



LSPTM

Legacy of
INNOVATION

COMPANY HISTORY / A LEGACY OF INNOVATION

LSP was founded by plumbers over 40 years ago with a focus on unparalleled innovation, superior product quality, and best-in-class service to the plumbing industry. Since its beginning as Specialty Products™, LSP has continued to lead plumbing products innovation with inventions like the stainless steel braided flex connector, UltraCore™, the Pull Stop Box™, and the Flex Arrester™. Our primary focus is the new construction market where we develop products that make installations easy and provide significant cost savings to the plumbing/mechanical contractor.

BACKGROUND / OPERATIONS

LSP is owned by NCH Corporation (NCH), a privately (family) owned corporation based in Irving, Texas. NCH has been owned by the same family and headquartered in Irving for over 90 years which provides significant stability and longevity to LSP. LSP 100% owns and operates two manufacturing facilities located in Carson City, Nevada, and Hainan, China. LSP also has two Distribution Centers located in Carson City, Nevada (servicing the West/Rockies), and Dallas, Texas (servicing the Central and Eastern U.S.), plus a number of satellite warehouses providing local inventory.



COMPANY TODAY

While plumbing practices and products have changed over the last 40 years, LSP's focus on designing and manufacturing innovative products remains steadfast. LSP concentrates its efforts on making a plumber's job simpler, easier, and faster. Our products not only reduce installation time and labor, but are also built to the highest quality standards and come with unmatched customer support and service.



Today, LSP consists of the following product divisions:

- **Specialty Products™ / Benjamin Mfg.** - outlet boxes, tub boxes, clamps, test caps, hangers, AAVs, pipe secure brackets, copper stubouts, hammer arresters, tub protectors, water heater pans, foam wrap, and much more
- **Aqua-Flo®** - a full line of braided, vinyl, and corrugated connectors and stops and LSP's innovative Pull Stop Box™.
- **Insulation** - polyolefin foam and rubber pipe insulation
- **Tech Specialties® / Frank Pattern™** - a broad line of roof drains, floor drains, shower drains, closet flanges, and access covers
- **Rapid-Fit®** - bath waste and overflow assemblies with designer finishes
- **Chemicals** - pipe thread sealants, solvent cements, and primers

Helping families realize the American Dream by delivering innovative, plumbing solutions.

BUY AMERICA

LSP proudly supports the American Recovery and Reinvestment Act (ARRA) of 2009 and the original Buy American Act of 1933. ARRA requires that any project receiving government funding must purchase American-made goods, if at all possible. This provision promotes American people to buy goods that have been produced by other Americans.

LSP has manufacturing facilities and is headquartered in the United States. We do everything possible to manufacture and source our products domestically and are proud to offer many American made products. You can easily locate American-made products throughout the catalog by looking for the USA symbol below.

The products below meet the "Buy American: provisions of Section 1605" of the ARRA.

Specialty Products™

- All Plastic Outlet Boxes Without Valves
- Lever-Lock
- PEX Elbows
- Single Nail Clamps
- Flexi-Fin Clamps
- Plastic Plumbers Tape
- Hang'Em II® Pipe Hangers
- All Groundwork Items
- All Test Caps and Plugs
- Benjamin Mfg. Products
- Inline Hammer Arresters
- Ultra EZ Turn Valve
- Hyco Straps



- Roof Drains
- Deck Drains
- Drain Accessories
- Hard Base Poly Roof Flashings
- Flex-All™ Soft Base Roof Flashings
- Poly Pipe Vent Shields

CHEMICALS

- Solvent Cements and Primers
- Pipe Thread Sealants



Insulation

- Polyolefin Foam Insulation

LEAD FREE

LSP is continually focused on quality products. This focus includes consumer safety. In support of the "Lead Free" legislation that is now in effect in the U.S., LSP offers "Lead Free" products that contain less than 0.25% lead by weighted average. These products comply with all state and federal legislation that revise the Federal Safe Drinking Water Act and the Lead Contamination Control Act of 1988. Previous to the recent "Lead Free" legislature, plumbing components could contain up to 8% lead.

LSP is devoted to providing "Lead Free" products. These items are easily identified by the checkmark symbol.



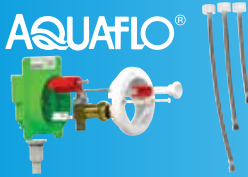
Specialty Products™



Washing Machine Outlet Boxes, Ice Maker Boxes, Utility Boxes, Gas Outlet Boxes, Faceplates, Air Admittance Valves, PipeSecure™ Brackets & Accessories, Hyco Straps, Copper Stub Outs, Grommets, Brackets, PEX Elbows, Clamps, Acousto® Clamp Systems, Acousto® Kits, Hangers, Mini Hammer Arresters, Pipe Protectors, Tub Boxes, Gorundwork Items, Test Caps & Plugs, Access Panels & Covers, Cleanout Covers, Spacers, In-Sul Wrap, Foam Tape, Organizational Trays, Nipple Caddies, Dirt Rider, Ladder Ledge, Water Heater Pans, Washing Machine Pans, Tub Protectors, Custom Tub Protector Order Form

4-39

AQUAFLO®



Pull Stop Box™, Pull Stop Box™ Trim Kits & Accessories, Quarter Turn Ball Valves, Flex Arrester, Water Heater Connectors, Faucet Connectors, Toilet Connectors, Washing Machine Connectors, Ice Maker Connectors, Dishwasher Connectors, Connector Kits, Specialized Connectors, Polymer Push-On Valves and Hoses

40-59

Insulation™



Polyolefin Foam (Self-Sealing, Half-Slit),

60-62

**TechSpecialties/
Frank Pattern™**



Roof Drains, Floor Drains, Area Drains, Shower Drains, Deck Drains, Roof Flashings, Closet Rings & Flanges, Cleanout Covers, Floor Access Covers

68-81

RAPID-FIT®



Rough-In Kits, PVC & ABS Bath Waste & Assemblies, Designer Finish Trim Kits, Brass & Plastic Bath Waste Assemblies, Trim Kits & Accessories

82-87

CHEMICALS



Solvent Cements and Primers, Pipe Thread Sealants

88-93

Specialty Products™

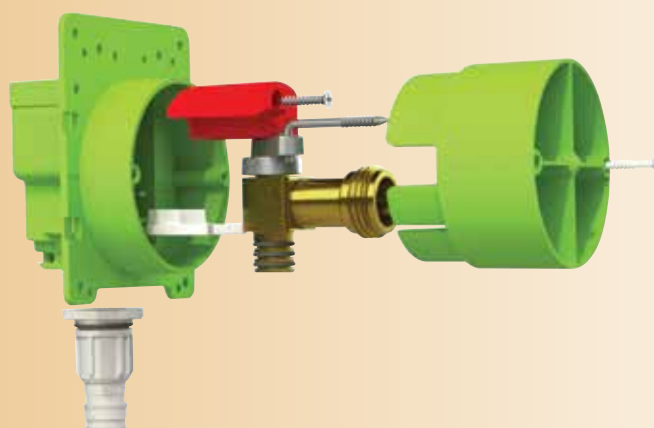
Specialty Products™ is LSP's original division. When it developed washing machine and ice maker outlet boxes over 40 years ago, Specialty Products™ acquired its reputation as the innovation leader to the plumbing industry. That unwavering focus on innovation also led to the development of pipe clamps, test caps, and tub boxes among many other products. Today, Specialty's Hang 'em Hangers™ and PipeSecure™ Brackets provide the quickest way to support pipe runs.

LSP has partnered with Benjamin Manufacturing Co. to offer a broad range of tub protectors, tote trays, nipple caddies, plastic water heater pans, access covers, foam wrap, and much more. These products are designed to make a plumber's job easier and reduce installation costs. Many of the products are constructed of high impact plastic that is extremely tough, resilient, and withstands rust. These products are manufactured domestically.



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The Pull Stop Box™ by LSP Has Revolutionized the Plumbing Industry!



Designed to take the hassle out of angle stop installation by eliminating the need to stub out and moving the angle stop into the wall, the end result is a beautiful, finished look.

See all the Pull Stop Box™ options starting on page 41 in the Aqua-Flo® Section.



Kahuna™ Outlet Box w/ Clear Cover and Optional Condensate
OB-2011



White Faceplate
P-00910



Kahuna™ Outlet Box w/ Hammer Arresters, Plastic Simplex Handle, Clear Cover and Optional Condensate
OB-2111



Plastic Simplex Handle
P-06066

Kahuna™ Outlet Box

The most durable outlet box in the plumbing industry. Our error-proof, no knockout drains allow for hassle-free testing. Fill your stack directly from the box and test without a mess! Dual drain feature allows you to choose right or left outlet. Easy-to-install cosmetic cap hides unused drain. Optional, innovative condensate, with visible air gap, accommodates secondary drainage where needed. Quarter Turn Ball Valve Outlet Box. Dimensions: 7-1/4" x 9-3/4" x 3-3/4". Faceplate: 12.32" x 8.50".

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVES		
OB-2000	White, Unassembled	10
WITH COPPER SWEAT VALVES		
OB-2010	White, Unassembled	10
OB-2011	White, Assembled	10
WITH CPVC VALVES		
OB-2020	White, Unassembled	10
OB-2021	White, Assembled	10
WITH CRIMP PEX VALVES		
OB-2030	White, Unassembled	10
OB-2031	White, Assembled	10
WITH UPONOR ProPEX® VALVES		
OB-2060	White, Unassembled	10
OB-2061	White, Assembled	10
WITH SIMPLEX VALVES		
OB-2400	White, Copper Sweat	10
OB-2401	White, CPVC	10
OB-2402	White, Crimp PEX	10
OB-2403	White, Uponor PEX	10
WITH VIEGA VALVES		
OB-2070	White, Unassembled	10
OB-2071	White, Assembled	10
ACCESSORIES / REPLACEMENT PARTS		
P-00991	Condensate Stand	3
P-00910	White Faceplate	20
P-00992	Test Plug	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)

Add "-C" to the end of the part number for Condensate stand

Add "-P" to the end of the part number for Test Plug



Kahuna™ Outlet Box with Hammer Arresters

All of the great features of our Kahuna™ Outlet Box with Water Hammer Arresters. Outlet box includes a plastic Simplex handle.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-2110	White, Unassembled	10
OB-2111	White, Assembled	10
WITH CPVC VALVES		
OB-2120	White, Unassembled	10
OB-2121	White, Assembled	10
WITH CRIMP PEX VALVES		
OB-2130	White, Unassembled	10
OB-2131	White, Assembled	10
WITH UPONOR ProPEX® VALVES		
OB-2160	White, Unassembled	10
OB-2161	White, Assembled	10
ACCESSORIES / REPLACEMENT PARTS		
P-00991	Condensate Stand	3
P-00910	White Faceplate	20
P-06066	Plastic Simplex Handle	1
P-00992	Test Plug	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)

Add "-C" to the end of the part number for Condensate

Add "-P" to the end of the part number for Test Plug



Plastic Switch Hitter® Outlet Box

One box does it all! Patented design provides left, center and right waste options. Knockouts accept either waste or water lines. Quarter Turn Ball Valve. Durable brass resists corrosion. Valves certified to ASME 112.18.1/CSA B125.1 Standard. Long lasting double stem O-rings and tough PTFE seats. Dimensions: Box: 6-1/2" x 7-5/8" x 3". Faceplate: 10-3/8" x 8-7/16".



Center Outlet
OB-101



Left Outlet
OB-203



Right Outlet
OB-205



White Faceplate
OB-901

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVES		
OB-100	Beige	10
OB-101	White	10
WITH COPPER SWEAT VALVES		
OB-102	Beige, Unassembled	10
OB-200	Beige, Center Outlet	10
OB-202	Beige, Left Outlet	10
OB-103	White, Unassembled	10
OB-201	White, Center Outlet	10
OB-203	White, Left Outlet	10
OB-205	White, Right Outlet	10
WITH CPVC VALVES		
OB-351	White, Unassembled	10
OB-353	White, Center Outlet	10
OB-355	White, Left Outlet	10
OB-357	White, Right Outlet	10
WITH CRIMP PEX VALVES		
OB-321	White, Unassembled	10
OB-323	White, Center Outlet	10
OB-325	White, Left Outlet	10
OB-327	White, Right Outlet	10
WITH UPONOR ProPEX® VALVES		
OB-331	White, Unassembled	10
OB-338	White, Center Outlet	10
WITH VIEGA PEX VALVES		
OB-341	White, Unassembled	10
OB-343	White, Center Outlet	10
REPLACEMENT FACEPLATES		
OB-900	Beige, for Switch Hitter®	100
OB-901	White, for Switch Hitter®	100
OB-903	White, for Switch Hitter® (Deep)	100

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)





Plastic Switch Hitter® Outlet Box
w/ Hammer Arrester
OB-207

Plastic Switch Hitter® Outlet Box With Water Hammer Arresters

All the great features of our Plastic Switch Hitter® Outlet Box with Water Hammer Arresters.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-210	White, Unassembled	10
OB-207	White, Center Outlet	10
OB-209	White, Left Outlet	10
WITH CPVC VALVES		
OB-211	White, Unassembled	10
OB-213	White, Center Outlet	10
WITH CRIMP PEX VALVES		
OB-216	White, Unassembled	10
OB-218	White, Center Outlet	10
WITH UPONOR ProPEX® VALVES		
OB-217	White, Unassembled	10
OB-219	White, Assembled	10
WITH VIEGA VALVES		
OB-237	White, Assembled	10
REPLACEMENT FACEPLATES		
OB-900	Beige Faceplate	100
OB-901	White Faceplate	100
OB-903	White Faceplate (Deep)	100

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Plastic Simplex™ Handle
P-06066

Plastic Switch Hitter® Outlet Box With Water Hammer Arresters and Plastic Simplex™ Handle

Our standard Plastic Washing Machine Outlet Box with Water Hammer Arresters is now available with convenient Plastic Simplex™ handle. The Plastic Simplex™ handle slides onto the valve handles, turning them into a single-lever valve. Quarter Turn Ball Valve. Dimensions: Box 6-1/2" x 7-5/8" x 3". Faceplate: 10-3/8" x 8-7/16".

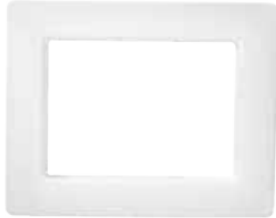
PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-410-L	White, Assembled, Left Outlet	10
OB-410-R	White, Assembled, Right Outlet	10
WITH CPVC VALVES		
OB-411-L	White, Assembled, Left Outlet	10
OB-411-R	White, Assembled, Right Outlet	10
WITH CRIMP PEX VALVES		
OB-416-L	White, Assembled, Left Outlet	10
OB-416-R	White, Assembled, Right Outlet	10
WITH UPONOR ProPEX® VALVES		
OB-417-L	White, Assembled, Left Outlet	10
OB-417-R	White, Assembled, Right Outlet	10
REPLACEMENT FACEPLATES		
OB-901	White, for Switch Hitter®	100
ACCESSORIES / REPLACEMENT PARTS		
P-06066	Plastic Simplex™ Handle	1

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)





Plastic Switch Hitter™ w/ Plastic Simplex™ Handle and Crimp PEX Valves
OB-435



White Faceplate
OB-901



Tornado™ Outlet Box w/ Hammer Arresters
OB-723



Tornado™ Outlet Box
OB-711

Plastic Switch Hitter® Outlet Box With Plastic Simplex™ Handle

Consolidates all valves and hose connections into one unit. Unique single-lever handle controls both hot and cold water with one movement. Dimensions: Box 6-1/2" x 7-5/8" x 3". Faceplate: 10-3/8" x 8-7/16".

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-400	Beige, Unassembled	10
OB-402	Beige, Left Outlet	10
OB-404	Beige, Right Outlet	10
OB-401	White, Unassembled	10
OB-403	White, Left Outlet	10
OB-405	White, Right Outlet	10
WITH CPVC VALVES		
OB-429	White, Unassembled	10
WITH UPONOR ProPEX VALVES		
OB-438	White, Unassembled	10
OB-439	White, Left Outlet	10
WITH CRIMP PEX VALVES		
OB-435	White, Unassembled	10
OB-437	White, Left Outlet	10
REPLACEMENT FACEPLATES		
OB-901	White, for Switch Hitter®	100
OB-903	White, for Switch Hitter® (Deep)	100

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Tornado™ Outlet Box

Constructed from high-impact plastic. Deeper faceplate and factory assembled drain funnel. Accommodates washing machine discharge and condensate while preventing installation errors. Easy to install condensate pipe stand provides quick visual inspection of required air gap. Quarter Turn Ball Valve. Dimensions: 11-1/4" x 6-1/4" x 3.8".

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-711	White, Unassembled	5
OB-723	White, w/ Hammer Arresters, Assembled	5
WITH CPVC VALVES		
OB-707	White, Unassembled	5
OB-708	White, Unassembled, No Funnel	5
OB-709	White, Assembled	5
OB-709-TOP	White, Top Mounted, Assembled	5
OB-719	White, w/ Hammer Arresters, Assembled	5
OB-719-TOP	White, Top Mounted w/ Hammer Arresters, Assembled	5
WITH CRIMP PEX VALVES		
OB-703	White, Unassembled	5
OB-705	White, Assembled	5
OB-705-TOP*	White, Top Mounted, Assembled	5
OB-724	White, w/ Hammer Arresters, Assembled	5
OB-724-TOP*	White, Top Mounted w/ Hammer Arresters	5
WITH UPONOR ProPEX® VALVES		
OB-720	White, Assembled	5
OB-720-TOP*	White, Top Mounted, Assembled	5
OB-721	White, w/ Hammer Arresters, Assembled	5
OB-721-TOP*	White, Top Mounted w/ Hammer Arresters	5
WITH VIEGA PEX VALVES		
OB-704	White, Unassembled	5
OB-706	White, Assembled	5
OB-734	White, Assembled, w/ Hammer Arresters	5
ACCESSORIES / REPLACEMENT PARTS		
OB-718	White Faceplate & Brackets	5
P-00712	Condensate Stand	5

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)

* Does not come with Simplex Handle





FireStop™ Washing Machine Outlet Box
OBFS-2011



FireStop™ Washing Machine Outlet Box
w/ Hammer Arresters
OBFS-2111



Metal Washing Machine Outlet Box
OB-501

FireStop™ Washing Machine Outlet Box

The most versatile, fire-rated box in the industry. Similar in design to the Switch Hitter®, valves may be mounted right/left, or with center drain, and from top or bottom. Constructed from fire-resistant PVC, with a factory-mounted intumescent pad. FireStop™ boxes are Warnock Hersey certified to ASTM E-814 and CAN/ULC S115 – 1Hr. and 2Hr. listings. Suitable for use on wood or metal studs, and with all pipe types. Molded in test cap for testing of DWV drain. Quarter Turn Ball Valve. Dimensions: 7-1/16" x 8-3/16" x 3". Faceplate: 11" x 8-3/4". Faceplates will accommodate 1.25" wall thickness.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVES		
OBFS-2000	White, Without Valves	10
WITH COPPER SWEAT VALVES		
OBFS-2010	White, Unassembled	10
OBFS-2011	White, Assembled, Center Drain	10
OBFS-2110	White, Unassembled w/ Hammer Arresters	10
OBFS-2111	White, Assembled, Center Drain, w/ Hammer Arresters	10
WITH CPVC VALVES		
OBFS-2020	White, Unassembled	10
OBFS-2021	White, Assembled, Center Drain	10
OBFS-2120	White, Unassembled w/ Hammer Arresters	10
OBFS-2121	White, Assembled, Center Drain, w/ Hammer Arresters	10
WITH CRIMP PEX VALVES		
OBFS-2030	White, Unassembled	10
OBFS-2031	White, Assembled, Center Drain	10
OBFS-2130	White, Unassembled w/ Hammer Arresters	10
OBFS-2131	White, Assembled, Center Drain, w/ Hammer Arresters	10
WITH VIEGA VALVES		
OBFS-2137	White, Assembled	10
WITH UPONOR ProPEX® VALVES		
OBFS-2060	White, Unassembled	10
OBFS-2061	White, Assembled, Center Drain	10
OBFS-2160	White, Unassembled w/ Hammer Arresters	10
OBFS-2161	White, Assembled, Center Drain, w/ Hammer Arresters	10
ACCESSORIES / REPLACEMENT PARTS		
P-00213	White Faceplate	1

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Metal Washing Machine Outlet Box

Available in reversible left or right outlet and center outlet models. Easy to install. Packaged with faceplate. Valves certified to ASME A112.18.1/CSA B125.1 Standard. 20 gauge, with white powder-coat paint. Patented design. Quarter Turn Ball Valve. Dimensions: Box: 5-7/8" x 8-11/3" x 3-1/2". Faceplate: 8-1/4" x 10-5/16". All come unassembled.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVES		
OB-500	Reversible Outlet	5
WITH COPPER SWEAT VALVES		
OB-501	Left or Right Outlet	5
OB-502	Center Outlet	5
OB-505	Left or Right Outlet	5
WITH CRIMP PEX VALVES		
OB-506	Center Outlet	5
WITH UPONOR ProPEX® VALVES		
OB-525	Center Outlet	5
WITH CPVC VALVES		
OB-550	White, Center Outlet	5
OB-551	Left or Right Outlet	5

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)





Metal Washing Machine Outlet Box
w/ Water Hammer Arresters
OB-510

Metal Washing Machine Outlet Box With Water Hammer Arresters

All of the same great features of our Metal Washing Machine Outlet Box with Water Hammer Arresters.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVES		
OB-508	White, Center Outlet	5
OB-510	White, Left or Right Outlet	5
WITH CPVC VALVES		
OB-513	White, Center Outlet	5
OB-511	White, Left or Right Outlet	5
WITH CRIMP PEX VALVES		
OB-516	White, Center Outlet	5
OB-517	White, Left or Right Outlet	5
WITH UPONOR ProPEX® VALVES		
OB-519	White, Center Outlet	5

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Red CPVC 3/4" GHT Washing Machine
Outlet Box Valve
P-06292

3/4" GHT Washing Machine Outlet Box Valves

Quarter Turn Ball Valves. Durable brass resists cracking and corrosion. Color coded handles – red/blue for hot/cold. Easy on/off finger control. Valves are certified to ASME A112.18.1 Standard. Long lasting double stem O-rings and tough PTFE seats.

