DWV Systems

Submittal Data Sheet

SYSTEM 15® DWV **SYSTEM XFR® DWV** **DRAIN-GUARD™ DWV** **MJ GREY™ DWV**

Project: .....

Engineer: .....

Contractor: .....

Submitted by: ..... Date

Approved by: ..... Date

Order No: ..... Date

Specification: .....

< STANDARDS >

System 15®

CSA B181.2 — CAN/ULC S102.2

System XFR®

CSA B181.2 — CAN/ULC S102.2 (Intertek)

Drain-Guard™ Double Containment

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

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

CSA B602 — CAN/ULC S102.2 (Intertek)

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

IPEX by aliaxis

Products manufactured by/for IPEX Inc.

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

DWV Systems

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.

DWV Systems

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.

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

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.

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.

DWV Systems

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

Diameter (in.)	Avg. Outside Diameter (in.)	Avg. Inside Diameter (in.)	Impact Resistance ft.lb at 0°C
1-1/2	1.90	1.56	52
2	2.38	2.01	66
3	3.50	3.01	85
4	4.50	3.95	100
6	6.63	5.97	100
8	8.62	7.82	130
10	10.75	9.81	140
12	12.75	11.70	150
14	14.00	12.86	165
16	16.00	14.69	175
18	18.00	16.54	200
*20	20.00	18.45	220
*24	24.00	22.19	220

* System 15 pipe only

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 20" and 24" diameter pipe is not ULC Listed for a Flame Spread Rating not greater than 25

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.

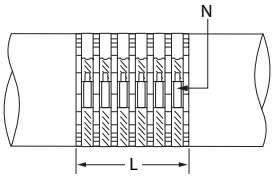
Weight Comparison

Size	System 15 & System XFR		Cast Iron	
(in.)	(lb/ft)	(kg/m)	(lb/ft)	(kg/m)
1-1/2	0.5	0.8	2.7	4.0
2	0.7	1.1	3.7	5.5
3	1.5	2.2	5.0	7.5
4	2.1	3.2	7.0	10.4
6	3.8	5.6	11.5	17.1
8	5.7	8.5	16.0	23.8
10	8.0	12.0	25.5	38.0
12	10.6	15.8	30.0	44.7
14	12.6	18.8	–	–
15	–	–	52.5	78.2
16	16.5	24.6	–	–
18	20.8	31.0	–	–
*20	24.4	36.4	–	–
*24	34.0	50.6	–	–

* System 15 pipe only

MJ Grey™ Dimensions

Coupling Size (inches)	Length (L) (inches)	N 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



DWV Systems

SYSTEM 15® DWV

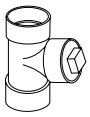
Product Availability

System 15 DWV Pipe

	Dimension inches	Dimension mm	Product Code
Plain End 12 foot lengths	1-1/2	40	010001
	2	50	010002
	3	75	010003
	4	100	010004
	6	150	010006
	8	200	010087
	10	250	010088
	12	300	010089
Bell End 20 foot lengths	* 4	100	010016
	* 6	150	010007
	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" by 20 ft. System 15 pipe sold in Western Canada only.

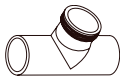
Line Cleanout H x H x Gasket Plug



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 Threaded Plug

FOR USE WITH 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

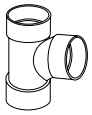
Fitting Cleanout Sp x Gasket Threaded Plug

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 H x H x H



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

DWV Systems

SYSTEM 15® DWV

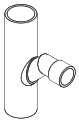
Product Availability

Sanitary Tee Sp x H x H

Dimension inches	Dimension mm	Product Code
1-1/2	40	026550
3 x 3 x 1-1/2	75 x 75 x 40	026552
4	100	026557

Sanitary Tee Sp x Sp x H

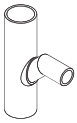
FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
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

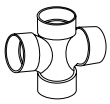
Sanitary Tee Sp x Sp x Sp

FOR USE WITH MJ GREY™



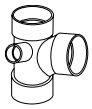
Dimension inches	Dimension mm	Product Code
8	200	226941
10 x 8	250 x 200	226943
10	250	226944
12 x 8	300 x 200	226947
12 x 10	300 x 250	226948
12	300	226949

