

# Traditional Products Catalog



*"Better by Design"*

Diversified Products Manufacturing, Inc.



# Traditional Products Catalog

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**Most Cost Effective and Complete Selection of Penetration Fittings**



**Threaded Penetrations**

- Single Sided for pipe through 4" LCX
- Single Sided with Integral Test Reducer
- Double Sided for Pipe through 4" LCX



**Studded Penetrations**

- Single Sided for Pipe through 6" Nominal
- Single Sided Inverted
- Double Sided for pipe through 6" Nominal
- Filled penetrations for pipe through 6" Nominal



**Reducers, Inserts, Caps & Plugs**

- Terminating & Test Reducers
- All Stainless Air Test Valves Made in USA
- Eccentric Reducers
- Dual Port Reducers
- Caps & Plugs for 2" Nominal to 6" Nominal Pipe
- Inserts for every Need



**Third Party Approvals**

- All Products N.D. Eryou
- All Products Round Table Engineering
- State of California - Spill Container Liners
- State of Florida EQ-742, EQ-801, EQ-836
- Selected Products 3rd Party UL Listing





## Product Bulletin

### Traditional Products



Contact Us

# Compared to the competition, DPM offers the Most Cost Effective Penetration Fittings in the Market

Diversified Products Manufacturing Inc now offers multiple solutions to the problem at a competitive price.



#### Threaded Penetrations

Single Sided, Double Sided  
With Integral Test reducers



#### Studded Penetrations

Single Sided, Double Sided  
Inverted Penetrations



#### Filled Penetrations

Double Sided



#### Test Reducers

With US Made Stainless Air Valves



#### Inserts

Wide Range of Sizes



#### Caps & Plugs

Third Party Approved to UL 2447 Protocols

Call us for a sample or test site

We have been here since 1991

First Testable Penetrations, Magnetic Tank Sump Lid, Compact Penetration -No rubber in the sump, & now all the options for repairing your site you need.

**CHECK IT OUT**

Call a Diversified representative to discuss your project needs. 530-534-3966

**Threaded Penetrations**

		Single Sided			Double Sided		
		Standard	w/Inserts	w/Reducers	Standard	w/Inserts	w/Reducers
B2 Series 3/4" & 1" Rigid 1" w/Inserts		<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a
B3.5 Series 1 1/2" OD through 2.7" OD (2" LCX)		<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions
B5 Series 2.7" (2" LCX) Through 3.8" (3" LCX)		<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions
B6 Series		<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a

**Studded Penetrations**

		Single Sided			Double Sided		
		Standard	w/Inserts	w/Reducers	Standard	w/Inserts	w/Reducers
4 Stud Traditional (T) & Inverted (I) 3/4" & 1" Rigid 1" w/Inserts		<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a
8 Stud Traditional (T) & Inverted (I) 1.5"-3.6" OD		<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input type="checkbox"/> n/a n/a n/a
10 Stud Traditional (T) & Inverted (I) 3.6" - 5.0"		<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions
12 Stud Traditional (T) & Inverted (I) 5.2" - 6.7"		<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> T I Price List Price List Data Sheet Instructions Instructions	<input checked="" type="checkbox"/> Price List Data Sheet Instructions	<input type="checkbox"/> n/a n/a n/a	<input checked="" type="checkbox"/> Price List Data Sheet Instructions

The US EPA issued regulations in 1988 that changed the fueling industry. Shortly after the introduction of products for double wall containment, components started to fail due to direct exposure to petroleum based fluids and more importantly to the vapors associated with these products. Today the industry has partially moved away from flexible entry boots and terminating reducers to fiberglass options. The materials selected for penetrations by the early manufacturers in the industry proved to be lacking. Diversified however has less than 50 reported failures with 10' of thousands sold annually since their introduction. The "B" Series is a family of threaded penetrations with significant demand today.

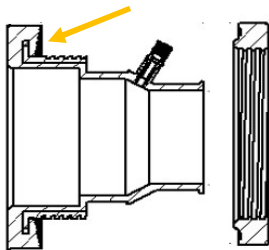
### Materials



**Sylvin Proprietary Polymers**

Selection of materials was a major concern in 1991 when Diversified first introduced this series. Alcryn, a melt processable rubber, was the material of choice. At that time Alcryn was used to manufacture some products exposed directly to fuels and had an outstanding track record. Diversified used this material from 1991 through 2015. With the introduction of next generation technology, we have moved on to **Sylvin**, a thermoplastic polymer. The Sylvin product test results reveal an even greater resistance to fuels and fuel vapors. In addition to being fuel resistant, the material is very flexible resisting damage for non perpendicular entries. The sylvin material may also be compressed significantly without failure. This is important when clamping oversized boots onto smaller pipe. Diversified's "B" series has a track record of over 30 years with a failure rate of less than .001% or 1 out of 100,000 over 30 years!

### Seal Design



Sealing to curved surfaces is significantly more difficult than sealing to flat surfaces. Diversified developed the conical shaped seal. This seal has multiple grooves with a flap design. This design helps the grooves to overlap to create a superior seal on round surfaces. On a typical sump the conical design will collapse at the top and bottom to accommodate the curvature of the sump. On the sides of the seal the flap design is in a more relaxed state and seals to these surfaces as well. This allows a single product to be used on all surfaces. Some sizes have been tested to seal to 24" round surfaces. Earlier competitive designs relied on flat or grooved surfaces. These products are no longer available to the market.

### Size Availability



Diversified Products "B" Series of penetrations is available in all sizes from 3/4" nominal through 4" nominal pipe without the use of inserts. The "B" Series is also manufactured for all metric sizes in this range. Additionally, the "B" series is manufactured for all APT and OPW flex pipes as well as Omegaflex and Brugg semi flexible pipe and Ameron LCX pipe. Inserts are available to convert from ANSI pipe standards to other pipe such as copper and plastics manufactured for other industries. Uniquely, the "B" series is available with integral step down reducers, reducing space consumption in the sump. These offerings are less expensive than a penetration and a separate test reducer. Penetrations with integral reducers are supplied with all stainless test valves. All components are manufactured in the United States of America.

### Double Sided



Many failures associated with penetration fittings are associated with stresses caused by backfill entering the cavity created on the outside of the sump between the pipe and the penetration. This cavity is also subject to freezing and thawing water where there is a high water table. This is problem is eliminated by using a double sided penetration. The "B" series penetrations are available in double sided for pipe applications and for corrugated ducting.

### Cost Effective

**Ideal for projects requiring long lasting products on a budget.**

When compared to equivalent studded penetrations, the "B" series is quicker to install with only a single hole required. Cost is always a consideration. The "B" series list price is often 1/2 that of the competitive product. See the "Dare to Compare" bulletin, in this catalog, for a contemporary comparison of the Diversified threaded and studded offerings compared to APT and OPW offerings.

The US EPA issued regulations in 1988 that changed the fueling industry. Shortly after the introduction of products for double wall containment, components started to fail due to direct exposure to petroleum based fluids and more importantly to the vapors associated with these products. Today the industry has partially moved away from flexible entry boots and terminating reducers to fiberglass options. The materials selected for penetrations by the early manufacturers in the industry proved to be lacking. Diversified however has less than 50 reported failures with 10's of thousands sold annually since their introduction. The studded series is a family of penetrations with significant demand today.

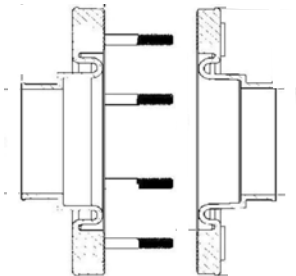
### Materials



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Selection of materials was a major concern in 1991 when Diversified first introduced its penetrations. Alcryn, a melt processable rubber, was the material of choice. At that time Alcryn was used to manufacture some products exposed directly to fuels and had an outstanding track record. Diversified used this material from 1991 through 2015. With the introduction of next generation technology, we have moved on to **Sylvin**, a thermoplastic polymer. The Sylvin product test results reveal an even greater resistance to fuels and fuel vapors. In addition to being fuel resistant, the material is very flexible resisting damage for non perpendicular entries. The sylvin material may also be compressed significantly without failure. This is important when clamping oversized boots onto smaller pipe. Diversified's "B" series has a track record of over 30 years with a failure rate of less than .001% or 1 out of 100,000 over 30 years!

### Product Design



Sealing to curved surfaces is significantly more difficult than sealing to flat surfaces. Diversified developed flexible over molded back and front plates. Diversified tested imbedding studs into these plates in excess of 15 ft. lb. torque without failure. Stainless studs fail at 20 ft lbs. when using the same test protocols. This allows the sealing surfaces to easily conform to round and flat surfaces. All known competitive products use an over molded steel plate that naturally resists forming to a curved surface. Additionally Diversified developed a stress roll in its studded series penetration fittings. This allows non perpendicular entries to be sealed with minimum stress on the boots.

### Size Availability



Diversified Products Studded Series of penetrations is available in all sizes from 3/4" nominal through 8" nominal pipe without the use of inserts. The studded series is also manufactured for all metric sizes in this range. Additionally, the studded series is manufactured for all APT and OPW flex pipes as well as Omegaflex and Brugg semi flexible pipe and Ameron LCX pipe. Inserts are available to convert from ANSI pipe standards to other pipe such as copper and plastics manufactured for other industries. All components are manufactured in the United States of America.

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Many failures associated with penetration fittings are associated with stresses caused by backfill entering the cavity created on the outside of the sump between the pipe and the penetration. This cavity is also subject to freezing and thawing water where there is a high water table. This problem is eliminated by using a double sided penetration. The studded series penetrations are available in double sided for pipe applications and for corrugated ducting.

### Cost Effective

**Ideal for projects requiring long lasting products on a budget**

When compared to equivalent studded penetrations, list price is often significantly less that of the competitive product. See the "Dare to Compare" bulletin in this catalog, for a contemporary comparison of the Diversified threaded and studded offerings compared to APT and OPW offerings.



**B2 Series Threaded Penetration Fittings (Required 2" Hole Saw)**



Part #	Description	List Price
PF-B2-1.1	B2 for 3/4" Nominal Pipe	\$27.99
PF-B2-1.3	B2 for 1.3" OD Pipe (32mm Pipe)	
PF-B2-1.4	B2 for 1" Nominal Pipe	\$36.57
PF-B2-41	B2 for 1" Nominal pipe with insert for 3/4"	
PF-B2-419	B2 for 1" Nominal Pipe with Inserts for 1/2" & 3/4"	
		\$45.15

**B3.5 Series Threaded Penetration Fittings (Required 3 1/2" Hole Saw)**



Part #	Description	List Price
PF-B3.5-1.5	B3.5 for 1.5" OD Pipe	\$34.21
PF-B3.5-1.6	B3.5 for 1.6" OD Pipe (40mm)	
PF-B3.5-1.7	B3.5 for 1 1/4" Nominal Pipe	
PF-B3.5-1.9	B3.5 for 1 1/2" Nominal Pipe	
PF-B3.5-2.0	B3.5 for 2.0" OD Pipe (OPW C15A & 50mm)	
PF-B3.5-2.2	B3.5 for 2.2" OD Pipe APT XP-175SC 1 3/4" Pipe	
PF-B3.5-2.4	B3.5 for 2" Nominal (NOV 2" FRP)	
PF-B3.5-2.5	B3.5 for 2.5" OD Pipe (OPW C20A & 63mm)	
PF-B3.5-2.7	B3.5 for 2.7" OD Pipe (NOV 2" LCX)	

**B5 Series Threaded Penetration Fittings (Required 5" Hole Saw)**



Part #	Description	List Price
PF-B5-2.7	B5 for 2.7" OD Pipe (NOV 2" LCX)	\$41.99
PF-B5-2.9	B5 for 2 1/2" Nominal Pipe	
PF-B5-3.0	B5 for 3.0" OD Pipe (75mm)	
PF-B5-3.3	B5 for 3.2"-3.3" OD Pipe	
PF-B5-3.6	B5 for 3" Nominal Pipe & 90 mm Pipe	
PF-B5-3.8	B5 for 3.8" OD Pipe (NOV 3" LCX)	

**B6 Series Threaded Penetration Fittings (Required 6" Hole Saw)**



Part #	Description	List Price
PF-B6-4.4	B6 for 4.4" OD Pipe (110mm)	\$49.76
PF-B6-4.5	B6 for 4" Nominal Pipe	
PF-B6-4.8	B6 for 4.8" OD Pipe (NOV 4" LCX)	
PF-B6-5.0	B6 for 5.0" OD Pipe (125 mm)	

**B3.5 Series Threaded Penetration Fittings with Integral Test Reducers (Required 3.5" Hole Saw)**



Part #	Description	List Price
PF-B3.5-40x32 A	B3.5 for 40x32mm with air test valve	\$44.92
PF-B3.5-63x50 A	B3.5 for 63x50 mm with air test valve	
PF-B3.5-2.7x2.4 A	B3.5 for 2" LCX with air test valve	

**B5 Series Threaded Penetration Fittings with Integral Test Reducers (Required 5" Hole Saw)**



Part #	Description	List Price
PF-B5-75x63 A	B5 for 75x63mm with air test valve	\$53.09
PF-B5-90x75 A	B5 for 90x75mm with air test valve	
PF-B5-3.6x2.4 A	B5 for 3" FRP over 2" FRP with air test valve	
PF-B5-3.8x3.5 A	B5 for 3" LCX with air test valve	

**B3.5 Series Double Sided Threaded Penetration Fittings with Integral Test Reducers (Required 3.5" Hole Saw)**



PF-B3.5D-40x32 A	B3.5 for 40x32mm with air test valve	\$82.05
PF-B3.5D-63x50 A	B3.5 for 63x50 mm with air test valve	
PF-B3.5D-2.7x2.4 A	B3.5 for 2" LCX with air test valve	

**B5 Series Double Sided Threaded Penetration Fittings with Integral Test Reducers (Required 5" Hole Saw)**



Part #	Description	List Price
PF-B5D-75x63 A	B5 for 75x63mm with air test valve	\$124.72
PF-B5D-90x75 A	B5 for 90x75mm with air test valve	
PF-B5D-3.6x2.4 A	B5 for 3" FRP over 2" FRP with air test valve	
PF-B5D-3.8x3.5	B5 for 3" LCX with air test valve	

**B2 Series Double Sided Threaded Penetration Fittings (Required 2" Hole Saw)**



Part #	Description	List Price
PF-B2D-1.1	B2 for 3/4" Nominal Pipe	\$61.02
PF-B2D-1.3	B2 for 1.3" OD Pipe (32mm Pipe)	
PF-B2D-1.4	B2 for 1" Nominal Pipe	
PF-B2D-41	B2 for 1" Nominal pipe with insert for 3/4"	
PF-B2D-419	B2 for 1" Nominal Pipe with Inserts for 1/2" & 3/4"	
		\$78.18
		\$95.34

**B3.5 Series Double Sided Threaded Penetration Fittings (Required 3 1/2" Hole Saw)**



Part #	Description	List Price
PF-B3.5D-1.5	B3.5 for 1.5" OD Pipe	\$71.34
PF-B3.5D-1.6	B3.5 for 1.6" OD Pipe (40mm)	
PF-B3.5D-1.7	B3.5 for 1 1/4" Nominal Pipe	
PF-B3.5D-1.9	B3.5 for 1 1/2" Nominal Pipe	
PF-B3.5D-2.0	B3.5 for 2.0" OD Pipe (OPW C15A & 50mm)	
PF-B3.5D-2.2	B3.5 for 2.2" OD Pipe APT XP-175SC 1 3/4" Pipe	
PF-B3.5D-2.4	B3.5 for 2" Nominal (NOV 2" FRP)	
PF-B3.5D-2.5	B3.5 for 2.5" OD Pipe (OPW C20A & 63mm)	
PF-B3.5D-2.7	B3.5 for 2.7" OD Pipe (NOV 2" LCX)	

**B3.5 Series Double Sided Threaded Penetration Fittings with integral reducers (Required 3 1/2" Hole Saw)**



Part #	Description	List Price
PF-B3.5D-40x32	B3.5 for 40mm over 32mm	\$82.05
PF-B3.5D-63x50	B3.5 for 63mm over 50mm	
PF-B3.5D-2.7x2.4	B3.5 Double Sided for 2" LCX	

**B5 Series Double Sided Threaded Penetration Fittings (Required 5" Hole Saw)**



Part #	Description	List Price
PF-B5D-2.7	B5 for 2.7" OD Pipe (NOV 2" LCX)	\$113.62
PF-B5D-2.9	B5 for 2 1/2" Nominal Pipe	
PF-B5D-3.0	B5 for 3.0" OD Pipe (75mm)	
PF-B5D-3.3	B5 for 3.3" OD Pipe	
PF-B5D-3.6	B5 for 3" Nominal Pipe & 90 mm Pipe	
PF-B5D-3.8	B5 for 3.8" OD Pipe (NOV 3" LCX)	

**B5 Series Double Sided Threaded Penetration Fittings with integral Reducers (Required 5" Hole Saw)**



Part #	Description	List Price
PF-B5D-75x63 A	B5 Double sided for 75mm over 63mm	\$124.72
PF-B5D-90x75 A	B5 Double sided for 90mm over 75mm	
PF-B5D-3.6x2.4 A	B5 Double Sided for 3" FRP over 2" FRP	
PF-B5D-3.8x3.6 A	B5 Double Sided for 3" LCX	



"Better by Design"

Traditional Studded Series Penetration Fittings



4 Stud Series Penetration Fittings (Required 2" Hole Saw)



Part #	Description	List Price
PF-T4S-.9	4 Stud for 1/2" Nominal Pipe	\$37.31
PF-T4S-1.1	4 Stud for 3/4" Nominal Pipe	
PF-T4S-1.3	4 Stud for 1.3" OD Pipe (32mm Pipe)	
PF-T4S-1.4	4 Stud for 1" Nominal Pipe	
PF-T4S-41	4 Stud for 1" Nominal pipe with insert for 3/4"	
PF-T4S-419	4 Stud for 1" Nominal Pipe with Inserts for 1/2" & 3/4"	\$54.47

