finishes, to complete refinishing. Of the historic luminaires requiring restoration, twelve were manufactured by the renowned Edward F. Caldwell & Company of New York City, the premier designer and manufacturer of electric light fixtures and decorative metalwork from the late 19th to the mid-20th centuries.

In addition to the historic lighting fixture restoration, the project required a total of thirty custom lanterns to be manufactured based off the design of an existing historic exterior wall lantern.

All fixtures were rewired with UL listed components and HIPOT tested in accordance with UL standard 1598. All exposed conductors were enclosed in fiberglass braided sleeving and were color matched to the fixture finish. Additionally, all fixtures over 100lbs received safety cables.

Client

Harvard University

Client Project Managers

Clare Kirk, Turner Construction
Joanne Aitken, Kieran Timberlake

Date Awarded

2013

Completion Date

2015

Project Webpage

<https://grandlight.com/portfolio/harvard-dunster-house/>

Awards

Cambridge Historical Commission Preservation Award 2016



Property History

Harvard University, established in 1636, is the oldest institution of higher education in the United States. Harvard University's Dunster House was constructed as part of a House Plan proposed by University President Abbott Lawrence Lowell to construct seven dormitories to separate upperclassmen from freshmen.

Project Description

This project required thirty custom replications of large exterior lanterns and wall brackets fabricated in iron with seeded glass panels frosted.

All custom iron components were hand-crafted individually by artisans to accurately match the original lanterns intricate metalwork, including a distinct Harvard "H" located at the top of each fixture. Each fixture was coated in a satin black finish and a UV resistant Incralac lacquer.

Custom fabricated frosted seeded glass panels were installed to each side of the replicated lanterns. A total of eight custom glass panels were fitted to each lantern attributing to a total of over 200 custom glass panels. Each glass panel required a custom removable mounting bracket to be fabricated, painted to match, and installed on the interior of each lantern to keep all glass panels anchored to the fixture without the use of silicon.

The fixtures were wired using a SOOW outdoor cable, porcelain sockets, and UL listed components were installed to accommodate the use of new energy efficient LED lamps. UL standard wiring is fed through the bottom of each lantern frame into a canal that runs through the entirety of the bracket to the back-plate. Each lantern was HIPOT tested in accordance with UL standard 1598 prior to packing and delivery.

Client

Harvard University

Client Project Managers

Clare Kirk, Turner Construction
Joanne Aitken, Kieran Timberlake
Ricardo Viera, BCA New York

Date Awarded

2013

Completion Date

2015

Project Webpage

<https://grandlight.com/portfolio/harvard-university-dunster-house/>

Awards

Cambridge Historical Commission Preservation Award 2016



Property History

Harvard University, established in 1636, is the oldest institution of higher education in the United States. Harvard University's McKinlock Hall was constructed as part of a House Plan proposed by University President Abbott Lawrence Lowell to construct seven dormitories to separate upperclassmen from freshmen.

Project Description

The project scope included the restoration of sixty lighting fixtures ranging from large chandeliers, wall sconces, ceiling mounted fixtures, pendant lights, and exterior lanterns. Our artisans utilized different restoration techniques, including conservation of the existing finishes and complete refinishing, including cleaning and hand polishing of crystal and silver components.

Considerable amounts of accumulated dust and grime required each component to be completely disassembled from the fixtures and hand cleaned. The restoration of the silver chandeliers and sconces involved the removal of the original lacquer and hand polishing to reveal the original silver finish before multiple applications of UV resistant clear high gloss lacquer were applied. Where existing silver plating was compromised, spot plating, buffing, and hand polishing was incorporated. Crystal fixtures with damaged and missing crystal strands were re-pinned and replaced as necessary.

In several cast brass fixtures, the finish required a combination of media walnut blasting, hand burnishing, and patina blending in restoring the underlying original finish prior to several applications of a protective lacquer.

All fixtures were rewired with UL listed components and HIPOT tested in accordance with UL standard 1598. All exposed conductors were enclosed in fiberglass braided sleeving and were color matched to the fixture finish. Additionally, all fixtures over 100lbs received safety cables.

Client

Harvard University

Client Project Managers

Clare Kirk, Turner Construction
Joanne Aitken, Kieran Timberlake

Date Awarded

2013

Completion Date

2015

Project Webpage

<https://grandlight.com/portfolio/harvard-university-mckinlock-hall/>



Property History

John Winthrop House, located on the banks of the Charles River, is one of twelve undergraduate residential Houses at Harvard University. The House derives its name from two notable men named John Winthrop who shared both name and lineage. Winthrop House consists of two historical buildings, Standish Hall and Gore Hall, both large four-story U-shaped structures connected by the Yellowwood Courtyard. Both Standish and Gore Hall were originally built in 1912 and share many architectural Neo-Georgian attributes.

Project Description

Grand Light restored forty-nine original luminaires ranging from large chandeliers, exterior lanterns and post lights. These fixtures underwent several different restoration techniques ranging from cleaning and conservation of the existing finishes, to complete refinishing.

