



Gutter/Filter & Miscellaneous Operation & Maintenance Manual

Norberto Pools
Schenectady Central Park
(803) 322-8128

ATTENTION!

This Instruction Manual includes important safety information that should be read by the Engineer, Contractor, Owner, Operator, and Maintenance Personnel.

Paddock Recommends That A Copy of The Filter Operation Instructions Be Posted In The Filter Room.



Winterizing

Compak Vacuum Sand Filter

Follow the suggested procedures below:

1. Lower water level in pool below stainless steel gutter.
2. Shut down auto-fill controller and domestic water supply.
3. Once the water level is lowered, close the main drain valve, perimeter overflow valve, return to pool valve to isolate the filter from the pool and open remaining valve(s) to prevent pipes breaking if freeze occurs.
 - a. In high water table areas we recommend that some water is left in the filter to prevent lifting from hydrostatic pressure from ground water. If this is not an issue please pull water level down to the sand level, turn off pump, refer to step #3, and place a small bilge pump in the backwash trough to remove remaining water.
4. Remove drain plugs from pump box (if available) on filter tank and pump housing.
5. Drain and blow out all auxiliary lines such as chlorinators, heaters, sample lines, etc.
6. Check filter and pipes periodically through winter months for possible excess water in these areas in case of valve leakage or rain water.
7. Cover pool if possible or remove debris ASAP to prevent surface damage or excess algae.
8. Power down Mark 5, recirculation pump and VFD (if provided). Put the VFD disconnect switch in the off position. Supplemental heat will be required if the room temperature drops below (-20° F).
9. Disconnects for recirculation pump and optional VFD should be lockout / tag out to prevent accidental powering of equipment.

Helpful Hint:

It is recommended that a manual backwash at a full flow rate for an extended time of 5 to 6 minutes is done a minimum of once a year. If your system has the optional air scour feature, it is recommended that the air scour feature is not used during this suggested preventive maintenance backwash. This suggested manual extended flow backwash extends the media life and could prevent having to replace the sand in your filter.

MAIN DRAIN INSTALLATION - SIGNOFF FORM

Job Name, City, State: _____ Job No.: _____

The following information is required to validate the expressed warranty. Complete this form upon start-up of pool and return via email (subject: Main Drain Installation) or mail to the address below.
info@paddockindustries.com

PLEASE NOTE: Warranty **DOES NOT** go into effect until completed installation form has been received by Paddock Pool Equipment Company.

Date of Main Drain Installation: _____

Service Life of Cover/Grate: > 20 years -- This SOFA is UNBLOCKABLE

Select Installed P/N & Model	Qty	Location (comp., therapy, warm-up, lifestyle)	Mounting Position	Suction Outlet P/N & Model #	Maximum Flow per IAPMO R&T
<input type="checkbox"/>			Floor Use	P/N 9300046 Model # 2424PCFC - 1818ESMD (sump), 6" Connection	915 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300044 Model # 2424PCFC - 1818ESMD (sump), 8" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300006 Model # 2424PCFC - 2424ESMD (sump), 8" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300007 Model # 2424PCFC-AVRD - 2424ESMD (sump), 10" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300011 Model # 2448PCFC-AVRD - 2448ESMD (sump), 12" Connection	3500 GPM
<input type="checkbox"/>			Wall Use		3000 GPM
<input type="checkbox"/>			Floor Use	P/N 9300013 Model # 2448PCFC-AVRD - 2448ESMD (sump), (2) 12" Conn's	3500 GPM
<input type="checkbox"/>			Wall Use		3000 GPM
<input type="checkbox"/>			Floor Use	P/N 9300056 Model # 2448PCFC-AVRD - 2448ESMD (sump), 14" Connection	3500 GPM
<input type="checkbox"/>			Wall Use		3000 GPM

Signature: _____

Contractor/ Installer:

Contractor/Installer: (Print name)

Signature: _____

Owner/Owner Representative:

Owner: (Print name)

Date: _____

Date: _____

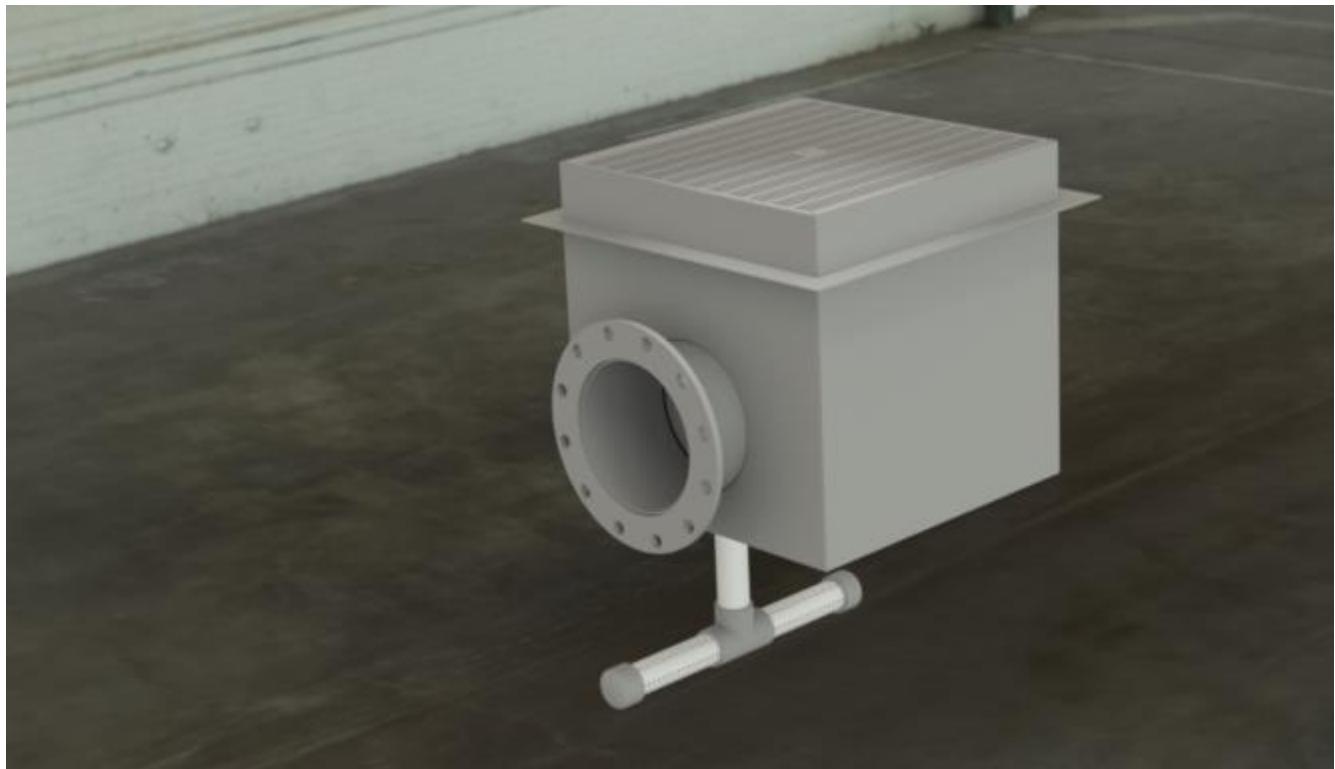
I have instructed customer proper maintenance of main drains.

