

Section Signs: UL 48 Requirements for Installation Instructions (UL48 41.1)

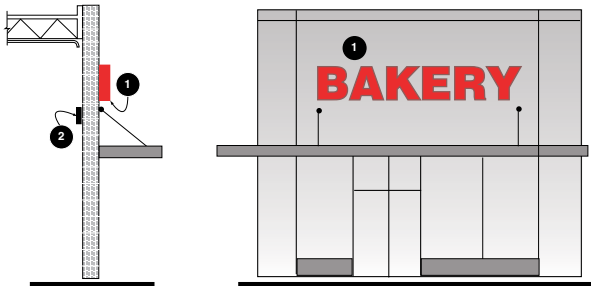
- a. Drawing of subassemblies arrangement
- b. Instructions for the physical installation and mechanical connection of the subassemblies
- c. Wiring arrangement of the subassemblies and components necessary to complete the electrical connection
- d. Conditions of use required for subassemblies.
- e. Conditions of use for components required to complete the wiring
- f. Instructions for the field wiring between the subassemblies and components and connection to power source.

II. Typical Installation Instructions: Section Letter Sign: LEDs

UL 48 41.1.1 (a) Drawing of Subassemblies Arrangement

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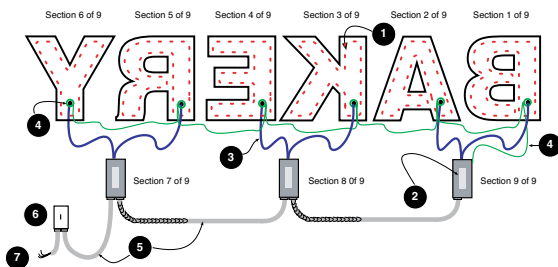
- TOTAL SUBASSEMBLIES: 9
- 1. Section Letter Sign, 24 Inch Pan Channel Letters / 5 Inch Returns Red Acrylic Faces / LED Recognized Component Illumination system. (Component manufacturers name and catalog designation). (6 Subassemblies)
- 2. LED Class 2 power supply. (3 Subassemblies)



II. Typical Installation Instructions: Section Letter Sign: LEDs

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UL 48 41.1.1 (c) Wiring arrangement of the subassemblies and components necessary to complete the electrical connection.

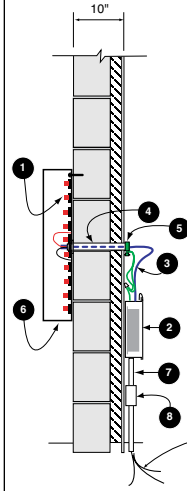


- 1. Recognized Component LED, Class 2 Illumination System. (Component Mfg. Name)
 - 2. Class 2 Power supply. Installed in sheet metal enclosure. 120 V / 2.2 Amps
 - 3. Type PLC cable. Cable to LED module factory wired in Section Letter. Cable cut to length as required by power supply location. Connect to matching free secondary conductors on Class 2 power supply.
 - 4. No.14 bonding jumper connected to 1/2" running thread with listed grounding bushing.
 - 5. No. 14 MC Cable w/ MC Fittings. Secure equipment ground to power supply metal enclosure.
 - 6. Disconnect. Safety Switch (CH/DG221-VGB)
 - 7. Branch circuit conductors, connection to 120 Volt - 20 Amp branch circuit by others.
- ⊕ Section letters bonded with No.14 conductor to power supply enclosure. Enclosure bonded to system ground.

II. Typical Installation Instructions: Section Letter Sign: LEDs

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UL48 41.1.1 (b) Instructions for the physical installation and mechanical connection of subassemblies. UL48 41.1.1 (d) Conditions of use for subassemblies. UL48 41.1.1 (e) Conditions of use for components required to complete wiring*



- 1. Recognized Component* LED, Class 2 Illumination System LED Modules Suitable for wet or dry location. Factory wired. (Name of component mfg.)
 - 2. Recognized Component* Class 2 Power Supply in 24 ga sheet metal enclosure. Power supply factory installed in enclosure. Secure enclosure to wall surface with four (4) wall board fasteners
 - 3. Type PLC cable* rated for use without conduit in damp or dry location. Connect power supply output leads with insulated compression wire connectors to matching color of free conductors in section letter. Bundle neatly and secure to wall with plastic cable ties within 12" of conduit and enclosure and at 6" intervals.
 - 4. Drill 1" dia holes through cement block facia, perpendicular to wall at locations shown on full size installation pattern. Secure 1/2" running thread to metal letter back. Remove paint from metal at point of connection to conduit. Double lock-nut, wrench tight. Insert 1/2" running thread through holes in wall. Apply silacone sealant around conduit and hole in cement block before fitting the letter back flush with wall surface.
 - 5. Thread grounding bushing onto 1/2" running thread conduit. Attach No. 14 bonding jumper to each bushing (6) and to one power supply enclosure. Bond enclosures to branch circuit equipment ground.
 - 6. Channel letter subassembly sign body suitable for wet location. Attach No. 14 drain hole in low points of each letter. Attach metal letter back to building facia with 1/4" concrete fasteners at predrilled locations in letter back.
 - 7. No. 14 MC Cable between power supply enclosures and disconnect. Secure to wall with cable ties, within twelve (12") inches of termination at enclosure and at no less than at six foot (6') intervals.
 - 8. Safety Switch / Single Pole / Dry location. Firmly secure in place with wallboard fasteners.
- Branch circuit conductors of suitable capacity and approved type to section sign by others. (120 V / 20 AMP / 792 VA)

*6) COPY OF MANUFACTURERS CONDITIONS OF USE FOR EACH COMPONENT ATTACHED AND INCLUDED AS PART OF INSTALLATION INSTRUCTIONS.

Figure 1.