

**Thomas and Betts Corporation  
Product Guide Specification**

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice, Fifth Edition*.

This section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all "Specifier Notes" after editing this section.

Section numbers are from *MasterFormat 2010 Update*.

**SECTION 26 05 33.21  
NON-METALLIC JUNCTION BOXES**

Specifier Notes: Delete any information below in Parts 1, 2 or 3 which is not required or relevant for the project.

**PART 1 – GENERAL**

**1.01 SUMMARY**

- A. This section includes the following:
  - 1. PVC or polycarbonate non-metallic molded junction boxes with gasketed lids, stainless steel screws and integral mounting feet.
  - 2. Large non-metallic junction boxes fabricated from type 11 PVC sheet using penetration welding. The enclosures are fully gasketed with stainless steel screws.
  
- B. Related Sections:
  - 1. Section 26 05 19.01 Cord and Cable Fittings
  - 2. Section 26 05 33.24 Liquidtight Conduit Fittings (LTFMC & LTFNMC)
  - 3. Section 26 05 33.27 Commercial Grade Non-metallic Liquidtight Fittings and Conduit
  - 4. Section 26 05 33.33 Industrial Grade Non-metallic Liquidtight Fittings and Conduit

**1.02 REFERENCES**

- A. Underwriters Laboratories, Inc. (UL):
  - 1. UL 514C Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers
  - 2. UL50 Enclosures for Electrical Equipment, Non-Environmental Considerations
  - 3. UL50E Enclosures for Electrical Equipment, Environmental Consideration
  
- B. National Fire Protection Association (NFPA):
  - 1. NFPA 70 National Electrical Code (NEC)
  
- C. National Electrical Manufacturers Association (NEMA):
  - 1. NEMA OS-2 Nonmetallic Outlet Boxes, Device Boxes, Covers and Box Supports
  
- D. Canadian Standards Association (CSA):
  - 1. CSA C22. No. 94.1 Enclosures for Electrical Equipment, Non-Environmental
  - 2. CSA C22. No. 94.2 Enclosures for Electrical Equipment, Environmental Consideration
  - 3. CSA C22.1 Canadian Electrical Code, Part I (CEC)

**1.03 SUBMITTALS**

- A. Comply with Section 01 33 00 – Submittal Procedures.

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- B. Product Data:
  - 1. Submit manufacturer's descriptive literature and product specifications for each product.
  - 2. Manufacturer's product drawings.

**1.04 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Products shall be free of defects in material and workmanship.
- B. Furnished products are listed or classified by third party agencies as being suitable for the intended purpose.

**1.05 WARRANTY**

- A. Product is warranted free of defects in material and workmanship.
- B. Product is warranted to perform the intended function within design limits.

**PART 2 – PRODUCTS**

**2.01 GENERAL**

- A. The PVC or polycarbonate molded junction box shall be the E987 and E989 series.
- B. The large non-metallic junction boxes shall be the EP series.

**2.02 MANUFACTURERS**

- A. Acceptable Manufacturers:  
Thomas & Betts Corporation  
8155 T&B Blvd  
Memphis, TN 38125  
800-816-7809, 901-252-5000  
[www.tnb.com](http://www.tnb.com)

Products:

- 1. Carlon® Molded Junction Boxes
- 2. Carlon® Large Junction Boxes

**2.03 DESIGN AND PERFORMANCE REQUIREMENTS**

- A. PVC and polycarbonate molded junction boxes:
  - 1. Molded non-metallic junction boxes shall be made from PVC or Polycarbonate resin.
  - 2. Molded non-metallic junction boxes shall not rust.
  - 3. Molded non-metallic junction boxes shall have foam-in-place gasketed lids.
  - 4. Molded non-metallic junction boxes shall be provided with stainless steel lid screws.
  - 5. Molded non-metallic junction boxes shall be provided with integral mounting feet.
  - 6. Molded non-metallic junction boxes shall be acceptable for direct burial applications.
  - 7. Molded non-metallic junction boxes shall be UL Listed and CSA Certified.
  - 8. Molded non-metallic junction boxes shall have a minimum NEMA Type 4/4X rating..
  - 9. Molded non-metallic junction boxes shall have a NEMA Type P6 rating up to and including box size 6"X6".
- B. Large non-metallic junction boxes:
  - 1. Large non-metallic junction boxes shall be fabricated from UL-94V-0 flame rated PVC sheet.
  - 2. Large non-metallic junction boxes shall be NEMA Type 4X Rated.

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3. Large non-metallic junction boxes shall not rust.
4. Large non-metallic junction boxes shall be suitable for ambient temperatures up to 90 ° C.
5. Large non-metallic junction boxes shall be supplied with gasketed lids.
6. Large non-metallic junction boxes shall be provided with stainless steel lid screws.
7. Large non-metallic junction boxes joints shall be penetration welded.
8. Custom features and components such as windows or mounting panel shall be available from the enclosure manufacturer.
9. Large non-metallic junction boxes shall be available with or without mounting feet.
10. Separate mounting feet shall be available from the enclosure manufacturer.

**PART 3 – EXECUTION**

**3.01 INSTALLATION**

- A. Installation shall be in accordance with the NEC and CEC where applicable.

**END OF SECTION**