HANDLE	STD. VALVE	MSTR CTN QTY	VALVE w/ H.A.	MSTR CTN QTY	NON-H.A. FOR SIMPLEX	MSTR CTN QTY
WITH COPPER SWEAT VALVES						
Red	P-06287	100	P-06295	24	P-06315	24
Blue	P-06286	100	P-06294	24	P-06314	24
WITH CPVC VALVES						
Red	P-06292	100	P-06257	24	P-06319	24
Blue	P-06291	100	P-06256	24	P-06318	24
WITH CRIMP PEX VALVES						
Red	P-06301	100	P-06237	24	P-06317	24
Blue	P-06300	100	P-06238	24	P-06316	24
WITH VIEGA VALVES						
Red			P-06338	24		
Blue			P-06337	24		
WITH UPONOR ProPEX® VALVES						
Red	P-06421	100	P-06334-WB	48	P-06370	48
Blue	P-06420	100	P-06333-WB	48	P-06371	48
ACCESSORIES / REPLACEMENT PARTS						
	1/2" Plastic Nut For Mounting Valve				P-06068	1,000
	Simplex Handle				P-06066	1,000

H.A. = Hammer Arrester



Blue Crimp PEX 3/4" GHT Washing Machine
Outlet Box Valve
P-06238



Red Uponor ProPEX® 3/4" GHT
Washing Machine Outlet Box Valve
P-06421



Mini Ice Maker Box
OB-8010-LL

Mini Ice Maker Box

Modern design with added strength provides unquestionable reliability. Longer mounting ears accommodate all applications. Quarter Turn Ball Valve. All boxes are assembled.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
OB-8000	White, No Valve	10
WITH COPPER SWEAT VALVE		
OB-8010-LL	White, 1/2" Copper Sweat x 1/4" Compr.	10
WITH CPVC VALVE		
OB-8020-LL	White, 1/2" CPVC x 1/4" Compr.	10
WITH CRIMP PEX VALVE		
OB-8030-LL	White, 1/2" PEX x 1/4" Compr.	10
OB-8031-LL	White, 3/8" PEX x 1/4" Compr.	10
WITH UPONOR ProPEX® VALVE		
OB-8040-LL	White, 1/2" Uponor x 1/4" Compr.	10
WITH VIEGA VALVE		
OB-8070-LL	White, 1/2" PEX x 1/4" Compr.	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)

Lead Free



Mini Ice Maker Box
w/ Water Hammer Arrestor
OB-8110-LL

Mini Ice Maker Box With Water Hammer Arrestor

All the great features of our Mini Ice Maker Box with Water Hammer Arrestor. All boxes are assembled.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVE		
OB-8110-LL	White, 1/2" Copper Sweat x 1/4" Compr.	10
WITH CPVC VALVE		
OB-8120-LL	White, 1/2" CPVC x 1/4" Compr.	10
WITH CRIMP PEX VALVE		
OB-8130-LL	White, 1/2" PEX x 1/4" Compr.	10
WITH UPONOR ProPEX® VALVE		
OB-8140-LL	White, 1/2" Uponor x 1/4" Compr.	10
WITH VIEGA VALVE		
OB-8170-LL	White, 1/2" Uponor x 1/4" Compr.	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)

Lead Free





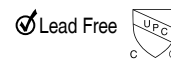
Plastic Ice Maker Box
OB-801-LL

Plastic Ice Maker Box

Slim-line profile for 1" backing. Ribbed walls add support for greater strength and better alignment. Adjustable faceplate accommodates up to 5/8" wall thickness. Top and bottom nailing tabs assure solid installation. Constructed of high-impact plastic. Valve certified to ASME A112.18.1/CSA B125.1 Standard. Quarter Turn Ball Valve. Dimensions: Box: 5-3/16" x 5-3/16" x 2-1/2". Faceplate: 6-13/16" x 6-13/16". All valves are 1/2" inlet x 1/4" outlet, unless otherwise noted. All boxes are assembled.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
OB-802	Beige	10
OB-803	White	10
WITH COPPER SWEAT VALVE		
OB-800-LL	Beige, 1/2" Copper Sweat x 1/4" Compr.	10
OB-801-LL	White, 1/2" Copper Sweat x 1/4" Compr.	10
WITH CPVC VALVE		
OB-807-LL	White, 1/2" CPVC x 1/4" Compr.	10
WITH CRIMP PEX VALVE		
OB-811-LL	White, 1/2" PEX x 1/4" Compr.	10
OB-810-LL	White, 3/8" PEX x 1/4" Compr.	10
WITH UPONOR ProPex® VALVE		
OB-814-LL	White, 1/2" Uponor x 1/4" Compr.	10
WITH VIEGA PEX VALVE		
OB-843-LL	White, 1/2" Viega x 1/4" Compr.	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



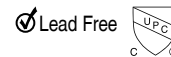
Plastic Ice Maker Box
w/ Hammer Arrester
OB-817-LL

Plastic Ice Maker Box With Hammer Arrester

All the great features of our Plastic Ice Maker Box with Water Hammer Arrester.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVE		
OB-817-LL	White, 1/2" Copper Sweat x 1/4" Compr.	10
WITH CPVC VALVE		
OB-819-LL	White, 1/2" CPVC x 1/4" Compr.	10
WITH CRIMP PEX VALVE		
OB-818-LL	White, 1/2" PEX x 1/4" Compr.	10
OB-820-LL	White, 3/8" PEX x 1/4" Compr.	10
WITH UPONOR ProPEX® VALVE		
OB-824-LL	White, 1/2" Uponor x 1/4" Compr.	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)





FireStop™ Ice Maker Box
OBFS-8010-LL



FireStop™ Ice Maker Box
w/ Hammer Arrester
OBFS-8110-LL

FireStop™ Ice Maker Box

The fire-rated Ice Maker box is similar in design to the Mini Ice Maker, with a modern look and compact profile, but is constructed from fire-resistant PVC, with a factory-mounted intumescent pad. FireStop™ boxes are Warnock Hersey certified to ASTM E-814 and CAN/ULC S115 - 1Hr. and 2Hr. listings. Suitable for use on wood or metal studs, and with all pipe types. Quarter Turn Ball Valve. Dimensions: 5-11/16" x 3-7/8" x 2-5/8". Faceplate: 5-1/4" x 7-1/4". Faceplates will accommodate 1.25" wall thickness.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
OBFS-8000	White, No Valves	10
WITH COPPER SWEAT VALVE		
OBFS-8010-LL	White, 1/2" Copper Sweat x 1/4" Compr.	10
OBFS-8110-LL	White, 1/2" Copper Sweat x 1/4" Compr. w/Hammer Arrester	10
WITH CPVC VALVE		
OBFS-8020-LL	White, 1/2" CPVC x 1/4" Compr.	10
OBFS-8120-LL	White, 1/2" CPVC x 1/4" Compr. w/Hammer Arrester	10
WITH CRIMP PEX VALVE		
OBFS-8030-LL	White, 1/2" PEX x 1/4" Compr.	10
OBFS-8130-LL	White, 1/2" PEX x 1/4" Compr. w/Hammer Arrester	10
WITH UPONOR ProPEX® VALVE		
OBFS-8040-LL	White, 1/2" Uponor x 1/4" Compr.	10
OBFS-8140-LL	White, 1/2" Uponor x 1/4" Compr. w/Hammer Arrester	10
WITH VIEGA VALVE		
OBFS-8170-LL	White, 1/2" Uponor x 1/4" Compr.	10

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Lead Free



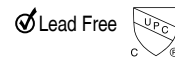
Metal Ice Maker Box
OB-504-LL

Metal Ice Maker Box

Slim-line profile for 1" backing. Ribbed walls add support for greater strength and better alignment. Adjustable faceplate accommodates up to 5/8" wall thickness. Top and bottom nailing tabs assure solid installation. Valve certified to ASME A112.18.1/CSA B125.1 Standard. Quarter Turn Ball Valve. Dimensions: Box: 5-1/8" x 5-5/8" x 2-1/2". Faceplate: 6-13/16" x 6-13/16". All boxes are unassembled.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
OB-503	White	5
WITH COPPER SWEAT VALVE		
OB-504-LL	White, 1/2" Copper Sweat x 1/4" Compr.	5
WITH CPVC VALVE		
OB-514-LL	White, 1/2" CPVC x 1/4" Compr.	5
WITH CRIMP PEX VALVE		
OB-507-LL	1/2" Crimp PEX x 1/4" Compr.	5
WITH UPONOR PPEX VALVE		
OB-512-LL	1/2" Uponor PEX 1/4" Compr.	5

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



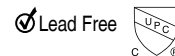
Metal Ice Maker Box
w/ Hammer Arrestor
OB-509-LL

Metal Ice Maker Box With Water Hammer Arrestor

All the great features of our Metal Ice Maker Box with Water Hammer Arrestor.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITH COPPER SWEAT VALVE		
OB-509-LL	White, 1/2" Copper Sweat x 1/4" Compr.	5
WITH CPVC VALVE		
OB-515-LL	White, 1/2" CPVC x 1/4" Compr.	5
WITH CRIMP PEX VALVE		
OB-518-LL	White, 1/2" PEX x 1/4" Compr.	5
WITH UPONOR ProPEX® VALVE		
OB-520-LL	White, 1/2" Uponor x 1/4" Compr.	5

Add "-T" to the end of the part number for Tract Pack (faceplates packaged separately)



Ice Maker Outlet Box Valve
P-06288-LL

Ice Maker Outlet Box Valves

Quarter Turn Ball Valves. Durable brass resists cracking and corrosion. Easy on/off finger control. Valves are certified to ASME A112.18.1/CSA 125.1 Standard. Long lasting double stem O-rings and tough PTFE seats.

INLET	OUTLET	STD. VALVE	VALVE w/ H.A.	MSTR CTN QTY
COPPER SWEAT				
1/2"	1/4" Compr.	P-06288-LL	P-06296-LL	80
CPVC				
1/2"	1/4" Compr.	P-06293-LL	P-06258-LL	80
CRIMP PEX				
1/2"	1/4" Compr.	P-06302-LL	P-06239-LL	80
3/8"	1/4" Compr.	P-06462-LL		80
PEX VALVES				
1/2" PEX	1/4" Compr.	P-06325-LL	P-06339-LL	80
UPONOR				
1/2"	1/4" Compr.	P-06422-LL	P-06335-WB-LL	80
ACCESSORIES / REPLACEMENT PARTS				
1/2" Plastic Nut For Mounting Valve			P-06068	5000



Ice Maker Outlet Box Valve -
Copper Sweat w/ H.A.
P-06296-LL

Specialty Products™

METAL ICE MAKER BOXES & VALVES



Utility Outlet Box
OB-1200



Perfect Fit™ Plastic Gas Outlet Box
GSB-101



Perfect Fit™ Plastic Gas Outlet Box
GSB-501



Deep Gas Box
OB-1260



FireStop™ Gas Box
GSFS-101

Utility Outlet Box

Innovative box for multiple applications. Provides easy access to main water supply shut-off. Saves time and money. Box is offered without valves for your own innovative applications. Dimensions: 6" x 6" x 3-3/8". Faceplate: 8" x 8".

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
OB-1200	White	10



Perfect Fit™ Gas Outlet Box

All gas boxes are unassembled. Recessed construction eliminates line kinks. Reduced clearance from the wall keeps appliances out of the way. Finished, attractive installations. Includes mounting brackets and safety plug. Quarter Turn Ball Valve for easy shut-off. Valve is CSA and AGA approved.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
FOR IRON PIPE		
GSB-101	White, 1/2" MIP x 1/2" FIP	10
GSB-201	White, 3/4" MIP x 3/4" FIP Valve	10
GSB-201-D	3/4" MIP x 3/4" FIP Valve, Deep	10
GSB-501	White, 1/2" MIP x 1/2" FIP Valve, Metal Outlet Box	10
GSB-601	White, 3/4" MIP x 3/4" FIP Valve, Metal Outlet Box	10
FOR CORRUGATED STAINLESS STEEL TUBING (CSST)		
GSB-101-FX	White, 1/2" Female x 1/2" Female Valve for CSST	10
GSB-501-FX	White, Metal Outlet Box, 1/2" Valve	10

Add "-GP" to the end of the part number for Gas Pack (faceplates packaged separately)

Deep Gas Outlet Box

Utility box for gas supply. Deep box design keeps valve recessed and out of the way of appliances. Ideal for 3/4" valve applications.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
GAS OUTLET BOX		
OB-1260	1/2" MIP x 1/2" FIP	10
OB-1261	3/4" MIP x 3/4" FIP	10
OB-1262	1/2" Valve for CSST*	10

Add "-GP" to the end of the part number for Gas Pack (faceplates packaged separately)

* Adapter Sold Separately

FireStop™ Gas Outlet Box

The Industry's best, compact, fire-rated box available with gas valves for gas appliance applications. Box: 5-11/16" x 3-7/8" x 2-5/8". Faceplate: 5-1/4" x 7-1/4". 1 hour/2 hour fire rating. Warnock Hersey listed 1hr and 2hr: ASTM E814, CAN/ULC S115, IAPMO/UPC Certified. Valve also meets or exceeds: ASME A112.18.1, NSF Standard 61.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
GSFS-101	1/2" MIP x 1/2" FIP	10
GSFS-201	3/4" MIP x 3/4" FIP	10
FOR CORRUGATED STAINLESS STEEL TUBING (CSST)*		
GSFS-101-FX	1/2" MIP x 1/2" FIP	10

Add "-GP" to the end of the part number for Gas Pack (faceplates packaged separately)

* Adapter Sold Separately





Mini-Hammer Arrester
P-06390



Mini-Hammer Arrester
P-06399



Polymer Mini Inline Hammer
Arresters

Mini-Hammer Arrester

Eliminates water hammer problems. AA size rating. Can be installed vertically or horizontally. Machined fittings for superior quality. Spun copper top for unobtrusive, clean look. NSF compliant; UPC certified. No access panel required.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-06379	1/2" Crimp PEX	50
P-06389	1/2" Copper Sweat	50
P-06390	1/2" CPVC	50
P-06392	3/4" Male Sweat	50
P-06393	3/8" Crimp PEX tee	50
P-06394	1/2" Crimp PEX tee	50
P-06395	1/4" O.D. Compr. tee	50
P-06398	5/8" O.D. Compr. tee	50
P-06399	3/4" F.G.H.T. x 3/4" M.G.H.T.	50
P-06401	5/8" O.D. FEM x 5/8" O.D. Compr.	50
P-06402	1/2" FEM Sweat x 1/2" Male Sweat	50
P-06405	1/2" Uponor PEX tee (low lead)	50



Polymer Mini Inline Hammer Arresters

Unlike Brass Hammer Arresters, the Polymer Mini Inline Hammer Arresters are made from the same engineered polymer as PEX fitting which is corrosion resistant, will never pit and is Lead Free Compliant. Easy to install at any angle. No access panel or maintenance required. Perfect for dishwashers.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-06406	1/2" Crimp PEX	50
P-06407	1/2" Uponor PEX	50
P-06408	1/2" Male CPVC	50

ASSE 1010 Certified NSF/ANSI61 Lead Free





1/2" MIP X 1/2" FIP
P-06450



3/4" MIP X 3/4" FIP
P-06451



1/2" FIP X 1/2" FIP
P-06452

Gas Outlet Box Valves

Quarter-turn, angle valves CSA listed to standards ANSI Z21.15/CSA 9.1 for 1/2 PSIG working pressure and to standard ASME B16.44 for above ground piping systems up to 5 PSI working pressure.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-06450	1/2" MIP X 1/2" FIP	50
P-06451	3/4" MIP X 3/4" FIP	50
P-06452	1/2" FIP X 1/2" FIP	50



Gas Valve Fitting Adaptors

Gas valve fitting adaptors allow connection between the gas valve to gas outlet boxes. Note: P-06050 is required for attachment. ASTM B16 brass.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WITHOUT VALVE		
P-06550	1/2" FIP X 1/2" MIP	135
P-06551	3/4" FIP X 3/4" MIP	135



Compliances/Listings:

ANSI Z21.15-2009/CSA 9.1-2009

ANSI Z21.15a-2012/CSA 9.1a-2012

ANSI Z21.15b-2013/CSA 9.1b-2013

CGA Req. CR91-002-1995, ASME B16.44-2012

CSA Class 3371 08, 3371 88, 3371 12, and 3371 92



Faceplate Replacement



P-00961

Faceplate Replacements

Standard faceplate constructed of high-impact plastic; 5/8" depth. Deep plastic faceplate accommodates two 1/2" thicknesses of drywall or up to 1" thick plaster; 1-1/4" depth.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WASHING MACHINE		
P-00213	White, for FireStop™	100
P-00910	White, for Kahuna™	20
OB-781	White, for Tornado*	50
OB-900	Beige, for Switch Hitter®	100
OB-901	White, for Switch Hitter®	100
OB-902	Beige, for Switch Hitter® (Deep)	100
OB-903	White, for Switch Hitter® (Deep)	100
P-4163	White, for Metal WMOB, 20 Gauge	100
ICE MAKER		
P-00908	White, for Mini Ice Maker	20
P-00805	White, for FireStop™	40
OB-904	Beige, for Standard	100
OB-905	White, for Standard	10
P-4164	White, for Metal IMOB, 20 Gauge	200
UTILITY		
P-00961	White AAV Wall Box Louver Faceplate	10
O B-951	White, (Deep)	100

* Includes mounting brackets



P-3704

Durgo Air Admittance Valves

Faster. Better. Smarter.

Air Admittance Valves (AAV) provide an acceptable means for ventilating a plumbing drainage system without venting through the roof or to open atmosphere. AAVs ensure that no sewer gases or liquids will enter the building through the valve.

The AAV closes by gravity, sealing at zero-differential pressure and remains closed under positive internal pressure (back pressure). It opens under negative pressure to allow proper drainage to occur without siphoning of fixture traps.

AAVs are offered with adapters in three different sizes to handle all applications.

- Junior: Perfect for horizontal runs in residential applications.
- Senior: Great for stack or branch systems.
- US90 3": For large or commercial requirements.
- Wall Box and Louver offers a recessed clean look for AAVs in visible locations.

Code Approvals:

- Manufactured in compliance with ASSE 1051, ASSE 1050 (Except Durgo Jr.)
- Installation shall be in accordance with local code requirements



P-3706

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-3700	Durgo Senior 1-1/2" - 2" w/ White ABS Adapter (20 DFU)	10
P-3701	Durgo Senior 1-1/2" - 2" w/ PVC Adapter (20 DFU)	25
P-3702	Durgo Junior 1-1/2" - 2" w/ White ABS Adapter (20 DFU)	25
P-3703	Durgo Junior 1-1/2" - 2" w/ PVC Adapter (20 DFU)	25
P-3704	Durgo US90 3"	12
OBAV-200	AAV Wall Box w/ Louver Faceplate	10
OBAV-3702	AAV Wall Box w/ Louver Faceplate & Durgo Jr 1-1/2" - 2" w/ White ABS Adapter	10
OBAV-3703	AAV Wall Box w/ Louver Faceplate & Durgo Jr 1-1/2" - 2" w/ PVC Adapter	10
ACCESSORIES / REPLACEMENT PARTS		
P-00961	White AAV Wall Box Louver Faceplate	1
P-3705	1-1/2" White ABS Adapter	1
P-3706	1-1/2" PVC Adapter	1
P-3708	Durgo Senior Frost Cap	1
P-3709	Durgo US90 3" Frost Cap	1



P-1059



P-1060



P-1061



P-1062-26



P-1063



P-1065



P-1066



P-1071



P-1072



P-1073



P-1074



P-1064



P-1067

Copper Plated PipeSecure™ Brackets

Unique manufacturing process ensures a uniform copper coat for a superior sweating surface. Durable construction for maximum strength and easier handling.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-1059	20" Copper, 1/2" Holes 1-1/4" Wide	50
P-1060	20" Copper, 1/2" Extruded Holes 1-1/4" Wide	50
P-1060-26	26" Copper, 1/2" Extruded Holes 1-1/4" Wide	50
P-1061	26" Copper, 1/2" Holes 1-3/4" Wide	50
P-1062	20" Copper, 1/2" & 3/4" Alternating Holes	50
P-1062-26	26" Copper, 1/2" & 3/4" Alternating Holes	50
P-1063	20" Copper, 3/4" Holes & 1" Alternating Holes	50
P-1063-26	26" Copper, 3/4" Holes & 1" Alternating Holes	50
P-1065	20" Copper, 1/2" Holes 2" Centers, 3/4" & 1" Holes on 4" Centers	50
P-1066	20" Copper, Extruded Half Holes, 1/2" & 3/4" Holes	50
P-1071	1/2" x 9-1/2", Half Holes on 1" Centers, 3/4" on 2" Centers. Kits furnished w/ felt pad & SS Clamp	50
P-1072	3" x 9-1/2", Half Holes on 1" center. Kits furnished w/ felt pad & SS Clamp	50
P-1073	5" x 6-3/4" Extruded, 1/2" and 3/4" Holes	50
P-1074	Closet Carrier Bracket	50



Galvanized PipeSecure™ Brackets

Sturdy, galvanized steel brackets with 1-3/8" keyed holes accommodate grommets for all pipe types, including glueable CPVC grommets, as well as the PEX Elbow (P-2021). Multiple configurations for all bracketing applications.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-1064	20" Galvanized, 1-3/8" Notched Holes	50
P-1067	26" Galvanized, 1-3/8" Notched Holes	25





P-1078-18



P-1078-26

Hyco Straps

This versatile perforated, galvanized support bracket is perfect for securing the Pull Stop Box™ and/or drain box either vertically or horizontally.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-1078-18	Hyco Strap 18" x 5/8" x 16"	100
P-1078-26	Hyco Strap 26" x 5/8" x 1/16"	100



Copper Stub Outs

Reduce installation time and cost with convenient, pre-formed copper stub outs and elbows. Accepts sweat and compression valves. Available in multiple pipe types and configurations. Type L copper.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-8001	1/2" x 1/2" Copper Female Sweat, 6" Straight	50
P-8002	1/2" x 1/2" Crimp PEX, 6" Straight	50
P-8003	1/2" x 1/2" Copper Female Sweat, 8" Elbow	50
P-8004	1/2" x 1/2" Copper Female CPVC, 8" Elbow	50
P-8006	1/2" x 3/8" Crimp PEX, 8" Elbow	50
P-8007	1/2" x 1/2" Lead-Free Uponor, 8" Elbow Lead Free Compliant	50
P-8014	1/2" x 1/2" Crimp PEX, 8" Elbow	50
P-8103	1/2" x 1/2" Copper Sweat, 8" Elbow w/ Flange	50
P-8107	1/2" x 1/2" Lead-Free Uponor, 8" Elbow w/ Flange	50
P-8114	1/2" x 1/2" Crimp PEX, 8" Elbow w/ Flange	50



P-8002



P-8003



P-8004



P-8006



P-8007



P-8014



P-8114



PEX Elbow
P-2021

PEX Elbow

Easiest PEX elbow to install allows plumber to bend pipe and quickly clip elbow into a PipeSecure™ bracket. The bend support works with any 1-3/8" keyed holes bracket. The PEX Elbow can also be fastened directly to the stud or stacked when two or more are needed. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2021	90° For 1/2" & 3/8" PEX	50	500



PEX Elbows installed in
PipeSecure Bracket (P-1064)



Talon Clamp With Nail

Talon Clamp With Nail

Constructed of high-impact plastic. Fast and easy to use. Pre-installed barbed nail prevents backout. Black in color.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-40429	3/8" CTS	100	1000
P-40433	1/2" CTS	100	1000
P-40434	3/4" CTS	100	1000
P-40435	1" CTS	50	500
P-40436	1-1/4" CTS	25	250



Full Clamp With Nail

Full Clamp With Nail

Constructed of high-impact plastic. Fast and easy to use. Pre-installed barbed nail prevents backout. Isolates tube from surface to reduce noise and protect tube from errant nails. Black in color.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2070	1/2" CTS	100	1000
P-2071	3/4" CTS	50	500
P-2072	1" CTS	25	250



Single Nail Clamp

Single Nail Clamp

Constructed of high-impact plastic. Fast and easy to use. Pre-installed barbed nail prevents backout. Ribbed design completely encircles pipe. Use with copper, CPVC and PEX pipe. Beige in color. Patented design. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2090	1/2" CTS	100	1500
P-2091	3/4" CTS	100	1000



Multi Fit Joist Clamp

Multi-Fit Clamps

Specially designed by contractors for contractors! Constructed of high impact plastic. Fast and easy to use. Ribbed design accommodates several pipe sizes. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
JOIST CLAMPS			
P-2073	1/2", 3/4", 1" CTS	50	200
P-2074	1-1/4", 1-1/2" CTS	50	200
P-2098	Joist Marking Tool	1	
RAFTER CLAMPS			
P-2075	1/2", 3/4", 1" CTS	50	200
P-2076	1-1/4", 1-1/2" CTS	50	200

CTS: Copper Tube Size



Multi Fit Rafter Clamp



Flexi-Fin® Pipe Insulator

Flexi-Fin® Pipe Insulator For Wood & Metal Studs

Features patented fin design. Exterior fins securely fasten insulator to both wood and metal studs. Ideal for potable and hydronic water systems. Secure copper, CPVC and PEX. Drill 1-3/8" hole. Beige in color. Patented design. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2086	1/2" CTS	100	1000
P-2087	3/4" CTS	100	1000
P-2089	1" CTS	100	300



