

# Complete Drainage Systems for Noncombustible Buildings



**SYSTEM 15® DWV**

**SYSTEM XFR® DWV**

**DRAIN-GUARD™ DWV**

**MJ GREY™ DWV**



**D W V   S Y S T E M S**

- System 15® Pipe & Fittings
- System XFR® Pipe & Fittings
- Drain-Guard™ Double Containment
- MJ Grey™ Mechanical Couplings
- Firestop Systems
- Solvent Cements



**IPEX**  
Committed to Excellence

We build tough products for tough environments®

# System 15<sup>®</sup>, System XFR<sup>®</sup> and Drain-Guard<sup>™</sup>, the **TOP-TO-BOTTOM STANDARD** in Noncombustible Buildings

From parking garages to hospitals to high-rise buildings, more and more mechanical contractors and engineers are switching to a long-lasting DWV solution.

Why are DWV systems from IPEX becoming the new standard? As an integrated solution, they meet all code requirements for noncombustible buildings. More importantly, they provide the required rugged reliability with all the added

benefits of PVC. They're lighter than their metal counterparts, making them easier to handle and install. Very durable, they resist corrosion and require virtually no maintenance. And they yield substantial cost savings both now and down the road.

Clearly System 15<sup>®</sup>, System XFR<sup>®</sup> and Drain-Guard<sup>™</sup> have raised the bar—and pipe—for DWV systems in noncombustible buildings.



IPEX not only provides a superior alternative to cast iron, it is easy for a crew to transition their skill set from installing cast iron to PVC systems virtually overnight. With both onsite and online solvent cement training and 24/7 technical support, why go with any other DWV system?

SYSTEM XFR PVC DWV CAN/ULC S102.2 CSA B181.2 SYS

## DWV SYSTEM BENEFITS

### ✓ LIGHTWEIGHT, EASIER TO INSTALL

A PVC system is as much as 75% lighter than equivalent lengths of cast iron, making it easier to handle, store and install. It's so light no special equipment is needed to hoist it up during installation, making what used to be awkward, back-breaking work now an easy one-man job for smaller sizes. In this way, a PVC system can lower labour requirements and reduce installation costs.

### ✓ CORROSION RESISTANT, LESS MAINTENANCE

Unlike cast iron pipe, a PVC system doesn't rust, pit, scale or corrode. In fact, its interior and exterior walls remain smooth in virtually any service condition, requiring virtually no maintenance and ensuring years of reliable service.

### ✓ LONG-TERM SAVINGS

No matter how you look at it, a PVC system is more cost-effective than a traditional metal system. It's less costly to transport and store. It's easier to install, bringing down installation costs. It lasts longer. What this all adds up to is substantial savings now and in the future.

### ✓ A MORE AESTHETIC ALTERNATIVE

Sleek and streamlined, PVC presents a more pleasing, aesthetic alternative to traditional metal systems. And as they won't rust and degrade, your PVC system will look as good in ten years as it does the day you install it.

**SYSTEM 15® PVC DWV  
PIPE & FITTINGS**

**SYSTEM XFR® PVC DWV  
PIPE & FITTINGS**

**DRAIN-GUARD™ DOUBLE  
CONTAINMENT**

**MJ GREY™ MECHANICAL  
COUPLINGS**

**FIRESTOP PRODUCTS**

**SOLVENT CEMENTS**

**ONSITE TRAINING**

**SOLVENT CEMENT COURSES**

**ONLINE TECHNICAL  
LITERATURE/MANUALS**

**COMPREHENSIVE  
TECHNICAL SUPPORT**

**WORLD'S LARGEST  
PRODUCT OFFERING**

**50+ YEARS OF IPEX  
EXPERIENCE AND QUALITY**



# SYSTEM 15® DWV

Drainage Systems for Noncombustible Buildings

## THE ECONOMICAL CHOICE FOR CONTRACTORS & ENGINEERS

As an investment, System 15® is a winner. It's a cost-effective "workhorse" designed for the majority of low-rise and light commercial applications where DWV systems don't run through air plenums.

In addition to costing less than cast iron, System 15 pipe and fittings are engineered to withstand years of uninterrupted service. Made of tough, impact resistant PVC, System 15 will not corrode, even under continued exposure to moisture, salts, aggressive soils and most acids. Interior and exterior walls remain smooth, ensuring years of reliable, maintenance-free flow.

As well, System 15 is lightweight and easy to handle, making installation — even in confined or awkward wall spaces — fast and easy. There's no need to pay for special hoisting equipment or extra manpower. This all converts to significant cost savings over copper and cast iron piping.

Do the math: System 15 is an unbeatable, cost-effective investment — now and for years to come.

### FEATURES & BENEFITS



#### FLAME SPREAD

When tested to the CAN/ULC-S102.2 Standard, System 15 achieved a Flame Spread Rating of not greater than 25.

#### COST EFFECTIVE

Lightweight. Easy to handle. Fast installation with no special equipment required. Substantial project cost savings over traditional piping materials.

#### BROAD RANGE OF SIZES

CSA certified in sizes from 1-1/2" to 24" in diameter. The most extensive DWV package available in North America.

#### LONG-TERM RELIABILITY

System 15 performs well under constant use in harsh environments corrosive to other materials.

#### IMPACT RESISTANCE

The high impact strength of System 15 reduces jobsite damage and wastage.

#### SIMPLE JOINING

Solvent cementing eliminates the need for cumbersome tools and the hazards of torches on site.

#### DIRECT BURIAL

Suitable for both above- and below-grade applications, eliminating the transition to other pipe materials at grade level.



