

#### **SECTION 16513**

# **UNDER-CABINET LIGHTING SYSTEM**

#### PART 1 - GENERAL

- 1.1 CONDITIONS AND REQUIREMENTS
  - A. The General Conditions, Supplementary Conditions, and Division 1 General Requirements apply.
- 1.2 SECTION INCLUDES
  - A. Under-cabinet lighting system.
- 1.3 RELATED SECTIONS

Specifier Note: In this article, specify work specified in other sections that is related to work of this section.

A. Division 16 - Electrical: Electrical systems and components.

Specifier Note: The following paragraph is a sample that may be used in this article. Add to or delete from the following as appropriate for the specific project.

B. Section [xxxxx] – [Section Title]: [Include brief description of work specified in another section that is related to the work of this section.]

# 1.4 SUBMITTALS

Specifier Note: In this article, specify various types of data to be furnished by the contractor before, during, or after construction. Topics included in this article are: product data, shop drawings, samples, design data, test reports, certificates, manufacturers' instructions, manufacturers' field reports, qualification statements, and closeout submittals.

- A. Submit under provisions of Section [01330] [\_\_\_\_\_].
- B. Product Data: Submit for each type of product specified.
- C. Samples: Submit one (1) [\_\_\_\_\_] sample for each type of under-cabinet lighting system component specified with required color and finish. Show standard color and finish ranges available.

### 1.5 QUALITY ASSURANCE

Specifier Note: In this article, describe qualifications, regulatory requirements, certifications, field samples, mock-ups, and pre-installation meetings.

- A. Manufacturer Qualifications: Firms regularly engaged in manufacture of under-cabinet lighting system components of the types and sizes required, whose products have been in satisfactory use in similar service for not less than 10 years.
- B. Source Limitations: Obtain each type of under-cabinet lighting system component through one (1) source from a single manufacturer.
- C. Under-Cabinet Lighting System Components: Listed and labeled by cETLus.
- 1.6 DELIVERY, STORAGE AND HANDLING
  - A. Deliver under-cabinet lighting system components in factory labeled packages.



- B. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
- C. Protect from damage due to weather, excessive temperature, and construction operations.

#### PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for under-cabinet lighting system components is based on products manufactured by legrand®/adorne™, 60 Woodlawn Street, West Hartford, CT 06110; toll-free 877-295-3472, telephone 877-295-3472, Web Site: www.legrand.us/adorne.
- B. Substitutions will be considered under provisions of Section 01635.

#### 2.2 UNDER-CABINET LIGHTING SYSTEM

Specifier Note: Retain as many of the following products as required for a specific project and delete the others.

- A. Under-Cabinet Lighting System: Modular, fully customizable system of components that can be either hard-wired or plugged into any home wiring configuration. Designed for use in kitchens, offices, hospitality, and healthcare applications.
- B. Modular Tracks:

Specifier Note: Retain the type of modules required for a specific project and delete the others. If a project requires multiple modules include a schedule at the end of this section.

- 1. 12" Modular Track: adorne<sup>™</sup> Part No. APMT12[TM2][W2]; 12-inch length includes one (1) outlet module and one (1) blank module, [titanium] [white] color; capable of supporting up to two (2) LED lights; provides 120V power via 15A outlet modules and 20A pass-through; module openings on six (6) inch centers; outlets are tamper resistant and ETL Listed.
- 2. 18" Modular Track: adorne™ Part No. APMT18[TM4][W4]; 18-inch length includes one (1) outlet module and one (1) blank module, [titanium] [white] color; capable of supporting up to two (2) LED lights; provides 120V power via 15A outlet modules and 20A pass-through; module openings on nine (9) inch centers; outlets are tamper resistant and ETL Listed.
- 3. 27" Modular Track: adorne<sup>™</sup> Part No. APMT27[TM2][W2]; 27-inch length includes two (2) outlet modules and one (1) blank module, [titanium] [white] color; capable of supporting up to three (3) LED lights; provides 120V power via 15A outlet modules and 20A pass-through; module openings on nine (9) inch centers; outlets are tamper resistant and ETL Listed.
- 4. Short Modular Track: adorne Part No. APST9[TM1][W1]; for use with narrow single cabinets; back feed power from in-wall wiring; 10-1/4-inch length with end caps, [titanium] [white] color; tamper resistant; ETL Listed.
- 5. 18" Modular Track Extender: adorne<sup>™</sup> Part No. APME18[TM2][W2]; 18-inch length blank module enables a perfect fit in any room, [titanium] [white] color; cut to length (minimum of six (6) inches); attach to end of modular track; does not contain any module openings; ETL Listed.
- 6. Modular Track Corner Connector: adorne<sup>™</sup> Part No. APCC[TM4][W4]; use with installations that include a right-angle corner to connect two (2) modular tracks,



[titanium] [white] color; allow three (3) inches on each side for installations with corner connectors; ETL Listed.

