

PPI MS-5

**MODEL SPECIFICATION FOR HDPE
SOLID WALL CONDUIT FOR
POWER AND COMMUNICATIONS
APPLICATIONS**

2024



Foreword

The Plastics Pipe Institute (PPI) has prepared this model specification as a service to its members and the industry. It is offered for use as a starting point and guide in developing appropriate final specifications suited to a particular project's needs.

This Model Specification was developed and published with the technical help and financial support of the members of the Plastics Pipe Institute (PPI). These members have shown their commitment to developing and improving quality products by assisting standards development organizations in the development of standards, and also by developing design aids and reports to help engineers, code officials, specifying groups, contractors and users.

PPI has prepared this Model Specification as a service to the industry. The information in this report is offered in good faith and believed to be accurate at the time of its preparation, but is offered “as is” without any express or implied warranty, including WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Additional information may be needed in some areas, especially with regard to unusual or special applications. Consult the manufacturer or material supplier for more detailed information. A list of member manufacturers is available on the PPI website. PPI does not endorse the proprietary products or processes of any manufacturer and assumes no responsibility for compliance with applicable laws and regulations.

PPI intends to revise this Model Specification within 5 years, or sooner if required, from the date of its publication in response to comments and suggestions from users of the document. Please send suggestions for improvements to the address below. Information on other publications can be obtained by contacting PPI directly or visiting our website.

The Plastics Pipe Institute, Inc.
www.plasticpipe.org

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PREFACE

This preface provides information and direction to the user of this document that is not intended to be incorporated into a specification referenced or published by the user. Using the text here-in within your specification and following the guide will assist in properly specifying HDPE conduit product. Contact PPI for an editable version of the text, if desired.

This publication is intended for use as a guide to support the designer or specifier of HDPE conduit systems. It contains the basic information needed to specify products, conduit, and fittings, that are commercially available and meet industry requirements. It can be used to solicit a quote from a manufacturer or bids from multiple companies. **It should not be used in lieu of the advice of a professional engineer.**

Existing product standards contain the material requirements and necessary performance requirements, so it is sufficient to reference the standard(s) rather than repeating those requirements within your specification. This guide helps you to specify only the options that you may need for your project(s).

The Plastics Pipe Institute (PPI) has made every reasonable effort to ensure the accuracy of this publication, but it may not provide all necessary information, particularly with respect to special or unusual applications or local codes and requirements. This publication may be changed from time to time without notice. Visit <https://www.plasticpipe.org> for the most current edition.

Note 1: Notes shown in blue highlights provide direction to the specifier for customization of the text. This preface and the blue notes should be deleted from the text of the final specification.

Note 2: The user may choose to adopt part or all of this Model Specification. However, users should ensure that all parts which are used are appropriate for the intended purpose. See above.

Note 3: Users should review PPI TN-50 Guide to Specifying HDPE Conduit for more information about conduit products and the standards listed within this Model Specification, as well as other information, such as HDPE conduit guidelines. TN-50 also includes an easy-to-follow flow chart to help guide users in selecting the most appropriate specification for various applications. PPI also offers a free online course covering Selecting and Specifying HDPE Conduit, available at [PPI eLearn™](#).

It is anticipated that the user of this document will need the following information to customize this model specification to their needs:

- Acceptable standard(s) (e.g., ASTM F2160, UL651A,)
- Packaging Information
 - Format: Coiled, reeled or straight lengths
 - Special coil, reel, or banding instructions
 - Footage per coil/reel, stick lengths
- Sizing information (in consideration of the those permitted by the selected standard)
 - Sizing standard (e.g., IPS, Schedule, True Size, SDR)
 - Wall type (e.g., SDR 11, Schedule 80, etc.)
- Application aerial or buried/encased
- Color or striping requirements
- Friction reduction features such as lubricant or ribbing
- Pull Media requirements, if any
- Acceptable joining methods

Note 4: Construction and installation specifications are not included in this model specification. See Section 4.0 for documents that may be helpful to the specifier.

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