Of the historic luminaires requiring restoration, four chandeliers were manufactured by the renowned Edward F. Caldwell & Company of New York City, the premier designer and manufacturer of electric light fixtures and decorative metalwork from the late 19th to the mid-20th centuries. Caldwell lighting fixtures, ornamental bronzes, and ironworks include an impressive range of historical and modern styles that were produced in the company's sixty-four year history. One consistent factor throughout all of Caldwell's lighting fixtures and metalwork was unparalleled craftsmanship demonstrated through decorative details and beautiful finishes.

All fixtures were rewired with UL listed components and HIPOT tested in accordance with UL standard 1598. All exposed conductors were enclosed in fiberglass braided sleeving and were color matched to the fixture finish, in addition where deemed necessary safety cables were added, both of which are standard Grand Light procedures.

In addition to the historic lighting fixture restoration, the project required a total of eleven custom lanterns to be manufactured based off the design of existing historic exterior wall lanterns.

Client

Harvard University

Client Project Managers

Michael Smart, Lynnwell Associates Inc.

Date Awarded

2016

Completion Date

2017

Project Webpages

<https://grandlight.com/portfolio/harvard-university-winthrop-house-gore/>
<https://grandlight.com/portfolio/harvard-university-winthrop-house-standish/>

Awards

Cambridge Historical Commission Preservation Award 2018



Property History

Constructed in 1955, Kresge Auditorium was dedicated to serve as the meeting house of the Massachusetts Institute of Technology. This elegant thin-shell structured building, designed by Eero Saarinen of TWA Flight Center fame, draws visitors from all around the world today. Built side by side with the MIT Chapel, the Kresge Auditorium is home to formal events for both students and faculty. The roof was originally covered with orastone, but was later replaced by lead sheeting with stainless steel wires, and eventually copper. The interior holds 1,200 seats within the performance hall, 200 seats within the theatre, as well as a number of dress and rehearsal rooms. The Kresge Auditorium serves primarily as performance facilities for MIT Music and Theatre Arts productions, as well as a meeting space for many student organizations.

Project Description

Grand Light restored sixty-seven historic exterior downlights located along the facade of the building. Each downlight was received by Grand Light with significant staining to the finish due to the accumulation of bird excrement. The interior of each fixture had also accumulated a diverse collection of twigs, dirt, and feathers as a result of birds nesting. Each downlight was cleaned of all foreign material and media blasted to remove all of the existing finish in preparation for a black matte finish.

In addition to finish deterioration, inspection of each downlight revealed significant metal rot on a large number of the fixtures. Additional metal work was required to repair and/or replace the corroded metal to match existing components.

All fixtures were rewired with UL listed components and HIPOT tested in accordance with UL standard 1598 while the lamps were upgraded to modern LED lighting technology.

Client

Massachusetts Institute of Technology

Client Project Managers

Matt Noon, J. & M. Brown Company, Inc

Date Awarded

2015

Completion Date

2015

Project Webpage

<https://grandlight.com/portfolio/mit-kresge-auditorium/>

Awards

Cambridge Historical Commission Preservation Award 2016

AIA New England Regional Council Design Award 2016

American Architecture Awards 2017



Property History

The United States Military Academy (West Point) is located approximately 50 miles (80 km) north of New York City on the western bank of the Hudson River in West Point, New York. West Point and grounds were declared a National Historic Landmark in 1960 due to the Revolutionary War history and the age and historic significance of the Academy itself. This project consisted of the renovation and restoration of the existing MacArthur Short Barracks.

MacArthur Short Barracks is a multi-story building including basement and six stories above ground to highest enclosed space. Originally constructed in 1961, the building is approximately 140,000 square feet and houses 400 Cadets from the Third and Fourth Regiments and is named after General of the Army Douglas MacArthur- a West Point graduate in 1903, former Superintendent of the US Military Academy (1919-22), General of the Army during World War II, and a recipient of the US Medal of Honor.

Project Description

Grand Light restored the exterior lighting fixtures which are original to this historic building. All structural damage to these fixtures were repaired. All missing, damaged, and broken components were replaced with handmade replicates to maintain the historical accuracy of these fixtures.

The existing verde green patina finish was cleaned and conserved, and in areas of significant finish failure due to severe excrement staining, re-patination of components or finish blending was required. After cleaning, conservation, and re-patination, a UV-resistant lacquer top coat was applied to each lantern.

Each existing panel was replaced with a new optix 7328 custom slumped panel. All wiring was replaced with UL listed components and HIPOT tested in accordance with UL standard 1598.

Client

United States Military Academy

Client Project Managers

Tony Soucier, Senior Estimator, Ducci Electrical Contractors

Date Awarded

2015

Completion Date

2015

Project Webpage

<https://grandlight.com/portfolio/the-united-states-military-academy-west-point-macarthur-short-barracks/>



Property History

The Malaga Cove Library in the Palos Verdes Library District (CA) was designed in Spanish style by Pasadena architect, Myron Hunt, and constructed in 1929. In 1995 it was placed on the National Register of Historic Places.

Project Description

Grand Light was selected to replicate lighting fixtures based on historic archived photographs of fixtures that are no longer in existence, which were located in the main area of the library. In addition to fabricating the ten replications of the historic pendants, Grand Light designed and manufactured twenty-five ceiling lighting fixtures, thirteen wall sconces and thirty-one pendant lighting fixtures of varying lengths for a new addition to the library.

