



**Product Name**

INSULWORKS™ LDC

April 30, 2019

**Associated Specification Section**

MasterFormat 1995 # 03118

MasterFormat 2004 # 03 11 26

**Manufacturer's Name**

Beaver Plastics Ltd.

---

## PRODUCT DESCRIPTION

---

### PRODUCT FEATURES

- DESCRIPTION / BASIC USES
  - Insulworks Large Diameter Conduit (LDC) High-density EPS insulation designed to conserve energy loss from buried hydronic tubing and other liquid piping systems to 80C (180F) maximum service temperature.
  
- PRODUCT ATTRIBUTES AND CHARACTERISTICS
  - High compressive strength supports concrete structures, construction activity, machinery and heavy loading.
  - Efficient thermal barrier between the heated slab and underlying ground.
  - Moisture vapour permeable.
  - Contains no CFCs, HCFCs, or other refrigerant gases.
  - Biologically inert; will not support mould, mildew or fungus growth.
  - Biologically inert; will not support mould, mildew or fungus growth.
  - Contains a chemical additive to inhibit accidental ignition from a small fire source.
  - Non-toxic and hypo-allergenic.
  
- SELECTION CRITERIA
  - Accommodates any diameter tube up to 40 mm (1-1/2") O.D.
  - Product is available in three standard sizes. Special order variations can be produced.
  - Reduces installation labour and speeds installation by eliminating the need to tie tubing down to wire mesh.
  - Available in four standard thicknesses with additional thicknesses available on request.
  - Material is easily cut.
  
- APPLICABLE STANDARDS, RELATED REFERENCES
  - ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
  - ASTM C578 – Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
  - ASTM D1621 - Standard Test Method for Compressive Properties of Rigid Cellular Plastics.



**Product Name**

INSULWORKS™ LDC

April 30, 2019

**Associated Specification Section**

MasterFormat 1995 # 03118

MasterFormat 2004 # 03 11 26

**Manufacturer's Name**

Beaver Plastics Ltd.

---

**PRODUCT DESCRIPTION**

---

- ASTM D2842 - Standard Test Method for Water Absorption of Rigid Cellular Plastics.
- ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
- CAN/ULC-S701 – Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.
- **QUALITY STATEMENT, TESTS, CERTIFICATIONS, AND APPROVALS**
  - Performance tests certified by Intertek Testing Services.
  - CCMC, Canadian Construction Materials Centre, Evaluation 12892-L
- **LIMITATIONS**
  - High compressive strength allows EPS LDC to be buried to a depth of 6 m (20 feet).
- **SAFETY PRECAUTIONS**
  - EPS LDC will burn when exposed to large continuous flame.
  - Normal fire precautions and good housekeeping methods must be followed during storage and application.
- **AVAILABILITY**
  - Available directly from Beaver Plastics.
- **COST**
  - Varies with substrate condition and configuration, and relative size of building.
  - Consult manufacturer or authorized distributors for specific product costs or budget pricing.

**PRODUCT PROPERTIES**

- **MATERIALS, COMPOSITION, PROPERTIES**
  - Material: Rigid closed cell, expanded polystyrene (EPS) board, Type 2 to CAN/ULC-S701 and ASTM C578.



**Product Name**

INSULWORKS™ LDC

April 30, 2019

**Associated Specification Section**

MasterFormat 1995 # 03118

MasterFormat 2004 # 03 11 26

**Manufacturer's Name**

Beaver Plastics Ltd.

---

**PRODUCT DESCRIPTION**

---

- Performance
  - Compressive Strength: 110kPa (16 psi)
  - Flame spread index / Smoke Developed Index: Less than 25/450 to ASTM E84.
  - Thermal resistance: RSI 0.70/25 mm (R-4.04/inch).
- DIMENSIONS
  - Standard board sizes available in three widths and thicknesses:

INSULATION VALUE	WIDTH	HEIGHT	LENGTH
1.4 RSI (R-8)	225 mm (9")	50 mm (2")	1220 mm (48")
2.7 RSI (R-10)	250 mm (10")	65 mm (2-1/2")	1220 mm (48")
2.1 RSI (R-12)	275 mm (11")	75 mm (3")	1220 mm (48")

**PRODUCT PLACEMENT**

- INSTALLATION
  - Verify surface is ready to receive insulation.
  - Surfaces must be smooth, dry and ready to receive insulation
  - Install products in accordance with the manufacturer's instructions.
  - Cover exposed insulation with a finish acceptable to local building authorities.
- COVERAGE
  - Two boards, each 1220 mm (48") long, clam-shelled together, will produce a 1200 mm (4 lineal feet) section of Insulworks LDC.



**Product Name**

INSULWORKS™ LDC

April 30, 2019

**Associated Specification Section**

MasterFormat 1995 # 03118

MasterFormat 2004 # 03 11 26

**Manufacturer's Name**

Beaver Plastics Ltd.

Page 4

---

**PRODUCT DESCRIPTION**

---

**Corporate Identification**

Beaver Plastics

11581 – 272 Street

Acheson, Alberta, Canada T7X 6E9

Phone 1-780-962-4433 (International)

Toll free: 1-888-453-5961 (U.S. and

Canada) Fax 1- 1 780 962 4640

Internet web site: <http://www.beaverplastics.com>

E-mail: [techsupport@beaverplastics.com](mailto:techsupport@beaverplastics.com)

**Technical Services Available**

Phone toll free or e-mail (see above)

**Classification and Filing**

MasterFormat 2004:

03 11 26 – Hydronic Tubing Insulation

MasterFormat 1995:

03118 – Hydronic Tubing Insulation

Uniformat 1998:

A1030

**END OF SECTION**