8 Stud Series Penetration Fittings (Required 3 1/2" Hole Saw)



Part #	Description	List Price
PF-T8S-1.5	8 Stud for 1.5" OD Pipe	\$46.64
PF-T8S-1.6	8 Stud for 1.6" OD Pipe (40mm)	
PF-T8S-1.7	8 Stud for 1 1/4" Nominal Pipe	
PF-T8S-1.9	8 Stud for 1 1/2" Nominal Pipe	
PF-T8S-2.0	8 Stud for 2.0" OD Pipe (OPW C15A & 50mm)	
PF-T8S-2.2	8 Stud for 2.2" OD Pipe (APT XP-175SC Pipe) 1 3/4"	
PF-T8S-2.4	8 Stud for 2" Nominal (NOV 2" FRP)	
PF-T8S-2.5	8 Stud for 2.5" OD Pipe (OPW C20A & 63mm)	
PF-T8S-2.7	8 Stud for 2.7" OD Pipe (NOV 2" LCX)	
PF-T8S-2.9	8 Stud for 2 1/2" Nominal Pipe	
PF-T8S-3.0	8 Stud for 3.0" OD Pipe (75mm)	
PF-T8S-3.3	8 Stud for 3.3" OD Pipe	
PF-T8S-3.6	8 Stud for 3" Nominal Pipe (3" FRP & 90mm)	

10 Stud Series Penetration Fittings (Required 5" Hole Saw)



Part #	Description	List Price
PF-T10S-3.6	10 Stud for 3" Nominal Pipe (3" FRP & (90mm)	\$57.54
PF-T10S-3.8	10 Stud for 3.8" OD Pipe (3" LCX)	
PF-T10S-4.4	10 Stud for 4.4" OD Pipe (110mm)	
PF-T10S-4.5	10 Stud for 4" Nominal Pipe (4" FRP)	
PF-T10S-4.8	10 Stud for 4.8" OD Pipe (4" LCX)	
PF-T10S-5.0	10 stud for 5.0" OD (125mm)	

12 Stud Series Penetration Fittings (Required 6 7/8" Hole Saw)



Part #	Description	List Price
PF-T12S-5.2	12 Stud for 5.2" OD Pipe (130mm)	\$139.93
PF-T12S-6.3	12 Stud for 6.3" OD Pipe (160mm)	
PF-T12S-6.7	12 Stud for 6" Nominal Pipe (6" FRP)	

**4 Stud Series Inverted Penetration Fittings (Required 2" Hole Saw)**



Part #	Description	List Price	
PF-4S-1.1	4 Stud for 3/4" Nominal Pipe	\$37.31	
PF-4S-1.3	4 Stud for 1.3" OD Pipe (32mm Pipe)		
PF-4S-1.4	4 Stud for 1" Nominal Pipe		
PF-4S-41	4 Stud for 1" Nominal pipe with insert for 3/4"		\$45.89
PF-4S-419	4 Stud for 1" Nominal Pipe with Inserts for 1/2" & 3/4"		\$54.47

**8 Stud Series Inverted Penetration Fittings (Required 3 1/2" Hole Saw)**



Part #	Description	List Price
PF-8S-1.5	8 Stud for 1.5" OD Pipe	\$46.64
PF-8S-1.6	8 Stud for 1.6" OD Pipe (40mm)	
PF-8S-1.7	8 Stud for 1 1/4" Nominal Pipe	
PF-8S-1.9	8 Stud for 1 1/2" Nominal Pipe	
PF-8S-2.0	8 Stud for 2.0" OD Pipe (OPW C15A & 50mm)	
PF-8S-2.2	8 Stud for 2.2" OD Pipe 1 3/4" APT XP Series 1 3/4"	
PF-8S-2.4	8 Stud for 2" Nominal (NOV 2" FRP)	
PF-8S-2.5	8 Stud for 2.5" OD Pipe (OPW C20A & 63mm)	
PF-8S-2.7	8 Stud for 2.7" OD Pipe (NOV 2" LCX)	
PF-8S-2.9	8 Stud for 2 1/2" Nominal Pipe	
PF-8S-3.0	8 Stud for 3.0" OD Pipe (75mm)	
PF-8S-3.3	8 Stud for 3.3" OD Pipe	
PF-8S-3.6	8 Stud for 3" Nominal Pipe (3" FRP & 90mm)	

**10 Stud Series Inverted Penetration Fittings (Required 5" Hole Saw)**



Part #	Description	List Price
PF-10S-3.6	10 Stud for 3" Nominal Pipe (3" FRP & (90mm)	\$57.54
PF-10S-3.8	10 Stud for 3.8" OD Pipe (3" LCX)	
PF-10S-4.4	10 Stud for 4.4" OD Pipe ( 110mm)	
PF-10S-4.5	10 Stud for 4" Nominal Pipe (4" FRP)	
PF-10S-4.8	10 Stud for 4.8" OD Pipe (4" LCX)	
PF-10S-5.0	10 stud for 5.0" OD (125mm)	

**12 Stud Series Inverted Penetration Fittings (Required 6 7/8" Hole Saw)**



Part #	Description	List Price
PF-12S-5.2	12 Stud for 5.2" OD Pipe (130mm)	\$139.93
PF-12S-6.3	12 Stud for 6.3" OD Pipe (160mm)	
PF-12S-6.7	12 Stud for 6" Nominal Pipe (6" FRP)	



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Traditional Double Sided Penetration Fittings



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**4 Stud Series Penetration Fittings (Required 2" Hole Saw)**

Part #	Description	List Price
PF-T4D-.9	4 Stud for 1/2" Nominal Pipe	\$68.41
PF-T4D-1.1	4 Stud for 3/4" Nominal Pipe	
PF-T4D-1.3	4 Stud for 1.3" OD Pipe (32mm Pipe)	
PF-T4D-1.4	4 Stud for 1" Nominal Pipe	
PF-T4D-41	4 Stud for 1" Nominal pipe with insert for 3/4"	
PF-T4D-419	4 Stud for 1" Nominal Pipe with Inserts for 1/2" & 3/4"	\$102.73

**8 Stud Series Penetration Fittings (Required 3 1/2" Hole Saw)**

Part #	Description	List Price
PF-T8D-1.5	8 Stud for 1.5" OD Pipe	\$80.86
PF-T8D-1.6	8 Stud for 1.6" OD Pipe (40mm)	
PF-T8D-1.7	8 Stud for 1 1/4" Nominal Pipe	
PF-T8D-1.9	8 Stud for 1 1/2" Nominal Pipe	
PF-T8D-2.0	8 Stud for 2.0" OD Pipe (OPW C15A & 50mm)	
PF-T8D-2.2	8 Stud for 2.2" OD Pipe (APT XP-175SC Pipe) 1 3/4"	
PF-T8D-2.4	8 Stud for 2" Nominal (NOV 2" FRP)	
PF-T8D-2.5	8 Stud for 2.5" OD Pipe (OPW C20A & 63mm)	
PF-T8D-2.7	8 Stud for 2.7" OD Pipe (NOV 2" LCX)	
PF-T8D-2.9	8 Stud for 2 1/2" Nominal Pipe	
PF-T8D-3.0	8 Stud for 3.0" OD Pipe (75mm)	
PF-T8D-3.3	8 Stud for 3.3" OD Pipe	
PF-T8D-3.6	8 Stud for 3" Nominal Pipe (3" FRP & 90mm)	

**10 Stud Series Penetration Fittings (Required 5" Hole Saw)**

Part #	Description	List Price
PF-T10D-3.6	10 Stud for 3" Nominal Pipe (3" FRP & (90mm)	\$90.19
PF-T10D-3.8	10 Stud for 3.8" OD Pipe (3" LCX)	
PF-T10D-4.4	10 Stud for 4.4" OD Pipe (110mm)	
PF-T10D-4.5	10 Stud for 4" Nominal Pipe (4" FRP)	
PF-T10D-4.8	10 Stud for 4.8" OD Pipe (4" LCX)	
PF-T10D-5.0	10 stud for 5.0" OD (125mm)	

**10 Stud Series Penetration Fittings with Integral Reducers for Corrugated Duct Systems (Required 5" Hole Saw)**

Part #	Description	List Price
PF-T10D-4.8x2.0	10 Stud for Corr Duct over 2.0" OD Pipe	\$97.97
PF-T10D-4.8x2.5	11 Stud for Corr Duct over 2.5" OD Pipe	
PF-T10D-4.8x2.7	12 Stud for Corr Duct over 2.7" OD Pipe	

**12 Stud Series Penetration Fittings (Required 6 7/8" Hole Saw)**

Part #	Description	List Price
PF-T12D-5.2	12 Stud for 5.2" OD Pipe (130mm)	\$171.03
PF-T12D-6.3	12 Stud for 6.3" OD Pipe (160mm)	
PF-T12D-6.7	12 Stud for 6" Nominal Pipe (6" FRP)	

**12 Stud Series Penetration Fittings with Integral Reducers for 6" over 4" or 6" Corrugated Duct Systems (Required 5" Hole Saw)**

Part #	Description	List Price
PF-T12D-6.7x4.5	12 Stud for 6.7" OD Pipe over 4.5" OD Pipe may be used for 6" corrugated ducting over all flex pipes with appropriate inserts PF IA 4.5xX.X	\$193.50



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Studded Penetrations w/Integral Reducers



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Inverted 10 Stud Penetration Fittings with Integral Step Down Reducers (Single Sided)



Part #	Description	List Price
PF-10S-4.6x2.0	10 Stud for 4" Corrugated Ducting & 2.0" OD Pipe	\$65.31
PF-10S-4.6x2.5	10 Stud for 4" Corrugated Ducting & 2.5" OD Pipe	
PF-10S-4.6x2.7	10 Stud for 4" Corrugated Ducting & 2.7" OD Pipe	

Inverted 12 Stud Penetration Fittings with Integral Step Down Reducers (Single Sided)



Part #	Description	List Price
PF-12S-6.7x4.5	12 Stud for 6" FRP over 4" FRP Air Test Optional	\$147.19

Traditional 10 Stud Penetration Fittings with Integral Step Down Reducers (Single Sided)



Part #	Description	List Price
PF-T10S-4.6x2.0	10 Stud for 4" Corrugated Ducting & 2.0" OD Pipe	\$65.06
PF-T10S-4.6x2.5	10 Stud for 4" Corrugated Ducting & 2.5" OD Pipe	
PF-T10S-4.6x2.7	10 Stud for 4" Corrugated Ducting & 2.7" OD Pipe	

Traditional 12 Stud Penetration Fittings with Integral Step Down Reducers (Single Sided)



Part #	Description	List Price
PF-T12S-6.7x4.5	12 Stud for 6" FRP over 4" FRP Air Test Optional	\$147.19

Traditional 10 Stud Penetration Fittings with Integral Step Down Reducers (Double Sided)



Part #	Description	List Price
PF-T10D-4.6x2.0	10 Stud for 4" Corrugated Ducting & 2.0" OD Pipe	\$97.97
PF-T10D-4.6x2.5	10 Stud for 4" Corrugated Ducting & 2.5" OD Pipe	
PF-T10D-4.6x2.7	10 Stud for 4" Corrugated Ducting & 2.7" OD Pipe	

Traditional 12 Stud Penetration Fittings with Integral Step Down Reducers (Double Sided)



Part #	Description	List Price
PF-T12D-6.7x4.5	12 Stud for 6" FRP over 4" FRP Air Test Optional	\$181.39



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**Terminating and Test Reducers 1" - 3.9"**



**Test Reducers for double wall pipes up to 1.8" Secondary OD**



Part #	Description	List Price
PF-RA 1.4x1.4 ASS	Reducer for 1.2"-1.4" OD Pipes w/Air Test	<b>\$37.09</b>
PF-RA 1.6x1.3 ASS	Reducer for Environ GFP 2100 w/Air Test	
PF-RA 1.8x1.4 ASS	Reducer for APT P-100SC & Bravo Pans w/Air Test	

**Test Reducers for double wall pipes up to 2.7" Secondary OD**



Part #	Description	List Price
PF-RA 1.9x1.7 ASS	Reducer for 1 1/2" APT w/Air Test	<b>\$41.74</b>
PF-RA 2.0x1.7 ASS	Reducer for 1 1/2" APT XP-150SC w/Air Test	
PF-RA 2.0x1.8 ASS	Reducer for 1 1/2" OPW & Western w/Air Test	
PF-RA 2.0x2.0 ASS	Reducer for coupling 2" Applications w/Air Test	
PF-RA 2.5x1.5 ASS	Reducer for 2" FRP over OPW C10 w/Air Test	
PF-RA 2.5x2.0 ASS	Reducer 63x50mm w/Air Test	
PF-RA 2.5x2.3 ASS	Reducer Western & Environ 2" Coax w/Air Test	
PF-RA 2.5x2.5 ASS	Reducer for coupling 2.5" OD Applications w/Air Test	
PF-RA 2.7x2.4 ASS	Reducer for 2" LCX Secondary to Primary w/Air Test	
PF-RA 2.7x2.5 ASS	Reducer for 2" APT XP 200 SC w/Air Test	
PF-RA 2.7x2.7 ASS	Reducer for coupling 2.7" OD Applications w/Air Test	

**Test Reducers for double wall pipes up to 3.9" Secondary OD**



Part #	Description	List Price
PF-RA 3.0x2.5 ASS	Reducer for 75x63mm & APT P-200SC w/ Air Test	<b>\$51.87</b>
PF-RA 3.6x1.1 ASS	Reducer for 3" FRP to 1.1" OD Pipes w/Air Test	
PF-RA 3.6x1.4 ASS	Reducer for 3" FRP to 1.4" OD Pipes w/Air Test	
PF-RA 3.6x1.8 ASS	Reducer for 3" FRP to 1.8" OD Pipes w/Air Test	
PF-RA 3.6x1.9 ASS	Reducer for 3" FRP to 1.9" OD Pipes w/Air Test	
PF-RA 3.6x2.0 ASS	Reducer for 3" FRP to 2.0" OD Pipes w/Air Test	
PF-RA 3.6x2.4 ASS	Reducer for 3" FRP to 2" FRP Pipes w/Air Test	
PF-RA 3.6x2.7 ASS	Reducer for 3" FRP to 2.7" OD Pipes w/Air Test	
PF-RA 3.6x3.0 ASS	Reducer for 3" FRP to 3.0" OD Pipes w/Air Test	
PF-RA 3.6x3.6 ASS	Reducer for coupling 3.5" OD Pipes w/Air Test	
PF-RA 3.8x3.6 ASS	Reducer for 3" LCX Secondary to Primary w/Air Test	
PF-RA 3.9x1.4 ASS	Reducer Custom 3" to 1.4" OD Pipes w/Air Test	<b>\$53.90</b>
PF-RA 3.9x2.0 ASS	Reducer Custom 3" to 2.0" OD Pipes w/Air Test	
PF-RA 3.9x2.4 ASS	Reducer Custom 3" to 2.4" OD Pipes w/Air Test	
PF-RA 3.9x2.4 ASSL	Long Version of above	
PF-RA 3.9x2.5 ASS	Reducer Custom 3" to 2" FRP Pipe w/Air Test	
PF-RA 3.9x2.7 ASS	Reducer Custom 3" to 2" LCX Pipes w/Air Test	
PF-RA 3.9x3.0 ASS	Reducer Custom 3" to 3" OD Pipes w/Air Test	
PF-RA 3.9x3.9 ASS	Reducer for coupling 3.9" OD Pipes w/Air Test	
PF-RA 3.9x3.9 ASSL	Long Version of above	



**Test Reducers for 4" nominal double wall pipes**



Part #	Description	List Price
PF-RA 4.5x1.1 ASS	Reducer for 4" FRP to 3/4" Nominal Pipes w/Air Test	<b>\$53.90</b>
PF-RA 4.5x1.4 ASS	Reducer for 4" FRP to 1" Nominal Pipes w/Air Test	
PF-RA 4.5x1.8 ASS	Reducer for 4" FRP to 1.8" OD Pipes w/Air Test	
PF-RA 4.5x1.9 ASS	Reducer for 4" FRP to 1.9" OD Pipes w/Air Test	
PF-RA 4.5x2.0 ASS	Reducer for 4" FRP to 2.0" OD Pipes w/Air Test	
PF-RA 4.5x2.5 ASS	Reducer for 4" FRP to 2.5" OD Pipes w/Air Test	
PF-RA 4.5x2.7 ASS	Reducer for 4" FRP to 2.7" OD Pipes w/Air Test	
PF-RA 4.5x3.0 ASS	Reducer for 4" FRP to 3.0" OD Pipes w/Air Test	
PF-RA 4.5x3.6 ASS	Reducer for 4" FRP to 3" FRP Pipes w/Air Test	
PF-RA 4.5x4.5 ASS	Reducer for 4" for coupling 4" Pipes w/Air Test	

**Test Reducers for 4.8" OD, 5.0" OD & 5.6" OD double wall pipes**



Part #	Description	List Price
PF-RA 4.8x4.5 ASS	Reducer for 4" LCX w/Air Test	<b>\$53.90</b>
PF-RA 5.0x2.0 ASS	Reducer for 125mm to 2" OD Pipe w/Air Test	
PF-RA 5.0x2.5 ASS	Reducer for 125mm to 2.5" OD Pipe w/Air Test	
PF-RA 5.0x2.7 ASS	Reducer for 125mm to 2.7" OD Pipe w/Air Test	
PF-RA 5.0x3.0 ASS	Reducer for 125mm to 3.0" OD Pipe w/Air Test	
PF-RA 5.0x3.6 ASS	Reducer for 125mm to 90mm Pipe w/Air Test	
PF-RA 5.0x4.4 ASS	Reducer for 125mm to 110mm Pipe w/Air Test	
PF-RA 5.0x4.5 ASS	Reducer for 125mm to 4" nominal Pipe w/Air Test	
PF-RA 5.6x3.6 ASS	Reducer for 5" nominal to 3" FRP Pipe w/Air Test	
PF-RA 5.6x4.5 ASS	Reducer for 5" nominal to 4" FRP Pipe w/Air Test	