Specifier Note: Every under-cabinet lighting system must include one of the below control boxes or direct wire connector. Retain the type of control boxes as required for a specific project and delete the others.

# C. Control Boxes:

- 1. Control Box with Paddle Dimmer: adorne<sup>™</sup> Part No. APCB1[TM4][W4]; connects to existing in-wall wiring; fits onto end of modular track, adding five (5) inches onto system length, [titanium] [white] color; includes adorne<sup>™</sup> Paddle Dimmer Part No. ADPD453LM2 rated for 450W CFL/LED; GFCI protection must be provided at electrical panel; ETL Listed.
- 2. Control Box with Paddle Dimmer and 15A GFCI: adorne<sup>™</sup> Part No. APCB6[TM2][W2]; connects to existing in-wall wiring; fits onto end of modular track, adding 5-1/4 inches onto system length, [titanium] [white] color; includes adorne<sup>™</sup> Paddle Dimmer Part No. ADPD453LM2 rated for 450W CFL/LED and 15A tamper-resistant GFCI outlet adorne<sup>™</sup> Part No. AGFTR2152[M4][W4], [titanium] [white] color; ETL Listed.
- 3. Plug-In Control Box: adorne<sup>™</sup> Part No. APCB3TM4, titanium color; snaps into any module opening on track and plugs into an existing outlet to provide system power; cord length of 24 inches can easily be shortened to match distance from outlet to modular track; ETL Listed.
- 4. One-Gang Control Box, No Devices: adorne<sup>™</sup> Part No. APCB4[TM1][W1]; connects to existing in-wall wiring; fits onto end of modular track, adding five (5) inches onto system length, [titanium] [white] color; customizes with choice of adorne<sup>™</sup> dimmers, switches, or outlets; ETL Listed.
- 5. Two-Gang Control Box, No Devices: adorne<sup>™</sup> Part No. APCB5[TM1][W1]; connects to existing in-wall wiring; fits onto end of modular track, adding 5-1/4 inches onto system length, [titanium] [white] color; customizes with choice of adorne<sup>™</sup> dimmers, switches, or outlets; ETL Listed.
- 6. Direct Wire Connector: adorne<sup>™</sup> Part No. APDWC[TM1][W1]; enables direct wire feed of power from in-wall wiring, eliminating need for a control box; connector is six (6) inches in length, [titanium] [white] color; ETL Listed.

Specifier Note: Retain the type of LED lights as required for a specific project and delete the others.

# D. LED Lights and Accessories:

- 1. 12" LED Strip Light: adorne<sup>™</sup> Part No. ALSLLED12[TM4][W4], [titanium] [white] color; 4.83 watts, 328 lumens; Correlated Color Temperature 3000 degrees Kelvin, Color Rendering Index 93; ETL Listed.
- 2. 6" LED Strip Light: adorne™ Part No. ALSLLED6[TM4][W4], [titanium] [white] color; 2.83 watts, 158 lumens; Correlated Color Temperature 3000 degrees Kelvin, Color Rendering Index 93; ETL Listed.
- 3. 60 Watt LED Dimmable Driver: adorne<sup>™</sup> Part No. ALSLDR60[TM1][W1], [titanium] [white] color; powers up to 10 feet of adorne<sup>™</sup> expandable strip lights; ETL Listed.
- 30 Watt LED Dimmable Driver: adorne<sup>™</sup> Part No. ALSLDR30[TM1][W1], [titanium] [white] color; powers up to 10 feet of adorne<sup>™</sup> expandable strip lights; ETL Listed.