Double Sanitary Tee H x H x H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	026542
2	50	026543
2 x 2 x 1-1/2 x 1-1/2	50 x 50 x 40 x 40	026547
3	75	026544
3 x 3 x 1-1/2 x 1-1/2	75 x 75 x 40 x 40	026538
3 x 3 x 2 x 2	75 x 75 x 50 x 50	026539
4	100	026545

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



Dimension inches	Dimension mm	Product Code
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

Dimension inches	Dimension mm	Product Code
3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 40	026397
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 SI

Dimension inches	Dimension mm	Product Code
3 x 3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 75 x 40	026336

90° Elbow H x H

Dimension inches	Dimension mm	Product Code
1 1/2	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 Sp x H

Dimension inches	Dimension mm	Product Code
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

FOR USE WITH MJ GREY™

Dimension inches	Dimension mm	Product Code
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

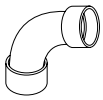
4 x 3	100 x 75	026026

90° Reducing Elbow H x H

4 x 3	100 x 75	026155

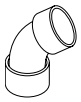
Product Availability

90° Elbow Extra Long Sweep H x H



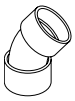
Dimension inches	Dimension mm	Product Code
2	50	026157

60° Elbow H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	026261
2	50	026262
3	75	026263
4	100	026264

45° Elbow - Short Turn H x H



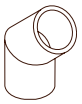
Dimension inches	Dimension mm	Product Code
1-1/2	40	026241
2	50	026242
3	75	026243
4	100	026244
6	150	026245
8	200	026246
10	250	026247
12	300	026248
14	350	026249
16	400	026250
18	450	026425

45° Elbow - Short Turn Sp x H

Dimension inches	Dimension mm	Product Code
1-1/2	40	026221
2	50	026071
3	75	026223
4	100	026072
6	150	026073
8	200	026226
10	250	026270
12	300	026271
14	350	026272
16	400	026273
18	450	026274

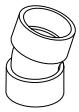
45° Elbow - Short Turn Sp x Sp

FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
8	200	226910
10	250	226911
12	300	226912
14	350	226773
16	400	226774
18	450	226775

22-1/2° Elbow H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	026251
2	50	026252
3	75	026253
4	100	026254
6	150	026255
8	200	026256
10	250	026257
12	300	026258
16	400	026260

22-1/2° Elbow Sp x H

Dimension inches	Dimension mm	Product Code
6	150	026651
8	200	026652
10	250	026653
12	300	026654
14	350	026655
16	400	026656

22-1/2° Elbow - Short Turn Sp x Sp

FOR USE WITH MJ GREY™

Dimension inches	Dimension mm	Product Code
8	200	226913
10	250	226914
12	300	226915

11-1/4° Elbow H x H

Dimension inches	Dimension mm	Product Code
6	150	026671
8	200	026672
10	250	026673
12	300	026674
14	350	026675
16	400	026676

11-1/4° Elbow Sp x H

Dimension inches	Dimension mm	Product Code
6	150	026681
8	200	026682
10	250	026683
12	300	026684
14	350	026685
16	400	026686

45° Wye H x H x H

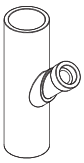
Dimension inches	Dimension mm	Product Code
1 1/2	40	026171
2	50	026172
2 x 1-1/2 x 1-1/2	50 x 40 x 40	026194
2 x 2 x 1-1/2	50 x 50 x 40	026195
3	75	026173
3 x 3 x 1-1/2	75 x 75 x 40	026201
3 x 3 x 2	75 x 75 x 50	026196
4	100	026174
4 x 4 x 2	100 x 100 x 50	026198
4 x 4 x 3	100 x 100 x 75	026197
6	150	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