I have read and understand instructions as instructed by contractor/installer as to proper operations.

THE INSTALLATION SIGNOFF FORM TO BE PERMANENTLY POSTED NEAR THE PUMP CONTROLS, & A COPY GIVEN TO THE POOL OWNER & A COPY KEPT WITH OTHER POOL RELATED DOCUMENTS



Main Drain Installation & Operation Manual



© Paddock Pool Equipment Co. | 555 Paddock Parkway, Rock Hill, SC 29730

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Table of Contents

1.0 REVISIONS.....	3
2.0 GENERAL INFORMATION	4
3.0 SERVICE LIFE OF PRODUCTS & COMPONENTS	8
4.0 INSTALLATION INSTRUCTIONS.....	10
5.0 USER MAINTENANCE	13
6.0 DRAWINGS.....	14
7.0 APPENDIX.....	15



1.0 REVISIONS

REVISION	DATE	DESCRIPTION	BY	CHECK
0	04/23/2024	Submission	VCC	
1	5/01/2024	Revised IAPMO R&T filing & content	VCC	

2.0 GENERAL INFORMATION

Introduction

For over fifty-five years, professionals of the most distinctive aquatic centers have come to rely on Paddock Pool Equipment Company to provide total project solutions. Far from just a pool equipment manufacturer, Paddock offers innovative high-performance products, and construction expertise to builders — all tailored to meet the unique demands of each individual project.

Paddock Suction Outlet Fitting Assemblies (SOFA) are certified by IAPMO R&T to comply with ANSI/APSP/ICC-16 2017 (PA 2021). These SOFAs shall not be installed in seating or backrest areas. There shall be no less than a 3-foot separation between suction fittings installed on a common line. These fittings are designed for installation with concrete, vinyl or composite lined pools.

Paddock's SOFA's have passed all required tests for body entrapment and hair entanglement. They have been approved to the maximum flow indicated on the SOFA flow rate chart.

**THIS DOCUMENT CONTAINS IMPORTANT SAFETY INSTRUCTIONS. READ, UNDERSTAND, AND FOLLOW
ALL WARNINGS AND INSTRUCTIONS.**

SAVE THESE INSTRUCTIONS!

Disclaimer: The information in this document is subject to change by Paddock Pool Equipment Company, Inc. ("Paddock") without notice. Paddock assumes no responsibility for inaccuracies or omissions and specifically disclaims any liabilities, losses or risks, personal, business or otherwise, incurred as a consequence, directly or indirectly, of the use or application of any or all of the contents of this document. For the latest or updated documentation, if available, contact Paddock at 555 Paddock Parkway, Rock Hill, SC 29730 T: (803) 324-1111 or visit us online at www.paddockpoolequipment.com.

Intended Use: Use of this document or the Paddock product(s) depicted herein are only for the purpose it/they were designed for; refer to the appropriate specifications sheet. For the latest or updated documentation, if available, contact Paddock at 555 Paddock Parkway, Rock Hill, SC 29730 t: (803) 324-1111, email to info@paddockindustries.com or visit us online at www.paddockpoolequipment.com.

EXCEPT AS EXPRESSLY STATED HEREIN, PADDOCK POOL EQUIPMENT COMPANY INC. MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE, EVEN IF THAT PURPOSE IS KNOWN OR SHOULD HAVE BEEN KNOWN TO PADDOCK.

Patents: Paddock has patents pending on the product(s) which it manufactures depicted in this document.

VGBA Compliant Sump and Cover Key Terminology



ESMD - Entrapment Safe Main Drain (Sump Unit)
AVRD - Anti-Vortex Reduction Device (Stainless Steel)
PCFC - Paddock Certified Flat Cover (Flat Cover)
SOFA – Suction Outlet Fitting Assembly

ANSI/APSP/ICC-16 2007 (PA 2021)

Paddock VGBA Compliant SOFA models available

Model #	Description
9300046	18" X 18" ESMD W/6" Connection, 6" AVRD, Relief Valve and 24" X 24" PCFC, Floor and Wall Flow Rating at 915 GPM
9300044	18" X 18" ESMD W/8" Connection, 8" AVRD, Relief Valve and 24" X 24" PCFC, Floor and Wall Flow Rating at 920 GPM
9300006	24" X 24" ESMD W/8" Connection, 8" AVRD, Relief Valve and 24" X 24" PCFC, Floor and Wall Flow Rating at 920 GPM
9300007	24 X 24 ESMD W/10" Connection, 10" AVRD, Relief Valve and 24" X 24" PCFC, Floor and Wall Flow Rating at 920 GPM
9300011	24" X 48" ESMD W/12" Connection, 12" AVRD, Relief Valve And (2) 24" X 24" PCFC, Floor Flow Rating at 3500 GPM and Wall Flow Rating at 3000 GPM
9300013	24" X 48" ESMD W/ (2)-12" Connection, (2)-12" AVRD, Relief Valve And (2) 24" X 24" PCFC, Floor Flow Rating at 3500 GPM and Wall Flow Rating at 3000 GPM
9300056	24" X 48" ESMD W/14" Connection, 14" AVRD, Relief Valve And (2) 24" X 24" PCFC, Floor Flow Rating at 3500 GPM and Wall Flow Rating at 3000 GPM

Specifications:

Paddock ANSI/APSP/ICC-16 2017 (PA 2021)

Compliant and IAPMO R&T Certified Swimming Pool Suction Outlet Fitting Assemblies