Every component was custom fabricated, using aluminum which was spun on our custom made tools to be historically accurate based on the archived photographs. Custom made white flashed opal glass was fabricated for the replicated pendant to serve as a decorative bottom diffuser for the four florescent lamps.

These custom fixtures required custom tooling as each component was spun using aluminum for replications and brass for the custom designed pendants. Both fixture types used a custom opal shade. A statuary bronze powder coat was applied to the historic replications that were made of aluminum and an antique brass patina was applied to the custom designed brass fixtures.

Each custom fixture was wired for the use of 42 watt fluorescent lamps and contained the appropriate ballast with the fixture for ease of maintenance in the future.

Client

Palos Verdes Library District

Client Project Managers

Charles Crouse, Facility Manager, Palos Verdes Library District
Tom Michali, M2A Milofsky Michali & Cox Architects

Date Awarded

2012

Completion Date

2012

Project Webpage

<https://grandlight.com/portfolio/malaga-cove-library/>



Property History

Washington Irving Intermediate School, located in the village of Tarrytown, N.Y., was founded in 1925. The building was designed by James O. Betelle of Gilbert & Betelle architects of New Jersey in a Georgian style. The brick building with its arched doorways and white borders has a welcoming, residential feel, perfect for the 4th and 5th graders who attend classes there. The school is named after the author Washington Irving, who was born in Tarrytown in 1783. He is renowned for his works Rip Van Winkle and The Legend of Sleepy Hollow, which takes its name from the neighboring town of Sleepy Hollow.

Project Description

Grand Light restored ten chandeliers from the school's auditorium and fabricated custom exit sign faceplates with a matching finish.

Each chandelier was cleaned then stripped of its existing finish which had tarnished beyond any salvageable point. Each component was chemically patinated and hand burnished giving the fixtures a rich dark brass finish, which is what they had been when they were originally made for the school. In addition to the refinishing of the components, several mechanical and structural defects were repaired, and missing cast finials and bobeches were replaced with replicated components. A UV resistant top coat was applied to all of the metal components to assure the fixtures long lasting beauty.

In addition to the finish, structural, mechanical, and component replication, each fixture was rewired and had all of its electrical components replaced and UL HIPOT tested.

Grand Light also fabricated eleven custom exit sign faceplates. Concept sketches were drawn to guide our metalworkers in the fabrication of the faceplates. A rich dark brass finish was applied, matching the new finish of the restored auditorium chandeliers.

Client

Public Schools of the Tarrytowns

Client Project Managers

Lou Logozio, All Star Electric

Date Awarded

2008

Completion Date

2008

Project Webpage

<https://grandlight.com/portfolio/washington-irving-intermediate-school/>



Property History

The Divinity School at Yale University was built in 1932 by the New York based architecture firm of Delano and Aldrich. The campus includes the Marquand Chapel, the Day Missions Library, the Trowbridge Reference Library, a refectory, common room, dormitories, common room and classrooms. The buildings were constructed with handmade water stuck brick, and designed in a sophisticated Georgian Colonial style, which Delano and Aldrich were renowned for.

Project Description

Grand Light designed and manufactured several custom lighting fixtures for Yale Divinity School. This project included the replication of a large existing historic iron and brass chandeliers, various multi-tiered crystal chandeliers, a massive brass and crystal chandelier, and numerous custom handcrafted pendant lights.

The historic chandeliers being replicated were previously restored by Grand Light. Extreme attention was taken to replicate the original fixture's intricate detailing to accurately capture the historical significance of the chandelier and its components. the replicated lounge chandelier was then assembled and received a hand applied patina to the brass components and the steel components were painted matte black. All components then received a coat of protective lacquer.

Massive crystal chandeliers in the refractory were partially assembled, wired, and tested at Grand Light's custom lighting factory before being safely transported to the school's lounge. Once they were suspended from their lifts, Grand Light artisans dressed the crystal components on the chandeliers in the refractory.

A one-of-a-kind, beautifully handcrafted, brass & crystal chandelier was custom designed and fabricated specifically for Divinity School's rotunda, and beautifully compliments the elegant pillars and spiral staircase aesthetics. This fixture was carefully dressed by Grand Light artisans in the rotunda.

The fabrication of the custom library pendants consisted of individually cast brass components. Each component was then welded together to obtain the large circumference required to accommodate the custom made flashed opal glass diffuser. A custom cluster configuration allowed 5000 lumens of light output, and accommodating a 277 volt LED A21 screw in lamp.

Client

Yale University

Client Project Managers

Jeromy Powers, Project Planner, Office of Facilities, Yale University

Date Awarded

2017

Completion Date

2017

Project Webpage

<https://grandlight.com/portfolio/yale-university-divinity-school-custom/>



Property History

New Haven, CT's Morse College & Ezra Stiles Colleges are two of the twelve residential colleges at Yale University, built in 1961 and designed by architect Eero Saarinen, a master of American 20th Century architecture. The two buildings are adjacent to each other and similar in design. Morse College is named after Samuel Morse, a Yale graduate and inventor of Morse Code. Ezra Stiles College is named after Rev. Ezra Stiles, president of Yale from 1778-1795.