Flexi-Fin® Insulating Suspension

Flexi-Fin® Insulating Suspension

Features patented fin design. High-ear design allows installation in hard-to-reach areas. Secures copper, CPVC and PEX pipe to both wood and metal framework. Use in both residential and commercial construction. Beige in color. Patented design. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2062	1/2" CTS	100	1000
P-2063	3/4" CTS	100	1000
P-2064	1" CTS	50	250
P-2056	1-1/4" CTS	50	800
P-2058	1-1/2" CTS	25	600
P-2060	2" CTS	25	300



Flexi-Fin® Pipe Clamp

Flexi-Fin® Pipe Clamp

Patented fin design. Secures copper, CPVC and PEX pipe to both wood and metal framework. Use in both residential and commercial construction. Beige in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2031	1/2" CTS	100	1000
P-2032	3/4" CTS	100	1000
P-2033	1" CTS	50	250
P-2025	1-1/4" CTS	50	800
P-2027	1-1/2" CTS	25	600
P-2029	2" CTS	25	300



Strut Clamp

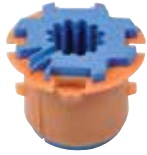
Strut Clamp

Designed to work with channel bar. Completely encircles pipe. No tools needed for installation. Fits 1-5/8" track. Black in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2041	1/2" CTS	50	1200
P-2042	3/4" CTS	50	900
P-2043	1" CTS	50	600
P-2044	1-1/4" CTS	50	600
P-2045	1-1/2" CTS	25	500
P-2046	2" CTS	25	300

CTS: Copper Tube Size





Acousto® Lator

Acousto® Lator

Keeps pipes from touching noise-transmitting surfaces such as wood & metal studs. Features high-impact plastic construction with special acoustic lining. Fish hook lugs hold insulator securely in place. Drill 1-3/8" hole. For best results, use with PipeSecure™ Pipe Brackets.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-6301	1/2" CTS	25	500
P-6302	3/4" CTS	25	500



Acousto® Clamp

Acousto® Clamp

Special acoustic lining completely encircles pipe to insulate it and absorb noise vibrations. Secures water pipe to joists. Constructed of durable high-impact plastic.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-6101	1/2" CTS	25	700
P-6102	3/4" CTS	25	400
P-6103	1" CTS	25	300
P-6104	1-1/4" CTS	25	300



High-Ear Acousto® Clamp

High-Ear Acousto® Clamp

High-ear design may be nailed to floor or ceiling joists or broken off during installation. Grooved body allows attachment to ceiling joists using a clevis hanger. Features high-impact plastic construction with special acoustic lining.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-6201	1/2" CTS	25	700
P-6202	3/4" CTS	25	500
P-6203	1" CTS	25	300
P-6204	1-1/4" CTS	25	300



Acousto® Pad

Acousto® Pad

Isolates pipe from surface contact with structure and dry wall. Use when installing pipe for shower risers, for tub drops, and through finished walls.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-6701	Acousto Pad	25	250

CTS: Copper Tube Size





Acousto® Scutcheon

Acousto® Scutcheon

Supports water supply line nipples that protrude from wall. Provides an attractive cover plate. Prevents pipe from contacting wall board, plaster or paneling. Special acoustic lining absorbs noise vibrations. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-6401	1/2" Ivory	50	400
P-6410	1/2" Chrome	50	400



Acousto® Kit
P-6721

Acousto® Kit

Choose from a variety of kits for sinks and toilet installations. All kits include 1/2" Acousto® Lator 20" or 26" bracket.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-6721	Sink/Lav 26" Bracket & 2 Each P-6301 (pg 25)	50
P-6730	Toilet 20" Bracket & 1 Each P-6301 (pg 25)	50
P-1064	20" Galvanized, 1-3/8" Notched Holes, Bracket Only	25
P-1067	26" Galvanized, 1-3/8" Notched Holes, Bracket Only	25



Acousto® Kit
P-6730

Plastic Plumber's Tape (Self-Dispensing Box)

Provides maximum 100 lbs. tensile strength. 1/8" holes on 3/4" centers. Used to support potable water piping. Eliminates rust or electrolysis problems. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-1011	3/4"	100' Roll	24



Plastic Plumber's Tape

Hang'Em® II Pipe Hanger

Replaces galvanized straps. Constructed of heat-resistant plastic. Fits all Schedule 40 DWV pipe sizes up to 4" in diameter. Features adjustable zip-strap. "Triple-beam" yoke construction. 1/2" grade/flow indicators allow more accurate installations. Ultrasonically welded. Patented design. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-1602	Hanger Kits 2' Rod & strap	25	25
P-1604	Hanger Kits, 4' Rod & strap	25	25
P-10132	Strap Only	25	25



Hang'Em® II Pipe Hanger

J-Hooks

Strong and rigid I-Beam design. Supports drain-waste and vent piping from joists and rafters. Two captive nails and nail holes on all four sides. Made of corrosion-proof, high-impact ABS.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-1610	1-1/2" w/ Nail	25	125
P-1612	White, 2" w/ Nail	25	125
P-1613	White, 3" w/ Nail	25	100
P-1614	White, 4" w/ Nail	25	75



J-Hook



Grommets
P-2016



Grommets
P-2020



Boss Bar™
P-1090



Boss Bar™
P-1093



Lever Lock™
P-2001

Grommets

Sized for metal studs or Galvanized PipeSecure Brackets. For use with Copper, PEX or CPVC.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
FOR ALL PIPE TYPES			
P-2016	Blue, 1/2" CTS	100	1000
P-2017	Blue, 3/4" CTS	100	1000
P-2018	Blue, 1" CTS	100	1000
FOR CPVC PIPING (GLUEABLE)			
P-2019	White, 1/2" CTS	100	1000
P-2020	White, 3/4" CTS	100	1000



Boss Bar™ Adjustable Bracket

Our Boss Bar™ is a multipurpose, galvanized steel, adjustable sliding bracket designed to support all pipe types. Specially designed mounting ears allow attachment to wood, metal, steel or concrete. In side-by-side testing, the unique triangular design of the Boss Bar™ easily surpasses similar brackets in strength. Our Flexi-Fin™ and Acousto® pipe clamps easily attach with four self-tapping sheet metal screws that are included with each bracket.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-1090	10" Adjustable Sliding Bracket	50
P-1093	13" Adjustable Sliding Bracket	50

Lever-Lock™

Lever-Lock™ easily clamps down on any 1/2" pipe. Great for securing stub outs. No more soldering copper elbows when running PEX systems. Snaps easily into any 1-3/8" notched hole. Mounting ears allow for mounting directly to a stud. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-2001	Lever-Lock Clamp, 1/2"	25	500





Plasti-Sleeve Pipe Protector

Plasti-Sleeve Pipe Protector

For use with copper, PEX, CPVC, and ABS/PVC, as listed below. Economical and efficient. Protects 1/2", 3/4", 1" and 2" pipe during installation. Flexible material forms a seal around pipe in concrete. Packaged in self-dispensing box. 180° F maximum. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
FOR USE WITH ALL PIPE MATERIAL, INCLUDING CPVC (POLYETHYLENE)			
P-3013	1" Red / 4 mil	200' Roll	20
P-3014	1" Black / 4 mil	200' Roll	20
P-3015	1" Blue / 4 mil	200' Roll	20
P-3016	2" Blue / 4 mil	200' Roll	8
P-3020	1" Clear / 4 mil	200' Roll	20
FOR USE WITH ALL PIPE MATERIAL, EXCEPT CPVC			
P-3036	1" Red / 27 mil	100' Roll	1
P-3037	1" Blue / 27 mil	100' Roll	1
P-3044	2" Blue / 27 mil	50' Roll	1
P-3045	2" Red / 27 mil	50' Roll	1
P-3046	3/4" Blue / 27 mil	50' Roll	1
P-3047	3/4" Red / 27 mil	50' Roll	1
P-3048	1" Blue / 27 mil	50' Roll	1
P-3049	1" Red / 27 mil	50' Roll	1



Tub Boxes

Patented, improved closure makes assembly a snap. More pipe knockouts - 10 total, compatible with 1-1/2" and 2" pipe. Angled corner increases versatility. Zip ties included for rebar anchoring. High-impact injection molded plastic. Use in concrete slabs, wood floors and multi-story flooring. Made in the U.S.A.



Right-Tite® II Tub Box
P-3000

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-3000	14-7/8" x 14-7/8" x 7" Deep	5 Pair	5



Plastic Tub Box by Benjamin
1313

Tub boxes by Benjamin Mfg. Constructed of high impact plastic. Will not fall apart when exposed to rain or water. Easily cut with utility knife for openings. Rodent proof. Can be used individually or in pairs.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
1313	13" x 13" x 7" Deep	12
1410	12" x 8" x 6" Deep	36





Light Pour Time-Savers Stokes™ Tub Dam
P-3092

Light Pour Time-Savers Stokes™ Tub Dam

Single piece construction cans out tub cavity for waste and overflow connection. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-3092	1-1/2" Height	25



Sure-Sleeve Plastic Hole Form

Sure-Sleeve Plastic Hole Form

Use vertically and horizontally for both floor and wall installations. For use in electrical, mechanical and plumbing installations and concrete casting applications. Stackable feature allows extension to higher elevations. Height - 8". Patented design. NOTE: Use 1 size larger than pipe size. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-3050	1-1/2" 1°- 3° Taper	135
P-3051	2" 3° Taper	90
P-3060	3" 3° Taper	80
P-3061	4" 3° Taper	55
P-3062	5" 3° Taper	30
P-3063	6" 3° Taper	25
P-3064	8" 3° Taper	36
P-3056	10" 1° Taper	12
P-3057	12" 1° Taper	12



Multi-Purpose Pipe Holder - PVC

Multi-Purpose Pipe Holder

Secures pipe to forms during the concrete pour. Scored tail piece snaps off when stripping from boards. Solvent cements to pipe. Made of high-impact plastic. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-1039	1-1/2" - 2" PVC	50	500
P-1040	3" - 4" PVC	25	300
P-1009	1-1/2" - 2" ABS	50	500
P-1010	3" - 4" ABS	25	300



Multi-Purpose Pipe Holder - ABS



Inset Plug On



Cap On



Slip On



Cap All

Inset Plug On

Designed for ABS or PVC Schedule 40 DWV pipe. Hinged knockouts prevent center from falling into pipe. Constructed of high-impact plastic. White in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0002	1-1/2"	100	1000
P-0003	2"	100	1000
P-0004	3"	50	500
P-0005	4"	25	200
P-0006	6"	10	200



Cap On

Designed for ABS or PVC Schedule 40 DWV pipe and fittings. Hinged knockouts prevent center from falling into pipe. Constructed of high-impact plastic. White in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0014	1-1/2"	100	1600
P-0015	2"	100	1600
P-0016	3"	50	700
P-0017	4"	25	250



Slip On

"Friction-hold" test cap for one story testing. Designed for ABS or PVC Schedule 40 DWV pipe and fittings. No solvent cementing required; cap slips over end of pipe or inserts into fittings. Orange in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0018	1-1/2"	50	900
P-0019	2"	50	600
P-0020	3"	20	280
P-0021	4"	10	150



Cap All

Use above or below ground to test ABS, PVC Schedule 40 DWV, steel, cast iron or copper pipe. Reusable for greater economy. Features all-stainless-steel band and screw. Black in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0029	1-1/2"	50	50
P-0030	2"	50	50
P-0031	3"	25	25
P-0032	4"	25	25
P-0038	5"	25	25
P-0039	6"	20	20
P-0040	8"	15	15





End Cap
PVC



End Cap
ABS

End Cap

Heavy-duty design has been tested to 100 PSI. Solvent cements to pipe. Offers an economical alternative to conventional Schedule 40 DWV test caps. PVC: White in color. ABS: Black in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
PVC			
P-0071	1-1/2" PVC	100	2000
P-0072	2" PVC	100	1200
P-0073	3" PVC	25	500
P-0074	4" PVC	25	400
ABS			
P-0075	1-1/2" ABS	100	2000
P-0076	2" ABS	100	1200
P-0077	3" ABS	25	500
P-0078	4" ABS	25	400



Wing Nut Plug

For testing all plastic, cast iron and DWV soil pipes. No tools required; extra large wing nut makes it easy to hand tighten. Reusable for greater economy. Built-in hose connection. Blue and orange in color. Made in the U.S.A.



Wing Nut Plug

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0033	1-1/2"	10	100
P-0034	2"	10	100
P-0035	3"	10	50
P-0036	4"	5	25
P-0037	6"	5	40



Expansion Dollar Plug

Expansion Dollar Plug

For testing all plastic, cast iron and DWV pipes. No tools required; extra large wing nut makes it easy to hand tighten. Reusable for greater economy. Blue and orange in color. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-0044	1-1/2"	10	120
P-0045	2"	10	100
P-0046	3"	10	50
P-0047	4"	5	25





Access Panels - Plastic



Access Panels - Plastic



Access Cover - Plastic

Access Panels - Plastic

Provides access to pumps on whirlpools and spas, tub/shower valve bodies, hidden shut off or regulating valves, trap primers, clean outs, etc. Made in the U.S.A.

- Nothing to wear out
- No snaps
- No screws
- No hinges
- No springs
- White
- Beveled edge
- Textured finish
- Can be painted
- High impact plastic

PART NUMBER	SIZE I.D. W x H	SIZE O.D. W x H	MSTR CTN QTY
AP55	4.75" x 4.75"	7.5" x 8"	12
AP88	8" x 7.875"	11.75" x 11.75"	12
AP96	9.125" x 6.125"	12.375" x 9.5"	12
AP1212	11.375" x 11.25"	14.75" x 14.625"	12
AP1414	13.35" x 13.25"	16.75" x 16.625"	12
AP1426	13" x 25.625"	16.75" x 29.5"	12



Access Cover - Plastic

- An inexpensive way to cover an access panel
- Pre-drilled holes in corners
- Textured finish for easy painting
- High impact plastic material
- Made in the U.S.A.

PART NUMBER	SIZE O.D. W x H	MSTR CTN QTY
ACF-1212	12" x 12"	20
ACF-1717	17" x 17"	20





Flat White



Flat Chrome



Bell White



Bell Chrome

Cleanout Cover Plates

- Available in chrome/matte finish (stops unsightly scratches & marks) or pure white/matte finish (paintable)
- Made of durable, high-impact plastic (will not rust or corrode)
- Provided with #14 screw (easy installation into plastic plug)
- Each cover plate is individually bagged
- High quality
- Inexpensive
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	FINISH	MSTR CTN QTY
FLAT CLEANOUT COVER PLATES - FOR USE WHEN CLEANOUT IS WITHIN WALL CAVITY			
R-1538*	4-1/2" Flat	Chrome	20
104FC	4-1/4" Flat	Chrome	25
105FC	5-1/4" Flat	Chrome	25
107FC	7-1/4" Flat	Chrome	25
109FC	9-1/4" Flat	Chrome	10
104FW	4-1/4" Flat	White	25
105FW	5-1/4" Flat	White	25
107FW	7-1/4" Flat	White	25
109FW	9-1/4" Flat	White	10
R-1278*	4-1/2" Flat	Unplated	20
BELL CLEANOUT COVER PLATES - FOR USE WHEN CLEANOUT FITTING EXTENDS OUTSIDE WALL CAVITY			
104BC	4-1/4" Bell	Chrome	25
105BC	5-1/4" Bell	Chrome	25
107BC	7-1/4" Bell	Chrome	25
109BC	9-1/4" Bell	Chrome	10
104BW	4-1/4" Bell	White	25
105BW	5-1/4" Bell	White	25
107BW	7-1/4" Bell	White	25
109BW	9-1/4" Bell	White	10

* Not Made in the U.S.A.





Foam Spacer
FS44

Foam Spacer

- Easily installed
- Keeps concrete from pipe
- Replaces Styrofoam, coffee can and duct tape
- Great labor save – eliminates need to chip out concrete

PART NUMBER	DESCRIPTION	MSTR CTN QTY
FS44	4" High 4" x 6"	60



In-Sul Wrap
6200

In-Sul Wrap

- EASIER to install than fiberglass
- FASTER to install than duct tape
- COST of material is far below that of duct tape or fiberglass
- IN-SUL WRAP can be pinned with nails or taped for fast securing
- IN-SUL WRAP will conform to fittings and pipe using far less material compared to other wraps
- INSULATION FACTOR 0.75 per wrap

PART NUMBER	DESCRIPTION	MSTR CTN QTY
6200	3/32" x 6" x 200'	5



Handi-Cap Wrap
HCW24

Handi-Cap Wrap Multi-Purpose Foam Tape

- A closed polyethylene foam specifically designed for wrapping traps and supplies in public restroom, pipe wrap, etc.
- Pressure sensitive adhesive backing
- Full 2" adhesive coverage (will not curl)
- Installs quickly and easily
- Multi-Use / Insulation
- White color for pleasing appearance
- Meets ADA requirements
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
HCW24	0.125" x 2" x 40' Roll	24





Chemical Tray
T1040

Chemical Tray

- Don't let your chemicals freeze in the winter weather
- Organize your chemicals to quickly transport on site or inside at night
- Carrier holds combinations of half pint, pint and quart cans
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T1040	13" x 10.5" x 2.75"	5



Saddle Tray
T1065

Saddle Tray

- Tray and lid made of high density polyethylene
- Will not rust or corrode
- Acids, harsh chemicals and oils will not harm
- Glue will not stick to them
- Will withstand temperature from 250°F to minus 40°F
- Reinforced handle
- Snap on lid to keep parts and tools clean and dry
- Six removable dividers for compartment preference
- Sits on 2" x 4", 2" x 6" etc.
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T1065	22" x 14" x 8" High w/ Lid	5
T1065-L	Lid	1
T1065-XD	Dividers	1



Tote Tray
T1000

Tote Trays / Organizers

All trays are made of high density polyethylene. They will not rust or corrode and acids, harsh chemicals and oils will not harm them. Glue will not stick to them and they will withstand temperatures from 250°F to minus 40°F. These trays are great truck organizers and have incredible industrial strength reinforced handles. Made in the U.S.A.

T1000: Tray can be divided into compartments as small as 4.5"x 1.5". Tray comes with six dividers. Extra dividers are available at extra cost.

T1025: Deep handy carrier with extra duty handle. Does not have dividers like other models.

T1050: Tray can be divided into the same size compartments as T1000 tray, except 5" in depth. Tray comes with six dividers. Extra dividers are available at extra cost.

T1075: Just the right tray for carrying longer tools and bulky parts such as copper or galvanized fittings. This also makes an excellent nail box. Can be divided into 8 compartments 6"x 5"x 6" deep. Comes with six dividers.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T1000	15" x 9" x 3"	10
T1000-XD	T1000 Dividers	1
T1025	16-3/4" x 11-3/4" x 4-1/2"	5
T1050	15" x 9" x 5"	10
T1050-XD	T1050 Dividers	1
T1075	24" x 12" x 6"	5
T1075-XD	T1075 Dividers	1



Tote Tray
T1025



Tote Tray
T1050



Tote Tray
T1075



Nipple Caddy
T1007



Nipple Caddy
T1010



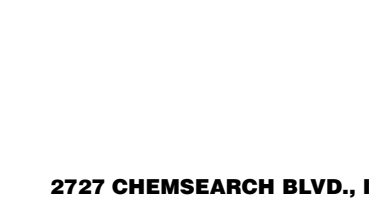
Nipple Caddy
T1015



Nipple Caddy
T1020



Nipple Caddy
T1057



Dirt Rider
T1075-DR

Dirt Rider
T1075-DRTT

Ladder Ledge
T1050-LL

Ladder Ledge
T1050-LLTT

Nipple Caddies

- Made of high density polyethylene
- Will withstand harsh chemicals, acids and oils
- Will not rust or corrode or cause nipples to rust
- When bent or crushed, will spring back into shape leaving no permanent damage
- Great in cold weather (material tested to minus 40°F)
- Drain holes in bottom lets caddy drain
- Strong enough to take abuse yet half the weight of metal
- Bottom design holds nipples up and keeps them out of water and other liquids
- Perfect for every plumber's truck
- Made in the U.S.A.

PART NUMBER	NIPPLE SIZE	OUTSIDE DIMENSION	MSTR CTN QTY
T1005	1/2"	11-1/4" x 7-3/4" x 8-3/4" Tall	4
T1007	3/4"	13-3/4" x 8" x 8-3/4" Tall	4
T1010	1"	15-1/4" x 8-1/4" x 8-3/4" Tall	4
T1015	1-1/2"	21-1/4" x 7-1/4" x 9-3/4" Tall	2
T1020	2"	23-1/2" x 8-3/4" x 10-1/2" Tall	2
T1057	1/2" / 3/4" Combo	18-1/2" x 8-1/4" x 8-3/4" Tall	4



Dirt Rider

No more dragging tool boxes and parts through the dirt! Take all the tools and parts in one trip.

- Constructed of high molecular weight polyethylene
- Use by itself for tools and parts or snap on the popular Benjamin T1075 tote tray
- Glides over dirt on two runners
- Comes with a 6 ft. rope
- Easy to clean, simply hose off
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T1075-DR	29" x 14" x 3-1/2"	5
T1075-DRTT	29" x 14" x 7" (w/ T1075 Tote Tray)	1



Ladder Ledge

- Keeps parts & tools within easy reach when working off a ladder
- Fits most OSHA approved step ladders
- T1050 tote tray can easily be removed from T1050 Ladder Ledge
- Will not rust or corrode
- Great for holding parts, tools, chemicals, etc.
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T1050-LL	10" x 11" x 6"	5
T1050-LLTT	12" x 16" x 10" (w/ T1050 Tote Tray)	1



NIPPLE CADDIES, DIRT RIDER & LADDER LEDGE Specialty Products



Water Heater Pan – Plastic

Water Heater Pan - Plastic

- Recommended and installed by the leading plumbing contractors
- Protects against water damage caused when water heaters start leaking
- Simple to install – Just set water heater into pan when installing
- Available with or without a drain hole in the side
- Pans come with a 1" drain adapter fitting
- Pans without drain holes can be drilled in the field to allow custom placement for drain in side or bottom of pan
- Will not rust or corrode
- Round design enables pan to be installed in small areas
- Comes in seven nominal sizes (19" - 20" - 22" - 24" - 26" - 28" - 30")
- Made in the U.S.A.



Water Heater Pan – Undrilled

PART NUMBER	DESCRIPTION	MSTR CTN QTY
DRILLED		
WHP20-1D	20" I.D. Drilled	20
WHP22-1D	22" I.D. Drilled	20
WHP24-1D	24" I.D. Drilled	20
WHP26-1D	26" I.D. Drilled	20
WHP28-1D	28" I.D. Drilled	20
WHP30-1D	30" I.D. Drilled	6
UNDRILLED		
WHP20-1U	20" I.D. Undrilled	20
WHP22-1U	22" I.D. Undrilled	20
WHP24-1U	24" I.D. Undrilled	20
WHP26-1U	26" I.D. Undrilled	20
WHP28-1U	28" I.D. Undrilled	20
WHP30-1U	30" I.D. Undrilled	6
ADAPTER		
SPF-100	1" Adapter	1



Washing Machine Saf-T-Pan

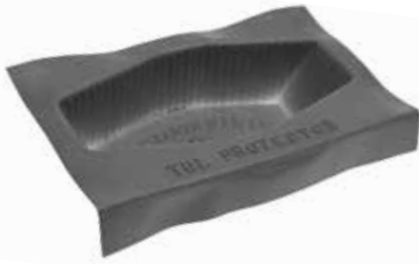
Washing Machine Pan

Why have a leaking or overflowing washer ruin the floor?

