

GUIDELINE SPECIFICATIONS - Reloc 820

Section 16150

MANUFACTURED WIRING SYSTEMS

for Lighting Circuits in Accessible Finished Ceilings

- Intent** The intent of this portion is to furnish a manufactured, relocatable, integrated electrical branch wiring system for lighting in accessible finished ceilings as manufactured by Lithonia Lighting, RELOC Wiring Solutions, a division of AcuityBrands Lighting.
- Scope** Furnish and install all components required for a totally integrated and operating relocatable branch circuit wiring system. The System shall begin at the Circuit Distributor and extend to the lighting fixtures, as specified here and as indicated on the contract drawings.
- Submittals** Must consist of specification sheets for all components specified. Submit samples if so requested by specifier.
- Drawings** For an additional fee, a complete set of RELOC drawings indicating how the flexible system will be installed can be obtained from the factory.
- The Basic System** The System shall be pre-manufactured and supplied in accordance with the NEC, Article 604, and UL183 Standard. All conductors in the system shall be #12 AWG copper with 600V, 90°C insulation. All field connection leads shall comply with NEC color-coding guidelines for voltage identification. The System grounding conductor shall be either bare or insulated #12 AWG copper.

The System shall be totally integrated; conduit and wire shall not be required as a part of the system. Where local authorities restrict the use of flexible metal conduit in partitions and the like, proper interfacing components shall be part of this System.

The System shall contain pin and socket contacts, which are securely crimped onto the #12 AWG branch circuit conductors and tested 100% at the factory. Factory testing should consist of both a continuity and dielectric strength test. This will ensure good electrical connections, proper cable configuration, proper insulation properties, and long component life. The cable heads shall be of a metal construction with a corrosion-resistant finish.

The System shall be keyed to guarantee no interconnection between different source voltages and connection of devices to an improper voltage. The System shall be designed to prevent backfeeding. This design shall be permanent and difficult to defeat.

The System shall have the capability of 5 wires (including a #12 AWG copper ground wire).

All components must meet UL 183 requirements for connecting and disconnecting under load and be UL listed. No fixture receptacle shall be required as part of this System.

The System shall consist of, but not be limited to, the following three (3) basic components:

I. CIRCUIT DISTRIBUTOR (CD)

- A. The Circuit Distributor "converts" conventional wiring into flexible wiring.
- B. The Circuit Distributor shall be designed to install through any 1/2" trade-size knockout.
- C. The Circuit Distributor shall have No. 12 AWG copper conductors with 600V, 90°C insulation. Each wire shall be NEC voltage color-coded and stripped 5/8".
- D. The quantity and types of Circuit Distributors shall be as required by the contract drawings.

II. STANDARD SELECTOR CABLE (SSC)

- A. The Standard Selector Cable shall have a male cable head on one end, and a snap-in port module on the other.
- B. The Standard Selector Cable shall contain #12 AWG copper wire with 600V, 90°C insulation for the entire length of the cable. The wire leads from the snap-in port module to the fixture shall be #18 AWG copper with 600V, 105°C insulation. Each shall terminate in a UL recognized poke-home terminal for field connection to the ballast leads.
- C. The Standard Selector Cable snap-in port module shall be designed to snap into a standard 1/2" K.O., either in the access plate or end plate of the fixture.
- D. The Standard Selector Cable shall provide a maximum installed clearance from the fixture surface of approximately 1-1/2".
- E. The snap-in port module of the Standard Selector Cable shall be designed to provide auto-grounding to the fixture and be UL listed for this requirement. The grounding of the fixture is established and maintained when the component is snapped into the fixture knockout with no ground lead required, except where required by local codes.
- F. The SSC allows the branch circuit to be fed to, but not through the fixture.
- G. The quantity and types of Standard Selector Cables shall be as required by the electrical circuitry and fixtures on the contract drawings.

III. CABLE EXTENDER (CE)

- A. The Cable Extender allows the Standard Selector Cable to be extended.
- B. The Cable Extender provides a male connector on one end and a female connector on the other.
- C. Each Cable Extender shall be "keyed" to insure proper connection with systems of the same voltage and prevent improper connection with systems of different voltages.
- D. The Cable Extender shall contain #12 AWG copper wire with 600V, 90°C insulation for the entire length of the cable.
- E. The quantity and types of Cable Extenders shall be as required by the contract drawings.

Switching See Section 16151 if local switching is required.

Guarantee The Wiring System shall be guaranteed to operate and perform as described per the manufactures warranty.