

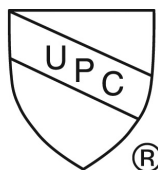
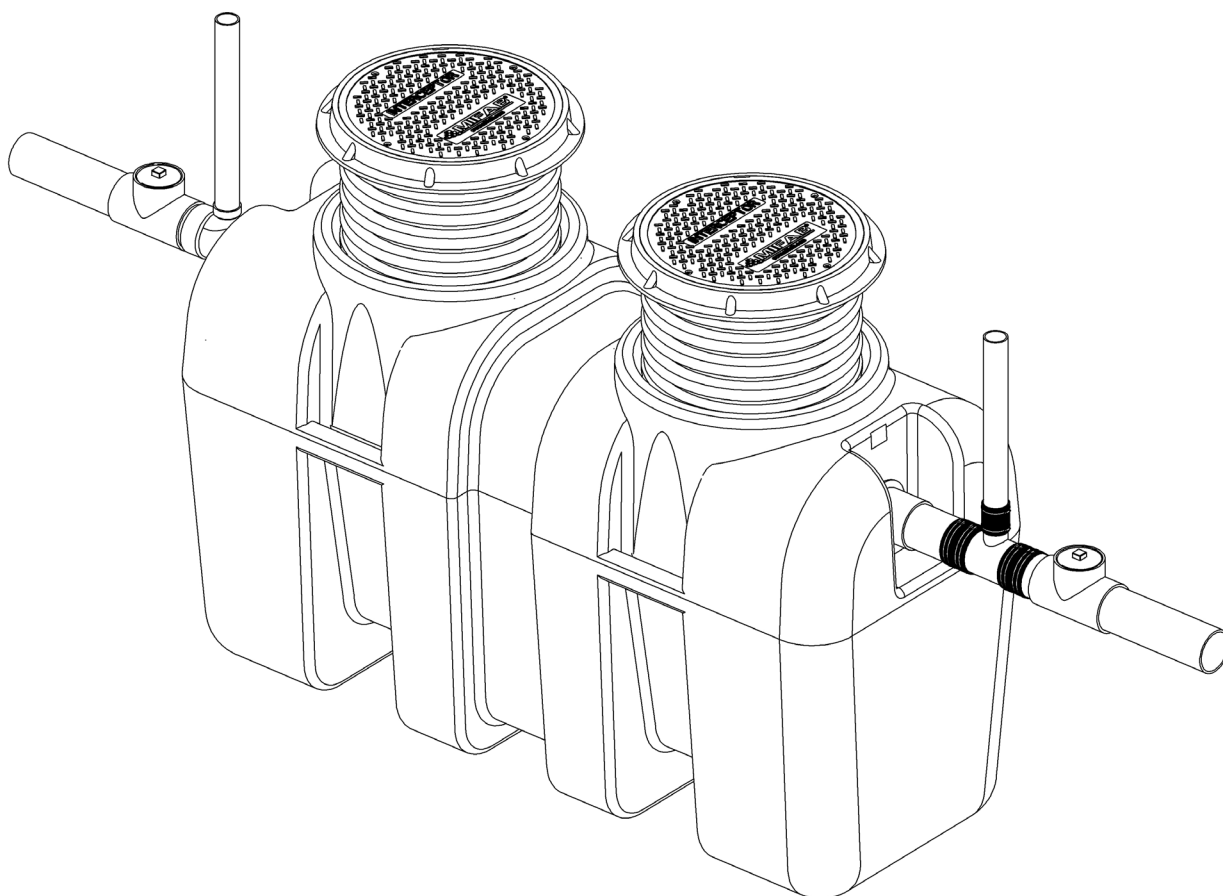
Lil Max



BIG MAX



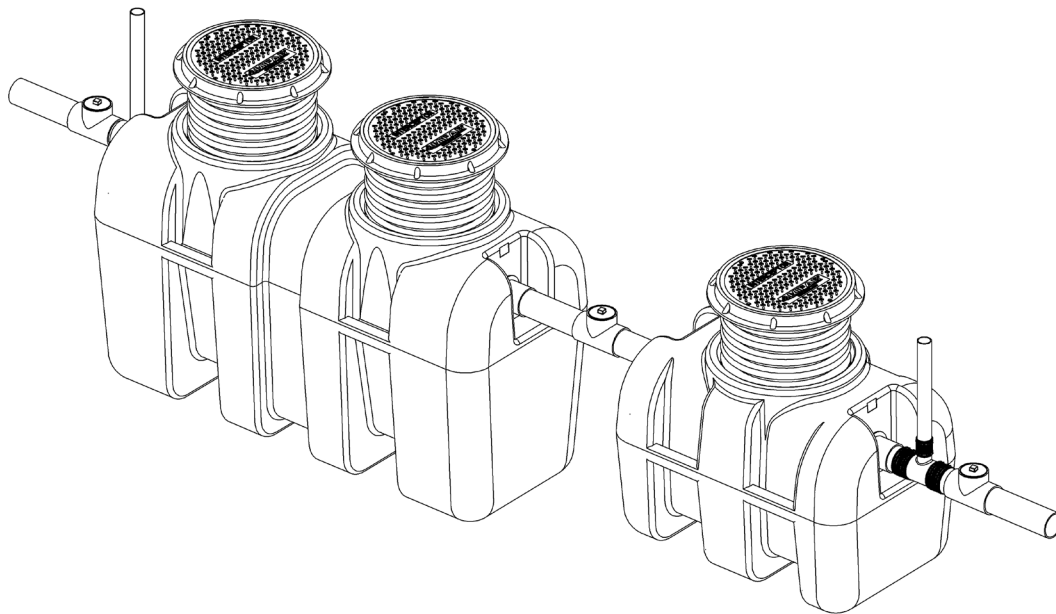
High Density Polyethylene (HDPE) Hydromechanical Interceptors Installation & Operation Manual



Manufactured
By:  **MIFAB**[®]

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Big Max & Lil Max System Overview

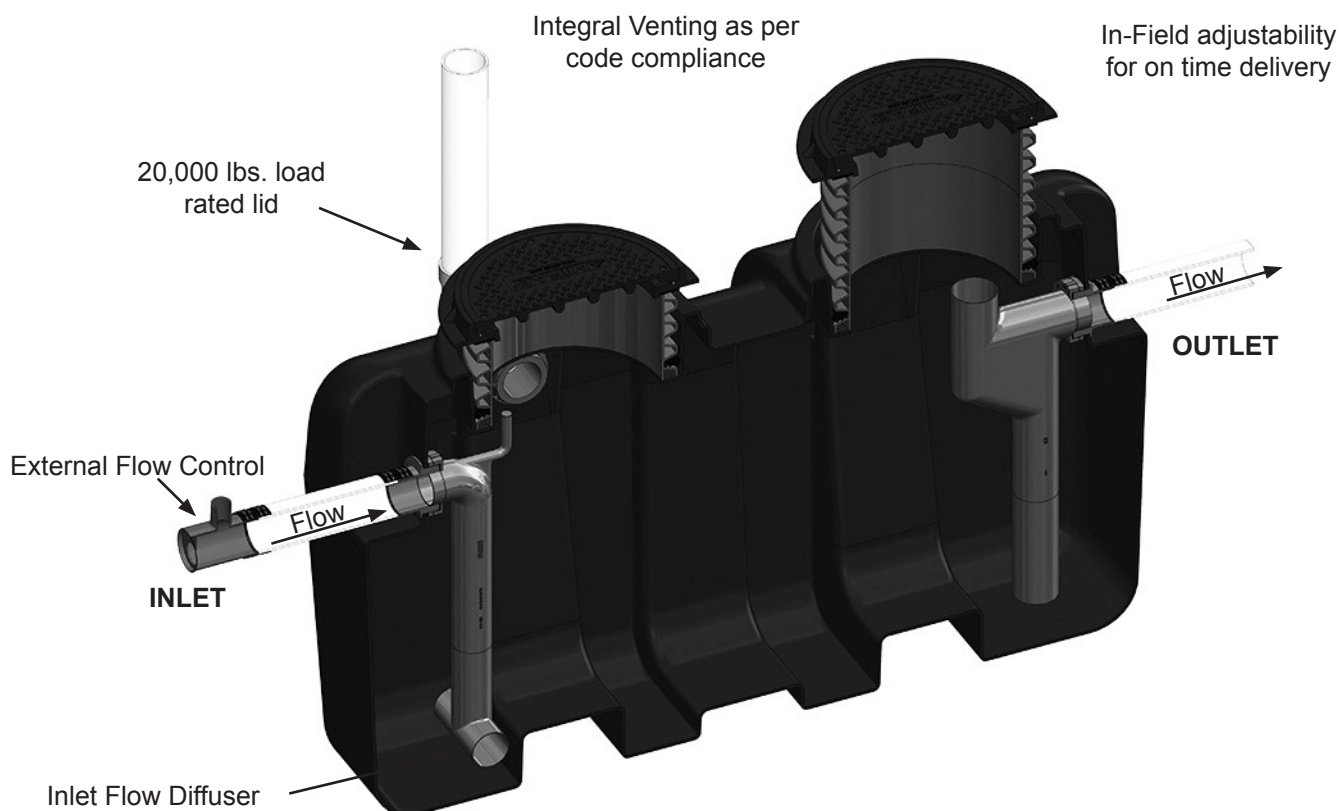
MIFAB's grease, oil and solids interceptors are manufactured using materials such as High Density Polyethylene (HDPE), stainless steel and 10 gauge hot rolled steel that is welded together and coated with an electrostatically applied baked epoxy finish.

Why use this variety of materials? Studies have shown that interceptors made with cast iron last on average of 5 years before need replacement, while concrete interceptors have an effective lifespan of around 10 years.

The cover sealing gasket is manufactured with low durometer closed-cell neoprene with self-adhesive backing. The gasket is custom fitted to the interceptor body top rim ledge where it is an integral part of the body. Because of the gasket's thickness and density, it provides an ideal sealing environment for the lid. All of MIFAB's interceptors are supplied with the same gasket. All MIFAB grease interceptors are supplied with a baffle system engineered to improve the grease/oil separation process. The baffle system is strategically located to direct inflow for maximum efficiency of the interceptor.

Flow entering the MIFAB interceptor is directed to the bottom by the baffle to avoid any disturbance of the previously accumulated surface layer of grease/oil in the device. The baffle also serves to reduce the velocity and surge of inflow, providing sufficient retention time for effective separation of the grease. The grease rises to the surface for manual or draw-off removal and the baffle is easy to remove for cleaning. The waste water is now relieved of over 90% of the fats, oils and greases and continues to flow through the interceptor into the drainage system. Many MIFAB grease interceptors bear the PDI (Plumbing and Drainage Institute) seal. This seal on MIFAB's grease interceptors proves that the designs and ratings marked on the interceptor have met or surpassed all standards established by PDI. All of MIFAB's PDI approved grease interceptors are supplied with external, vented flow control fittings to ensure maximum performance.

Big Max and Lil Max units are PDI, ASME, IAPMO and CSA certified and made in the USA.



Big Max & Lil Max System Overview

Description of Operation:

There are a few factors critical in the operation of a grease interceptor, which are: Design, Sizing, Proper installation and maintenance.