45° Wye Sp x H x H

3	75	026635

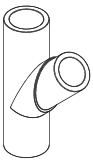
45° Wye Sp x Sp x H

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

45° Wye Sp x Sp x Sp



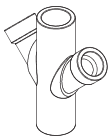
Dimension inches	Dimension mm	Product Code
8	200	226928
10 x 8	250 x 200	226931
10	250	226932
12 x 8	300 x 200	226936
12 x 10	300 x 250	226937
12	300	226938
14	350	226145
14 x 4	350 x 100	226140
14 x 6	350 x 150	226141
14 x 8	350 x 200	226142
14 x 10	350 x 250	226143
14 x 12	350 x 300	226144
16	400	226152
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

Double 45° Wye H x H x H x H

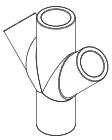
Dimension inches	Dimension mm	Product Code
1-1/2	40	026637
2	50	026456
2 x 2 x 1-1/2 x 1-1/2	50 x 50 x 40 x 40	026642
3	75	026639
3 x 3 x 1-1/2 x 1-1/2	75 x 75 x 40 x 40	026643
3 x 3 x 2 x 2	75 x 75 x 50 x 50	026644
4 x 4 x 3 x 3	100 x 100 x 75 x 75	026457
6	150	026752
8	200	026755
8 x 4	200 x 100	026753
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
16 x 10	400 x 250	026774
16 x 12	400 x 300	026775
16 x 14	400 x 350	026776
18 x 4	450 x 100	026778
18 x 6	450 x 150	026779

45° Double Wye Sp x Sp x H x H



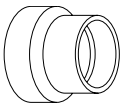
Dimension inches	Dimension mm	Product Code
8 x 4	200 x 100	226954
8 x 6	200 x 150	226916
10 x 4	250 x 100	226917
10 x 6	250 x 150	226919
12 x 4	300 x 100	226922
12 x 6	300 x 150	226923

45° Double Wye Sp x Sp x Sp x Sp



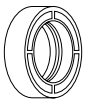
Dimension inches	Dimension mm	Product Code
8	200	226918
10	250	226921
10 x 8	250 x 200	226920
12 x 8	300 x 200	226924
12 x 10	300 x 250	226925

Reducer Coupling H x H



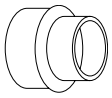
Dimension inches	Dimension mm	Product Code
2 x 1-1/2	50 x 40	026362
3 x 1-1/2	75 x 40	026363
3 x 2	75 x 50	026364
4 x 1-1/2	100 x 40	026369
4 x 2	100 x 50	026365
4 x 3	100 x 75	026366
6 x 4	150 x 100	026860
8 x 4	200 x 100	026861
8 x 6	200 x 150	026867
10 x 4	250 x 100	026862
10 x 6	250 x 150	026868
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



Dimension inches	Dimension mm	Product Code
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

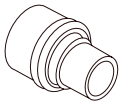
Reducer Bushing (Extended) Sp x H



Dimension inches	Dimension mm	Product Code
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

FOR USE WITH MJ GREY™



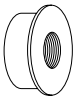
Dimension inches	Dimension mm	Product Code
10 x 8	250 x 200	226950
12 x 8	300 x 200	226951
12 x 10	300 x 250	226952
14 x 10	350 x 250	226134
14 x 12	350 x 300	226135
16 x 12	400 x 300	226136
16 x 14	400 x 350	226137
18 x 14	450 x 350	226138
18 x 16	450 x 400	226139

DWV Systems

SYSTEM 15® DWV

Product Availability

Reducer Bushing (Dishwasher Bushing) Sp x FPT



Dimension inches	Dimension mm	Product Code
1-1/2 x 1/2	40 x 12	026277
1-1/2 x 3/4	40 x 20	026278

Reducer Bushing Sp x H

4 x 3	100 x 75	026294

Adapts Plastic Sewer Ftg. to Plastic DWV Pipe

Adapter Sleeve Sp x H

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

Adapts Plastic DWV Ftg. to Plastic Sewer Pipe

Male Adapter H x MPT

1-1/2	40	026331
2	50	026332
3	75	026333
4	100	026334

Female Adapter H x FPT

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

Coupling H x H

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

Plastic Sewer Hub H x H

4 x 3	100 x 75	026376

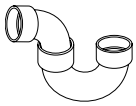
Adapts Plastic Sewer Pipe to Plastic DWV Pipe

