



131 Regalcrest Court  
Woodbridge, ON L4L 8P3  
Tel: (905) 856-7550  
Fax: (905) 856-4367  
Toll free: 1-800-263-2353

## TECHNICAL SPECIFICATION

### Royal Seal™ Gasketed Sewer Pipe SDR 28

Cell classification 12364

### **SCOPE**

This specification covers the requirements for PVC (polyvinyl chloride) gravity sewer pipe with integral locked-in gasket bell and spigot joints. Nominal sizes 4", 5" and 6" is certified to Canadian Standards Association (CSA) Standard B182.2 and Bureau de Normalisation du Quebec (BNQ) NQ3624-130.

### **MATERIALS**

The pipe is manufactured from virgin PVC compound meeting the cell classification requirements of 12364 as defined by the American Society of Testing and Materials (ASTM) Standard D 1784: *Standard Specification for Rigid PVC Compounds and CPVC Compounds*.

When available, Royal uses reworked PVC material from Royal pipe production, in accordance with Clause 4.1.3 of CSA B181.0, and BNQ NQ 3624-130/135. The supply of this type of rework material is not consistent, therefore Royal cannot guarantee the exact recycled content of any one product.

### **MARKING**

Pipe markings are as specified in CSA B182.2.

### **PIPE**

The pipe is manufactured for use in gravity flow sanitary and storm sewer. The pipe is produced with a wall thickness corresponding to the dimension ratio of SDR 28, with a minimum pipe stiffness value of 90 psi (625 kPa) when tested in accordance with ASTM D2412, *Standard Test Method for Determination of External Loading*. Standard length of pipe is 4.0m plus the bell.

### **GASKETS**

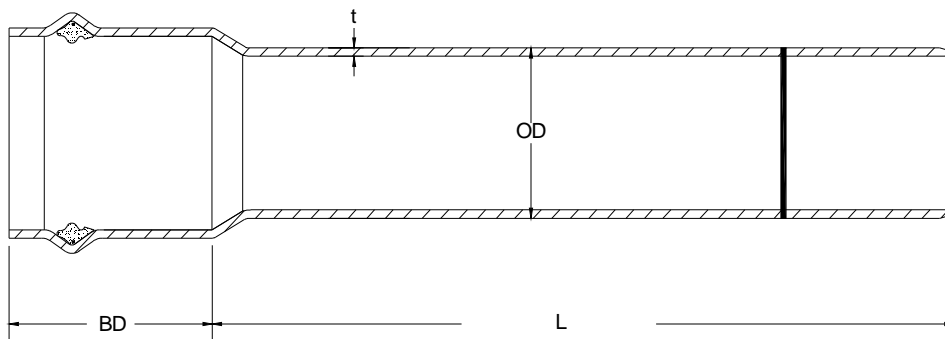
The pipe utilizes a double seal locked-in gasket system (DSLII) design which exceeds the requirements of ASTM D3212, *Standard Specifications for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals*. The gaskets are reinforced with a steel band and conform to the requirements of ASTM F477: *Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe*.

## TEST REQUIREMENTS

Quality testing is as per Royal's Quality Assurance program and in accordance with CSA B182.2.

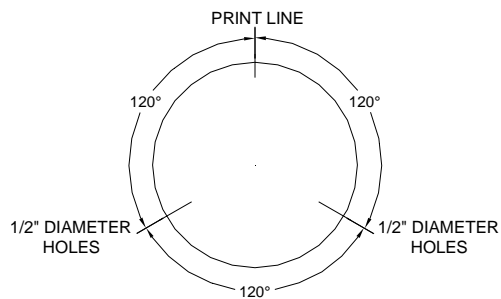
## PIPE DIMENSIONS

| Nominal Size (in) | Outside Diameter, OD (in) | Wall Thickness, t (in) | Average Bell Depth, BD (in) | Pipe Length Plus Bell, L (m) |
|-------------------|---------------------------|------------------------|-----------------------------|------------------------------|
| 4                 | 4.207 - 4.222             | 0.150 – 0.165          | 3.5                         | 4.0                          |
| 5                 | 5.630 - 5.650             | 0.201 – 0.220          | 4                           | 4.0                          |
| 6                 | 6.264 - 6.285             | 0.224 – 0.252          | 4.5                         | 4.0                          |



## OPTIONAL PERFORATIONS

It is possible to perforate the finished pipe product. The standard perforation pattern consists of 2 rows of 1/2" diameter holes, 120 degrees apart, on 6" centres, as shown in the sketch.



1/2" Diameter Holes-6" Spacing