NEMA Standards Publication

NEMA TC 6 and 8-2013

Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations

National Electrical Manufacturers Association

NEMA TC 6 and 8-2013

Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations

Published by:

National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, Virginia 22209

www.nema.org

NOTICE AND DISCLAIMER

The information in this publication was considered technically sound by the consensus of persons engaged in the development and approval of the document at the time it was developed. Consensus does not necessarily mean that there is unanimous agreement among every person participating in the development of this document.

The National Electrical Manufacturers Association (NEMA) standards and guideline publications, of which the document contained herein is one, are developed through a voluntary consensus standards development process. This process brings together volunteers and/or seeks out the views of persons who have an interest in the topic covered by this publication. While NEMA administers the process and establishes rules to promote fairness in the development of consensus, it does not write the document and it does not independently test, evaluate, or verify the accuracy or completeness of any information or the soundness of any judgments contained in its standards and guideline publications.

NEMA disclaims liability for any personal injury, property, or other damages of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use of, application, or reliance on this document. NEMA disclaims and makes no guaranty or warranty, expressed or implied, as to the accuracy or completeness of any information published herein, and disclaims and makes no warranty that the information in this document will fulfill any of your particular purposes or needs. NEMA does not undertake to guarantee the performance of any individual manufacturer or seller's products or services by virtue of this standard or guide.

In publishing and making this document available, NEMA is not undertaking to render professional or other services for or on behalf of any person or entity, nor is NEMA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. Information and other standards on the topic covered by this publication may be available from other sources, which the user may wish to consult for additional views or information not covered by this publication.

NEMA has no power, nor does it undertake to police or enforce compliance with the contents of this document. NEMA does not certify, test, or inspect products, designs, or installations for safety or health purposes. Any certification or other statement of compliance with any health or safety–related information in this document shall not be attributable to NEMA and is solely the responsibility of the certifier or maker of the statement.

TABLE OF CONTENTS

FOREWORD

During the preparation of this standards publication input of users and other interested parties was sought and evaluated. Inquiries, comments, and proposed or recommended revisions to this standards publication should be submitted to:

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

NEMA TC 6 & 8-2013 revises and supersedes NEMA TC 6 & 8-2003, the NEMA standards publication for *Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations*.

NEMA TC 6 & 8-2013 was approved by the NEMA Polymer Raceway Products Section. Approval by the Section does not necessarily imply that all Section members voted for its approval. At the time NEMA TC 6 & 8-2013 was published, the NEMA Polymer Raceway Products Section was composed of the following members:

AFC Cable Systems, a part of Atkore International	New Bedford, MA
Allied Tube and Conduit, a part of Atkore International	Harvey, IL
Anamet Electrical, Inc.	Mattoon, IL
Champion Fiberglass, Inc.	Spring, TX
FRE Composites (2005) Inc.	St. Andre-d'Argenteuil, QC, Canada
Hubbell Incorporated	Shelton, CT
IPEX USA, LLC	Mississauga, ON, Canada
Legrand North America	West Hartford, CT
Panduit Corporation	Tinley Park, IL
Royal Pipe Systems	Shelby Township, MI
Southern Pipe, Inc.	New London, NC
Thomas & Betts, a member of the ABB Group	Memphis, TN
Underground Devices, Inc.	Northbrook, IL
United Fiberglass of America	Springfield, OH

The following Section member companies contributed to this preparation of NEMA TC 6 & 8-2013:

FRE Composites (2005) Inc.	St. Andre-d'Argenteuil, QC, Canada
Thomas & Betts, a member of the ABB Group	Memphis, TN
Underground Devices, Inc.	Northbrook, IL

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, reference is made to the ASTM standards listed below are to the current edition 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*