Plastic M-J Spigot MJ Sp x H

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

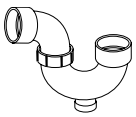
Adapts M-J Cast Iron Pipe to Plastic DWV Pipe

P Trap Solvent Weld H x H



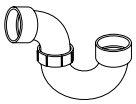
1-1/2	40	026431
2	50	026432
3	75	026433
4	100	026434
4 x 3	100 x 75	026669

P Trap Solvent Weld with Cleanout H x H



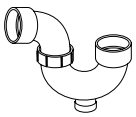
1-1/2	40	026441
2	50	026442

P Trap Union Connection H x H



1-1/2	40	026443
2	50	026444

P Trap Union Connection with Cleanout H x H



1-1/2	40	026505

U Bend H x H

3	75	026498
4	100	026499
6	150	026503

DWV Systems

SYSTEM 15® DWV

Product Availability

Fitting Trap Adapter — Plastic Nut & Washer Sp x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2	40	026304
2	50	026305

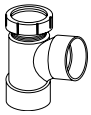
Pipe Trap Adapter — Plastic Nut & Washer H x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2	40	026321
1-1/2 x 1-1/4	40 x 32	026329
2	50	026328

90° Pipe Trap Adapter — H x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2 x 1-1/2	40 x 40	026330

Sanitary Tee Trap Adapter — H x H x Slip Joint

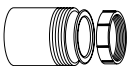


Dimension inches	Dimension mm	Product Code
1-1/2	40	026179

Copper to DWV Pipe Adapter — H x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2	40	026320
1-1/2 x 1-1/4	40 x 32	026430
2	50	026510

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

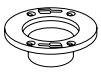


Dimension inches	Dimension mm	Product Code
1-1/2	40	026555
1-1/2 x 1-1/4	40 x 32	026556

Swivel Strainer Adapter — H x Swivel Nut

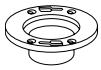
Dimension inches	Dimension mm	Product Code
1-1/2	40	026577

Closet Flange — One Piece Plastic Slip



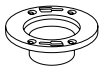
Dimension inches	Dimension mm	Product Code
4	100	026573
4 x 3	100 x 75	026584

Closet Flange — One Piece Plastic Slip with Spigot End



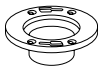
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026592

Closet Flange — One Piece Plastic Slip with Molded Test Plate



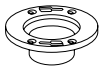
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026591

Closet Flange — One Piece Plastic Slip Flush Fit



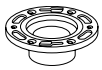
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026594

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



Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026595

Adjustable Closet Flange — with Plastic Ring Slip

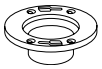


Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026586

Adjustable Closet Flange — w Plastic Ring Slip w Molded Ring Slip

Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026588

Adjustable Closet Flange — with Plastic Ring Sp



Dimension inches	Dimension mm	Product Code
4 x 3 Close	100 x 75 Close	026587

45° Disharge Closet Flange — Adjustable with Plastic Ring Slip

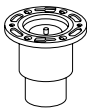
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	026589

DWV Systems

SYSTEM 15® DWV

Product Availability

Closet Flange Kit for Concrete



Dimension (inches)	Dimension (mm)	Product Code
4 x 3	100 x 75	026593

for use in Slab on Grade W.C. installations

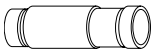
Closet Flange Spacer Ring

Dimension (inches)	Dimension (mm)	Product Code
4	100	026176

Urinal Flange Hub

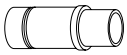
Dimension (inches)	Dimension (mm)	Product Code
2	50	026459

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



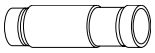
Dimension (inches)	Dimension (mm)	Product Code
1-1/2	40	026485
2	50	026486
3	75	026487

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



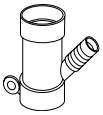
Dimension (inches)	Dimension (mm)	Product Code
1-1/2	40	026491
2	50	026492
3	75	026384