- The Swimming Pool Suction Outlet Fitting Assemblies (SOFA) shall include a velocity, vacuum entrapment, hair entanglement **ANTI-VORTEX REDUCTION DEVICE (AVRD)** which has been submitted under ANSI/APSP/ICC-16 2017 (PA 2021) for testing by IAPMO R&T and found to be in compliance with this standard.
- The SOFA both cover/grate and sump, shall be fabricated from 304L stainless steel. The outlet and outlet piping assembly shall be fabricated with stainless steel piping and designed for compliance with the testing requirements ANSI/APSP/ICC-16 2017 (PA 2021).
- The open area of the SOFA shall be equal to or exceeds the open area of the outlet pipe of the SOFA.
- All grating fasteners in the assembly shall be 316L stainless steel Pan Head Phillips fasteners. All exposed security fasteners shall be inserted or removed with #2 Phillips Screwdriver with a maximum torque of 19.8-inch pounds. All fasteners shall be engaged by a minimum of three (3) threads.
- The velocity of water entering any orifice on the cover/grate of the SOFA during normal operation shall not exceed 1.5 feet per second.
- Blockable SOFAs in existing pools with single SOFA systems shall be installed with an additional anti-entrapment device or system (listed in section 9.4 of ANSI/APSP/ICC-16 2017).
- Paddock's SOFAs must be installed as a multiple SOFA system.
- SOFAs shall be chosen so that the individual flow rate is great than the pumping system's MAX system flow rate (not including secondary circulation systems - skimmer, gutters, etc.)
- Paddock SOFAs are not designed to use any pool surface as a portion of the flow path.

Paddock Suction Outlet Fittings Flow Rates

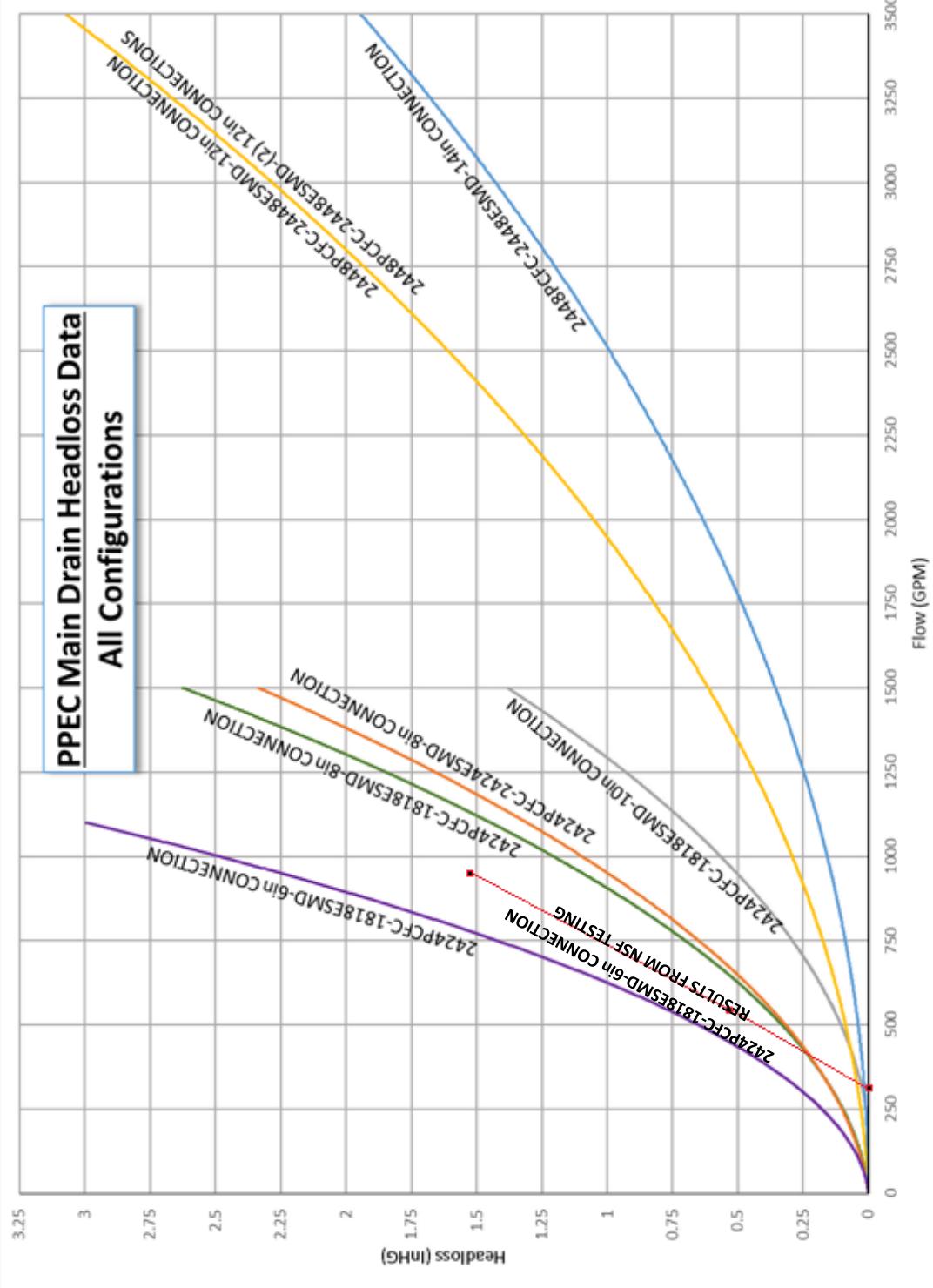
Suction Outlet P/N & Model #	Mounting Position	Total Open Area	Recommended Flow	Maximum Flow per NSF	Blockable or Unblockable
P/N 9300046 Model # 2424PCFC 1818ESMD (sump), 6" Connection	Floor or Wall Use	219.6 sq. inches	915 GPM @ 1.38 fps	915 GPM	Unblockable
P/N 9300044 Model # 2424PCFC 1818ESMD (sump), 8" Connection	Floor or Wall Use	219.6 sq. inches	920 GPM @ 1.38 fps	920 GPM	Unblockable
P/N 9300006 Model # 2424PCFC 2424ESMD (sump), 8" Connection	Floor or Wall Use	219.6 sq. inches	920 GPM @ 1.38 fps	920 GPM	Unblockable
P/N 9300007 Model # 2424PCFC-AVRD 2424ESMD (sump), 10" Connection	Floor or Wall Use	219.6 sq. inches	920 GPM @ 1.38 fps	920 GPM	Unblockable
P/N 9300011 Model # 2448PCFC-AVRD 2448ESMD (sump), 12" Connection	Floor Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3500 GPM	Unblockable
	Wall Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3000 GPM	Unblockable
P/N 9300013 Model # 2448PCFC-AVRD 2448ESMD (sump), (2) 12" Connections	Floor Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3500 GPM	Unblockable
	Wall Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3000 GPM	Unblockable
P/N 9300056 Model # 2448PCFC-AVRD 2448ESMD (sump), 14" Connection	Floor Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3500 GPM	Unblockable
	Wall Use	439.2 sq. inches	1996 GPM @ 1.5 fps	3000 GPM	Unblockable

ONLY INSTALL ON SOFA CONFIGURATIONS LISTED.

