Submittal Data Sheet

SYSTEM XFR° DWV DRAIN-GUARD" DWV MJ GREY" DWV SYSTEM 15° DWV



Project:	
Engineer:	
Contractor:	
Submitted by:	Date
Approved by:	Date
Order No:	Date
Specification:	Date

< STANDARDS >

System 15®





CAN/ULC S102.2

System XFR®



B181.2



CAN/ULC S102.2

Drain-Guard™ **Double Containment**

Depending on your application, Drain-Guard meets the same requirements of System 15 and

MJ Grey™ Mechanical Couplings Used with System 15 and/or System XFR





S102.2

introduction

PVC is the most frequently specified of all thermoplastic piping materials. It has been used successfully for over 60 years. PVC is characterized by distinctive physical properties, and is resistant to corrosion and chemical attack by acids, alkalis, salt solutions and many other chemicals.

PRODUCT SIZES

System 15® System XFR®	1-1/2" - 24" (40mm - 600mm) 1-1/2" - 18" (40mm - 450mm)
	Depending on your application, Drain-Guard is a double containment piping system using System 15 and or System XFR as its primary components.
Drain-Guard™	Carrier: 1-1/2" – 8" (40mm – 200mm Containment: 4" – 12" (100mm – 300mm) (Larger sizes available upon request)
M I C . TM	1-1/2" - 18" (40mm - 450mm)* for DWV to DWV connections
MJ Grey™	1-1/2" - 6" (40mm - 150mm) for CI to DWV connections

^{*} MJ Grey couplings are suitable only for use with System 15 and System XFR pipe and fittings.



by aliaxis

Products manufactured by/for IPEX Inc.

Product Data Sheet

PRODUCT INTRODUCTION

System 15°, System XFR° and Drain-Guard™ by IPEX are compatible product lines designed for use in Drain, Waste and Vent (DWV) applications for buildings designated as noncombustible construction.

While both thermoplastic systems meet the demanding Flame Spread Rating requirements for noncombustible construction, System XFR also meets the Smoke Developed Classification requirements for installation in high buildings and air plenum spaces.

System 15®

System 15 DWV is certified to CSA B181.2, made to Schedule 40 thickness and exhibits a Flame Spread Rating of not greater than 25 as per ULC S102.2 test methods. With some restrictions, System 15 is permitted for use in many commercial DWV applications.

System 15® vs ABS

System 15 is a premium choice for DWV piping versus either ABS solid wall or cell core pipe. System 15 will provide designers and building owners with 40% greater tensile strength, 40% lower expansion contraction movement, greater chemical resistance, less noise generation and superior fire resistance than ABS.

System XFR®

System XFR DWV is also certified to CSA B181.2 and made to Schedule 40 thickness. System XFR is listed to ULC S102.2 to exhibits a Flame Spread Rating of not greater than 25 as well as a Smoke Developed Classification of not greater than 50. Having this makes System XFR permissible for use in High Buildings (as defined in NBC section 3.2.6) and Air Plenums (section 3.6.4.3).

Drain-Guard™ Double Containment

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, including excellent thermal properties, improved flow, longevity and durability, and the security of meeting all code requirements for noncombustible buildings.

Drain-Guard 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.

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

MJ Grey™ Mechanical Couplings

MJ Grey couplings are a mechanical joint assembly only suitable for use on IPEX System 15 or System XFR DWV piping sizes 1-1/2" through 18" for DWV to DWV connections and 1-1/2" through 6" for CI to DWV connections. They are certified to CSA B602 and are listed to ULC S102.2-10 to exhibit a Flame/Smoke rating of 25/50.

Products manufactured by/for IPEX Inc.

Material Description

DESIGN AND INSTALLATION

The design and installation of PVC systems shall be performed in accordance with the recommendations detailed in the Handling and Installation section of this Submittal Data Sheet, local and national regulations where applicable.

To ensure the full integrity of the completed system, all components shall be supplied by IPEX.

VISUAL ID

From a distance, there are some differences in appearance between System 15 and System XFR to help with their identification.

The photo below shows the position of one of two labels on System XFR fittings and a close-up of information printed on the label.

Description	System 15	System XFR
Colour	Light grey	Dark grey
Pipe Print Line	Black	Green
Fitting Labels	White	Green







MJ Grey couplings can be easily differentiated from standard cast iron couplings by noting that the rubber interior sleeve is grey in colour (versus the traditional black colour) and exterior identification labels showing the System XFR trade name and the Flame and Smoke values as per ULC S102.2.

Dimensions and Weights

Pipe Dimensions

The physical dimensions and tolerances of System 15 and System XFR pipe and fittings meet the requirements of CSA B181.2.

System15® & System XFR® Pipe Dimensions

Cyclonno	a by otom / in it	ipo Birrioriolorio
Diameter (in.)	Avg. Outside Diameter (in.)	Impact Resistance ft.lb at 0°C
1-1/2	1.9	52
2	2.4	66
3	3.5	85
4	4.5	100
6	6.6	100
8	8.6	130
10	10.8	140
12	12.8	150
14	14.0	165
16	16.0	175
18	18.0	200
20	20.0	220
24	24.0	220

NOTES:

- · System XFR is now available up to 18" diameter
- System XFR is made in 12 foot lengths only for all sizes
- System 15 pipe lengths of 12 foot are plain end while 20 foot lengths of pipe are solvent bell ended
- System 15 24" diameter pipe is not ULC Listed for a Flame Spread Rating

Pipe Weight

Weight differences between various materials can influence a project significantly. During handling and installation, heavier piping products may incur additional costs for the extra manpower and equipment. Other effects of heavier systems may include reduced daily production levels, and impact on worker safety and fatigue.

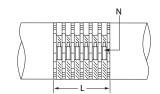
The table below compares the weights of three more commonly specified DWV piping materials.

Weight Comparison

Size		em 15® tem XFR®	Cas	t Iron
(in.)	(lb/ft)	(kg/m)	(lb/ft)	(kg/m)
1-1/2	0.4	0.5	2.7	4.0
2	0.5	0.7	3.7	5.5
3	1.0	1.5	5.0	7.5
4	1.5	2.2	7.0	10.4
6	2.6	3.8	11.5	17.1
8	3.8	5.7	16.0	23.8
10	5.4	8.1	25.5	38.0
12	7.2	10.7	30.0	44.7
14	8.5	12.7	-	-
15	-	-	52.5	78.2
16	11.2	16.6	-	-
18	14.1	21.0	-	-
20	16.5	24.6	_	-
24	23.0	34.3	-	-

MJ Grey™ Dimensions

Coupling Size	Length (L)	N
(inches)	(inches)	Number of Clamps
1-1/2	4.0	4
2	4.0	4
3	4.0	4
4	4.0	4
6	6.0	6
8	6.0	6
10	6.0	6
12	6.0	6
14	8.0	8
16	8.0	8
18	8.0	8



Products manufactured by/for IPEX Inc.