**Test Reducers for 6.3" & 6.7" double wall pipes**



Part #	Description	List Price
PF-RA 6.3x2.5 ASS	Reducer for 160mm to 63mm pipes w/ Air Test	<b>\$55.97</b>
PF-RA 6.3x3.6 ASS	Reducer for 160mm to 90mm Pipes w/Air Test	
PF-RA 6.3x4.5 ASS	Reducer for 160mm to 4" nominal Pipes w/Air Test	
PF-RA 6.3x5.0 ASS	Reducer for 160mm to 125mm Pipes w/Air Test	
PF-RA 6.7x2.5 ASS	Reducer for 6" FRP to 63mm Pipes w/Air Test	
PF-RA 6.7x3.6 ASS	Reducer for 6" FRP to 3" FRP Pipes w/Air Test	
PF-RA 6.7x4.5 ASS	Reducer for 6" FRP to 4" FRP Pipes w/Air Test	
PF-RA 6.7x4.8 ASS	Reducer for 6" FRP to 4" LCX Pipes w/Air Test	
PF-RA 6.7x5.0 ASS	Reducer for 6" FRP to 125mm Pipes w/Air Test	
PF-RA 6.7x6.7 ASS	Reducer for coupling 6" nominal Pipes w/Air Test	

**Test Reducers for 8" nominal double wall pipes**



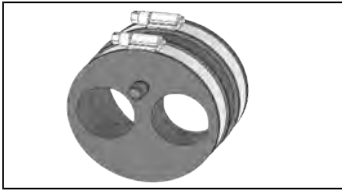
PF-RA 8x4 ASS	Reducer for 8" nominal to 4" nominal Pipe w/Air Test	<b>\$180.00</b>
PF-RA 8x6 ASS	Reducer for 8" nominal to 6" nominal Pipe w/Air Test	

**High Pressure Reducers with Stainless Test Valve (Tests to 35 PSIG)**



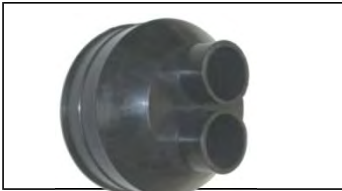
Part #	Description	List Price
PF-RA 2.7x2.4HP ASS	High Pressure Test Reducer for Ameron 2" LCX	\$91.32
PF-RA 3.6x2.4HP ASS	High Pressure Test Reducer 3" FRP to 2"	\$94.32
PF-RA 3.8x3.6HP ASS	High Pressure Test Reducer for Ameron 3" LCX	\$96.91
PF-RA 4.8x4.5HP ASS	High Pressure Test Reducer for Ameron 4" LCX	\$96.91

**3" FRP Dual Port Test Reducers**



Part #	Description	List Price
PF-RA 3.6x1.5x1.5 ASS	3" FRP to two 1.5" OD Pipes (Typically OPW C10) Includes Stainless Air Test Valve	\$109.13

**4" FRP Dual Port Test Reducers**



Part #	Description	List Price
PF-RA 4.5x1.4x1.4 ASS	4" FRP to two 1" nominal Pipes (Typically OPW C10) Includes Stainless Air Test Valve	\$100.03
PF-RA 4.9x1.9x1.4 ASS	4" FRP to one 1 1/2" and one 1" nominal pipes Includes Stainless Air Test Valve	\$107.80

**Three Step Reducers**



Part #	Description	List Price
PF-RA 4.5x3.5x2.7 ASS	Three Step Reducer 4" FRP to 3" FRP to 2.7" Includes Stainless Air Test Valve	\$119.97
PF-RA 5.6x4.5x3.6 ASS	Three Step Reducer 5" pipe to 4" Corr Duct to 3.5" OD Includes Stainless Air Test Valve	\$147.00

**Inserts 1.4" (1" Nominal Series)**



Part #	Description	List Price
PF-IA 1.4x.375	Insert 1.4" (1" Nominal) to .375"	<b>\$8.58</b>
PF-IA 1.4x.7	Insert 1.4" (1" Nominal) to .7"	
PF-IA-1.4x.8	Insert 1.4" (1" Nominal) to .8"	
PF-IA-1.4x.9	Insert 1.4" (1" Nominal) to .9"	
PF-IA-1.4x1.1	Insert 1.4" (1" Nominal) to 1.1"	
PF-IA-1.4x1.2	Insert 1.4" (1" Nominal) to 1.2"	

**Inserts 2.4" & 2.5" (2" Nominal Series)**



Part #	Description	List Price
PF-IA-2.4x1.6	Insert 2.4" (2" Nominal) to 1.6"	<b>\$17.77</b>
PF-IA-2.4x1.7	Insert 2.4" (2" Nominal) to 1.7"	
PF-IA-2.4x1.8	Insert 2.4" (2" Nominal) to 1.8"	
PF-IA-2.4x1.9	Insert 2.4" (2" Nominal) to 1.9"	
PF-IA-2.4x2.0	Insert 2.4" (2" Nominal) to 2.0"	
PF-IA 2.5x1.1	Insert 2.5" (2" Nominal) to 1.1"	<b>\$22.06</b>
PF-IA-2.5x1.4	Insert 2.5" (2" Nominal) to 1.4"	
PF-IA-2.5x1.6	Insert 2.5" (2" Nominal) to 1.6"	
PF-IA-2.5x1.7	Insert 2.5" (2" Nominal) to 1.7"	
PF-IA-2.5x1.8	Insert 2.5" (2" Nominal) to 1.8"	
PF-IA-2.5x1.9	Insert 2.5" (2" Nominal) to 1.9"	
PF-IA-2.5x2.0	Insert 2.5" (2" Nominal) to 2.0"	
PF-IA-2.5x2.2	Insert 2.5" (2" Nominal) to 2.2"	
PF-IA-2.5x2.3	Insert 2.5" (2" Nominal) to 2.3"	

**Inserts 3.0" (75mm Nominal Series)**



Part #	Description	List Price
PF-IA 3.0x1.4	Insert 3.0" (75mm Nominal) to 1.4"	<b>\$23.28</b>
PF-IA 3.0x2.5	Insert 3.0" (75mm Nominal) to 2.5"	
PF-IA-3.0x2.7	Insert 3.0" (75mm Nominal) to 2.7"	

**Inserts 3.6" (3" Nominal Series)**



Part #	Description	List Price
PF-IA-3.6x1.1	Insert 3.6" (3" Nominal) to 1.1"	<b>\$40.42</b>
PF-IA-3.6x1.4	Insert 3.6" (3" Nominal) to 1.4"	
PF-IA-3.6x1.5x1.5	Insert 3.6" (3" Nominal) to 1.5x1.5"	
PF-IA-3.6x1.6	Insert 3.6" (3" Nominal) to 1.6"	
PF-IA-3.6x1.7	Insert 3.6" (3" Nominal) to 1.7"	
PF-IA-3.6x1.8	Insert 3.6" (3" Nominal) to 1.8"	
PF-IA-3.6x1.9	Insert 3.6" (3" Nominal) to 1.9"	
PF-IA-3.6x2.0	Insert 3.6" (3" Nominal) to 2.0"	
PF-IA-3.6x2.0 Hex	Insert 3.6" (3" Nominal) to 2.0" Hex Face to Face"	
PF-IA-3.6x2.4	Insert 3.6" (3" Nominal) to 2.4"	
PF-IA-3.6x2.5	Insert 3.6" (3" Nominal) to 2.5"	
PF-IA-3.6x2.5 Hex	Insert 3.6" (3" Nominal) to 2.5" Hex Face to Face	
PF-IA-3.6x2.7	Insert 3.6" (3" Nominal) to 2.7"	
PF-IA-3.6x2.9	Insert 3.6" (3" Nominal) to 2.9"	
PF-IA-3.6x3.0	Insert 3.6" (3" Nominal) to 3.0"	
PF-IA-3.6x3.2	Insert 3.6" (3" Nominal) to 3.2"	

**Inserts 4.5" (4" Nominal Series)**



Part #	Description	List Price
FP-IA 4.5x1.4	Insert 4.5" (4" Nominal) to 1.4"	<b>\$49.00</b>
PF-IA 4.5x2.0	Insert 4.5" (4" Nominal) to 2.0"	
PF-IA 4.5x2.2	Insert 4.5" (4" Nominal) to 2.2"	
PF-IA 4.5x2.4	Insert 4.5" (4" Nominal) to 2.4"	
PF-IA 4.5x2.5	Insert 4.5" (4" Nominal) to 2.5"	
PF-IA 4.5x2.7	Insert 4.5" (4" Nominal) to 2.7"	
PF-IA 4.5x2.9	Insert 4.5" (4" Nominal) to 2.9"	
PF-IA 4.5x3.0	Insert 4.5" (4" Nominal) to 3.0"	
PF-IA 4.5x3.6	Insert 4.5" (4" Nominal) to 3.6"	
PF-IA 4.5x3.8	Insert 4.5" (4" Nominal) to 3.8"	
PF-IA 4.5x3.9	Insert 4.5" (4" Nominal) to 3.9"	
PF-IA 4.5x4.0	Insert 4.5" (4" Nominal) to 4.0"	

**Inserts 4.8" (4" LCX Series)**



Part #	Description	List Price
PF-IA 4.8x3.6	Insert 4.8" (4" LCX) to 3.6"	<b>\$52.68</b>
PF-IA 4.8x3.8	Insert 4.8" (4" LCX) to 3.8"	
PF-IA 4.8x4.5	Insert 4.8" (4" LCX) to 4.5"	

**Inserts 5.0" (125mm Series)**



Part #	Description	List Price
PF-IA 5.0x3.6	Insert 5.0" (125mm) to 3.6"	<b>\$56.36</b>
PF-IA 5.0x3.9	Insert 5.0" (125mm) to 3.9"	
PF-IA 5.0x4.5	Insert 5.0" (125mm) to 4.5"	

**Inserts 6.7" (6" Nominal Series)**



Part #	Description	List Price
PF-IA 6.7x3.6	Insert 6.7" (6" Nominal) to 3.6"	<b>\$78.40</b>
PF-IA 6.7x4.0	Insert 6.7" (6" Nominal) to 4.0"	
PF-IA 6.7x4.5	Insert 6.7" (6" Nominal) to 4.5"	
PF-IA 6.7x5.0	Insert 6.7" (6" Nominal) to 5.0"	
PF-IA 6.7x5.2	Insert 6.7" (6" Nominal) to 5.2"	
PF-IA 6.7x6.0	Insert 6.7" (6" Nominal) to 6.0"	

**Molded Cap for Closing 2" Nominal & 3" Nominal Pipe**



Part #	Description	List Price
PF-IA 2.4xCap	Molded Cap for 2" Nominal Pipe	\$19.60
PF-IA 3.6xCap	Molded Cap for 3" Nominal Pipe	\$39.20

**Molded Cap for Closing 4" & 5" Nominal Pipe**



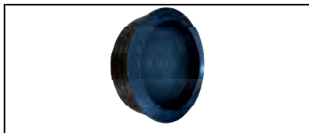
Part #	Description	List Price
PF-IA 4.5xCap	Molded Cap for 4" Nominal Pipe	\$49.00
PF-IA 5.6xCap	Molded Cap for 5" Nominal Pipe	\$66.79

**Molded Cap for Closing 6" Nominal Pipe**



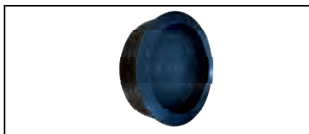
Part #	Description	List Price
PF-IA 6.7xCap	Molded Cap for 6" Nominal Pipe	\$78.40

**Molded Plug to Terminate Boots, Sleeves and Other 1" Nominal Applications**



Part #	Description	List Price
PF-IA 1.4xPlug	Molded Plug for 1" Nominal Pipe	\$12.26
PF-IAI 1.5xPlug	Molded Plug for 1.5" Sleeves	

**Molded Plug to Terminate Boots, Sleeves and Other 2" Nominal Applications**



Part #	Description	List Price
PF-IA 2.4xPlug	Molded Plug for 2" Nominal Pipe	\$29.40
PF-IA 2.5xPlug	Molded Plug for 2.5" Sleeves	

**Molded Plug to Terminate Boots, Sleeves and Other 75 mm & 3" Nominal Applications**



Part #	Description	List Price
PF-IA 3.0xPlug	Molded Plug for 75 mm Applications	\$29.40
PF-IA 3.6xPlug	Molded Plug for 3" Nominal Pipe	\$41.66

**Molded Plug to Terminate Boots, Sleeves and Other 4" Nominal Applications**



Part #	Description	List Price
PF-IA 4.5xPlug	Molded Plug for 4" Nominal Pipe	\$55.12

**Molded Plug to Terminate Boots, Sleeves and Other 6.0" Custom & 6" Nominal Applications**



Part #	Description	List Price
PF-IA 6.7xPlug	Molded Plug for 6" Nominal Pipe	\$85.76

**Air Test Assemblies**



Part #	Description	List Price
PF-Xover-1ft	Cross Over Assemblies w/Stainless components-1 Ft	\$21.74
PF-Xover-2ft	Cross Over Assemblies w/Stainless components-2 Ft	\$23.33
PF-Xover-3ft	Cross Over Assemblies w/Stainless components-3 Ft	\$27.49
PF-Xover-6ft	Cross Over Assemblies w/Stainless components-6 Ft	\$31.63
PF-Xover-Test	Test assembly for Double Wall interstices	\$28.18
PF-XT-Kit	Kit for surface mtg access for Air Test	\$33.88

**Stainless Air Test Valves**



Part #	Description	List Price
PF-AV-1-SS	Push in Stainless air valve with cap and Nut	\$18.84
PF-AV-2-SS	Barbed Style Stainless air valve with cap and Nut	
PF-AV-4-SS	1/8" MPT Threaded Style Stainless w/cap	
PF-ABV	Bicycle Fitting mates to AV-1, AV-2 & AV-4	

**Bonder for Threaded and Studded Penetration fittings**



Part #	Description	List Price
CH-DBB V 50ml	Methyl methacrylate Bonder for threaded an Studded Penetration fittings w/ one static mixer	\$42.28
CH-DSM-III	Additional Static Mixers for CH-DBB V	\$8.14

**Cleaner for Threaded and Studded Penetration fittings**



Part #	Description	List Price
CH-DBC II	Diversified Bulkhead Cleaner 12 oz Aerosol used with all Threaded and Studded Penetrations	\$20.36

**Applicator Gun for CH-DBB V**



Part #	Description	List Price
CH-DAG-III	Applicator gun for 50 ml cartridge sets	\$142.49
CH-DAG-III-M	Metal Applicator gun for 50 ml cartridge sets	\$192.50

**Sanding Hole Saws - Carbide Tipped for Fiberglass**



Part #	Description	List Price
PF-SHS-1.75x2.8	Sanding Hole Saw for 3/4 & 1" Bonded Electrical Conduits SW Sumps	<b>\$232.28</b>
PF-SHS-2x2.8	Sanding Hole Saw for 3/4 & 1" Bonded Electrical Conduits DW Sumps	<b>\$256.61</b>
PF-SHS-2x3	Sanding Hole Saw for B2 Series Penetrations SW Sumps	<b>\$261.13</b>
PF-SHS-3.5x5.2	Sanding Hole Saw for B3.5 Series Penetrations SW Sumps	<b>\$407.56</b>
PF-SHS-5x6.7	Sanding Hole Saw for B5 Series Penetrations SW Sumps	<b>\$565.85</b>
PF-SHS-6x7.6	Sanding Hole Saw for B6 Series Penetrations SW Sumps	<b>\$587.08</b>
PF-SHS-2.25x4.5	Sanding Hole Saw for 4 Stud Penetrations SW Sumps	<b>\$291.71</b>
PF-SHS-4x6.4	Sanding Hole Saw for 8 Stud Penetrations SW Sumps	<b>\$466.05</b>
PF-SHS-5.5x8	Sanding Hole Saw for 10 Stud Penetrations SW Sumps	<b>\$509.88</b>
PF-SHS-6.875x9.3	Sanding Hole Saw for 12 Stud Penetrations SW Sumps	<b>\$650.00</b>
PF-SHS-4.5x6.38	Sanding Hole Saw for FGT & FGC Series Fiberglass Penetrations SW Sumps	<b>\$467.33</b>
PF-SHS-5x6.85	Sanding Hole Saw for Omegaflex Series Penetrations SW Sumps	<b>\$566.57</b>
PF-SHS-5x6.38	Sanding Hole Saw for FGT & FGC Series Fiberglass Penetrations DW Sumps	<b>\$566.57</b>
PF-FGC-5.5x6.85	Compact Fiberglass Penetration for Omegaflex Penetrations DW Sumps	<b>\$495.37</b>



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# Diversified Products Manufacturing "Better By Design"



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## B Series Threaded Penetration Fittings

### Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Penetration fittings have been an unwanted necessity due to failures of early material selections. Diversified Products Mfg. Inc sells over 20,000 of this series of penetration fittings annually for the past 20 years. These are high quality flexible penetrations with a proven record since 1993.

#### Single Sided B 2



All components are either UL Listed or third party approved for their respective applications.

The "B" Series is available in all pipe sizes both domestic and export.

The "B" Series of penetration fittings has a conical sealing surface that seals to flat and curved surfaces.



The "B" Series of penetrations are available with a boot for double sided applications. The double sided series keeps backfill and water subject to freezing from entering the fitting from outside the sump.

The "B2" series is available with inserts for 1/2 & 3/4" rigid conduits.

#### Single Sided B 3.5 with Integral Test Reducer

The "B3.5 & B5" series is available in a step down version for double wall pipe with an integral test reducer. This reduces cost and space requirements.



The "B" series is bonded in place using a cost effective bonding agent Methyl methacrylate. Available in 50ml cartridge sets.

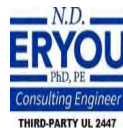
The "B" series is installed using the hole saw size identified in the product number, B2 needs a 2" hole saw etc.

