



Debris Collection Device Specifications

Description

The Debris Collection Device (DCD) shall be a polyethylene product manufactured by a rotational molding process. The DCD will sit inside a street storm grate casting but under the vane grate and is designed to not interfere with the load bearing capacity of the frames. The DCD shall be used during the construction phase of street or sewer projects and can then be moved to another project or kept permanently in place. The DCD will be manufactured with overflow holes in its sidewall to prevent ponding in the streets during large rain events, yet stop sediment and debris from entering the storm sewer lines. A 400 micron reusable geotextile bag will be placed in the baskets to trap fines from entering the system.

Purpose

Set in place, this DCD is designed to stop sediments, debris and fines from entering the manhole and clogging the sewer system.

Materials

The InfraSafe DCD shall be made of Linear Low Density Polyethylene (LL-8555/8556). LLDPE rotational-molding resins shall offer good stiffness and low temperature impact strength, excellent environmental stress crack resistance (ESCR) and warp resistance.

Characteristics *Fully Formulated, High Flow
 UV-4 Type*

Resin Properties

<i>Melt Index (g/10 min)</i>	6.8
<i>Density (g/cm³)</i>	0.935

Typical Physical Properties

<i>Tensile Strength</i>	
<i>@ Yield (2"/minute PSI)</i>	2450
<i>Ultimate Elongation (%)</i>	415
<i>ESCR - Condition B</i>	
<i>Hours F₅₀ (100% Igepal)</i>	>1000
<i>Flexural Modulus</i>	
<i>@ 1% Secant (PSI)</i>	84000
<i>Heat Distortion</i>	
<i>@ 66 PSI (° C)</i>	50
<i>ARM Impact</i>	
<i>1/8" Specimen (-40° C)</i>	52
<i>Standard Colors</i>	Grey

Codes and Standards

The InfraSafe Debris Collection Device meets the following codes and standards:

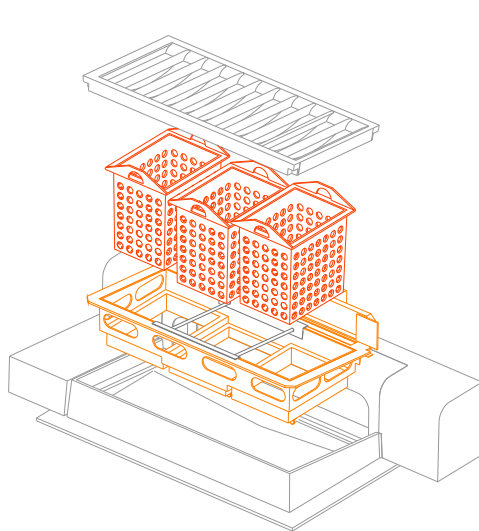
- FDA Requirements 21CFR 177.1520
- ASTM D 1893 Measurement of Physical Properties
- ASTM D 792/1505 Density of Polyethylene Materials
- ASTM D 968 Abrasion Test
- ASTM D 1248 Polyethylene Plastics Molding and Extrusion Materials
- ASTM D 1308 Chemical Resistance
- ASTM D 2152 Acetone Immersion

Product Accessories – Filter Fabric (400 micron)

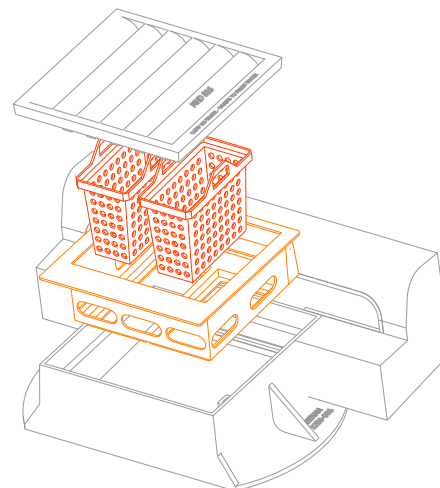
Mechanical Properties	Test Method	Unit	Typical Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D 4632	lbs	295	185
Trapezoid Strength	ASTM D 4533	lbs	80	60
Burst	ASTM D 3786	lbs	415	
Puncture	ASTM D 4833	lbs	108	
Water Flow	ASTM D 4491	gpm	100	
Apparent Opening Size (AOS)	ASTM D 4751	U.S. Sieve	40	
Shade		%	90	

Physical Properties	Test Method	Unit	Typical Value
Weight	ASTM D 5261	oz / sq yd	4.5
Thickness	ASTM D 5199	mils	11
Fiber Content			100% PP

Typical Details



2'x3' Debris Collection Device



2'x2' Debris Collection Device