Expansion Joint – Type 2 (Vertical Use Only) H x H



Dimension (inches)	Dimension (mm)	Product Code
4	100	026489

Dishwasher Wye H x H x Hose Barb



Dimension (inches)	Dimension (mm)	Product Code
1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	026495

Drain Grate Sp

Dimension (inches)	Dimension (mm)	Product Code
4	100	026482

Slip Cap H

Dimension (inches)	Dimension (mm)	Product Code
1-1/2	40	026411
2	50	026412
3	75	026413
4	100	026414
6	150	026415
8	200	026416

Polyethylene Cap Slip-on Style

Dimension (inches)	Dimension (mm)	Product Code
1-1/2	40	026875
2	50	026876
3	75	026878
4	100	026880

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

DWV Systems

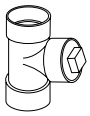
SYSTEM XFR® DWV

Product Availability

System XFR DWV Pipe

Dimension inches	Dimension mm	Product Code
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

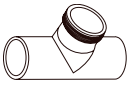
Line Cleanout H x H x Gasket Plug



Dimension inches	Dimension mm	Product Code
1-1/2	40	526040
2	50	526041
3	75	526103
4	100	526104
4 x 3 x 4	100 x 75 x 100	526105
6	150	526161
8	200	426162
10	250	526163
12	300	526164

Line Cleanout Sp x Sp x Threaded Plug

FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
8	200	526766

Plug Cleanout MPT with gasket

Dimension inches	Dimension mm	Product Code
1-1/2	40	526401
2	50	526402
3	75	526403
4	100	526404
6	150	526405

Fitting Cleanout Sp x FPT

Dimension inches	Dimension mm	Product Code
1-1/2	40	526042
2	50	526046
3	75	526047
4	100	526048
6	150	426050

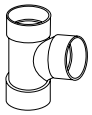
Fitting Cleanout Sp x Gasket Plug

Dimension inches	Dimension mm	Product Code
1-1/2	40	526345
2	50	526346
3	75	526347
4	100	526348
6	150	526349

Tube End Cleanout H x Gasket Plug

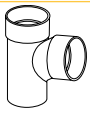
Dimension inches	Dimension mm	Product Code
1-1/2	40	526291
2	50	526298
3	75	526299
4	100	526300

Sanitary Tee H x H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	526081
2	50	526082
2 x 1-1/2 x 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 1½	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

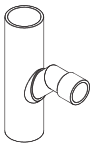
Sanitary Tee Sp x H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	526550
3 x 1-1/2	75 x 40	526552
4	100	426557

Sanitary Tee Sp x Sp x H

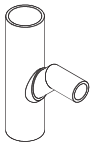
FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
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

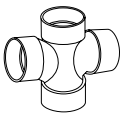
FOR USE WITH MJ GREY™

Sanitary Tee Sp x Sp x Sp



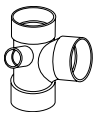
Dimension inches	Dimension mm	Product Code
8	200	526999
10 x 8	250 x 200	526759
10	250	526760
12 x 8	300 x 200	526763
12 x 10	300 x 250	526764
12	300	526765

Double Sanitary Tee H x H x H x H



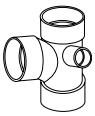
Dimension inches	Dimension mm	Product Code
1-1/2	40	526542
2	50	526543
2 x 1-1/2	50 x 40	526547
3	75	526544
3 x 1-1/2	75 x 40	526538
3 x 2	75 x 50	426539

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



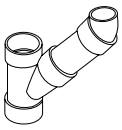
Dimension inches	Dimension mm	Product Code
3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 40	526395
3 x 3 x 3 x 2	75 x 75 x 75 x 50	526396

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



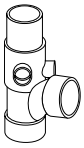
Dimension inches	Dimension mm	Product Code
3 x 3 x 3 x 1-1/2	75 x 75 x 75 x 40	526397
3 x 3 x 3 x 2	75 x 75 x 75 x 50	526398