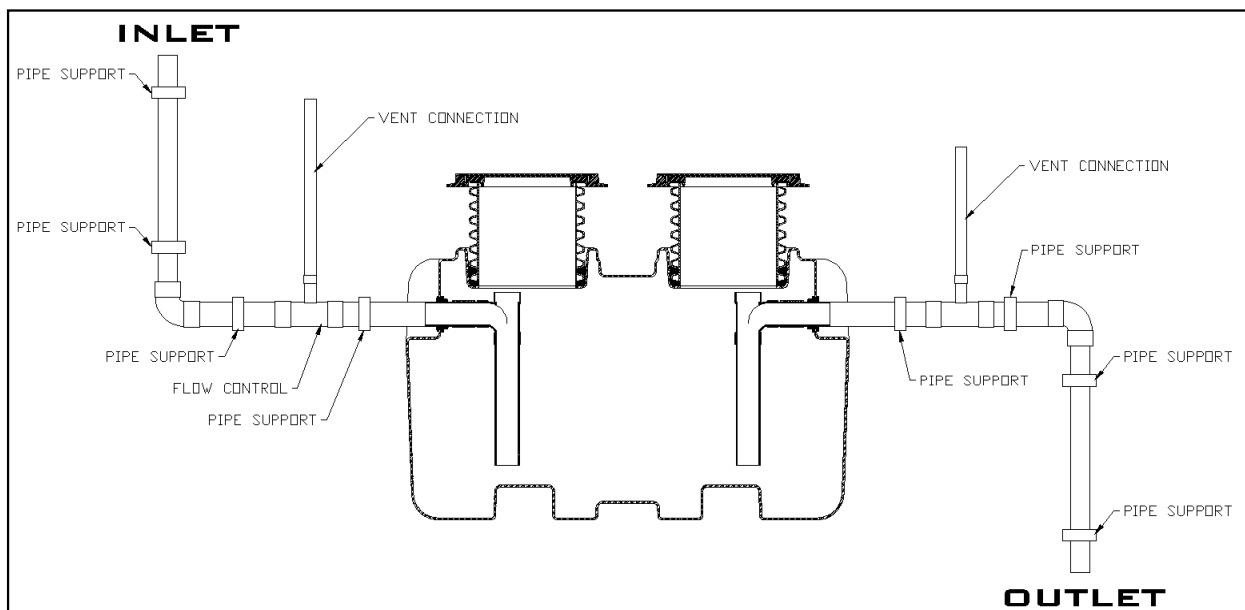
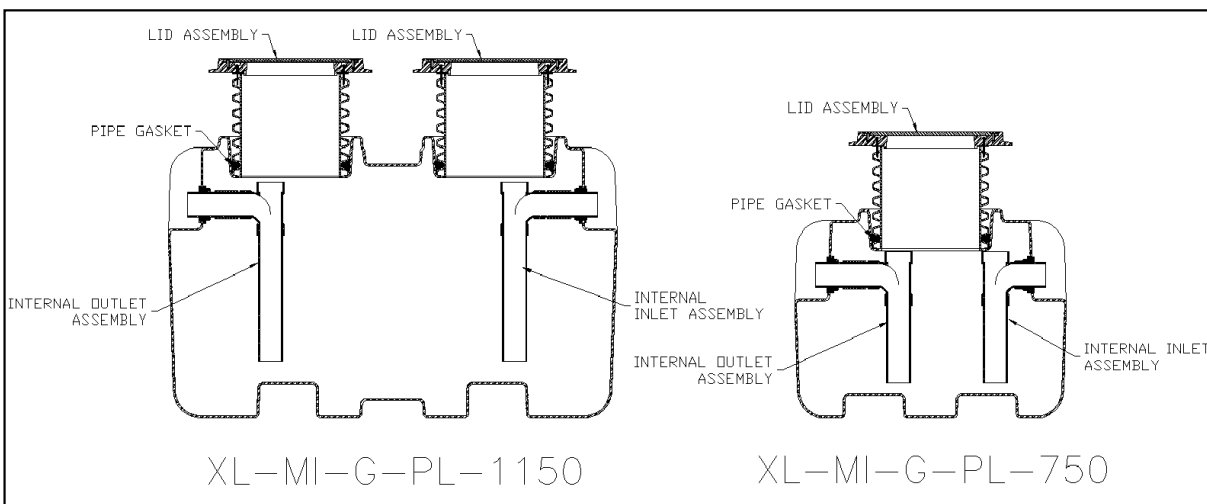
Design:

MIFAB interceptors are manufactured with high inlets. This allows the incoming flow to completely drain out of the inlet lines, which reduces the chance of the lines being clogged with grease build up. MIFAB interceptors are also manufactured with a removable vertical baffle plate. The baffle plate is designed to slow the incoming flow and redirect it to the bottom of the interceptor allowing for the longest retention time possible. The -PL series has internal piping that directs the flow into the bottom of the interceptor.

MIFAB interceptors are manufactured as well with an integral deep seal trap, which has a built in air by pass relief. The trap is also built with a cleanout access point, so that if a blockage occurs downstream; it can be easily removed. To prevent odor from accumulated grease in the interceptor from coming back up through the fixture drain, a trap should be installed between the interceptor and the fixture. Please consult your local codes.

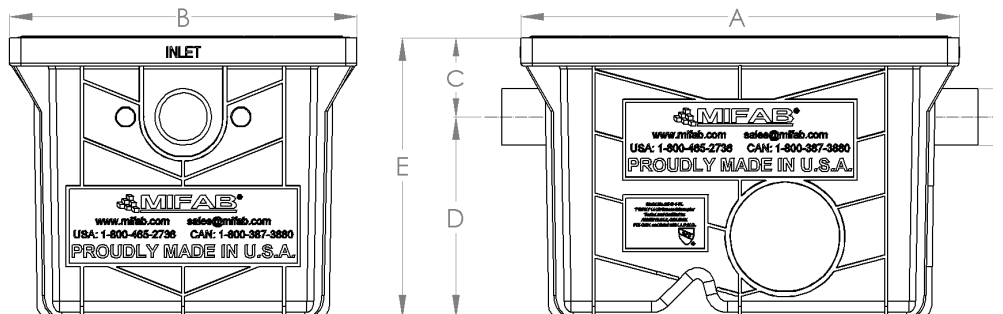
Sizing:

For proper sizing of the grease interceptor please see MIFAB's Price Book.



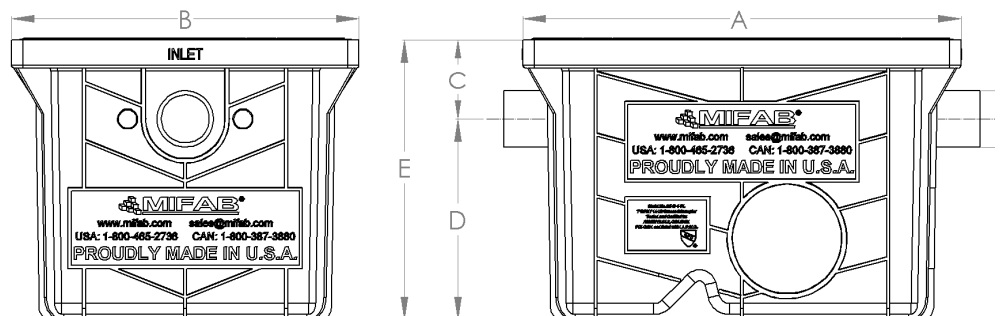
Lil Max Sizes & Dimensions

Lil Max Grease Interceptor Dimensions



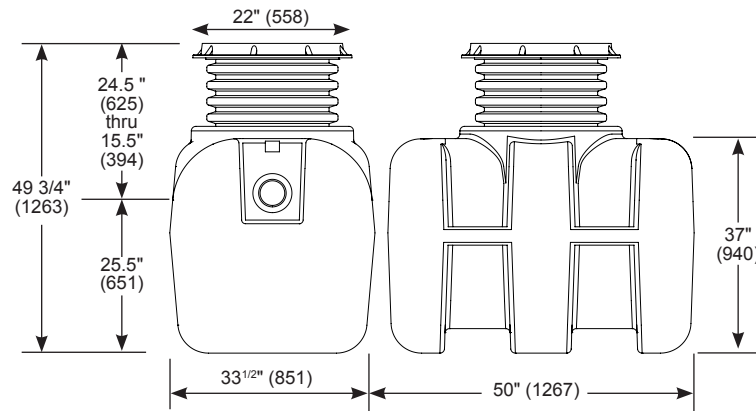
MODEL NO.	FLOW RATE (GPM)	GREASE CAP. (LBS.)	LIQUID CAP. (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)
MI-G-1-PL	7	14	5.8	19.5	15.5	3.5	9	12.5	2
MI-G-2-PL	10	20	8.5	23	17.5	3.5	9.75	13.25	2
MI-G-3-PL	15	30	13	23	17.5	3.5	13.25	16.75	2
MI-G-4-PL	20	40	16	29.5	20.5	3.5	10.75	14.25	3
MI-G-5-PL	25	50	23	29.5	20.5	3.5	14.75	18.25	3
MI-G-6-PL	35	70	39	33	25.5	5.5	16.75	22.25	3
MI-G-7-PL	50	100	44	33	25.5	5.5	18.75	24.25	3
MI-G-L-25-PL	25	50	19	33	25.5	3.5	9	12.5	3

Lil Max Solids Interceptor Dimensions

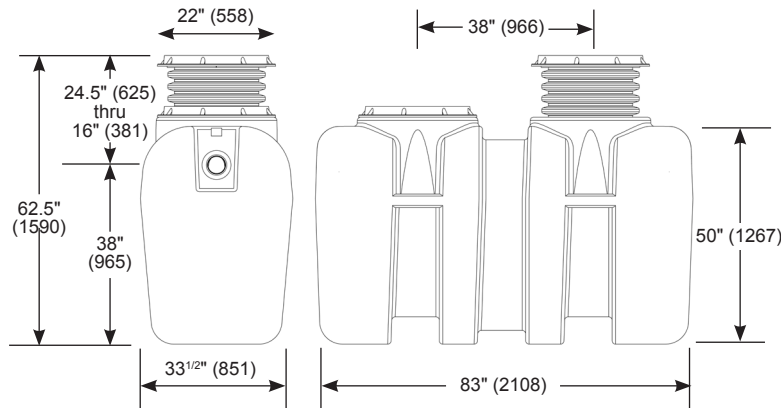


MODEL NO.	FLOW RATE (GPM)	SOLIDS CAP. (GAL.)	LIQUID CAP. (LBS.)	A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)
MI-L-1-PL	7	5.8	5.8	19.5	15.5	3.5	9	12.5	2
MI-L-2-PL	10	8.5	8.5	23	17.5	3.5	9.75	13.25	2
MI-L-3-PL	15	13	13	23	17.5	3.5	13.25	16.75	2
MI-L-4-PL	20	16	16	29.5	20.5	3.5	10.75	14.25	3
MI-L-5-PL	25	23	23	29.5	20.5	3.5	14.75	18.25	3
MI-L-6-PL	35	39	39	33	25.5	5.5	16.75	22.25	3
MI-L-7-PL	50	44	44	33	25.5	5.5	18.75	24.25	3
MI-L-L-25-PL	25	19	19	33	25.5	3.5	9	12.5	3

Big Max Sizes & Dimensions



Big Max XL-MI-G-PL-750 Grease Interceptor & XL-MI-O-PL-750 Oil Interceptor



Big Max XL-MI-G-PL-1150 Grease Interceptor & XL-MI-O-PL-1150 Oil Interceptor

BIG MAX GREASE INTERCEPTOR	MAX 750G	MAX 1150G
MODEL NUMBER	XL-MI-G-PL-750	XL-MI-G-PL-1150
FLOW RATE (US Gallons Per Minute)	75	100
GREASE DESIGN CAPACITY (Pounds of Grease)	750	1,150
LIQUID CAPACITY (Gallons)	140	300
AVERAGE EFFICIENCY % ASME A112.4.3	95%	98%
OPERATING TEMPERATURE CAPABILITIES	190° F	190° F
COVER LOAD CAPACITY AASHTO H20 (Pounds)	20,000	20,000
SHIPPING WEIGHT (Pounds)	150	275
CONNECTION SIZE (No Hub Connection)	4"	4"

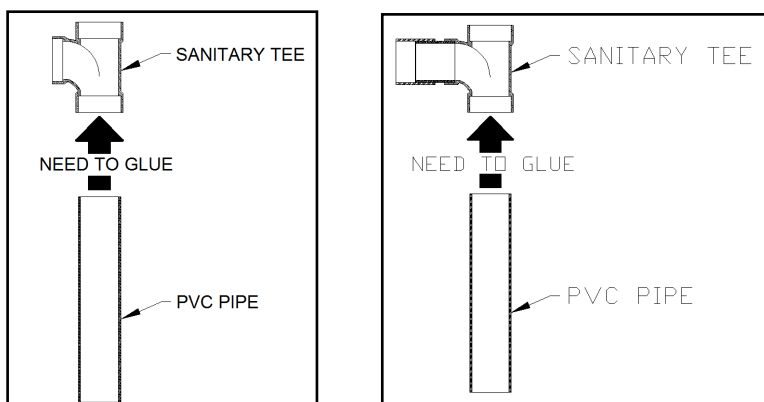
BIG MAX OIL INTERCEPTOR	MAX 750O	MAX 1150O
MODEL NUMBER	XL-MI-O-PL-750	XL-MI-O-PL-1150
FLOW RATE (US Gallons Per Minute)	75	100
OIL STORAGE CAPACITY (Gallons of Oil)	140	300
LIQUID CAPACITY (Gallons)	140	300
OPERATING TEMPERATURE CAPABILITIES	190° F	190° F
COVER LOAD CAPACITY AASHTO H20 (Pounds)	20,000	20,000
SHIPPING WEIGHT (Pounds)	150	275
CONNECTION SIZE (No Hub Connection)	4"	4"

Big Max System Assembly

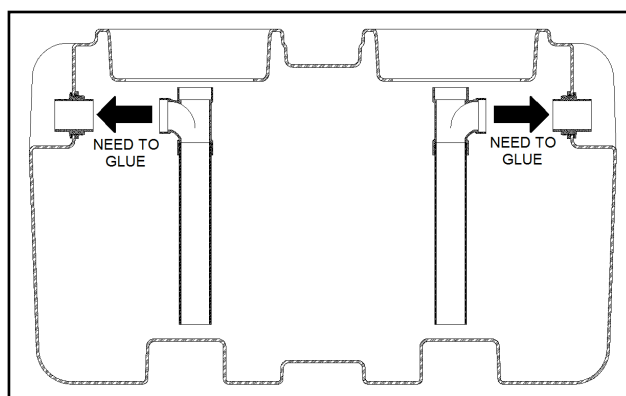
Assembly:

The grease interceptor should be installed as close as physically possible to the fixture that is intended to drain into it. This will help protect the incoming lines from becoming clogged with grease.

