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NEMA TC 6 & 8-2020

Standard for Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations

National Electrical Manufacturers Association

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Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations

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Foreword

This Standard is intended to define general requirements, performance requirements, test methods, and marking for Type EB-20, Type EB-35, Type DB-60, Type DB-100, and Type DB-120 PVC plastic utilities ducts. The PVC duct specified in this Standard is intended for installation underground for communications and electrical wire and cable:

User needs have been considered during the development of this Standard.

The Polymer Raceway Products Section (5TC) of NEMA, through its Members, has worked (and continues to work) closely with such organizations as ASTM, the Plastics Pipe Institute, appropriate government agencies, testing laboratories, and others in the periodic review and revision of these Standards for any changes necessary to remain current.

The NEMA Polymer Raceway Products Section will periodically review this Standard and revise the adoptions or modifications as necessary. Proposed or recommended revisions can be submitted to:

NEMA Technical Operations Department
National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, Virginia 22209

NEMA TC 6 & 8-2020 is a revision of NEMA TC 6 & 8-2013. NEMA TC 6 & 8-2013 revised and superseded NEMA TC 6 & 8-2003. NEMA TC 6 & 8 was prepared by a subgroup of the NEMA Polymer Raceway Products Section's Technical Committee. During the preparation phase, the following were active participants:

David Kendall—ABB, Inc.
Ray Horner—Atkore International
Brian Deacy—Atkore International
Andrew Nause—IPEX USA, LLC.

NEMA TC 6 & 8-2020 was approved by the NEMA Polymer Raceway Products Section. Approval does not necessarily imply that all Members of the Section voted for its approval. At the time of approval, the Section consisted of the following Members:

ABB, Inc.—www.abb.com—Memphis, TN
Anamet Electrical, Inc.—www.anacondasealtite.com—Mattoon, IL
Atkore International—www.atkore.com—Harvey, IL
Champion Fiberglass, Inc.—www.championfiberglass.com—Spring, TX
Electri-Flex Company—www.electriflex.com—Roselle, IL
FRE Composites Group—www.frecomposites.com—St. Andre-d'Argenteuil, PQ, Canada
Hubbell Incorporated—www.hubbell.com—Shelton, CT
IPEX USA, LLC. —www.ipexinc.com—Mississauga, ON, Canada
Legrand North America—www.legrand.us—West Hartford, CT
Panduit Corporation—www.panduit.com—Tinley Park, IL
Phoenix Contact—www.phoenixcontact.com—Middletown, PA
Southern Pipe, Inc.—www.southern-pipe.com—New London, NC
Southwire Company—www.southwire.com—Carrollton, GA
Underground Devices, Inc.—www.udevices.com—Northbrook, IL
United Fiberglass of America—www.unitedfiberglass.com—Springfield, OH

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Section 1
General

1.1 Scope

This Standard defines general requirements, performance requirements, test methods, and marking for the following types of PVC plastic utilities duct. The PVC duct specified in this Standard is intended for installation underground for communications and electrical wire and cable:

Type EB-20	Designed for burial encased in concrete
Type EB-35	Designed for burial encased in concrete
Type DB-60	Designed for direct burial without encasement in concrete
Type DB-100	Designed for direct burial without encasement in concrete
Type DB-120	Designed for direct burial without encasement in concrete

Type DB products can also be used for concrete encased applications where specified.

Fittings designed for use with the ducts covered by this Standard are described in NEMA TC 9 *Fittings for Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installation*.

Note: The values stated in U.S. customary units are to be regarded as the Standard.

1.2 Referenced Standards

In this publication, references made to the ASTM Standards listed below are to the current editions unless otherwise specified. Copies are available from:

American Society for Testing and Materials (ASTM)
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
www.astm.org

D 618	*Standard Practice for Conditioning Plastics for Testing*
D 883	*Standard Terminology Relating to Plastics*
D 1600	*Standard Terminology for Abbreviated Terms Relating to Plastics*
D 1784	*Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds*
D 2122	*Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings*
D 2412	*Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading*
D 2444	*Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)*
D 2564	*Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems*
D 4396	*Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds for Plastic Pipe and Fittings Used in Non-Pressure Applications*