

SECTION 265100  
INTERIOR LUMINAIRES

PART 1        GENERAL

1.1        SECTION INCLUDES

- A.    Interior luminaires and accessories.
- B.    Emergency lighting units.
- C.    Exit signs.
- D.    L.E.D. lamp emergency power supply.
- E.    Lamps.
- F.    Luminaire accessories.

1.2        RELATED SECTIONS

- A.    Section 26 05 34 - Boxes.

1.3        REFERENCES

- A.    ANSI C78.379 - Electric Lamps - Incandescent and High-Intensity Discharge Reflector Lamps - Classification of Beam Patterns.
- B.    ANSI C82.1 - Ballasts for Fluorescent Lamps - Specifications.
- C.    ANSI C82.4 - Ballasts for High-Intensity Discharge and Low-Pressure Sodium Lamps (Multiple Supply Type).
- D.    ANSI/NFPA 70 - National Electrical Code.
- E.    ANSI/NFPA 101 - Life Safety Code.
- F.    NEMA WD 6 - Wiring Devices-Dimensional Requirements.

1.4        SUBMITTALS

- A.    Submit under the provisions of Division 01.
- B.    Shop Drawings: Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
- C.    Product Data: Provide dimensions, ratings, and performance data.

1.5        OPERATION AND MAINTENANCE DATA

- A.    Submit under the provisions of Division 01.
- B.    Maintenance Data: Include replacement parts list.

PART 2        PRODUCTS

## 2.1 LUMINAIRES

- A. Furnish products as specified on the Drawings. For fire rated ceiling assemblies, furnish products listed for installation in the assembly.
- B. Substitutions: Under the provisions of Division 01. Where three or more manufacturers are shown, substitutions will not be considered.

## 2.2 L.E.D. EMERGENCY LIGHTING UNITS

- A. Description: Self-contained emergency lighting unit.
- B. Battery: Type as shown in schedule with 1.5-hour capacity.
- C. Battery Charger: Dual-rate type, with sufficient capacity to recharge discharged battery to full charge within twelve hours.
- D. Lamps: Sealed beam type as scheduled.
- E. Remote Lamps: Match lamps on unit.
- F. Housing as scheduled by manufacturer's catalog data.
- G. Indicators: Provide lamps to indicate AC ON and RECHARGING.
- H. Provide TEST switch to transfer unit from external power supply to integral battery supply.
- I. Electrical Connection: Conduit connection.

## 2.3 EXIT SIGNS

- A. Description: Exit sign fixture suitable for use as emergency lighting unit.
- B. Face and Housing: As scheduled by manufacturer's catalog data.
- C. Directional Arrows: Universal type for field adjustment.
- D. Mounting: Universal, for field selection.
- E. Battery: As scheduled, with 1.5-hour capacity.
- F. Battery Charger: Dual-rate type, with sufficient capacity to recharge discharged battery to full charge within twelve hours.
- G. Lamps: Manufacturers standard.

## 2.4 L.E.D. LAMP EMERGENCY POWER SUPPLY

- A. Description: Emergency battery power supply suitable for installation in ballast compartment of L.E.D. luminaire.
- B. Lamp Ratings: One lamp as scheduled on the plans providing 1100-1400 lumens, minimum.
- C. Battery: Sealed nickel cadmium type, rated for 10-year life.

- D. Include TEST switch and AC ON indicator light, installed to be operable and visible from the outside of an assembled luminaire.
- E. Warranty: Three-year total customer satisfaction.

## 2.5 LAMPS

- A. Provide lamp type specified for luminaire. Use 3500K lamps in L.E.D. luminaires unless specified otherwise.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrate and supporting grids for luminaires.
- B. Examine each luminaire to determine suitability for lamps specified.

### 3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install suspended luminaires using pendants supported by swivel hangers. Provide pendant length required to suspend luminaire at indicated height.
- C. Support luminaires larger than 2 x 4-foot (600 x 1 200 mm) size independent of ceiling framing.
- D. Locate recessed ceiling luminaires as indicated on reflected ceiling plan.
- E. Install surface mounted luminaires and exit signs plumb and adjust to align with building lines and with each other. Secure to prohibit movement.
- F. Exposed Grid Ceilings: Provide auxiliary members spanning ceiling Ts to support surface mounted luminaires. Fasten surface mounted luminaires to ceiling T using bolts, screws, rivets, or suitable clips. For seismic areas, support surface mounted luminaires on grid ceiling directly from building structure.
- G. Install recessed luminaires to permit removal from below.
- H. Install recessed luminaires using accessories and firestopping materials to meet regulatory requirements for fire rating.
- I. Install clips to secure recessed grid-supported luminaires in place. Install seismic support where indicated on plans.
- J. Install wall mounted luminaires, emergency lighting units and exit signs at height as indicated on Drawings. Outlet boxes are required.
- K. Install accessories furnished with each luminaire.
- L. Connect luminaires, emergency lighting units and exit signs to branch circuit outlets provided under Section 26 05 34 using flexible conduit.
- M. Make wiring connections to branch circuit using building wire with insulation suitable for temperature conditions within luminaire.

- N. Bond products and metal accessories to branch circuit equipment grounding conductor.
- O. Install specified lamps in each luminaire, emergency lighting unit and exit sign.
- P. Mount fixtures as called for in schedule on drawings. Determine type of ceiling to be installed in each space from the architectural drawings and schedules and furnish fixtures suitable for the exact type.
- Q. Lighting fixtures shall be structurally supported. L.E.D. fixtures mounted in suspended ceiling shall be supported by, and attached to, the ceiling suspension system as required by N.E.C. 410-16(c). Incandescent fixtures mounted in suspended ceilings shall be supported by fixtures channels, furnished under this Division, laid across ceiling support channels. Surface mounted fixtures shall be supported from the building structural system by rods, or rods and clamps, or by the fixture outlet box, which in turn shall be supported by rods. Provide fixture studs as required.
- R. Wall mounted fixtures shall be secured to masonry walls with bolts and lead anchors, and to metal stud, dry wall partitions by sheet metal screws driven into metal studs.

### 3.3 FIELD QUALITY CONTROL

- A. Operate each luminaire after installation and connection. Inspect for proper connection and operation.

### 3.4 ADJUSTING

- A. Aim and adjust luminaires as indicated on the Drawings and as directed.
- B. Adjust exit sign directional arrows as indicated.
- C. Relamp luminaires that have failed lamps at Substantial Completion.

### 3.5 CLEANING

- A. Clean Work under the provisions of Division 01.
- B. Clean electrical parts to remove conductive and deleterious materials.
- C. Remove dirt and debris from enclosure.
- D. Clean photometric control surfaces as recommended by the manufacturer.
- E. Clean finishes and touch up damage.

END OF SECTION