1. Install the Internal Inlet and Outlet Assemblies in the interceptor.
 - a. Use PVC primer and cement to install the straight piece of PVC pipe to the sanitary tee. The XL-MI-G-PL-750 has the sanitary tee and PVC pipe already assembled.



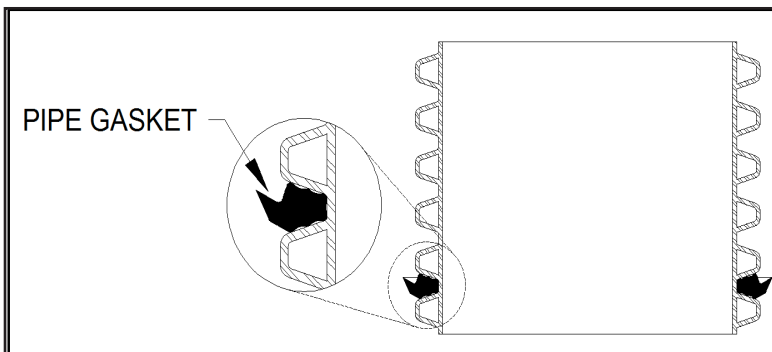
- b. Then install them onto the internal connection of the installed bulk head fitting using PVC primer and cement.



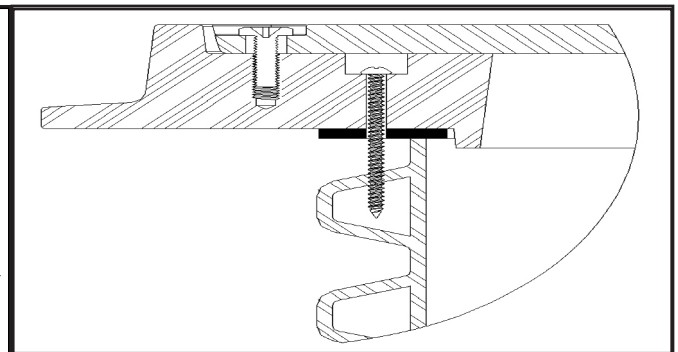
2. Install the 18" diameter corrugated pipe onto the top opening(s) of the body, set the lid on top to measure the finishing height from the top of the lid to the drain pipe connections. The pipe can be cut with a saw to get a correct finishing height.
3. Next, install the pipe gasket onto the bottom of the pipe as shown on the next page.

Big Max Extension Collar Installation

- 1) Set the Big Max Unit height to grade by installing the 18" diameter corrugated pipe onto the top opening(s) of the body, then insert the lid on top to measure and adjust the finished height from the top to grade. If less extension is needed, measure the required dimension, mark the extension and cut to fit with a Saw. The extension system is ADS pipe and is designed to be field cut as needed. If a longer extension is required to meet grade, new ADS pipe can be purchased and cut to length in order to equal grade.
- 2) Install the Pipe Gasket onto the bottom of the pipe as shown. Then firmly press the 18" diameter pipe into the top opening(s) of the interceptor. It will bottom out at the pipe stop. The Gasket is designed to fit tightly around the extension collar. Prying the gasket into place with a pry tool can save time and make this process easier.
- 3) Insert the extension collar and pipe gasket onto the opening of the Big Max. Press firmly until the extension is seated inside provided recessed channel. The Big Max is designed to fit tightly, and installation can be made easier by wetting the receiving area with mild soapy water. This will reduce the friction and allow the extension to slide more easily into place.
- 4) Remove the cover from the lid assembly and this will expose predrilled screw holes. Affix the lid gasket with the self adhesive onto the underside of the collar. Place lid assembly onto the top of the corrugated pipe. Connect the lid assembly collar to the pipe with the 6 self tapping screws into the countersunk holes. Replace lid back onto the lid assembly collar.
- 5) When installing the collar on concrete roads, an 8 inch-width concrete ring beam with a 16 inch-width guard circle around it should be poured between the collar and brick setting to make the surrounding compaction level and unmovable.
- 6) When installing the collar on a bituminous road, the collar must be installed AFTER the road is paved. Roller compaction by construction equipment around the collar must be avoided. A hole that is slightly larger than the collar should be inserted before pouring the pavement. The reserved hole can help ensure the installation quality and prolong the usefulness of the installation.

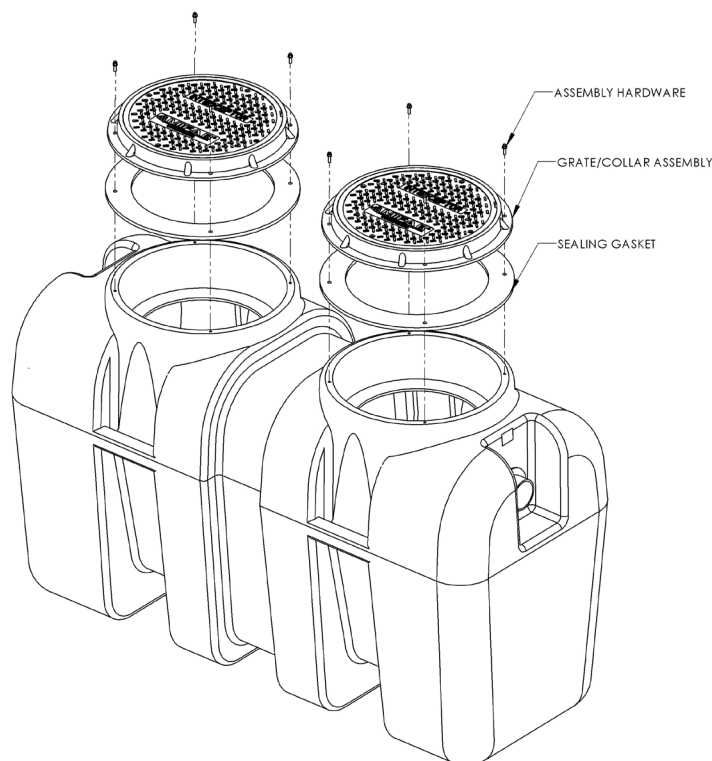
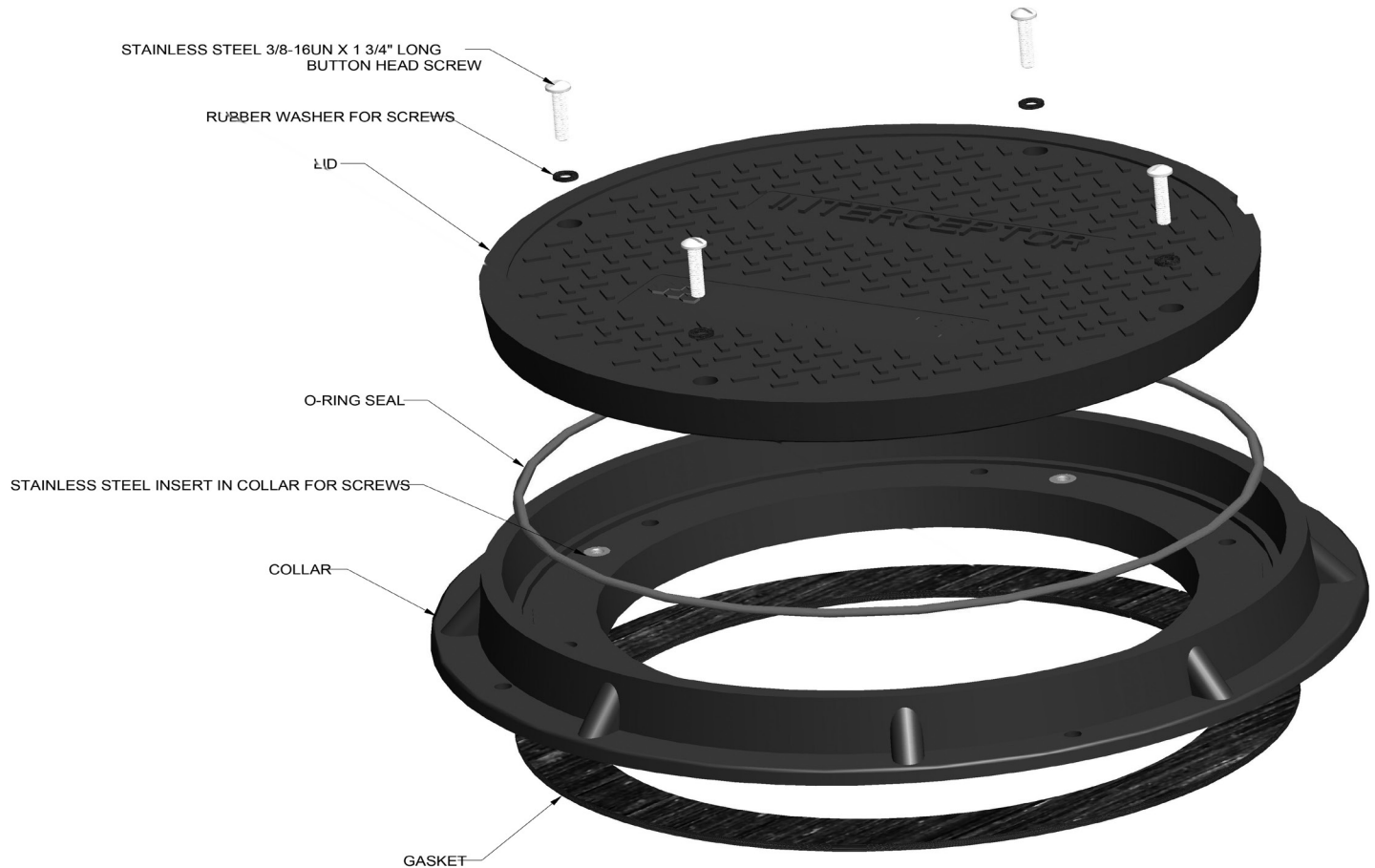


Extension Collar and Gasket Assembly



Lid and Extension Collar Installation

Big Max DCL Direct Connect Installation



Interceptor Sizing Methodology

Grease Interceptors

Fats, Oils and Grease (FOG) has historically caused problems in plumbing drainage systems. Grease easily adheres to the inner surface of most commonly used drainage piping material and over time will form into a hard crust as tough as baked clay. The rougher the inner surface of the pipe, the easier this adherence will occur. Grease is also a problem for sewage treatment plants as it impedes the bacterial process used to break down these complex compounds. The purpose of a grease interceptor is to trap and store the suspended grease from the water passing through it. They are usually connected to kitchen sinks, floor drains, and any other plumbing fixtures in restaurants, hotels and institutions that discharge grease laden waste water. MIFAB grease interceptors operate on the principle of separation by flotation. Our environmental laws have become more restrictive and maintenance costs have increased, public sewer departments have responded by tightening the list of materials allowed to flow into their systems. Severe fines may be levied on those users found to be in violation. Grease that is removed from the drainage system as close as possible to its source and before it becomes contaminated with other material, can be sold to rendering companies and recycled into a variety of products. It can therefore become an economic asset rather than liability.

