

SECTION 16500 - LIGHTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Contractor furnished and installed Lighting fixtures.
 - 2. Acrylic lighting panel at pharmacy.
 - 3. Owner furnished lighting for installation by Contractor.
- B. Related Requirements:
 - 1. Appendix A – Products and Work By Owner or Separate Contractor
 - a. General procedures related to Owner furnished products and transport, handle, store and protect products.
 - b. Manufacturers, suppliers, and vendor contacts and product names and numbers related to Owner furnished products.

1.2 QUALITY ASSURANCE

- A. Fixtures and their electrical components will bear the label of a nationally recognized testing laboratory.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Provide facilities for handling and storage of materials to prevent damage to edges, ends, and surfaces. Keep materials dry and protected from weather. Fixtures stored outside without a permanent overhead roof and shelter shall be replaced at Contractor expense. Examples of approved storage include drop trailers, storage inside warehouse, or other Owner Construction Manager approved storage area meeting these criteria. Fixtures showing signs of rust or weathering shall be replaced at Contractor's expense.
- B. Contact selected distributor 4 weeks prior to desired delivery date to arrange for delivery of lighting fixtures.

PART 2 - PRODUCTS

2.1 CONTRACTOR FURNISHED AND INSTALLED LIGHTING FIXTURES

- A. Contractor shall provide light fixtures, lamps and Protect-A-Lamp covers, as indicated on drawings.
- B. Acrylic Lighting Panel - Prismatic White Acrylic Lighting Sheet, Item # 1A20084A, 23-3/4" X 47-3/4", BY Plaskolite Ind., Columbus OH, (800)848-9124
- C. Contractor Furnished Lighting Approved Vendors:
 - 1. Hunzicker Brothers, (800) 324-1026
 - 2. Haines, Jones & Cadbury, Inc., (800) 459-7099

2.2 OWNER FURNISHED LIGHTING FIXTURES FOR INSTALLATION BY CONTRATOR

- A. Appendix A – Products and Work By Owner or Separate Contractor Section 16500 and Lighting Fixture Schedule.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install lighting fixtures, lamps, lighting panels, and connections in accordance with manufacturer's recommendations and as indicated on Drawings.

1. LED Fixtures will arrive with protective film. Film shall not be removed until all painting and deep cleaning is completed. Removal of film prior to the cleaning procedure may result in damage and replacement at Contractor's expense.
- B. Coordinate exact mounting location of light fixtures with building structure and other trades prior to installation. Continuous rows shall be installed straight and true.
- C. Attach fixtures to ceiling grid. Install four to six feet of flexible conduit from recessed fixtures installed in lay-in ceiling grid systems to outlet boxes supported from building structural system.
- D. Maintain all light fixtures and lamps during construction, and coordinate replacement of any defective lamps with Owner's lighting vendor prior to Certification of Substantial Completion. Notify Owner's lighting vendor immediately of any damaged fixtures or lamps delivered to the jobsite and make arrangements to have them replaced.
- E. Verify ceiling and wall details. Install fixtures complete with proper mounting arrangements for ceiling or wall construction encountered.
- F. Where indicated on Drawings, install Protect-A-Lamp covers and caps.
- G. Lighting fixtures and lamps shall be clean and free of building paint over-spray one week prior to possession.
- H. Provide all additional hardware required to complete installation such as nuts, bolts, threaded rods and Unistrut channels.

3.2 MAINTENANCE AND REPLACEMENT DURING CONSTRUCTION

- A. Provide material and labor to deep clean new lighting fixtures with anti-static cleaning fluid. Replace lamps with building paint overspray one week prior to possession at Contractor's expense.
- B. Maintain lighting fixtures, ballasts, LED drivers, and lamps during construction, possession, and until store Grand Opening. Coordinate replacement of defective, lost, or damaged equipment with vendor.
- C. Owner Responsibility (Including Vendor):
 1. Costs for replacement for normal failure covered by warranty of any fixture, lamp, or ballast prior to Grand Opening. Evaluation of abnormally high failure percentage and replacement covered under warranty will be provided by vendor on site.
 2. Costs for replacement of parts damaged during shipment. Charges will be made to shipping carrier or responsible party.
- D. Contractor Responsibility:
 1. Coordinate vendor on-site evaluation of abnormal component failures of ballast and lamps at least two weeks prior to Grand Opening. Provide labor for routine and normal maintenance of equipment including troubleshooting and determination of lighting failure.
 2. Material and labor costs for replacement of loss, breakage, or other damage due to fault of Contractor including lamps.
 3. Contact vendor to order replacement parts in time to have all fixtures fully operational prior to Grand Opening.
- E. Replacement Procedure - General:
 1. Immediately notify vendor and request replacement of damaged fixtures, ballasts or lamps delivered to the jobsite.
 2. If shipping damage is concealed, notify carrier and vendor within 15 days of acceptance of the freight. Provide vendor a copy of the written notification sent to the carrier.
- F. Additional Ballast Replacement Procedure:
 1. Order replacement ballast(s) or LED driver(s) from vendor. Request Return Authorization number from vendor to return defective ballast no later than Grand Opening.

2. Return all defective ballast(s) or LED driver(s) to vendor. Vendor will arrange pickup and return, including shipping costs, of defective ballast(s) or LED driver(s). Cost for ballast(s) or LED driver(s) not returned within the specified time frame or returned but not defective will be automatically charged to Contractor.

END OF SECTION