Product Availability

Dimension		Product
inches	mm	Code

Dime	on	Product
inches	mm	Code

System 15 DWV Pipe

	1-1/2	40	010001
	2	50	010002
	3	75	010003
Plain End	4	100	010004
12 foot lengths	6	150	010006
	8	200	010087
	10	250	010088
	12	300	010089
	* 4	100	010016
	* 6	150	010007
Bell End 20 foot lengths	8	200	010008
	10	250	010010
	12	300	010012
	14	350	010031
	16	400	010032
	18	450	010034
	20	500	010035
	24	600	010036
	* Sizes 4" and 6" k	ov 20 ft System 15	5 pipe sold in

Western Canada only.

Fitting Cleanout Sp x Gasket Threaded Plug



1-1/2	40	026345
2	50	026346
3	75	026347
4	100	026348
6	150	026349
8	200	026301

Tube End Cleanout H x Gasket Plug



1-1/2	40	026291
2	50	026298
3	75	026299
4	100	026300

Sanitary Tee HxHxH



1-1/2	40	026081
2	50	026082
2 x 1-1/2 x 1-1/2	50 x 40 x 40	026058
2 x 1-1/2 x 2	50 x 40 x 50	026057
2 x 2 x 1-1/2	50 x 50 x 40	026056
3	75	026083
3 x 3 x 1-1/2	75 x 75 x 40	026061
3 x 3 x 2	75 x 75 x 50	026060
4	100	026084
4 x 4 x 2	100 x 100 x 50	026064
4 x 4 x 3	100 x 100 x 75	026066
6	150	026377
6 x 6 x 4	150 x 150 x 100	026385
8	200	026810
8 x 4	200 x 100	026808
8 x 6	200 x 150	026809
10	250	026814
10 x 4	250 x 100	026811
10 x 6	250 x 150	026812
10 x 8	250 x 200	026813
12	300	026819
12 x 4	300 x 100	026815
12 x 6	300 x 150	026816
12 x 8	300 x 200	026817
12 x 10	300 x 250	026818
14	350	026825
14 x 4	350 x 100	026820
14 x 6	350 x 150	026821
14 x 8	350 X 200	026822
14 x 12	350 X 300	026824
16	400	026832
16 x 4	400 x 100	026826
16 x 6	400 x 150	026827
16 x 8	400 x 200	026828
16 x 10	400 x 250	026829
16 x 12	400 x 300	026830
16 x 14	400 x 350	026831
18 x 4	450 x 100	026833
18 x 6	450 x 150	026834

Line Cleanout HxHx Gasket Plug



1-1/2	40	026040
2	50	026041
3	75	026103
4	100	026104
4 x 3 x 4	100 x 75 x 100	026105
6	150	026161



Line Cleanout	Sp x Sp x Th	readed Plug	MJ GREY
	8	200	226953

Plug Cleanout MPT with Gasket



1-1/2	40	026401
2	50	026402
3	75	026403
4	100	026404
6	150	026405

Fitting Cleanout Sp x FPT



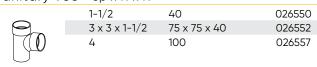
2	50	026046
3	75	026047
4	100	026048
6	150	026050

Products manufactured by/for IPEX Inc.

Product Availability

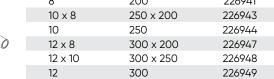
Dime	Product	
inches mm		Code

Sanitary Tee Sp x H x H

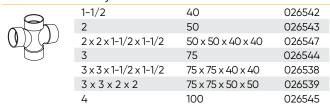


Sanitary Tee	· Sp x Sp x H		FOR USE WITH MJ GREY
	8 x 4	200 x 100	226955
	8 x 6	200 x 150	226940
	10 x 4	250 x 100	226939
	10 x 6	250 x 150	226942
	12 x 4	300 x 100	226945
	12 x 6	300 x 150	226946

Sanitary Tee Sp x Sp x Sp Sp MJ GREY 8 200 226941 10 x 8 250 x 200 226943



Double Sanitary Tee HxHxHxH



Sanitary Tee Side Inlet (left hand) H x H x H x H SI

arn car y	roo orao mnot	(IOTE HATIA) TIXTIX	
	3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 40	026395
	3 x 3 x 3 x 2	75 x 75 x 75 x 50	026396

Sanitary Tee Side Inlet (right hand) H x H x H x H SI

0	3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 40	026397
0	3 x 3 x 3 x 2	75 x 75 x 75 x 50	026398

Double Sanitary Tee Side Inlet H x H x H x H x H SI

3 x 3 x 3 x 3 x 1-1/2 75 x 75 x 75 x 75 x 40 026336



90° Elbow HxH



11/2	40	026121
1-1/2 L	40 L	026024
2	50	026035
2 L	50 L	026122
3	75	026025
3 L	75 L	026123
4	100	026124
6	150	026125
8	200	026126
10	250	026127
12	300	026128
14	350	026129
16	400	026130
18	450	026131

90° Elbow SpxH



1-1/2	40	026231
2	50	026232
3	75	026233
4	100	026234
6	150	026235
8	200	026236
10	250	026237
12	300	026238
14	350	026135
16	400	026136
18	450	026137

90° Elbow Sp x Sp



,	x Sp		MJ GREY
	8	200	226934
	10	250	226908
	12	300	226909
	14	350	226871
	16	400	226872
	18	450	226873

90° Reducing Elbow Closet Bend Reducing Sp x H



4 x 3

100 x 75

026026

90° Reducing Elbow HxH



4 x 3

100 x 75

026155

Product Availability

	Dime	noion			Dime	ension	
			Product				Product
	inches	mm	Code		inches	mm	Code
90° Elbow Ext	ra Long Swee	р НхН		22-1/2° Elbow	$H \times H$		
	2	50	026157		1-1/2	40	026251
	2	30	020137		2	50	026252
					3	75	026253
					4	100	026254
60° Elbow Hx	ы				6	150	026255
OO LIDOW II X		/ 0	02/2/1		8	200	026256
	1-1/2	40	026261		10	250	026257
	2	50	026262		12	300	026258
	3 4	75 100	026263		16	400	026260
	4	100	026264				
45° Elbow - Sh	ort Turn H	x H		22-1/2° Elbow	Sp x H		
43 LIDOW 31	1-1/2	40	026241		6	150	026651
	2	50	026241		8	200	026652
	3	75	026242		10	250	026653
	4	100	026244		12	300	026654
	6	150	026244		14	350	026655
	8	200	026246		16	400	026656
	10	250	026247				
	12	300	026248				FOR USE WITH
	14	350	026249	22-1/2° Elbow	- Short Tur	n SpxSp	MJ GREY
	16	400	026250		8	200	226913
	18	450	026425		10	250	226914
	10	400	020-25		12	300	226915
/ F 2 F 11 O1							
45° Elbow - Sh	nort Turn Sp	хН		11-1/4° Elbow	НхН		
	1-1/2	40	026221	11 1/ 4 E186W	6	150	026671
	2	50	026071		8	200	026672
	3	75	026223		10	250	026673
	4	100	026072		12	300	026674
	6	150	026073		14	350	026675
	8	200	026226		16	400	026676
	10	250	026270		10	400	020070
	12	300	026271	/			
	14	350	026272	11-1/4° Elbow	Sp x H		
	16	400	026273		6	150	026681
	18	450	026274		8	200	026682
					10	250	026683
			FOR USE WITH		12	300	026684
45° Elbow - Sh	ort Turn Sp	x Sp	MJ GREY		14	350	026685
	8	200	226910	_	16	400	026686
	10	250	226911				
	12	300	226912				
\mathcal{I}	14	350	226773				
	16	400	226774				

Products manufactured by/for IPEX Inc.