Point Source Sizing Method

Reliable performance of any grease interceptor is dependent on being correctly sized to handle the drainage load from the fixtures it serves. Each MIFAB interceptor is flow and capacity rated for easy selection when sizing requirements have been established and met. Sizing is based on factors like volume of wastewater and fixture type. These factors combine to establish the expected flow rate and the size of the interceptor required. The flow control fitting provided with every MIFAB grease interceptor is installed in the fixture drain line ahead of the interceptor and maintains the flow of drainage at the interceptor's rated capacity. The following sizing formula is based on the PDI G-101 (Plumbing and Drainage Institute) requirements:

1. Calculate the volume in cubic inches of all the fixtures to be served by the Grease Interceptor. (length x width x depth = capacity)
2. *Eg.: 15" x 10" x 24" = 3600 cubic inches. Since a three compartment sink is serving the grease interceptor, multiply the single compartment cubic inch capacity by three to obtain the total capacity in cubic inches. Divide this number by 231 to convert the volume to US gallons. *Eg. cubic capacity of 10.800 in³ / 230=46.75 gallons; multiplied by 75% = 35.06 U.S.G. Use MIFAB model number MI-G-6 which has a rated flow capacity of 35 G.P.M.
3. These capacities are based on a two minute drain-down time with the interceptor adjacent to the fixture(s). If a two minute drain-down time is acceptable, then divide the capacity by two.
4. The flow control fitting supplied with the interceptor **must be installed**. If this is not in place, the interceptor will not function to PDI standards.
5. If an interceptor is to be installed with the top level at the finished floor, an extension type may be required. In that instance, the B25 dimension is required, (center line of inlet/outlet to top of the finished floor) and must be specified at time of ordering.

Fixture Unit Sizing Method

The majority of plumbing codes list the drainage fixture-unit values for plumbing fixtures or fixtures not listed, the codes provide drainage fixture-unit values based on drain outlet or trap size. Drainage fixture-unit values are converted to GPM discharge rates on the basis of one drainage fixture-unit equaling = 7.5 GPM fixture discharge rate. The drainage fixture-unit sizing for grease interceptors is included for those that prefer this approach as an alternative to the conventional (volume) sizing. The following table provides the suggested PDI size grease interceptor based on drainage fixture unit sizing method.

Fixture Outlet or Size (inches)	Drainage Trap Fixture Unit Value	GPM Discharge Equivalent	Suggested GPM Flow Rate	MIFAB Model #
1 1/4"	1	7.5	10	MI-G-2
1 1/2"	2	15.0	15	MI-G-3
2"	3	22.0	25	MI-G-5
2 1/2"	4	30.0	35	MI-G-6
3"	5	37.5	50	MI-G-7
4"	6	45.0	55	MI-G-7

The following factors may require an increase in the size of the grease interceptor location: presence of detergents in the waste water, ratio of grease to water, specific gravity weight of the grease filtrates, speed of incoming water flow, presence of large particles mixed with the grease laden water, and percentage of maximum flow capacity. The interceptor should be installed as close as possible to the source of grease to prevent pipes draining into the grease interceptor from becoming clogged as grease-laden water cools before entering the grease interceptor.

MIFAB GREASE INTERCEPTOR INSTALLATION AND MAINTENANCE GUIDE

Installation Diagrams

Figures A2.5.1 through A2.5.5 are included to illustrate various grease interceptor installations normally encountered in domestic, commercial and institutional systems. These figures will serve as a guide to practical application of grease interceptors.

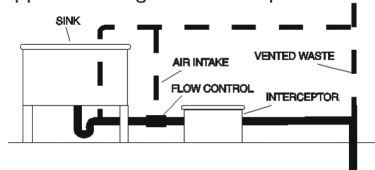


Fig. A2.5.1 Interceptor Serving Trapped and Vented Sink - Flow Control Air Intake Intersects Vent

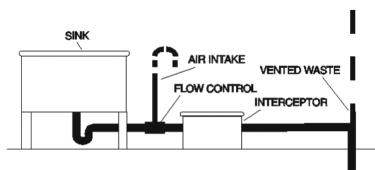


Fig. A2.5.2 Interceptor Serving Sink - Flow Control Air Intake Terminates in a Return Bend Above Flood Level

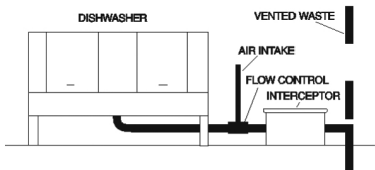


Fig. A2.5.3 Interceptor Serving Dishwasher - Flow Control Air Intake Terminates Above Flood Level

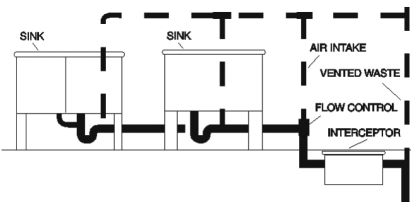


Fig. A2.5.4 Interceptor Serving Two Individually Trapped and Vented Sinks - Flow Control Air Intake Intersects Vent

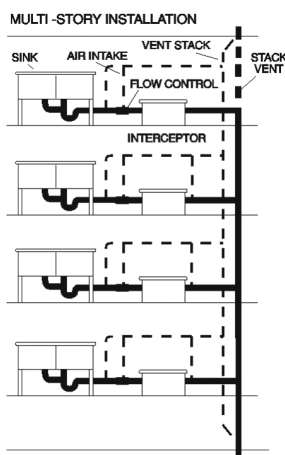


Fig. A2.5.5 Interceptor Serving Trapped and Vented Sinks - Flow Control Air Intakes Intersect Vent

INSTALLATION CONSIDERATIONS

Install interceptor as close as practical to fixture or fixtures being served, see figures A2.5.1 through A2.5.5. The interceptor may be set on the floor, partially recessed in the floor, with top flush with the floor, or fully recessed below the floor to suit piping and structural conditions. Anticipate sufficient clearance for removal of interceptor cover for cleaning. Avoid installation wherein long runs of pipe (exceeding 25 feet (7500)) are necessary to reach interceptor. This precaution will preclude the possibility of pipeline becoming clogged with congealed grease that will collect before reaching the grease interceptor.

Do not install grease interceptor in waste line from garbage grinder. Garbage grinder waste must by-pass interceptor, for rapid accumulation of solid matter will greatly reduce grease interceptor efficiency preventing operation in compliance with rated capacity.

FLOW CONTROL

The flow control fitting furnished with PDI certified interceptors must be installed ahead of interceptor in the waste line beyond the last connection from the fixture and as close as possible to the underside of lowest fixture. When waste of two or more sinks or fixtures are combined to be served by one interceptor, a single flow control fitting should be used. Air intake for flow control may terminate under sink drain board as high as possible to prevent overflow or terminate in a return bend at the same height and on outside of building. When fixture is individually trapped and back-vented, air intake may intersect vent stack. All installation recommendations subject to approval of code authority.

VENTING

Grease interceptors must have a vented waste, sized in accordance with code requirements for venting traps to retain water seal and prevent siphoning.

MULTIPLE FIXTURE INSTALLATION

One interceptor to serve multiple fixtures is recommended only where fixtures are located close together. In such installations, each fixture should be individually trapped and back-vented.

MAINTENANCE

GENERAL CONSIDERATIONS

To obtain optimum operating efficiency of a properly sized and installed PDI certified grease interceptor, a regular schedule of maintenance must be adhered to. All PDI certified grease interceptors are furnished with manufacturer's operating and maintenance instructions, which must be followed to insure efficient satisfactory operation.

CLEANING

All grease interceptors must be cleaned regularly. The frequency of grease removal is dependent upon the capacity of the interceptor and the quantity of grease in the waste water. Grease removal intervals may therefore vary from once a week to once in several weeks. When the grease removal interval has been determined for a specific installation, regular cleaning at that interval is necessary to maintain the rated efficiency of the interceptor. After the accumulated grease and waste material has been removed, the interceptor should be thoroughly checked to make certain that inlet, outlet and air relief ports are clear of obstructions.

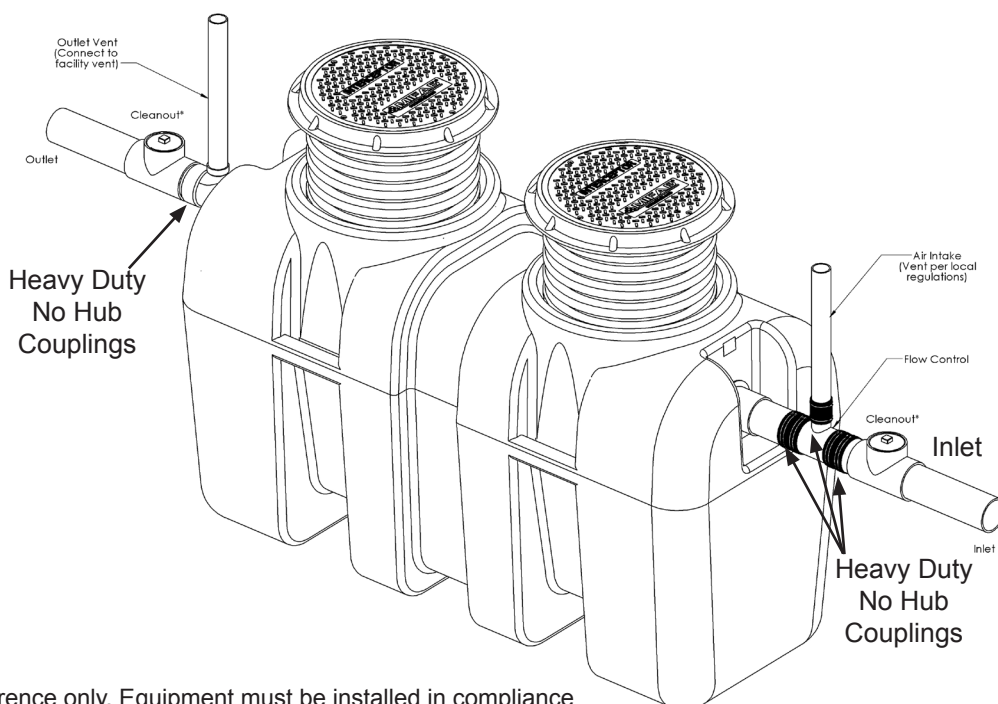
DISPOSITION OF INTERCEPTED MATERIALS

Grease and other waste matter that has been removed from the interceptor should not be introduced into any drain, sewer, or natural body of water. This waste matter should be placed in proper containers for disposal. Where recovery of grease is desired, it can be handled in a manner suitable to the authorities.

