SPECIAL PRECAUTIONS

1. HIGH TEMPERATURE KITCHEN WATER

If there is water entering the interceptor at over 150°F, a drain water tempering valve and approved backflow prevention assembly must be installed. Generally, state and local plumbing codes prohibit water above 150°F from being discharged into the sewer.

2. HYDROSTATIC SLABS (OR PRESSURE SLABS)

Interceptor must be enclosed in a water concrete vault when installed under a hydrostatic slab (slab designed to withstand upward lift- typically caused by hydrostatic pressure).

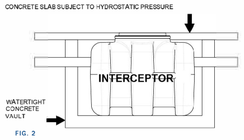


FIG. 2

3. MAXIMUM WATER LEVEL

The water level will never go beyond the level height of Inlet / Outlet connection

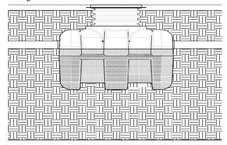


FIG. 3

4. HIGH WATER TABLE INSTALLATIONS

Interceptor and riser cannot withstand excessive water table height - see max water table height in figure 3. If possible, interceptor and riser should be installed in a water-tight concrete vault or backfill with concrete or flowable fill (pour wet concrete and flowable backfill in stages to avoid crushing the interceptor). BIG MAX models buried in high water table are required to be installed with an anchor kit. High Risk Areas: Floodplains, tidal surge and high storm-water areas.

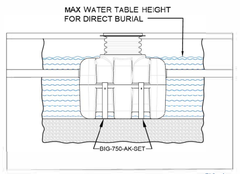


FIG. 4

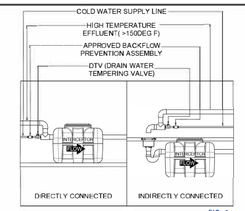


FIG. 1

INSTALLATIONS

BELOW GRADE/BACKFILL INSTALL:

1. Install the interceptor(s) as close as practical to the fixtures being served.
2. The excavation must be a minimum of 12" greater on all sides of the tank.
3. The depth of the excavation must be greater than 6" on the bottom of the interceptor.
4. Backfill while filling the interceptor with water at an equal rate until you reach the inlet/outlet. (Do not pack the backfill)
5. Fully install the double wall corrugated pipe and lid prior to backfilling.
6. Concrete or finishing material requirements is to be determined by the specifying engineer.
7. Encase the interceptor in well-packed ¾" rock, or sand. Do not compact backfill around interceptor.
8. 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.

FINISHED CONCRETE SLAB

Slab must extend 18" minimum outside the footprint of the unit. **Pedestrian traffic areas:** 4" Thick reinforced concrete slab required **Vehicular traffic areas:** Minimum 8" thick concrete slab with rebar is required.

Thickness of concrete around cover to be determined by specifying engineer. If traffic loading is required, the concrete slab dimensions shown are for guiding purposes only. Concrete to be 28 day compressive strength to 4,000 PSI. Use #4 rebar (1/2") grade 60 steel per ASTM A615; connected with tire wire. Rebar to be 2-1/2" from edge of concrete and spaced in a 12" grid with 4" spacing around access openings.