The "B" series incorporates machine cut threads which increases quality.

#### Double Sided B 5

The "B" Series of penetrations is by far the most cost effective penetration fitting in the industry today.

### Third Party Approvals



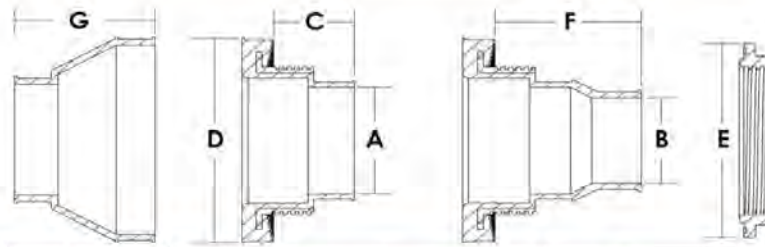
EQ-742 EQ-801 EQ-836

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530-534-3966 - www.dpm-co.com - Order Entry Email: sales@dpm-llc.com



## Double Sided Threaded Penetration Fitting Dimensional Data



Part Number	A	B	C	D	E	F	G
PF-B2D-1.1	1.100	N/A	1.750	3.025	2.925	N/A	2.650
PF-B2D-1.2	1.200	N/A	1.750	3.025	2.925	N/A	2.650
PF-B2D-1.3	1.300	N/A	1.750	3.025	2.925	N/A	2.650
PF-B2D-1.4	1.450	N/A	1.750	3.025	2.925	N/A	2.650
PF-B2D-41	1.450/1.100	N/A	1.750	3.025	2.925	N/A	2.650
PF-B3.5D-1.5	1.500	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-1.6	1.600	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-1.6x1.3	1.600	1.300	N/A	5.025	4.500	3.070	3.400
PF-B3.5D-1.7	1.700	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-1.9	1.900	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-2.0	2.000	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-2.2	2.200	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-2.4	2.400	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-2.5	2.500	N/A	1.700	5.025	4.500	N/A	3.400
PF-B3.5D-2.5x2.0	2.500	2.000	N/A	5.025	4.500	3.070	3.400
PF-B3.5D-2.7	2.700	N/A	1.700	5.025	4.500	3.070	3.400
PF-B3.5D-2.7x2.4	2.700	2.400	N/A	5.025	4.500	3.070	3.400
PF-B5D-2.7	2.700	N/A	1.800	6.500	6.150	N/A	N/A
PF-B5D-2.7x2.4	2.700	2.4	N/A	6.500	6.150	3.650	N/A
PF-B5D-3.0	3.000	N/A	1.800	6.500	6.150	N/A	N/A
PF-B5D-3.0x2.5	3.000	2.5	N/A	6.500	6.150	3.650	N/A
PF-B5D-3.6	3.600	N/A	1.800	6.500	6.150	N/A	N/A
PF-B5D-3.6x2.4	3.600	2.4	N/A	6.500	6.150	3.650	N/A
PF-B5D-3.8	3.800	N/A	1.800	6.500	6.150	N/A	N/A
PF-B5D-3.8x3.6	3.800	3.6	N/A	6.500	6.150	3.650	N/A
PF-B6D-3.8	3.800	N/A	2.700	7.500	7.400	N/A	N/A
PF-B6D-4.4	4.380	N/A	2.700	7.500	7.400	N/A	N/A
PF-B6D-4.5	4.550	N/A	2.700	7.500	7.400	N/A	N/A
PF-B6D-4.8	4.780	N/A	2.700	7.500	7.400	N/A	N/A
PF-B6D-5.0	5.050	N/A	2.700	7.500	7.400	N/A	N/A

DTS-PF-B Series Threaded DS-1.1

**Note:** See Chemicals Wizard on page 76 for required Bonder & Cleaner

Hole Saws follow the B Number Thus a B5 requires a 5" Hole Saw.

## Studded Series Penetration Fittings

### Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Penetration fittings have been an unwanted necessity due to failures of early material selections. Diversified Products Mfg. Inc manufactures studded penetration for 1/2" through 6" pipe. Fuel rated materials developed in the last few years assure high quality and long life.

**Inverted**

All components are either UL Listed or third party approved for their respective applications.

The Studded Series is available in all pipe sizes both domestic and export.

The Studded Series of penetration fittings has a flexible back and front plates allowing these penetrations to easily seal on flat or curved surfaces.

**Traditional**

The Studded Series of penetrations are available with a boot for double sided applications. The double sided series keeps backfill and water subject to freezing from entering the fitting from outside the sump.

The Studded series is available in a step down version for corrugated ducted applications.

The Studded series is bonded in place using a cost effective bonder Methyl methacrylate. Available in 50ml cartridge sets.

The studded series has molded in groves for increasing bonding surface area.

The Studded Series features a stress relieving roll to accommodate off angle pipe and conduit installations.

**Double Sided**

The inverted series allows installation of the stud nuts from outside the sump reducing installation time. These penetrations include stud nuts that cover the stainless studs leaving no exposed metal in the soils.

The Studded Series of penetrations are provided with stud seals, eliminating a leak path down the studs.

The Studded Series of penetrations is the most cost effective studded penetration fitting in the industry today.

#### Third Party Approvals



EQ-742 EQ-801 EQ-836

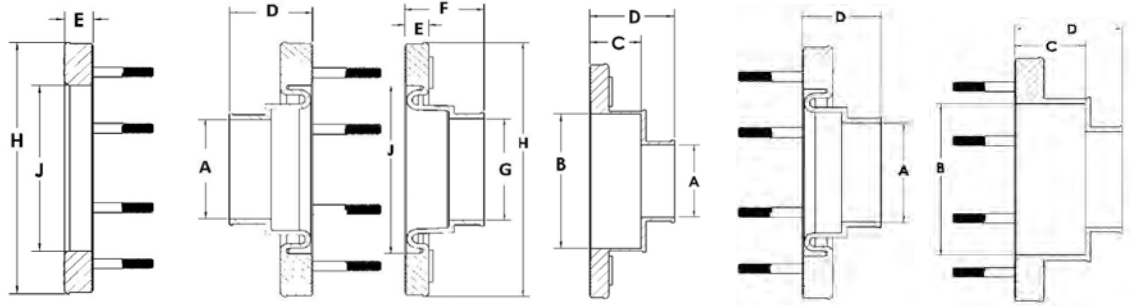


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Product Number	A	B	C	D	E	E'	F	G	H
PF-4x-1.1	1.200	N/A	N/A	1.625	0.500	0.250	1.625	4.467	3.282
PF-4x-1.3	1.300	N/A	N/A	1.625	0.500	0.250	1.625	4.467	3.282
PF-4x-1.4	1.390	N/A	N/A	1.625	0.500	0.250	1.625	4.467	3.282
PF-4x-1.41	1.390**	N/A	N/A	1.625	0.500	0.250	1.625	4.467	3.282
PF-4x-1.419	1.390***	N/A	N/A	1.625	0.500	0.250	1.625	4.467	3.282
PF-8x-1.5	1.500	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-1.6	1.625	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-1.7	1.725	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-1.9	1.950	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-2.0	2.050	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-2.2	2.190	N/A	N/A	1.625	0.500	0.250	1.625	6.375	5.282
PF-8x-2.4	2.450	N/A	N/A	1.625	0.500	0.250	1.550	6.375	5.282
PF-8x-2.5	2.550	N/A	N/A	1.625	0.500	0.250	1.750	6.375	5.282
PF-8x-2.7	2.725	N/A	N/A	1.625	0.500	0.250	1.750	6.375	5.282
PF-8x-2.9	2.900	N/A	N/A	1.625	0.500	0.250	1.750	6.375	5.282
PF-8x-3.0	3.030	N/A	N/A	1.625	0.500	0.250	1.750	6.375	5.282
PF-8x-3.3	3.300	N/A	N/A	1.625	0.500	0.250	1.800	6.375	5.282
PF-8x-3.6	3.600	N/A	N/A	1.625	0.500	0.250	1.800	6.375	5.282
PF-10x-3.6	3.600	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-10x-3.8	3.800	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-10x-4.4	4.380	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-10x-4.5	4.550	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-10x-4.8	4.780	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-10x-5.0	5.050	N/A	N/A	1.660	0.500	0.250	1.698	8.000	6.875
PF-12x-5.2	5.168	N/A	N/A	1.780	0.500	0.250	2.150	9.250	8.062
PF-12x-6.3	6.350	N/A	N/A	1.780	0.500	0.250	2.150	9.250	8.062
PF-12x-6.7	6.675	N/A	N/A	1.780	0.500	0.250	2.000	9.250	8.062
PF-10x-4.6x2.0	2.050	4.650	1.640	2.380	0.500	0.250	1.698	8.000	6.875
PF-10x-4.6x2.5	2.550	4.650	1.640	2.380	0.500	0.250	1.698	8.000	6.875
PF-10x-4.6x2.7	2.765	4.650	1.640	2.380	0.500	0.250	1.698	8.000	6.875
PF-12x-6.7x4.5	4.600	6.760	2.500	3.500	0.500	0.250	2.000	9.250	8.062

Hole Saw	Size	Product Number	Bolt Pattern Center to Center	
4 Stud	2 1/4"	PF-SHS-2.25x4.5	4 Stud	3.28"
8 Stud	4"	PF-SHS-4x6.4	8 Stud	5.28"
10 Stud	5 1/2"	PF-SHS-5.5x8	10 Stud	6.87"
12 Stud	6 7/8"	PF-SHS-6.875x9.3	12 Stud	8.06"

Note: See Chemicals Wizard on page 76 for required Bonder & Cleaner

\* Product numbers are consistent for PF-S, PF-T-S, PF-D and PF-F Series where 4, 8, 10 & 12 Stud patterns are used



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# Diversified Products Manufacturing "Better By Design"



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## RA Series & Test Reducers for Double Wall Pipe

### Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. The RA Series of Test Reducers are available for all known double wall pipe both domestic and export. These reducers are manufactured using the latest fuel rated materials for both liquid and vapor phase applications.

All components are either UL Listed or third party approved for their respective applications.

This family of terminating & test Reducers are designed to close the interstice of double wall piping systems.

Products available for double wall pipe from all manufacturers including metric sizes

Includes reducer, stainless air valve and stainless band clamps.

Standard worm gear clamps provide effective test pressures up to 15 PSIG. "T" handle clamps are available for testing in excess of 35 PSIG.



### Third Party Approvals

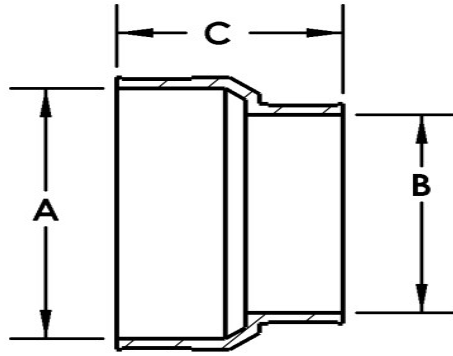


EQ-742 EQ-801 EQ-836



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Note: Product Numbers below are for reducers without test valves. To add Test Valves add suffix -ASS

Product #	A	B	C	Product #	A	B	C
PF-RA 1.4x1.4	1.39	1.39	2.40	PF-RA 3.9x1.4	3.95	1.39	2.30
PF-RA 1.6x1.3	1.63	1.27	2.00	PF-RA 3.9x2.0	3.95	2.42	2.30
PF-RA 1.8x1.4	1.80	1.39	2.10	PF-RA 3.9x2.4	3.95	2.46	5.40
				PF-RA 3.9x2.4L	3.95	2.50	2.72
PF-RA 1.9x1.7	1.91	1.70	1.95	PF-RA 3.9x3.0	3.95	3.03	2.30
				PF-RA 3.9x3.9	3.95	3.95	2.30
PF-RA 2.0x1.8	2.07	1.86	2.83	PF-RA 4.5x1.1	4.55	0.91	2.80
PF-RA 2.0x2.0	2.07	2.07	2.83	PF-RA 4.5x1.4	4.55	1.39	2.80
PF-RA 2.4x1.1	2.45	1.20	1.93	PF-RA 4.5x1.8	4.55	1.82	2.80
PF-RA 2.4x1.4	2.45	1.39	1.93	PF-RA 4.5x1.9	4.55	1.95	2.80
PF-RA 2.4x1.5	2.45	1.52	1.93	PF-RA 4.5x2.0	4.55	1.99	2.80
PF-RA 2.4x2.0	2.45	2.05	1.93	PF-RA 4.5x2.5	4.55	2.55	2.80
				PF-RA 4.5x2.7	4.55	2.73	2.80
PF-RA 2.5x2.0	2.55	2.07	2.90	PF-RA 4.5x3.0	4.55	3.03	2.80
PF-RA 2.5x2.3	2.55	2.38	2.90	PF-RA 4.5x3.6	4.55	3.60	2.80
PF-RA 2.5x2.5	2.55	2.55	2.90	PF-RA 4.5x4.5	4.55	4.55	2.80
PF-RA 2.7x2.4	2.73	2.43	3.00	PF-RA 4.8x4.5	4.85	4.55	3.05
PF-RA 2.7x2.5	2.73	2.50	1.97	PF-RA 5.0x2.0	5.05	3.60	3.40
PF-RA 2.7x2.7	2.73	2.73	3.00	PF-RA 5.0x2.5	5.05	4.45	3.40
				PF-RA 5.0x2.7	5.05	2.73	3.40
PF-RA 3.0x2.5	3.03	2.55	2.00	PF-RA 5.0x3.0	5.05	3.03	3.40
				PF-RA 5.0x3.6	5.05	3.65	3.40
PF-RA 3.6x1.1	3.65	1.20	3.10	PF-RA 5.0x4.4	5.05	4.45	3.40
PF-RA 3.6x1.4	3.65	1.39	3.10	PF-RA 5.0x4.5	5.05	4.55	3.40
PF-RA 3.6x1.8	3.65	1.86	3.10	PF-RA 5.6x3.6	5.75	3.65	3.81
PF-RA 3.6x1.9	3.65	1.95	3.10	PF-RA 5.6x4.5	5.75	4.55	3.81
PF-RA 3.6x2.0	3.65	2.07	3.10				
PF-RA 3.6x2.5	3.65	2.57	3.10	PF-RA 6.3x2.5	6.39	2.49	3.81
PF-RA 3.6x2.7	3.65	2.77	3.10	PF-RA 6.3x3.6	6.39	2.90	3.81
PF-RA 3.6x3.0	3.65	3.03	3.10	PF-RA 6.3x4.5	6.39	3.60	3.81
PF-RA 3.6x3.6	3.65	3.60	3.10	PF-RA 6.3x5.0	6.39	5.05	3.81
PF-RA 3.8x3.6	3.85	3.60	3.60	PF-RA 6.7x2.5	6.68	3.60	3.43
				PF-RA 6.7x3.6	6.68	3.65	3.43
				PF-RA 6.7x4.5	6.68	4.55	3.43
				PF-RA 6.7x4.8	6.68	4.95	3.43
				PF-RA 6.7x5.0	6.68	5.05	3.43
				PF-RA 6.7x6.7	6.68	6.67	3.43

# IA Series Inserts

## Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Inserts allow common sizes to be reduced to a multiple of smaller less common sizes. Diversified has develop a complete line of fuel rated inserts from standard sizes to small copper sizes. Larger inserts are available for every standard pipe size through 6" nominal that allows multiple reductions in size. See the table attached.



All components are either UL Listed or third party approved for their respective applications.

This family of Inserts are designed to work with DPM's series of terminating and test reducers.

These accessories are made from the same thermoplastics as the Terminating & Test reducers. Thus, they are compatible chemically with the host reducer and all flex pipes & rigid pipes

Inserts are designed to reduce the size of a standard reducer to a unique size required in the field.

