# SYSTEM XFR DRAINAGE SYSTEMS

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Contractors installing DWV pipe in high buildings and plenums had few alternatives to heavy cast iron and copper. IPEX has changed that. System XFR<sup>®</sup> is the world's first PVC DWV system rated for high buildings and air plenums where the National Building Code mandates more stringent Flame Spread and Smoke Development requirements which previously limited the use of thermoplastic.

Suitable for use in noncombustible environments, System XFR's advanced material has a Flame Spread Rating of 25 and Smoke Developed Classification of 50 which permits it to be installed in High Buildings and Air Return Plenums in accordance with local Codes.

And in addition to its flame and smoke attributes, System XFR delivers all the performance advantages you'd expect from thermoplastic piping.

## ADVANTAGES

## Flame & Smoke

System XFR possesses superior fire- and smoke- retardant capabilities. When tested to the CAN/ULC S102.2 Standard, System XFR achieved a Flame Spread Rating of not greater than 25 and a Smoke Developed Classification of not greater than 50.

## **Code Compliance**

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Ideal for noncombustible applications, System XFR meets these national and provincial building codes:

- High buildings as defined by NBC article 3.2.6
- Air plenums as defined by NBC article 3.6.4.3
- Noncombustible construction as defined by NBC article 3.1.5
- Penetrating a rated fire separation as defined by NBC article 3.1.9.4.(4)

## **High Impact Resistance**

Thanks to its advanced materials, System XFR demonstrates a high impact strength in cold temperatures. Impact-tested at 0 °C and 23 °C, XFR is tough enough to exceed the CSA requirements.

### Improved Flow

System XFR has a substantially lower roughness factor compared to metal systems, allowing for overall improved flow. It's also made with a larger inside diameter which provides a greater cross-sectional area for flow and raises both carrying capacity and flow rates. This feature gives engineers the versatility to design smaller, compact systems that can still handle the necessary flow rates.

## Lower Thermal Conductivity

System XFR sweats less than metal pipe due to its excellent insulating properties. As a result, XFR can reduce — and in many cases, eliminate — the need for insulation.

### Comparable Noise Attenuation

In real world sound tests performed on constructed buildings, IPEX DWV systems have proven to provide comparable noise attenuation when compared to cast iron from drainage flow. Numerous installations from schools to hospitals and nursing homes have been plumbed with these IPEX drainage systems, all proving that in these critical installations the IPEX systems measure up in terms of sound transfer.

### APPLICATIONS

Drain Waste and Vent Piping in:

- Commercial
  Industrial
- Residential
- Above ground or underground

## STANDARDS



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SYSTEM XFR — the world's first uncoated PVC rated for high buildings and plenums where tighter fire and smoke regulations have previously limited the use of thermoplastic.

Suitable for use in noncombustible environments, System XFR's advanced material meets all fire-resistance and smoke development codes. Its revolutionary fire-retardant properties virtually eliminate flame spread and reduce the volume of smoke generated.

## SHORT FORM SPECIFICATIONS

#### SYSTEM XFR DWV PIPE AND FITTINGS

IPEX System XFR Drain, Waste and Vent pipe and fittings shall be certified to CSA B181.2 and when used in noncombustible construction, high buildings and air plenums, they shall be tested and listed in accordance with CAN/ULC S102.2 and clearly marked with the certification logo indicating a Flame Spread Rating not more than 25 and a Smoke Developed Classification not exceeding 50.

System XFR® pipe and fittings have been tested and certified by CSA to the CSA B181.2 standard. System XFR pipe and fittings are listed with ITS (Warnock Hersey) to exhibit Flame and Smoke values as per CAN/ULC S102.2-10.

#### Test Results

ITS (Warnock Hersey) conducted the testing in accordance with CAN/ULC S102.2 test standard. The following table summarizes the results of these tests.

Component	Flame Spread Rating	Smoke-Developed Classification
System XFR®		
Pipe	≤ 25	≤ 50
Fittings	≤ 25	≤ 50
Fabricated PVC fittings with XFR Coating	≤ 25	≤ 50

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## **PRODUCT SELECTION CHART - SYSTEM XFR**

	Dimension		Product
	inches	mm	Code
Increaser Coupli	ng HxH		
	2 x 1-1/2	50 x 40	526362
	3 x 1-1/2	75 x 40	526363
	3 x 2	75 x 50	526364
_	4 x 1-1/2	100 x 40	526369
	4 x 2	100 x 50	526365
	4 x 3	100 x 75	526366
	5 x 3	125 x 75	526944
	6 x 4	150 x 100	526860
	8 x 4	200 x 100	526861
	8 x 6	200 x 150	526867
	10 x 4	250 x 100	526862
	10 x 6	250 x 150	526868
	10 x 8	250 x 200	526900
	12 x 6	300 x 150	526869
	12 x 8	300 x 200	526901
	12 x 10	300 x 250	526907

## **Reducer Bushing** Sp x H

	2 x 1-1/2	50 x 40	526282	
3 x 1-1/2      75 x 40        3 x 2      75 x 50        4 x 2      100 x 50        4 x 3      100 x 75	526292			
	3 x 2	75 x 50	526284	
	4 x 2	100 x 50	526288	
	4 x 3	100 x 75	526286	
	6 x 4	150 x 100	526054	
	8 x 4	200 x 100	526446	
	8 x 6	200 x 150	526447	

## **Reducer Bushing** (Extended) Sp x H

_	10 x 4	250 x 100	526296
	10 x 6	250 x 150	526297
	10 x 8	250 x 200	526962
	12 x 4	300 x 100	526963
	12 x 6	300 x 150	526964
	12 x 8	300 x 200	526965
	12 x 10	300 x 250	526966
	14 x 12	350 x 300	526913

Reducer Bushing	(Extended)	Sp x Sp	FOR USE WITH
$\sim$	10 x 8	250 x 200	526981
	12 x 8	300 x 200	526767
VIL Ô	12 x 10	300 x 250	526768

	inches	mm	Code
Male Adapter	Н х МРТ		
	1-1/2	40	526331
	2	50	526332
	3	75	526333

100

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## Female Adapter H x FPT

1-1/2	40	526341
2	50	526342
3	75	526343
4	100	526344

## Coupling H x H

1-1/2	40	526351
2	50	526352
3	75	526353
4	100	526354
6	150	526356
8	200	526358
10	250	526359
12	300	526360
14	350	526361
16	400	526367
18	450	526368

## Plastic MJ Spigot MJ Sp x H

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	2	50	526522
( (((())	3	75	526523
	4	100	526524

Adapts M-J Cast Iron Pipe to Plastic DWV Pipe

## P Trap Solvent Weld H x H

	1-1/2	40	526431
W)a	2	50	526432
plg	3	75	526433
	4	100	526434