Above Grade Interceptor Installation Considerations

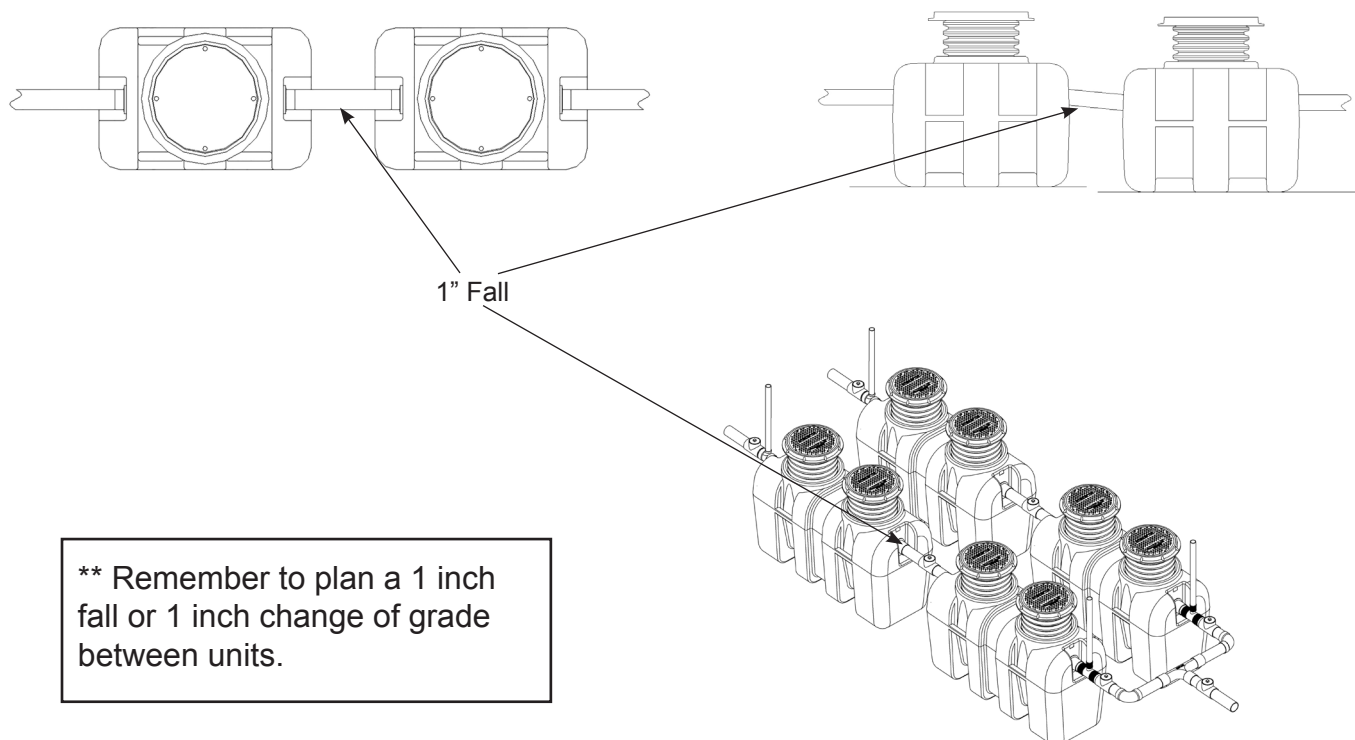
- 1) All Big and Lil Max Interceptors can be installed above grade. The HDPE ribbed construction allows these interceptors to be placed on an engineered approved, load compliant and level surface. Under normal use, Big and Lil Max Interceptors will require no additional support to maintain full functionality. Seismic ratings and needs should be determined by a design engineer and based on established codes. The Interceptor should be placed in a visible and easily accessible area for maintenance, cleaning, and inspection. Allowing space for the service provider to properly clean the vessel is a key consideration to efficient functionality.
- 2) MIFAB Interceptors should be set in place by the installer. The installer should ensure the pad/site is level and load rate compliant. The total weight of a Big Max model XL-MI-G-PL-750 at designed storage capacity is 7,000 lbs. and the XL-MI-G-PL-1150 has a total weight of 10,000 lbs. The Unit should then be plumbed as instructed below in accordance with all required codes.
- 3) When installing a MIFAB Interceptor, proper venting is strongly recommended. Venting can be installed on the outlet of the unit which is preferred, or as close as possible to the outlet connection. MIFAB recommends a vent at least 50% the diameter of the system's outlet connection. As an example the XL-MI-G-PL-750 or the XL-MI-G-PL-1150 will require a 2 inch vent. A Big or Lil Max Interceptor can be connected to the facility supplied venting or as directed by the designing engineer. ALWAYS consider and follow all local and industry code requirements.
- 4) Connection to the plumbing system is achieved by the use of No Hub Couplings. MIFAB recommends the use of Extra Heavy Banded No Hub Couplings. This will provide protection for the pipe at the connection points and ensure a strong connection between the Big and Lil Max Unit and the plumbing system. No Hub Couplings should be installed and torqued to the supplying manufacturers recommendations. As an example the XL-MI-G-PL-750 and XL-MI-G-PL-1150 will require 4 inch couplings.
- 5) Each Big Max and Lil Max Unit is supplied with a factory sized external flow control for each size unit available. Studies have shown that an external vented flow control device increases a grease interceptor's efficiency. Hence, the vented flow control is an important component to ensure the proper operation and efficiency of the unit. The flow control should be located as close to the interceptor as possible. Installation is accomplished using properly sized "flexible" couplings for above ground indoor installations or Extra Heavy No Hub shielded couplings for any out door installation. As an example the XL-MI-G-PL-750 and XL-MI-G-PL-1150 we require two 4 inch couplings. IMPORTANT - the flow control installation is always prior to the inlet of any Big and Lil Max interceptor.
- 6) Pipe supports should be located every 16 inches on all vertical and horizontal piping. Allow for expansion as per local and national codes.
- 7) When combining more than one Grease Interceptor or Solids Interceptor in series or parallel always provide a 1 inch fall or change in grade between units.
- 8) All local codes should be followed and at no time does MIFAB require or recommend any installation which does not meet local, state or industry code requirements or standards.

Typical Above Ground Big Max Installaion*



*Drawings for reference only. Equipment must be installed in compliance with all applicable laws, regulations and codes, including plumbing codes. Installation should be performed by a qualified plumber.

When installing multiple Big Max units in series or parallel the elevation change from the preceding unit's center line to the next unit's center line should be 1" inch. This is to allow gravity to supply the required rate of fall and control the rate of flow to allow the needed separation time.

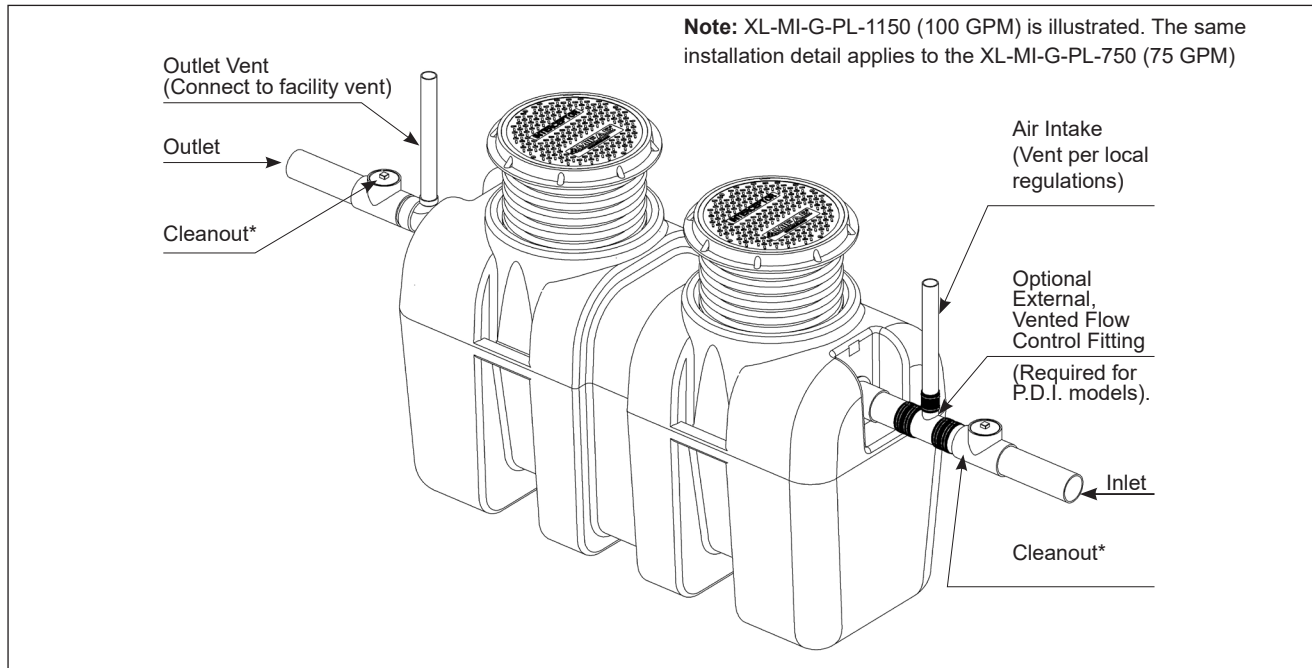


**** Remember to plan a 1 inch fall or 1 inch change of grade between units.**

Below Grade Interceptor Installation Considerations

Venting of the Big Max® interceptor is recommended by MIFAB® and required for indoor installations.

- Vent the Big Max® grease interceptor on the inlet side. It is also recommended to vent the outlet side of the Big Max® grease interceptor right after the outlet. Big Max® solids interceptors do not require the use of an external, vented flow control fitting and should be vented off the inlet and outlet connections.



INTERCEPTOR PLACEMENT

The interceptor should be visible and easily accessible for maintenance and inspection. The Big Max® can be installed in a basement, suspended from a ceiling (with a solid steel plate underneath the entire length and width of the interceptor) or in-ground in an exterior location. Ensure that adequate room is provided around the interceptor to allow easy access for a pump truck operator. Ensure that the height above the Big Max® access cover is enough to properly service the interceptor.

INLET/OUTLET PIPING

The inlet and outlet piping connections require no hub pipe couplings. (See MIFAB®'s MI-HUB Series of no hub couplings). Keep outlet piping as straight as possible. MIFAB® recommends installation of 4" (102 mm) cleanouts on both the Inlet and Outlet of 4" Big Max® Interceptors and Solids Interceptors in accordance with all applicable laws, regulations and codes. Use only "sweep" connections. Do not reduce the pipe sizing on the outlet piping. Do not install a "P" trap on the outlet connection of system. (Note: The system already has an internal gas trap).

FLOW CONTROLS

Big Max® interceptors are supplied with a stainless steel calibrated orifice plate (internal flow control). An external, vented, flow control fitting is required to be installed before the inlet of the grease interceptor to meet the P.D.I. G-101 Standard.

VENTING THE OUTLET

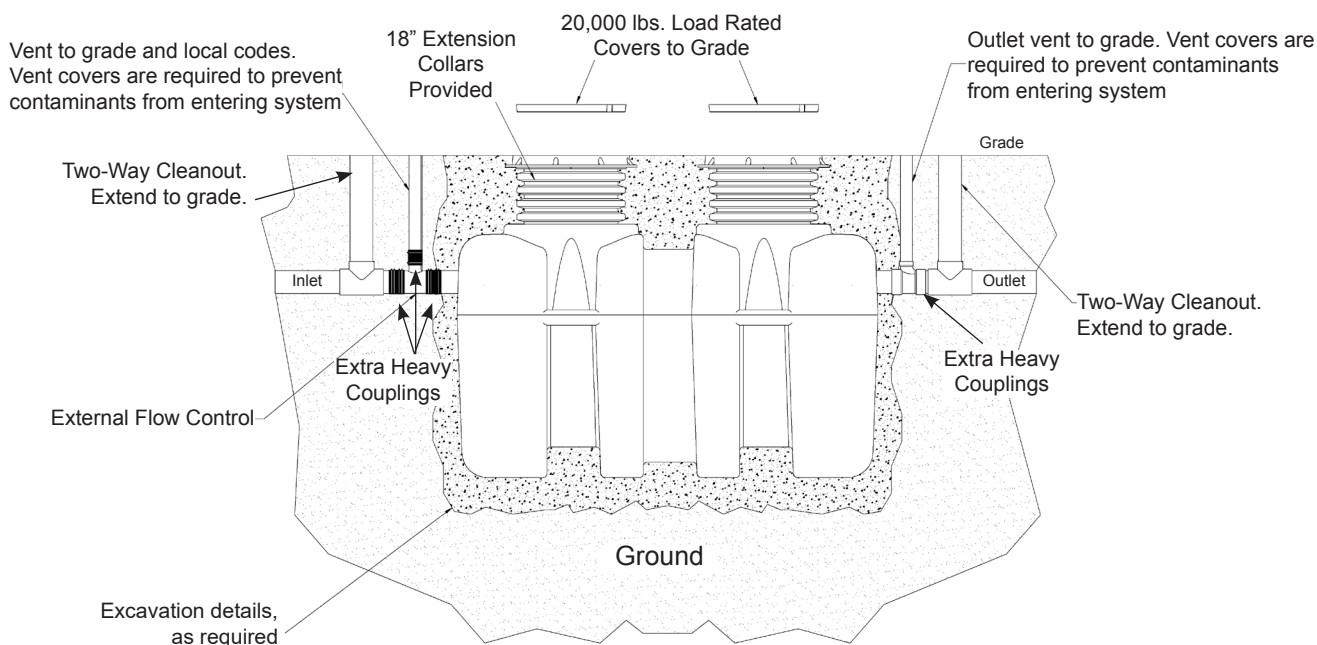
An outlet vent or approved air admittance valve of at least 1/2 the diameter of the interceptor's outlet connection must be installed as close as possible to the Big Max® outlet to prevent possible siphonage problems. The vent on the outlet piping is to be installed in accordance with all applicable laws, regulations and codes. Failure to provide a vent for the interceptor voids MIFAB® Warranty for the system.