450

226775

Product Availability

Dimension		Product
inches	mm	Code

Dimension		Product
inches	mm	Code

45° Wye HxHxH



Η	x H x H		
	11/2	40	026171
	2	50	026172
	$2 \times 1 - 1/2 \times 1 - 1/2$	50 x 40 x 40	026194
	2 x 2 x 1-1/2	50 x 50 x 40	026195
	3	75	026173
	$3 \times 3 \times 1 - 1/2$	75 x 75 x 40	026201
	3 x 3 x 2	75 x 75 x 50	026196
	4	100	026174
	4 x 4 x 2	100 x 100 x 50	026198
	4 x 4 x 3	100 x 100 x 75	026197
	6	150	026175
	6 x 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	300	026711
	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
	14	350	026717
	14 x 4	350 x 100	026712
	14 x 6	350 x 150	026713
	14 x 8	350 x 200	026714
	14 x 10	350 x 250	026715
	14 x 12	350 x 300	026716
	16	400	026724
	16 x 4	400 x 100	026718
	16 x 6	400 x 150	026719
	16 x 8	400 x 200	026720
	16 x 10	400 x 250	026721
	16 x 12	400 x 300	026722
	18 x 4	450 x 100	026725
	18 x 6	450 x 150	026726
		450 x 150	

45° Wye SpxHxH



45° Wye Sp x Sp x H

8 x 4 200 x 100 226926

8 x 6 200 x 150 226927

026635

,.	op x op x	47.	. OILL
	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
$\overline{}$			

45° Wye Sp x Sp x Sp



sp x sp x sp		
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
14	350	226145
14 x 4	350 x 100	226140
14 x 6	350 x 150	226141
14 x 8	350 x 200	226142
14 x 10	350 x 250	226143
14 x 12	350 x 300	226144
16	400	226152
16 x 4	400 x 100	226146
16 x 6	400 x 150	226147
16 x 8	400 x 200	226148
16 x 10	400 x 250	226149
16 x 12	400 x 300	226150
16 x 14	400 x 350	226151
18	450	226160
18 x 4	450 x 100	226153
18 x 6	450 x 150	226154
18 x 8	450 x 200	226155
18 x 10	450 x 250	226156
18 x 12	450 x 300	226157
18 x 14	450 x 350	226158
18 x 16	450 x 400	226159

Product Availability

Dimension		Product
inches	mm	Code

Dimension		Product
inches mm		Code

Double 45° Wye HxHxHxH



O VVyC IIXIIX	11 A 11	
1-1/2	40	026637
2	50	026456
2 x 2 x 1-1/2 x 1-1/2	50 x 50 x 40 x 40	026642
3	75	026639
3 x 3 x 1-1/2 x 1-1/2	75 x 75 x 40 x 40	026643
3 x 3 x 2 x 2	75 x 75 x 50 x 50	026644
4 x 4 x 3 x 3	100 x 100 x 75 x 75	026457
6	150	026752
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	300	026764
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	350	026770
14 x 4	350 x 100	026765
14 x 6	350 x 150	026766
14 x 8	350 x 200	026767
14 x 10	350 x 250	026768
14 x 12	350 x 300	026769
16	400	026777
16 x 4	400 x 100	026771
16 x 6	400 x 150	026772
16 x 8	400 x 200	026773 026774
16 x 10	400 x 250	
16 x 12 16 x 14	400 x 300 400 x 350	026775 026776
18 x 4	450 x 100	026778
18 x 6	450 x 150	026779

45°	Double	Wve	SpxSpxHxH



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

Reducer Coupling HxH



 9 11 / 11		
2 x 1-1/2	50 x 40	026362
3 x 1-1/2	75 x 40	026363
3 x 2	75 x 50	026364
4 x 1-1/2	100 x 40	026369
4 x 2	100 x 50	026365
4 x 3	100 x 75	026366
6 x 4	150 x 100	026860
8 x 4	200 x 100	026861
8 x 6	200 x 150	026867
10 x 4	250 x 100	026862
10 x 6	250 x 150	026868
10 x 8	250 x 200	026900
12 x 10	300 x 250	026907
14 x 12	350 x 300	026913

Reducer Bushing Sp x H



•	9 00 7 11		
	2 x 1-1/2	50 x 40	026282
	3 x 1-1/2	75 x 40	026292
	3 x 2	75 x 50	026284
	4 x 2	100 x 50	026288
	4 x 3	100 x 75	026286
	6 x 4	150 x 100	026054
	8 x 4	200 x 100	026446
	8 x 6	200 x 150	026447

Reducer Bushing (Extended) Sp x H



10 x 8	250 x 200	026962
12 x 10	300 x 250	026966
14 x 12	350 x 300	026971

Reducer Bushing (Extended) Sp x Sp **MJ GREY**10 x 8 250 x 200 226950



10 x 8	250 x 200	226950
12 x 8	300 x 200	226951
12 x 10	300 x 250	226952
14 x 10	350 x 250	226134
14 x 12	350 x 300	226135
16 x 12	400 x 300	226136
16 x 14	400 x 350	226137
18 x 14	450 x 350	226138
18 x 16	450 x 400	226139

Product Availability

Dimension		Product
inches	mm	Code

Dimension Product Code inches

100 x 75

Reducer Bushing (Dishwasher Bushing) Sp x FPT



1-1/2 x 1/2	40 x 12	026277
1-1/2 x 3/4	40 x 20	026278

Plastic Sewer Hub $H \times H$



Adapts Plastic Sewer Pipe to Plastic DWV Pipe

026376

Reducer Bushing Sp x H



4 x 3	100 x 75	026294

Adapts Plastic Sewer Ftg. to Plastic DWV Pipe

Plastic M-J Spigot MJ Sp x H



2	50	026522
3	75	026523
4	100	026524
4 x 3	100 x 75	026535

Adapts M-J Cast Iron Pipe to Plastic DWV Pipe

Adapter Sleeve



2	50	026310
3	75	026311
4	100	026312
6	150	026313

Adapts Plastic DWV Ftg. to Plastic Sewer Pipe

P Trap Solvent Weld H x H



1-1/2	40	026431
2	50	026432
3	75	026433
4	100	026434
4 x 3	100 x 75	026669

Male Adapter H x MPT



11 X 1 11 1		
1-1/2	40	026331
2	50	026332
3	75	026333
/,	100	02677/

P Trap Solvent Weld with Cleanout H x H



	1-1/2	40	026441
	2	50	026442
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Female Adapter HxFPT