Morse & Stiles Colleges are eclectic structures built on an odd, angular site with many design features that are reminiscent of the Tuscan villages, most notably San Gimignano. In a modern attempt to capture the spirit of Gothic architecture, Saarinen eliminated all right angles from the living areas. Although controversial, the two buildings are considered by many architecture critics to be masterpieces of American architecture.

Project Description

Grand Light was selected to completely restore and modify a large number of the original fixtures from the two schools, beginning with Morse College. These fixtures included multiple bronze sconces, bronze chandeliers, exterior poles and luminaires, library lights, and numerous massive bronze outdoor lighting fixtures. The fixtures were designed by Oliver Andrews, a well known and respected California sculptor, author and educator at UCLA. His designs, abstract in nature, where intended to be contemporary versions of what he considered "the sort of thing you'd find in an ancient castle".

In addition to restoring, rewiring, refinishing and repairing the fixtures as needed, Grand Light will upgrade the lighting sources to energy efficient systems and provide a CFL dimming system for the large bronze dining hall fixtures.

Client

Yale University

Client Project Managers

Tom Merenda, Purchasing Manager, Ducci Electrical Contractors, Inc.

Date Awarded

2010

Completion Date

2010

Project Webpage

<https://grandlight.com/portfolio/yale-university-morse-stiles-college/>

Awards

2013 AIA Honor Award: Architecture

New Haven Preservation Trust Landmark Plaque for Extraordinary Devotion to Preservation



Property History

Silliman College is the largest of all 12 residential colleges on Yale University's New Haven, Conn. campus. It was named after Benjamin Silliman, the "father of the scientific education," who was the first professor of chemistry at Yale, and later became a renowned geologist. Opened in September of 1940, the college was designed by Otto R. Eggers, of Eggers and Higgins, an architectural firm based out of New York City. Renovations on Silliman College began in 2005 and were completed in August of 2007. It was during this period that Grand Light's restoration specialists began their work on over one hundred indoor and outdoor fixtures of various sizes.

Project Description

Renovations on the campus began in 2005 and were completed in August of 2007. It was during this period that Grand Light's restoration specialists worked on over a hundred indoor and outdoor fixtures of various sizes.

These fixtures underwent several different restoration techniques including extensive metal reshaping, refinishing, and the fabrication of custom intricate glass panes.

All fixtures were rewired with UL listed components and HIPOT tested in accordance with UL standard 1598.

Client

Yale University

Client Project Managers

Genovese & Massaro Inc

Date Awarded

2007

Completion Date

2007

Project Webpage

<https://grandlight.com/portfolio/yale-university-silliman-college/>



Property History

Silliman College is the largest of all 12 residential colleges on Yale University's New Haven, Connecticut campus. It was named after Benjamin Silliman, the "father of the scientific education," who was the first professor of chemistry at Yale, and later became a renowned geologist. Opened in September of 1940, the college was designed by Otto R. Eggers, of Eggers and Higgins, an architectural firm based out of New York City.

Renovations on Silliman College began in 2005 were completed in August of 2007. It was during this period that Grand Light's restoration specialists began their work on over one hundred indoor and outdoor fixtures of various sizes.

Project Description

As a part of renovations that took place, Grand Light created six custom lanterns flanking the entrance to the college. The task called for Grand Light to utilize many of their tools in the creation of the pieces.

Due to the sheer size and weight of the lanterns, the cages were fabricated using laser cut stainless steel frames, ensuring that the structural integrity of the fixtures would not be compromised in the future.

Decorative brass spinning's were fabricated to permit for crisper, more precise detailing. A removable ballast tray with a multi-wattage CFL ballast and socket were installed for optimum photometrics and easy maintenance. Glass panels of the lantern were sandblasted frosted seedy glass, consistent with maintaining the historical accuracy of the iron entry gates they illuminate.

With the six custom made lanterns installed, this leg of Grand Light's work with Yale was concluded. The lanterns compliment the surroundings and remain true to the ambiance created by the existing architecture. Designed for both aesthetic appeal and for durability, Grand Light's team designed the perfect fixture to illuminate the entry gates to Silliman College.

Client

Yale University

Client Project Managers

Genovese & Massaro Inc

Date Awarded

2007

Completion Date

2007

Project Webpage

<https://grandlight.com/portfolio/yale-university-silliman-college-custom/>



Property History

Presented to the university by Paul Mellon (Yale College Class of 1929), the Yale Center for British Art houses the largest and most comprehensive collection of British art outside the United Kingdom. The collections re-flect the development of British art, life, and thought from the Elizabethan period onward. The Center offers a year-round schedule of exhibitions and educational programs, as well as numerous academic resources. The Yale Center for British Art is designed by the internationally acclaimed American architect Louis I. Kahn. Located across the street from his first major commission, the Yale University Art Gallery (1953), the Center was Kahn's final work and was completed in 1977, three years after his death. In 2005 the Center received the prestigious Twenty-five Year Award of the American Institute of Architects which each year honors a single architectural landmark, completed twenty-five to thirty-five years prior, which has withstood the test of time.

Project Description

Grand Light replicated one of the existing historic pendant light fixtures original to the architecture of the building. The pendant is a spun, tapered aluminum, shade which was anodized further enhancing the characteristics to the hand spun part. Each component for the fixture was custom made to assure complete historical accuracy to the ones that had been originally made.

