

15003 Construction Materials – Sewer Mains**Index**

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15003-1 Sewer Main Pipe – Gravity Flow**1.1 Reinforced Concrete Pipe****Product Description:**

- Reinforced Concrete Pipe
- Joints shall be the rubber gasket type
- Standard pipe lengths shall not be less than 1.8 m

Conforming to:

- ASTM C76 Class 5 or for a specific D-load in ASTM C655
- Pipe joints - ASTM C443 or ASTM C361
- Pipe joints installed at a buried depth of 6m or greater - ASTM C361

Product Use:

- Gravity Sewer construction
- Bell and Spigot grove type joints for buried depth of 6m or greater
- Beveled pipe and pipe lengths less than 1.8m – as approved by City of Saskatoon Engineer on a project to project basis

Standard Construction Specification Reference:

- 08002-3.2

Approved products: Manufacturer – Model

- Inland Pipe
- Lafarge Canada Inc.

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

1.2 Polyvinyl Chloride (PVC) Type PSM, Sanitary and Storm Pipe and Fittings (150-675mm)

Product Description:

- Polyvinyl Chloride Pipe, Bell and Spigot type with factory supplied rubber gasket.
- SDR not greater than 35 or SDR 28 at buried depth greater than 6m

Conforming to:

- ASTM D3034 and CSA B182.2

Product Use:

- Gravity Sanitary and Storm Sewer Main construction

Standard Construction Specification Reference:

- 08002-3.1

Approved products: Manufacturer – Model

- Ipex Inc. – Ring Tite
- Northern Pipe Products Inc. – Northern Pipe
- Royal Group - Royal Seal
- Next Polymers - Duraloc
- Galaxy Plastics – Gasketed Sewer Fittings

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

1.3 Polyvinyl Chloride (PVC) Open Profile Storm Sewer Pipe and Fittings

Profile PVC products are not approved for use as a catch basin lead.

Product Description:

- Polyvinyl Chloride Open Profile (OP) Pipe with concentric reinforcing ribs
- Bell and Spigot type with factory supplied rubber gasket

Conforming to:

- ASTM F794 and CSA B182.4

Product Use:

- Gravity flow Storm Sewer Main construction

Standard Construction Specification Reference:

- 08002-3.1.2

Approved products: Manufacturer – Model

- Ipex Inc. - Ultra Rib

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

**1.4 Polyvinyl Chloride (PVC) Dual Wall Corrugated Profile Storm Sewer
Pipe and Fittings**

Profile PVC products are not approved for use as a catch basin lead.

Product Description:

- Polyvinyl Chloride, Dual Wall Corrugated Profile (DWCP) pipe
- Bell and Spigot type with factory supplied rubber gasket

Conforming to:

- ASTM F794 and CSA B182.4

Product Use:

- Gravity flow storm sewer main construction

Standard Construction Specification Reference:

- 08002-3.1.2

Approved products: Manufacturer – Model

- Royal Group – Kor-Flo (200mm – 900mm)
- Ipex Inc. – Ultra X2 (750mm & 900mm)

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

1.5 High Density Polyethylene (HDPE) Storm Sewer Gravity Flow Pipe

Product Description:

- Polyethylene Sewer pipe

Conforming to:

- CGSB 41-GP-25M

Product Use:

- Gravity & Low Pressure Applications
- As approved by City of Saskatoon Engineer on a project to project basis

Standard Construction Specification Reference:

- 08010-7.5

Approved products: Manufacturer – Model

- KWH Pipe - Weholite
- Polytubes

Approved products: Manufacturer – Model (with Conditions)

CSA B182.8 (Storm Sewer) with a minimum ring stiffness of 320KPa, only with CSA B182.8 Type 1 Joints (74KPa) (Boss Ultra Stab 75) is approved for use in storm watermain line applications up to a maximum bury to invert of six metres.

Not approved for use as a catch basin lead.

- Armttec Limited - Boss 2000 320Kpa HDPE
- Hancor, Inc. – HDPE
- Hancor, Inc. – ADS N-12 WT 1B HDPE

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

1.6 Polyvinyl Chloride (PVC C900 DR51) PR80, Storm Pipe (600-1200mm)**Product Description:**

- PVC C900 DR51 gasketed pressure pipe for storm sewer applications.
- Bell and Spigot type with factory supplied rubber gasket.
- DR51 with a depth of cover no greater than 6m

Conforming to:

- CSA B137.3
- AWWA C900
- NSF-61
- ASTM D1784

Product Use:

- Gravity Storm Sewer Main construction

Standard Construction Specification Reference:

- 08002-3.1

Approved products: Manufacturer – Model

- Ipex – Centurion DR51 CIOD 80psi gasketed pressure pipe

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

15003-2 Sewer Main Pressure Pipe

2.1 High Density Polyethylene (HDPE) Sewer Pressure Pipe

Product Description:

- High Density Polyethylene Pipe

Conforming to:

- CGSB 41-GP-25M

Product Use:

- Force main construction
- As approved by City of Saskatoon Engineer on a project to project basis
- Joined by butt fusing the ends of the pipe

Standard Construction Specification Reference:

- 08002-3.3

Approved products: Manufacturer – Model

- KWH Pipe - Sclairpipe
- Performance Pipe
- Polytubes

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

2.2 Polyvinyl Chloride (PVC) Sewer Pressure Pipe

Product Description:

- Polyvinyl Chloride DR41 Class 100 Pressure Pipe
- Bell and Spigot type with factory installed gasket

Conforming to:

- AWWA C900, CSA137.3

Product Use:

- Force main construction
- As approved by City of Saskatoon Engineer on a project to project basis

Standard Construction Specification Reference:

- N/A

Approved products: Manufacturer – Model

- Ipex Inc.

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

15003-3 Concrete Manholes and Catch Basins

3.1 Reinforced Concrete Manhole Barrels and Catch Basins

Product Description:

- Precast reinforced concrete barrels
- Joints shall be the rubber gasket type

Conforming to:

- ASTM C478

Product Use:

- Sewer main construction

Standard Construction Specification Reference:

- Section 08002, City of Saskatoon Standard Drawings for Catchbasins and Manholes

Approved products: Manufacturer – Model

- Inland Pipe
- Proform Precast Products Inc.
- Lafarge Canada Inc.
- Souris Valley Industries

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

3.2 Manhole Frames and Covers

Product Description:

- Cast Iron Frame and Cover

Conforming to:

- ASTM A48M-00

Product Use:

- Sewer main construction

Standard Construction Specification Reference:

- Section 08002, City of Saskatoon Standard Drawings for Catchbasins and Manholes

Approved products: Manufacturer – Model

- Titan Foundry Ltd.
- Westview Sales Ltd.

All products must meet specification. This section is intended as a guide to products that comply. The Specifications take precedence over this section. Products included in this section must still be proven to comply by the supplier. To have a product added or approved, see Sections 08000, 08001, 08002.

3.3 Pipe to Manhole and Concrete Structure Connectors

Product Description:

- Resilient, watertight connection between concrete manholes, structures and pipes.

Conforming to:

- ASTM C923
- ASTM C1478

Product Use:

- Sewer main construction.

Standard Construction Specification Reference:

- Section 08002-5

Approved products: Manufacturer – Model

- Hamilton Kent – HKT-CS
- Press–Seal Corporation
 - PSX: Direct Drive & 8QRS
 - Econoseal
 - Kwik Seal
 - WS Series Waterstop

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End of Specification 15003