Upright Extended Wye H x x H x Sp



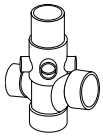
Dimension inches	Dimension mm	Product Code
3	75	526006

Single Apartment Fitting H x Sp x H



Dimension inches	Dimension mm	Product Code
3	75	526007

Double Apartment Fitting H x Sp x H x H



Dimension inches	Dimension mm	Product Code
3	75	526008

90° Elbow H x H

Dimension inches	Dimension mm	Product Code
1-1/2	40	526121
1-1/2 L	40 L	426024
2	50	526035
2 L	50 L	526122
3	75	526025
3 L	75 L	526123
4	100	526124
6	150	526125
8	200	526126
10	250	526127
12	300	526128
14	350	526129
16	400	526130
18	450	526131

90° Elbow Sp x H

Dimension inches	Dimension mm	Product Code
1-1/2	40	526231
2	50	526232
3	75	526233
4	100	526234
6	150	526235
8	200	526236
10	250	526237
12	300	526238
14	350	526135
16	400	526136
18	450	526137

90° Elbow Sp x Sp

Dimension inches	Dimension mm	Product Code
8	200	526967
10	250	526968
12	300	526970
14	350	526871
16	400	526872
18	450	526873

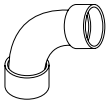
90° Reducing Elbow Closet Bend Reducing Sp x H

Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	426026

90° Reducing Elbow H x H

Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526155

90° Elbow Extra Long Sweep H x H



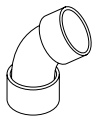
Dimension inches	Dimension mm	Product Code
2	50	426157

DWV Systems

SYSTEM XFR® DWV

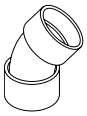
Product Availability

60° Elbow H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	526261
2	50	526262
3	75	526253
4	100	526264

45° Elbow Short Turn H x H



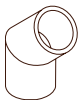
Dimension inches	Dimension mm	Product Code
1-1/2	40	526241
2	50	526242
3	75	526243
4	100	526244
6	150	526245
8	200	526246
10	250	526247
12	300	526248
14	350	526249
16	400	526250
18	450	526425

45° Elbow Short Turn Sp x H

Dimension inches	Dimension mm	Product Code
1-1/2	40	526221
2	50	526071
3	75	526223
4	100	526072
6	150	526073
8	200	526226
10	250	526270
12	300	526271
14	350	526272
16	400	526273
18	450	526274

45° Elbow Short Turn Sp x Sp

FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
8	200	526971
10	250	526770
12	300	526771
14	350	526773
16	400	526774
18	450	526775

45° Elbow Long Turn H x H

Dimension inches	Dimension mm	Product Code
6	150	426038

45° Elbow Long Turn Sp x H

Dimension inches	Dimension mm	Product Code
6	150	426225

22-1/2° Elbow H x H

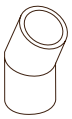
Dimension inches	Dimension mm	Product Code
1-1/2	40	526251
2	50	526252
3	75	526253
4	100	526254
6	150	526255
8	200	526256
10	250	526257
12	300	526258
14	350	526259
16	400	526260

22-1/2° Elbow Sp x H

Dimension inches	Dimension mm	Product Code
6	150	526651
8	200	526652
10	250	526653
12	300	526654
14	350	526655
16	400	526656

22-1/2° Elbow Sp x Sp

FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
8	200	526972
10	250	526973
12	300	526908

11-1/4° Elbow H x H

Dimension inches	Dimension mm	Product Code
6	150	526671
8	200	526672
10	250	526673
12	300	526674

11-1/4° Elbow Sp x H

Dimension inches	Dimension mm	Product Code
6	150	526681
8	200	526682
10	250	526683
12	300	526684

Product Availability

45° Wye H x H x H

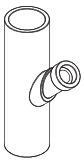
Dimension inches	Dimension mm	Product Code
1-1/2	40	526171
2	50	526172
2 x 1-1/2 x 1-1/2	50 x 40 x 40	526194
2 x 1-1/2	50 x 40	526195
3	75	526173
3 x 1-1/2	75 x 40	526201
3 x 2	75 x 50	526196
4	100	526174
4 x 2	100 x 50	526198
4 x 3	100 x 75	526197
6	150	526175
6 x 4	150 x 100	526199
8	200	526560
8 x 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° Wye Sp x H x H