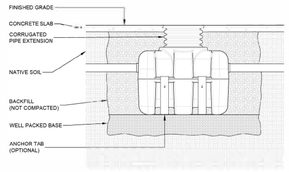


FIG. 11

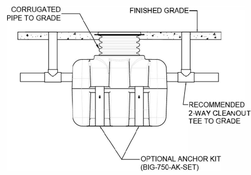


FIG. 12

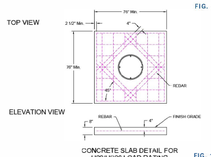
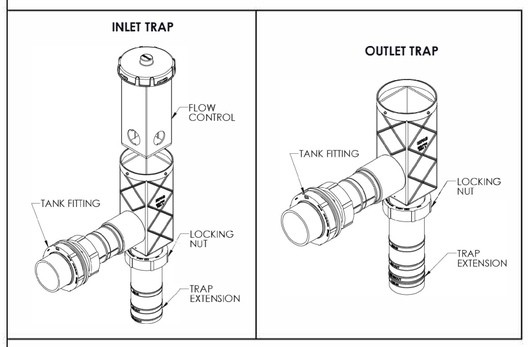
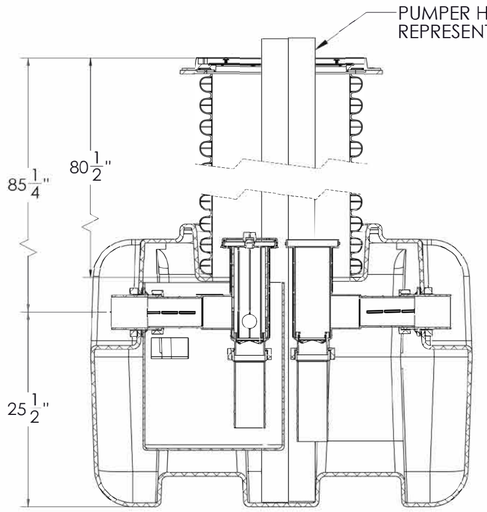


FIG. 13

CONCRETE SLAB DETAIL





MIFAB®

TITLE:
DETAIL OF BIG-750-99 WITH 80.5" EXTENSION TO SHOW PUMPER HAS ACCESS TO ENTIRE TANK DURING PUMP OUT

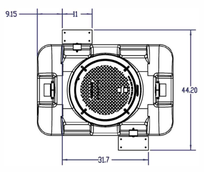
SIZE	DWG. NO.	REV
B	PUMPOUT ACCESS	

SCALE: 1:8 WEIGHT: SHEET 1 OF 1

SPECIAL PRECAUTIONS

5. ABOVE GRADE INSTALLATION SUPPORT - ANCHOR KITS

Anchor kit is recommended for installation in high water table conditions to prevent float out. Necessity to be determined by Project Engineer. Hold down force achieved by backfill weight acting on Anchor plates. Place Anchor hook over handle on interceptor. Bolt hardware through hole of anchor hook, to ensure hook does not become removed. Anchor plate may be bolted to concrete slab using provided holes.



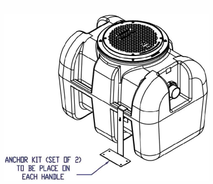


FIG. 5

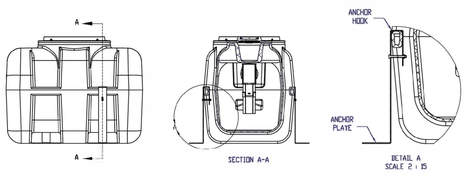


FIG. 6

INSTALLATIONS

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 and mark the extension. Then, 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. (ADS pipe part #18N12)

2. Install the Pipe Gasket between the bottom ribs. 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. Watch the installation video at www.bit.ly/ADS-gasket

3. Insert the extension collar and pipe gasket onto the opening of the BIG MAX. Press firmly until the extension is seated inside the 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 press more easily into place.

4. Remove the cover from the lid assembly to see the 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" 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.

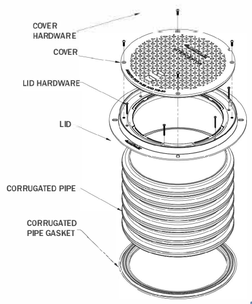


FIG. 14

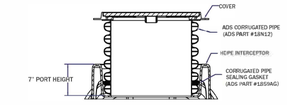
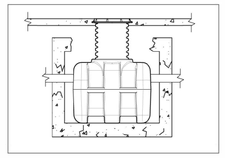
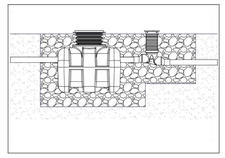
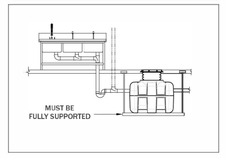


