



Specification for Diversified Components, Inc. Simplicity® Quik-Connect™ System of Insulating Bushings

Performance Specification for Signage - MF2017
Section 10 14 33
Illuminated Panel Signage

PART 1 GENERAL

1.1 SUMMARY

- A. The following specification details the minimum performance and related criteria for the **Simplicity®** Quik-Connect™ System of insulating bushings for use with electric signage. Any deviations from this specification must be documented in writing and submitted to the Specifying Authority prior to the start of work.

1.2 RELATED SECTIONS

- A. Section 10 14 00 (Signage)
- B. Section 10 06 10.13 (Exterior Signage Schedule)
- C. Section 10 06 10.16 (Interior Signage Schedule)

1.3 REFERENCES

- A. Underwriters Laboratories Inc. (UL 879, UL 635, UL 48)
- B. 2017 National Electric Code ("NEC") (Articles 300.4, 600.33 and 725.136 of NEC 2014)
- C. International Association of Electrical Inspectors ("IAEI")
- D. International Sign Association ("ISA")

1.4 SYSTEM DESCRIPTION

- A. This insulating bushing system encompasses devices which are feed-through insulating bushings with various locknuts intended for use within a suitable electric enclosure to provide a smooth wall to protect insulated wires where passing through metal panel or enclosures. Insulating bushing system shall consist of permanently installed, insulated bushings.
- B. Ancillary materials such as silicone caulk may be required on a job specific basis for the contractor to perform the installation in a workmanship like manner and will be provided by the installer when needed.

1.5 SUBMITTALS

- A. Shall include manufacturer's catalog cut sheets with performance specifications demonstrating complete compliance to all of the specifications herein.

1.6 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 25 years continuous experience in the manufacturing of insulating bushings for electric signage.
- B. Insulating bushings shall be UL 879 Listed and included in the UL iQ for Sign Components (SAM Manual), and UL 635 Listed by a Nationally Recognized Testing Laboratory ("NRTL") such as U.L. or ETL. Non-Listed products shall not be acceptable.
- C. Manufacturer shall provide evidence of compliance upon request.

1.7 WARRANTY

- A. Manufacturer shall provide a limited one-year warranty on its insulating bushings. Warranty shall provide for the replacement of any failed insulating bushing which was properly installed and is directly attributable to manufacturer defect in material or workmanship. Warranty will cover materials only, labor is not to be included.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Diversified Components, Inc.
200 Rome Court
Fort Collins, CO 80524

Tel: (970) 484-9025
Fax: (970) 493-4125

www.LEDSignComponents.com

- B. The listing of a manufacturer as "acceptable" does not imply automatic approval. It is the sole responsibility of the electrical sign contractor or installer to ensure that materials meet or exceed the specifications included herein.

2.2 MATERIALS

- A. The **Simplicity**® Quik-Connect™ System is comprised of interchangeable insulating bushings designed to provide installation flexibility for the installer. This system of insulating bushings is comprised of the following components:

1. Rigid Quik-Connects™

Versatile smooth-wall, feed-through insulators protect insulated sign wires. Rated for use with all wire types from low voltage LED through high voltage GTO. Male threading and choice of locknut provides a simple insulating solution. Supplied with Standard Locknut. Use by itself or easily connect it to Female or Male Locknut together with proprietary 3/8" Non-Metallic Greenfield (NMG) Flexible Quik-Connect™ tubing to accommodate most any electric sign installation.

1.0" fixed hex base.

Inside diameter 0.390"

Outside diameter 0.550" Requires drilling only a 9/16" hole for installation.

Available in 2", 4", 6" and 8" standard lengths.

2. Female Lock-Nuts

Quik-Connects™ thread directly into the female opening of the locknut. The opposite side has a nipple that threads into proprietary 3/8" Non-Metallic Greenfield (NMG) Flexible Quik-Connect™ tubing. 1.0" fixed hex body.

3. Male Locknuts

The male thread of the locknut inserts directly into a standard 1/2" knock-out and is secured with a supplied Standard Locknut. The opposite side has a nipple that threads into proprietary 3/8" Non-Metallic Greenfield (NMG) Flexible Quik-Connect™ tubing. 1.0" fixed hex body.

4. Flexible Quik-Connect™ Tubing

Proprietary 3/8" Non-Metallic Greenfield (NMG) Flexible Quik-Connect™ tubing is manufactured to fit perfectly together with Female and Male Locknuts and Quik-Connects™ to provide a simple, cost-effective and easy-to-use insulating system for electrical signage. Flexible product design provides versatility in the field. Available in 18" and 24" straight cut and 100' roll standard lengths.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Materials shall be installed utilizing manufacturer's installation instructions and in accordance with these specifications.
- B. Contractor shall furnish all equipment, labor, installation setup and other services necessary for the proper installation of the insulating bushings as indicated and specified herein.

3.2 MANUFACTURER'S FIELD SERVICES

- A. Manufacturer shall provide technical support during normal business hours.
- B. Supplemental information shall be provided via manufacturer's website.