- 5. 8" Joiner Cable: adorne<sup>™</sup> Part No. ALSLJC8[TM4][W4], [titanium] [white] color; can be used to place an 8-inch space between two (2) lights, or paired with another cable for an even longer space between two (2) lights; ETL Listed.
- 6. 14" Joiner Cable: adorne<sup>™</sup> Part No. ALSLJC14[TM4][W4], [titanium] [white] color; can be used to place an 14-inch space between two (2) lights, or paired with another cable for an even longer space between two (2) lights; ETL Listed.
- 7. Tee Cable: adorne<sup>™</sup> Part No. ALSLT[TM4][W4], [titanium] [white] color; used to split the power from a driver into two (2) different locations; ETL Listed.
- 8. 36" Power Cable Extender: adorne<sup>™</sup> Part No. ALSLPC36[TM4][W4], [titanium] [white] color; kit extends leads on the driver so it can be hidden out of sight; ETL Listed.
- 9. LED Linear Light: adorne<sup>™</sup> Part No. ALLNLEDTM4, titanium color; eight (8) watts, 280 lumens; Correlated Color Temperature 3000 degrees Kelvin, Color Rendering Index 95; Energy Star Certified; can be paired with adorne<sup>™</sup> Part No. ADPD453L CFL/LED Paddle Dimmer to enable dimming; ETL Listed.
- 10. Light Extender: adorne<sup>™</sup> Part No. ALEXTLEDTM4, titanium color; enables adorne<sup>™</sup> LED lights to be mounted up to 22 inches from backsplash by extending cord length beyond default 11 inches; ideal for corner cabinet installations; ETL Listed

Specifier Note: Retain the type of modules and accessories as required for a specific project and delete the others.

# E. Modules and Accessories:

- 1. 15A Outlet Module: adorne<sup>™</sup> Part No. APTR15[TM4][W4]; provides two (2) power outlets by snapping into any module opening; tamper-resistant outlet designed with patented shutter system; included with 12-inch, 18-inch, and 27-inch module tracks, [titanium] [white] color; rated 15A, 120V; ETL Listed.
- 2. USB Outlet Module: adorne<sup>™</sup> Part No. APUSB3[TM4][W4]; provides two (2) USB charging ports for devices such as mobile phones and tablets by snapping into any module opening, [titanium] [white] color; does not include charging cable; rated 2.1A, 5V; ETL Listed.
- 3. Mobile Phone Cradle: adorne<sup>™</sup> Part No. AAPC[TM4][W4]; attaches anywhere along track to hold a mobile phone, [titanium] [white] color; use with USB outlet mobile while charging devices.
- 4. Tablet Cradle: adorne<sup>™</sup> Part No. AATC[TM4][W4]; attaches anywhere along track to hold a tablet, [titanium] [white] color; use with USB outlet mobile while charging devices.
- 5. Digital Music Kit: adorne<sup>™</sup> Part No. AUDMTM1, titanium color; includes two (2) inch full range drivers; digital signal processing for full, rich sound; Bluetooth<sup>®</sup> wireless technology is A2DP compatible; also includes USB charging capability; ETL Listed.

### PART 3 - EXECUTION

### 3.1 EXAMINATION

Specifier Note: Retain one (1) of the options in the first paragraph below and delete the other one.

A. Examine conditions under which under-cabinet lighting components are to be installed. Notify the [Architect/Engineer] [Construction Manager] in writing of conditions



detrimental to proper completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected.

# 3.2 INSTALLATION

A. Strictly comply with manufacturer's installation instructions and recommendations. Coordinate installation with adjacent work to ensure proper clearances and to prevent electrical hazards.

Specifier Note: The under-cabinet lighting system can also be installed in front of wall finishes such as stone, tile, marble, etc. Retain either or both of the options in the following paragraph.

- B. Install under-cabinet lighting system [at underside of wall-mounted cabinets] [in front of wall finishes].
  - 1. Do not install under-cabinet lighting system directly above any direct heat or open flame source.
  - 2. Do not install under-cabinet lighting system in a high moisture content environment.
- C. Repair wall finishes and reinstall under-cabinet lighting components that do not fit flush.

### 3.3 CLEANING AND PROTECTION

- A. Clean exposed surfaces using non-abrasive materials and methods recommended by manufacturer.
- B. Protect under-cabinet lighting components until acceptance.

**END OF SECTION** 

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