1-1/2	40	026341
2	50	026342
3	75	026343
4	100	026344

P Trap Union Connection H x H



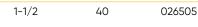
1-1/2	40	026443
2	50	026444

Coupling HxH



1-1/2	40	026351
2	50	026352
3	75	026353
4	100	026354
6	150	026356
8	200	026358
10	250	026359
12	300	026360
14	350	026361
16	400	026367
18	450	026368

Union Connection with Cleanout H x H





U Bend HxH

- –

3	75	026498
4	100	026499
6	150	026503

Product Availability

Dimension		Product
inches	mm	Code

Dimension Product Code inches mm

Fitting Trap Adapter Plastic Nut & Washer Sp x Slip Joint



1-1/2	40	026304
2	50	026305

Closet Flange One Piece Plastic Slip with Spigot End 100 x 75 026592

Pipe Trap Adapter Plastic Nut & Washer H x Slip Joint



1-1/2	40	026321
1-1/2 x 1-1/4	40 x 32	026329
2	50	026328

Closet Flange One Piece Plastic Slip with Molded Test Plate 4 x 3 100 x 75



90° Pipe Trap Adapter H x Slip Joint



-1/2 x 1-1/2	40 x 40	026330

Closet Flange One Piece Plastic Slip Flush Fit



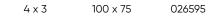
Sanitary Tee Trap Adapter



p Adapter	пхпх	Slib Joint
1-1/2	40	026179

Closet Flange One Piece Plastic Slip Flush Fit w Molded Test Plate





100 x 75

100 x 75

026594

026588

Copper to DWV Pipe Adapter H x Slip Joint



1-1/2	40	026320
1-1/2 x 1-1/4	40 x 32	026430
2	50	026510

Adjustable Closet Flange with Plastic Ring Slip 4 x 3 100 x 75 026586



Tail Piece Adapter (Plastic Nut & Washer) Sp x Slip Joint 40







Adjustable Closet Flange w Plastic Ring Slip w Molded Ring Slip



4 x 3

Swivel Strainer Adapter H x Swivel Nut



1-1/2026577

40 x 32

Adjustable Closet Flange with Plastic Ring Sp 4 x 3 Close 100 x 75 Close



Closet Flange One Piece Plastic Slip



4	100	026573
4 x 3	100 x 75	026584

45° Disharge Closet Flange Adjustable with Plastic Ring Slip 100 x 75 026589



Product Availability

Dimension		Product
inches	mm	Code

Dimension Product Code inches

Closet Flange Kit for Concrete

100 x 75

026593

for use in Slab on Grade W.C. installations



 $1-1/2 \times 1-1/2 \times 1/2$

40 x 40 x 12

026495

Closet Flange Spacer Ring



026176 100

Drain Grate



100 026482

Urinal Flange Hub

026459

Slip Cap H



1-1/2	40	026411
2	50	026412
3	75	026413
4	100	026414
6	150	026415
8	200	026416

Expansion Joint - Type 1 (Vertical Use Only) H x H

1-1/2	40	026485
2	50	026486
3	75	026487

Polyethylene Cap Slip-on Style



1-1/2	40	026875
2	50	026876
3	75	026878
4	100	026880

Expansion Joint - Type 1 (Vertical Use Only) H x Sp End Piston

1-1/2	40	026491
2	50	026492
3	75	026384

Expansion Joint - Type 2 (Vertical Use Only) HxH 026489



Additional fittings up to 24" diameter may be available; please contact IPEX for assistance.

Product Availability

Dimension		Product
inches	mm	Code

Dimension Product Code inches

System XFR DWV Pipe



1-1/2	40	110067
2	50	110068
3	75	110069
4	100	110070
6	150	110071
8	200	110072
10	250	110073
12	300	110074
14	350	110076
16	400	110077
18	450	110078

Line Cleanout HxHxGasket Plug



II X II X G	usket Flug	
1-1/2	40	526040
2	50	526041
3	75	526103
4	100	526104
$4 \times 3 \times 4$	100 x 75 x 100	526105
6	150	526161
8	200	426162
10	250	526163
12	300	526164

FOR USE WITH

Line Cleanout Sp x Sp x Threaded Plug MJ GREY



8	200	526766

Plug Cleanout MPT with gasket



1-1/2	40	526401
2	50	526402
3	75	526403
4	100	526404
6	150	526405

Fitting Cleanout Sp x FPT



1-1/2	40	526042
2	50	526046
3	75	526047
4	100	526048
6	150	426050

Fitting Cleanout Sp x Gasket Plug



1-1/2	40	526345
2	50	526346
3	75	526347
4	100	526348
6	150	526349

Tube End Cleanout H x Gasket Plug



1-1/2	40	526291
2	50	526298
3	75	526299
4	100	526300

Sanitary Tee HxHxH



11 / 11 / 11		
1-1/2	40	526081
2	50	526082
$2 \times 1 - 1/2 \times 1 - 1/2$	50 x 40 x 40	526058
2 x 1-1/2 x 2	50 x 40 x 50	526057
2 x 1-1/2	50 x 40	526056
3	75	526083
3 x 11/2	75 x 40	526061
3 x 2	75 x 50	526060
4	100	526084
4 x 2	100 x 50	526064
4 x 3	100 x 75	526066
6	150	526377
6 x 4	150 x 100	526385
8	200	526810
8 x 4	200 x 100	526808
8 x 6	200 x 150	526809
10	250	526814
10 x 4	250 x 100	526811
10 x 6	250 x 150	526812
10 x 8	250 x 200	526813
12	300	526819
12 x 4	300 x 100	526815
12 x 6	300 x 150	526816
12 x 8	300 x 200	526817
12 x 10	300 x 250	526818
14 x 4	350 x 100	526820
14 x 6	350 x 150	526821
16 x 4	400 x 100	526826
16 x 6	100 x 150	526827
18 x 4	450 x 100	526833
18 x 6	450 x 150	526834

Sanitary Tee SpxHxH



1-1/2	40	526550
3 x 1-1/2	75 x 40	526552
4	100	426557

Sanitary Tee Sp x Sp x H MJ GREY"



8 x 4	200 x 100	526926
8 x 6	200 x 150	526998
10 x 4	250 x 100	526997
10 x 6	250 x 150	526758
12 x 4	300 x 100	526761
12 x 6	300 x 150	526762

Products manufactured by/for IPEX Inc.