### Third Party Approvals

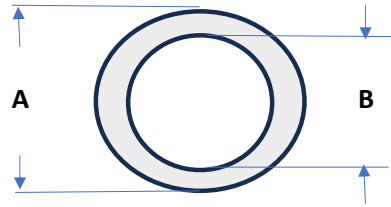


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THIRD-PARTY UL 2447

Diversified Products Manufacturing  
5523 Baggett Marysville Road Oroville CA 95965  
530-534-3966 - [www.dpm-co.com](http://www.dpm-co.com) - Order Entry Email: [sales@dpm-llc.com](mailto:sales@dpm-llc.com)



### Dimensional Data

Product #	A	B		A	B
PF-IA 1.4x.375	1.39	TBD	PF-IA 3.6x2.4	3.5	2.425
PF-IA 1.4x.7	1.39	TBD	PF-IA 3.6x2.5	3.5	2.55
PF-IA 1.4x.8	1.39	0.77	PF-IA 3.6x2.5 Hex	3.5	2.5
PF-IA 1.4x.9	1.39	0.91	PF-IA 3.6x2.7	3.5	2.725
PF-IA 1.4x1.1	1.39	1.20	PF-IA 3.6x2.9	3.5	2.9
PF-IA 1.4x1.2	1.39	1.22	PF-IA 3.6x3.0	3.5	3.03
			PF-IA 3.6x3.2	3.5	3.25
PF-IA 2.4x.9	2.43	0.91			
PF-IA 2.4x.1.1	2.43	1.20	PF-IA 4.5x1.4	4.50	1.39
PF-IA 2.4x1.4	2.43	1.39	PF-IA 4.5x2.0	4.50	2.05
PF-IA 2.4x1.6	2.43	1.63	PF-IA 4.5x2.2	4.50	TBD
PF-IA 2.4x1.7	2.43	1.73	PF-IA 4.5x2.4	4.50	2.43
PF-IA 2.4x1.8	2.43	1.86	PF-IA 4.5x2.5	4.50	2.55
PF-IA 2.4x1.9	2.43	1.95	PF-IA 4.5x2.7	4.50	2.73
PF-IA 2.4x2.0	2.43	2.05	PF-IA 4.5x2.9	4.50	2.90
			PF-IA 4.5x3.0	4.50	3.03
PF-IA 2.5x1.1	2.52	1.20	PF-IA 4.5x3.6	4.50	3.50
PF-IA 2.5x1.4	2.52	1.43	PF-IA 4.5x3.8	4.50	3.90
PF-IA 2.5x1.6	2.52	1.63	PF-IA 4.5x3.9	4.50	3.95
PF-IA 2.5x1.7	2.52	1.73	PF-IA 4.5x4.0	4.50	3.98
PF-IA 2.5x1.8	2.52	1.82			
PF-IA 2.5x1.9	2.52	1.95	PF-IA 4.8x3.6	4.78	3.50
PF-IA 2.5x2.0	2.52	2.07	PF-IA 4.8x3.8	4.78	3.95
PF-IA 2.5x2.2	2.52	TBD	PF-IA 4.8x4.5	4.78	4.55
PF-IA 2.5x2.3	2.52	TBD			
			PF-IA 5.0x3.6	4.93	3.50
PF-IA 3.0x1.4	2.98	1.39	PF-IA 5.0x3.9	4.93	3.95
PF-IA 3.0x2.5	2.98	2.52	PF-IA 5.0x4.5	4.93	4.55
PF-IA 3.0x2.7	2.98	2.75			
			PF-IA 6.0x3.0	5.98	3.03
PF-IA 3.6x1.1	3.50	1.20	PF-IA 6.0x3.6	5.98	3.50
PF-IA 3.6x1.4	3.50	1.39	PF-IA 6.0x3.9	5.98	3.95
PF-IA 3.6x1.5x1.5	3.50	1.56	PF-IA 6.0x4.5	5.98	4.55
PF-IA 3.6x1.6	3.50	1.63			
PF-IA 3.6x1.7	3.50	1.73	PF-IA 6.7x3.6	6.63	3.53
PF-IA 3.6x1.8	3.50	1.86	PF-IA 6.7x4.0	6.63	3.98
PF-IA 3.6x1.9	3.50	1.95	PF-IA 6.7x4.5	6.63	4.50
PF-IA 3.6x2.0	3.50	2.05	PF-IA 6.7x5.0	6.63	4.93
PF-IA 3.6x2.0 Hex	3.50	2.00	PF-IA 6.7x5.2	6.63	5.17
			PF-IA 6.7x6.0	6.63	TBD



# IA Series Caps & Plugs

## Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Caps & Plugs are used to terminate reducers, penetration fittings and pipe. Diversified manufactures a complete set of caps & plugs. Custom sizes can be machined to customers specifications.



All components are either UL Listed or third party approved for their respective applications.

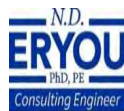
This family of caps & plugs are designed to terminate pipe, penetration fittings and test or terminating reducers.



### Third Party Approvals



EQ-742 EQ-801 EQ-836

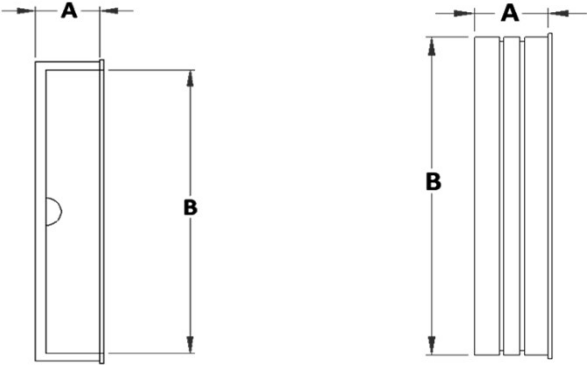


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### Dimensions



Product #	A	B
SR-UI 2.4xCap	1.0	2.4
SR-UI 3.6xCap	0.9	3.7
SR-UI 4.5xCap	1.0	4.6
SR-UI 5.6xCap	1.0	5.7
SR-UI 6.7xCap	0.9	6.6
SR-UI 1.4xPlug	0.8	1.3
SR-UI 1.5xPlug	0.8	1.4
SR-UI 2.4xPlug	0.7	2.3
SR-UI 2.5xPlug	0.7	2.4
SR-UI 3.0xPlug	0.7	2.9
SR-UI 3.6xPlug	0.9	3.5
SR-UI 4.5xPlug	0.9	4.5
SR-UI 6.0xPlug	0.9	5.9
SR-UI 6.7xPlug	0.9	6.7

# Crossover Fittings

## Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Diversified Products manufactures a complete line of fuel resistant Crossover assemblies for testing interstices of double wall systems.



PF-Xover-2ft.

All components are either UL Listed or third party approved for their respective applications.

This family of crossover products is designed to connect the interstices of double wall systems and to provide test assemblies for end or run applications.

Crossovers are available in standard lengths of 1 ft, 2 ft, 3 ft and 6 ft. assemblies and are available in custom lengths.

End Pieces are manufactured out of stainless steel in the USA by Diversified Products. Tubing is fuel rated vinyl.

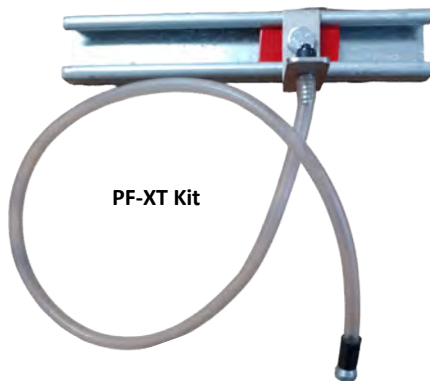
PF-Xover Test Assembly



A Cross over test assembly is available for end of runs where the contractors test equipment adapts to the "test" assembly.

After installation testing is often difficult to reach. Diversified offers a "XT" kit so the air valve is mounted at grade making future testing convenient and does not interfere with access.

A Cross over test assembly uses a stainless steel bracket and mounting bar for standard Unistrut mounting. (Unistrut provided by others.)



PF-XT Kit

All Crossover assemblies come with stress relieving collars to prevent tubing collapse at the connection.

### Third Party Approvals



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## Air Test Valves

### Technical Data Sheet

Since the introduction of EPA driven regulatory activities in 1988, contractors have been purchasing components to comply with these regulations. Diversified Products manufactures a complete line of air test valves



All components are either UL Listed or third party approved for their respective applications.

This family of air test valves is designed to for installation where an air test is needed. Air test valves can be used in pressurized applications beyond 100 PSIG.



Air test valves are available in many configurations. Common styles are the push in, barbed and male pipe thread.

Push in valves include an acetal nut that is concave to seal to curved surfaces.

Barbed air valves are designed to seal to 3/16" ID tubing without a band clamp up to 50 PSIG pressure.



Air Valves are available with a 1/8" MPT thread for sealing to any 1/8" Female pipe thread. Pipe dope or Teflon tape may be used with these valves.

Air valves are manufactured out of 303 stainless steel in the USA by Diversified Products. Other materials are available on request.



Valve cores use metal valve core with a nitrile seal. Other seal materials are available.

Diversified manufactures the mating Bicycle fitting also out of 303 Stainless steel with a nitrile o ring seal. Standard bicycle fittings are designed for 3/16" ID tubing. Other sizes available on request.

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# Diversified Bulkhead Cleaner CH-DBC II

## Technical Data Sheet

Diversified's product offering includes a class of products we call Chemicals. These products have been tested with our repair and new construction products and have been listed as being compliant with UL 2447 protocols. The approval letters are attached at the end of each of our catalogs.



HMIS Hazard Rating	
0-Mineral	A-Goggles
1-Slight	B-Goggles, gloves
2-Moderate	C-Goggles, Gloves
3-Severe	Protective Wear

Non Chlorinated Aerosol for use on Diversified's fiberglass & thermoplastic new construction and repair products

Removes Silicon residue left after the injection molded Products.

Health	2
Flammability	3
Reactivity	0
Protective Wear	B

Effective Cleaner for Fiberglass and HDPE sumps

Contains Heptane Isomers, Acetone and Carbon Dioxide is a flammable Aerosol and is under Pressure

### Physical Properties

Color	Clear Colorless
Odor	Solvent
Odor Threshold	N/D
Specific Gravity	0.78
Initial Boiling Point	132 F
Freezing Point	< 100 F
Vapor Pressure	N/D
Evaporation Rate	Fast
Solubility	Slightly Soluble in water
Coefficient of water/oil Distribution	N/D
pH	N/A
Stability	Stable

### Third Party Approvals



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**Diversified Bulkhead Bonder CH-DBB V**

**Technical Data Sheet**

Diversified's product offering includes a class of products we call Chemicals. These products have been tested with our repair and new construction products and have been listed as being compliant with UL 2447 protocols. The approval letters are attached at the end of each of our catalogs.



Proprietary Methyl methacrylate formulated to be used on B2-B6 and 4 stud to 12 stud Penetrations.

Adheres to both Fiberglass and Poly sumps.

Clean with CH-DBC II cleaner prior to installation.



\$50 Hazmat fee on air shipments

**Benefits**

- Excellent Strength
- Impact Resistant
- 100% Reactive
- Room Temperature Cure
- Easily Applied

**Physical Properties - Uncured**

	Resin	Activator
Viscosity	70000	50000
Color	Off White	Amber shell
Mixed Density		8.2
Mixed Ratio Volume		1:1
Mixed Ration Weight		1:1
Thix Index		5
Flash Point		51 F

**Physical Properties - Cured**

	Shear 2500-3500	Tensile 3000-3500
Strength (PSI)		
Work Time		30 minutes
Handling Strength		90 minutes
Temperature Range		-67 F to 250 F

**Effects of Temperature**

CH-DBB V is best used at temperatures between 65F and 80F. Temperature below 65F will slow cure speed of the material and viscosities will be higher. Temperatures above 80F will cause the material to cure faster and viscosities will be lower. For consistent dispensing, maintain temperature in the above stated range.

**Third Party Approvals**



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*"Better By Design"*

# Diversified's Applicator Guns CH-DAG III & CH-DAG III-M

## Technical Data Sheet

Diversified's product offering includes a class of products we call Chemicals. These products have been tested with our repair and new construction products and have been listed as being compliant with UL 2447 protocols. The approval letters are attached at the end of each of our catalogs. The following applicator guns are available for use with the CH-DBB V bonder.



**CH-DAG III**

CH-DAG III Manual gun used with 50 ml cartridge sets or filling penetrations and repair boots.



**CH-DAG III M**

CH-DAG III M Metal manual gun used with 50 ml cartridge sets or filling penetrations and repair boots.

### Third Party Approvals



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*"Better By Design"*

## Sanding Hole Saws

### Technical Data Sheet

Proper Hole saw selection for penetration fittings is key to having a tight sump. After the hole is cut, then the sump should be sanded to remove all gel coat and to smooth rough fiberglass surfaces on the surfaces to be bonded.. This can now be accomplished with one step with Diversified's Sanding Hole Saws. Sanding hole saws are manufactured to match the penetration fitting's diameter and provided a smooth relief for the diameter of the bonding surface. An additional slight relief is designed for excess epoxy to easily compress to the outside of the fitting.

Sanding hole saws are available for all penetrations made up to 6 7/8" Diameter.

Sanding hole saws are industrial grade carbide tipped

The hole saw is backed with an aluminum disc with an abrasive surface.

Abrasive surfaces are replaceable in the field by bonding on commercial sand paper of the grit desired.

Reduces labor by doing two operations at the same time.

Assures a smooth, even bonding surface for penetration fittings.







# B2-

-1.1  
-1.3  
-1.4

## Installation Instructions

### Threaded Penetration Fitting - Single Sided For Rigid Conduits through 1" Nominal



TOC

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Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Hole Preparation:** Drill a 2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 "

Minimum Spacing  
between Centers 3.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B2's order PF-SHS-2x3. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and removes any sump wall inconsistencies.



Before



After

#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.



#### Tools Required

2 " hole saw  
5/16 nut driver for band clamps  
Water Pump Pliers  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 8 ml per fitting

# B2-

- 49  
- 41  
- 419

## Installation Instructions

### Threaded Penetration Fitting - Single Sided For Rigid Conduits through 1" Nominal



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Manufacturing Inc.



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Hole Preparation:** Drill a 2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 "

Minimum Spacing  
between Centers 3.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B2's order PF-SHS-2x3. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and removes any sump wall inconsistencies.



#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.



#### Tools Required

2 " hole saw  
5/16 nut driver for band clamps  
Water Pump Pliers  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 8 ml per fitting

# B3.5-

- 1.5 - 2.2
- 1.6 - 2.4
- 1.7 - 2.5
- 1.9 - 2.7
- 2.0

## Installation Instructions

### Threaded Penetration Fitting - Single Sided for pipes from 1.5" through 2.7" OD



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Hole Preparation:** Drill a 3 1/2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed.

Hole Saw 3 1/2 "

Minimum Spacing  
between Centers 5.5"

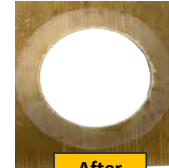


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B3.5's order PF-SHS-3.5x5.2. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.










#### Tools Required

- 3 1/2 " hole saw
- 5/16 nut driver for band clamps
- Water Pump Pliers
- CH-DAG III applicator gun for CH-DBB V bonder
- PF-SHS-3.5x5.2 Sanding Hole Saw

#### Products Needed

- CH-DBC II - Cleaner .1 Cans per penetration fitting
- CH-DBB V - Methyl methacrylate Bonder - 15 ml per fitting

<h1>B3.5-</h1> <p>Inches <b>2.7x2.4</b></p> <p>mm <b>40x32</b> <b>63x50</b></p>		<h2>Installation Instructions</h2> <p><b>Threaded Penetration Fitting - Single Sided for 40x32, 63x50 and 2.7x2.4 pipes.</b></p>	
		<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>	
 <b>Diversified Products Manufacturing Inc.</b>	 <b>Weaver Products</b>		
<p><b>Step 1</b></p> <p><b>Hole Preparation:</b> Drill a 3 1/2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed..</p>		<p>Hole Saw 3 1/2 "</p> <p>Minimum Spacing between Centers 5.5"</p> 	
<p><b>Step 2</b></p> <p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For B3.5's order PF-SHS-3.5x5.2. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p>			
<p><b>Step 3</b></p> <p><b>Dry fit the fittings:</b> Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.</p>			
<p><b>Step 4</b></p> <p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p>			
<p><b>Step 5</b></p> <p><b>Tighten Nut, Install Pipe and Tighten Band Clamps:</b> Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.</p>			
<p><b>Tools Required</b></p> <ul style="list-style-type: none"> <li>3 1/2 " hole saw</li> <li>5/16 nut driver for band clamps</li> <li>Water Pump Pliers</li> <li>CH-DAG III applicator gun for CH-DBB V bonder</li> <li>PF-SHS-3.5x5.2 Sanding Hole Saw</li> </ul>		<p><b>Products Needed</b></p> <ul style="list-style-type: none"> <li>CH-DBC II - Cleaner .1 Cans per penetration fitting</li> <li>CH-DBB V - Methyl methacrylate Bonder - 15 ml per fitting</li> </ul>	
<p>Diversified Products MFG · PH (530)534-3966 · DPM-co.com</p>		<p>6/7/18 Rev-1.1</p>	

# B5-

- 2.7
- 3.0
- 3.3
- 3.6
- 3.8

## Installation Instructions

### Threaded Penetration Fitting - Single Sided for pipes from 2.7" through 3.8" OD

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.



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#### Step 1

**Hole Preparation:** Drill a 5" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed..

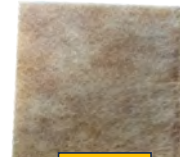
Hole Saw 5 "

Minimum Spacing  
between Centers 6.5"

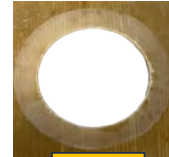


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B5's order PF-SHS-5x6.7. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.


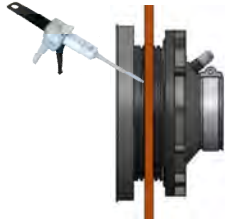



#### Tools Required

- 5 " hole saw
- 5/16 nut driver for band clamps
- Water Pump Pliers
- CH-DAG III applicator gun for CH-DBB V bonder
- PF-SHS-5x6.7 Sanding Hole Saw

#### Products Needed

- CH-DBC II - Cleaner .1 Cans per penetration fitting
- CH-DBB V - Methyl methacrylate Bonder - 20 ml per fitting

<h1>B5-</h1>	Inches <b>3.6x2.4</b> <b>3.8x3.6</b>	mm <b>75x63</b>	<b>Installation Instructions</b>  <b>Threaded Penetration Fitting - Single Sided for 3.6x2.4, 3.8x3.6 and 75x63 pipes.</b>	
	 <b>TOC</b> Diversified Products Manufacturing Inc.		 <b>Contact Us</b> Weaver Products	
<b>Step 1</b>  <b>Hole Preparation:</b> Drill a 5" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed			Hole Saw 5 "  Minimum Spacing between Centers 6.5"	
<b>Step 2</b>  <b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For B5's order PF-SHS-5x6.7. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.			 <b>Before</b>	 <b>After</b>
<b>Step 3</b>  <b>Dry fit the fittings:</b> Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.				
<b>Step 4</b>  <b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.				
<b>Step 5</b>  <b>Tighten Nut, Install Pipe and Tighten Band Clamps:</b> Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.				
<b>Tools Required</b>  5 " hole saw 5/16 nut driver for band clamps Water Pump Pliers CH-DAG III applicator gun for CH-DBB V bonder PF-SHS-5x6.7 Sanding Hole Saw			<b>Products Needed</b>  CH-DBC II - Cleaner .1 Cans per penetration fitting CH-DBB V - Methyl methacrylate Bonder - 20 ml per fitting	
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# B6-

- 3.8
- 4.4
- 4.5
- 4.8
- 5.0

## Installation Instructions

Threaded Penetration Fitting - Single Sided for pipes from 3.7" through 5.0" OD



TOC

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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

### Step 1

**Hole Preparation:** Drill a 6" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 6 "

Minimum Spacing  
between Centers 8.0"



### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B6's order PF-SHS-6x7.6. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting rereck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle.



