

DRAINAGE SYSTEMS FOR NONCOMBUSTIBLE BUILDINGS

SYSTEM 15® DWV DRAIN-GUARD™ DWV

SYSTEM XFR® DWV MJ GREY™ DWV

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

Why are PVC systems from IPEX becoming the new standard? As an integrated solution, System 15® and System XFR® 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 and System XFR have raised the bar—and pipe—for DWV systems in noncombustible buildings.

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.

Depending on your application, Drain-Guard is a double containment piping system using System 15 and/or System XFR as its primary components. The many performance benefits of System 15 and System XFR are enhanced by this dual pipe concept.

MJ Grey™ mechanical couplings are a great alternative to solvent welding when working in cold weather conditions or from heights in a scissor lift or bucket.

APPLICATIONS

Drain Waste and Vent Piping in:

- Commercial
- Residential
- Above ground or underground
- Industrial

STANDARDS



CSA B181.2
CAN/ULC S102.2

ADVANTAGES

1 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. In this way, a PVC system can lower labour requirements and reduce installation costs.

2 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.

3 Cost-Savings Now and Over Long-term

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.

4 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.



CODE COMPATIBILITY

System 15 pipe and fittings, when used in combination with System XFR, not only satisfies National and Provincial Building Codes but also provides a cost effective trouble-free long-term installation.

- To use thermoplastic piping in a building classified as noncombustible, the material must meet a Flame Spread Rating of 25 or less. Approval to use thermoplastic piping in noncombustible buildings is detailed in clause 3.1.5.16 of the building code.
- Products for use within air plenums must meet a Flame Spread of 25 or less and a Smoke Developed Classification of 50 or less. (Building Code article 3.6.4.3. (1).)
- Products to be used within a building deemed to be high-rise must also meet the Smoke Developed Classification of 50 or less. (Building Code article 3.2.6).
- The fire resistance rating of a material is attained by having the product tested according to a prescribed test method. National and Provincial Codes specify the test requirements in 3.1.12.1.(2). In the case of thermoplastic piping the prescribed test method is CAN/ULC S102.2.

By using System 15 and System XFR in combination, designers and contractors can maximize the potential installation and cost benefits offered by these two products.

System 15®

System 15 meets the general requirements of noncombustible construction. However, System 15 is not approved for use in air plenums (transitions to System XFR are acceptable here) or buildings classified as high-rise. System 15 also is a viable option for a more rugged underground storm or sanitary drain on the private side of commercial buildings.

System XFR®

System XFR meets the requirements for noncombustible buildings, and the further restrictions of smoke development for air plenums and high rise buildings.

In high-rise buildings, System XFR must be used throughout the building to satisfy the requirement for a 50 Smoke Developed Criterion.

Drain-Guard™

Drain-Guard is our latest innovation to the System 15 and System XFR family of products. The many performance benefits of System 15 and System XFR are enhanced by this dual pipe concept.

Contact IPEX for product availability and pricing for a customized solution on your next project.

MJ Grey™

Meets all the same requirements of System 15 and System XFR and can be used in the same applications.

Note: Combustible DWV piping products are not allowed in a vertical service space.



SYSTEM 15 DRAINAGE SYSTEMS

1-1/2" - 24" (40mm - 600mm)

SYSTEM 15® DWV

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 won't rust, pit, scale or degrade, 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.

ADVANTAGES

- 1 Flame Spread**
When tested to the CAN/ULC S102.2 Standard, System 15 achieved a Flame Spread Rating of not greater than 25.
- 2 Cost Effective**
Lightweight. Easy to handle. Fast installation with no special equipment required. Substantial project cost savings over traditional piping materials.
- 3 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.
- 4 Long-term Reliability**
System 15 performs well under constant use in harsh environments corrosive to other materials.
- 5 Impact Resistance**
The high impact strength of System 15 reduces jobsite damage and wastage.
- 6 Simple Joining**
Solvent welding eliminates the need for cumbersome tools and the hazards of torches on site.
- 7 Direct Burial**
Suitable for both above- and below-grade applications, eliminating the transition to other pipe materials at grade level.

APPLICATIONS

Drain Waste and Vent Piping in:

- Commercial
- Industrial
- Residential
- Above ground or underground

STANDARDS



CSA B181.2
CAN/ULC S102.2





DID YOU KNOW?