FOR USE WITH

Product Availability

Dime	Product	
inches	mm	Code

FOR USE WITH

MJ GREY

526396

526398

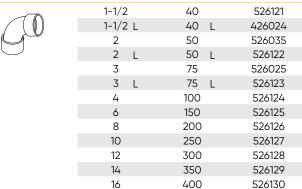
526007

Dimension		Produc [*]
inches	mm	Code

Sanitary Tee Sp x Sp x Sp

illary icc	36 x 36 x 36			
	8	200	526999	
	10 x 8	250 x 200	526759	
	10	250	526760	
	12 x 8	300 x 200	526763	
40	12 x 10	300 x 250	526764	
	12	300	526765	
\sim				

90° Elbow HxH



450

526131

Double Sanitary Tee HxHxHxH

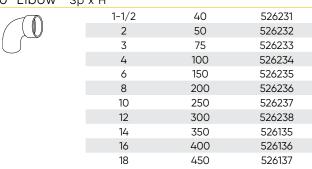
 $3 \times 3 \times 3 \times 1 - 1/2$

 $3 \times 3 \times 3 \times 2$

	1-1/2	40	526542
	2	50	526543
	2 x 1-1/2	50 x 40	526547
	3	75	526544
	3 x 1-1/2	75 x 40	526538
	3 x 2	75 x 50	426539

Sanitary Tee Side Inlet (left hand) H x H x H x H SI

90° Elbow Sp x H



18

Sanitary Te

e Side Inlet	(right hand) H x	H x H SI x H
$3 \times 3 \times 3 \times 1 - 1/2$	75 x 75 x 75 x 40	526397

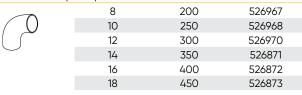
75 x 75 x 75 x 50

75

75 x 75 x 75 x 40

 $75 \times 75 \times 75 \times 50$

90° Elbow Sp x Sp



Upright Extended Wye HxxHxSp

Single Apartment Fitting H x Sp x H

 $3 \times 3 \times 3 \times 2$

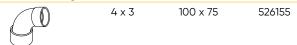


90° Reducing Elbow Closet Bend Reducing Sp x H

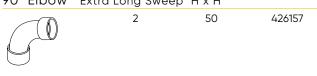


3 75 526008	

90° Reducing Elbow HxH



90° Elbow Extra Long Sweep H x H



Product Availability

	Dim	ension	Product			Dimer
	inches	mm	Product Code		inches	mr
60° Elbow	H×H			45° Elbow	Long Turn Sp	×Н
	1-1/2	40	526261		6	150
	2	50	526262			
	3	75	526253			
	4	100	526264			
45° Elbow	Chart Turn II v. I	ı		22-1/2° Elbo	DW HxH	
43 EIDOW	Short Turn H x F	40	526241		1-1/2	40
	2	50	526242		2	50
	3	75	526242		3	75
	4				4	100
		100	526244		6	150
	6 8	150	526245		8	200
		200	526246		10	250
	10	250	526247		12	300
	12	300	526248		14	350
	14	350	526249		16	400
	16	400	526250			
	18	450	526425	22-1/2° Elbo	· · · · · · · · · · · · · · · · · · ·	
₊5° Elbow	Short Turn Sp x	Н			6	150
	1-1/2	40	526221		8	200
	2	50	526071		10	250
	3	75	526223		12	300
1 Y	4	100	526072		14	350
	6	150	526073		16	400
	8	200	526226			
	10	250	526270	22-1/2° Elbo	20 V CD	
	12	300	526271	ZZ-1/Z EIDC		222
	14	350	526272		8	200
	16	400	526273		10	250
	18	450	526274		12	300
45° Elbow	Short Turn Sp x	Sp	FOR USE WITH MJ GREY	11 1//0 50		
	8	200	526971	<u>11-1/4° Elbo</u>		150
	10	250	526770		6	150
	12	300	526771		8	200
	14	350	526773		10	250
	16	400	526774		12	300
	18	450	526775			
45° Elbow	Long Turn H v II			11-1/4° Elbo	ow SpxH	
43 EIDOW	Long Turn H x H		/2/070	11-1/4 EIDU	оw spхн	150
	6	150	426038			
					8	200
					10	250
_					12	300

Product Availability

Dime	Product	
inches	mm	Code

Dimension Product Code inches

45° Wye HxHxH



×	анхн		
	1-1/2	40	526171
	2	50	526172
	2 x 1-1/2 x 1-1/2	50 x 40 x 40	526194
	2 x 1-1/2	50 x 40	526195
	3	75	526173
	3 x 1-1/2	75 x 40	526201
	3 x 2	75 x 50	526196
	4	100	526174
	4 x 2	100 x 50	526198
	4 x 3	100 x 75	526197
	6	150	526175
	6 x 4	150 x 100	526199
	8	200	526560
	8 x 4	200 x 100	526606
	8 x 6	200 x 150	526607
	10	250	526706
	10 x 4	250 x 100	526703
	10 x 6	250 x 150	526704
	10 x 8	250 x 200	526705
	12	300	526711
	12 x 4	300 x 100	526707
	12 x 6	300 x 150	526708
	12 x 8	300 x 200	526709
	12 x 10	300 x 250	526710
	14 x 4	350 x 100	526712
	14 x 6	350 x 150	526713
	16 x 4	400 x 100	526718
	16 x 6	100 x 150	526719
	18 x 4	450 x 100	526725
	18 x 6	450 x 150	526726

	45°	W١	/e	Sp	Х	Н	Х	Н
--	-----	----	----	----	---	---	---	---



3	75	426635
3 x 1-1/2	75 x 40	426638

FOR USE WITH MI CREV

45° Wye Sp x Sp x H



хэрхп		MJ UILLI
8 x 4	200 x 100	526985
8 x 6	200 x 150	526986
10 x 4	250 x 100	526988
10 x 6	250 x 150	526989
12 x 4	300 x 100	526992
12 x 6	300 x 150	526993

FOR USE WITH 45° Wye Sp

x Sp x Sp		MJ GREY
8	200	526987
10 x 8	250 x 200	526990
10	250	526991
12 x 8	300 x 200	526994
12 x 10	300 x 250	526995
12	300	526996
14	350	526945
14 x 4	350 x 100	526940
14 x 6	350 x 150	526941
14 x 8	350 x 200	526942
14 x 10	350 x 250	526943
14 x 12	350 x 300	526944
16	400	526952
16 x 4	400 x 100	526946
16 x 6	400 x 150	526947
16 x 8	400 x 200	526948
16 x 10	400 x 250	526949
16 x 12	400 x 300	526950
16 x 14	400 x 350	526951
18	450	526960
18 x 4	450 x 100	526953
18 x 6	450 x 150	526954
18 x 8	450 x 200	526955
18 x 10	450 x 250	526956
18 x 12	450 x 300	529957
18 x 14	450 x 350	526958
18 x 16	450 x 400	526959

Double 45° Wye HxHxHxH



, –	11 // 11 // 11 /	V 1 1	
	1-1/2	40	526637
	2	50	526456
	2 x 1-1/2	50 x 40	526642
	3	75	526639
	3 x 1-1/2	75 x 40	526643
	3 x 2	75 x 50	526644
	4 x 3	100 x 75	526457
	6	150	426752
	8	200	426755
	8 x 4	200 x 100	426753
	8 x 6	200 x 150	526754
	10	250	426759
	10 x 4	250 x 100	426756
	10 x 6	250 x 150	426757
	10 x 8	250 x 200	426758
	12	300	426764
	12 x 4	300 x 100	426760
	12 x 6	300 x 150	426761
	12 x 8	300 x 200	426762
	12 x 10	300 x 250	426763

