



Note: The PROV published in November 2018 replaces OPSS 1842 COMMON, November 2015 with no technical content changes.

MATERIAL SPECIFICATION FOR PRESSURE POLYETHYLENE PIPE PRODUCTS

TABLE OF CONTENTS

1842.01	SCOPE
1842.02	REFERENCES
1842.03	DEFINITIONS - Not Used
1842.04	DESIGN AND SUBMISSION REQUIREMENTS - Not Used
1842.05	MATERIALS
1842.06	EQUIPMENT - Not Used
1842.07	PRODUCTION
1842.08	QUALITY ASSURANCE

1842.01 SCOPE

This specification covers the requirements for pressure polyethylene pipe products to be used for sewage forcemains, watermains, and associated service connections.

1842.02 REFERENCES

This specification refers to the following standards, specifications, or publications:

CSA Standards

B137.1-13 Polyethylene (PE) Pipe, Tubing, and Fittings for Cold Water Pressure Services
[Part of B137 Series-05, Thermoplastic Pressure Piping Compendium]

American Water Works Association (AWWA)

C901-08 Polyethylene (PE) Pressure Pipe and Tubing, ½ In. (13 mm) Through 3 In. (76 mm), for Water Service

C906-15 Polyethylene (PE) Pressure Pipe and Fittings, 4 In. (100 mm) Through 63 In. (1,600 mm), for Water Distribution and Transmission

1842.05 MATERIALS

1842.05.01 Polyethylene Pipe Products

The moulding and extrusion material used to manufacture polyethylene pipe shall be polyethylene according to the requirements of AWWA C901 or AWWA C906.

The moulding and extrusion material used to manufacture polyethylene fittings shall be polyethylene according to the requirements of AWWA C906 for fittings 100 mm through 1,600 mm and CSA B137.1 for fittings less than 100 mm diameter.

1842.07 PRODUCTION

1842.07.01 Requirements

The requirements for the production of polyethylene pipe and tubing shall be according AWWA C901 or AWWA C906.

The requirements for the production of polyethylene pipe fittings shall be according to AWWA C906 for fittings 100 mm through 1,600 mm diameter and CSA B137.1 for fittings less than 100 mm diameter.

1842.07.02 Markings

Markings for polyethylene pipe and tubing shall be placed so that the intervals between markings are no greater than 1.5 m.

For polyethylene pipe and tubing according to AWWA C901, minimum markings shall be as follows:

- a) Nominal size.
- b) Standard material code designation (e.g., PE 2406).
- c) On pipe, the dimension ratio and diameter base (e.g., DR 11).
- d) On tubing, the word "Tubing" and dimension ratio.
- e) Pressure class (e.g., PC 160).
- f) Standard designation (e.g., AWWA C901).
- g) Manufacturer's name or trademark.
- h) Production record code.

For polyethylene pipe according to AWWA C906, minimum markings shall be as follows:

- a) Nominal size and OD base.
- b) Standard material code designation (e.g., PE 3408).
- c) Dimension ratio (e.g., DR 17).
- d) Pressure class (e.g., PC 100).

- e) Standard designation (e.g., AWWA C906).
- f) Manufacturer's name or trademark.
- g) Production record code.

Markings shall be applied in a manner that will not reduce the strength or damage the pipe and shall remain legible during normal handling and storage.

1842.08 QUALITY ASSURANCE

1842.08.01 Certificate

Upon request, suppliers shall provide a certificate to indicate that the product was produced and tested according to the appropriate specification requirements.

1842.08.02 Inspection and Testing

The Owner may make inspections and tests at such times as considered necessary to ensure that the material supplied is according to this specification.

All materials failing to comply with the requirements of this specification shall be rejected.