In addition to historic pendant replications, Grand Light designed and fabricated custom aluminum LED exit sign replications of existing historic exit signs while also retrofitting those exit signs original to the architecture of the building. Each exit sign has LED circuit boards installed inside the frame along the sides and top and a separate LED downlight board, creating a consistent illuminated face plate and a uniform downlight. Custom glass face-plates, using a specific frame size, stencils, and chevrons, were fabricated to meet UL 925 Standards.

By installing these custom exit signs, the Center maintains its historical architectural accuracy while still upgrading to modern LED lighting technology with improved light levels and efficient energy savings that both employees and visitors can appreciate.

Client

Yale University

Client Project Managers

Daphne Kalomiris, Knight Architecture LLC

Date Awarded

2013

Completion Date

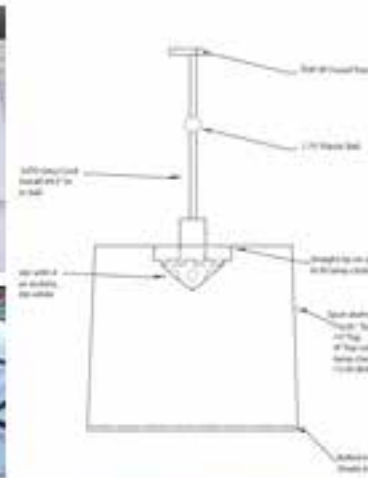
2015

Project Webpage

<https://grandlight.com/portfolio/yale-center-for-british-art/>

Awards

CT Trust For Historic Preservation Merit Award 2017





Section 9: Historic Restoration Guidelines

Historic Lighting Restoration Guidelines

PART 1 – GENERAL

The purpose of this document is to specify the scope of work required for the restoration of existing historic lighting fixtures and the replication of others.

1.1 RELATED DOCUMENTS

A. The provisions of the Contract Documents, Drawings & Instructions to Bidders, General Conditions, Supplementary Conditions, Alternates and Addendas apply to this Specification.

1.2 DESCRIPTION OF WORK

A. Provide lighting fixtures as shown on the Drawings and identified as “historic lighting” and herein specified or scheduled.

B. The work to be performed on this project shall include the restoration of existing historic fixtures and the replication of luminaires from both existing fixtures and from photographs, drawings, and historic information available, where actual luminaires do not exist.

C. For new replications of existing and non-existing lighting, work shall include complete studies of photographs, drawings, and available historic information allowing concise preparation and design of engineering drawings with complete bills of materials for the fabrication of each fixture. All ornamental design, structural elements and component parts shall be fully detailed in addition to all anchoring support, wireway, and joinery conditions.

D. Completed fixtures shall meet all applicable codes regarding materials and methods. All NEC guidelines and UL procedures shall be followed.

E. Electrical contractor shall be responsible for verifying existing conditions and coordinate the mounting hardware with Grand Light. It is the responsibility of the fixture manufacturer to ensure that all structural, mechanical, electrical, design, construction and fabrication of fixtures meet all applicable codes as related to public safety concerns. It is the responsibility of the electrical contractor to ensure that fixtures are safely installed with careful attention to fixture weight and mounting, lift and lowering devices and safety/seismic cables, where applicable.

1.3 QUALITY ASSURANCE

A. New and restored historic light fixtures and assembled components shall be wired and tested in accordance with UL standards.

B. Work on historic lighting shall be performed by a qualified Restoration and Replication Manufacturer (Grand Light) with no less than ten years successful experience in comparable restoration and replication projects and employing personnel skilled in the restoration and replication processes and operations indicated. Upon Request, Grand Light shall provide proof of qualification.

C. Qualification Data:

Grand Light shall submit qualification data as listed below, in their response to the request for bids, along with their price quotation. Data shall demonstrate Grand Light's capabilities, experience and financial stability. It shall include a history of the firm, number of years the firm has restored and replicated historic lighting. Qualification data should include five projects within the last five years of similar scope and magnitude, photo documentation of completed work and project references.

1.4 SUBMITTALS

A. Grand Light shall refer to contract bid documents regarding shop drawings, product data, and samples, submission procedures.

B. For custom replicated luminaires, submit shop drawings indicating all details of mechanical and electrical construction (including circuitry, lamping, ballasts, transformers, wireways, lampholders, etc.), diffuser assembly, mounting accessories and hardware, finishes and list of materials.

C. For existing luminaires; Provide shop drawings for structural modifications only indicating the project name, manufacturer, all materials, finishes, lamping, voltage, ballast information and mounting details.

D. Finish Samples: Samples of shades, glass diffuser material, metals and metal finish samples shall be submitted for approval prior to the notice to proceed with mock-ups.

1.5 MANUFACTURERS MOCK-UPS

A. Grand Light shall provide, access to the manufacturing plant for the project architect/engineer and owner project manager to review work in progress. The project architect/engineer and owner will coordinate these trips for timely review of work in progress.

