

## HANCOR® PIPE WITH ENGINEERED MATERIAL COMPOUND CAN PROVIDE EXCEPTIONAL INFRASTRUCTURE PRODUCT WITH ENHANCED SOCIAL RESPONSIBILITY

Today's BLUE SEAL®, Sure-Lok®, and Hi-Q® (per ASTM F2648) pipes are engineered with a compound of virgin and recycled high density polyethylene resins to provide impressive material properties. The performance you've come to expect from Hancor pipe, with the added benefit of helping to promote responsible use of resources. Available in diameters from 4" to 60" (100 to 1500 mm), our pipe is replacing reinforced concrete pipe as a preferred product for storm water applications.

### BLUE SEAL, Sure-Lok and Hi-Q Pipe Property Comparison Chart (12" – 60")

PROPERTY	ASTM F2648	AASHTO M294
Pipe Material	Engineered compound of HDPE	Virgin HDPE
Resin Density	0.945 - 0.955 gm/cm3	0.942 - 0.955 gm/cm3
Melt Index	<0.4 to 0.15	<0.4 to 0.15
Flexural Modulus	759 - 1103 MPa	759 - 1103 MPa
Tensile Strength at Yield	21 - 24 MPa	21 - 24 MPa
Pipe Stiffness	Identical to AASHTO M294 (see below)	Identical to ASTM F2648 (see below)
Pipe Flattening	20% with no buckling, cracking, splitting, etc	20% with no buckling, cracking, splitting, etc
Brittleness	Must pass impact test per ASTM D2444	Must pass impact test per ASTM D2444
UV Stabilizer	Minimum 2% carbon black	Minimum 2% carbon black
12" Pipe Stiffness	50 psi	50 psi
15" Pipe Stiffness	42 psi	42 psi
18" Pipe Stiffness	40 psi	40 psi
24" Pipe Stiffness	34 psi	34 psi
30" Pipe Stiffness	28 psi	28 psi
36" Pipe Stiffness	22 psi	22 psi
42" Pipe Stiffness	20 psi	20 psi
48" Pipe Stiffness	18 psi	18 psi
60" Pipe Stiffness	14 psi	14 psi
Minimum Cover	1' minimum for 4"-48". 2' minimum for 60"	1' minimum for 4"-48". 2' minimum for 60"
Maximum Cover	See Technical Note 2.02	See Technical Note 2.01

#### Benefits of using BLUE SEAL, Sure-Lok, and Hi-Q pipe (per ASTM F2648)

- Technological advancements in materials science have improved quality of recycled resins. Innovative blending capabilities have made recycled products a viable and often preferred building construction material.
- Mandated use of 100% virgin resin unnecessarily increases end-user (taxpayer) costs. By utilizing engineered compounds, we can maintain the quality and performance while minimizing the impact of excessive raw material increases on infrastructure costs.
- Recycled compounds are capable of providing an equal level of performance. It is socially responsible to utilize them.
- When recycled products are purchased, an incentive is created for materials to be collected, manufactured and developed into new products. This process saves resources for future generations.
- The U.S. Green Building Council's LEED rating program for sustainable design recognizes the use of recycled building materials and LEED credits can be attained for incorporating their use.
- Recycled materials have proven to be viable for construction products. Other widely used construction materials, like steel or concrete pipe have been utilizing recycled components for decades.