FIG. 15

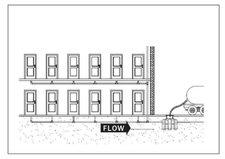
APPLICATION SPECIFIC DETAILS


INSIDE CORRODED CONCRETE UNIT

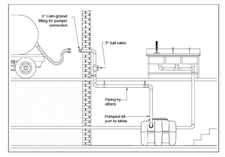

INSTALLATION WITH SAMPORT

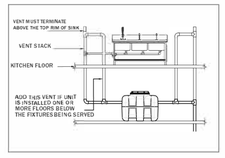


RECESSED AND SUSPENDED



SERVING AN APARTMENT COMPLEX


BASEMENT INSTALLTION WITH PUMPOUT KIT



ADDITIONAL VENTING FOR FLOOR-BELOW INSTALL

SYSTEM SPECIFICATIONS

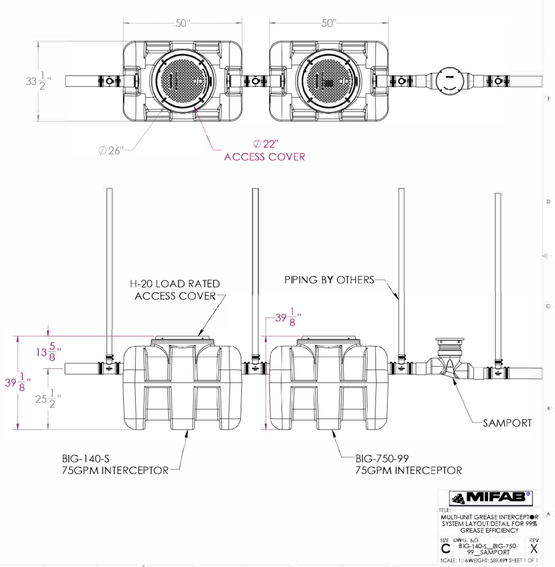
1. 4" No-hub inlet/outlet
2. Max flow rate: 50 gpm
3. Liquid Capacity: 140 gal
4. Max grease capacity: 277 lbs (Grease capacity based off 99% efficiency per Miami Derm FOG 2.0 requirement)
5. H-20 rated pickable access covers
6. Maxiumum operating temperature: 150° F
7. Meets the PH of 3-10 per DERM Miami-Dade

NOTES

1. Each grease interceptor is certified and listed by IAPMO to ASME A112.14.3, Type D P.D.I. G-101, and CSA B481.1 grease interceptor standards
2. Internal flow control ASME A112.14.3 tested interceptors and external vented flow control for P.D.I. G-101 tested units. MIFAB has both approvals.
3. 3/8" thick high density polyethylene walls
4. Unit supplied with pickable H-20 rated access covers
5. Cover placement allows full access to tank for proper maintenance
6. Vent system per local codes
7. Designed narrow footprint (33 1/2" wide) allows clearance through doorways and down stairwells
8. For buried and above ground applications
9. Locate interceptor as close as possible to grease producing fixtures
10. Unique variable flow control inlet trap design

OPTIONS

- Corrugated pipe connections
- High water anchor kit (Set of 2)
- 6" pipe connections
- High level alarm monitoring system



MIFAB®

TITLE:
MULTI-UNIT GREASE INTERCEPTOR SYSTEM LAYOUT DETAIL FOR 99% GREASE EFFICIENCY

SIZE	DWG. NO.	REV
C	BIG-140-S_BIG-750-99_SAMPORT	X

SCALE: 1:64 WEIGHT: SHEET 1 OF 1

MIAMI-DADE COUNTY

Satisfies Miami DERM 99% efficiency requirements. Product labels are permanently attached to inside and outside of unit for easy viewing.

MIFAB®

TITLE:
BIG-750-99

SIZE	DWG. NO.	REV
C	XXXXX	

SCALE: 1:11 WEIGHT: SHEET 1 OF 1

BIG-750-99

Grease Interceptor Calculation:
Per Florida Plumbing Code Section 1003.3.4, in accordance with PDI G101 Sec.8.3.1 sizing method based on pipe diameter and slope table:

Minimum Slope	Pipe Size	GPM 2 minutes drain
1/8" per ft	4"	50

Seats X Turns X Grease Product X POF = Grease Capacity

Number of Seats	Turns per Seat	Meals per Day	Grease Production per Meal (lbs)	POF (Days)	Grease capacity Needed (LBS)	Description
44	4	176	0.0455	90	721	Eat-In
		75	0.035	90	236	Take-Out
		200	0.035	90	630	Bakery
Total Grease Capacity Needed					**1587**	

IAPMO RESEARCH AND TESTING, INC.