CAUTIONARY NOTES:

- Do not exceed maximum allowable flow rate as stated above.
- If pump needs to be changed, a replacement must be the same as the original pump. If a different pump is required, a Registered Design Professional must be contracted to assure original flow rate is not exceeded.

Paddock Suction Outlet Fittings Head Loss Data (from CFD Study)



HEADLOSS MEASUREMENT TAKEN AS CLOSE AS PRACTICAL TO THE SUMP CONNECTION.

3.0 SERVICE LIFE OF PRODUCTS & COMPONENTS

Paddock Main Drain Cover Lifespan

- **Component Lifespans** – The SOFA cover and sump have a lifespan greater than 20 years. The screws should be replaced every 7 years.
- **Requirement** – Inspect cover at 10 years minimum for any signs of damage and replace if needed. (Covers older than 10 years must be inspected yearly by facility operators and documented, then every year thereafter for any damage compromising unit which would necessitate replacement.)
- **Requirement** – Replace screws every 7 years at minimum and document information for records (use only the size and grade of stainless-steel screws 8/32 x 1/2" SS 316 recommended by Paddock).
- **Recommendation** – Establish a yearly checklist for facility operators to document inspection of covers and screws for damage – replace any covers or screws immediately that are compromised, damaged or broken in any way. If threaded holes become damaged contact PPEC immediately to determine the best means of repair (brittle/missing pieces, cracks, non-superficial changes to color).
- The 2424ESMD and 2448ESMD Stainless Steel Sump Box and their components are permanently mounted in the pool shell and will not require replacement. This includes all integral parts listed on ESMD Parts List Breakdown.
- Paddock Main Drain Covers do not need to be replaced unless they are compromised, damaged or broken and all above requirements are met. These are stainless steel covers and should last life of facility if properly maintained. Ultraviolet light test which establishes life expectancy is for degradation of resin products such as PVC or plastics.
- SOFA(s) should be chosen so that the individual suction system flow rate is greater than the pumping system's **MAXIMUM** system flow rate.
- The capacity of the secondary circulation systems should not be included when evaluating an individual suction system flow rating.
- To determine the flow rating for pools with multiple blockable SOFAs in one body of water without isolation valves combine all SOFAs minus the flow rate of one. If not, all SOFAs flow rates are equal subtract the largest flow rate. The flow rating for existing pools with a single blockable SOFA is the flow rating of the SOFA when also installed w/an additional device to prevent suction entrapment. The flow rating of a single blockable SOFA without an additional device is zero.
- The flow rating for pools with single or multiple unblockable SOFAs shall be the combined flow rate of al SOFAs pipe together on one body of water.
- SOFAs shall not be located on backrests or seats.
- When installing and using this equipment basic safety precautions shall always be followed including the "**Important Safety Instructions**" included in Section 4 Installation Instructions.
- Service life begins when the SOFA is installed (with or without water).

4.0 INSTALLATION INSTRUCTIONS

SAVE THESE INSTRUCTIONS!

IMPORTANT SAFETY INSTRUCTIONS READ, UNDERSTAND, AND FOLLOW ALL WARNINGS AND INSTRUCTIONS

IMPORTANT: READ AND STORE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

WARNING! Install this equipment in accordance with the instructions provided. FAILURE TO FOLLOW INSTRUCTION AND/OR USE WITH COMPONENTS NOT PROVIDED BY PADDOCK AND INTENDED TO BE USED WITH THIS PRODUCT MAY RESULT IN IMPROPER POSITIONING OR FUNCTIONING OF SUCTION OUTLET AND MAY CAUSE SEVERE PERSONAL INJURY OR DEATH.

CAUTION LABEL: REMOVE AND INSTALL ALL EXPOSED SCREWS WITH A PHILLIP #2 SCREWDRIVER. APPLY A MAXIMUM TORQUE OF 19.8 INCH POUNDS. DO NOT USE POWER TOOLS TO INSTALL FASTENERS.

NOTE: GRATE ALIGNMENT & ELEVATION IS CRUCIAL. IF NOT PROPERLY ALIGNED, HOLES WILL NOT MATCH. MARK GRATE LOCATION ON FRAME TO MATCH FOR REINSTALLATION LATER. THE GRATE MUST BE SET FLUSH WITH POOL FLOOR, IF NOT THE EDGES POSE A HAZARD FOR POOL OCCUPANTS. FIELD MODIFICATIONS NOT AUTHORIZED BY PADDOCK POOL EQUIPMENT COMPANY OR THESE INSTALLATION INSTRUCTIONS SHALL VOID THE SOFA CERTIFICATION. ANY MODIFICATION THAT INCREASES THE FLOW RATE OF THE CIRCULATION SYSTEM SHALL REQUIRE RE-EVALUATION OF THE COVER/GRADE AND SUMP TO ENSURE THAT THE FLOW RATING OF THE SUCTION OUTLET FITTING ASSEMBLY (SOFA) IS NOT EXCEEDED.

NO CONFIGURATION CHANGES TO THE STRUCTURE OR FLOW PATH OF THIS DRAIN ASSEMBLY ARE ALLOWED UNLESS THE NEW CONFIGURATION HAS BEEN CERTIFIED.

ADHESIVES AND PERMANENT ATTACHMENT METHODS ARE PROHIBITED. THE COVER IS TO REMAIN REMOVABLE.

INSPECT FOR MISSING, BROKEN OR CRACKED SUCTION FITTINGS, THESE SHALL BE REPLACED BEFORE BATHERS ARE ALLOWED TO USE THE POOL.

ANY LOOSE COVER/GRAVES AND ASSOCIATED COMPONENTS SHALL BE REATTACHED BEFORE BATHERS ARE ALLOWED TO USE THE POOL.