Product Availability

	Dimen	sion	
			Product Code
	inches	mm	Code
45° Double Wye	SpxSpxI	НхН	
	8 x 4	200 x 100	526769
	8 x 6	200 x 150	526974
	10 x 4	250 x 100	526976
	10 x 6	250 x 150	526977
	12 x 4	300 x 100	526980
	12 x 6	300 x 150	526982
45° Double Wye	SpxSpx	Sn x Sn	
-	8	200	526975
	10	250	526979
	10 × 8	250 x 200	526978
	12 x 8		
		300 x 200	526983
	12 x 10	300 x 250	526984
Increaser Coupl	ing H×H		
	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
	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	g SpxH		
	2 x 1-1/2	50 x 40	526282
	3 x 1-1/2	75 x 40	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	<u> </u>	•	
	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

	Dimensi	ion	Product
	inches	mm	Code
Reducer Bushir	ng (Extended)	Sp x Sp	MJ GREY
	10 x 8	250 x 200	526981
	12 x 8	300 x 200	526767
	12 x 10	300 x 250	526768
	14 x 10	350 x 250	526934
	14 x 12	350 x 300	526935
	16 x 12	400 x 300	526936
	16 x 14	400 x 350	526937
	18 x 14	450 x 350	526938
	18 x 16	450 x 400	526939
Male Adapter	H x MPT		
(=	1-1/2	40	526331
$A \rightarrow A$	2	50	526332
	3	75	526333
\Box	4	100	526334
Female Adapte	er HxFPT		
	1-1/2	40	526341
	2	50	526342
	3	75	526343
	4	100	526344
Coupling H x I	-1		
	1-1/2	40	526351
	2	50	526352
$((\bigcap$	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 Spig	got MJSpxH	I	
	2	50	526522
	3	75	526523
(((((())	4	100	526524
	Adapts M-J Co		Plastic DWV Pipe
P Trap Solvent	:Weld HxH		
2.12	4.4/0		



1-1/2	40	526431
2	50	526432
3	75	526433
4	100	526434

Products manufactured by/for IPEX Inc.

Product Availability

Dimension		Product
inches	mm	Code

	Dimension		
inches mm Coo	inches	Code	

P Trap Solvent Weld with Cleanout H x H



1-1/2	40	526441
2	50	526442

Copper to DWV Pipe Adapter H x Slip Joint



1-1/2	40	426320
1-1/2 x 1-1/4	40 x 32	426430
2	50	426510

P Trap Union Connection H x H



1-1/2	40	526443
2	50	526444

Tail Piece Adapter Sp x Slip Joint



1-1/2	40	526555
1-1/2 x 1-1/4	40 x 32	526556

Plastic Nut & Washer

426894

P Trap Union Connection with Cleanout H x H



1-1/2	40	526505

Swivel Strainer Adapter H x Swivel Nut 1-1/2



U Bend HxH



4	100	526499
6	150	426503

Closet Flange One Piece Plastic Slip



	· · · · · · · · · · · · · · · · · · ·	
4	100	526573
4 x 3	100 x 75	526584

Fitting Trap Adapter Sp x Slip Joint



1-1/2	40	426304
2	50	426305

Plastic Nut & Washer

Pipe Trap Adapter H x Slip Joint



1-1/2	40	526321
1-1/2 x 1-1/4	40 x 32	526329

Plastic Nut & Washer

Closet Flange One Piece Plastic Slip w Spigot End



100 x 75 526592

100 x 75

90° Pipe Trap Adapter H x Slip Joint



1-1/2 x 1-1/2 40 x 40

526330

Sanitary Tee Trap Adapter H x Slip Joint x H

1-1/2



426179

Closet Flange One Piece Plastic Slip w Molded Test Plate 4 x 3 100 x 75 526591

Closet Flange One Piece Plastic Slip Flush Kit 4 x 3





Products manufactured by/for IPEX Inc.

Canada: Website: ipexna.com • Toll Free: 866-473-9462

426594

Product Availability

Expansion Joint - Type 1 (Vertical & Horizontal Use) H x H

Dimension		Product
inches	mm	Code

Dimension		Product
inches	mm	Code

Closet Flange One Piece Plastic Slip Flush Kit w Molded Test Plate



4 x 3 100 x 75 526595



1	1-1/2	40	526485
)	2	50	526486
,	3	75	526487
	4	100	526489
	6	150	426209
	8	200	426210
	10	250	426211
	12	300	426212

Adjustable Closet Flange with Plastic Ring Slip

4 x 3



100 x 75 526586

Adjustable Closet Flange w Plastic Ring Slip w Molded Test Plate



4 x 3

100 x 75

526588

Dishwasher Wye HxHx Hose Barb



,		
1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	526495
1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	526496

45° Discharge Closet Flange Adjustable w Plastic Ring



4 x 3 100 x 75 426589





100 x 75 426593

for use in Slab on Grade W.C. installations

Slip Cap H



1-1/2	40	526411
2	50	526412
3	75	526413
4	100	526414
6	150	526415
8	200	526416
10	250	526417
12	300	526418

Product Availability

Dimension		# of Clamps	Product Code
inches mm			

MJ Coupling DWV to DWV H x H



DWV to DWV	$H \times H$		
1.5	40	4	094056
2	50	4	094057
3	75	4	094058
4	100	4	094059
6	150	6	094060
8	200	6	094053
10	250	6	094054
12	300	6	094055
14	350	8	094086
16	400	8	094087
18	450	8	097089

MJ Coupling CI to DWV H x H



1.5	40	4	094061
2	50	4	094062
3	75	4	094063
4	100	4	094064
6	150	6	094065

Description	Product
Description	Code

T-Handle Torque Wrench 80 in-lb

5/16" socket

094139

Handling & Installation Procedures

Proper Cement Applicators

SOLVENT CEMENT

Only high quality IPEX System 15/XFR cements and primers are recommended for use with System 15 or System XFR DWV piping.

This product offering includes One-Step (i.e. no primer required) in both Medium Bodied and Heavy Bodied, as well as Two-Step formulations, all of which are grey in color. Our System 15/XFR cement products are CSA certified.

Meets Low VOC limit of 510 mg/L as per SCAQMD Rule 1168.

Cement Selection

Specific cement recommendations are shown below for proper selection of System 15/XFR cement products.

