

MODEL SPECIFICATION FOR POLYPROPYLENE (PP-R & PP-RCT) PRESSURE PIPE SYSTEMS FOR PLUMBING & MECHANICAL APPLICATIONS

PPI MS-8

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Foreword

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 by developing design aids and reports to help engineers, code officials, specifying groups, contractors, and users.

The purpose of this model specification is to support designers and specifiers using polypropylene piping systems for plumbing and mechanical piping applications with language about pipes, fittings, joining, installation, and testing.

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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.

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INTRODUCTION

This model specification applies to polypropylene (PP) pressure pipe material types PP-R & PP-RCT and provides the material requirements, handling, storage, joining, and installation of polypropylene pressure pipe, fittings, and valves to be used for hot- and cold-water plumbing distribution, chilled water, cooling/condenser water, make-up water, and hydronic heating and cooling distribution piping systems, including district energy.

This publication is intended for use as a guide to support designers and specifiers of plumbing and mechanical piping systems, but it should not be used in lieu of the advice of a professional engineer. In all cases, plumbing and mechanical piping systems must be installed, tested, and operated in accordance with local regulations which may include the mechanical code that is enforced at the project location or other codes or regulations.

The Plastics Pipe Institute 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.

This publication may be changed without notice. Visit <https://www.plasticpipe.org> for the most current edition.

Note 1: The user may choose to adopt part or all of this Model Specification. However, users should ensure all parts used are appropriate for the intended purpose.

1.0 GENERAL

1.1. Scope

This model specification applies to polypropylene (PP) pressure pipes, fittings, and valves to be used for hot- and cold-water plumbing distribution systems, chilled water, cooling/condenser water, make-up water, and hydronic heating and cooling distribution piping systems, including district energy.

1.2. Definitions, Acronyms and Symbols

Definitions, acronyms, and symbols pertaining to polypropylene pipe as used in this specification shall be in accordance with ASTM F2389, CSA B137.11 and local regulations.

- **Heat fusion:** a method of joining two similar materials (such as PP-R to PP-R or PP-R to PP-RCT) by the application of heat to melt the mating surfaces and then pressing them together with sufficient force to become one monolithic piece