*** **Make** sure product is properly cleaned with Sheila Shine or similar after installation. Carbon contamination could show up as surface rust in a couple of months from dissimilar materials coming in contact with stainless steel. Example: carbon drill bits or saw blades.

Installation: RENOVATION

1. Bonding SOFAs (Electrical Inspection may be required).
 - a. Chip to find rebar in structural frame of pool, which is grounded.
 - b. Attach grounding lug to existing structural rebar. (reference National Electric Code Article 680)
 - c. Attach grounding lug and 8-gauge grounding wire to structural frame of pool.



2. Drain Assembly for Testing
 - a. The Paddock SOFA includes a blanking plate to allow for plumbing pressure testing.
 - b. The supplied hardware will allow for installation of the blanking plate and the AVR. Ensure the blank plate is removed prior to putting the pool in operation.

3. Completing installation

- a. Confirm all suction outlet fitting components and fastener receptacles are clean and free of debris or obstructions during installation of cover/grate and fasteners.
- b. Start all fasteners by hand to ensure proper thread engagement and prevent cross threading then tighten to a maximum torque of 19.8-inch pounds. **Do not use power tools to install fasteners.**
- c. Make sure that cover is flush to the existing pool finish and confirm snugness of the cover/grate to the sump/frame by a hand check after installation.
- d. Marcite voids around frame if needed.
- e. Give owner certificate of compliance and extra screw pack for cover.
- f. **Log date of installation once work is completed.**

Contact Paddock Pool Equipment Company, Customer Service for assistance.

5.0 USER MAINTENANCE

Inspection Schedule

Daily (or before each use of the facility):

- a. Inspect the cover/grate, including fasteners, for damage or tampering each operation day.
- b. Missing, broken or cracked covers/grates, including fasteners, shall be replaced before bathers are allowed to use the pool.

Important Notes

- Before removing the cover/grate(s), mark the cover/grate that matches the screw hole(s) and make sure the smooth side is facing up. This will insure placement of cover/grate(s) will line-up correctly. Improper install of the cover/grate(s) will cause the screws to not fit the sump and a hazard to the bathers.
- Any loose cover/grates and associated components shall be reattached before bathers are allowed to use the pool.
- All exposed fasteners on Paddock Main Drain Cover/Grate require a Phillip #2 Screwdriver for insertion and removal. Start all fasteners by hand to ensure proper thread engagement and prevent cross threading then tighten to a maximum torque of 19.8-inch pounds. DO NOT USE POWER TOOLS TO INSTALL FASTENERS.
 - a. Confirm all SOFA components and fastener receptacles are clean and free of debris or obstructions during installation of cover/grate and fasteners.
 - b. Make sure that cover is flush to the existing pool finish and confirm snugness of the cover/grate to the sump/frame by a hand check after installation.
- Paddock Pool Equipment Company must be contacted in the event a fastener fails to engage (stripped or cross threaded hold) the stainless sump/frame prior to allowing bathers to return to the pool.

Winterization

The **winterization procedure** is to inspect drain(s) for cracks and damages.

- Replace grate if damaged. Also, inspect screws and make sure grate(s) is secure. Replace any missing screws. If required, remove grate(s) and associated hardware to allow for a sump pump to be utilized to prevent water from freezing in the sump.
- Store removed components in a well-marked box and store in a location that allows for easy retrieval for installation prior to putting the pool back into service. See above Important Notes.



Main Drain Operation Manual

6.0 DRAWINGS

Main Drain Assembly Drawing(s) (In Drawing Folder)



Main Drain Operation Manual

7.0 APPENDIX

Appendix



MAIN DRAIN INSTALLATION - SIGNOFF FORM

Job Name, City, State: _____ Job No.: _____

The following information is required to validate the expressed warranty. Complete this form upon start-up of pool and return via email (subject: Main Drain Installation) or mail to the address below.

info@paddockindustries.com

PLEASE NOTE: Warranty **DOES NOT** go into effect until completed installation form has been received by Paddock Pool Equipment Company.

Date of Main Drain Installation: _____

Service Life of Cover/Grate: **> 20 years -- This SOFA is UNBLOCKABLE**

Select Installed P/N & Model	Qty	Location (comp., therapy, warm-up,lifestyle)	Mounting Position	Suction Outlet P/N & Model #	Maximum Flow per IAPMO R&T
<input type="checkbox"/>			Floor Use	P/N 9300046 Model # 2424PCFC - 1818ESMD (sump),6" Connection	915 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300044 Model # 2424PCFC - 1818ESMD (sump),8" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300006 Model # 2424PCFC - 2424ESMD (sump), 8" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300007 Model # 2424PCFC-AVRD - 2424ESMD (sump), 10" Connection	920 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300011 Model # 2448PCFC-AVRD - 2448ESMD (sump), 12" Connection	3500 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300013 Model # 2448PCFC-AVRD - 2448ESMD (sump), (2) 12" Conn's	3000 GPM
<input type="checkbox"/>			Wall Use		
<input type="checkbox"/>			Floor Use	P/N 9300056 Model # 2448PCFC-AVRD - 2448ESMD (sump), 14" Connection	3500 GPM
<input type="checkbox"/>			Wall Use		

Contractor/ Installer:

Signature: _____

Owner/Owner Representative:

Signature: _____

Contractor/Installer: _____

(Print name)

Owner: _____

(Print name)

Date: _____

Date: _____

I have instructed customer on proper maintenance of drains.

I have read and understand instructions as instructed by contractor/installer as to proper operations.

THE INSTALLATION SIGNOFF FORM TO BE PERMANENTLY POSTED NEAR THE PUMP CONTROLS, A COPY GIVEN TO THE POOL OWNER & A COPY KEPT WITH OTHER POOL RELATED DOCUMENTS

Powder Coated Metal Care & Maintenance

Powder coating is a type of coating that is applied as a free-flowing, dry powder. Unlike conventional liquid paint which is delivered via an evaporating solvent, powder coating is typically applied electrostatically and then cured under heat or with ultraviolet light. It's very durable and can last for many years if treated well.

