



IntraFlow – Low-Profile Inside Drop Specifications

Part 1.00 – General

1.01 Description

- A. The IntraFlow Low-Profile Inside Drop System shall be a rotational molded; sectional enclosure made of Polyethylene (PE). The inside drop assembly shall contain, and direct sewage flow from the upper portion of the manhole to the invert channel. The sections shall be of low profile design with molded fastening lugs conforming to the inside manhole wall. The intermediate sections shall be supplied in three and four foot sections. The top section shall have a 9” adjustment joint at the bottom and removable inspection hood at the top. The inside of the top section shall have an opening for 4” through 12” pipe entry. The outside of the top section shall have a nominal 13” inspection / cleanout opening. The bottom section shall be elongated at the top with a transition to a 10” round pipe at the bottom. A 90° 10” PVC sweep shall attach to the bottom transition section. Sections shall be secured to the manhole wall through the fastening lugs using type 302 or 304 stainless steel anchor bolt assemblies.

1.02 Purpose

- A. The low-profile design of the IntraFlow System shall provide a safer entry and working environment for maintenance workers. The removable inspection hood allows maintenance workers easy access to both the incoming lateral and drop sections. The self-contained unit reduces the impact of corrosion thus prolonging the life expectancy of the manhole. Inside drops greatly reduce installation and maintenance costs associated with outside drop assemblies.

Part 2.00 – Products

2.01 Materials

- A. The IntraFlow Low-Profile Inside Drop System shall be made of Polyethylene (PE). 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 -

| | |
|-----------------------------------|--------------|
| Melt Index (g/10 min) | 6.8 |
| Density (g/cm³) | 0.935 |

Typical Physical Properties

| | |
|--------------------------------|------------------|
| Tensile Strength | |
| @Yield (2"/ minute PSI) | 2450 |
| Ultimate Elongation (%) | 415 |
| ESCR – Condition B | |
| Hours F50 (100% Igepal) | > 1000 |
| Flexural Modulus | |
| @1% Secant (PSI) | 8400 |

Heat Distortion

| | |
|------------------------------|-------------|
| @ 66 PSI (°C) | 50 |
| ARM Impact | |
| 1/8" Specimen (-40°C) | 52 |
| Standard Color | Gray |

Codes and Standards

- 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

Part 3.00 – Execution

3.01 Installation

- A. The IntraFlow Low-Profile Inside Drop System shall be securely fastened to the manhole wall using stainless steel anchor bolt assemblies. The stainless steel anchor bolt assemblies shall be type 302 or 304 stainless steel.

Dimensions

| | |
|--------------------------------------|----------------|
| Intermediate and top sections | ½" x 7" |
| Transition Section | ½" x 7" |