### Tools Required

- 6 " hole saw
- 5/16 nut driver for band clamps
- Water Pump Pliers
- CH-DAG III applicator gun for CH-DBB V bonder
- PF-SHS-6x7.6 Sanding Hole Saw

### Products Needed

- CH-DBC II - Cleaner .1 Cans per penetration fitting
- CH-DBB V - Methyl methacrylate Bonder - 24 ml per fitting

# B2D-

-1.1  
-1.3  
-1.4

## Installation Instructions

### Threaded Penetration Fitting - Double Sided For Rigid Conduits through 1" Nominal



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

### Step 1

**Hole Preparation:** Drill a 2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 "

Minimum Spacing  
between Centers 3.5"



### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B2's order PF-SHS-2x3. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighten clamps to boot and pipe.



### Tools Required

2 " hole saw  
5/16 nut driver for band clamps  
Water Pump Pliers  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2x3 Sanding Hole Saw

### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 8 ml per fitting



# B2D-

-41  
-419

## Installation Instructions

### Threaded Penetration Fitting - Double Sided For Rigid Conduits with Inserts

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.



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#### Step 1

**Hole Preparation:** Drill a 2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 "

Minimum Spacing  
between Centers 3.5"

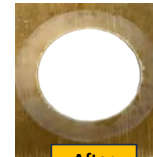


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B2's order PF-SHS-2x3. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighten clamps to boot and pipe.



#### Tools Required

2 " hole saw  
5/16 nut driver for band clamps  
Water Pump Pliers  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2x3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 8 ml per fitting

# B3.5D-

-1.5 - 2.2  
 -1.6 - 2.4  
 -1.7 - 2.5  
 -1.9 - 2.7  
 -2.0

## Installation Instructions

Threaded Penetration Fitting - Double Sided for pipes from 1.5" through 2.7" OD



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

### Step 1

**Hole Preparation:** Drill a 3 1/2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 3 1/2 "

Minimum Spacing between Centers 5.5"



### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B3.5's order PF-SHS-3.5x5.2. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighten clamps to boot and pipe.










### Tools Required

3 1/2 " hole saw  
 5/16 nut driver for band clamps  
 Water Pump Pliers  
 CH-DAG III applicator gun for CH-DBB V bonder  
 PF-SHS-3.5x5.2 Sanding Hole Saw

### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
 CH-DBB V - Methyl methacrylate Bonder - 15 ml per fitting

<p style="text-align: center;"><b>B3.5D-</b></p> <p style="text-align: center;">Inches      mm 2.7x2.4      40x32 63x50</p>		<b>Installation Instructions</b>	
		Threaded Penetration Fitting - Double Sided for 40x32, 63x50 and 2.7x2.4 pipes.	
 Diversified Products Manufacturing Inc.	 Contact Us Weaver Products	<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>	
<b>Step 1</b>		Hole Saw 3 1/2 "	
<p><b>Hole Preparation:</b> Drill a 3 1/2" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed.</p>		Minimum Spacing between Centers 5.5"	
<b>Step 2</b>			
<p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For B3.5's order PF-SHS-3.5x5.2. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p>			
<b>Step 3</b>			
<p><b>Dry fit the fittings:</b> Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.</p>			
<b>Step 4</b>			
<p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p>			
<b>Step 5</b>			
<p><b>Tighten Nut, Install Pipe and Tighen Band Clamps:</b> Tighen nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighen clamps to boot and pipe.</p>			
<b>Tools Required</b>		<b>Products Needed</b>	
3 1/2 " hole saw 5/16 nut driver for band clamps Water Pump Pliers CH-DAG III applicator gun for CH-DBB V bonder PF-SHS-3.5x5.2 Sanding Hole Saw		CH-DBC II - Cleaner .1 Cans per penetration fitting CH-DBB V - Methyl methacrylate Bonder - 15 ml per fitting	
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# B5D-

- 2.7
- 3.0
- 3.3
- 3.6
- 3.8

## Installation Instructions

### Threaded Penetration Fitting - Double Sided for pipes from 2.7" through 3.8" OD



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Hole Preparation:** Drill a 5" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 5 "

Minimum Spacing  
between Centers 6.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For B3.5's order PF-SHS-5x6.7 Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Dry fit the fittings:** Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Nut, Install Pipe and Tighten Band Clamps:** Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighten clamps to boot and pipe.



#### Tools Required

- 5 " hole saw
- 5/16 nut driver for band clamps
- Water Pump Pliers
- CH-DAG III applicator gun for CH-DBB V bonder
- PF-SHS-5x6.7 Sanding Hole Saw

#### Products Needed

- CH-DBC II - Cleaner .1 Cans per penetration fitting
- CH-DBB V - Methyl methacrylate Bonder - 20 ml per fitting

<h1>B5D-</h1>	Inches 3.6x2.4 3.8x3.6	mm 75x63	<h2>Installation Instructions</h2> <p><b>Threaded Penetration Fitting - Double Sided for 3.6x2.4, 3.8x3.6 and 75x63 pipes.</b></p>	
	 <b>Diversified Products Manufacturing Inc.</b>		 <b>Weaver Products</b>	
<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>				
<p><b>Step 1</b></p> <p><b>Hole Preparation:</b> Drill a 5" Diameter hole where the fitting is to be installed. Where possible run the pipe perpendicular to the sump surface. Sand around the hole 1 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed</p>			<p>Hole Saw 5 "</p> <p>Minimum Spacing between Centers 6.5"</p> 	
<p><b>Step 2</b></p> <p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For B3.5's order PF-SHS-5x6.7 Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p>			 <p style="text-align: center;"><b>Before</b></p>  <p style="text-align: center;"><b>After</b></p>	
<p><b>Step 3</b></p> <p><b>Dry fit the fittings:</b> Dry fit. If you have trouble installing the fitting recheck the holes. You may need to clean the holes with the hole saw or sand paper. The body must fit freely through the hole.</p>				
<p><b>Step 4</b></p> <p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p>			 	
<p><b>Step 5</b></p> <p><b>Tighten Nut, Install Pipe and Tighten Band Clamps:</b> Tighten nut with water pump pliers until snug. Do not over tighten nut. Install pipe and tighten band clamps. Do not exceed 60 in lb. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Install the boot over the body on the outside of the sump. Tighten clamps to boot and pipe.</p>				
<p><b>Tools Required</b></p> <ul style="list-style-type: none"> <li>5 " hole saw</li> <li>5/16 nut driver for band clamps</li> <li>Water Pump Pliers</li> <li>CH-DAG III applicator gun for CH-DBB V bonder</li> <li>PF-SHS-5x6.7 Sanding Hole Saw</li> </ul>			<p><b>Products Needed</b></p> <ul style="list-style-type: none"> <li>CH-DBC II - Cleaner .1 Cans per penetration fitting</li> <li>CH-DBB V - Methyl methacrylate Bonder - 20 ml per fitting</li> </ul>	
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# 4S-

-1.1  
-1.3  
-1.4

## Installation Instructions

### 4 Stud Penetration Fitting - Inverted Style - Single Sided



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 4S's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior



Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Stud Nuts and Install Pipe and Tighten Band Clamps:** Tighten stud nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x4.5 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 13 ml per fitting

# 4S-

-49  
-41  
-419

## Installation Instructions

### 4 Stud Penetration Fitting - Inverted Style - Single Sided with Inserts



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

Studded inverted penetrations are designed to have the boot on the inside of the sump with the stud nuts on the sump exterior. Product numbers include inserts. -49 has a 1/2" insert, 41 has a 3/4" insert and 419 has both a 1/2" and 3/4" inserts.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 4S's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 4S's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.

Sump Exterior

Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Stud Nuts and Install Pipe and Tighten Band Clamps:** Tighten stud nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior

Sump Interior



#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x4.5 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 13 ml per fitting

# 8S-

-1.5 -2.5  
 -1.6 -2.7  
 -1.7 -2.8  
 -1.9 -2.9  
 -2.0 -3.0  
 -2.2 -3.3  
 -2.4 -3.6

## Installation Instructions

### 8 Stud Penetration Fitting - Inverted Style - Single Sided



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Manufacturing Inc.



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

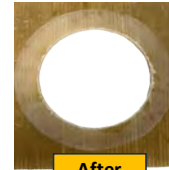
Hole Saw 4"

Minimum Spacing  
between Centers 6.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 8S's order PF-SHS-4x6.7. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior

Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.

Sump Exterior

Sump Interior



#### Step 5

**Tighten Stud Nuts and Install Pipe and Tighten Band Clamps:** Tighten stud nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior

Sump Interior



#### Tools Required

4" hole saw  
 5/16 nut driver for band clamps  
 7/16 deep socket for flange nuts  
 CH-DAG III applicator gun for CH-DBB V bonder  
 PF-SHS-4x6.7 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
 CH-DBB V - Methyl methacrylate Bonder - 20 ml per fitting



# 10S-

-3.6  
-3.8  
-4.4  
-4.5  
-4.8  
-5.0

## Installation Instructions

### 10 Stud Penetration Fitting - Inverted Style - Single Sided



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Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 5 1/2"

Minimum Spacing  
between Centers  
8.35"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 10S's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior

Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Stud Nuts and Install Pipe and Tighten Band Clamps:** Tighten stud nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior









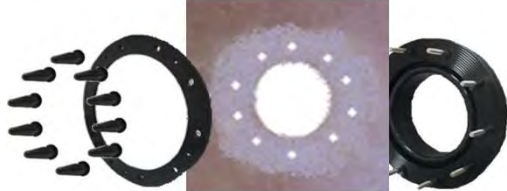














#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-5.5x8 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 24 ml per fitting

<h1>10S-</h1> <p>- 4.6x2.0 - 4.6x2.5 - 4.6x2.7</p>		<h2>Installation Instructions</h2> <h3>10 Stud Penetration Fitting - Inverted Style - Single Sided with Reducer</h3>	
		<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>	
 <p>Diversified Products Manufacturing Inc.</p>		 <p>Weaver Products</p>	
<p><b>Step 1</b></p> <p><b>Sump Preparation:</b> Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed</p>			
		<p>Hole Saw 5 1/2"</p> <p>Minimum Spacing between Centers 8.35"</p>	
<p><b>Step 2</b></p> <p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For 10S's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p>			
		 <p style="text-align: center;">Before</p>	 <p style="text-align: center;">After</p>
<p><b>Step 3</b></p> <p><b>Mark Sump for Drilling Stud Holes:</b> Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. <b>Warning make sure the correct fitting is on the outside of the sump.</b></p>			
		<p>Sump Exterior</p> 	<p>Sump Interior</p> 
<p><b>Step 4</b></p> <p><b>Dry fit the fittings:</b> Dry fit. If you have trouble fitting them together, recheck the holes. You may need to clean the holes with the drill. Studs must fit freely through the holes. Install Corrugated duct seal. Install seal in corrugation so that the band clamps on the boot.</p>			
			
<p><b>Step 5</b></p> <p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p>			
			
<p><b>Step 6</b></p> <p><b>Tighten Stud Nuts and Install Pipe and Tighten Band Clamps:</b> Tighten stud nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.</p>			
			
<p><b>Tools Required</b></p> <ul style="list-style-type: none"> <li>5 1/2" hole saw</li> <li>5/16 nut driver for band clamps</li> <li>CH-DAG III applicator gun for CH-DBB V bonder</li> <li>PF-SHS-5.5x8 Sanding Hole Saw</li> </ul>		<p><b>Products Needed</b></p> <ul style="list-style-type: none"> <li>CH-DBC II - Cleaner .1 Cans per penetration fitting</li> <li>CH-DBB V - Methyl methacrylate Bonder - 24 ml per fitting</li> </ul>	

<h1>12S-</h1>		-5.2 -6.3 -6.7	<h2>Installation Instructions</h2> <h3>12 Stud Penetration Fitting - Traditional Style - Single Sided</h3>			
 <b>Diversified Products Manufacturing Inc.</b>	 <b>Weaver Products</b>	<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>				
<b>Step 1</b>		<p><b>Sump Preparation:</b> Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed</p>				
		Hole Saw 6 7/8"  Minimum Spacing between Centers 9.5"				
<b>Step 2</b>		<p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For T10S's order PF-SHS-6.872x???. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p>				
		 <b>Before</b>	 <b>After</b>			
<b>Step 3</b>		<p><b>Mark Sump for Drilling Stud Holes:</b> Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. <b>Warning make sure the correct fitting is on the outside of the sump.</b></p>				
		Sump Exterior 	Sump Interior 			
<b>Step 4</b>		<p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p>				
						
<b>Step 5</b>		<p><b>Tighten Flange Nuts and Install Pipe and Tighten Band</b></p> <p><b>Clamps:</b> Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.</p>				
						
<b>Tools Required</b>		<b>Products Needed</b>				
5 1/2" hole saw 5/16 nut driver for band clamps 7/16 deep socket for flange nuts CH-DAG III applicator gun for CH-DBB V bonder PF-SHS-6.875x9.3 Sanding Hole Saw		CH-DBC II - Cleaner .1 Cans per penetration fitting CH-DBB V - Methyl methacrylate Bonder - 56 ml per fitting				
5523 Baggett Marysville Rd. Oroville CA, 95965 ~ PH: (530) 534-3966 ~ www.dpm-co.com						
INI-PF Trad 12 SS						

# T4S-

-1.1  
-1.3  
-1.4

## Installation Instructions

### 4 Stud Penetration Fitting - Traditional Style - Single Sided



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"

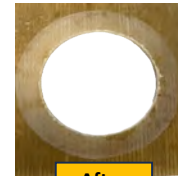


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T4S's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Interior

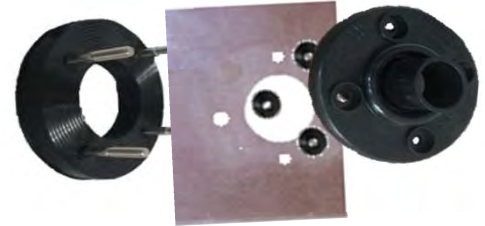


Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior



Sump Interior

#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x4.5 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 26 ml per fitting

# T4S-

-49  
-41  
-419

## Installation Instructions

### 4 Stud Penetration Fitting - Traditional Style - Single Sided



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

Traditional Studded penetrations are designed to have the boot on the inside of the sump with the studs coming in from the sump exterior. Product numbers include inserts. -49 has a 1/2" insert, 41 has a 3/4" Insert and 419 has both a 1/2" and 3/4" inserts.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T4S's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Interior



Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

#### Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:

Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior



Sump Interior

#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x4.5 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 26 ml per fitting

# T8S-

-1.5	-2.5
-1.6	-2.7
-1.7	-2.8
-1.9	-2.9
-2.0	-3.0
-2.2	-3.3
-2.4	-3.6

## Installation Instructions

### 8 Stud Penetration Fitting - Traditional Style - Single Sided

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.



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#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

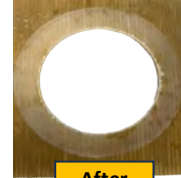
Hole Saw 4"

Minimum Spacing  
between Centers 6.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T8S's order PF-SHS-4x6.7. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

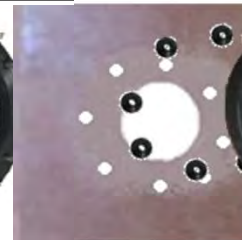
Sump Exterior

Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior

Sump Interior



#### Tools Required

4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-4x6.7 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 40 ml per fitting

# T10S-

-3.6  
-3.8  
-4.4  
-4.5  
-4.8  
-5.0

## Installation Instructions

### 10 Stud Penetration Fitting - Traditional Style - Single Sided



Diversified Products  
Manufacturing Inc.



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

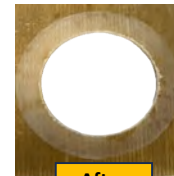
Hole Saw 5 1/2"

Minimum Spacing  
between Centers  
8.35"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T10S's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior



Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.

Sump Exterior



Sump Interior



#### Step 5

#### Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:

Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior














Sump Interior

#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-5.5x8 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 48 ml per fitting

<h1>T10S-</h1> <p>- 4.6x2.0 - 4.6x2.5 - 4.6x2.7</p>	<h2>Installation Instructions</h2> <h3>10 Stud Penetration Fitting - Traditional Style - Single Sided</h3>	
 <p><b>Diversified Products Manufacturing Inc.</b></p>	 <p><b>Weaver Products</b></p>	<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>
<p><b>Step 1</b></p> <p><b>Sump Preparation:</b> Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="894 562 1015 667"> <p>Hole Saw 5 1/2"</p> <p>Minimum Spacing between Centers 8.35"</p> </div> <div data-bbox="1117 573 1252 695">  </div> </div>		
<p><b>Step 2</b></p> <p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For T10S's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p> <div style="display: flex; justify-content: center; align-items: center;">   </div> <div style="display: flex; justify-content: center; margin-top: 5px;"> <div style="margin: 0 10px;"><b>Before</b></div> <div style="margin: 0 10px;"><b>After</b></div> </div>		
<p><b>Step 3</b></p> <p><b>Mark Sump for Drilling Stud Holes:</b> Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. <b>Warning make sure the correct fitting is on the outside of the sump.</b></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="875 951 979 972">Sump Exterior</div> <div data-bbox="1192 951 1295 972">Sump Interior</div> </div> <div style="display: flex; justify-content: center; align-items: center;">   </div>		
<p><b>Step 4</b></p> <p><b>Dry fit the fittings:</b> Dry fit. If you have trouble fitting them together, recheck the holes. You may need to clean the holes with the drill. Studs must fit freely through the holes. Install Corrugated duct seal. Install seal in corrugation so that the band clamps on the boot.</p> <div style="display: flex; justify-content: center; align-items: center;">   </div>		
<p><b>Step 5</b></p> <p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p> <div style="display: flex; justify-content: center; align-items: center;">  </div>		
<p><b>Step 6</b></p> <p><b>Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:</b> Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.</p> <div style="display: flex; justify-content: center; align-items: center;">  </div>		
<p><b>Tools Required</b></p> <ul style="list-style-type: none"> <li>5 1/2" hole saw</li> <li>5/16 nut driver for band clamps</li> <li>7/16 deep socket for flange nuts</li> <li>CH-DAG III applicator gun for CH-DBB V bonder</li> <li>PF-SHS-5.5x8 Sanding Hole Saw</li> </ul>	<p><b>Products Needed</b></p> <ul style="list-style-type: none"> <li>CH-DBC II - Cleaner .1 Cans per penetration fitting</li> <li>CH-DBB V - Methyl methacrylate Bonder - 24 ml per fitting</li> </ul>	
<p>5523 Baggett Marysville Rd. Oroville CA, 95965 – PH: (530) 534-3966 – www.dpm-co.com <span style="float: right;">INI-PF Trad 10 SS</span></p>		



# T12S-

-5.2  
-6.3  
-6.7

## Installation Instructions

### 12 Stud Penetration Fitting - Traditional Style - Single Sided



TOC

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Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 6 7/8"

Minimum Spacing  
between Centers 9.5"

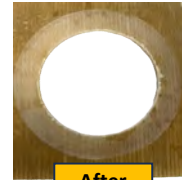


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T12S's order PF-SHS-6.872x???. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior



Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.