1. Clean as follow:
 - a. **Clean with mild soap and fresh water (not pool water)**, after washed, rinse off completely.
 - b. **Dry the surface completely after cleaning**; when water is left on the surface it can cause staining. **Avoid using any type of abrasive cleaner, pads or brushes as this can damage the finish.**
 - c. If you need to remove a **tough stain**, try using a soft cloth dampened with white vinegar. Gently rub the stained area until the stain is removed. Be sure to rinse the area off with fresh water (not pool water) afterwards then dry it completely. If tough stain(s) are still there, use a soft cloth or non-abrasive sponge with a water-based gentle cleaner for cleaning powder-coating surfaces.
2. **Power Wash on Low Settings** is one of the best ways to clean your powder-coated items. However, power washers are **super powerful**, so be prudent and use the low setting to avoid damage. **Dry the surface completely after cleaning/rinsing**; when water is left on the surface it can cause staining.
3. **Protecting the surface of the powder-coated metal by Waxing the Exposed Areas:**
 - a. Waxing the exposed areas of your powder-coated metal will help to protect it from the elements and keep it looking shiny and new. You can use commercial car wax or beeswax furniture polish by applying the wax with a soft cloth and rub it in using circular motions. Allow the wax to dry for at least 20 minutes before buffing it off with a clean, dry cloth.
 - b. **DO NOT** put wax on **non-skid surfaces**, this will cause safety hazard on the surface.

AVOID

Harsh Chemical Cleaners, Abrasives and Harsh Weather Conditions - these things can damage the finish on your product(s).

If you have any question contact Paddock Pool Equipment Customer Service.



To Backwash Using Air Scour:

Shut off UV, Heaters, chemical controller(s), Water Level Controller, etc. 5-10 minutes prior to Backwash.

1. Reset vacuum limit switch if tripped. Close Main Drain valve #1 and Perimeter Overflow valve (#7). Draw the filter tank level down to top of sand bed, opening backwash viewport to see. Slowly close return to pool valve (#3), then shut off pump. Close Pump Suction Valve (#2).
2. Open Air Scour Control valve (#12) and turn on air scour blower. Run 3-5 minutes while monitoring sand bed to ensure water is not bypassing valves. Once the sand bed is thoroughly agitated, turn off air scour blower and close valve (#12). **If the water level does start to rise during air scouring, turn off the air scour blower immediately. Re-check valves #1, #7, and #3 for full closure. If water rises above backwash trough during air scouring, it will allow sand to enter said trough and potentially return to the pool after the backwashing cycle.**
3. Open Backwash Influent valve (#8) and open Air Relief valve (#12A). Allow water level in the tank to rise until it stops. Close Backwash Influent valve (#8) and Air Relief valve (#12A).
4. Open Backwash Suction valve (#4). Start pump and open Backwash-To-Waste valve #5 slowly to the designated flow. Draw the filter tank level down to the equalization screen. Look through backwash viewport and open Backwash Influent valve (#8) to regulate and maintain water level just below equalization screen, allowing dirty water to flow over edge of backwash trough. Backwash 3-4 minutes or until the sight glass is clear.
5. Close Backwash Influent valve #8 and turn off pump. Close Backwash Suction valve #4. Close backwash viewport window. Open Perimeter Overflow Valve(s) #7 and Main Drain Valve #1 allowing water level to rise to maximum level. Open Pump Suction Header valve #2 and turn on filter pump. Rinse filter to waste 15-20 seconds
6. Open Return to Pool (#3) to first setting or notch while slowly closing Backwash-To-Waste valve (#5). Then set Return to Pool valve (#3) to marked position for designated flow rate.
7. Run 2-3 minutes and check operation, turn on UV, heaters, controllers, etc.

When backwashing, it is important to keep the water level in the filter compartment just above the top lip of the backwash trough partition to maximize the efficiency of the backwash flow and dirt removal. This can be observed through the viewport window in the equalization screen. With the proper setting of the backwash discharge to waste valve (#5), the backwash flow can be easily maintained at the proper level in the filter tank and in the backwash trough by modulating Backwash Influent valve (#8).

Helpful hint: It is recommended that a manual backwash at the maximum flow rate allowable by backwash water receptacle capabilities for an extended time of 5-6 minutes is done a minimum of once a year. The air scour feature is not used during this suggested preventive maintenance backwash. This suggested manual extended flow backwash extends the media life & could prevent having to replace the sand in your filter.



Note: If the filter pump for the pool loses prime during the backwash procedure, follow these steps:

1. Turn the filter pump off.
2. Open manual air bleed tube located in the pump box and open valve #12A to allow any trapped air to escape.
3. Check to make sure all valves are in the proper position.
4. Allow the water in the filter tank to equalize with the pool.
5. Once the water in the filter tank has equalized with the pool, close air bleed tube in pump box and valve # 12A.
6. Turn the filter pump back on.

General:

If debris accumulates on the vacuum equalization screen, it should be removed at regular intervals. This can be accomplished during backwashing. If it is necessary to enter the filter chamber, use the ladder provided and put your weight directly over the support angles.

The Vacuum Equalization Screen (VES) is held in place with fasteners. There is a window in the VES to permit visual inspection of the condition of the media surface. One section near the access ladder is made for easy removal for inspection of the area beneath the screen. All sections may be removed for maintenance operation if required.

If pump loses prime for any reason, let tank fill with pump "off" to displace air, then start pump.



STARTING PLATFORMS

INSTALLATION & REMOVAL WITH CARE & MAINTENANCE

Paddock starting platforms are manufactured using 304L and/or 316L material and will require general maintenance over time. Please refer to and utilize Paddock's Care and Maintenance for Stainless Steel provided to you in your Operations Manual. For installation and removal, please follow the instructions listed below:

Installation

1. Remove each cover plate (**DO NOT DISCARD!**) and check anchors for debris.
2. Locate the brass compression collars, loosen the set screw on the side to prevent scratching and place one per platform leg.
3. Inspect the starting platform legs for debris and clean if required
 - a. If cleaning is required, use a green 3M® Scotch-Brite Pad to clean area going with the grain.
4. Use of a non water soluble grease to lubricate anchor is suggested for ease of placement.
 - a. Lubrication suggestions include marine bearing grease and/or white lithium grease.
5. Using two people, one on each side, lift the starting platform into position over the anchors. Slowly lower the platform continuing alignment until completely set in anchors.
6. Brass compression collars should be hand started to prevent cross threading. Once started by hand tighten with an 18" smooth faced adjustable wrench making sure **not to over tighten** and strip the brass compression collars.
7. Tighten set screw on brass compression collars to complete installation.