- Made of heavy gauge high-impact plastic
- Pan will not rust or corrode
- Available with or without a drain hole in the side
- Pans come with 1" drain adapter fitting
- Different model number for each option make it easy to get the pan you want
- Pans without drain holes can be drilled in the field to allow custom placement of drain in side or bottom of pan
- Made in the U.S.A.
- O.D. Dimensions (outside at top of pan): 32-1/2" x 30-3/4" x 2-1/4"
- I.D. Dimensions (inside at bottom of pan): 30" x 28" x 1-3/4"

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WMSP-1U	29" x 27" Undrilled	10
WMSP-1D	29" x 27" Drilled	10





Foam Bottom



Multi-Fit Shower Base Protector
SBP-6036MF



Flex Poly



Custom Tub Protectors

Tub Protectors

The Original Patented Foam Based Tub Protector. An Inexpensive Way to Protect Your Valuable Tub.

- Made of heavy gauge high-impact plastic
- Soft foam bottom grips tub surface to protect finish from the abrasive action resulting from a protector moving under workman's feet
- No set up or assembly time as you just pull out of the box and drop it into the tub
- Nest together for space-saving storage
- Most durable protectors yet, can often be reused
- Fits both left and right-hand drain tubs
- Larger sizes are available and we can make custom fit protectors for larger jobs
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
FOAM BOTTOM TUB PROTECTORS		
TP6030-14	60" x 30" x 14"	35
TP6030-16	60" x 30" x 16"	35
TP6042-16	60" x 42" x 16"	25
TP6030-14-B	BULK	315
TP6030-16-B	BULK	315
NO FOAM BOTTOM TUB PROTECTORS		
TP6030-14-NF	60" x 30" x 14"	35
TP6030-16-NF	60" x 30" x 16"	35
TP6042-16-NF	60" x 42" x 16"	25
TP6030-14-NF-B	BULK	315
TP6030-16-NF-B	BULK	315



Multi-Fit Shower Base Protector

SBP-6036MF fits 9 sizes of shower bases

Use right out of the box for 60" x 32", 60" x 34", 60" x 36" bases -or-

Cut off small end on left side for use in 48" x 32", 48" x 34", 48" x 36" bases -or-

Cut off large end on right side for use in 36" x 32", 36" x 34", 36" x 36"

- Made of high impact plastic with foam pad bottom. Foam pad grips the shower base to protect finish from abrasive action.
- Nest together for space saving storage. Fits left hand, right hand or center drain pans.
- Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
SBP-6036MF	58" x 35" x 3"	50



Flex Poly

Allows you to get tub protection even on small jobs. Now you can order as few as one tub protector at a time.

- Made of flexible poly to resist mud, dirt and paint. Foam bottom to prevent scratching and abrasion.
- Folds to a carton size of 19"x 8"x 19". Comes in over 100 different shapes and sizes.
- Made in the U.S.A.

Add "-FP" to the end of the part number for Flex Poly.



Custom & Oversized Tub Protectors

Now offering custom and oversized protectors in hundreds of styles. Please use Custom Tub Protector order form on following page.

CORNER TUBS, ROUND TUBS, OVAL TUBS, RECTANGLE TUBS, HOUR GLASS TUBS, KOHLER, JACUZZI, AMERICAN STANDARD, AND MANY OTHER MANUFACTURERS





Custom Tub Protector Order Form

Help us to provide you with the best Tub Protector option available.
 Fill out the following form and fax it to us at **(800) 243-1777** or **(775) 884-4343**.

OVER 100 MODELS AVAILABLE! Available with Foam Pad bottom for optimum protection. Foam Pad grips the tub to protect finish from the abrasive action resulting from the protector grinding under workman's feet. Made of high-impact plastic with over 250% more material than standard tub protectors. Special thicknesses and/or special application materials available. Available in standard box quantities or in bulk/pallets. Pallets are great for use on jobs or for handling and storage purposes in a warehouse. Simply place in tub and remove once job is finished. No time consuming application and removal of tapes or adhesives.

Company Name: _____

Company Address: _____

Phone Number: _____ Fax Number: _____

Contact Name: _____ Title/Position: _____

QUANTITY	MANUFACTURER	MODEL NAME	MODEL NUMBER	MODEL DIMENSIONS
IE: (177)	(American Standard)	(Stratford)	(2470.002)	(66" x 32" x 20")

If you are not a licensed wholesale supply company, please provide the following information to help us expedite satisfying your needs.

Preferred Supplier 1: _____

Address: _____

Phone Number: _____

Contact(s): _____

Preferred Supplier 2: _____

Address: _____

Phone Number: _____

Contact(s): _____

Specialty Products™ CUSTOM TUB PROTECTOR ORDER FORM

AQUAFLO®

Aqua-Flo® has been part of the LSP family for over 20 years. As the innovation and quality standard bearer in water connectors and valves, Aqua-Flo's® performance and durability is unmatched in the market place. Aqua-Flo® developed the majority of the connectors available to the plumbing industry today. It introduced stainless steel braided connectors to the U.S. It developed the first NSF certified connector liner with its patented Ultracore® tubing to resist attacks to the connector liner from chemicals found in most modern potable water systems. As we continue to push the technological envelope on new materials, LSP has developed better and tougher corrugated stainless and copper water heater connectors.



- Pull Stop Boxes™ & Accessories41-44
- Quarter Turn Ball Valves 45
- Hose End Fitting Guide & Glossary 46
- Aqua-Flo® Product Guide..... 47
- Flex Arrestor™ Connectors 48
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- Specialized Connectors 58



Crimp PEX Pull Stop Box™
OBPS-103-RK-LL

Pull Stop Box™ For Lavns/Toilets, Sinks & Dishwashers

The Pull Stop Box™ takes the hassle out of angle stop installation by eliminating the need to stub out. Moving the angle stop into the wall provides a sleek and sophisticated finished look. The decorative knob controls the flow of water to the supply line by actuating the valve in a push/pull motion. The valve can be easily replaced if needed.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBPS-101-RK-LL	1/2" Male Copper Sweat, Lead Free	10
OBPS-102-RK-LL	1/2" Male CPVC, Lead Free	10
OBPS-103-RK-LL	1/2" Crimp PEX, Lead Free	10
OBPS-104-RK-LL	1/2" Uponor PEX, Lead Free	10

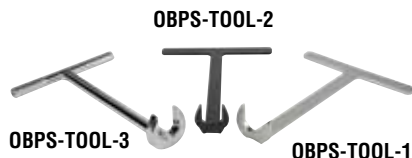


Crimp PEX FireStop™ Pull Stop Box™
OBFPS-103-RK-LL

FireStop™ Pull Stop Box™

The FireStop™ Pull Stop Box™ is constructed of fire resistant ABS with a factory mounted intumescent pad. The OBFPS series are Warnock Hersey certified to ASTM E-814 and CAN/ULC S115 with 1 hour and 2 hour listings. Suitable for wood or metal studs and for all pipe types.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBFPS-101-RK-LL	1/2" Male Copper Sweat, Lead Free	10
OBFPS-102-RK-LL	1/2" Male CPVC, Lead Free	10
OBFPS-103-RK-LL	1/2" Crimp PEX, Lead Free	10
OBFPS-104-RK-LL	1/2" Uponor PEX, Lead Free	10

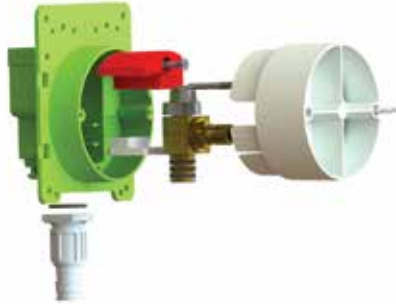


OBPS-TOOL-1 OBPS-TOOL-2 OBPS-TOOL-3

Pull Stop Box™ Tools

Cost effective tools specifically designed to help tighten hoses onto the Pull Stop Box™ valve no matter how tight the installation. Follow hose manufacturers' instructions on how tight to make the hoses.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
PULL STOP™ BOX TOOLS		
OBPS-TOOL-1	3/8" Comp, Sheet Metal. Wrench to tighten Toilet, Faucet and Dishwasher Pull Stop Boxes™	100
OBPS-TOOL-2	1/4" Comp, Sheet Metal. Wrench to tighten all Ice Maker Pull Stop Boxes™	100
OBPS-TOOL-3	3/8" Comp, Drop Forged. Extremely durable wrench to tighten all Toilet, Faucet and Dishwasher Pull Stop Boxes™	100



Copper Sweat Ice Maker Pull Stop Box™
OBPS-111-RK-LL

Ice Maker Pull Stop Box™

The Ice Maker Pull Stop Box™ provides a sleek and sophisticated finished look. The decorative knob controls the flow of water to the supply line by actuating the valve in a push/pull motion. The box is strong, compact and cost-efficient.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBPS-111-RK-LL	1/2" Male Copper Sweat, Lead Free	10
OBPS-112-RK-LL	1/2" Male CPVC, Lead Free	10
OBPS-113-RK-LL	1/2" Crimp PEX, Lead Free	10
OBPS-114-RK-LL	1/2" Uponor PEX, Lead Free	10

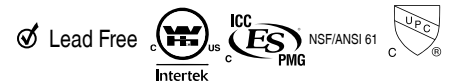


Crimp PEX FireStop™
Ice Maker Pull Stop Box™
OBFPS-113-RK-LL

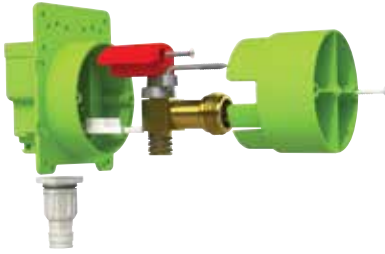
FireStop™ Ice Maker Pull Stop Box™

The FireStop™ Ice Maker Pull Stop Box™ is constructed of fire resistant ABS with a factory mounted intumescent pad. The OBFPS series are Warnock Hersey certified to ASTM E-814 and CAN/ULC S115 with 1 hour and 2 hour listings. Suitable for wood or metal studs and for all pipe types.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBFPS-111-RK-LL	1/2" Male Copper Sweat, Lead Free	10
OBFPS-112-RK-LL	1/2" Male CPVC, Lead Free	10
OBFPS-113-RK-LL	1/2" Crimp PEX, Lead Free	10
OBFPS-114-RK-LL	1/2" Uponor PEX, Lead Free	10



Pull Stop Box™ Tools – See Page 41



Copper Sweat Washing Machine Pull Stop Box™
OBPS-121-RK

Washing Machine Pull Stop Box™

The Washing Machine Pull Stop Box™ provides a sleek and sophisticated finished look. The decorative knob controls the flow of water to the supply line by actuating the valve in a push/pull motion. The boxes are strong and compact with an adjustable layout.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBPS-121-RK	1/2" Male Copper Sweat	10
OBPS-122-RK	1/2" Male CPVC	10
OBPS-123-RK	1/2" Crimp PEX	10
OBPS-124-RK	1/2" Uponor PEX	10

ROUGH-IN KITS WITH HAMMER ARRESTER - INCLUDES TWO BOXES, VALVES, PROTECTIVE COVERS, DRAIN BOX		
OBPS-121-RK-KIT	1/2" Male Copper Sweat	5
OBPS-122-RK-KIT	1/2" Male CPVC	5
OBPS-123-RK-KIT	1/2" Crimp PEX	5
OBPS-124-RK-KIT	1/2" Uponor PEX	5
OBPS-122-RK-KIT-HA	1/2" Male CPVC w/ Hammer Arrester	1
OBPS-123-RK-KIT-HA	1/2" Crimp PEX w/ Hammer Arrester	1
OBPS-124-RK-KIT-HA	1/2" Uponor PEX w/ Hammer Arrester	1



Crimp PEX FireStop™
Washing Machine Pull Stop Box™
OBFPS-123-RK

FireStop™ Washing Machine Pull Stop Box™

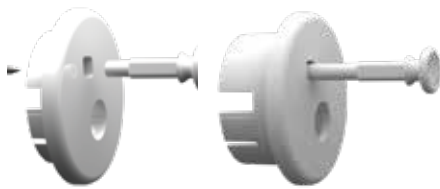
The FireStop™ Washing Machine Pull Stop Box™ is constructed of fire resistant ABS with a factory mounted intumescent pad. The OBFPS series are Warnock Hersey certified to ASTM E-814 and CAN/ULC S115 with 1 hour and 2 hour listings. Suitable for wood or metal studs and for all pipe types.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROUGH-IN KITS-INCLUDES BOX, VALVE AND PROTECTIVE COVER		
OBFPS-121-RK	1/2" Male Copper Sweat	10
OBFPS-122-RK	1/2" Male CPVC	10
OBFPS-123-RK	1/2" Crimp PEX	10
OBFPS-124-RK	1/2" Uponor PEX	10

ROUGH-IN KITS-INCLUDES TWO BOXES, VALVES, PROTECTIVE COVERS, DRAIN		
OBFPS-121-RK-KIT	1/2" Male Copper Sweat	5
OBFPS-122-RK-KIT	1/2" Male CPVC	5
OBFPS-123-RK-KIT	1/2" Crimp PEX	5
OBFPS-124-RK-KIT	1/2" Uponor PEX	5
OBFPS-122-RK-KIT-HA	1/2" Male CPVC w/ Hammer Arrester	5
OBFPS-123-RK-KIT-HA	1/2" Crimp PEX w/ Hammer Arrester	5
OBFPS-124-RK-KIT-HA	1/2" Uponor PEX w/ Hammer Arrester	5



Pull Stop Box™ Tools – See Page 41



Trim Kit
OBPS-200-W

Deep Trim Kit
OBFPS-300D-W



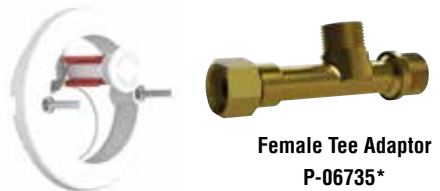
Oil-Rubbed Bronze Trim Kit
OBFPS-200-ORB

Satin Nickel, Deep Trim Kit
OBPS-300D-SN

Trim Kits

PART NUMBER	DESCRIPTION	MSTR CTN QTY
TRIM KITS-INCLUDES KNOB AND ESCUTCHEON		
OBPS-200-W	White-Paintable	100
OBPS-200-C	Chrome	100
OBPS-200-SN	Satin Nickel	100
OBPS-200-ORB	Oil Rubbed Bronze	100
OBPS-200-W-S	White-Paintable with Screw	100
OBPS-300D-W-S	White-Paintable (Deep) with Screw	100
OBPS-300D-C	Chrome (Deep)	100
OBPS-300D-SN	Satin Nickel (Deep)	100
OBPS-300D-ORB	Oil Rubbed Bronze (Deep)	100
TRIM KITS-INCLUDES KNOB, ESCUTCHEON, SCREWS AND CLIP		
OBPS-400-W*	White-Paintable	100
OBPS-400D-W*	White-Paintable (Deep)	100

*Designed for ice maker, dishwasher and washing machine Pull Stop Box™ applications.



Pull Stop Box™ Trim Kit
OBPS-400-W

Female Tee Adaptor
P-06735*



Escutcheon Extension Ring
P-06923

Dual Escutcheon
Extension Ring
P-06930

Pull Stop Box™ Accessories/Replacement Parts

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ACCESSORIES/REPLACEMENT PARTS		
OBPS-500D-W	Extension Kit For Trim (Deep, White)	10
P-06878-LL	3/8" Compr., 1/4 Turn Replacement Valve, Lead Free	48
P-06979-LL	1/4" Comp., 1/4 Turn Replacement Valve, Lead Free	10
P-06881	3/4" GHT, 1/4 Turn Replacement Valve, Lead Free	120
P-06923	Escutcheon Extension Ring	1000
P-06930	Dual Escutcheon Extension Ring	2000
P-06928	2.5" Self-Tapping Screw 2 Pack	4500
P-06921	1" Self-Tapping Screw 2 Pack	5000
P-1078-18	18" Hyco strap	TBD
P-1078-26	26" Hyco strap	TBD
P-06735	Tee Adaptor, Female 3/8" Comp x 2 x Male 3/8" Com	TBD
P-06406	Poly Inline Hammer Arrester 1/2" Crimp PEX	50
P-06407	Poly Inline Hammer Arrester 1/2" Uponor PEX	50
P-06408	Poly Inline Hammer Arrester 1/2" Male CPVC	50



Washing Machine Drain
(Fire Rated)
OBFD-100

Washing Machine Drain
OBD-100

Drain Box

The LSP Drain Box is molded from high impact plastic with error proof no-knockout drains and is an excellent accessory to the regular and FireStop™ Pull Stop Box™ product line. Includes threaded test plug. Available optional Condensate Stand has visible air gap. Use with Hyco Strap for top and bottom support.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
WASHING MACHINE DRAIN BOX		
OBD-100	Washing Machine Drain	10
OBFD-100	Washing Machine Drain (Fire Rated)	10



Lead-Free Quarter Turn Ball Valves in Straight and Angle versions make for a quick and easy shut-off. Heavy duty nickel plated brass ensures durability and ball style valve will not freeze up. PTFE seats allow for extra wear resistance and Chloramine/chlorine resistant O-rings will not break down due to oxidation.



Angle Valve
V-104-A-LL

Lead Free Angle Valves

PART NUMBER	INLET	OUTLET	MSTR CTN QTY
NICKEL-PLATED			
V-001-A-LL	5/8" O. D Compr	1/4" O.D. Compr	144
V-100-A-LL	1/2" Female Sweat	3/8" O.D. Compr.	144
V-101-A-LL	5/8" O.D. Compr.	3/8" O.D. Compr.	144
V-102-A-LL	1/2" F.I.P.	3/8" O.D. Compr.	144
V-103-A-LL	1/2" Crimp PEX	3/8" O.D. Compr.	144
V-104-A-LL	1/2" Uponor PEX	3/8" O.D. Compr.	144
V-105-A-LL	3/8" F.I.P.	3/8" O.D. Compr.	144
V-107-A-LL	1/2" F.I.P.	3/4" Hose Thread	144
V-401-A-LL	5/8" O.D. Compr.	1/2" OR 7/16" Slip Joint	144
V-402-A-LL	1/2" F.I.P.	1/2" OR 7/16" Slip Joint	144
V-500-A-LL	1/2" Female CPVC	3/8" O.D. Compr.	144

Lead Free NSF/ANSI 61



Straight Valve
V-104-S-LL

Lead Free Straight Valves

PART NUMBER	INLET	OUTLET	MSTR CTN QTY
NICKEL-PLATED			
V-100-S-LL	1/2" Female Sweat	3/8" O.D. Compr.	144
V-101-S-LL	5/8" O.D. Compr.	3/8" O.D. Compr.	144
V-102-S-LL	1/2" F.I.P.	3/8" O.D. Compr.	144
V-103-S-LL	1/2" Crimp PEX	3/8" O.D. Compr.	144
V-104-S-LL	1/2" Uponor PEX	3/8" O.D. Compr.	144
V-105-S-LL	3/8" F.I.P.	3/8" O.D. Compr.	144
V-401-S-LL	5/8" O.D. Compr.	1/2" OR 7/16" Slip Joint	144
V-402-S-LL	1/2" F.I.P.	1/2" OR 7/16" Slip Joint	144
V-500-S-LL	1/2" Female CPVC	3/8" O.D. Compr.	144

Lead Free NSF/ANSI 61



HoseMate Valve
V-750-S

HoseMate Valves

Solid brass construction. 1/4 turn only. Working pressures to 125 psi. Can be used indoors or outdoors. Attaches to garden equipment.

PART NUMBER	HANDLE	INLET X OUTLET	MSTR CTN QTY
V-750-S	Brass	3/4" F.G.H.T. x M.G.H.T.	24
UNFINISHED			
P-06306	Blue Handle	5/8" Compr. X 3/4" M.G.H.T.	24
P-06307	Red Handle	5/8" Compr. X 3/4" M.G.H.T.	24



RetroFit Valve
V-2000-S-LL

RetroFit Valves

Piggyback on old adapter or connector stop. Save time - leave old parts in place. Quarter-turn shut-off.

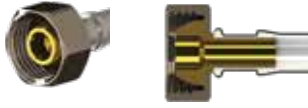
PART NUMBER	INLET	OUTLET	MSTR CTN QTY
V-2000-S-LL	3/8" Compr. H.C.	3/8" O.D. Compr.	24

Lead Free



Soft Compression Seal (S.C.)

Uses a soft cone washer to make a water-tight seal.



Hard Compression Seal (H.C.)

Metal to metal seal.



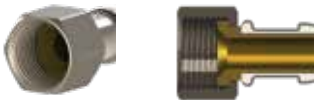
O.D. Compression

Uses a brass compression ring seal around the outside of a copper tube.



Ballcock

Available in either plastic or metal for toilet connection.



Flare

Metal to Metal tapered seal.



Female Garden Hose Thread (F.G.H.T.)

The same fitting as a garden hose. Uses a washer to make a water tight seal.

Glossary Information

H.C. = Hard Compression Seal

S.C. = Soft Compression Seal

F.I.P. = Female Iron Pipe Thread

M.I.P. = Male Iron Pipe Thread

Compr. = Unified National Threads

F.G.H.T. = Female Garden Hose Thread

M.G.H.T. = Male Garden Hose Thread

O.D. Compr. = Copper Tube Compression

All ballcocks are female and have soft cone compression washers, unless otherwise noted.



UltraCore™

UltraCore™

UltraCore – The exclusive UltraCore™ barrier in the Aqua-Flo® connectors does not flake or erode like other connectors. It is super-resistant to chemical degradation from chemicals such as chloramine and chlorine. It can also withstand dramatic changes in water pressure. It is free of BPA's, Phthalates and leaves no trace of odors or taste in the water. **UltraCore™** connectors have a unique 12-point crimp, making them far less susceptible to leaks than the standard 8-point crimp.

Crimp Points: 12

Working Pressure: 125 PSI with intermittent impulse up to 180 PSI

Working Temperature: 40° F with intermittent temps up to 180°F



MightyFlex™

MightyFlex™

Installations are easier and faster than ever with our **MightyFlex™** connectors, even in cramped conditions. They feature a reinforced PVC liner with stainless steel braid. They are chloramine and chlorine resistant and have been manufactured to withstand dramatic changes in water pressure to prevent bursting.

MightyFlex™ connectors have a unique double 12-point crimp, making them far less susceptible to leaks than the standard 8-point crimp.

Crimp Points: 12

Working Pressure: 125 PSI with intermittent impulse up to 180 PSI

Working Temperature: 40° F with intermittent temps up to 180°F



DiamondBack™

DiamondBack™

With our **DiamondBack™** reinforced PVC connectors, you'll never need special installation tools again. They are easy to install and require no soldering. They feature a reinforced PVC liner that is resistant chloramine and chlorine and have been manufactured to withstand dramatic changes in water pressure to prevent bursting. **DiamondBack™** connectors have a unique 12-point crimp, making them far less susceptible to leaks than the standard 8-point crimp.

Crimp Points: 12

Working Pressure: 125 PSI with intermittent impulse up to 180 PSI

Working Temperature: 40° F with intermittent temps up to 180°F



Ice Maker



Dishwasher



Washing Machine



Flex Arrester™ Connectors

Eliminate annoying and potentially dangerous water hammer when installed in Icemakers, Dishwashers, Washing Machines, Faucets and Toilets. Designed with the patented LSP Inline Hammer Arrester built into a corrosion-resistant polymer braid with Ultra Core™. Easy to install with directional Water Flow arrow clearly imprinted on the Hammer Arrester.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ICE MAKER CONNECTOR – 60"		
IMFA-160-PP	1/4" Compr. H.C. x 1/4" Compr. H.C.	10
	☑ Lead Free	NSF/ANSI 61 ASSE 1010

DISHWASHER CONNECTOR – 60"– ARRESTER IS 12" FROM VALVE		
DWFA-560-PP	3/8" Compr. x 3/8" Compr. w/ 3/4" FGHT 90° Elbow Adapter	10

WASHING MACHINE CONNECTOR – 60"		
WMFA-160-PP	3/8" I.D., 3/4" FGHT X 3/4" FGHT	10

FAUCET CONNECTOR – 20"		
FCFA-120-PP	3/8" Compr. x 1/2" FIP	25

TOILET CONNECTOR – 12"		
WCFA-112-PP	3/8" Compr. x 7/8" Ball Cock	25

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ACCESSORIES		
P-06365	Male 3/8" Comp x 3/4" FGHT Elbow Adapter	100



Polymer Push On Valve Only
PV-100

Polymer Push On Valves

Designed with Chloramine resistant rubber components and connected to the patented UltraCore™ supply line, this angle stop allows for excellent resistance to oxidation, scaling, mineral buildup, chemicals and heat. Bulk packaged. Includes Escutcheon and Gripper Ring.