Sump Exterior



Sump Interior



#### Step 5

##### Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:

Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior



Sump Interior

#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-6.875x9.3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 56 ml per fitting

# T12S-6.7x4.5

## Installation Instructions

### 12 Stud Penetration Fitting - Traditional Style - Single Sided with Reducer



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 6 7/8"

Minimum Spacing  
between Centers 9.5"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For T12S's order PF-SHS-6.872x???. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**

Sump Exterior



Sump Interior



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.

Sump Exterior



Sump Interior



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Exterior



Sump Interior

#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-6.875x9.3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .1 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 56 ml per fitting

# 4D-

-1.1  
-1.3  
-1.4

## Installation Instructions

### 4 Stud Penetration Fitting - Double Sided



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 4D's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



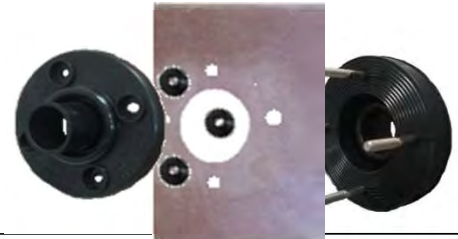
#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 26 ml per fitting

# 4D-

-49  
-41  
-419

## Installation Instructions

### 4 Stud Penetration Fitting - Double Sided



TOC

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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

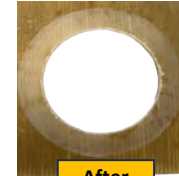
Hole Saw 2 1/4"

Minimum Spacing  
between Centers  
4.75"



#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 4D's order PF-SHS-2.25x4.5. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



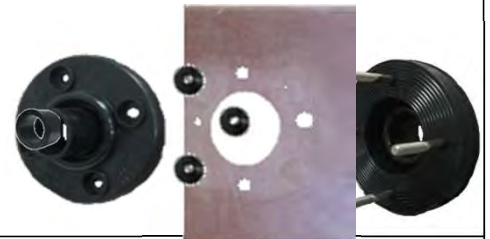
#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:**  
Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

2 1/4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-2.25x3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 26 ml per fitting

# 8D-

-1.5	-2.5
-1.6	-2.7
-1.7	-2.8
-1.9	-2.9
-2.0	-3.0
-2.2	-3.3
-2.4	-3.6

## Installation Instructions

### 8 Stud Penetration Fitting - Double Sided



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**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 4"

Minimum Spacing  
between Centers 6.5"

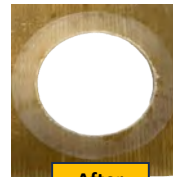


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 8D's order PF-SHS-4x6.7. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:**  
Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

4" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-4x6.7 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 40 ml per fitting

<h1 style="font-size: 48px; margin: 0;">10D-</h1> <div style="display: flex; flex-direction: column; align-items: center; gap: 5px;"> <span>-3.6</span> <span>-3.8</span> <span>-4.4</span> <span>-4.5</span> <span>-4.8</span> <span>-5.0</span> </div>	<h2 style="margin: 0;">Installation Instructions</h2> <h3 style="margin: 0;">10 Stud Penetration Fitting - Double Sided</h3>
	<p><b>Prepare all Surfaces:</b> All surfaces to be bonded should be prepared prior to Completing the installation steps below.</p> <p><b>Warning:</b> Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.</p> <p><b>Bonding to Poly &amp; FRP surfaces:</b> Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.</p> <p><b>Cleaning:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.</p>
 <p><b>Diversified Products Manufacturing Inc.</b></p>	 <p><b>Weaver Products</b></p>
<p><b>Step 1</b></p> <p><b>Sump Preparation:</b> Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p>Hole Saw 5 1/2"</p> <p>Minimum Spacing between Centers 8.35"</p> </div> <div style="width: 30%; text-align: center;">  </div> </div>	
<p><b>Step 2</b></p> <p><b>Use a Diversified Sanding Hole Saw:</b> Get the right hole saw for the right fitting. For 10D's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Before</p> </div> <div style="text-align: center;">  <p>After</p> </div> </div>	
<p><b>Step 3</b></p> <p><b>Mark Sump for Drilling Stud Holes:</b> Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. <b>Warning make sure the correct fitting is on the outside of the sump.</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Sump Exterior</p>  </div> <div style="text-align: center;">  </div> </div>	
<p><b>Step 4</b></p> <p><b>Clean &amp; Bond:</b> Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.</p> <div style="text-align: center;">  </div>	
<p><b>Step 5</b></p> <p><b>Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:</b> Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.</p> <div style="text-align: center;">  </div>	
<p><b>Tools Required</b></p> <ul style="list-style-type: none"> <li>5 1/2" hole saw</li> <li>5/16 nut driver for band clamps</li> <li>7/16 deep socket for flange nuts</li> <li>CH-DAG III applicator gun for CH-DBB V bonder</li> <li>PF-SHS-5.5x8 Sanding Hole Saw</li> </ul>	<p><b>Products Needed</b></p> <ul style="list-style-type: none"> <li>CH-DBC II - Cleaner .2 Cans per penetration fitting</li> <li>CH-DBB V - Methyl methacrylate Bonder - 48 ml per fitting</li> </ul>
<p>5523 Baggett Marysville Rd. Oroville CA, 95965 – PH: (530) 534-3966 – www.dpm-co.com <span style="float: right;">INI-PF Trad 10 DS</span></p>	

# 10D-

- 4.6x2.0  
- 4.6x2.5  
- 4.6x2.7

## Installation Instructions

### 10 Stud Penetration Fitting - Double Sided with Reducer



Diversified Products  
Manufacturing Inc.



Contact Us  
Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 5 1/2"

Minimum Spacing  
between Centers  
8.35"



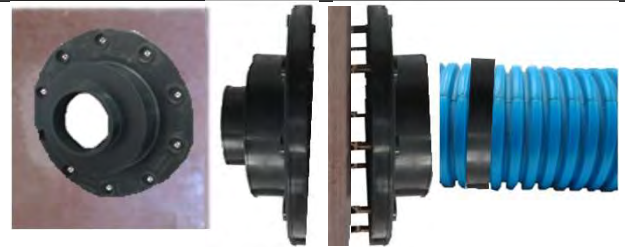
#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 10D's order PF-SHS-5.5x8. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



#### Step 3

**Mark Sump for Drilling Stud Holes:** Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Install Stud seals around studs prior to installing the boot. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.

Sump Exterior

Sump Interior

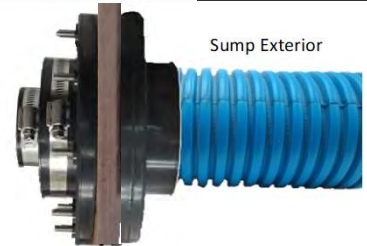


#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.

Sump Interior

Sump Exterior



#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-5.5x8 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 48 ml per fitting

# 12D-

-5.2  
-6.3  
-6.7

## Installation Instructions

### 12 Stud Penetration Fitting - Double Sided



Diversified Products  
Manufacturing Inc.



Contact Us  
Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 6 7/8"

Minimum Spacing  
between Centers 9.5"

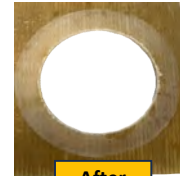


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 12D's order PF-SHS-6.875x???. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

##### Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:

Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-6.825x9.3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 56 ml per fitting



# 12D-6.7x4.5

## Installation Instructions

### 12 Stud Penetration Fitting - Double Sided with Reducer



Diversified Products  
Manufacturing Inc.



Contact Us  
Weaver Products

**Prepare all Surfaces:** All surfaces to be bonded should be prepared prior to Completing the installation steps below.

**Warning:** Failure to follow each step will void the warranty and may result in premature failure of the penetration fitting. Adhere to the following general instructions for each step of the installation.

**Bonding to Poly & FRP surfaces:** Clean and sand (rough up) sump surfaces with CH-DBC II. Remove all gel coat on all fiberglass surfaces. Apply CH-DBB V to all surfaces to be bonded both the fitting and sump wall.

**Cleaning:** Spray all surfaces to be bonded with CH-DBC II Cleaner and allow to air dry. Excess cleaner may be wiped off with a clean dry cloth.

#### Step 1

**Sump Preparation:** Where possible run pipe so as to penetrate the sump perpendicular to the sump surface. Drill the center hole according to the chart. Sand around the hole 2 1/2" on all sides to be bonded. Use a sanding Hole saw. This allows the sump wall to be smooth and even where the penetration is installed

Hole Saw 6 7/8"

Minimum Spacing  
between Centers 9.5"

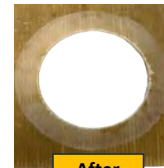


#### Step 2

**Use a Diversified Sanding Hole Saw:** Get the right hole saw for the right fitting. For 12D's order PF-SHS-6.875x???. Refer to price list and data sheet. The Sanding Hole Saw is carbide tipped for long life. This hole saw leaves a clean hole sanded to the right diameter and takes out any sump wall inconsistencies.



Before



After

#### Step 3

**Mark Sump for Drilling Stud Holes:** Center and clamp front plate to sump wall. Mark hole positions and drill with 5/16" drill. On round sumps make sure you drill perpendicular to the sump wall. **Warning make sure the correct fitting is on the outside of the sump.**



#### Step 4

**Clean & Bond:** Spray all surfaces to be bonded with CH-DBC II Cleaner. Wipe dry or air dry. Apply CH-DBB V Bonder to the fitting surface that creates a seal with the sump wall. When installing there should be enough bonder so that a small bead escapes the perimeter of the fitting when the nuts are tightened to the fitting. If no bonder is present remove fitting and apply again.



#### Step 5

**Tighten Flange Nuts and Install Pipe and Tighten Band Clamps:** Tighten flange nuts to 75 in-lb. Allow fitting to cure for 1/2 hour then install pipe. Pipe should be run perpendicular to the sump wall. Do not exceed 15 deg off angle. Once the pipe is installed and connected, tighten the band clamp. Do not exceed 60 in-lb.



#### Tools Required

5 1/2" hole saw  
5/16 nut driver for band clamps  
7/16 deep socket for flange nuts  
CH-DAG III applicator gun for CH-DBB V bonder  
PF-SHS-6.875x9.3 Sanding Hole Saw

#### Products Needed

CH-DBC II - Cleaner .2 Cans per penetration fitting  
CH-DBB V - Methyl methacrylate Bonder - 56 ml per fitting



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# Reference Data

## Third Party Approval - ROUNDTABLE



Contact Us



October 30, 2020

Mr. Josh Dow  
Diversified Products Manufacturing Inc  
5523 Baggett Marysville Rd  
Oroville, CA 95965

RE: NDE Reference No: NDE20201020  
Third-Party Certification under UL 2447- Outline of Investigation for  
Fittings Accessories for Fuels

Products Evaluated: Split Repair Fittings & Test Reducers for Containment Sumps for  
Fuels PF-Penetration Fittings Series, Sump Entry Fittings and Test  
Reducers  
SR- Split Repair Sump Entry Fittings and Test Reducer Series  
FG/PG Spilt Repair Series  
CH- Series, All Chemicals used in the installation process  
SU- Sumps and Accessories

Dear Mr. Dow,

In reference to the above listed products, our testing partner on this project (N.D. Eryou, PhD, PE) has performed our UL 2447 Third-Party inspection and testing. All products listed were determined to comply with the "Outline of Investigation for Fittings and Accessories for Fuels".

It is our opinion that both the design and materials used in the above products are based on sound engineering principles and the materials are compatible with all motor fuels and additives currently being used including fuels containing >10% ethanol or 20% biodiesel. Therefore, the Spill Containment Liner should have the same chemical resistance to the UL 2447 test fuels as the DPM "Products Evaluated" listed above.

Disclaimer: Underwriters Laboratories (UL) is an independent testing laboratory and use of, in any way, of the UL Listing or Registered Trade Mark UL is prohibited unless specifically authorized by Underwriters Laboratories.

Very truly yours,

*Brian E Lewis*  
Brian E Lewis, PE



Roundtable Engineering Solutions, Inc  
660 Southpointe CT, Unit 300G  
Colorado Springs, CO 80906



# Reference Data



## Third Party Approval - N.D. ERYOU



**Southwest Florida Office**  
5051 Castello Drive, Suite 244  
Naples, FL 34103

**Central Florida Office**  
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Spring Hill, FL 34608  
(352) 684-7275  
Alex@eryouengineering.com

**New Jersey Office**  
107 Lincoln Avenue  
Florham Park, NJ 07932  
(973) 919-6842  
Robert@eryouengineering.com

### NOTICE OF COMPLETION OF THIRD-PARTY UL 2447 EVALUATION

February 3, 2021

Mr. Josh Dow  
Diversified Products Manufacturing Inc  
5523 Baggett Marysville Rd  
Oroville, CA 95965

RE: NDE Reference No: NDE20201020  
Third-Party Certification under UL 2447- Outline of Investigation for  
Fittings Accessories for Fuels

Products Evaluated: Split Repair Fittings & Test Reducers for Containment Sumps for Fuels  
PF-Penetration Fittings Series, Sump Entry Fittings and Test Reducers  
SR- Split Repair Sump Entry Fittings and Test Reducer Series  
FG/PG Spilt Repair Series  
CH- Series, All Chemicals used in the installation process.  
SU - Sumps and Accessories

Dear Mr. Dow

In reference to the above listed products, we have performed our UL 2447 Third-Party inspection and testing. All products listed were determined to comply with the "Outline of Investigation for Fittings and Accessories for Fuels".

It is our opinion that both the design and materials used in the above products are based on sound engineering principles and the materials are compatible with all motor fuels and additives currently being used including fuels containing >10% ethanol or 20% biodiesel. Therefore, the Spill Containment Liner should have the same chemical resistance to the UL 2447 test fuels as the DPM "Products Evaluated" listed above.

Further to your recent request with regard to your Canadian distributors utilization of the above test results, we have compared the testing requirements of UL (US) 2447 with CAN/ULC-S664:2017 and found them to be virtually identical.

There were only two differences that we found between the two Codes.

1. ULC S664 Section 5.8.5 "Extreme Low Temperature Impact Test – requires testing at -40°F and our tests were conducted at a minimum temperature of -30°F.

2. ULC S664 Section Appendix B 1.1 Defines 21 specific grades of fuel while UL US defines four grades of fuel, which covers the wide range of fuels commonly used by gasoline and diesel-powered vehicles.

Furthermore, we have reviewed the UL (US) website which contains the following relevant statement confirming the sharing of UL specifications between UL – US and UL - Canada:

### **“UL STANDARDS: ACCREDITED IN THE US AND CANADA**

In the US, UL is accredited by the American National Standards Institute (ANSI) as an audited designator. In 2013, UL was accredited by the Standards Council of Canada (SCC) as a nationally recognized Standards Development Organization (SDO) able to develop National Standards of Canada (NSCs).

UL's Standards Technical Panels (STPs) serve as the consensus body for both American National Standards (ANS) and National Standards of Canada (NSC). Essential information About UL's standards development programs, how to Access Standards, and how to participate in the UL programs used to Develop Standards is available on this site.”

It should not be inferred that our test of DPM products addresses the issue of long-term quality control issues as both UL (US) and UL Canada do with their annual subscription programs.

Disclaimer: Underwriters Laboratories (UL – US & UL - Canada) are independent testing laboratories and use of, in any way, of the UL Listing or Registered Trademark UL is prohibited unless specifically authorized by Underwriters Laboratories (US or Canada).