1.6 PRODUCT HANDLING – REMOVAL THROUGH INSTALLATION

A. All costs for removing historic fixtures from existing locations, disassembly, packing, crating, insurance and freight for luminaires from the job site to Grand Light shall be the responsibility of the Electrical Contractor. The Electrical Contractor shall coordinate the removal and re-installation with other project contractors to insure convenience for all concerned. Packaging, crating, insurance and shipping of restored and replicated fixtures to the Electrical Contractor for re-installation shall be the responsibility of Grand Light. The Electrical contractor shall be responsible for receiving, assembly and installation of both restored and replicated fixtures.

Historic Lighting Restoration Guidelines

B. The Electrical contractor shall be responsible for final lamping adjustment, luminaire adjustment and cleaning. Grand Light shall be on-site during fixture removal to assist with the photo-documentation of the existing condition, location, tagging and supervising the proper handling, disassembly, packing and crating of the historic lighting fixtures. When fixtures are re-installed, Grand Light shall again be on-site to supervise the proper handling, uncrating and assembly of the fixtures prior to their being installed by the Electrical Contractor.

1.7 GUARANTEE

A. Grand Light shall furnish to the owner a written guarantee for luminaries against all defects in materials and workmanship, including without limitation, against failure to function, for two (2) years from date of acceptance.

PRODUCTS Lamps, ballasts, transformers, lampholders, as specified.

1.8 MATERIALS

General:

Utilize materials to match the original or with matching equivalent physical characteristics of strength, finish, resistance to corrosion, etc. Utilize gauges and thickness required to provide the appropriate structural performance and durability.

The restoration of existing luminaires shall consist of, electrical rewiring, new glass globes, cleaning and refinishing. Physical restoration shall consist of the repair or replacement of any parts that are missing, broken, or damaged. Replacement shall match the original parts in strength and appearance, including degree of detail.

Electrical restoration shall consist of the replacement of all electrical components and wiring. Luminaires shall be wired with UL listed components and tested in accordance with UL standards.

1.9 STRUCTURAL MEMBERS

A. All visible structural members shall be fabricated in the material used in the original or, in the case of luminaires based on photographs or drawings of the original, the material that would have been used in a quality luminaire at the time. Thickness and gauges shall be as required for structural integrity.

B. All castings shall be free of pits, scratches, blemishes, parting lines, burrs and internal flaws.

C. Assemblies of structural elements joined by soldering, brazing, or welding shall exhibit no external discoloration at the seams. External fasteners shall be finished to match the parts in which they are installed.

2.0 ORNAMENTAL MEMBERS

- A. Applied ornamental pieces (cast, spun, stamped or hand wrought) shall be of the material to which they were attached unless otherwise indicated by the originals or in the specifications.**
- B. Applied ornamentation shall be attached using fasteners in discreet locations. Visible fasteners shall be finished to match the material into which they are set.**

2.1 NEW FINISHES (New Luminaires)

- A. It shall be the responsibility of Grand Light to research and propose the finish or combination of finishes to be employed on the luminaires. Finish shall be uniform, free of runs, specs, smudges, “checking”, “rainbowing” or milkiess caused by humid environments. Manufacturer shall provide samples for approval of all finishes and materials to be used with the Shop Drawing Submittal.**

2.1A CLEANING FINISHES (EXISTING LUMINAIRES)

- A. Existing luminaires shall be cleaned only and the existing patina appearance shall be retained were specified.**
- B. Restoration/Conservation includes cleaning, repair, patination, painting, and application of protective coatings. Multiple coats of museum grade waxes or lacquer as required.**

2.2 DIFFUSERS - GLASS

- A. Match the original diffuser-glass as shown in historic photos. It shall be the responsibility of Grand Light to research and propose the diffuser. Grand Light shall provide samples for approval of all finishes and materials to be used with the Shop Drawing Submittal.**
- B. Match the existing in all aspects: size, thickness, material, color, surface texture design, etc. Shelf Stock: furnish additional diffusers for each fixture type, as specified.**
- C. Replace the diffusers-glass on the existing luminaires to match the diffusers on the new luminaires.**

2.3 REPLICATION LUMINAIRES

- A. The contract documents define the required visual appearance and performance characteristics, which must be achieved in the existing replications. Variances will be considered only, if in the opinion of the architects, their consultants, and the project historians, they will achieve the desired appearance, quality of construction and performance.**

B. Lamp holders shall hold lamps securely against vibrations and maintenance handling. For enclosed incandescent standard base lampholders, provide glazed porcelain, nickel-plated brass screw shell type lampholders. Other lampholders shall match the original or as specified. Decorative sleeves over lampholders should match the original.

C. Wiring: Shall meet the applicable U.L. Standard and all local codes and the National Electrical Code. Exposed wire shall be of similar color to existing finish and be installed in such a manner as to be as invisible as possible. Wires through the chain shall be in such a manner that chains hang plumb and straight without crimping the wire at any point. Grand Light shall coordinate with Electrical Contractor for any special wiring or attachment considerations (plugs, quick disconnects, extra length, sleeving, etc.)

D. Lamps: Shall be provided by others.

2.4 FABRICATION

A. Luminaires shall be free of light leaks and shall be designed to provide sufficient ventilation of lamps and ballasts, including vent holes where required.