CERTIFICATE OF LISTING

Issued To:

MIFAB, INC.

Product:

Hydromechanical Grease Interceptors

NOTE:
1. All grease traps and solid interceptors can be cleaned at any time.
2. "Area for interceptors only"
3. No cars can park on top of them.

GREASE TRAP SCOP OF WORK:
1. Connect New Fixtures and the new grease lines to BIG-750-99 at 50 GPM.
2. Waste water Sample Port model # **SAMPORT**
3. Settler BIG-750-99 with H20 rated pickable cast iron covers.
4. To comply with FOG 2.0 RER-DERM requirements.
5. Adjust pipe to meet existing elevation of main sanitary drain

FOG 2.0 RER-DERM	
Required Information	**Total**
Sample Port	**SAMPORT**
Capacity (Gallons)	140
FOG load capacity (lbs) at 99% efficiency	277
Manufacturer	MIFAB
Model #	BIG-750-99
3rd party certifier	ASME
Interceptor Monitor Alarm (model#)	HLA2
Interceptor Monitor Device (model#)	By Others
Solid Separator (model#)	**BIG-140-S**

NOTE:
Sample port shall always be accessible without having to remove merchandise and without standing water, on ground level with minimum 36 inches horizontal clearance from any wall, fixed equipment or stored materials and a minimum of 48 inches vertical clearance from any stored materials or fixed equipment.
Grease interceptor shall always be accessible to allow for maintenance and cleaning without any impediments.

BIG-750-99 meets the DERM 99% efficiency and PH of 3	Model #	Quantity	Flow (GPM)	Grease capacity Needed (lbs)
ASME A 112.14.3 Type D	BIG-750-99	1	50	277

NOTE:
MIFAB interceptors will have access for cleaning the tanks from 72" above.

