

NEW FROM CENTENNIAL PLASTICS:



# earthLoops™ SECURE SYSTEM

GEOHERMAL EXCHANGE SYSTEM

WITH EXCLUSIVE TEST-CAP  
TECHNOLOGY!

## Installing Geothermal HeatPump Systems is Now Faster and More Secure

EarthLoops™ Secure System starts with two industry favorites: Centennial Plastics' NSF-certified Cenfuse Geothermal HDPE pipe, and the Bullet™ U-Bend fitting.

Now, we offer an **exclusive test-cap system with one-step air testing** to make installation faster and more secure – **all at no added cost!**

### Our new test-cap system sets the gold standard of factory-sealing!

- Built-in pressure valve lets you check loop pressure with a tire gauge and **add air during field pressure tests.**
- By cutting installation time, the new Test-Cap System helps **reduce labor costs!**
- EarthLoops™ are factory-pressurized and sealed with our new Test-Cap System to assure the **loops you install are free from leaks and contaminants.**
- Using Exclusive Patent Pending Technology.



For further details, see our installation guide at [centennialplastics.com](http://centennialplastics.com) or as provided by your local distributor.



Quality and Service That Soars



Meets Buy America Act requirements.



# Specifications for Geothermal Exchange Pipe

**CenFuse**  Standard Stock SDR 11

3/4"	1"	1-1/4"
310' (155' x 155')	410' (205' x 205')	610' (305' x 305')
350' (175' x 175')	510' (255' x 255')	810' (405' x 405')
410' (205' x 205')	610' (305' x 305')	1010' (505' x 505')
460' (230' x 230')	810' (405' x 405')	
510' (255' x 255')		

CenFuse Geothermal pipe and EarthLoops™ are available in other SDR's and special lengths. Contact your distributor or visit our website at [www.centennialplastics.com](http://www.centennialplastics.com).

CenFuse SDR 11 meets the applicable standards for AWWA C901 & C906.

## CenFuse HDPE Pipe and Bullet™ U-Bend Fitting Raw Material

PROPERTY	ASTM Test Method	Typical Values	
		English Units	SI Units
Density (Natural)	D 4883	-	0.944 g/cc
Density (Black)		-	0.955 g/cc
Melt Index <sup>1</sup>	D 1238	-	12.5 g/10 min
Tensile Strength			
@ Yield (2 in/min)	D 638	3300 psi	22.8 MPa
@ Break (2 in/min)	D 638	4500 psi	31.0 MPa
Elongation @ Break (2 in/min)	D 638	>600%	>600%
Flexural Modulus <sup>2</sup>	D 790	120,000 psi	827 MPa
Notched Izod Impact Strength	D 256	6 ft-lbf/in	0.32 kJ/m
Hardness (Shore D)	D 2240	68	68
Vicat Softening Point	D 1525	259°F	126°C
Brittleness Temperature	D 746	<-180°F	<-118°C
Hydrostatic Design Basis			
@ 23° C	D 2837	1600 psi	11.0 MPa
@ 60° C	D 2837	800 psi	5.5 MPa
Environmental Stress			
Crack Resistance <sup>3</sup>	D 1693	>2000 hrs.	>2000 hrs.
Environmental Stress			
Crack Resistance <sup>4</sup>	D 1693	>5000 hrs.	>5000 hrs.
Pipe Ring ESCR <sup>5</sup>	F 1248	>5000 hrs.	>5000 hrs.
Notch Tensile (PENT)	F 1473	>100 hrs.	>100 hrs.
Carbon Black Concentration	D 1603	2.3%	2.3%
Cell Classification	D 3350	345464C	345464C

<sup>1</sup>190°C/21600 g <sup>2</sup>2% Secant-Method 1 <sup>3</sup>Condition B, 10% <sup>4</sup>Condition C <sup>5</sup>Two inch, SIDR 19



CenFuse is NSF-14/ Geothermal certified.



Meets Buy America Act requirements.



**Centennial**  
PLASTICS, INC.

Quality and Service That Soars

## CenFuse Geothermal HDPE 3608 Pipe

ASTM D3035		3/4"	1"	1-1/4"	1-1/2"	2"
160 PSI	O.D.	1.050"	1.315"	1.660"	1.900"	2.375"
	I.D.	.860"	1.077"	1.358"	1.554"	1.943"
SDR 11	Wall	.095"	.120"	.151"	.173"	.216"
	Wt/ft	.122#	.191#	.306#	.402#	.627#
Coil Lengths in ft		100, 300, 400, 500, 600, 700, 800, 1000	100, 300, 500	100, 150, 200, 300, 500	100, 200, 300, 500	100, 200, 300, 500
	Straight Lengths	-	20'	20'	20'	20'
ASTM D3035		3"	4"	6"		
O.D.		3.500"	4.500"	6.625"		
	I.D.	2.864"	3.682"	5.421"		
Wall		.318"	.409"	.602"		
	Wt/ft	1.360#	2.249#	4.873#		
Coil Lengths in ft		500	500			
Straight Lengths		20', 40'	20', 40'	20'		



### New EarthLoop™ Test-Cap with Field Testing Capabilities

- Air pressurized to approx. 15 lbs
- Quick pull-off valve stem cap
- 1,000 hours of lab testing at 160PSI