B. Lamps shall be oriented to provide the best light distribution, free of shadows or “hot” spots.

C. Sheet metal work shall be free from tool marks and dents and shall have accurate angles bent as sharp as compatible with the gauges of the required metal. Intersections and joints shall be formed true and of adequate strength and structural rigidity to prevent any distortion after assembly. Sheet metal shall be free of light leaks. Edges shall be finished so there are no sharp edges exposed. Sheet metal work shall be properly fabricated and supported so that planes will not deform (i.e. become concave or convex, due to normal expected ambient and operating conditions).

Need More Information, Browse Our Additional Resources At GrandLight.com

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Packaging Instructions - Form 10404

Glass Packaging Recommendations

- 1) All glass should be removed from the fixtures and wrapped in 1/2" thick bubble wrap... Secure the bubble wrap with clear carbon sealing tape. "Do Not Allow Tape To Come In Contact With Glass"
- 2) Place bubble wrapped glass in a box with bottom lined bubble wrap and fill box with packing peanuts. Allow 3" of packing on all sides, top and bottom of the box... Secure with clear carbon sealing tape and label with contents (1 x qty (1) glass Type A)
- 3) Cracked Glass...Place painter tape on both sides of any cracked glass

Broken Glass...Place all broken glass on a flat cardboard...Secure with painter tape...Bubble wrap and tape with clear carbon sealing tape.

Fixture Packaging Recommendations

- 1) All fixtures and loose fixture components (chain, canopy etc.) should be wrapped with 1/2" bubble wrap and secured with clear carbon sealing tape. "Do Not Allow Tape To Come In Contact With Metal Finishes"
- 2) Place bubble wrapped fixture or fixtures (depending on size) in a box with bottom lined bubble wrap and fill box with packing peanuts. Allow 3" of packing on all sides, top and bottom of the box. Secure with clear carbon sealing tape and label with contents (1 x qty (1) fixture Type A)

General Notes:

- Do not mix fixture frames and glass within the same box. Do not use duct or electrical tape.
- Do not allow loose components to rattle inside the bubble wrapped fixture.
- Select boxes to fit and support the contents size and weight.
- Separate multiple fixtures or glass within a box with cardboard separators.

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Maintenance Instructions - Form 10403

Maintenance Overview

Lightly clean the surface every six months or as needed with a non-abrasive soap like Ivory Soap. Dry completely and reapply a new layer of wax with a brush when dry. If the wax is maintained regularly there is a good chance the clear sealant will last a long time.

Cleaning and Care of Lighting Fixtures

Required Materials:

- (2) terrycloth or similarly durable soft cloth
- Non-abrasive soap like Ivory Soap (liquid)
- Scrubby Nonwoven Wipe
- Vacuum (optional or with hose attachment)

Directions:

- Using the vacuum, gently remove any surface dust from the fixture. Keep the edge of the vacuum or hose attachment from touching the fixture as this may damage the finish. Removing the dust prevents it from becoming an abrasive that will damage the fixture when wiping it down.
- Spray a small amount of the soap solution onto the terrycloth and gently wipe down the surface of the fixture. Remove any discoloration or fingerprints. Wipe dry with second terrycloth.
- Apply the wax to a warm or cold surface. Stopping with a brush may be the preferred method of application or as to not create streaking on the surface. Then apply a smooth line of wax to the surface. Try not to let the clear wax fill up in the recessed areas as it may turn white. Use a soft brush to remove the excess wax from these areas. Use a cloth to remove any ridges or lumps during the set up time. When ready, buff with a terry cloth type rag. When using the correct wax, buffing will or the build up in the recessed areas is decorative. If you are waxing on a cold surface with the clear wax buff after one hour. Let the colored wax sit longer, up to an hour of two and then buff. The colored wax takes much longer to dry if you are applying the wax to a hot surface. Let the surface cool down, then buff. Do not apply the wax to extremely hot surfaces; let the surface cool down somewhat. A good rule of thumb is when to buff is if it was once off, when you rub your finger over the surface, it is too early to buff. Do not buff longer than three times to buff in most any circumstance as the wax layer dries very hard. To apply multiple layers of wax repeat the application and buffing process for each layer for about a few hours before applying the next.

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Cleaning Crystal - Form 10405

Overview

The most important factors that contribute to the frequency of cleaning your crystal chandelier are the location, type of crystals, and the shape of the crystals. A crystal chandelier hanging in a foyer (roomed with Everwood) Stress crystals, which are finished with an optical coating that repels dust and other airborne particles, is both easier to clean and would be done less frequently, while a crystal chandelier trimmed with hand cut crystal pendants in the same location will show more dust and require frequent cleanings.

To determine if your crystals need to be cleaned, look at your light fixture and if the crystals seem to be dull or have a layer of dust coating on them, refer to the cleaning techniques below.

Note: Prior to using any crystal cleaning techniques listed below, unplug and turn off the power source to your crystal light fixture and allow all bulbs to cool.

Cleaning Techniques

Grand Light has been the leading source of crystal light fixtures for over 70 years, and in that time, we have perfected the art of cleaning and maintaining crystals. Here's how we recommend you do it.

- Likes Glass Method:** This technique is best used when particle and dust coating is minimal and does not require the crystals to be removed.

