

ONTARIO PROVINCIAL STANDARD SPECIFICATION

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MATERIAL SPECIFICATION FOR SMOOTH WALLED STEEL PIPE

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1802.01 SCOPE

This specification covers the requirements for smooth walled steel pipe to be used for the installation of pipes or casings.

1802.02 REFERENCES

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

CSA Standards

Z662-11 Package Consists of Z662-11, Oil and Gas Pipeline Systems, and Z662.1-07, Commentary on CSA Z662-11, Oil and Gas Pipeline Systems

ASTM International

A 252-98e1 Welded and Seamless Steel Pipe Piles

American Water Works Association (AWWA)

C200-05 Steel Water Pipe-6 in. (150 mm) and Larger

1802.07 PRODUCTION

1802.07.01 Requirements

All pipe shall be new and manufactured from steel according to ASTM A 252, Grade 2, with a minimum yield strength of 240 MPa.

Production welding shall be according to AWWA C200.

Pipe ends shall be bevel edged on the outside to an angle of 30°.

Pipe wall thickness shall be according to Table 1, except as amended below:

- a) The least nominal wall thickness for pipe with outside diameters from 88.9 to 141.3 mm shall be 4.8 mm.
- b) When protective coating or cathodic protection for steel casing or carrier pipe is not specified in the Contract Documents, the pipe wall thickness shall be increased to the nearest standard size that is a minimum of 1.6 mm greater than the least nominal wall thickness shown.

1802.07.02 Identification

The following information shall be clearly marked by stencilling, stamping, or painting of each section of pipe:

- a) Name or trademark of the manufacturer.
- b) Heat number.
- c) Outside diameter.
- d) Nominal wall thickness.
- e) Length of pipe.
- f) Weight per unit length.
- g) Standard designation.
- h) Grade of steel.

1802.08 QUALITY ASSURANCE

1802.08.01 Certificate

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

1802.08.02 Inspection and Testing

The Owner reserves the right to make inspections and tests at such time as the Owner considers necessary to ensure the materials supplied are according to this specification. All materials failing to comply with the requirements of this specification shall be rejected.

Pipe Outside Diameter mm	Least Nominal Wall Thickness mm	
	Roads	Railways
88.9	3.2	3.2
101.6	3.2	3.2
114.3	3.2	3.2
141.3	4.0	4.0
168.3	4.8	4.8
219.1	4.8	4.8
273.1	4.8	4.8
323.9	4.8	4.8
355.6	4.8	5.6
406.4	4.8	5.6
457.0	4.8	6.4
508.0	4.8	7.1
559.0	5.6	7.9
610.0	6.4	8.7
660.0	6.4	9.5
711.0	6.4	10.3
762.0	6.4	10.3
813.0	6.4	11.1
864.0	6.4	11.9
914.0	6.4	11.9
965.0	7.9	12.7
1016.0	7.9	12.7
1067.0	7.9	12.7
1118.0	7.9	14.3
1168.0	7.9	15.9
1219.0	8.3	15.9
1270.0	8.7	15.9
1321.0	9.5	19.1
1372.0	9.5	19.1
1422.0	9.5	19.1
1524.0	10.3	20.6

 TABLE 1

 Least Nominal Wall Thickness for Steel Casing Pipe

 in Cased Crossings and Carrier Pipe in Uncased Crossings

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