PART NUMBER	COLOR	MSTR CTN QTY
1/2" PUSH ON X OUTLET 3/8" COMPRESSION		
PV-100 Push On Valve Only	White	24




Polymer Push On Valves
Toilet Connector
PV-WC112

Polymer Push On Valves With Integrated Supply Line (White)

PART NUMBER	LENGTH	MSTR CTN QTY
TOILET CONNECTOR 1/2" PUSH ON X 7/8" BALL COCK NUT SC		
PV-WC112	12"	24
PV-WC116	16"	24
PV-WC120	20"	24
FAUCET CONNECTOR 1/2" PUSH ON X 1/2" FIP SC		
PV-FC112	12"	24
PV-FC116	16"	24
PV-FC120	20"	24
PV-FC130	30"	24
ICE MAKER CONNECTOR 1/2" PUSH ON X 1/4" COMP		
PV-IM172	72"	10
DISHWASHER CONNECTOR 1/2" PUSH ON X 3/4" FGHT ELBOW		
PV-DW160	60"	10




Polymer Push On Valve

Lead Free ASSE 1061 NSF/ANSI 61 

Accessories

DISHWASHER 3/8" MIP X 3/8" COMP ELBOW ADAPTER		5000
FTG-05-0380-L		

Lead Free ASSE 1061 NSF/ANSI 61 

Stainless Steel Corrugated Connectors

Chrome plated brass nut. Non-toxic and sanitary. Truly kink resistant. Flexible but durable even with multiple bends. Tube resists work hardening allowing for more flexibility and easier installation. No dielectric union required. 100% leak tested. High corrosion-resistant stainless steel.

PART NUMBER	DESCRIPTION	LENGTH	MSTR CTN QTY
WCS-112-PP	3/4" F.I.P. x 3/4" F.I.P.	12"	25
WCS-118-PP	3/4" F.I.P. x 3/4" F.I.P.	18"	25
WCS-124-PP	3/4" F.I.P. x 3/4" F.I.P.	24"	25
WCS-312-PP	1" F.I.P. x 1" F.I.P.	12"	25
WCS-318-PP	1" F.I.P. x 1" F.I.P.	18"	25
WCS-324-PP	1" F.I.P. x 1" F.I.P.	24"	25
WCS-418-PP	3/4" F.I.P. x 3/4" Copper Sweat	18"	25
WCS-424-PP	3/4" F.I.P. x 3/4" Copper Sweat	24"	25
WCS-518-PP	3/4" Uponor PEX x 3/4" F.I.P.	18"	25
WCS-524-PP	3/4" Uponor PEX x 3/4" F.I.P.	24"	25
WCS-718-PP	3/4" Push to Conn	18"	25
WCS-724-PP	3/4" Push to Conn	24"	25
WCS-818-PP	3/4" Crimp PEX x 3/4" F.I.P. Nut	18"	25
WCS-824-PP	3/4" Crimp PEX x 3/4" F.I.P. Nut	24"	25
WITH SWEAT ADAPTER			
WSS-112-PP	3/4" F.I.P. x 3/4" F.I.P.	12"	25
WSS-118-PP	3/4" F.I.P. x 3/4" F.I.P.	18"	25
WSS-124-PP	3/4" F.I.P. x 3/4" F.I.P.	24"	25
WITH 1/4 TURN BALL VALVE			
WCSV-518-PP	3/4" Uponor PEX 1/4 Turn Ball Valve x 3/4" F.I.P.	18"	25
WCSV-524-PP	3/4" Uponor PEX 1/4 Turn Ball Valve x 3/4" F.I.P.	24"	25
WCSV-718-PP	3/4" Push to Conn. 1/4 Turn Ball Valve x 3/4" F.I.P. Nut	18"	25
WCSV-724-PP	3/4" Push to Conn. 1/4 Turn Ball Valve x 3/4" F.I.P. Nut	24"	25
WCSV-818-PP	3/4" Crimp PEX 1/4 Turn Ball Valve x 3/4 F.I.P. Nut	18"	25
WCSV-824-PP	3/4" Crimp PEX 1/4 Turn Ball Valve x 3/4 F.I.P. Nut	24"	25





Stainless Steel Braided

UltraCore™ Stainless Steel Braided

UltraCore™ Liner with Stainless Steel braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
3/4" M.I.P. X 7/8" O.D. COMPR.		
WHC-118-PP	18"	10
WHC-124-PP	24"	10
3/4" M.I.P. X 3/4" F.I.P.		
WHF-118-PP	18"	10
WHF-124-PP	24"	10
3/4" F.I.P. X 3/4" F.I.P.		
WFF-118-PP	18"	10
WFF-124-PP	24"	10
5/8" O.D. COMPR. X 3/4" M.I.P.		
WHC-518-PP	18"	10
WHC-524-PP	24"	10
3/4" M.I.P. w/ DIELECTRIC INSERT X 3/4" CPVC SOCKET		
WHL-2118-PP	18"	10
3/4" M.I.P. w/ DIELECTRIC INSERT X 3/4" PEX BARB		
WHJ-2118-PP	18"	10
3/4" F.I.P. X 7/8" O.D. COMPR.		
WFC-118-PP	18"	10
WFC-124-PP	24"	10
3/4" F.I.P. X 5/8" O.D. COMPR.		
WFC-518-PP	18"	10
WFC-524-PP	24"	10
3/4" F.I.P. X 3/4" CPVC		
WFL-2118-PP	18"	10

Lead Free



Copper Corrugated Connectors

Copper Corrugated Connectors

Annealed corrugated copper for improved flexibility and durability. Machined brass fittings with built in dielectric.

PART NUMBER	DESCRIPTION	LENGTH	MSTR CTN QTY
WCP-112-PP	3/4" F.I.P. x 3/4" F.I.P.	12"	25
WCP-118-PP	3/4" F.I.P. x 3/4" F.I.P.	18"	25
WCP-124-PP	3/4" F.I.P. x 3/4" F.I.P.	24"	25
WCP-212-PP	3/4" F.I.P. x 3/4" Sweat	12"	25
WCP-218-PP	3/4" F.I.P. x 3/4" Sweat	18"	25
WCP-224-PP	3/4" F.I.P. x 3/4" Sweat	24"	25
WCP-312-PP	3/4" F.I.P. x 3/4" PEX	12"	25
WCP-318-PP	3/4" F.I.P. x 3/4" PEX	18"	25
WCP-324-PP	3/4" F.I.P. x 3/4" PEX	24"	25

NSF/ANSI61 Lead Free




MightyFlex™ Stainless Steel Braided

MightyFlex™ Stainless Steel Braided

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
3/8" COMPR. H.C. X 3/8" O.D. COMPR.		
TFC-109-PP	9"	25
TFC-112-PP	12"	25
TFC-116-PP	16"	25
TFC-120-PP	20"	25
3/8" COMPR. H.C. X 3/8" COMPR. H.C.		
KFC-509-PP	9"	25
KFC-512-PP	12"	25
KFC-516-PP	16"	25
KFC-520-PP	20"	25

Lead Free NSF/ANSI 61 

DiamondBack™ Vinyl

Reinforced PVC DiamondBack™ Liner. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.



DiamondBack™ Vinyl

PART NUMBER	LENGTH	MSTR CTN QTY
1/2" F.I.P. S.C. X 3/8" COMPR. S.C.		
VF-109-PP	9"	25
VF-112-PP	12"	25
VF-116-PP	16"	25
VF-120-PP	20"	25
VF-124-PP	24"	25
VF-130-PP	30"	25
VF-136-PP	36"	10
VF-148-PP	48"	10
VF-172-PP	72"	10
7/16" COMPR. X 1/2" F.I.P.		
VF-212-PP	12"	25
VF-220-PP	20"	25
1/2" F.I.P. X 1/2" CONE		
VF-316-PP	16"	25
1/2" F.I.P. S.C. X 1/2" F.I.P. S.C.		
VF-409-PP	9"	25
VF-412-PP	12"	25
VF-416-PP	16"	25
VF-420-PP	20"	25
VF-424-PP	24"	25
VF-436-PP	36"	10
VF-448-PP	48"	10
3/8" COMPR. S.C. X 3/8" COMPR. S.C.		
VF-509-PP	9"	25
VF-512-PP	12"	25
VF-516-PP	16"	25
VF-520-PP	20"	25
VF-524-PP	24"	25
VF-536-PP	36"	10

Lead Free NSF/ANSI 61 

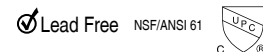


MightyFlex™ Stainless Steel Braided

MightyFlex™ Stainless Steel Braided

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft Cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
1/2" F.I.P. S.C. X 3/8" COMPR. S.C.		
SFC-109-PP	9"	25
SFC-112-PP	12"	25
SFC-116-PP	16"	25
SFC-120-PP	20"	25
SFC-124-PP	24"	25
SFC-130-PP	30"	25
SFC-136-PP	36"	25
SFC-148-PP	48"	10
SFC-160-PP	60"	10
SFC-172-PP	72"	10
1/2" F.I.P. S.C. X 7/16" COMPR. S.C.		
SFC-212-PP	12"	25
SFC-216-PP	16"	25
SFC-220-PP	20"	25
SFC-224-PP	24"	25
1/2" F.I.P. S.C. X 1/2" COMPR. S.C.		
SFC-309-PP	9"	25
SFC-312-PP	12"	25
SFC-316-PP	16"	25
SFC-320-PP	20"	25
SFC-336-PP	36"	10
SFC-348-PP	48"	10
1/2" F.I.P. S.C. X 1/2" F.I.P. S.C.		
SFC-409-PP	9"	25
SFC-412-PP	12"	25
SFC-416-PP	16"	25
SFC-420-PP	20"	25
SFC-424-PP	24"	25
SFC-430-PP	30"	25
SFC-436-PP	36"	10
SFC-448-PP	48"	10
3/8" COMPR. S.C. X 3/8" COMPR. S.C.		
SFC-506-PP	6"	25
SFC-509-PP	9"	25
SFC-512-PP	12"	25
SFC-516-PP	16"	25
SFC-520-PP	20"	25
SFC-524-PP	24"	25
SFC-530-PP	30"	25
SFC-536-PP	36"	10
SFC-548-PP	48"	10
SFC-560-PP	60"	10
SFC-572-PP	72"	10
SFC-596-PP	96"	25
SFC-5120-PP	10'	10
1/2" F.I.P. S.C. X 3/8" FLARE		
SFF-112-PP	12"	25
SFF-116-PP	16"	25
SFF-120-PP	20"	25
SFF-130-PP	30"	25





MightyFlex™ Stainless Steel Braided

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
7/8" BALLCOCK X 3/8" FLARE		
SFT-112-PP	12"	25
SFT-116-PP	16"	25
SFT-120-PP	20"	25
7/8" BALLCOCK X 1/2" FLARE		
SFT-312-PP	12"	25
SFT-316-PP	16"	25
SFT-320-PP	20"	25
7/8" BALLCOCK X 3/8" COMPR. S.C.		
SWC-109-PP	9"	25
SWC-112-PP	12"	25
SWC-116-PP	16"	25
SWC-120-PP	20"	25
SWC-124-PP	24"	25
7/8" BALLCOCK X 1/2" COMPR. S.C.		
SWC-312-PP	12"	25
SWC-316-PP	16"	25
SWC-320-PP	20"	25
7/8" BALLCOCK X 1/2" F.I.P. S. C.		
SWC-409-PP	9"	25
SWC-412-PP	12"	25
SWC-416-PP	16"	25
SWC-420-PP	20"	25



MightyFlex™ Stainless Steel Braided

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
7/8" BALLCOCK X 3/8" COMPR. H.C.		
KWC-109-PP	9"	25
KWC-112-PP	12"	25
KWC-116-PP	16"	25
KWC-120-PP	20"	25
7/8" BALLCOCK X 1/2" COMPR. H.C.		
KWC-312-PP	12"	25



MightyFlex™ 1/2" Full Flow

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
7/8" BALLCOCK X 1/2" COMPRESSION S.C.		
KWC-509-PP	9"	10
KWC-512-PP	12"	10



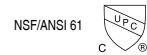


MightyFlex® Stainless Steel Braided - Metal Ballcock

MightyFlex™ Stainless Steel Braided – Metal Ballcock

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
7/8" BALLCOCK X 3/8" COMPR. S.C.		
SWC-512-PP	12"	25
SWC-516-PP	16"	25
SWC-520-PP	20"	25



DiamondBack™ Vinyl

DiamondBack™ Vinyl

Reinforced PVC DiamondBack™ Liner. Bright nickel plated nuts with brass fitting and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
7/8" POLYMER BALLCOCK X 3/8" COMPR. S.C.		
VT-109-PP	9"	25
VT-112-PP	12"	25
VT-116-PP	16"	25
VT-120-PP	20"	25
7/8" POLYMER BALLCOCK X 1/2" F.I.P. S.C.		
VT-409-PP	9"	25
VT-412-PP	12"	25
VT-416-PPv	16"	25
7/8" BRASS BALLCOCK X 3/8" COMPR.		
VT-512-PP	12"	25





UltraCore™ Polymer Braided Washing Machine Connector

UltraCore™ Polymer Braided Washing Machine Connectors

UltraCore™ Liner with corrosion-resistant polymer braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Corrosion-resistant polymer braid.

PART NUMBER	LENGTH	MSTR CTN QTY
1/2" I.D. – 3/4" F.G.H.T. X 3/4" F.G.H.T. – FOR FRONT LOAD WASHERS		
WAS-148-PP	48"	10
WAS-160-PP	60"	10
WAS-172-PP	72"	10



MightyFlex™ Connectors

Reinforced PVC MightyFlex™ Liner with Stainless Steel Braid. Bright nickel plated nuts with brass fittings and 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
3/8" I.D. – 3/4" F.G.H.T. X 3/4" F.G.H.T. – FOR TOP LOAD WASHERS		
WAS-348-PP	48"	10
WAS-360-PP	60"	10
WAS-372-PP	72"	10
3/8" I.D. – 3/4" F.G.H.T. X 90° 3/4" F.G.H.T.		
WAS-448-PP	48"	10
WAS-460-PP	60"	10
WAS-472-PP	72"	10
WAS-496-PP	96"	10



MightyFlex™ Stainless Steel Braided Ice Maker Connectors

Reinforced PVC MightyFlex™ Liner with Stainless Steel Braid. Bright nickel plated nuts with brass fittings and 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
1/4" COMPR. H.C. X 1/4" COMPR. H.C.		
KDW-912-PP	12"	25
KDW-924-PP	24"	10
KDW-960-PP	60"	10
KDW-972-PP	72"	10
KDW-984-PP	84"	10
KDW-996-PP	96"	10
KDW-9120-PP	120"	10
KDW-9180-PP	180"	10
1/4" COMPR. S.C. X 1/4" COMPR. S.C.		
SDW-936-PP	36"	10
SDW-948-PP	48"	10
SDW-960-PP	60"	10
SDW-972-PP	72"	10

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MightyFlex™ Stainless Steel Braided Ice Maker Connector

DiamondBack™ Ice Maker Connectors

Reinforced PVC DiamondBack™ Liner. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
1/4" COMPR. S.C. X 1/4" COMPR. S.C.		
VDW-936-PP	36"	10
VDW-948-PP	48"	10
VDW-960-PP	60"	10
VDW-972-PP	72"	10

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DiamondBack™ Ice Maker Connector



MightyFlex™ Stainless Steel Braided Dishwasher Connector

MightyFlex™ Stainless Steel Braided Dishwasher Connectors

Reinforced PVC MightyFlex™ Liner with Stainless Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
1/2" F.I.P. S.C. X 3/8" COMPR. H.C. w/ 90° 3/8" M.I.P. ELBOW ADAPTER		
KDW-148-PP	48"	10
KDW-160-PP	60"	10
KDW-172-PP	72"	10
KDW-184-PP	84"	10
1/2" COMPR. H.C. X 3/8" COMPR. H.C. w/ 90° 3/8" M.I.P. ELBOW ADAPTER		
KDW-360-PP	60"	10
1/2" F.I.P. S.C. X 1/2" F.I.P. S.C.		
KDW-448-PP	48"	10
KDW-460-PP	60"	10
KDW-472-PP	72"	10
3/8" COMPR. S.C. X 3/4" F.G.H.T. w/ 90° ELBOW		
KDW-548-PP	48"	10
KDW-560-PP	60"	10
KDW-572-PP	72"	10
3/8" COMPR. S.C. X 3/8" COMPR. H.C. w/ 90° 3/8" M.I.P. ELBOW ADAPTER		
KDW-636-PP	36"	10
KDW-648-PP	48"	10
KDW-660-PP	60"	10
KDW-672-PP	72"	10
KDW-684-PP	84"	10
KDW-6120-PP	120"	10
1/2" COMPR. S.C. X 1/2" COMPR. S.C. w/ 90° 3/8" M.I.P. ELBOW ADAPTER		
KDW-784-PP	84"	10

Lead Free



DiamondBack™ Dishwasher Connector

DiamondBack™ Dishwasher Connectors

Reinforced PVC DiamondBack™ Liner. Bright nickel plated nuts with brass fittings and a double 12 point crimp. Soft cones feature a chloramine resistant washer.

PART NUMBER	LENGTH	MSTR CTN QTY
3/8" COMPR. S.C. X 3/8" COMPR. H.C. w/ 90° 3/8" NPT ELBOW ADAPTER		
VDW-660-PP	60"	10
VDW-672-PP	72"	10
VDW-672-NE*	72"	10

*Does not come with elbow

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Accessories



PART NUMBER	LENGTH	MSTR CTN QTY
3/8" COMPR. X 3/48" F.G.H.T. 90° ELBOW ADAPTER w/NUT AND WASHER		
P-06365		100



UltraCore™ Full Flow Connectors

UltraCore™ Full Flow Connectors

Patented UltraCore™ Liner with Stainless Steel Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
3/4" F.I.P. w/ WASHER X 3/4" F.I.P. w/ WASHER		
HWH-118-PP	18"	10
HWH-124-PP	24"	10
HWH-148-PP	48"	10

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UltraCore™ Large Diameter Connectors

UltraCore™ Large Diameter Connectors

Patented UltraCore™ Liner with Stainless Steel Braid. Bright nickel plated nuts with brass fittings and a double 12 point crimp.

PART NUMBER	LENGTH	MSTR CTN QTY
LEAD FREE NICKEL PLATED OVER BRASS FITTINGS		
1/2" F.I.P. w/ WASHER X 1/2" F.I.P w/ WASHER		
PPC-118-PP	18"	10
PPC-124-PP	24"	10
LEAD FREE NICKEL PLATED OVER STEEL FITTINGS		
1" F.I.P. w/ WASHER X 1" F.I.P. w/ WASHER		
SFF-10012	12"	40
SFF-10018	18"	20
SFF-10024	24"	20
SFF-10036	36"	30

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TMX Series Hoses

NICKEL PLATED OVER BRASS FITTINGS WITH UNFINISHED BRASS ADAPTORS

1" ID - 1" MIP X 1/2" GROUND JOINT F.I.P. w/ 1/2" MIP ADAPTER		
TMX-10020	20"	20
TMX-10036	36"	15
TMX-10048	48"	20
TMX-10072	72"	10
TMX-10096	96"	10
3/4" ID - 3/4" MIP X 3/4" GROUND JOINT F.I.P. w/ 3/4" MIP ADAPTER		
TMX-07512	20"	10
TMX-07524	24"	10
TMX-07536	36"	10
TMX-07548	48"	10
1/2" ID - 1/2" MIP X 1/2" GROUND JOINT F.I.P. w/ 1/2" MIP ADAPTER		
TMX-05018	18"	10
TMX-05024	24"	10
TMX-05036	36"	10

NSF/ANSI 61

insulation

Polyolefin foam insulation provides exceptional performance for thermal insulation, shock absorption, and sound dampening. It is extremely low in water absorption and moisture vapor transmission, making it ideal for many applications.

Rubber insulation is used to retard heat gain and prevent condensation on cold water plumbing and air conditioning lines. The closed-cell structure is non-porous, resists mold growth, and provides effective moisture vapor resistance. The tough skin withstands tearing, rough handling, and severe environmental conditions. Factory-applied talc coating allows it to easily slide onto the pipe during installation.



Polyolefin Foam Insulation (Self-Sealing, Half-Slit).....61





Foam (Self-Sealing, Half-Slit)

Polyolefin foam insulation is available in a wide variety of sizes and styles. Whether you require an un-slit design for a slide on application or a peel and seal design for existing projects, LSP carries the right foam insulation product for you. Made in the U.S.A.

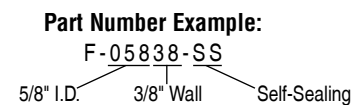


NOMINAL WALL THICKNESS 3/8"								
PART NUMBER (CARTON)				NOMINAL I.D.	CTS		IPS NOMINAL	FT/CTN
SELF-SEALING	MOQ	HALF-SLIT	MOQ		NOMINAL	O.D.		
F-05838-SS		F-05838-HS		5/8"	1/2"	5/8"	3/8"	396
F-03438-SS	100	F-03438-HS	100	3/4"	5/8"	3/4"	1/2"	300
F-07838-SS		F-07838-HS		7/8"	3/4"	7/8"		276
F-10038-SS	100	F-10038-HS	100	1"			3/4"	246
F-11838-SS		F-11838-HS		1-1/8"	1"	1-1/8"		222
F-11438-SS		F-11438-HS	100	1-1/4"			1"	186
F-13838-SS		F-13838-HS		1-3/8"	1-1/4"	1-3/8"		180
F-15838-SS		F-15838-HS		1-5/8"	1-1/2"	1-5/8"	1-1/4"	138
F-20038-SS		F-20038-HS	100	2"			1-1/2"	126
F-21838-SS		F-21838-HS		2-1/8"	2"	2-1/8"		102
F-23838-SS		F-23838-HS	100	2-3/8"			2"	84
F-25838-SS		F-25838-HS		2-5/8"	2-1/2"	2-5/8"		72
F-27838-SS	100	F-27838-HS	100	2-7/8"			2-1/2"	60
F-31838-SS		F-31838-HS	100	3-1/8"	3"	3-1/8"		54
F-31238-SS		F-31238-HS	100	3-1/2"			3"	48
F-35838-SS	100	F-35838-HS	100	3-5/8"	3-1/2"	3-5/8"		48
F-41838-SS	100	F-41238-HS	100	4-1/8"	4"	4-1/8"		36
F-41238-SS		F-41238-HS	100	4-1/2"			4"	36

NOMINAL WALL THICKNESS 1/2"								
PART NUMBER (CARTON)				NOMINAL I.D.	CTS		IPS NOMINAL	FT/CTN
SELF-SEALING	MOQ	HALF-SLIT	MOQ		NOMINAL	O.D.		
F-05812-SS		F-05812-HS		5/8"	1/2"	5/8"	3/8"	300
		F-03412-HS	100	3/4"	5/8"	3/4"	1/2"	264
F-07812-SS		F-07812-HS		7/8"	3/4"	7/8"		240
F-10012-SS		F-10012-HS	100	1"			3/4"	210
F-11812-SS		F-11812-HS		1-1/8"	1"	1-1/8"		186
F-11412-SS		F-11412-HS	100	1-1/4"			1"	168
F-13812-SS		F-13812-HS		1-3/8"	1-1/4"	1-3/8"		150
F-15812-SS		F-15812-HS		1-5/8"	1-1/2"	1-5/8"	1-1/4"	120
F-20012-SS		F-20012-HS	100	2"			1-1/2"	96
F-21812-SS		F-21812-HS		2-1/8"	2"	2-1/8"		84
F-23812-SS		F-23812-HS		2-3/8"			2"	72
F-25812-SS		F-25812-HS		2-5/8"	2-1/2"	2-5/8"		60
F-27812-SS		F-27812-HS	100	2-7/8"			2-1/2"	54
F-31812-SS		F-31812-HS		3-1/8"	3"	3-1/8"		48
F-31212-SS		F-31212-HS		3-1/2"			3"	42
F-35812-SS		F-35812-HS		3-5/8"	3-1/2"	3-5/8"		36
F-41812-SS		F-41812-HS	100	4-1/8"	4"	4-1/8"		24
F-41212-SS		F-41212-HS	100	4-1/2"			4"	24

CTS: Copper Tube Size
 SS: Peel & Seal Seam Closure Feature
 HS: Half-Slit Design
 IPS: Iron Pipe Size

Note: Uncommon sizes may require a longer lead time.
 Minimum order size may apply.