RECOMMENDED EXCAVATION, BACKFILLING, AND FINISHING FOR BIG MAX® INTERCEPTORS

- Install the interceptor(s) as close as practical to the fixtures being served.
- The excavation must be a minimum of 12" greater on all sides of the tank.
- The depth of the excavation must be greater than 6" on the bottom of the interceptor.
- Fill the interceptor with water prior to backfilling in order to prevent the interceptor from floating.
- Fully install the double wall corrugated pipe and lid prior to backfilling.
- Concrete or finishing material requirements is to be determined by the specifying engineer.
- Encase the interceptor in well-packed 3/4" rock, or sand.
- To prevent float out; the Anchor kit is recommended for installations in high water table conditions. This is to be determined by the specifying engineer.

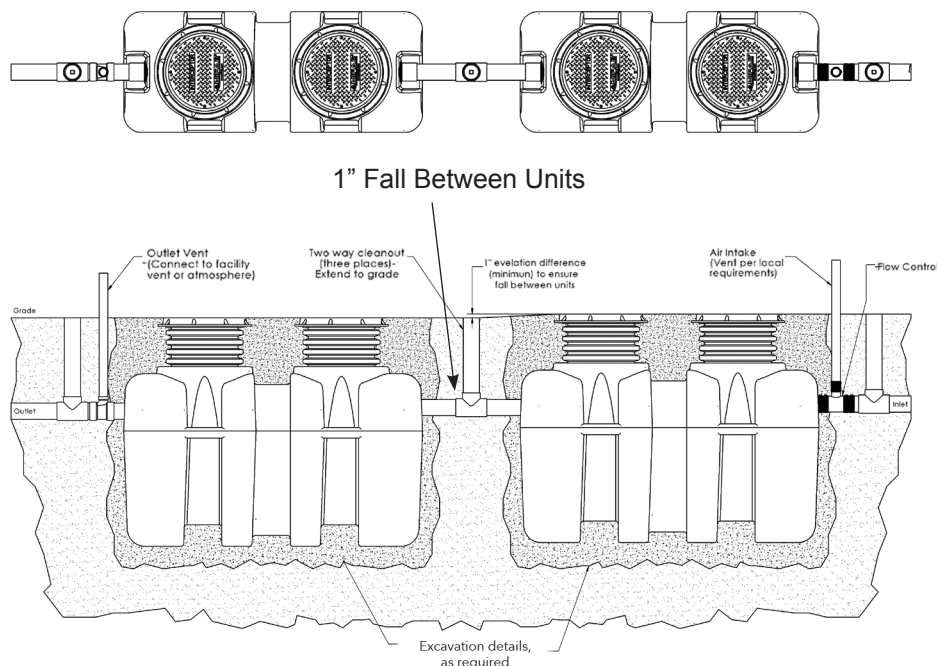
Note: Drawings are for reference only. Equipment must be installed in compliance with all applicable laws, regulations and codes, including plumbing codes. Installation should be done by a licensed plumber.

Typical Below Ground Big Max Installation*



1) Big Max Units come with 18 inches of extension collar. In cases where less than 18 inches is needed the Big Max Collar is designed to be field cut to the desired height. Measure and mark the required height on the extension collar and then cut to the needed height with a Saws All. If more than 18 inches is required additional collar length can be acquired from a local supply house. Simply purchase the required amount of 18 inch diameter ABS pipe and insert into the Big Max. The maximum recommended depth of the collars should be no more than 72".

2) Proper venting is important to unit efficacy. Always vent to grade / atmosphere and in compliance to local codes. Vent covers are required to prevent contaminants from entering system.



When combining more than one Big Max Unit in series or parallel always provide a 1 inch fall or change in grade between units.

Big Max and Lil Max Maintenance

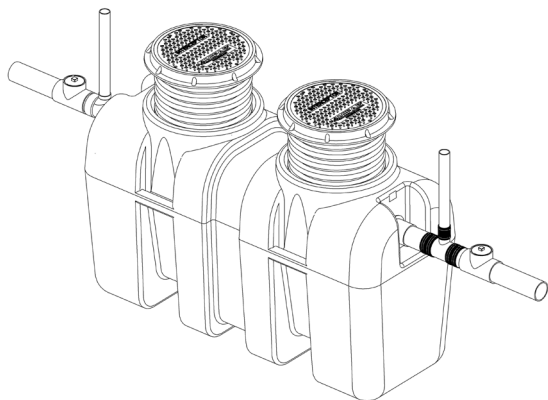
- 1) A well maintained interceptor is important to keeping efficiency high. If the interceptor is not kept to a strict cleaning schedule, it will build up with grease and eventually allow the grease to pass directly into the municipal water system. A cleaning schedule is directly affected by the volume of FOG present and introduced into the interceptor, as well as the type of menu. For example a Fried Chicken type restaurant may have higher FOG generation than a sandwich shop.
- 2) The grease interceptor should be checked after the first few days of operation. Note the buildup of grease within it. Based on the amount of grease collected, a regular cleaning schedule should be implemented to ensure that the grease buildup does not get to the point of allowing the grease laden water to pass directly through the interceptor.
- 3) Routine service including pumping is a requirement for Big Max and Lil Max units to operate properly. To determine when to pump and clean the Big and Lil Max may be done by simple measurement. The XL-MI-G-PL-750 should be pumped when the FOG thickness measures 16.5" deep from the water line. The XL-MI-G-PL-1150 should be pumped and cleaned when the FOG measure's 15" in depth from the water line. Using a Sludge Judge type tool will help determine these depths.
- 4) Measuring collected solids in any interception system is a more difficult task than with the FOG measurement. Because most solids are organic in nature there is a tendency for these solids to absorb water becoming more bulky but having very little actual mass. A simple solution is to have the Solids Interceptor pumped when the Grease Interceptor is pumped. The likelihood that they will both require service at the same time is very high. Servicing the Solids Interceptor is an integral part of maintaining system efficacy.

Following the simple steps below will help make cleaning easier:

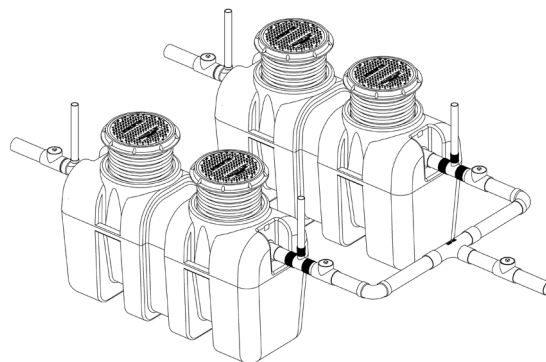
- 1) Remove the bolt(s) from the interceptor lid(s) taking care to carefully locate the bolts together and out of the way.
- 2) Remove the lid(s) (Take caution, the lid(s) can be heavy and slippery)
- 3) Lil Max Interceptors having a GPM rating of 7 to 50 GPM can be cleaned by hand. Remove grease from the interceptor and dispose of it in the proper waste container. Big Max Interceptors with a GPM rating of 75 GPM or greater normally require cleaning by a pumping service.
- 4) Check to make sure that the gasket material is still in good condition. No rips or missing pieces and that it is still in the proper position.
- 5) Reinstall the lid(s) and bolt(s) by reversing step #1.

Different Big Max Combinations

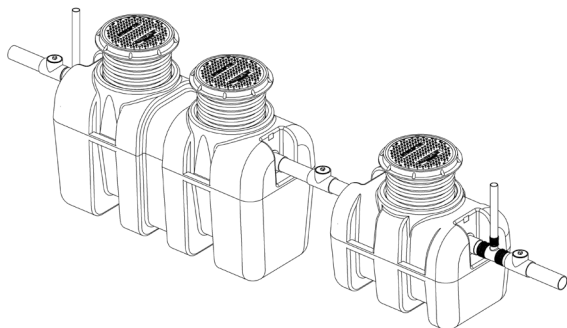
Big Max Interceptors may be used in any number of different combinations to properly service the application.



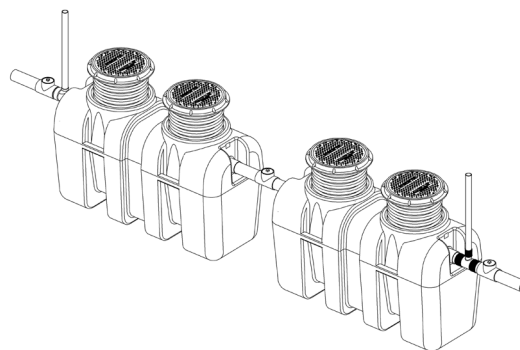
Individually



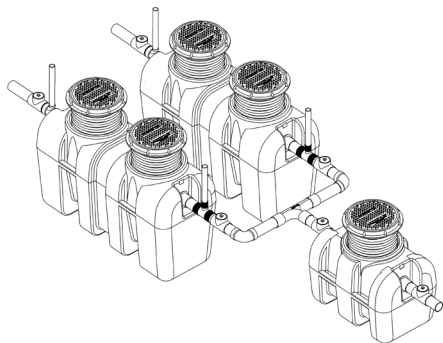
Twin units in parallel



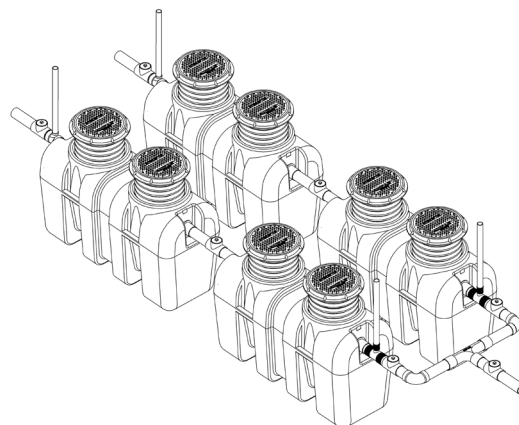
Twin units installed in-line (small Big Max unit used as Solids Interceptor)



Twin units (same size) installed in-line



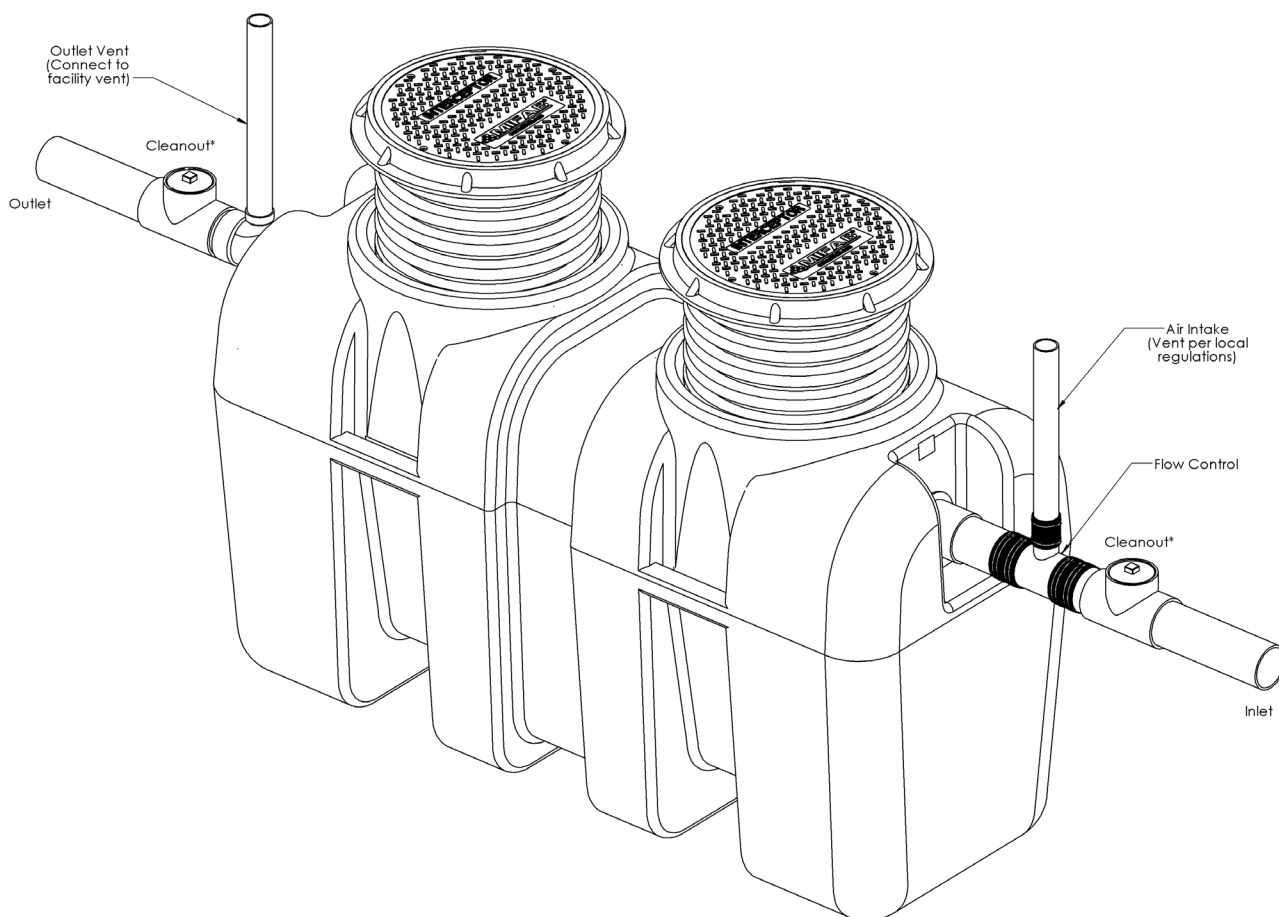
Small Unit installed as Solids Interceptor in front of twin parallel Grease Interceptors