Dimension inches	Dimension mm	Product Code
3	75	426635
3 x 1-1/2	75 x 40	426638

45° Wye Sp x Sp x H

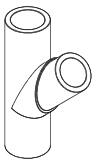
FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
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

45° Wye Sp x Sp x Sp

FOR USE WITH MJ GREY™



Dimension inches	Dimension mm	Product Code
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 H x H x H x H

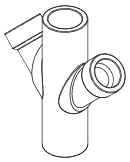
Dimension inches	Dimension mm	Product Code
1-1/2	40	526637
2	50	526456
2 x 1-1/2	50 x 40	526642
3	75	526639
3 x 1-1/2	75 x 40	526643
3 x 2	75 x 50	526644
4 x 3	100 x 75	526457
6	150	426752
8	200	426755
8 x 4	200 x 100	426753
8 x 6	200 x 150	526754
10	250	426759
10 x 4	250 x 100	426756
10 x 6	250 x 150	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

DWV Systems

SYSTEM XFR® DWV

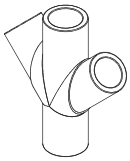
Product Availability

45° Double Wye Sp x Sp x H x H



Dimension inches	Dimension mm	Product Code
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 Sp x Sp x Sp x Sp



Dimension inches	Dimension mm	Product Code
8	200	526975
10	250	526979
10 x 8	250 x 200	526978
12 x 8	300 x 200	526983
12 x 10	300 x 250	526984

Increaser Coupling H x H

Dimension inches	Dimension mm	Product Code
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 Sp x H

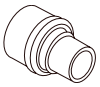
Dimension inches	Dimension mm	Product Code
2 x 1-1/2	50 x 40	526282
3 x 1-1/2	75 x 40	526292
3 x 2	75 x 50	526284
4 x 2	100 x 50	526288
4 x 3	100 x 75	526286
6 x 4	150 x 100	526054
8 x 4	200 x 100	526446
8 x 6	200 x 150	526447

Reducer Bushing (Extended) Sp x H

Dimension inches	Dimension mm	Product Code
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 MJ GREY™



Dimension inches	Dimension mm	Product Code
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

Dimension inches	Dimension mm	Product Code
1-1/2	40	526331
2	50	526332
3	75	526333
4	100	526334

Female Adapter H x FPT

Dimension inches	Dimension mm	Product Code
1-1/2	40	526341
2	50	526342
3	75	526343
4	100	526344

Coupling H x H

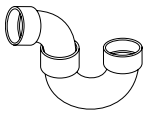
Dimension inches	Dimension mm	Product Code
1-1/2	40	526351
2	50	526352
3	75	526353
4	100	526354
6	150	526356
8	200	526358
10	250	526359
12	300	526360
14	350	526361
16	400	526367
18	450	526368

Plastic MJ Spigot MJ Sp x H

Dimension inches	Dimension mm	Product Code
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



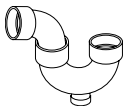
Dimension inches	Dimension mm	Product Code
1-1/2	40	526431
2	50	526432
3	75	526433
4	100	526434

DWV Systems

SYSTEM XFR® DWV

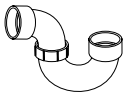
Product Availability

P Trap Solvent Weld with Cleanout H x H



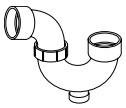
Dimension inches	Dimension mm	Product Code
1-1/2	40	526441
2	50	526442

P Trap Union Connection H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	526443
2	50	526444

P Trap Union Connection with Cleanout H x H



Dimension inches	Dimension mm	Product Code
1-1/2	40	526505

U Bend H x H

Dimension inches	Dimension mm	Product Code
4	100	526499
6	150	426503

Fitting Trap Adapter Sp x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2	40	426304
2	50	426305