Foam (Self-Sealing, Half-Slit)

Polyolefin foam insulation is available in a wide variety of sizes and styles. Whether you require an un-slit design for a slide on application or a peel and seal design for existing projects, LSP carries the right foam insulation product for you. Made in the U.S.A.



insulation
POLYOLEFIN FOAM INSULATION

NOMINAL WALL THICKNESS 3/4"

PART NUMBER (CARTON)				NOMINAL I.D.	CTS		IPS NOMINAL	FT/CTN
SELF-SEALING	MOQ	HALF-SLIT	MOQ		NOMINAL	O.D.		
F-03834-SS	100	F-03834-HS		3/8"	1/4"	3/8"	1/8"	228
F-01234-SS	100	F-01234-HS	100	1/2"	3/8"	1/2"	1/4"	210
F-05834-SS		F-05834-HS		5/8"	1/2"	5/8"	3/8"	180
F-03434-SS	100	F-03434-HS	100	3/4"	5/8"	3/4"	1/2"	162
F-07834-SS		F-07834-HS		7/8"	3/4"	7/8"		150
F-10034-SS	100	F-10034-HS	100	1"			3/4"	132
F-11834-SS		F-11834-HS		1-1/8"	1"	1-1/8"		120
F-11434-SS	100	F-11434-HS	100	1-1/4"			1"	114
F-13834-SS		F-13834-HS		1-3/8"	1-1/4"	1-3/8"		96
F-15834-SS		F-15834-HS		1-5/8"	1-1/2"	1-5/8"	1-1/4"	84
F-20034-SS		F-20034-HS	100	2"			1-1/2"	66
F-21834-SS		F-21834-HS	100	2-1/8"	2"	2-1/8"		54
F-23834-SS				2-3/8"			2"	54
F-25834-SS		F-25834-HS	100	2-5/8"	2-1/2"	2-5/8"		48
		F-27834-HS	100	2-7/8"			2-1/2"	42
F-31834-SS		F-31834-HS	100	3-1/8"	3"	3-1/8"		36
F-31234-SS	100	F-31234-HS	100	3-1/2"			3"	30
F-35834-SS	100	F-35834-HS	100	3-5/8"	3-1/2"	3-5/8"		30
F-41834-SS	100	F-41834-HS	100	4-1/8"	4"	4-1/8"		24
F-41234-SS				4-1/2"			4"	24

NOMINAL WALL THICKNESS 1"

PART NUMBER (CARTON)				NOMINAL I.D.	CTS		IPS NOMINAL	FT/CTN
SELF-SEALING	MOQ	HALF-SLIT	MOQ		NOMINAL	O.D.		
F-05810-SS		F-05810-HS		5/8"	1/2"	5/8"	3/8"	126
F-03410-SS	100	F-03410-HS	100	3/4"	5/8"	3/4"	1/2"	120
F-07810-SS		F-07810-HS		7/8"	3/4"	7/8"		102
F-10010-SS	100	F-10010-HS	100	1"			3/4"	96
F-11810-SS		F-11810-HS		1-1/8"	1"	1-1/8"		84
F-11410-SS	100	F-11410-HS	100	1-1/4"			1"	72
F-13810-SS		F-13810-HS		1-3/8"	1-1/4"	1-3/8"		72
F-15810-SS		F-15810-HS		1-5/8"	1-1/2"	1-5/8"	1-1/4"	54
F-20010-SS	100	F-20010-HS	100	2"			1-1/2"	54
F-21810-SS		F-21810-HS		2-1/8"	2"	2-1/8"		48
F-23810-SS		F-23810-HS	100	2-3/8"			2"	42
F-25810-SS		F-25810-HS		2-5/8"	2-1/2"	2-5/8"		36
F-27810-SS	100			2-7/8"			2-1/2"	36
F-31810-SS		F-31810-HS	100	3-1/8"	3"	3-1/8"		24
F-31210-SS	100	F-31210-HS	100	3-1/2"			3"	24
F-35810-SS	100			3-5/8"	3-1/2"	3-5/8"		24
		F-41810-HS	100	4-1/8"	4"	4-1/8"		18
F-41210-SS	100	F-41210-HS	100	4-1/2"			4"	18

CTS: Copper Tube Size

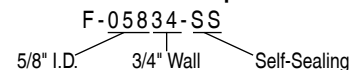
SS: Peel & Seal Seam Closure Feature

HS: Half-Slit Design

IPS: Iron Pipe Size

Note: Uncommon sizes may require a longer lead time.
Minimum order size may apply.

Part Number Example:





TechSpecialties®/ Frank Pattern™

Tech Specialties® represents LSP's reputation for innovation in the roof drain product line. Its development of the Uniflex roof drain with membrane clamps created a revolution in roof drains. Tech Specialties® carries a complete line of roof drains to meet the toughest and broadest of installations.

LSP acquired Frank Pattern™ which offers a broad line of cast iron drainage products. Frank Pattern™ has been in business since 1946, invented the "Instant Set" closet flange and was the originator of the baby blue color for cast iron drainage products. Frank Pattern™ provides LSP with a broad line of closet flanges, floor drains, shower drains, roof drains and cleanouts.



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Roof Drain Guide

ORIGIN

The modern roof drain must be designed to drain off rain water in the most effective manner possible while maintaining an aesthetic appeal since it is placed in full view of the public in many instances.

HOW TO SELECT A ROOF DRAIN

To select the proper roof drain, the following information must be determined by the specifier:

- Type of roof construction
- Roof pitch
- Volume of expected rainfall
- Desired rate of drainage
- Roof load and safety overflow requirements
- Locations of drains
- Size
- Vandal proofing

SELECTION OF ROOF DRAIN BODY

For a heavy rainfall region use 12" diameter type for large or small roof areas. For a light rainfall region, use 8-1/2" diameter type for small roof areas.

SELECTING PROPER ROOF DRAIN LEADER SIZES

1. Calculate the total roof area.
2. Determine the maximum hourly rainfall in inches. (The figure can be acquired from your local weather bureau and or local code authority.)
3. Select leader size.
4. From Table 1, determine the number of square feet that can be drained by one roof leader at the local maximum rainfall rate.
5. Divide the total roof area by the area that one leader will handle. The above result is the number of roof drains required for the building. If the result is a fraction less, use the next higher number.

NOTE: It can be readily seen that if 4" leaders were desired the number of roof drains required would increase to 22 drains. If a small number of roof drains are required then a larger leader would have to be chosen. Several small drains and leaders rather than one or two large drains will ensure even, safe and adequate roof drainage. Drains should be spaced for even drainage.

CALCULATING TOTAL G.P.M.

- G.P.M. = .0104 x R x A
- G.P.M. = Gallons per minute
- R = Rainfall Intensity (inches/hour)
- A = Roof Area (square feet)
- 0.0104 = conversion factor

Example: 4" rainfall with a roof area of 30,000 square feet
 .0104 x 4" x 30,000 = 1248 G.P.M

PIPE SIZE	VERTICAL LEADER	TABLE 2 – ALLOWABLE FLOW IN G.P.M		
		HORIZONTAL STORM DRAIN SLOPE / FT		
		1/8"	1/4"	1/2"
2	30	12	17	24
3	90	36	51	72
4	192	78	111	157
5	348	142	201	284
6	566	231	327	462
8	1220	498	705	996
10	2200	902	1275	1804
12		1467	2076	2934
15		2666	3774	5332

LEADERS PIPE SIZE INCHES	SIZE OPEN AREA SQ. IN.	TABLE 1 – HOURLY RAINFALL IN INCHES									
		1	1-1/2	2	2-1/2	3	4	5	6	7	8
ROOF AREA – SQUARE FEET											
2	3.14	2,880	1,920	1,440	1,150	960	720	575	480	410	360
3	7.06	8,880	5,860	4,400	3,520	2,930	2,200	1,760	1,470	1,260	1,100
4	12.56	18,400	12,700	9,200	7,360	6,130	4,600	3,680	3,070	2,630	2,300
5	19.60	34,600	23,050	17,300	13,840	11,530	8,650	6,920	5,765	4,945	4,325
6	28.30	54,000	36,000	27,000	21,600	18,000	13,500	10,800	9,000	7,715	6,750
8	50.25	116,000	77,400	58,000	46,400	38,680	29,000	23,200	19,315	16,570	14,500

NOTE: Above table is for leader sizes. Select drains with adequate open free area in proportion to the leader size and consistent with code requirements. Based on National Plumbing Code.



UNI-FLEX™ Roof Drain

UNI-FLEX™ Roof Drain

Accommodates single-ply, modified membranes and BUR systems. Comes with nylon grate and screw kit. One expansion coupling. One recessed clamping ring with screw kit. Deck screw kit. Dimensions: Drain/Flange: 20-1/4" x 20-1/4"; Drain Basin: 9-1/4" x 9-1/4". Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-6002	2" ABS	1
T-6003	3" ABS	1
T-6004	4" ABS	1



UNI-FLEX™ Roof Drain with Overflow

UNI-FLEX™ Roof Drain with Overflow

Accommodates single-ply, modified membranes and BUR systems. Comes with nylon round grate with screw kit. Two expansion couplings. Two clamping rings with screw kit. Deck screw kit. Dimensions: Drain/Flange" 20-1/4" x 27"; Drain Basin: 9-1/4" x 9-1/4". Overflow grate included. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-6102	2" ABS	1
T-6103	3" ABS	1
T-6104	4" ABS	1



Accessories

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0310	4-1/2" Nylon Overflow Grate	1
P-70825	2" Adapter, Overflow	1
P-70826	3" Adapter, Overflow	1



Plastic Roof Drain with Side-Outlet

Plastic Roof Drain with Side-Outlet

Combines roof drain and flashing skirt. Incorporates 90 degree right angle outlet for shallow joist areas. Nylon dome grate with screw kit. One expansion coupling. Deck screw kit. Dimensions: Drain/Flange: 15-3/4" x 15-3/4"; Drain Basin: 9-1/4" x 9-1/4". Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY	LBS
T-0050	2" ABS	1	6
T-0052	3" ABS	1	6
T-0054	4" ABS	1	7





Plastic Side-Outlet Roof Drain & Overflow

Plastic Roof Drain with Side-Outlet & Overflow

Combines roof drain, flashing skirt and overflow. Incorporates 90 degree right angle outlet for shallow joist areas. Nylon dome grate with screw kit. Two expansion couplings. Deck screw kit. Dimensions: Drain/Flange: 22-1/4" x 15-1/4"; Drain Basin: 9-1/4" x 9-1/4". Overflow grate included. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0020	2" ABS	1
T-0022	3" ABS	1
T-0024	4" ABS	1



Cast Iron Combination Roof Drain

Cast Iron Combination Roof Drain

Cast iron membrane clamps bolt to both roof and overflow drains. Designed with their own flashing skirt. Cast iron dome grate comes standard with cast iron drains. Dual membrane clamps provide a watertight bond. Shallow bowl/sump version. Dimensions: Drain/Flange: 19-1/4" x 10-1/2". Overflow grate included.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0082	2" Cast Iron Combo	24
T-0083	3" Cast Iron Combo	24
T-0084	4" Cast Iron Combo	24



Copper Roof Drain

Copper Roof Drain

Designed for flat roof installations. Sits flush on roof deck. Seamless, one-piece construction. Drain and flange are formed from 100% copper. No-hub adapter is 100% brass. Dimensions: Flange: 23 gauge Drain/Flange: 18" x 18" Drain Basin: 10". Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0280	2" Copper No-Hub	1
T-0281	3" Copper No-Hub	1
T-0282	4" Copper No-Hub	1



Accessories & Replacements

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-7239	8" Replacement Dome Grate	1
P-70823	Replacement Adapter Ring	1





Copper Roof Drain with Overflow

Copper Roof Drain with Overflow

Combines roof drain, flashing skirt and overflow all in one unit. Designed for flat roof installations. Seamless, one-piece construction. Drain and flange are formed from 100% copper. No-hub adapter is 100% brass. Dimensions: Flange: 23 gauge Drain/Flange: 24" x 18" Drain Basin: 10". Overflow grate included. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0272	4" Copper No-Hub	1



Replacements

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-7239	8" Replacement Dome Grate	1
P-70823	Replacement Adapter Ring	1



Copper Roof Drain with Side-Outlet

Copper Roof Drain with Side-Outlet

Incorporates 90 degree right angle outlet for shallow joist areas. Sits flush on roof areas. Seamless, one-piece construction. Drain body and flange are formed from 100% copper. No-hub adapter is 100% brass. Dimensions: Flange: 23 gauge Drain/Flange: 18" x 18" Drain Basin: 10". Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0265	2" Copper No-Hub	1
T-0266	3" Copper No-Hub	1



Replacements

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-70823	Replacement Adapter Ring	1



Frank Pattern™ Roof Drains

The Roof Drain must be designed to drain off rain water in the most effective manner possible while maintaining an aesthetic appeal. To select the proper roof drain, the following information must be determined: type of roof constructions, roof pitch, volume of expected rainfall, desired rate of drainage, roof load and safety overflow requirements, location of drains and possible vandal proofing. For heavy rainfall regions, use 12" diameter type and for light rainfall regions, use 8-12" diameter type drains.



853SN



853N



850-3N



850-041



850-003

PART NUMBER	DESCRIPTION	MSTR CTN QTY
ROOF DRAIN 8-1/2 SERIES / SIDE OUTLET		
852SN	2" No-Hub	1
853SN	3" No-Hub	1
854SN	4" No-Hub	1
ROOF DRAIN 8-1/2 SERIES / BOTTOM OUTLET		
852N	2" No-Hub	1
853N	3" No-Hub	1
854N	4" No-Hub	1
ROOF DRAIN OVERFLOW COMBINATION		
850-2N	2" x 2" No-Hub	1
850-3N	3" x 3" No-Hub	1
850-4N	4" x 4" No-Hub	1
ROOF DRAIN PARTS		
850-003	Strainer Dome	4
850-006	Roof Drain Membrane Clamp - Reg	20
850-041	2" High Dam Membrane Clamp - 8"	8



Floor Drain Guide

HOW TO SELECT A FLOOR DRAIN

Floor drains are primarily used for inside locations where the flow rate into the drain can be anticipated and for the outside areas where rainfall volume dictates sizing. Drains should be selected with the sufficient top size and grate free area to pass the anticipated flow. Grate free area is defined as the total area of drainage openings in the grate. The drain outlet should be sized large enough so that it will safely pass the maximum flow through the grate, without creating buildup.

SIZING AND LOCATION

For most indoor installations, the grate free area should equal the transverse area of the connecting pipe. The number and location of drains are based on the configuration of the floor plan, type of operation and location of equipment. Location and number of the floor drains required can be determined only after careful review of the plans and anticipated building use.

Floor drains or area drains, when used to drain exterior areas, should have an open area equal to twice the cross section area of the connection pipe.

RECOMMENDED GRATE OPEN AREAS FOR VARIOUS PIPE SIZES

NOMINAL PIPE SIZE IN.	TRANSVERSE AREA OF PIPE SQ. IN.	MIN. FLOW REQUIREMENTS (INTERIOR AREAS) SQ. IN.	MAX. FLOW REQUIREMENTS (EXTERIOR AREAS) SQ. IN.
1.5	2.04	3.06	4.08
2.0	3.14	4.71	6.28
3.0	7.06	10.59	14.12
4.0	12.60	18.90	25.20

Most drains are available with nickel bronze or bronze tops to match the surrounding trim in finished areas. Usually finished areas require light duty to medium duty tops. Round and square styles are available to blend with all types of construction and floor patterns.

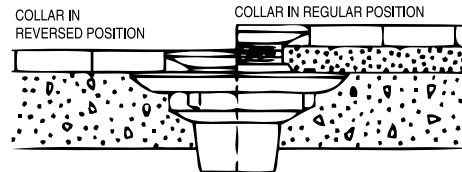
SIZE	NO-HUB
MODEL NUMBERS	
2"	N72
3"	N73

Trap primer tap not available on above models.

The round top is the most flexible type since it can be easily oriented to most floor plans.

ADJUSTABLE TOP

Floor drains are available with over 5 round and 2 square strainer heads. Strainer heads have a 3-3/4 – 11-1/2 threaded shank which threads into the top collar. This type of drain is particularly adaptable to two pour construction, such as bathrooms, shower rooms, locker rooms and other light duty finished areas. Strainer head is easily adjusted when the tile floor is being set.



Reversible top collar permits adjustment of the strainer as low as 3/4" (measured from top of the body pan to finished floor). This low position is particularly adaptable for installation where ceramic tile is applied directly to the slab. With collar in regular position, sufficient adjustment is available for all normal two pour application. Usually the normal sand and cement fill and ceramic tile measures approximately 1-1/2". For unusually deep floor fills or unique construction, additional height can be obtained by using a suffix E x 100 extension.

INSTANT SET® CONNECTION

The Instant Set® connection was invented and patented in 1968. Instant Set® - the original mechanical connection - provides an easy, time saving method to seal pipes while allowing for vertical flexibility. The mechanical joint uses 3 bolts to compress a resilient rubber gasket against cast iron and plastic pipes to create a water tight seal.

SIZE	INSTANT SET®	NO-HUB
MODEL NUMBERS 7"		
2"	7020	N702
3"		N703

Trap primer tap available on above models.



N73W/5375S



Floor drains are primarily used for inside locations where the flow rate into the drain can be anticipated and for the outside areas where rainfall volume can dictate sizing. Drains should be selected with the sufficient top size and grate free area to pass the anticipated flow. Grate free area is defined as the total area of the drainage openings in the grate.

Most drains are available with Nickel Bronze tops to match surrounding trim in finished areas. Usually finished areas require light duty to medium duty tops.

Frank Pattern™ Floor Drains

PART NUMBER	OUTLET SIZE	OUTLET TYPE	ROUND STRAINER	SQUARE TOP	MSTR CTN QTY
7" ADJUSTABLE FLOOR DRAINS WITH NICKEL BRONZE STRAINER					
N72		No-Hub			4
N73		No-Hub			4
N72W5375R	2"	No-Hub	5" Round		4
N73W5375R	3"	No-Hub	5" Round		4
N72W5375S	2"	No-Hub		5" Square	4
N73W5375S	3"	No-Hub		5" Square	4
7" ADJUSTABLE FLOOR DRAINS WITH NICKEL BRONZE STRAINER AND MEMBRANE CLAMP					
7020	2"	Instant Set®			4
N702W5375R	2"	No-Hub	5" Round		4
N703W5375R	3"	No-Hub	5" Round		4
7020W5375R	2"	Instant Set®	5" Round		4
N702W5375S	2"	No-Hub		5" Square	4
N703W5375S	3"	No-Hub		5" Square	4
7020W5375S	2"	Instant Set®		5" Square	4
ACCESSORIES					
100EX	Extension Extends 2"-4"				4
5375R-S&S	Plate Screen & Screws				1
5375R	Nickel Bronze Floor Drain Strainer Top		Round		16
5375S	Nickel Bronze Floor Drain Strainer Top			Square	16
CHR5375R*	Chrome Plated Floor Drain Strainer Top		Round		16
CHR5375S*	Chrome Plated Floor Drain Strainer Top			Square	16

* Coming 2018



N703W/5375R



30C

Frank Pattern™ Area Drains

PART NUMBER	OUTLET SIZE	OUTLET TYPE	ROUND STRAINER	MSTR CTN QTY
20C	2"	Instant Set®	6"	1
30C	3"	Instant Set®	7"	1
40C	4"	Instant Set®	8"	1



20SD

Frank Pattern™ Shower Drains

The 20SD Shower Drain was developed in 1968. At that time most of the plumbing fittings and related products were painted the standard black color. To differentiate the products from the rest of the industry's standard black color, the 20SD was painted with a light blue. Today it is recognized as "TRUE BLUE" in the industry.

PART NUMBER	OUTLET SIZE	OUTLET TYPE	STRAINER DIAMETER	MSTR CTN QTY
20SD	2"	Instant Set	3-1/2"	4





Plastic Adjustable Deck Drain



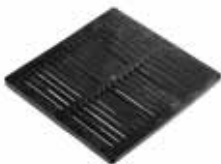
Copper Deck Drain



Copper Overflow Deck Drain



Grate - T-0300



Grate - T-0301



Grate - T-0318



Grate - T-0303



Expansion Couplings

Plastic Adjustable Deck Drain

Versatile design can be used as a floor, area, or deck drain. Drain body is available in 2" or 4" depth with a 2" or 3" sized outlet. Stabilizer adjusts to pour thickness and rigidly attaches drain. Comes complete with grate. Dimension: Drain/Flange: 9 3/8" x 9 3/8". Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0200	4" Opening x 2" Depth x 2" Pipe	10
T-0202	4" Opening x 2" Depth x 3" Pipe	10
T-0204	4" Opening x 4" Depth x 2" Pipe	10
T-0206	4" Opening x 4" Depth x 3" Pipe	10



Copper Deck Drain

Versatile design can be used as a floor drain, area drain or deck drain. No-hub adapter is made of 100% brass. Sand-blasted finish allows excellent adhesion to waterproofing systems. Dimensions: Flange 23 gauge Drain/Flange: 9" x 9" (2") 10" x 10" (3").