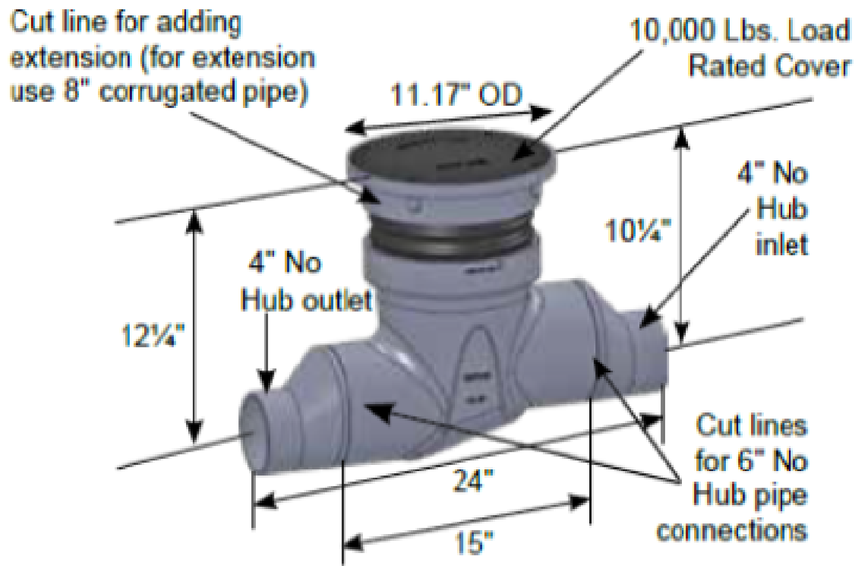
No.	Test	Clear	Seconds	Rate (GPM)	lb. Added	lb. Skimmed	lb. Retained	Efficiency	lb. Added	lb. Skimmed	lb. Retained	Efficiency		
11	1	2	112.81	50.53	10.00	0.075	9.925	99.25%	110.00	0.550	109.450	99.50%	(1) Total Skimmed:	.550 Lbs.
12	2	1	113.17	50.37	10.00	0.085	9.915	99.15%	120.00	0.635	119.365	99.47%	(2) Total Retained:	109.45 Lbs.
13	1	2	113.60	50.18	10.00	0.060	9.940	99.40%	130.00	0.695	129.305	99.47%	(3) Total Added:	110 Lbs.
14	2	1	111.19	51.26	10.00	0.070	9.930	99.30%	140.00	0.765	139.235	99.45%	Efficiency = (Line 2 - Line 1) / Line 3	
15	1	2	112.62	50.61	10.00	0.085	9.915	99.15%	150.00	0.850	149.150	99.43%	Efficiency % =	99.50%
16	2	1	110.09	51.78	10.00	0.105	9.895	98.95%	160.00	0.955	159.045	99.40%		
17	1	2	110.93	51.38	10.00	0.100	9.900	99.00%	170.00	1.055	168.945	99.38%		
18	2	1	111.37	51.18	10.00	0.105	9.895	98.95%	180.00	1.160	178.840	99.36%		
19	1	2	111.68	51.04	10.00	0.115	9.885	98.85%	190.00	1.275	188.725	99.33%	Summary and Results based on the testing to "maximum grease capacity" at 99% efficiency	
20	2	1	110.90	51.40	10.00	0.125	9.875	98.75%	200.00	1.400	198.600	99.30%		
21	1	2	111.25	51.24	10.00	0.165	9.835	98.35%	210.00	1.565	208.435	99.25%		
22	2	1	111.31	51.21	10.00	0.145	9.855	98.55%	220.00	1.710	218.290	99.22%		
23	1	2	111.13	51.29	10.00	0.145	9.855	98.55%	230.00	1.855	228.145	99.19%	Breakdown Increment No.	28
24	2	1	111.44	51.15	10.00	0.125	9.875	98.75%	240.00	1.980	238.020	99.18%		
25	1	2	111.75	51.01	10.00	0.195	9.805	98.05%	250.00	2.175	247.825	99.13%	(1) Total Skimmed:	2.745 Lbs.
26	2	1	111.54	51.10	10.00	0.140	9.860	98.60%	260.00	2.315	257.685	99.11%	(2) Total Retained:	277.255 Lbs.
27	1	2	111.94	50.92	10.00	0.190	9.810	98.10%	270.00	2.505	267.495	99.07%	(3) Total Added:	280 Lbs.
28	2	1	111.88	50.95	10.00	0.240	9.760	97.60%	280.00	2.745	277.255	99.02%	Efficiency = (Line 2 - Line 1) / Line 3	
29	1	2	112.50	50.67	10.00	0.250	9.750	97.50%	290.00	2.995	287.005	98.97%	Efficiency % =	99.02%
30	2	1	111.75	51.01	10.00	0.270	9.730	97.30%	300.00	3.265	296.735	98.91%		

BIG-750-99 meets the DERM 99% efficiency and PH of 3	Model #	Quantity	Flow (GPM)	Grease capacity Needed (lbs)
ASME A112.14.3 Type D	BIG-750-99	1	50	277

Seats X Turns X Grease Product X POF = Grease Capacity

Number of Seats	Turns per Seat	Meals per Day	Grease Production per Meal (lbs)	POF (Days)	Grease capacity Needed (LBS)	Description
44	4	176	0.0455	90	721	Eat-In
		75	0.035	90	236	Take-Out
		200	0.035	90	630	Bakery
Total Grease Capacity Needed					**1587**	

SAMPORT SPECIFICATION SHEET



FOG 2.0 RER-DERM	
Required Information	**Total**
Sample Port	**SAMPORT**
Capacity (Gallons)	140
FOG load capacity (lbs) at 99% efficiency	277
Manufacturer	MIFAB
Model #	BIG-750-99
3rd party certifier	ASME
Interceptor Monitor Alarm (model#)	HLA2
Interceptor Monitor Device (model#)	By Others
Solid Separator (model#)	**BIG-140-S**