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



SHORT FORM SPECIFICATIONS

SYSTEM 15 DWV PIPE AND FITTINGS

IPEX System 15 Drain, Waste and Vent pipe and fittings shall be certified to CSA B181.2. When combustible pipe and fittings are used in buildings required to be of noncombustible construction, they shall be listed by ULC to the Standard CAN/ULC S102.2 and clearly marked with the certification logo indicating a Flame Spread Rating not exceeding 25.

IPEX System 15[®] pipe and fittings have been tested and certified by CSA to the CSA B181.2 standard.

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 15[®]		
Pipe	10	> 50
Fittings	15	> 50

PRODUCT SELECTION CHART - SYSTEM 15

Dimension	Product Code	
	inches	mm

45° Wye H x H x H



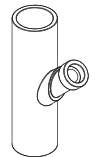
Dimension	inches	mm	Product Code
1 1/2	40		026171
2	50		026172
2 x 1-1/2 x 1-1/2	50 x 40 x 40		026194
2 x 1-1/2	50 x 50 x 40		026195
3	75		026173
3 x 1-1/2	75 x 75 x 40		026201
3 x 2	75 x 75 x 50		026196
4	100		026174
4 x 2	100 x 100 x 50		026198
4 x 3	100 x 100 x 75		026197
6	150		026175
6 x 4	150 x 150 x 100		026199
8	200		026560
8 x 4	200 x 100		026606
8 x 6	200 x 150		026607
10	250		026706
10 x 4	250 x 100		026703
10 x 6	250 x 150		026704
10 x 8	250 x 200		026705
12 x 4	300 x 100		026707
12 x 6	300 x 150		026708
12 x 8	300 x 200		026709
12 x 10	300 x 250		026710
12	300		026711
14 x 4	350 x 100		026712
14 x 6	350 x 150		026713
16 x 4	400 x 100		026718
16 x 6	400 x 150		026719
18 x 4	450 x 100		026725
18 x 6	450 x 150		026726

45° Wye Sp x H x H



3	75	026635
---	----	--------

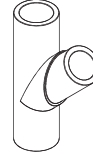
45° Wye Sp x Sp x H



			FOR USE WITH MJ GREY™
8 x 4	200 x 100		226926
8 x 6	200 x 150		226927
10 x 4	250 x 100		226930
10 x 6	250 x 150		226929
12 x 4	300 x 100		226933
12 x 6	300 x 150		226935

Dimension	Product Code	
	inches	mm

45° Wye Sp x Sp x Sp



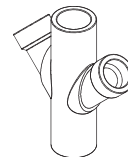
			FOR USE WITH MJ GREY™
8	200		226928
10 x 8	250 x 200		226931
10	250		226932
12 x 8	300 x 200		226936
12 x 10	300 x 250		226937
12	300		226938

Double 45° Wye H x H x H x H



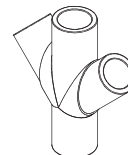
1 1/2	40		026637
2	50		026456
2x2x1-1/2x1-1/2	50x50x40x40		026642
3	75		026639
3x3x1-1/2x1-1/2	75x75x40x40		026643
3 x 3 x 2 x 2	75x75x50x50		026644
4 x 4 x 3 x 3	100x100x75x75		026457
6 x 4	150 x 100		026646
8	200		026755
8 x 4	200 x 100		026753
8 x 6	200 x 150		026754
10 x 4	250 x 100		026756
10 x 6	250 x 150		026757
10 x 8	250 x 200		026758
12 x 4	300 x 100		026760
12 x 6	300 x 150		026761
12 x 8	300 x 200		026762
12 x 10	300 x 250		026763
14 x 4	350 x 100		026765
14 x 6	350 x 150		026766
16 x 4	400 x 100		026771
16 x 6	400 x 150		026772
18 x 4	450 x 100		026778
18 x 6	450 x 150		026779

45° Double Wye Sp x Sp x H x H



8 x 4	200 x 100		226954
8 x 6	200 x 150		226916
10 x 4	250 x 100		226917
10 x 6	250 x 150		226919
12 x 4	300 x 100		226922
12 x 6	300 x 150		226923

45° Double Wye Sp x Sp x Sp x Sp



8	200		226918
10	250		226921
10 x 8	250 x 200		226920
12 x 8	300 x 200		226924
12 x 10	300 x 250		226925