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0210	2" Copper No-Hub	10
T-0211	3" Copper No-Hub	10

Copper Deck Drain with Overflow

Primarily used as a secondary drainage system for roof, deck or area drains. Overflow meets 2" building code requirements. Sand-blasted finish provides excellent adhesion to water proofing systems. Dimensions: Flange 23 gauge Drain/Flange: 9" x 9" (2") 10" x 10" (3"). Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0220	2" Copper No-Hub	5
T-0221	3" Copper No-Hub	5



Grates

Choose from a wide variety of designs. Constructed of high impact plastic. Added UV inhibitors block sun's harmful rays. All models come complete with screws. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0300	9" x 9" Nylon Dome Grate w/ Screw Kit	80
T-0301	9" x 9" Flat Nylon w/ Screw Kit	1
T-0303	4-1/2" Flat Nylon Deck / Area Grate w/ Screw Kit	1
T-0318	9" x 9" Nylon Round Grate w/ Screw Kit	1
T-7241*	8" Aluminum Dome Grate	1

* Not made in America



Expansion Couplings

Provides exceptional flexibility to reduce the damaging effects of roof expansion and contraction. Preserves downspout/drain integrity to prolong roof life and decrease possibility of leaks and callbacks. Constructed of thermoplastic rubber with stainless steel bands. For use with plastic drains only. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
T-0305	2" Expansion Coupling x 7-1/2" Height	80
T-0306	3" Expansion Coupling x 8-1/4" Height	40
T-0307	4" Expansion Coupling x 9" Height	24





Neo-Poly® Roof Flashing

Neo-Poly® Roof Flashing

Injection molded poly base. TPR collar molded onto base to form one-piece permanent bonding of materials. Accommodates roofs from 0 to 45 degrees. Not for hot mop applications. Eliminates leaks by compressing around the pipe, creating a watertight seal. Resists extreme weather conditions and exposure to UV light.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-6150	8-7/8" x 11-3/4"	1-1/4"-1-1/2"	12
P-6200	8-7/8" x 11-3/4"	2"	12
P-6300	10-3/4" x 13-5/8"	3"	12
P-6400	11-3/4" x 15-3/4"	4"	12
MULTI-FIT			
P-7123	10-3/4" x 13-5/8"	1-1/2", 2", 3"	12



Galvanized Roof Flashing

Galvanized Roof Flashing

Self-sealing design allows for pipe expansion and contraction. Resists weather and exposure to UV light. Use with ABS, PVC, galvanized and cast iron DWV pipe. 25 gauge.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-4030	8-3/4" x 12-5/8"	1-1/4"-1-1/2"	12
P-4031	8-3/4" x 12-5/8"	2"	12
P-4032	10-3/4" x 14-1/2"	3"	12
P-4033	11-3/4" x 15-1/2"	4"	12
MULTI-FIT			
P-8123	10-3/4" x 14-1/2"	1-1/2", 2", 3"	12
P-8034	11-3/4" x 15-1/2"	3", 4"	12



Aluminum Roof Flashing

Aluminum Roof Flashing

Self-sealing design allows for pipe expansion and contraction. Resists weather and exposure to UV light. Use with ABS, PVC, galvanized and cast iron DWV pipe. 25 gauge.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-4042	8-3/4" x 12-5/8"	1-1/4"-1-1/2"	12
P-4043	8-3/4" x 12-5/8"	2"	12
P-4044	10-3/4" x 14-1/2"	3"	12
P-4045	11-3/4" x 15-1/2"	4"	12
MULTI-FIT			
P-9123	10-3/4" x 14-1/2"	1-1/2", 2", 3"	12
P-9034	11-3/4" x 15-1/2"	3", 4"	12





Hard Base Poly® Roof Flashing

Hard Base Poly® Roof Flashing

Flexible design conforms to roof shakes, shingles, and flat tile for a universal fit. Eliminates leaks by compressing around the pipe, creating a watertight seal. Resistant to extreme weather temperatures, ultra-violet rays, moisture and salt air corrosion. Use with all plastic DWV pipe systems. Features nail holes for easy installation. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-4150	13-1/16" x 8-7/8"	1-1/2"	25
P-4200	13-1/16" x 8-7/8"	2"	25
P-4300	16-5/32" x 11-9/16"	3"	25
P-4400	16-5/32" x 11-9/16"	4"	25



Flex-All™ Soft Base Roof Flashing

Flex-All™ Soft Base Roof Flashing

Accommodates 0 to 40 degrees. Flexible design conforms to roof shakes, shingles, and flat tile for a universal fit. Eliminates leaks by compressing around the pipe, creating a watertight seal. Resistant to extreme weather temperatures and ultra-violet rays. Use with all plastic DWV pipe systems. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-5150	11-1/4" x 8-7/8"	1-1/4", 1-1/2"	25
P-5200	11-1/4" x 8-7/8"	2"	25
P-5300	13-1/4" x 9-7/8"	3"	25



Poly® Pipe Vent Shield

Poly® Pipe Vent Shield

Requires no tools or mastics for sealing. Constructed of durable weather resistant materials. For use with ABS, PVC, galvanized or cast iron DWV pipe. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PIPE SIZE	MSTR CTN QTY
P-4190	1-1/2"	25	300
P-4191	2"	25	225
P-4192	3"	25	125
P-4193	4"	25	100





Stabilizer
P-3006

Stabilizer

Ideal for wooden floors or concrete slab applications. Prevents bend or riser from moving to eliminate water closet rocking. Made in the U.S.A.

PART NUMBER	DESCRIPTION	PARTS/BAG	MSTR CTN QTY
P-3006	4" Flush	1	75



Light Pour Time-Savers Stokes™ Closet Ring
P-3079

Light Pour Time-Savers Stokes™ Closet Ring

Single piece ring-stabilizer. Preset closet ring heights. Special ring slot for closet bolts. Patented design. Made in the U.S.A.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-3070	3/4" H for 3" ABS	20
P-3074	1-1/2" H for 3" ABS	20
P-3076	3/4" H for 4" ABS	20
P-3078	1" H for 4" ABS	20
P-3080	1-1/2" H for 4" ABS	20
P-3079*	1" H for 4" PVC	20



30



40TCSL

Frank Pattern™ Closet Flanges

A cast iron closet flange for connecting water closets to a pipe which utilizes a collar squeezing a resilient gasket against the pipe to provide a water tight, mechanical seal without the problems usually associated with hot lead type of sealant. Available for 3" & 4" cast iron, and ABS pipe systems in various heights, and offset requirements.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
30	3" x 2" Closet Ring	12
30TC	3" x 2" Closet Ring w/ Test Cap	12
40	4" x 2" Closet Ring	12
40TC	4" x 2" Closet Ring w/ Test Cap	12
40TCSL	4" x 2" Closet Ring w/ Test Cap, Slotted	12
44	4" x 4" Deep Closet Ring	4
46	4" x 6" Deep Closet Ring	4
OS40	4" x 2" Closet Ring 3/4 Offset	12



Pop Up Closet Flange

Pop Up Closet Flange*

The Pop up Closet Flange features a pop up test cap that can hold up to 6 floors of pressure and is still quickly and easily removed while not being able to fall down the drain. The test cap is below the top surface of the flange, preventing damage at the work site. It also comes with optional patented pending stainless steel reinforcing inserts to give you the strength and rigidity of a metal closet flange with the corrosion resistance of a plastic flange. 14 floor attachment holes offer options with irregular floor cutouts.

POP UP CLOSET FLANGE 3" X 4"		
PART NUMBER	DESCRIPTION	MSTR CTN QTY
P-3301	PVC w/ Test Cap	24
P-3302	ABS w/ Test Cap	24
P-3303	PVC w/o Test Cap	24
P-3304	ABS w/o Test Cap	24
P-3311	PVC w/ SS Inserts & Test Cap	24
P-3312	ABS w/ SS Inserts & Test Cap	24
P-3313	PVC w/ SS Inserts No Test Cap	24
P-3314	ABS w/ SS Inserts No Test Cap	24

*Available Winter 2018



Clean Outs

TRAFFIC FUNCTION: The top specified must be strong enough to safely carry the loads of anticipated traffic. The regular nickel bronze top is a heavy duty design and can be used for all finished floor areas subject to foot and light vehicular traffic, round, heavy duty cast iron tops should be specified. LSP offers cast iron tops in heavy duty design and non-tractor type covers.

MATERIAL: For most finished floors, scoriated nonskid nickel bronze tops are recommended. Nickel bronze has excellent corrosion resistant qualities, is extremely serviceable, will not discolor and has an attractive surface. Nickel bronze tops will not rust stain the surrounding finished floor areas as cast iron tops sometimes do. The "scuff-buff" action adds to its appearance, giving it a soft patina. Tops are available in special polished cast bronze, for use where tops must blend with other architectural trim.

SELECTION OF BODY: Outlet Type bodies which are used with adjustable floor – level cleanout assemblies are available with two types of outlet connections. No-Hub and Instant Set® which can be effectively used, depending on the type of piping used in the system and compliance with plumbing code stipulations.

Access Covers

SELECTION OF TOP TYPE: For general use, the floor access cover are secured with countersunk screws. Where required, these screws may be of the vandal proof variety.

SELECTION FOR TRAFFIC LOAD: All floor access covers are subject to some sort of traffic. For most indoor areas which are subject to foot and light traffic, the regular scoriated nickel bronze top is recommended.

SELECTION OF MATERIAL: Since the floor areas are of the finished type, polished scoriated nickel bronze tops are recommended. In areas where blending with surrounding architectural trim is a requirement, polished bronze is available. CHROME PLATED BRONZE ACCESS COVER AND FRAMES ARE NEVER RECOMMENDED FOR FLOOR APPLICATIONS. For unfinished areas, heavy duty cast iron tops are recommended.

FRANK PATTERN™ CLEANOUTS

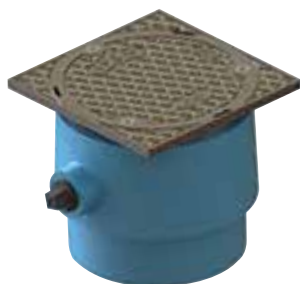
TechSpecialties®
Frank Pattern™



N404W/4440



4440



N503W/4050S

Frank Pattern™ Cleanouts & Floor Access Covers

CLEANOUTS WITH FLOOR ACCESS COVER			MSTR CTN QTY
PART NUMBER	OUTLET SIZE	OUTLET TYPE	
N404W4440	4"	No Hub	4



FLUSH FLOOR			MSTR CTN QTY
PART NUMBER	MATERIAL	PIPE SIZE	
4430	Iron / Brass	2" - 3"	6
4440	Iron / Brass	3" - 4"	6



Cast Iron Cleanouts

NICKEL BRONZE CAST IRON FLOOR CLEANOUTS, NO HUB		MSTR CTN QTY
PART NUMBER	DESCRIPTION	
N503W4050R	3" No Hub 5" Round Top	4
N503W4050S	3" No Hub 5" Square Top	4
N504W4050R	4" No Hub 5" Round Top	4
N504W4050S	4" No Hub 5" Square Top	4



RAPID-FIT®

All Schedule 40 rough-in-kits are available in PVC or ABS, with testing capability, in rough-in kits, or complete with trim kits. Rapid-Fit provides the flexibility to accommodate all overflow plate variations with a choice of three stopper designs.



Rough-In Kits 83



PVC & ABS Bath Waste Assemblies 84



Designer Finish Trim Kits 85

Brass & Plastic Bath Waste Assemblies 86

Trim Kits & Accessories 87





Half Kit - PVC
R-6011-RK



Half Kit - ABS
R-6010-RK



R-0910

Rough-In Kits

Rapid-Fit assemblies with testing feature. Revolver is Rapid-Fit's premier product, incorporating a unique, integrated knock-out test feature and snap-on overflow plate. The Dual-Test feature provides overflow/drain plugs and hardware to test and then mount 1 hole faceplates.

PVC	ABS	DESCRIPTION	MSTR CTN QTY
HALF KITS – INCLUDE OVERFLOW ELBOW, CP STRAINER & DRAIN ELBOW (NO PIPING OR TEE)			
R-6011-RK	R-6010-RK	Revolver, snap-on overflow plate (no hole)	20
R-0468-RK	R-0467-RK	2 hole overflow plate	20
R-0476-RK	R-0475-RK	1 hole overflow plate	20
FULL KITS – INCLUDE OVERFLOW ELBOW, CP STRAINER, DRAIN ELBOW, PIPING AND TEE			
R-6111-RK	R-6110-RK	Revolver, snap-on overflow plate (no hole)	20
R-0466-RK	R-0465-RK	2 hole overflow plate	20

LIFT & TURN	PUSH-PULL	TOE-TOUCH	DESCRIPTION	MSTR CTN QTY
TRIM KITS – INCLUDE CP STOPPER AND OVERFLOW PLATE				
R-0910	R-0919	R-0916	Revolver, snap-on overflow plate (no hole)	20
R-0929	R-0929-P	R-0929-T	1 hole overflow plate	20
R-0934		R-0934-T	2 hole overflow plate	20



R-6111-LT



R-6110-LT



Dual-Test Overflow Testing



Revolver Overflow Testing w/ Integrated Knock-out



Testing Drain Plug w/ Strainer

Bath Waste Assemblies

PVC	ABS	DESCRIPTION	MSTR CTN QTY
HALF KITS – INCLUDE OVERFLOW ELBOW, CP OVERFLOW PLATE, DRAIN ELBOW, CP STRAINER & CP STOPPER (NO PIPING OR TEE)			
LIFT & TURN			
R-6011-LT	R-6010-LT	Revolver, snap-on overflow plate (no hole)	20
R-0476	R-0475	1 hole overflow plate	20
R-0468	R-0467	2 hole overflow plate	20
R-0542		2 hole overflow w/ condensate	20
PUSH-PULL			
R-6011-P	R-6010-P	Revolver, snap-on overflow plate (no hole)	20
R-0476-P	R-0475-P	1 hole overflow plate	20
R-0468-P	R-0467-P	2 hole overflow plate	20
R-0542-P		2 hole overflow w/ condensate	20
TOE-TOUCH			
R-6011-T	R-6010-T	Revolver, snap-on overflow plate (no hole)	20
R-0476-T	R-0475-T	1 hole overflow plate	20
R-0468-T	R-0467-T	2 hole overflow plate	20
R-0542-T		2 hole overflow w/ condensate	20

PVC	ABS	DESCRIPTION	MSTR CTN QTY
FULL KITS – INCLUDE OVERFLOW ELBOW, CP OVERFLOW PLATE, DRAIN ELBOW, CP STRAINER, CP STOPPER, PIPING AND TEE			
LIFT & TURN			
R-6111-LT	R-6110-LT	Revolver, snap-on overflow plate (no hole)	20
R-0376	R-0364	1 hole overflow plate	20
R-0466	R-0465	2 hole overflow plate	20
PUSH-PULL			
	R-6110-P	Revolver, snap-on overflow plate (no hole)	20
	R-0364-P	1 hole overflow plate	20
R-0466-P	R-0465-P	2 hole overflow plate	20
TOE-TOUCH			
R-6111-T	R-6110-T	Revolver, snap-on overflow plate (no hole)	20
R-0376-T	R-0364-T	1 hole overflow plate	20
R-0466-T	R-0465-T	2 hole overflow plate	20

Bath waste assemblies available in Designer Finishes upon special request.
CP=Chrome Plated

Each Designer Finish kit includes a course thread strainer, premium stopper, and overflow plate.



Lift & Turn Stopper –
Shown with No Hole
Revolver Overflow Plate

Lift & Turn Stopper

REVOLVER SNAP ON	1 HOLE OVERFLOW PLATE	2 HOLE OVERFLOW PLATE	FINISH	MSTR CTN QTY
R-0986	R-0980	R-0992	Satin Nickel	20
R-0987	R-0981	R-0993	Oil Rubbed Bronze	20
R-0976	R-0967	R-0965	White	20
R-0935	R-0936	R-0937	Venetian Bronze	20



Push-Pull Stopper –
Shown with 1 Hole
Overflow Plate

Push-Pull Stopper

REVOLVER SNAP ON	1 HOLE OVERFLOW PLATE	2 HOLE OVERFLOW PLATE	FINISH	MSTR CTN QTY
R-0986-P	R-0980-P	R-0992-P	Satin Nickel	20
R-0987-P	R-0981-P	R-0993-P	Oil Rubbed Bronze	20
R-0976-P	R-0967-P	R-0965-P	White	20



Toe-Touch Stopper --
Shown with 2 Hole
Overflow Plate

Toe-Touch Stopper

REVOLVER SNAP ON	1 HOLE OVERFLOW PLATE	2 HOLE OVERFLOW PLATE	FINISH	MSTR CTN QTY
R-0986-T	R-0980-T	R-0992-T	Satin Nickel	20
R-0987-T	R-0981-T	R-0993-T	Oil Rubbed Bronze	20
R-0976-T	R-0967-T	R-0965-T	White	20



Brass Trip Lever
R-5000



Brass Lift & Turn
R-8020



Brass Toe-Touch
R-9000



Rapid-Test Plugs
R-1287

1 1/2" Brass

Fast and easy adjustment. Available in Brass Compression Joint or Solder Connection. Tubular construction.

PART NUMBER	DESCRIPTION	FINISH	MSTR CTN QTY
BRASS - TRIP LEVER			
R-5000	17 Ga. Compression	Chrome Plated	12
R-5500	20 Ga. Compression	Chrome Plated	12
BRASS - LIFT & TURN			
R-8000	20 Ga. Compression	Chrome Plated	12
R-8020*	17 Ga. Solder Conn.	Chrome Plated	12
R-8030*	17 Ga. Solder Conn.	Polished Brass	12
R-8500	20 Ga. Compression	Chrome Plated	12
BRASS - TOE TOUCH			
R-9000	17 Ga. Compression	Chrome Plated	12

*Coring fall 2017.

1 1/2" Plastic Tubular

Fast and easy linkage adjustment. Available in Chrome Plated only. Made of tubular construction.

PART NUMBER	DESCRIPTION	FINISH	MSTR CTN QTY
PLASTIC - TRIP LEVER			
R-0500	ABS Trip Lever	Chrome Plated	20
R-0550	PVC Trip Lever	Chrome Plated	20
R-0650	PVC Turn & Twist	Chrome Plated	20

Accessories/Replacement Parts

PART NUMBER	DESCRIPTION	FINISH	MSTR CTN QTY
R-03710	Brass Compr. Ring		3

Rapid-Test Plugs

For use when testing Schedule 40 waste overflows with 1 hole faceplates. Reusable. Holds a two-story test. Easy grip wing nut.

PART NUMBER	DESCRIPTION	MSTR CTN QTY
R-1287	Rapid Test Kit	100
R-60060	1 Hole Test Kit	200
R-60063	2 Hole Test Kit	200



1 Hole Lift & Turn and Coarse Thread Bushing Kit

1 Hole Lift & Turn and Coarse Thread Bushing Kits

Adapter bar required for 1 hole overflow plate. Designed with theft and vandal-resistant, solid brass lift and turn. Includes 1-5/8" – 16 TPI fine thread strainer body. Comes complete with 1-1/2" – 11-1/2 TPI adapter bushing. Fits most bath wastes. Includes 1 hole overflow plate with screw. Patented design.

PART NUMBER	FINISH	PACKAGING	MSTR CTN QTY
RFT-100-C	Chrome Plated	Clamshell	20
RFT-100-B	Polished Brass	Clamshell	20
RFT-100-SN	Satin Nickel	Clamshell	20
RFT-100-ORB	Oil Rubbed Bronze	Clamshell	20
RFT-100-VB	Venetian Bronze	Clamshell	20



2 Hole Lift & Turn and Coarse Thread Bushing Kit

2 Hole Lift & Turn and Coarse Thread Bushing Kits

Designed with theft and vandal-resistant, solid brass lift and turn. Includes 1-5/8" – 16 TPI fine thread strainer body. Comes complete with 1-1/2" – 11-1/2 TPI adapter bushing. Fits most bath wastes. Includes 2 hole overflow plate with screws. Patented design.

PART NUMBER	FINISH	PACKAGING	MSTR CTN QTY
RFT-102-SN	Satin Nickel	Clamshell	20
RFT-102-ORB	Oil Rubbed Bronze	Clamshell	20
RFT-102-VB	Venetian Bronze	Clamshell	20



1 Hole Toe-Touch and Coarse Thread Bushing Kit

1 Hole Toe-Touch and Coarse Thread Bushing Kits

Features the original and most trouble-free toe-touch stopper in the industry. Includes 1-5/8" – 16 TPI fine thread strainer body. Comes complete with 1-1/2" – 11-1/2 TPI adapter bushing. Fits most bath wastes. Includes 1 hole overflow plate with screw.

PART NUMBER	FINISH	PACKAGING	MSTR CTN QTY
RFT-200-C	Chrome Plated	Clamshell	20



Stopper with Reversible Stem

Lift & Turn Stopper with Reversible Stem

Lift & Turn Stopper includes reversible 3/8" and 5/16" stem. Allows theft-resistant installations. Fits most non-trip lever strainers. Patented design.

PART NUMBER	FINISH	PACKAGING	MSTR CTN QTY
RFT-101-C	Chrome Plated	Clamshell	20



Toe Touch Stopper

Toe Touch Stopper

The original and most trouble-free toe-touch stopper in the industry. Simply push stopper to open or close. Activated by rubber boot. No springs to wear out. Accommodates 1-1/4" deep strainer body.

PART NUMBER	DESCRIPTION	FINISH	PACKAGING	MSTR CTN QTY
RFT-201-B	3/8" thread	Polished Brass	Clamshell	20
RFT-201-C	3/8" thread	Chrome Plated	Clamshell	20

Chemicals

LSP offers a broad range of high strength PVC, CPVC and ABS solvent cements, primers, cleaners, and thread sealants ideally formulated for a variety of pipe joining applications. All LSP cements, primers, cleaners and thread sealants are low in volatile organic components (Low VOC) that readily evaporate into the atmosphere. These Low VOC products provide functional performance alternative that are environmentally friendly. The thread sealants are specifically designed for thread-locking, lubrication and a sure water seal.



Solvent Cements & Primers	89
Pipe Thread Sealants	93

Solvent Cements & Primers Selection Guide

	REGULAR BODY	COLOR	NOMINAL PIPE SIZE	PIPE SIZE															
				MM		IN.		MM		IN.		MM		IN.		MM		IN.	
				15	20	25	40	50	60	75	100	125	150	200	250	300	450	600	800
PVC	MEDIUM BODY	CLEAR	600C REGULAR	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR	605C MEDIUM	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		BLUE	621B IRRIGATION	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		AQUA BLUE	625B WET CONDITIONS	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR	627C ALL WEATHER	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR	695C FLEXIBLE PVC	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
	HEAVY BODY	CLEAR GRAY	617C/G HEAVY	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
CPVC	EXTRA-HEAVY BODY	GRAY	619G EXTRA HEAVY	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
	MEDIUM BODY	YELLOW	6FG ONE-STEP	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
	REGULAR BODY	ORANGE	613O REGULAR	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
ABS	HEAVY BODY	GRAY	614G HEAVY	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		BLACK	673BK ABS	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
SPECIALTY		CLEAR	690C UNIVERSAL	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR GREEN	694C/GN TRANSITION	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
PRIMER		CLEAR PURPLE	670C/P PRIMER	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR PURPLE	640C/P PRIMER CLEANER	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															
		CLEAR	CLEANER	[White bar for SCHEDULE 40, Black bar for SCHEDULE 80]															



PIPE FORMAT: SCHEDULE 40 SCHEDULE 80

Solvent Cements & Primers Installation Guide

Handling / Set Schedule*

Temperature	Pipe Size 1/2" to 1-1/4" 15mm to 30mm	Pipe Size 1-1/2" to 3" 40mm to 75mm	Pipe Size 4" to 8" 100mm to 200mm	Pipe Size 10" to 16" 250mm to 400m	Pipe Size 16"+ 400mm+
60° - 100° F 16° - 38° C	2 minutes	5 minutes	30 minutes	2 hours	4 hours
40° - 60° F 5° - 16° C	5 minutes	10 minutes	2 hours	8 hours	16 hours
0° - 40° F -18° - 5° C	10 minutes	15 minutes	12 hours	24 hours	48 hours

*The handling / set schedule is the time required before handling the joint. In case of damp/humid weather or loose fitting joints, allow 50% additional cure time.

Average Number of Joints per Quart

Pipe Diameter	1/2" 15mm	3/4" 20mm	1" 25mm	1-1/2" 40mm	2" 50mm	3" 75mm	4" 100mm	6" 150mm	8" 200mm	10" 250mm	12" 300mm
Total Joints	325	240	180	120	80	50	30	15	7	4	2

Joint / Cure Schedule*

Relative Humidity 60% or less	Pipe Size 1/2" to 1-1/4" 15mm to 30mm		Pipe Size 1-1/2" to 3" 40mm to 75mm		Pipe Size 4" to 8" 100mm to 200mm		Pipe Size 10" to 16" 250mm to 400m	Pipe Size 16"+ 400mm+
	Up to 180 PSI 12.4 Bar	180 PSI+ 12.4 Bar+	Up to 180 PSI 12.4 Bar	180 PSI+ 12.4 Bar+	Up to 180 PSI 12.4 Bar	180 PSI+ 12.4 Bar+	Up to 100 PSI 7 Bar	Up to 100 PSI 7 Bar
60° - 100° F 16° - 38° C	15 min	6 hrs	30 min	12 hrs	1-1/2 hrs	24 hrs	48 hrs	72 hrs
40° - 60° F 5° - 16° C	20 min	12 hrs	45 min	24 hrs	4 hrs	48 hrs	96 hrs	6 days
0° - 40° F -18° - 5° C	30 min	48 hrs	1 hr	96 hrs	3 days	8 days	8 days	14 days

*The handling / set schedule is the time required before handling the joint. In case of damp/humid weather or loose fitting joints, allow 50% additional cure time.