Very truly yours,



N.D. Eryou, Ph.D., P.E.  
Eryou Engineering  
[dennis@eryouengineering.com](mailto:dennis@eryouengineering.com)



## Reference Data

### Chemicals Wizard for Penetrations



Site Information:

#### Quick Selection Chart - Repair Products

	Quantity	Epoxy oz DEB	Bonder ml DBB V	Cleaner Cans DBC II	Putty Stick DSP-4	Glue Kit oz DGK-4	Total DEB oz	Total DBB V ml	Total DBC II Cans	Total DSP-4 sticks	Total DGK-4 oz
B2 with or without inserts		0	8	0.1	0.00	0	0	0	0	0	0
B3.5		0	15	0.1	0.00	0	0	0	0	0	0
B5		0	20	0.1	0.00	0	0	0	0	0	0
B6		0	24	0.1	0.00	0	0	0	0	0	0
B3.5 w integral Reducers		0	15	0.1	0.00	0	0	0	0	0	0
B5 w integral Reducers		0	20	0.1	0.00	0	0	0	0	0	0
4S & T4S with or without inserts		0	13	0.1	0.00	0	0	0	0	0	0
8S & T8S		0	20	0.1	0.00	0	0	0	0	0	0
10S & T10S with or without reducers		0	24	0.1	0.00	0	0	0	0	0	0
12 S & T12S		0	28	0.1	0.00	0	0	0	0	0	0
4D with or without inserts		0	26	0.1	0.00	0	0	0	0	0	0
8D		0	40	0.1	0.00	0	0	0	0	0	0
10D with or without reducers		0	48	0.1	0.00	0	0	0	0	0	0
12 D		0	56	0.1	0.00	0	0	0	0	0	0
<b>Totals</b>							<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

DEB Bulk 13 Can sets of 13 oz	0	DBB V in 50 ml cartridges	0	DBC II Cans of Cleaner	0
Bulk pack of 9 each 13 oz cans	0.0	Cases of 15 each 50 ml cartridges sets	0.0	Cases of 12 aerosol cans of DBC II	0.0
		DSP-4 Sticks of Super Putt		DGK-4 glue Kits	
		0		0.0	
		Cases of 12 sticks of Super		Cases of 4 each DGK-4	
		0.0		0.0	
		DGK-4 Glue Kits		DBC II Cleaner Cans	
		0		0	
Additional DEB Bulk 13 Epoxy Kits		DBB V Bulkhead Bonder			
0		0			
Additional Super Putty		DBC II Cleaner Cans			
0		0			



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# Reference Data



Contact Us

## Pipe Size Charts

### APT Flex Pipe Diameters

#### Obsolete Pipe

##### Double Wall Pipe

Size	Prod #	Diameter	Key
1/2"	P-050-SC	1.10/.84	1.1/.9
3/4"	P-075-SC	1.32/1.05	1.4/1.1
1"	P-100-SC	1.70/1.32	1.7/1.4
1 1/2"	P-150-SC	2.00/1.75	2.0/1.8
1 3/4"	P-175-SC	2.38/2.00	2.4/2.0
2"	P-200-SC	2.88/2.50	2.9/2.5
3"	P-300-SCN	3.75/3.51	3.8/3.6
2"	V-200-SC	2.88/2.50	2.9/2.5
3"	V-300-SCN	3.80/3.60	3.8/3.6
3"	R-300-SCN	3.80/3.60	3.8/3.6
4"	R-400-SCN	4.75/4.50	4.8/4.5

##### Single Wall Pipe

1/2"	P-050-D	0.84	0.9
3/4"	P-075-D	1.05	1.1
1"	P-100-D	1.32	1.4
1 1/2"	P-150-D	1.75	1.8
1 3/4"	P-175-D	2.00	2.0
2"	P-200-D	2.50	2.5
3"	P-300-D	3.51	3.6
2"	V-200-D	2.50	2.5
3"	V-300-D	3.60	3.6
3"	R-300-D	3.60	3.6
4"	R-400-D	4.50	4.5

#### New Pipe

##### Double Wall Pipe

Size	Prod #	Diameter	Key
1"	XP-100-SC	1.47/1.27	1.5/1.3
1 1/2"	XP-150-SC	1.90/1.70	1.9/1.7
1 3/4"	XP-175-SC	2.15/1.95	2.2/2.0
2"	XP-200-SC	2.65/2.45	2.7/2.5

##### Single Wall Pipe

1"	XP-100-D	1.27	1.3
1 1/2"	XP-150-D	1.70	1.7
1 3/4"	XP-175-D	1.95	2.0
2"	XP-200-D	2.45	2.5
4"	DCT-400	4.50	4.5

### Total Containment Flex Pipe Diameters

#### Obsolete Pipe

##### Double Wall Pipe

Size	Prod #	Diameter	Key
1 1/2"	CP-1503	2.285/2.085	2.4/2.0
2"	CP-2503	3.385/3.185	3.4/3.2

##### Single Wall Pipe

1/2"	PP0500	0.780	0.8
3/4"	PP0750	1.060	1.1
1"	PP1000	1.350	1.4
1 1/2"	PP1503F	2.085	2.1
2 1/2"	PP2503F	3.185	3.2
2 1/2"	SP2501F	2.870	2.9
2 1/2"	SP2503F	2.860	2.9
2 1/2"	VP2501F	2.860	2.9
4"	SP4500	4.600	4.6
4"	SP4500B	4.600	4.6
6"	SP6000	5.800	5.8

### NOV Ameron/Smith Fiberglass Pipe

#### Current Pipe

##### Double Wall Pipe

Size	Prod #	Diameter	Key
2" LCX	3000LCX	2.59/2.37	2.7
3" LCX	3000LCX	3.70/3.50	3.8
4" LCX	3000LCX	4.70/4.50	4.8

##### Single Wall Pipe

2"	3000L	2.370	2.4
3"	3000L	3.500	3.6
4"	3000L	4.500	4.5
6"	3000L	6.630	6.7
2"	RT II	2.372	2.4
3"	RT II	3.559	3.6
4"	RT II	4.554	4.5
6"	RT II	6.686	6.7

### Metric Pipes

28mm	1.10"	1.1
32mm	1.26"	1.3
40mm	1.57"	1.6
50mm	1.97"	2.0
54mm	2.13"	2.2
60mm	2.36"	2.4
63mm	2.48"	2.5
75mm	2.95"	3.0
90mm	3.54"	3.6
110mm	4.33"	4.4
125mm	4.92"	5.0
160mm	6.30"	6.3
180mm	7.09"	7.1



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## Reference Data



Contact Us

### Pipe Size Charts

Environ Flex Pipe Diameters			
Obsolete Pipe			
Double Wall			
Size	Prod #	Diameter	Key
3/4"	GFP-2075	1.18/1.00	1.2/1.0
1"	GFP-2100	1.45/1.25	1.5/1.3
1 1/2"	GFP-2150	2.00/1.80	2.0/1.8
2"	GFP-2200	2.50/2.30	2.5/2.3
3"	GFP-2300	3.57/3.34	3.6/3.4
2"	GVP-2200	2.50/2.30	2.5/2.3
3"	GVP-2300	3.57/3.34	3.6/3.4
Single Wall Pipe			
1 1/2"	GFP-1150	1.80	1.8
2"	GFP-1200	2.30	2.3
3"	GFP-1300	3.34	3.4
2"	GVP-1200	2.30	2.3
3"	GVP-1300	3.34	3.4
4"	GDP-4500	4.50	4.5
4"	GDM-4500	4.50	4.5

OPW New Flexworks Pipe & Western Co-Flex			
New Pipe			
Double Wall			
Size	Prod #	OD	Key
3/4"	C075	1.18/1.00	1.2/1.0
1"	C10	1.45/1.25	1.5/1.3
1 1/2"	C15	2.0/1.8	2.0/1.8
2"	C20	2.5/2.3	2.5/2.3
3"	C30	3.5/3.3	3.5/3.3
1 1/2"	CP15RB	1.97/1.80	2.0/1.8
2"	CP20RB	2.6/2.4	2.6/2.4
3"	AXP-30	3.54	3.6
4"	AXP-40	4.76	4.8
Single Wall Pipe			
1 1/2"	SP15	1.80	1.8
2"	SP20	2.40	2.4
3"	AP30	3.50	3.5
4"	AP40	4.50	4.5

Copper Pipe			
Nominal		OD	Key
1/2"		.625"	0.7
5/8"		.750"	0.8
3/4"		.875"	0.9
1"		1.125"	1.2
1 1/4"		1.375"	1.4
1 1/2"		1.625"	1.7
2"		2.125"	2.2
2 1/2"		2.625"	2.7
3"		3.125"	3.2
4"		4.125"	4.2

OmegaFlex Stainless Pipe			
New Pipe			
DoubleTrac Stainless Pipe			
Size	Prod #	Diameter	Key
1"	UGF-FSP-16	1.55	1.6
1 1/2"	UGF-FSP-24	2.3	2.3
2"	UGF-FSP-32	2.93	3.0
4"	UGF CP4	4.5	4.5
DEF-Trac Uninsulated Stainless Pipe			
1"	DF-FSP-16		1.5
1 1/2"	DF-FSP-24		2.0
2"	DF-FSP-32		2.5
DEF-Trac Insulated Stainless Pipe			
1"	DF-FSPHT-16		2.7
1 1/2"	DF-FSPHT-24		3.0
2"	DF-FSPHT-32		3.6

Brugg Stainless Flex Pipe			
New Pipe			
Double Wall Stainless Pipe			
Size	Prod #	OD	Key
3/4"	CNT 21/31	.83/1.22	.9/1.3
1"	CNT 30/38	1.18/1.50	1.2/1.5
1 1/2"	CNT 48/60	1.89/2.36	1.9/2.4
2"	CNT 60/71	2.36/2.80	2.4/2.8
3"	CNT 83/105	3.26/4.13	3.3/4.2
4"	CNT 98/120	3.86/4.73	3.9/4.8
revised 3/15/18	1"	HL 30/48	1.90
revised 3/15/18	1 1/2"	HL 48/71	2.80
revised 3/15/18	2"	HL 60/83	3.30
revised 3/15/18	3"	HL98/134	5.30
	1 1/2"	SEC 40	2.50
	2"	SEC 50	3.00
	4"	SEC 100	4.76

Rigid Conduit - ANSI Steel Pipe			
Nominal		OD	Key
1/2"		0.84"	0.90
3/4"		1.05"	1.10
1"		1.315"	1.40
1 1/4"		1.660"	1.70
1 1/2"		1.900"	1.90
2"		2.375"	2.40
2 1/2"		2.875"	2.90
3"		3.500"	3.60
3 1/2"		4.000"	4.00
4"		4.500"	4.50
5"		5.563"	5.60
6"		6.625"	6.70
8"		8.625"	8.70
10"		10.760"	10.80
12"		12.750"	12.80
14"		14.000"	14.00



# "Dare to Compare"



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Diversified Products has been producing quality products since 1991. The following is a selected listing of OPW, APT and Diversified penetration fittings. Where possible like for like products have been compared. Bravo products were not considered in this comparison as they currently do not catalog a flexible penetration fitting. IN many cases Diversified's list prices are less than 50% of the corresponding List prices from APT or OPW. Double sided penetrations are not compared but like results may be expected.



Description Pipe Size	Diversified				OPW				APT			
	Threaded	List	Studded	List	Studded	List	Saving	%	Studded	List	Saving	%
3/4" Rigid Conduit	PF-B2-1.1	\$27.99	PF-T4S-1.1	\$37.31								
32mm Conduit	PF-B2-1.3	\$27.99	PF-T4S-1.3	\$37.31								
1" Rigid Conduit & APT 3/4" SC	PF-B2-1.4	\$27.99	PF-T4S-1.4	\$37.31					FBB-075-SC	\$87.00	\$49.69	133.2%
3/4" & 1" Rigid Conduit	PF-B2-41	\$36.57	PF-T4S-41	\$45.89								
1/2, 3/4 & 1" Rigid Conduit	PF-B2-419	\$45.15	PF-T4S-419	\$54.47	EBF-0751	\$74.63	\$20.16	37.0%				
1.5" OD Pipe	PF-B3.5-1.5	\$34.21	PF-T8S-1.5	\$46.64								
40mm Pipe	PF-B3.5-1.6	\$34.21	PF-T8S-1.6	\$46.64								
1 1/4" Nominal Pipe & APT 1" SC	PF-B3.5-1.7	\$34.21	PF-T8S-1.7	\$46.64					FEB-100-SC	\$87.00	\$40.36	86.5%
1 1/2" Nominal (Steel) Pipe	PF-B3.5-1.9	\$34.21	PF-T8S-1.9	\$46.64								
1 1/2" Flex Works & APT 1 1/2" SC	PF-B3.5-2.0	\$34.21	PF-T8S-2.0	\$46.64	EBF-0150	\$76.72	\$30.08	64.5%	FBB-150-SC	\$129.00	\$82.36	176.6%
2.2" OD Pipe APT??	PF-B3.5-2.2	\$34.21	PF-T8S-2.2	\$46.64								
2" FRP & Steel Pipe & APT 1 3/4" SC	PF-B3.5-2.4	\$34.21	PF-T8S-2.4	\$46.64	EBF-0200F	\$95.64	\$49.00	105.1%	FEB-175SC	\$112.00	\$65.36	140.1%
2" Flex Works & 63mm Pipe	PF-B3.5-2.5	\$34.21	PF-T8S-2.5	\$46.64	EBF-0200	\$92.09	\$45.45	97.4%				
2" LCX Pipe	PF-B3.5-2.7	\$34.21	PF-T8S-2.7	\$46.64	EBF-0200	\$92.09	\$45.45	97.4%				
2" LCX Pipe	PF-B5-2.7	\$41.99	PF-T8S-2.7	\$47.64								
2 1/2" Nominal Pipe & APT 2" SC	PF-B5-2.9	\$41.99	PF-T8S-2.9	\$46.64					FEB-200-SC	\$112.00	\$65.36	140.1%
75mm Pipe	PF-B5-3.0	\$41.99	PF-T8S-3.0	\$46.64								
3.3" OP Pipe (APY??)	PF-B5-3.3	\$41.99	PF-T8S-3.3	\$46.64								
3" Nominal & 90mm Pipe	PF-B5-3.6	\$41.99	PF-T8S-3.6	\$46.64	EBF-0300	\$100.98	\$54.34	116.5%				
3" Nominal & 90mm Pipe	PF-B5-3.6	\$41.99	PF-T10S-3.6	\$57.54					FEB-300-R	\$117.00	\$59.46	103.3%
3" LCX & 3" APT	PF-B5-3.8	\$41.99	PF-T10S-3.8	\$57.54	EBF-0300	\$100.98	\$43.44	75.5%	FEB-300	\$155.00	\$97.46	169.4%
110 mm Pipe	PF-B6-4.4	\$49.76	PF-T10S-4.4	\$57.54								
4" FRP & Nominal & 4" APT Pipe	PF-B6-4.5	\$49.76	PF-T10S-4.5	\$57.54	EBF-0400	\$118.50	\$60.96	105.9%	FEB-400-R	\$161.00	\$103.46	179.8%
4" LCX	PF-B6-4.8	\$49.76	PF-T10S-4.8	\$57.54					FEB-400-F	\$161.00	\$103.46	179.8%
125mm Pipe	PF-B6-5.0	\$49.76	PF-T10S-5.0	\$57.54								
130mm Pipe			PF-T12S-5.2	\$139.93								
160mm Pipe			PF-T12S-6.3	\$139.93								
6" FRP & Nominal Pipe			PF-T12S-6.7	\$139.93	EBF-0600	\$232.90	\$92.97	66.4%				

\* Threaded Penetration offered by OPW

### Other Considerations

	Diversified	OPW	APT
Flexible Studded Penetration Series	Yes	yes	Yes
Flexible for sealing to round surfaces	Yes	no	no
with inserts for multiple sizes	Yes	-	n/a
With integral reducers for Double wall pipe	Yes	no	no
Stainless Steel Air Test Valves	Yes	no	no
Sizes up to 8" Nominal	Yes	no	no
Rolling design for stress relieving	Yes	no	no
Requires foam for installation	no	yes	no
inverted fittings for easier installation	Yes	no	no
Sizes for all flex, semi flex and rigid pipes	Yes	no	no
Threaded Series	Yes	no	no





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## Warranty

**Limited Warranty:** Diversified Products Manufacturing Inc. (DPMI) warrants that the products sold under this agreement are free from defects in design, material or workmanship for a period of (3) years on all non chemical products from the date of shipment. **DPMI MAKES NO OTHER WARRANTY WHATSOEVER, EXPRESSOR OR IMPLIED, WITH RESPECT TO THE GOODS OR WITH RESPECT TO THE MERCHANTABILITY OF THE GOODS OR THE FITNESS OF THE GOODS FOR ANY PURPOSE.** DPMI's sole obligation with respect to any defect in any of the products will be, at DPMI's option, to repair or replace the item or to refund, in the form of a credit on account, the purchase price for that item. Where practical, parts must be returned to DPMI for evaluation. DPMI will not be liable for costs of labor or other costs with the replacement of the defective item. DPMI will not be responsible for any damage to the environment or any other damage associated with the use of the product. To the maximum extent permitted by law, Buyer waives any claim against DPMI by reason of any such defect or any breach of DPMI's warranty herewith; and, without limiting the foregoing, any claim for indirect, incidental or consequential damages. Customer confirms that it has relied, is relying and will rely only on DPMI's warranty and understanding above, and that Buyer has not relied, is not relying and will not rely on any other statements, promise, affirmation, sample or model, any of which are superseded by this agreement. This warranty is conditional of Buyer promptly notifying DPMI of any alleged defect. Any product purchased by DPMI for use on or in conjunction with the Products which are manufactured by DPMI, DPMI extends to Buyer only the warranty that the product of vendor granted to DPMI.

## Terms & Conditions of Sale

**Payment:** DPMI offers a 3% 10 day discount (less freight) from the date of invoice not the date of receipt of goods. Where a prompt payment discount is offered, funds must be received by DPMI by the 10th day following the date of invoice. Should diversified not receive payment in a timely fashion credit terms will be revoked. For payments received beyond 10 days where a discount is taken, Diversified will invoice for the discount taken. These invoices are due upon receipt. Typically all international orders are pre-pay before shipping. If any questions arise concerning accounts receivable Buyer shall contact the Credit Department for assistance. In the event of disputes Buyer shall pay the undisputed portion of the invoice within the above time.

**Methods of Payment:** Preferred methods of payment are by check by Phone, ACH or EFT. Credit cards while acceptable are not preferred as there is a 4% processing fee charged to the invoice. If Buyer chooses to wire funds, buyer is responsible for all bank charges both at Buyers end and DPMI's end. DPMI will invoice Buyer for all shortages on wire transfers. Such shortages must be made up within 30 days or with the next order.

**Delivery:** Sales are F.O.B. DPMI's factory. This means that the title to goods passes to the customer when the carrier leaves DPMI's facility. If shipping damage or loss should occur, buyer is responsible for filing the freight claim with the carrier. Buyer is responsible for noting any damage on the carrier's bill of lading. DPMI will assist in the filing of freight claims if requested to do so by the buyer. Buyer shall report any concealed damage or shortages in the Product to DPMI within (5) working days from the date of delivery.

Should a loss of product occur, after it has been shipped, Buyer is liable for payment of the original invoice as well as for invoices created for products shipped to replace lost or damaged goods. While Diversified may provide assistance to Buyer in filing a claim, financial recover of the loss is between the freight carrier and the Buyer.



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