## 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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		Dimension		Product
		inches	mm	Code
N	НхН			

#### 45° Elbow H x H



_				
		3	76	040502
		4	100	040504
		6	150	040506
		8	200	040508
	* ]	10	250	040407
	* 1	12	300	040409
	* ]	15	375	040410
	* 1	18	450	040411
	* 2	24	600	040399

<sup>\*</sup> Fabricated Fitting

#### 45° Elbow S x H



	3	76	040402
	4	100	040404
	6	150	040406
	8	200	040408
*	10	250	040412
*	12	300	040413
*	15	375	040414
*	18	450	040405

<sup>\*</sup> Fabricated Fitting

#### 22-1/2° Elbow H x H



	3	76	040963
	4	100	040964
	6	150	040969
	8	200	040970
*	10	250	040971
*	12	300	040973
*	15	375	040974
*	18	450	040042

<sup>\*</sup> Fabricated Fitting

#### 22-1/2° Elbow S x H



	4	100	040864
	6	150	040866
*	18	450	040977

<sup>\*</sup> Fabricated Fitting

Dimen	Product	
inches	inches mm	

#### Increaser Coupling H x H



ונ	ing	пхп			
		4 x 2	100 x 50	040656	
		4 x 3	100 x 76	040654	
		6 x 4	150 x 100	040661	
	*	8 x 4	200 x 100	040610	
		8 x 6	200 x 150	040611	
	*	10 x 4	250 x 100	040613	
	*	10 x 6	250 x 150	040614	
	*	10 x 8	250 x 200	040615	
	*	12 x 4	300 x 100	040616	
	*	12 x 6	300 x 150	040617	
	*	12 x 8	300 x 200	040618	
	*	12 x 10	300 x 250	040619	
	*	15 x 4	375 x 100	040620	
	*	15 x 6	375 x 150	040621	
	*	15 x 8	375 x 200	040622	
	*	15 x 10	375 x 250	040623	
	*	15 x 12	375 x 300	040627	
	*	18 x 10	450 x 250	040101	
	*	18 x 15	450 x 375	040630	
	*	21 x 18	600 x 450	040086	
	* Fabricated Fitting				

<sup>\*</sup> Fabricated Fitting

#### Coupling w Stop H x H



	2	50	040600
	3	76	040602
	4	100	040604
	6	150	040606
	8	200	040631
*	10	250	040608
*	12	300	040612
*	15	375	040609
*	18	450	040603
*	24	600	040078

<sup>\*</sup> Fabricated Fitting

#### Repair Coupling H x H



4	100	040624
6	150	040626