Start off by preparing a solution consisting of one part isopropyl alcohol to three parts distilled water in a spray bottle. Stand while wearing latex gloves, spray the solution onto a soft-free cleaning cloth. Do not spray the crystals directly to reduce the chance of cracking. To ensure proper cleaning, each crystal should be done one at a time.

- Crystal Removal Method:** This technique is best used to remove the dust that has been building up over the years and requires a bit more effort to clean away.

Begin by placing a soft towel or blanket down on a level, safe location. Next, remove all trim and finish pieces that will prevent you from removing the crystals. Once this is completed, remove the crystals and place them on the towel or blanket. Upon removal of the crystal, hand wash them in mild dish soap and lukewarm water. Rinse the crystals in warm water and allow them to dry. Remember to wear gloves when placing them back on your crystal chandelier or any other crystal light fixture to reduce fingerprints and other grime.

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Packaging Instructions

Maintenance Instructions

Crystal Cleaning Instructions

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Initial Restoration Checklist

Project _____ SOR _____ Fixture Type _____ QTY _____

Description ☐ Indoor ☐ Outdoor ☐ Sconce ☐ Pendant

☐ Chandelier ☐ Lantern ☐ Post Top ☐

Construction ☐ Iron ☐ Brass ☐ Copper ☐ Bronze

☐ Glass Panels ☐ Glass Bowl ☐ Crystal ☐

Existing Lamp #Sockets _____ Wattage _____ Voltage _____

☐ Edison ☐ Mogul ☐ Candleabra ☐ CFL ☐ HID

Existing Finish Color _____

☐ Polite ☐ Paint ☐ Powder Coat ☐ Polished ☐

Condition Poor Fair Good Excellent

Finish ☐ ☐ ☐ ☐

Mechanical ☐ ☐ ☐ ☐

Wiring ☐ ☐ ☐ ☐

Glass ☐ ☐ ☐ ☐

Overall ☐ ☐ ☐ ☐

Finish Comments _____

Mechanical Comments _____

Wiring Comments _____

Glass Comments _____

General Comments _____

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New Grand Light LLC (Grand Light) Limited Warranty - Form 10402

Grand Light warrants all its Products (fixture, replication, and restoration) to be free from defects in material and workmanship, subject to certain conditions and exclusions, for the following time periods from the date the Product was shipped to the original end user purchaser:

Indoor Lighting Fixtures	
Electrical Wiring and Sockets	3 Years
Finish	3 Years
Mechanical	2 Years

Outdoor Lighting Fixtures	
Electrical Wiring and Sockets	2 Years
Finish	2 Years
Mechanical	2 Years

OEM Components: Incandescent, Fluorescent, HID and LED components furnished by Grand Light for incorporation into Grand Light products shall be subject to the manufacturer's warranty (copies of which will be furnished upon request) or customary practice, the lesser or replacement of goods that may prove defective in material or workmanship. The foregoing shall constitute the exclusive remedy of the buyer and the sole obligation of Grand Light. Assistance with warranty claims for any such component may be obtained from a customer service representative.

Grand Light will, at its election, repair, replace or make appropriate adjustment where Grand Light inspection discloses any such defects occurring in normal usage within the applicable time period above, subject to the following conditions and exclusions.

The following costs, expenses and damages are not covered by the provisions of this limited warranty: (i) labor costs including, but not limited to, such costs as the removal and reinstallation of Product; (ii) shipping and freight expenses required to return Product to Grand Light.

All warranties only apply to the original end user purchaser and original installation of Products. This warranty is not transferable.

The provisions of this warranty do not apply to Products: (i) used for purposes for which they are not designed or intended; (ii) which have been subjected to alteration, abuse, misuse, negligence, accident; (iii) which have been improperly stored, installed, maintained or operated; (iv) which have been used in violation of written instructions provided by Grand Light; (v) which have been subjected to improper temperature, humidity or other environmental conditions; or (vi) which, based on Grand Light's examination, do not disclose to Grand Light's satisfaction non-conformance to the warranty.

American Artisans At Work Preserving History

Initial Restoration Checklist

Limited Warranty



Section 10: The **GRAND LIGHT** Difference



In-Factory Staging of a Restored Crystal Basket Fixture

Why Choose Grand Light

- Long Standing History of Successful, Award Winning Projects
- Dedicated, Full-Time Project Management & Engineering Team
- Artisans and Specialists with Decades of Experience
- Extensive Background in Restoration, Manufacturing, and Design
- Understanding of Large and Small Projects
- Exceptional Client Communication and Customer Service
- Committed to Safety Without Compromise

The Grand Light Difference extends beyond the restoration and manufacturing process. Our word is our commitment, and we strive to earn your trust. While challenges are inevitable, we will never waiver from a commitment we make and work hard to exceed your expectations.

Repeat business from satisfied clients is critical to our success. Our goal is to ensure our clients receive more value than expected in Quality Assurance, Cost, Scheduling, Performance, Communication, and Safety. We have never failed to complete a project on-time and commit ourselves to delivering the highest quality products and service possible.

Thank you for reviewing our team's qualifications, please do not hesitate to contact us with questions or for additional information needed for your assessment of our company.

Regards,



Steve Stockman
Principal



American Artisans At Work Preserving History