Twin parallel Solids Interceptors installed in front of twin parallel Grease Interceptors

** Please see MIFAB Website for other combinations*

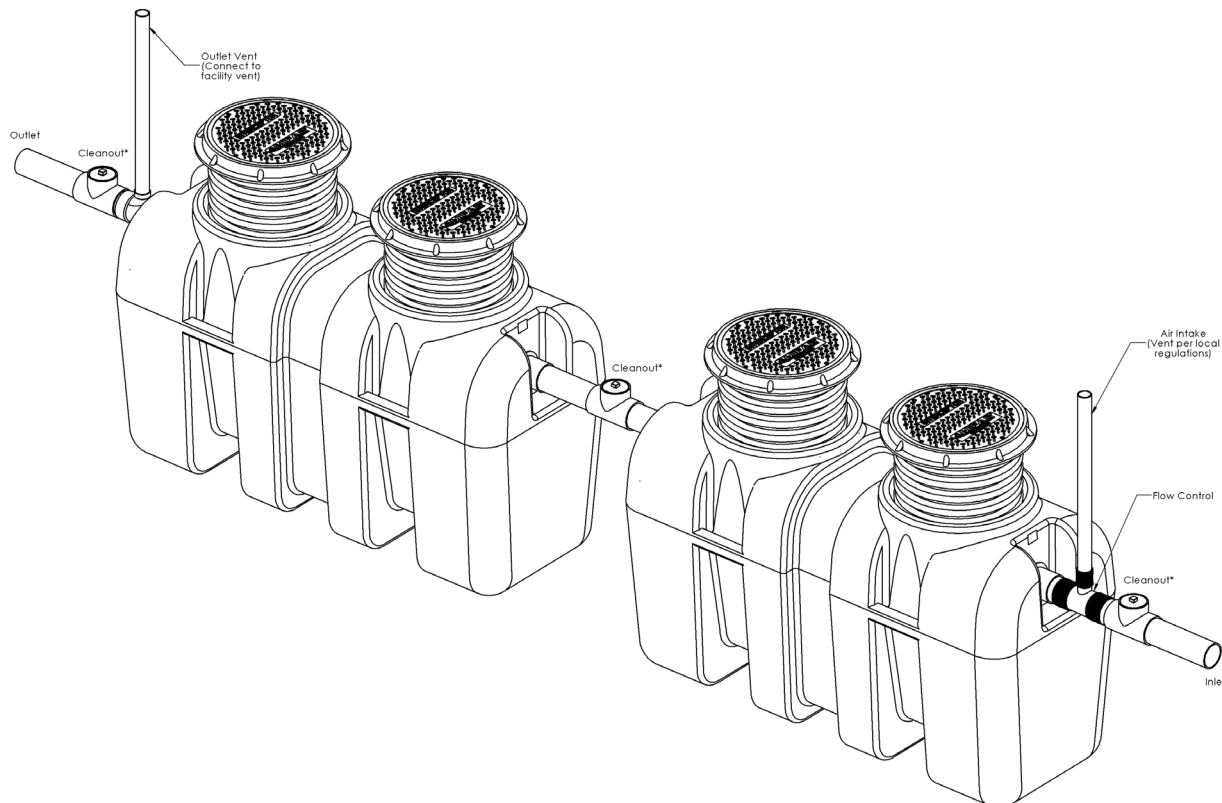
Big Max Configurations/Tools/Connections



Needed Connections		Recommended Tools	
Dual Cleanouts 4"	2	Screw Driver	Pliers
Union 4" w/ 2" outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4"	4	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2"	1	PVC Cutter	Marker
4" PVC Pipe	Per Design	PVC Cement	Shovel
2" PVC Pipe	Per Design	PVC Primer	

Note: Drawings for general installation reference only and not for a specially identified project. Big Max should be installed in Compliance with all applicable laws, regulations, and codes. Installation by a qualified Plumber or Contractor is highly recommended.

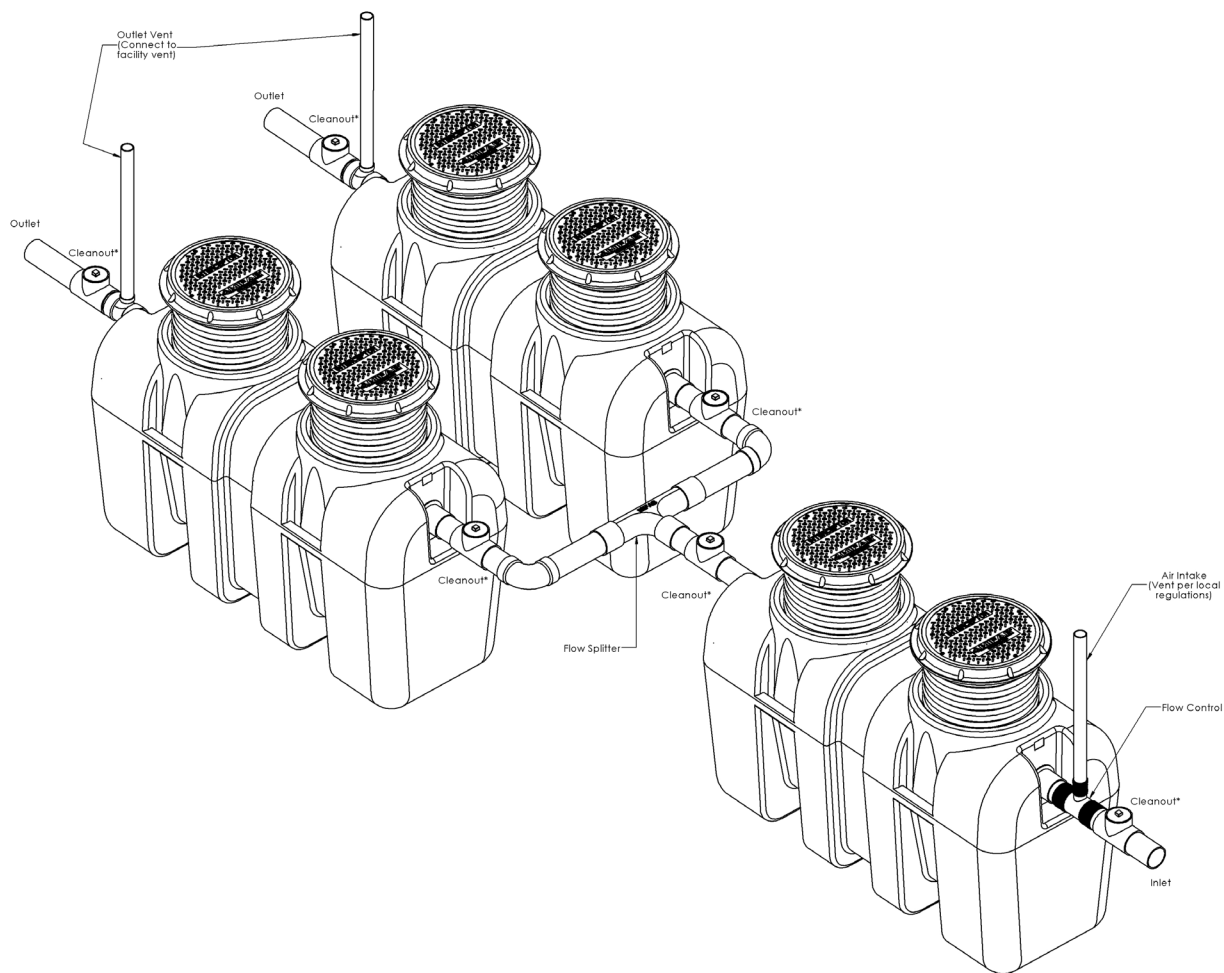
Big Max Configurations/Tools/Connections



Needed Connections		Recommended Tools	
Dual Cleanouts 4"	3	Screw Driver	Pliers
Union 4" w/ 2" outlet	1	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4"	6	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2"	1	PVC Cutter	Marker
4" PVC Pipe	Per Design	PVC Cement	Shovel
2" PVC Pipe	Per Design	PVC Primer	

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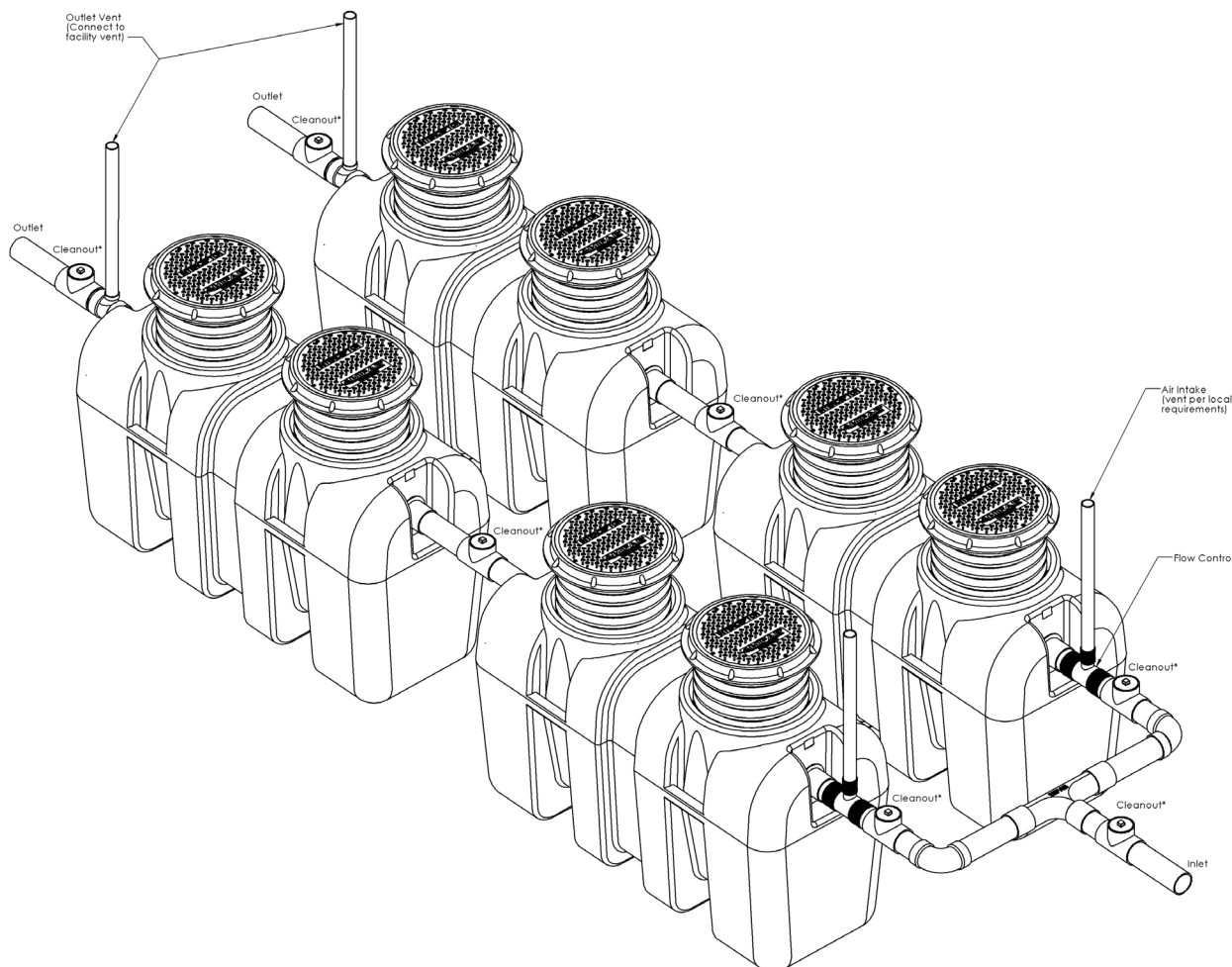
Big Max Configurations/Tools/Connections



Needed Connections		Recommended Tools	
Dual Cleanouts 4"	6	Screw Driver	Pliers
Union 4" w/ 2" outlet	2	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4"	8	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2"	1	PVC Cutter	Marker
4" PVC Pipe	Per Design	PVC Cement	Shovel
2" PVC Pipe	Per Design	PVC Primer	
Flow Splitter	1		

Note: Drawings for general installation reference only and not for a specially identified project. Big Max should be installed in Compliance with all applicable laws, regulations, and codes. Installation by a qualified Plumber or Contractor is highly recommended.