Removal

1. Remove all components from starting platforms including any timing and speakers.
2. Loosen the set screw on brass compression collars. Make sure to loosen set screw enough to prevent from damaging finish on starting platform legs while loosening brass compression collars.
3. Using an 18" smooth faced adjustable wrench loosens the brass compression collars. Use caution while loosening collars to prevent injury from slippage.
4. Using two people, one on each side, lift in a vertical direction, gently rocking back and forth to dislodge platforms from anchors. Continue rocking and lifting until platform is removed.
 - a. Ease of removal will vary based on frequency of the removal process.
5. Inspect the starting platform legs and anchors for debris and clean if required.
 - a. If cleaning is required, use a green 3M® Scotch-Brite Pad to clean area going with the grain.
6. **Replace the cover plates on anchors while not in use.**



Care and Maintenance

These materials require little if any maintenance. The following tips are intended as a guide to help you maintain your Paddock starting platforms.

1. Wash down the starting platforms including the tops weekly and / or as needed with fresh water to remove dirt and debris. After the final rinse using clean water, dry wipe will complete the process this will eliminate possibility of water stains. The longer the stain(s) is on the surface of stainless equipment, the higher chance of permanent discoloration or damage.
2. All starting platforms have warning labels, if yours starting platforms do not have the warning labels, contact our customer service immediately.
3. Follow general stainless steel cleaning procedures for cleaning - see the section on **Maintenance & Product Information** in the **Operation & Maintenance manual – Stainless Steel Products Care & Maintenance for cleaning**.
4. **If non-skid surface becomes dirty**, it can be cleaned using a stiff polypropylene hand brush. The use of the brush will help speed up the process by lifting the accumulated dirt from between the gritted surface.

Paddock Fast Track Starting Platforms are equipped with kick (wedge) plate.

1. For Fast Track Starting Platform Operation and Maintenance Manual (**if applicable**).



STAINLESS STEEL PRODUCTS

Care & Maintenance Guide

General Precautions:

Scratching can occur on a bright finish by cleaners that contain hard abrasives or even by "grit" in wash water. The best preventive measure is to avoid using abrasive cleaners unless absolutely necessary. When abrasives are needed first experiment on an inconspicuous area. A "soft abrasive", such as Zud liquid or Bon Ami should be tried first to see initial test results. While cleaning with products mentioned be sure to observe direction of grain in material. Following grain while cleaning material will limit scratching. Many cleaners contain corrosive ingredients which require thorough cleaning and rinsing with clean water and is recommended for all cleaning procedures.

General Maintenance Procedures:

Stainless steel equipment will need to be cleaned on a regular basis for aesthetic considerations and to preserve corrosion resistance against evaporated chloramines or spotting. Stainless steel is protected from corrosion by a thin layer of chromium oxide. Oxygen from the atmosphere combines with chromium in stainless steel to form this passive chromium oxide film that helps protect against corrosion. Any contamination of surface by dirt, chlorides, greases, or other material will hinder this passivation process, and traps corrosive agents thus reducing corrosion protection. Chlorine and bromine used for sanitation are highly caustic chemicals to stainless steel, while heat and humidity enhance corrosiveness of these chemicals especially in natatoriums. Thus, some form of routine maintenance is necessary to preserve appearance and integrity of surface. Stainless steel is easily cleaned by many different methods. They actually thrive with frequent cleaning, and unlike some other materials it is impossible to "wear out" stainless steel by excessive cleaning. Your goal should be a robust cleaning and maintenance program to keep stainless steels protective chromium oxide layer intact which helps prevent corrosion.

To increase longevity of your stainless steel equipment, follow these steps:

1. Establish a proper grounding of all equipment being installed at aquatic facilities. Make it a point that dissimilar metals are not in direct contact of one another. Taking this precaution will minimize risk of forming an electrolytic cell between equipment, pool water and atmosphere at facility.



2. Once all equipment has been installed at facility, apply a coat of paste wax (automotive or marine wax) and buff equipment with soft cloth to assist in extended corrosion protection. Redo this process with waxing after using cleaners or at six-month intervals on stainless equipment. This wax will form a protective barrier between stainless steel and environmental elements left behind by evaporating pool water on equipment.
3. As stated previously rinse all equipment frequently with fresh water and dry with soft clean cloth. This should wash away any accumulated halogen salts such as chlorine or bromine. **DO NOT** use pool water, salt water, high PH or iron in water to clean your stainless steel products.
4. Pool equipment should be inspected regularly. Look for any tarnish, discoloration, stubborn stains, grease build up, blemishes or water spotting of stainless equipment. If apparent, then take appropriate steps to remove corrosive elements with a non-chlorinated stainless steel cleaner and water rinse.

NEVER use steel wool, sandpaper, hydrochloric acid, muriatic acid, mineral acids or harsh abrasive cleaners on stainless steel equipment. Steel wool will add to corrosion due to dissimilar metal materials coming into contact with equipment. Discoloration should be removed at first sign with a cleaner or polisher recommended for stainless steel equipment.

Note: Avoid adding chlorine in close proximity to stainless steel equipment. Dilute chlorine in 5-gallon bucket and pour as far from stainless equipment as possible. Also avoid cleaning masonry and pool decks with strong acid solutions that come in contact with stainless steel products. Do not pour straight muriac acid directly into pool for PH control. This method increases corrosion to stainless steel around application area.

Effective Cleaning Methods:

There are many choices available for cleaning stainless steel in market that consumers may utilize. Depending upon cleaning needed and degree of contamination, some products may be better than others. Although some products are listed as stainless steel cleaners, they may scratch surface and may contain chloride bleach which will discolor, tarnish or dull finish if not removed completely.

There are many industry associations that have listed available product that can be utilized in cleaning stainless steel products. Use of these proprietary names is intended only to indicate a type of product available and does not constitute an endorsement. Omission of any proprietary product does not imply inadequacy. Review each product being utilized in strict accordance with instructions on packaging. No one product is best for every form of cleaning, since there are many levels of corrosion.