Cement Selection		Floper Cement Applicators		
Pipe Diameter	IPEX System 15® / System XFR®	Pipe Diameter	Applicator	
1-1/2" to 6"	One-Step with or without Primer	1-1/2" to 3"	1" Round Dauber	
8" to 12"	Two-Step Cement with Primer	3" to 6"	3" Roller	
14" and larger	Xirtec® 19 PVC cement with Primer	8" and larger	7" Roller or 6" Swab	

Average Joint Cure Schedule for System 15/XFR Solvent Cements

Temperature Range(during assembly)		Cure Time Pipe Sizes 3" to 8"	Cure Time Pipe Sizes 10" to 14"	Cure Time Pipe Sizes 16" +
60° to 100°F	30 minutes	1-1/2 hours	48 hours	72 hours
40° to 60°F	45 minutes	4 hours	96 hours	6 days
0° to 40°F	1 hour	72 hours	8 days	14 days

^{*} The figures in the table are estimates based on laboratory tests for water applications (chemical applications may require different set times). In damp or humid weather (relative humidity over 60%) allow 50% more cure time.

NOTE 1: Due to the many variables in the field, these figures should be used as a general guideline only. NOTE 2: Joint cure schedule is the necessary time needed before pressurizing the system.

Practical Considerations

Cold Weather

Although normal installation temperatures are between $40^{\circ}F$ ($4^{\circ}C$) and $110^{\circ}F$ ($43^{\circ}C$), high strength joints have been made at temperatures as low as $-15^{\circ}F$ ($-26^{\circ}C$).

In cold weather, solvents penetrate and soften the plastic pipe and fitting surfaces more slowly than in warm weather. In this situation, the plastic is more resistant to solvent attack and it becomes even more important to pre-soften surfaces with an aggressive primer. Be aware that because of slower evaporation, a longer cure time is necessary.

Tips for solvent cementing in cold weather

- Prefabricate as much of the system as is possible in a heated work area.
- Store cements and primers in a warmer area when not in use and make sure they remain fluid.
- Take special care to remove moisture including ice and snow from the surfaces to be joined.
- Ensure that the temperature of the materials to be joined (re: pipe and fittings) is similar.
- Use System15/XFR Primer to soften the joining surfaces before applying cement. More than one application may be necessary.
- · Allow a longer cure period before the system is used.

NOTE: A heat blanket may be used to speed up the set and cure times.

Hot Weather

There may be occasions when solvent cementing plastic pipe at 95°F (35°C) temperatures and above cannot be avoided. If special precautions are taken, problems can be avoided.

Solvent cements for plastic pipe contain high-strength solvents which evaporate faster at elevated temperatures. This is especially true when there is a hot wind blowing. If the pipe is stored in direct sunlight, the pipe surface temperatures may be 20°F to 30°F (10°C to 15°C) higher than the ambient temperature. In this situation, the plastic is less resistant to attack and the solvents will attack faster and deeper, especially inside a joint. It is therefore very important to avoid puddling the cement inside the fitting socket and to ensure that any excess cement outside the joint is wiped off.

Tips for solvent cementing in hot weather:

- Store solvent cements and primers in a cool or shaded area prior to use.
- If possible, store fittings and pipe or at least the ends to be solvent welded, in a shady area before cementing.
- Try to do the solvent cementing in cooler morning hours.
- · Cool surfaces to be joined by wiping with a damp rag.
- Make sure that the surface is dry prior to applying solvent cement.
- Make sure that both surfaces to be joined are still wet with cement when putting them together. With large size pipe, more people on the crew may be necessary.
- Using a primer and a heavier, high-viscosity cement will provide a little more working time.

NOTE: During hot weather, the expansion-contraction effect may increase. For additional information, please refer to the most current IPEX Mechanical Technical Manual – Drainage Systems for Noncombustible Construction.

Practical Considerations

HANDLING AND STORAGE

System 15 and System XFR are strong, lightweight piping materials and, as such, are easily handled. However, because of their light weight there is a tendency for this product to be mishandled on the jobsite.

CAUTION

Use a forklift to unload System 15 and System XFR crates directly from the delivery vehicle. Avoid using wire ropes, chains or slings. Failure to properly handle crates may cause injury.

As is common for most rigid piping materials, impact strength for System 15 and XFR is reduced in colder weather. Thus, when unloading these components in cold weather, take extra care to minimize impact damage. Since the soundness of any joint depends on the condition of the pipe end, exercise care during storage and handling to avoid damaging these ends.

While in transit, make sure pipe and fittings are wellsecured, so there is no potential for a load to shift.

When storing System 15 and System XFR pipe, bear the following points in mind:

- Treat these products as you would other DWV piping products: take care during handling and storage to prevent damaging the pipe.
- Store System 15 and System XFR pipe on a level surface. If placed on the ground, make sure the pipe is supported by timbers spaced no more than 3 feet apart.
- When storing pipe on a flat smooth surface place smaller diameter pipe on top of larger pipe.
- Make sure the pipe is not stored close to sources of heat such as boilers, steam lines, engine exhaust outlets, etc.

PROLONGED OUTDOOR STORAGE AND PROTECTION

System 15® and System XFR®

Prolonged exposure of System 15 and System XFR pipe to direct rays of the sun will not damage the pipe. However, some mild discoloration may take place in the form of a milky film on exposed surfaces. This change in colour indicates a harmless chemical transformation at the surface of the pipe. A slight reduction in impact strength may occur at the discolored surfaces, but is not enough to cause problems in field installation or operation.

Discoloration of the pipe can be avoided by shading it from the direct rays of the sun. This can be accomplished by covering the stockpile or the crated pipe with an opaque material such as canvas. If the pipe is covered, always allow for circulation of air through the pipe to avoid heat buildup in hot summer weather. (Refer to the section entitled 'Painting' below for more information.)

PAINTING

System 15 and System XFR pipe and fittings can be easily protected from ultraviolet oxidation by painting with a heavily pigmented, exterior water-based latex paint. White or a similar light colour is preferred to minimize heat absorption on the pipe surface. Apply latex paint thickly as an opaque coating on well cleaned and lightly sanded pipe and fittings.

Practical Considerations

PIPE DIAMETERS 1-1/2" - 6"

Installers have two options for these sized pipes: either One- or Two-Step Cement. IPEX System 15 and System XFR one-step cement eliminates primer from the solvent welding process, thus saving time and material costs.

Because, System 15 and System XFR One-Step cement does not require the use of a primer, there is a minimum temperature recommended when using this product. Contact IPEX for guidelines.

Although a number of One-Step cements are available, not all of them are equal. Various levels of solvent and PVC resin in each formulation may alter results of the installation:

- A product with too little solvent may not sufficiently soften the surfaces prior to inserting the pipe into the fitting.
- A product with too little PVC resin may not be heavy enough to sufficiently fill the area between pipe and fitting at the socket end of the joint.

IPEX System15/XFR One-Step Cement has been tested with System 15 and System XFR piping and is strongly recommended to be used for best results.

PIPE DIAMETERS 8" & ABOVE

IPEX does not recommend One-Step cement from any manufacturer be used for DWV applications with this size pipe diameter. For specific installation recommendations using large diameter pipe, consult IPEX's Solvent Cementing Guide. When requested, IPEX representatives will also visit a jobsite to provide an onsite demonstration of recommended solvent cementing procedures.

For larger pipe diameters, select System 15/XFR Two-Step cement along with System 15/XFR primer. This Two-Step cement is a heavy-bodied, medium-setting cement that provides the good gap filling capabilities required for pipe sizes through to 12".