Plastic Nut & Washer

Pipe Trap Adapter H x Slip Joint

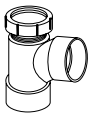
Dimension inches	Dimension mm	Product Code
1-1/2	40	526321
1-1/2 x 1-1/4	40 x 32	526329

Plastic Nut & Washer

90° Pipe Trap Adapter H x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2 x 1-1/2	40 x 40	526330

Sanitary Tee Trap Adapter H x Slip Joint x H

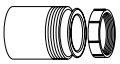


Dimension inches	Dimension mm	Product Code
1-1/2	40	426179

Copper to DWV Pipe Adapter H x Slip Joint

Dimension inches	Dimension mm	Product Code
1-1/2	40	426320
1-1/2 x 1-1/4	40 x 32	426430
2	50	426510

Tail Piece Adapter Sp x Slip Joint



Dimension inches	Dimension mm	Product Code
1-1/2	40	526555
1-1/2 x 1-1/4	40 x 32	526556

Plastic Nut & Washer

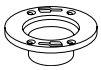
Swivel Strainer Adapter H x Swivel Nut

Dimension inches	Dimension mm	Product Code
1-1/2	40	426894

Closet Flange One Piece Plastic Slip

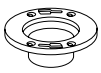
Dimension inches	Dimension mm	Product Code
4	100	526573
4 x 3	100 x 75	526584

Closet Flange One Piece Plastic Slip w Spigot End



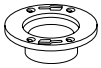
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526592

Closet Flange One Piece Plastic Slip w Molded Test Plate



Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526591

Closet Flange One Piece Plastic Slip Flush Kit



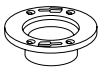
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	426594

DWV Systems

SYSTEM XFR® DWV

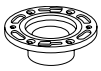
Product Availability

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



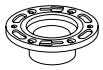
Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526595

Adjustable Closet Flange with Plastic Ring Slip



Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526586

Adjustable Closet Flange w Plastic Ring Slip w Molded Test Plate

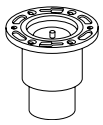


Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	526588

45° Discharge Closet Flange Adjustable w Plastic Ring

Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	426589

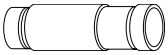
Closet Flange Kit for Concrete



Dimension inches	Dimension mm	Product Code
4 x 3	100 x 75	426593

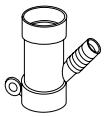
for use in Slab on Grade W.C. installations

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



Dimension inches	Dimension mm	Product Code
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

Dishwasher Wye H x H x Hose Barb



Dimension inches	Dimension mm	Product Code
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

Slip Cap H

Dimension inches	Dimension mm	Product Code
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

DWV Systems

Product Availability

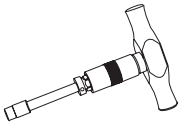
MJ Coupling DWV to DWV H x H

Dimension		# of Clamps	Product Code
inches	mm		
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

T-Handle Torque Wrench 80 in-lb



Description	Product Code
5/16" socket	094139

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.

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

Cement Selection

Pipe Diameter	IPEX System 15® / System XFR®
1-1/2" to 6"	One-Step with or without Primer
8" to 12"	Two-Step Cement with Primer
14" and larger	Xirtec® 19 PVC cement with Primer

Proper Cement Applicators

Pipe Diameter	Applicator
1-1/2" to 3"	1" Round Dauber
3" to 6"	3" Roller
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 1-1/2" to 2"	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.

Cold Weather

Although normal installation temperatures are between 40°F (4°C) and 110°F (43°C), high strength joints have been made at temperatures as low as –15°F (–26°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.

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 well-secured, 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.

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.

WARNING

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.

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.

DWV Systems

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.

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

MECHANICAL EASY SPECIFICATIONS

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

Product	Non-Combustible Building				
	General Usage	Air Plenum	Vertical Service Spaces	High Buildings	Underground
System 15 DWV	P†	N	N	N	P
System XFR DWV	P	P	N	P	P
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	P	P	N	P	P*

† 24" is not permitted
* Permitted by Code but not recommended by IPEX

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).

DWV Systems

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 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")

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