Big Max Configurations/Tools/Connections



Needed Connections		Recommended Tools	
Dual Cleanouts 4"	7	Screw Driver	Pliers
Union 4" w/ 2" outlet	2	Torque Wrench	Tape Measure
Extra Heavy No Hub Couplings 4"	10	Hand Saw	Leveling Device
Extra Heavy No Hub Couplings 2"	2	PVC Cutter	Marker
4" PVC Pipe	Per Design	PVC Cement	Shovel
2" PVC Pipe	Per Design	PVC Primer	
Flow Splitter	1		

Note: Drawings for general installation reference only and not for a specially identified project. Big Max should be installed in Compliance with all applicable laws, regulations, and codes. Installation by a qualified Plumber or Contractor is highly recommended.

Big Max and Lil Max Options and Accessories

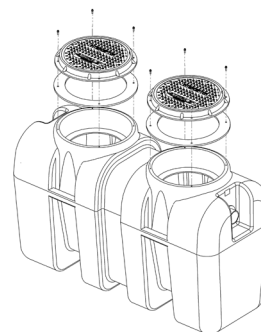
Big Max Options and Accessories

MIFAB's 32 years of experience with grease interceptors provides us with a superior knowledge of options and accessories often required with grease interceptors. We can expertly provide any of the following options: dosing pump, enzyme port, high level alarm, multiple inlet and outlet ports, sediment bucket and threaded connections.

SUFFIX	OPTIONAL VARIATIONS
-AK	High water anchor kit (set of two)
-C	Lid extension (specify "C" dimension required)
-CL	Hold down brackets for lid (when installed above ground)
-DP	Dosing pump
-EP	Enzyme port
-FL-C	Membrane clamp kit
-HLA	High level alarm
-LHSI	4" no hub inlet on left hand side
-LHSI6	6" no hub inlet on left hand side
-LHSO	4" no hub outlet on left hand side
-LHSO6	6" no hub outlet on left hand side
-RHSI	4" no hub inlet on right hand side
-RHSI6	6" no hub inlet on right hand side
-RHSO	4" no hub outlet on right hand side
-RHSO6	6" no hub outlet on right hand side
-SB	Sediment bucket
-SP	External Sampling Port
-T	Female threaded connections

Direct Connect Option - DCL

In many installations, the collar extensions are not needed and the lid can be converted to fit atop the Big Max vessel using the Direct Connection option.



External Sampling Port

For jurisdictions that require the installation of an external sampling port, the MIFAB XL-MI-G-PL-SP is the answer. It is manufactured from HDPE and available with a standard AASHTO H-20 load rated cover.

Option -SP for existing construction. Inlet and Outlet are at the same height.

Option -SP-OF for New Construction. Inlet is located above the Outlet.



Specify **Option -SP**
for existing construction.



Specify **Option -SP-OF**
for new construction.

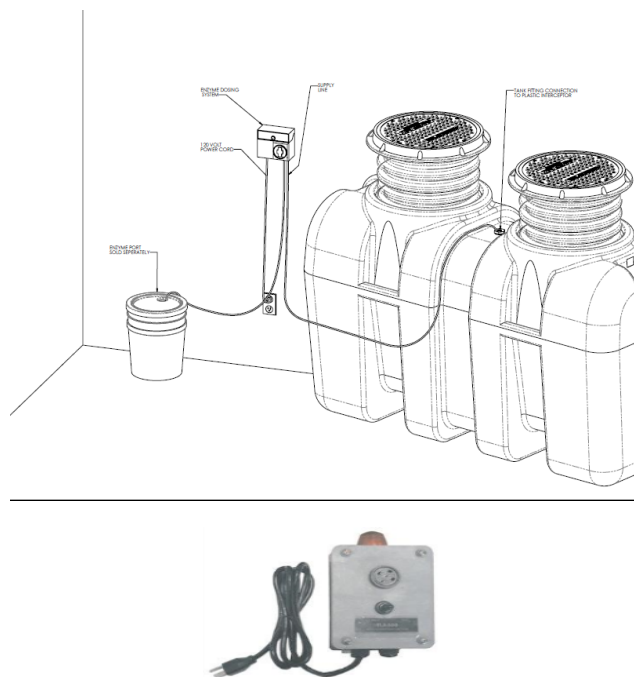
Big Max and Lil Max Options and Accessories

High Level Alarm

The purpose of the High Level Alarm is to monitor and send an audible and visual alarm when the interceptor's grease or oil capacity is approximately 75% full. (Specify suffix -HLA)

High level alarm systems can be installed on any MIFAB grease or oil interceptors be maintained when required.

The -HLA option includes an alarm control box that is weatherproof rated NEMA 4/4X, 6' 120VAC Power Cord, 360° viewable alarm light, 85 dB @ 10" solid tone alarm and a silence and test button that is to be mounted to the nearest structure. It also includes a float switch that is mounted inside the interceptor for oil or grease level detection and is connected to the alarm control box.



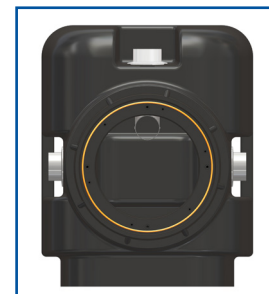
In-Ground Installation Anchor Kits

The Anchoring Kit is normally used in markets where there is a high water table and buoyancy may be a problem. The 750 comes with a set of 2 Anchors or 25" and the 1150 comes with a set of 4 Anchors at 33" - please specify when ordering.



Multiple Inlet/Outlet Options

MIFAB's interceptors are manufactured with two optional side inlets or outlets on both sides of the interceptor. This allows for straight through or side inlet/outlet pipe connections. (Specify required suffix for desired optional inlet/outlet).



Terms and Conditions

WHOLESALE DISCOUNT: Contact MIFAB® or your local representative for your applicable discount structure.

FREIGHT ALLOWANCE: Ex Works, MIFAB's Chicago, Illinois Factory or Manufacturer Representative's warehouse with full motor freight allowed on shipments of \$1,500.00 Net or more, within the continental U.S.A. or Canada, except Alaska, Hawaii and Puerto Rico. MIFAB® reserves the right to choose the carrier and route of shipment. Alaska: Ex Works, Seattle, WA. Hawaii: Freight allowed on shipments of \$1,500.00 or more only when shipped from West Coast, U.S. Puerto Rico: Ex Works, Miami, Florida. There is no allowance for United Parcel Service, Federal Express or Shipment by air service. Full motor freight is allowed on shipments of \$1,500.00 Net or more, within the continental U.S.A. and Canada for any combination of BEECO, Counterline, No Hub Coupling, Trench Drain, Access Door and Trap Seal Primer products. Shipping dates are estimates and time of delivery is not the essence of the sale of the contract. Therefore, under no circumstances will MIFAB have any responsibility on account of any delays in manufacture, transportation, or otherwise. Additional freight services such as construction site delivery, lift gate delivery service, re-consigned freight or notification charges, are not included in full freight allowance terms, and will result in additional freight charges.

QUOTATION TERMS: List Price and discount protected for 30 days from date issued by MIFAB®. Orders received within this period must be released for shipment within 30 days from date of purchase order, otherwise, prices will be those that are in effect at the time of shipment.

PAYMENT TERMS: Terms of payment are Net 30 days from the date of the invoice. All pricing in United States currency unless sold in Canada in which case Canadian dollars is the currency used. The Buyer shall pay all sales, consumers, and / or any other applicable taxes. Past due accounts will be subject to a 2% per month service charge from the date of the invoice. If any proceedings be instructed by or against Buyer under any bankruptcy or insolvency law, or if Buyer shall fail to make timely payment on this or any other order, or if, in MIFAB's judgment, Buyer's financial situation justifies such action, MIFAB® may, at its election, require payment in advance or cancel the order as to any unshipped item and require payment of its reasonable cancellation charges. If Buyer delays completion of manufacture, MIFAB® may elect to require payment according to percentage of completion. Equipment held for Buyer shall be at Buyer's risk and expense. In all cases, regardless of partial payment, title to the Products shall remain with MIFAB® until payment for the Products (including any notes given therefore) has been made in full. Should legal action be necessary to enforce payment of an unpaid invoice, the Buyer will assume full responsibility for any court costs and reasonable attorney fees. All orders subject to credit check and approval prior to shipment. Confirmed irrevocable letter of credit or cash in advance of shipment is required for accounts without an established line of credit. Minimum invoice amount is \$100.00. MIFAB reserves the right to apply a minimum order charge to equal \$100.00. MIFAB's Accounting Department must be notified of potential pricing errors within 30 days of the invoice date. Any terms and conditions stated on Buyer's orders which are inconsistent with MIFAB's quotation and Terms and Warranties shall be of no effect.

RETURNED GOODS RESTOCKING CHARGE: Standard product may be returned within a one year period only with written permission from MIFAB®. All products in catalog are not considered Standard. Standard product to be determined by MIFAB®. Returned goods are subject to a 25% restocking charge, plus cost of reconditioning, if necessary, to make material saleable. Material must be returned to MIFAB® freight prepaid only after written permission from MIFAB® to accept the returned material. Buyer must provide copy of the original invoice on which the material was charged. The original outgoing freight cost to ship the order will be deducted from the credit. Credit allowance will be in the form of merchandise credit only-not cash credit which must be used within 12 months of the date of issue. The value of a return must total \$100.00 to qualify for credit allowance. Galvanized and acid resistant epoxy coated material will be credited to value of cast iron, and chrome plated at value of nickel bronze. No credit will be allowed for auxiliary tappings, discontinued, or made to order items. Products designated non stock and / or that have been specially made (require a sign off drawing by MIFAB®) are not subject to return or cancellation.

LIMITED WARRANTY: MIFAB® warrants each product against defects in material and workmanship for a period of one year from the date of original shipment. In the event of such defects within the warranty period, MIFAB® will, at its option, replace or recondition the product without charge. This shall constitute the exclusive remedy for breach of warranty, and MIFAB® shall not be responsible for any incidental or consequential damages, including, without limitation, damages or other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, or any other circumstances over which MIFAB® has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product.

MIFAB MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED AS PROVIDED IN THIS LIMITED WARRANTY.

ILLUSTRATIONS OR TYPICAL INSTALLATIONS: The typical installations for various products in each product section are intended to illustrate the products and their options. Under no circumstances are they to be construed as recommended installation procedures. Consult local codes and project specifications for proper installation instructions.

ALL SALES SUBJECT TO MIFAB's TERMS AND WARRANTIES.

NOTE: Prices and terms are subject to change without notice and supersede all previous quotations. The right is reserved to change or modify product design or construction without prior notice and without incurring any obligation to make similar changes and modifications to product previously or subsequently sold. Contact MIFAB® for any clarification.

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