IPEX recommends Xirtec® 19 PVC cement for System 15 and System XFR in sizes larger than 12".

More care should be used when using solvent cement in below freezing temperatures. Solvent cement products should be stored in a warm environment prior to use in colder weather to avoid the possibility of freezing. Consideration may also be given to the use of MJ Grey Couplings in available sizes as an alternate to solvent welding in colder conditions.

HANDLING AND STORAGE

Solvent Cement

Store in the shade between 4°C (40°F) and 43°C (110°F) or as specified on label. Keep away from heat, spark, open flame and other sources of ignition. Keep container closed when not in use. If the unopened container is subjected to freezing, it may become extremely thick or gelled. This cement can be placed in a warm area, where after a period of time, it will return to its original, usable condition. But such is not the case when gelatin has taken place because of actual solvent loss — for example, when the container was left open too long during use or not properly sealed after use. Cement in this condition should not be used and should be properly discarded.

IPEX solvent cements are formulated to be used "as received" in original containers. Adding thinners or primers to change viscosity is not permitted. If the cement is found to be jelly-like and not free flowing, it should not be used.



PVC

Primer and cement must be used within 3 years of the date of manufacture shown on the bottom of the can.

DO NOT USE primer or cement which is greater than 3 years old.

Products manufactured by/for IPEX Inc.

Practical Considerations

TESTING DRAINAGE SYSTEMS

After a system is installed and all solvent weld joints cured, a hydrostatic pressure test should be performed prior to the piping system being commissioned. Testing of drainage and venting systems shall be conducted in accordance to the requirements of local plumbing codes.

When pressure testing, the system should be slowly filled with water and all air bled from the highest and farthest points in the installation. Once the system has reached the desired test pressure, it should remain at this pressure for one hour.

During this time the assembled sections should be visually inspected for joint leaks that may have occurred in the system. If a leak is discovered at a solvent weld joint, the joint must be removed and replaced or alternatively may be back-welded in place by a worker certified or experienced in thermoplastic welding. It is not necessary to fully drain the system if the affected fitting can be isolated for the required work.

Solvent weld systems may be pressure-tested with water at levels higher than code requirements if desired by the project design engineer. Contact IPEX for details.

Normal testing procedures for System 15 or System XFR may be employed if using MJ Grey couplings. Maximum water pressure shall be 10 feet of head for all sizes. Proper safety precautions and protective equipment should be employed during all testing procedures.

Building Code Considerations

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 buildings must also meet a maximum Flame Spread Rating of 25 and maximum Smoke Developed Classification of 50.
- The above Flame and Smoke values are confirmed through listings to ULC S102.2, latest edition.

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 requirements of noncombustible construction.

In noncombustible buildings, System 15 may be used throughout the building, except for the limitations noted on the following page in the Specifications section. When the piping system enters an air plenum, the transition to System XFR must be made before entering into the plenum space.

System XFR®

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

In high buildings, System XFR must be used throughout the building including parking garages in order to meet the Smoke Developed limit of 50.

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

Drain-Guard™ Double Containment

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™·····

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

Products manufactured by/for IPEX Inc.

Building Code Considerations

LISTED SUMMARY

Component	Flame-Spread Rating	Smoke Developed Classification		
System 15®				
Pipe	10	N/A		
Fittings	15	N/A		
System XFR®				
Pipe	≤ 25	≤ 50		
Fittings	≤ 25	≤ 50		
Drain-Guard™ Double Containment				

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™		
Couplings	≤ 25	≤ 50

Specifications

MECHANICAL EASY SPECIFICATIONS

Applications as per 2010 National Building Code of Canada (NBC) Suitability for Use

Non-Combustible Building

Product	General Usage	Air Plenum	Vertical Service Spaces	High Buildings	Underground	
System 15 DWV	P ⁺	N	N	N	Р	
System XFR DWV	Р	Р	N	Р	Р	
Drain-Guard Double Containment	•	Depending on your application, Drain-Guard is a double containment piping system using System 15 and or System XFR as its primary components.				
MJ Grey Coupling	Р	Р	N	Р	P*	

^{† 24&}quot; is not permitted

P = Permitted N = Not Permitted

FOOTNOTES:

P = Permitted, N = Not Permitted

- 1. Combustible piping in noncombustible construction is subject to the requirements of 3.1.5.16.(1) of the NBC 2015.
- 2. Combustible piping that penetrates a fire separation is subject to the requirements in articles 3.1.9.1, 3.10.9.6 and 9.10.9.7 of the NBC 2015.
- 3. Products may not be approved for use in a Vertical Service Space, (check with local codes).
- 4. Use of pipe and fittings per the National Plumbing Code of Canada 2010 (Tables A-2.25, 2.26 and 2.27).

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^{*} Permitted by Code but not recommended by IPEX

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 in accordance with ULC S102.2 and clearly marked with the certification logo of the testing agency indicating a Flame Spread Rating not greater than 25.

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 must only be installed with System XFR or FR-PRO fittings to ensure compliance with Flame and Smoke listings.

Drain-Guard™ Double Containment

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, including excellent thermal properties, improved flow, longevity and durability, and the security of meeting all code requirements for noncombustible buildings.

MJ Grey™ Couplings

MJ Grey Couplings are a mechanical joint assembly suitable only for use on IPEX System 15 or System XFR pipe and fittings. These couplings come in sizes 1–1/2" – 18" for DWV to DWV connections and 1–1/2" – 6" for CI to DWV connections. They are certified to CSA B602 and are listed to ULC S102.2–10 exhibiting Flame/Smoke ratings of 25/50.

Firestopping Devices

Firestopping systems for System 15/XFR shall be listed to CAN4-S115 and tested with a pressure differential of 50 Pa. Listed firestopping systems are required whenever the piping penetrates a fire-rated vertical or horizontal separation.

Solvent Cements

System 15/XFR cements shall be CSA certified and meet the requirements of ASTM D2564. System 15/XFR One-Step Cement may be used for sizes 1-1/2" to 6" only. For sizes 8" to 24", System 15/XFR Two-Step cement must be used in conjunction with System 15/System XFR primer. Consideration may also be given to the use of Xirtec® 19 cement for sizes over 12". Proper solvent cementing procedures must be followed at all times.

Design and Installation

The design and installation of PVC systems shall be performed in accordance with the recommendations detailed in the Handling and Installation section of this Submittal Data Sheet, local and national regulations where applicable.

To ensure the full integrity of the completed system, all components shall be supplied by IPEX.

About IPEX

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 world's 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 centers across North America, we have earned a reputation for product innovation, quality, end-user focus and performance.

Markets served by IPEX group products are:

- Electrical systems
- Telecommunications and utility piping systems
- · Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing piping systems
- PE Electrofusion systems for gas and water
- · Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVCO, ABS, PEX, FR-PVDF, NFRPP, FRPP, HDPE, PVDF and PE pipe and fittings (1/2" - 48")

Products manufactured by IPEX Inc.

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