ALL THE DATA SHOWN ABOVE IS BASED ON LABORATORY TESTING. CHARTS SHOULD BE USED AS A GENERAL GUIDE, AS CONDITIONS IN THE FIELD MAY VARY.

Solvent Cements & Primers Case Quantity Guide

Master Carton Quantities of Solvent Cements & Primers

Can Size	1/2 Pint	Pint	Quart	Gallon
Master Ctn	24	12	12	6

Each product is labeled with a numbered extension to clearly identify the size of the can. 1/2 Pint cans are -2, Pint cans are -3, Quart cans are -4 and Gallon cans are -5.

Example: An item with the product number 625B-2 would be a case of 1/2 Pint PVC Cement and would contain 24 cans per case.

PVC CEMENTS

Chemicals

SOLVENT CEMENTS & PRIMERS

PRODUCT	PIPE SIZE	BODY/ SET	COLORS	LISTINGS / SPECIFICATIONS	SIZES
 <p>600 REGULAR BODY For use on pipes and joints in potable drinking water, DWV (Drain/Waste/Vent), irrigation, pool & spa and electrical conduit systems.</p>	For all PVC through 4", excluding SCH 80	Regular / Fast	○ Clear	NSF UPC ^c	Pint 600C-3 Quart 600C-4 Gallon 600C-5
 <p>605 MEDIUM BODY Recommended for all types and grades of PVC in potable drinking water, DWV (Drain/Waste/Vent), irrigation, pool & spa, and electrical conduit systems. Can be used without primer on non-pressure systems if local codes allow.</p>	For all PVC through 6" / SCH 80 thru 4"	Medium / Fast	○ Clear	NSF UPC ^c	Pint 605C-3 Quart 605C-4 Gallon 605C-5
 <p>617 HEAVY BODY Recommended for all types and grades of PVC in potable drinking water, DWV (Drain/Waste/Vent), irrigation, pool & spa, and electrical conduit systems. Heavy body provides good gap filling properties. Medium set time provides longer working time. Very high strength industrial grade cement.</p>	For all PVC through 12"	Heavy / Medium	○ Clear ● Gray	NSF UPC ^c	Pint 617C-3 Quart 617C-4 Gallon 617C-5 Pint 617G-3 Quart 617G-4 Gallon 617G-5
 <p>619 EXTRA HEAVY BODY Very high strength industrial grade cement for large industrial pipe systems. Perfect for fabricating because of its large gap filling properties. Slow set time provides longer working time for larger pipes.</p>	For all PVC through 30"	Extra Heavy / Slow	● Gray		Pint 619G-3 Quart 619G-4 Gallon 619G-5
 <p>621 IRRIGATION Very fast setting premium cement for rigid or flexible PVC in wet conditions for quick pressurization. Perfect for irrigation systems.</p>	For all PVC thru 6" / SCH 80 through 4"	Medium / Very Fast	● Blue	NSF UPC ^c	Pint 621B-3 Quart 621B-4 Gallon 621B-5
 <p>625 WET CONDITIONS Perfect for irrigation, pool and spa, and plumbing applications where wet conditions exist and/or quick pressurization is desired. Can be used without primer on non-pressure systems if codes allow.</p>	For all PVC thru 6" / SCH 80 through 4"	Medium / Very Fast	● Aqua Blue	NSF UPC ^c	1/2 Pint Pint 625B-3 Quart 625B-4 Gallon 625B-5
 <p>627 ALL WEATHER For use on pipes and joints in potable drinking water, DWV (Drain/Waste/Vent), irrigation, pool & spa and electrical conduit system.</p>	For all PVC thru 6" / SCH 80 through 4"	Medium / Fast	○ Clear	NSF UPC ^c	Pint 627C-3 Quart 627C-4 Gallon 627C-5

All solvent cements and primers are made in the U.S.A.



	PRODUCT	PIPE SIZE	BODY/ SET	COLORS	LISTINGS / SPECIFICATIONS	SIZES
PVC	 695 FLEX Special formula for solvent welding flexible PVC to rigid fittings.	For all PVC through 6" / SCH 80 through 4"	Medium / Fast	○ Clear	NSF UPC [®]	Quart 695C-4
	 6FG ONE STEP CEMENT One-step CPVC cement can be used without primer if codes allow. For use on CPVC potable water systems including FlowGuard Gold.	For CPVC CTS through 2" including FlowGuard Gold	Medium / Fast	● Yellow	NSF UPC [®]	1/2 Pint 6FG-2 Pint 6FG-3 Quart 6FG-4
CPVC	 613 REGULAR BODY For use with CPVC potable water systems.	For CPVC CTS through 2"	Regular / Fast	● Orange	NSF UPC [®]	1/2 Pint 613O-2 Pint 613O-3 Quart 613O-4
	 614 HEAVY BODY Industrial quality CPVC cement for non-chemical systems.	For all CPVC through 12"	Heavy / Medium	● Gray	NSF UPC [®]	1/2 Pint 614G-2 Pint 614G-3 Quart 614G-4
ABS	 673 ABS CEMENT For use on ABS systems including DWV (Drain/Waste/Vent), conduit, and foam core.	For all ABS through 8"	Medium / Fast	● Black	NSF UPC [®]	Pint 673BK-3 Quart 673BK-4 Gallon 673BK-5
SPECIALTY	 690 UNIVERSAL CEMENT For use on PVC, CPVC, and ABS.	For all PVC, CPVC, and ABS through 6"	Medium / Fast	○ Clear		1/2 Pint 690C-2 Pint 690C-3 Quart 690C-4
	 694 TRANSITION CEMENT ABS-PVC For use on transition joints between ABS and PVC non-pressure systems.	ABS to PVC non-pressure transition joints through 6" dia.	Medium / Fast	○ Clear ● Green	NSF UPC [®]	Pint 694GN-3 Quart 694GN-4
PRIMERS & CLEANERS	 670 PRIMER Premium, industrial strength, primer used to aggressively soften and prepare PVC and CPVC for solvent cement welding.	For all PVC and CPVC pipes and fittings.		○ Clear ● Purple	NSF UPC [®]	Pint 670C-3 Quart 670C-4 Gallon 670C-5 Pint 670P-3 Quart 670P-4 Gallon 670P-5
	 640 PRIMER CLEANER For cleaning and preparing PVC and CPVC surfaces for solvent cement welding.	For use on all PVC and CPVC pipes and fittings.		○ Clear ● Purple	F 656	Pint 640C-3 Quart 640C-4 Gallon 640C-5 Pint 640P-3 Quart 640P-4 Gallon 640P-5
	 650 CLEANER For removing dirt, grease, oil, and other foreign substances from pipe and fitting surface in preparation for priming and solvent cement welding.	For use on all PVC, CPVC, and ABS pipe and fittings		○ Clear		Pint 650C-3 Quart 650C-4 Gallon 650C-5



Gold 555

Gold 555

- Slow drying, soft-setting formula allows ample time for assembly or disassembly
- Creamy, non-separating consistency provides excellent thread coverage
- Grit-free sealant ensures leak proof sealing
- For sealing and lubricating all metal and plastic (ABS, PVC, CPVC, Polypropylene & Nylon) piping systems carrying various materials
- Made in the USA

PART NUMBER	SIZE	MSTR CTN QTY
55502	1/2 Pint	24
55503	Pint	12



White 222

White 222

- Contains fine PTFE particles for filling cracks and thread imperfections, ensuring a leak-proof seal
- Thick body formula has no smell, won't stain tile, marble, wood or other finishes and won't separate in the can
- For sealing and lubricating all metal and plastic (ABS, PVC, CPVC, Polypropylene & Nylon) piping systems carrying various material
- Compatible with FlowGuard Gold®, BlazeMaster® and Corzan®
- Made in the USA

PART NUMBER	SIZE	MSTR CTN QTY
22202	1/2 Pint	24
22203	Pint	12



Heavy Blue

Heavy Blue (Industrial)

- Heavy duty, grit-free formula
- Excellent for industrial applications and pipe lines in high vibration environments
- Finely synthesized PTFE particles fill imperfections while never hardening in vibrating connections
- For sealing and lubricating all metal and plastic (ABS, PVC, CPVC, Polypropylene & Nylon) piping systems carrying various material
- Made in the USA

PART NUMBER	SIZE	MSTR CTN QTY
88802	1/2 Pint	24
88803	Pint	12



LSP ORDER, SHIPMENT AND RETURN POLICIES 2018

LSP orders may be placed by calling LSP Customer Service at **(800) 854-3215**, faxing to **(800) 243-1777** or emailing **CustomerService@LSPProducts.com**. Hours: 7am-7pm CST Monday-Thursday
7am-6pm CST Friday

Please have Account Number, Company Name, ZIP Code, PO Number and Invoice Number (if applicable) available when contacting us.

- Orders must meet a minimum requirement of \$100 net. Exceptions will incur an additional \$25 charge.
- Hazardous materials, tub protectors, and Innofoam, must be purchased in case/bag quantity.

Back Orders: Occasionally, items may be temporarily back ordered. Back Ordered items will not be billed until shipped. Back orders will ship on a different invoice number.

Will Call Orders: Will Call Orders will only be processed after a phone call to LSP Customer Service to confirm inventory position and pick-up time. LSP Warehouse Hours are 9am-3pm local time.

Broken Carton Orders: A broken carton fee of \$5.00 per line item will be applied when orders do not meet case/bag quantities.

Shipments & Deliveries:

- Deliveries can only be made to a physical address; please provide that address when ordering.
 - Orders exceeding \$1500 net are shipped "full freight allowed" (FFA) i.e., LSP pays freight charges
- Small Order Delivery: LSP uses FedEx Ground to ship small package orders. Any other method of shipment is only available upon customer's request and expense.

Freight Delivery: Freight Truck deliveries will be shipped collect or prepaid. Freight Collect means freight will be billed back to the customer. Freight prepaid means LSP will prepay the freight. LSP retains the right to determine method of freight shipment. Any exceptions made at the customer's request will be at customer's expense. FFA ("full freight allowed") limits are established by LSP.

Damages: If a customer is going to refuse a shipment due to damage, contact the shipper and LSP Customer Service must be made before refusing the shipment. If authorization is not received from Customer Service, the customer will be responsible for all freight costs. This includes original shipping costs, if appropriate, and all freight costs incurred due to the refused order being returned without authorization. A 20% restocking fee on the material will also be charged on any shipment that is refused without proper, prior authorization. The material condition should be clearly written on the bill of lading as either "good" or "damaged" with the number of pieces (Ex. "1 out of 3 pieces damaged") along with the recipient's or customer's signature. If a customer has damaged material and the signed bill of lading does not state that the material was damaged upon receipt, the customer is responsible for the damaged material and should contact the carrier to file a claim. The customer must retain all packaging material for the carrier's inspection. Please note: Under no circumstances will LSP be responsible for replacement of damaged material whose signed bill of lading does not clearly state the material as "damaged" upon receipt.

Step 1: Inspect all material thoroughly upon receipt.

Step 2: Check material against packing slip for completeness.

Step 3: Note on bill of lading and packing slip any damaged goods or shortages with your Company Name, Receiver's Name, and overall condition of load.

Step 4: Call carrier immediately when your order has been deemed "damaged" or "shorted". Please have your Pro # and/or invoice # available to reference.

Step 5: Call LSP Customer Service for any material that needs to be replaced due to damage or shortage.

Step 6: All returned products must be in full carton or bagged quantity.

Shortages: Shortage claims must be made to LSP Customer Service within seven days from the date of material receipt. It is the responsibility of the customer to inspect all material upon receipt. If a shortage has been identified, contact the carrier as well as LSP Customer Service immediately. LSP will not be responsible for any shortage claim made after seven days from the date of material receipt.

Returns: We accept product returns in the original packaging up to one year from the date of purchase. To initiate a return, contact LSP Customer Service at **(800) 854-3215** to be issued written approval and provided a return goods authorization form (RGA) prior to returning material. After your return is authorized, please follow the guidelines below:

1. Simply return the material within 30 days of issuance of Return Authorization.
2. Mark all shipping documents with the RMA/RGA number provided by LSP Customer Service and include the RMA/RGA paperwork with the return.
3. Please do NOT write on any of the packaged product being returned.

Certain items may not be returned or may have specific return instructions. Credit will be allowed on material that is in its original, unopened packaging, has not been damaged or modified, is in clean salable condition, and of LSP's current manufacturing design. Credit will be issued on the basis of invoice price. A 20% restocking fee may be applied to certain returns. Custom orders including fabricated, special order, and customer made-to-order factory direct items, are non-returnable. Return shipping charges are non-refundable.

If upon inspection of the returned product, the material does not meet the requirements above, the product will be scrapped or returned to the customer at the customer's expense without issuance of credit.

TERMS AND CONDITIONS:

Payments: In order to ensure proper crediting of accounts, the customer must include remittance information with all payments. Any payment of an account sent to LSP without a remittance copy or some form of explanation, will be held.

Credits: Any claim against a bill must be made within 30 days from the due date. If there is a question or problem concerning an invoice or its charges, LSP should be contacted immediately.

Pricing: Prices are subject to change without notice. All orders are subject to the prices as they exist at the time of receipt of order.

SPECIAL NOTE: LSP reserves the right to make minor product modifications and improvements other than what is shown or described in this document without notice. LSP will not be responsible for providing improvements or updates on previous models.

LIMITED WARRANTY INFORMATION:

What is covered: For one year from the date of purchase, LSP Products Group, Inc. will replace free of charge, to the original purchaser only, any Specialty Products, Tech Specialties®, Rapid-Fit® or Aqua-Flo® product that fails due to defect in material or workmanship. At its option, LSP Products Group, Inc. will provide a full refund of the purchase price.

What is not covered: LSP Products Group, Inc. shall have no obligation under this warranty for leaks or damages caused by abuse, temperatures below 33°F (1°C) and above 180°F (82.2°C), misuse, accident, improper installation, sharp ends, kinking, twisting, unauthorized repair or damage that occurs during shipping. LSP Products Group, Inc. shall not be liable for any incidental or consequential damage resulting from the products or use of the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Some states do not allow the exclusive of limitation of incidental or consequential damages, so the above limitation or exclusive may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

A	Area (Roof Area in Square Feet)
ABS Pipe	Acrylonitrile-Butadiene-Styrene Pipe
ASTM	American Society for Testing and Materials
C.P.	Chrome Plated
Compr.	Compression
CPVC Pipe	Chlorinated Polyvinyl Chloride Pipe
CTN	Carton
CTS	Copper Tube Size
DWV Pipe	Non-pressure (Vented) Piping Used for Drain, Waste or Vent
F.G.H.T.	Female Garden Hose Thread
FT	Feet
F.I.P.	Female Iron Pipe Thread
G.P.M.	Gallons per Minute
H.A.	Hammer Arrester
H.C.	Hard Compression Seal
HS	Half-Slit Design
I.D.	Inner Diameter
IPS	Iron Pipe Size
LL	Lead Free
M.G.H.T.	Male Garden Hose Thread
M.I.P.	Male Iron Pipe Thread
O.D.	Outer Diameter
PSI	Pounds per Square Inch
PVC Pipe	Polyvinyl Chloride Pipe
R	Rainfall Intensity (Inches/Hour)
S.C.	Soft Compression Seal
SCH	Schedule
SS	Seal Seam Closure Feature
TPI	Thread per Inch
WHI	Warnock Hersey International, Incorporated

6FG.....	89	617G.....	89	695C.....	89	F-03834-SS.....	62
6FG-2.....	92	617G-3.....	91	695C-4.....	92	F-05810-HS.....	62
6FG-3.....	92	617G-4.....	91	850-2N.....	73	F-05810-SS.....	62
6FG-4.....	92	617G-5.....	91	850-003.....	73	F-05812-HS.....	61
20C.....	75	619G.....	89	850-3N.....	73	F-05812-SS.....	61
20SD.....	75	619G-3.....	91	850-4N.....	73	F-05834-HS.....	62
30.....	79	619G-4.....	91	850-006.....	73	F-05834-SS.....	62
30C.....	75	619G-5.....	91	850-041.....	73	F-05838-HS.....	61
30TC.....	79	621B.....	89	852N.....	73	F-05838-SS.....	61
40.....	79	621B-3.....	91	852SN.....	73	F-07810-HS.....	62
40C.....	75	621B-4.....	91	853N.....	73	F-07810-SS.....	62
40TC.....	79	621B-5.....	91	853SN.....	73	F-07812-HS.....	61
40TCSL.....	79	625B.....	89	854N.....	73	F-07812-SS.....	61
44.....	79	625B-3.....	91	854SN.....	73	F-07834-HS.....	62
46.....	79	625B-4.....	91	1313.....	28	F-07834-SS.....	62
100EX.....	75	625B-5.....	91	1410.....	28	F-07838-HS.....	61
104BC.....	33	627C.....	89	4430.....	80	F-07838-SS.....	61
104BW.....	33	627C-3.....	91	4440.....	80	F-10010-HS.....	62
104FC.....	33	627C-4.....	91	5375R.....	75	F-10010-SS.....	62
104FW.....	33	627C-5.....	91	5375R-S&S.....	75	F-10012-HS.....	61
105BC.....	33	640C.....	89	5375S.....	75	F-10012-SS.....	61
105BW.....	33	640C-3.....	92	6200.....	34	F-10034-HS.....	62
105FC.....	33	640C-4.....	92	7020.....	74, 75	F-10034-SS.....	62
105FW.....	33	640C-5.....	92	7020W/5375R.....	75	F-10038-HS.....	61
107BC.....	33	640P.....	89	7020W/5735S.....	75	F-10038-SS.....	61
107BW.....	33	640P-3.....	92	22202.....	93	F-11410-HS.....	62
107FC.....	33	640P-4.....	92	22203.....	93	F-11410-SS.....	62
107FW.....	33	640P-5.....	92	55502.....	93	F-11412-HS.....	61
109BC.....	33	650C.....	89	55503.....	93	F-11412-SS.....	61
109BW.....	33	650C-3.....	92	88802.....	93	F-11434-HS.....	62
109FC.....	33	650C-4.....	92	88803.....	93	F-11434-SS.....	62
109FW.....	33	650C-5.....	92	ACF-1212.....	32	F-11438-HS.....	61
600C.....	89	670C.....	89	ACF-1717.....	32	F-11438-SS.....	61
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600C-4.....	91	670C-4.....	92	AP88.....	32	F-11810-SS.....	62
600C-5.....	91	670C-5.....	92	AP96.....	32	F-11812-HS.....	61
605C.....	89	670P.....	89	AP1212.....	32	F-11812-SS.....	61
605C-3.....	91	670P-3.....	92	AP1414.....	32	F-11834-HS.....	62
605C-4.....	91	670P-4.....	92	AP1426.....	32	F-11834-SS.....	62
605C-5.....	91	670P-5.....	92	CHR5375R.....	75	F-11838-HS.....	61
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614G-2.....	92	690C-2.....	92	F-03410-SS.....	62	F-13834-HS.....	62
614G-3.....	92	690C-3.....	92	F-03412-HS.....	61	F-13834-SS.....	62
614G-4.....	92	690C-4.....	92	F-03434-HS.....	62	F-13838-HS.....	61
617C.....	89	694C.....	89	F-03434-SS.....	62	F-13838-SS.....	61
617C-3.....	91	694GN.....	89	F-03438-HS.....	61	F-15810-HS.....	62
617C-4.....	91	694GN-3.....	92	F-03438-SS.....	61	F-15810-SS.....	62
617C-5.....	91	694GN-4.....	92	F-03834-HS.....	62	F-15812-HS.....	61

F-15812-SS61	F-31812-HS61	K-0581064	K-21834-SS66
F-15834-HS62	F-31812-SS61	K-05810-SS66	K-2183863
F-15834-SS62	F-31834-HS62	K-0581263	K-21838-SS65
F-15838-HS61	F-31834-SS62	K-05812-SS65	K-2381064
F-15838-SS61	F-31838-HS61	K-0583464	K-23810-SS66
F-20010-HS62	F-31838-SS61	K-05834-SS66	K-2381263
F-20010-SS62	F-35810-SS62	K-0583863	K-23812-SS65
F-20012-HS61	F-35812-HS61	K-05838-SS65	K-2383464
F-20012-SS61	F-35812-SS61	K-0781064	K-23834-SS66
F-20034-HS62	F-35834-HS62	K-07810-SS66	K-2383863
F-20034-SS62	F-35834-SS62	K-0781263	K-2581064
F-20038-HS61	F-35838-HS61	K-07812-SS65	K-25810-SS66
F-20038-SS61	F-35838-SS61	K-0783464	K-2581263
F-21810-HS62	F-41210-HS62	K-07834-SS66	K-25812-SS65
F-21810-SS62	F-41210-SS62	K-0783863	K-25834-SS66
F-21812-HS61	F-41212-HS61	K-07838-SS65	K-2583863
F-21812-SS61	F-41212-SS61	K-1181064	K-2781064
F-21834-HS62	F-41234-SS62	K-11810-SS66	K-27810-SS66
F-21834-SS62	F-41238-HS61	K-1181263	K-2781263
F-21838-HS61	F-41238-SS61	K-11812-SS65	K-27812-SS65
F-21838-SS61	F-41810-HS62	K-1183464	K-2783464
F-23810-HS62	F-41812-HS61	K-11834-SS66	K-27834-SS66
F-23810-SS62	F-41812-SS61	K-1183863	K-3121064
F-23812-HS61	F-41834-HS62	K-11838-SS65	K-31210-SS66
F-23812-SS61	F-41834-SS62	K-1381064	K-3121263
F-23834-SS62	F-41838-SS61	K-13810-SS66	K-31212-SS65
F-23838-HS61	FS4434	K-1381263	K-31234-SS66
F-23838-SS61	FCFA-120-PP48	K-13812-SS65	K-3181064
F-25810-HS62	FTG-05-0380-L49	K-1383464	K-31810-SS66
F-25810-SS62	GSB-10116	K-13834-SS66	K-3181263
F-25812-HS61	GSB-101-FX16	K-1383863	K-31812-SS65
F-25812-SS61	GSB-20116	K-13838-SS65	K-3183464
F-25834-HS62	GSB-201-D16	K-1581064	K-31834-SS66
F-25834-SS62	GSB-50116	K-15810-SS66	K-3581064
F-25838-HS61	GSB-501-FX16	K-1581263	K-35810-SS66
F-25838-SS61	GSB-60116	K-15812-SS65	K-3581263
F-27810-SS62	GSFS-10116	K-1583464	K-35812-SS65
F-27812-HS61	GSFS-101-FX16	K-15834-SS66	K-3583464
F-27812-SS61	GSFS-20116	K-1583863	K-4121064
F-27834-HS62	HCW2434	K-15838-SS65	K-41210-SS66
F-27838-HS61	HWH-118-PP49, 58	K-2001064	K-4121263
F-27838-SS61	HWH-124-PP58	K-20010-SS66	K-41212-SS65
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F-31210-SS62	IMFA-160-PP48	K-20012-SS65	K-41810-SS66
F-31212-HS61	K-0341064	K-2003464	K-4181263
F-31212-SS61	K-03410-SS66	K-20034-SS66	K-41812-SS65
F-31234-HS62	K-0341263	K-20038-SS65	K-4183464
F-31234-SS62	K-03412-SS65	K-2181064	K-41834-SS66
F-31238-HS61	K-0343464	K-21810-SS66	KDW-148-PP57
F-31238-SS61	K-03434-SS66	K-2181263	KDW-160-PP57
F-31810-HS62	K-0343863	K-21812-SS65	KDW-172-PP57
F-31810-SS62	K-03438-SS65	K-2183464	KDW-184-PP57

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KDW-6120-PP.....57	OB-331.....7	OB-705.....9	OB-2061.....6
KDW-9120-PP.....56	OB-338.....7	OB-705-TOP.....9	OB-2070.....6
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