SYSTEM 15®

# SYSTEM XFR® DWV

Drainage Systems for Noncombustible Buildings

## THE WORLD'S FIRST PVC RATED FOR HIGH RISES & PLENUMS



Contractors installing DWV pipe in high buildings and plenums had few alternatives to heavy cast iron and copper. IPEX has changed

that. System XFR® 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.



### FEATURES & BENEFITS



#### FLAME & SMOKE

System XFR possesses superior fire- and smoke- retardant capabilities. When tested to the CAN/ULC-102.2 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

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

- High-rise 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)

#### RANGE OF SIZES

Sizes range from 1-1/2" to 12" in diameter.

#### 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.

# DRAIN-GUARD™ DWV

Drainage Systems for Noncombustible Buildings

## ENABLING IMPROVED SAFETY & RELIABILITY WITH SYSTEM 15® & SYSTEM XFR®

Drain-Guard™ double containment piping systems provide safe transport of sanitary or storm drainage in critical areas. Should a leak occur, people, equipment and valuable property will be protected from possible harm.

Drain-Guard provides the secure environment necessary for piping in vital areas of a wide variety of buildings, including hospitals, museums, historical sites, libraries, art galleries, theatres, data centres, restaurants, and arenas.

### THE PROBLEM

What would happen if there was a leak over a computer server room or a backup system causing significant loss of data? What if there was a drop of water on a rare renaissance oil painting? What if there was a plumbing leak above a new grand piano in a resident's condominium? Insurance may cover the costs associated with ceiling and property repairs, but it cannot recover valuable user data and priceless artifacts.

### THE SOLUTION

A double containment piping system is an engineered solution to the above concerns.



### FEATURES & BENEFITS



Depending on your application, Drain-Guard is a double containment piping system using System 15 and or System XFR as its primary components.

#### FLAME & SMOKE

Drain-Guard is listed to the CAN/ULC S102.2 Standard with a Flame Spread Rating of not greater than 25 and a Smoke Developed Classification of not greater than 50.

#### CODE COMPLIANCE

Drain-Guard conforms to the following National Building Code of Canada requirements.

- High-rise buildings as defined by NBC article 3.2.6
- Air plenums as defined by NBC article 3.6.4.3
- Non-combustible construction as defined by NBC article 3.1.5
- Combustible construction as defined by Part 9

#### RANGE OF SIZES

Carrier: 1-1/2" to 8"  
Containment: 4" to 12"  
(Larger sizes available upon request)

#### CERTIFICATION

Drain-Guard pipe and fitting components are third party certified to CSA B181.2

#### RELIABLE JOINTS

Double wall solvent weld joints set a new standard for joint-tightness in a DWV application.

#### LOWER CONDENSATION POTENTIAL

The excellent insulative properties of System 15 and System XFR are enhanced with the secondary pipe and air barrier. Thus, condensation potential is greatly reduced.

### APPLICATIONS INCLUDE:

- Healthcare/Hospital Use • Laboratory Applications
- Museums & Libraries • Historical Sites
- Theatres, Restaurants (Public Areas) • Residential Buildings
- High-Tech & Data Storage Environments (Network & Server Rooms etc.)
- and more...

# MJ GREY™ DWV

Drainage Systems for Noncombustible Buildings

## A GAME CHANGER THAT IS TAKING SYSTEM 15® & SYSTEM XFR® TO NEW HEIGHTS

IPEX is proud to bring more jobsite relief to your crew by introducing MJ Grey™ Mechanical Couplings to the “System” family.

Certified to CSA B602 and listed to ULC 102.2, MJ Grey mechanical couplings are available in 8", 10" and 12" sizes. On large diameter joints, mechanical couplings are a great alternative to solvent cementing when working in cold weather conditions or at heights in a scissor lift or bucket. MJ Grey couplings do allow for limited joint deflection to help accommodate small degrees of misalignment during installation.



### FEATURES & BENEFITS



- ✓ Available in 8", 10" & 12"
- ✓ Designed specifically for system 15 & System XFR PVC DWV
- ✓ Certified to B602 & LISTED TO ULC 102.2-10 for flame spread rating / smoke development classification limits of 25/50
- ✓ Stainless steel band with a grey rubber gasket

## SAFETY, SECURITY, PROTECTION

### FIRESTOPPING PRODUCTS

Whatever the installation – concrete floor, concrete wall, Q-Deck, wood frame, drywall or core slab construction – IPEX offers a wide range of firestop products certified for use with System 15 and/or System XFR. These products include straps, collars and cast-in-place devices as well as caulks and sealants. Installers are advised to read firestop manufacturer listings carefully for exact piping products included in each listing.



### LEED COMPLIANT, SYSTEM 15 & XFR SOLVENT CEMENT

IPEX offers a variety of cements to ensure easy installation and a good joint every time. System 15 and System XFR cements are formulated to the highest standards and manufactured with the strictest quality control. We also offer low VOC solvent cements that comply with LEED building standards.



## SALES AND CUSTOMER SERVICE

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### About the IPEX Group of Companies

As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centres across North America, we have earned our reputation for product innovation, quality, end-user focus and performance.

Markets served by the IPEX Group of Companies include:

- Electrical systems
- Telecommunications and utility piping systems
- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings

System 15<sup>®</sup>, System XFR<sup>®</sup>, MJ Grey<sup>™</sup> and Drain-Guard<sup>™</sup> are manufactured by/for IPEX Inc.

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A policy of ongoing product improvement is maintained. This may result in modifications of features and/or specifications without notice.

