## NOVA**F@RM**™

Across North America, aging sewer and water infrastructure has reached a critical juncture. In many cases repair and replacement is long overdue, which has led to ever increasing operating costs for municipalities. As a result, the need for a durable and cost-efficient pipe rehabilitation solution has never been more paramount. The engineers at IPEX recognized this need and have responded with NovaForm<sup>TM</sup> PVC Liner, a product that brings the lasting benefits of factory-made PVC pipe to the North American trenchless pipe rehabilitation industry.

Being made from PVC, NovaForm PVC Liner is highly-resistant to chemicals and offers excellent abrasion- and scratch-resistance properties. The smooth interior surface of PVC translates into improved hydraulic properties as well. Best of all, PVC is a sustainable pipe material which means NovaForm provides an industry leading service life.

#### **ADVANTAGES**

1 Flexible, Durable, Reliable & Cost-Efficient

The finished NovaForm PVC Liner product provides the same proven benefits of standard PVC pipe.

2 Availability

From corroded sanitary sewers to deteriorated corrugated steel pipes in need of structural repair, NovaForm PVC Liner is available in the sizes 6" to 15" and industry-standard DR 35 and DR 41.

3 Trenchless Benefits

With NovaForm PVC Liner you benefit from the many advantages of a modern trenchless rehabilitation technology including: time savings, the ability for local businesses and roads to remain open during operation, potential cost savings and reduced environmental impact over traditional open-cut methods.

Factory Made & Quality Controlled

**Smooth Interior Surface** 

**Excellent Chemical Resistance** 

#### **APPLICATIONS**

- Sewer Rehabilitation
- Culbert Rehabilitation

#### **STANDARDS**



DID YOU KNOW?

Non-corroding and installation friendly PVC piping systems have become the material of choice for potable water and sewer infrastructure across North America

### SHORT FORM SPECIFICATIONS

#### **GENERAL**

NovaForm PVC Liner is available in sizes 150mm to 350mm (6" & 15").

The Pipe shall be made from PVC compound meeting all the requirements for cell classification of 12111 as defined in specification ASTM D1784 and with minimum physical properties.

#### **PRODUCT**

Pipe Flattening: There shall be no evidence of splitting, cracking or breaking when the rounded pipe is tested according to section 11.3 of ASTM F1871.

Pipe Impact Strength: The impact strength of rounded pipe shall not be less than the values when tested in accordance with test method D2444 as referenced in ASTM F1871.

#### PIPE STIFFNESS

Values for pipe stiffness for the rounded pipe shall comply when tested in accordance with test method D2412 as referenced in ASTM F1871.

#### **EXTRUSION QUALITY**

The extrusion quality of the pipe shall be evaluated by the following test methods:

**Acetone Immersion:** The pipe shall not flake or disintegrate when tested in accordance with test method D2152 as referenced in ASTM F1871.

**Heat Reversion:** The extrusion quality of the pipe shall be estimated by heat reversion method in accordance with practice F1057 as referenced in ASTM F1871.

Flexural Properties: The flexural strength and modulus of the pipe shall be tested in accordance with test method D790 as referenced in



Ratio

Lengths

**DIMENSIONS** 

Pipe Size



# SOLVENT WELD SEWER FITTINGS

3" - 8"

(76mm - 200mm) (200mm - 380mm)

IPEX offers a wide variety of moulded sewer fittings 3" in diameter and larger. Solvent welded fittings are typically installed in sanitary and drainage systems. Injection-moulded fittings are available in 3" to 8" sizes. Fabricated DR35 solvent weld sewer fittings are available in 8" to 15" sizes.

#### SOLVENT WELD VS. GASKETED JOINTS

Solvent welding is a process by which a joint is made by chemically fusing together a pipe and a fitting. A solvent is applied to the surface of a PVC pipe spigot and the inside of a matching bell. In some cases a primer may be used to prepare the surfaces. The solvent dissolves some of the chemical bonds in the PVC material, effectively "melting" the material. Once the two surfaces are pushed together the material from the two surfaces begin to fuse together. As the joint cures, the solvent evaporates and the joint becomes stronger, until it essentially becomes a continuous pipe.

Solvent welded joints are able to resist large tensile loads and will not pull apart. In fact, it can be shown that the pipe itself will fail before the joint will.

#### **APPLICATIONS**

- Gravity Flow Sanitary Sewers
- Storm Sewers
- Sewer Laterals

#### **STANDARDS**







182.1 File 2431

#### **ADVANTAGES**

1 Leak-Proof Joints

Properly installed DR35 solvent weld sewer fittings provide leakproof joints. This eliminates underground water infiltration and exfiltration. The results: substantial savings in sewage treatment costs for municipalities.

2 Superior Chemical Resistance

The chemical resistance of SDR35 sewer fittings is exceptional. Acids, alkalies and normally diluted hydrocarbons have little or no effect. Aggressive soil conditions due to sulfates, carbonates, industrial effluents and acid rain are easily

handled by DR35 solvent weld sewer fittings.

#### **Super Abrasion Resistance**

SDR35 solvent weld sewer fittings are highly resistant to abrasion, making them ideal for transporting abrasive effluent, even in high velocity storm sewer systems.



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#### PRODUCTION SELECTION CHART

	Dimension		sion	Product
	ir	nches	mm	Code
Extended Bushing S x H				
		6 x 4	150 x 100	040939
		8 x 4	200 x 100	040897
		8 x 6	200 x 150	040940
	*	10 x 4	250 x 100	040898
		10 x 6	250 x 150	040899
	*	10 x 8	250 x 200	040900
	*	12 x 6	300 x 150	040902
	*	12 x 8	300 x 200	040903
	*	12 x 10	300 x 250	040904
	*	15 x 10	375 x 250	040905
	*	15 x 12	375 x 300	040906
	*	18 x 12	450 x 300	040913
	*	18 x 15	450 x 375	040908
	* Fal	oricated Fitt	ing	

#### Reducer Bushing S x H



4 x 3	100 x 76	040933
6 x 4	150 x 100	040896

#### Reducer Bushing S x FPT



4 x 1-1/2 100 x 38 040416

#### **Adapter** (Sewer Spigot x DWV Hub)



	4	100	040728
	4 long	100 long	040808
	6	150	040729
*	18	450	040340

<sup>\*</sup> Fabricated Fitting

#### Adapter Bushing (Sewer Spigot x DWV Hub)



3 x 1-1/2	76 x 38	040932
3 x 2	76 x 50	040341
4 x 2	100 x 50	040935

Dimension		Product
inches	mm	Code

#### **Extended Adapter Bushing** (Sewer Spigot x DWV Hub)



4 x 3	100 x 76	040934
6 x 4	150 x 100	040941

#### Adapter Sleeve (Sewer Hub x DWV Spigot)



4	100	040342
12	300	040207

#### Cast Iron Spigot Adapter H x H



4 x 4 100 x 100 040704

#### Adapter Coupling (Sewer Hub x DWV Hub)



4 x 3	100 x 76	040655
4 x 4	100 x 100	040725
6 x 4	150 x 100	040727
6 x 6	150 x 150	040756

#### Male Adapter Hub x MPT



4 100 040723

#### Female Adapter Hub x FPT



	3	76	040948
	4	100	040949
	6	150	040952
	8	200	040945
*	10	250	040946
*	12	300	040947

<sup>\*</sup> Fabricated Fitting