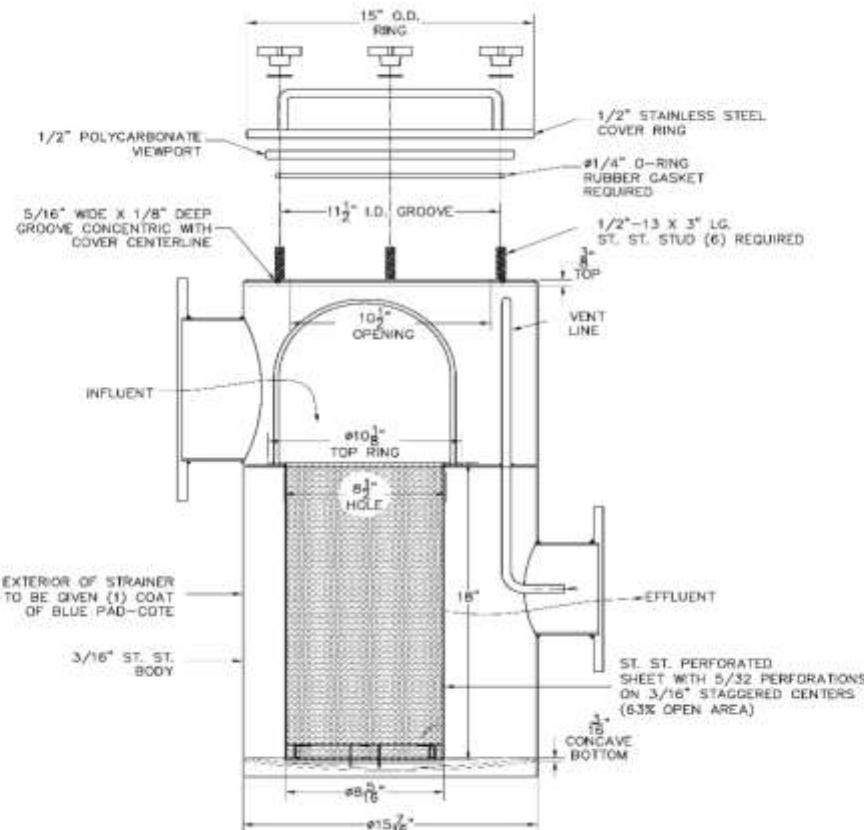
The simplest, safest and least costly method that will adequately do the job is always best. The longer a stain is on surface of stainless equipment, the higher chance of permanent discoloration or damage. Stainless steel surfaces thrive with frequent cleaning because there is no surface coating to wear off material. A soft cloth and clean warm water should always be first choice for mild stains and loose dirt and soils. A final rinse with clean water and a dry wipe will complete process and eliminate possibility of water stains. **DO NOT** use pool water, salt water, and water with high PH or iron content to clean your stainless steel products.

Dealing with stubborn stains, discolored or tarnished stainless steel product try and utilize recommended merchandise per various manufacturers. Some recommended product: CitiSurf product such as 77 plus or 2310, Sta-clean, Zud liquid, Samae, Bon Ami, Allchem concentrated cleaner, Twinkle, 3M stainless steel cleaner and polish, Sheila Shine, Perfect Sink, Liquid Nu Steel, Lumin cleaner, Gade FFF or Grade F Italian pumice, Highlite and many others.

Surface restoration may be needed when stainless steel is scratched or pitted due to heavy corrosion. This can be accomplished by mechanically polishing as opposed to chemical cleaning above. A professional familiar with process should be contacted to handle.

Paddock Industries Pump Strainer Installation, Start-Up, Shut-Down

The Pump Strainer is a high-quality stainless-steel vessel incorporating a perforated stainless-steel basket designed to strain hair, lint, and other large particles from the fluid stream that might clog or damage the pump's impeller. A typical design is shown in the cross-sectional view below.



Installation

Support the strainer, pump, and plumbing independently using standard concrete pedestals to mount the pump and standard pipe supports for the plumbing. Typically, the strainer sits on the floor, but a pedestal can be constructed for it, if necessary. Attach the strainer flange to the pump flange using standard flange gaskets and hardware. Likewise, attach the influent plumbing to the strainer. Install an isolation valve in the influent line upstream of the strainer, and another in the effluent line downstream of the pump.

Start-Up

Close both isolation valves, remove the strainer lid, and fill the strainer and pump volute with water through the lid opening if pump is installed above water level. In a flooded-suction situation, crack open the influent isolation valve to allow the strainer and volute to fill with water, then close influent isolation valve. Re-install the strainer lid, making sure it is secured and sealed tightly. Open the influent isolation valve and start the pump. After about five seconds, slowly open the effluent isolation valve, taking 5-10 seconds to open the valve. This slow opening of the effluent isolation valve after pump is started eliminates the possibility of creating a water hammer (also known as hydraulic shock).

555 Paddock Parkway, Rock Hill, SC 29730

Telephone: 803 324 1111 * Facsimile: 803 324 1116 * Email: info@paddockindustries.com
www.paddockindustries.com



Shut-Down....

Gradually close the effluent isolation valve, taking 5-10 seconds, before turning pump off. This slow closing of the effluent isolation valve prior to turning the pump off prevents water hammer. This “dead-heading” of the pump for a few seconds will in no way damage it. If the strainer is to be opened at this time for cleaning, close the influent isolation valve before removing the lid. Upon replacement of a clean basket, re-install the lid and secure it tightly, and open the influent isolation valve. Do not open the effluent isolation valve until after the pump is started so as to prevent water hammer.

A Word About Water Hammer....

Water hammer is a destructive pressure spike caused by the sudden deceleration of water flow. The pressure spike potential can be easily calculated by multiplying the water velocity at normal flow in feet per second by 65. This gives the pressure spike potential in pounds per square inch. For example, water flowing at 6 ft/s will cause a 390 psi water hammer if the water flow is suddenly stopped. This can occur upon starting a pump with air in the plumbing every time the water flow encounters an elbow or tee, or upon closing a valve suddenly, or even upon simply turning off a pump without first slowing the water flow down. **Failure to prevent water hammer constitutes abuse and will render any warranties void.**

SAFETY INFORMATION

This bulletin includes important safety information that should be read by owners, managers, service personnel, and anyone in charge of the pool or pool area. Also, we suggest a copy be posted for quick reference.

1. Only personnel trained and familiar with the proper use of pool chemicals should handle acid, liquid chlorine or chlorine compounds. Chemicals should never be used when swimmers are in the pool. Acid and liquid chlorine should always be stored, carried, or handled in plastic containers.
2. If grating is a part of the perimeter system, it should be kept firmly clamped down and in good repair at all times. When a section of grating become loose or damaged that particular area must be immediately covered and a replacement of grating ordered. Under no circumstances should swimmers be allowed to use any portion of the perimeter that contains loose or damaged grating. Perimeter grating is not intended for foot traffic. Swimmers should be advised not to walk, stand, or jump on perimeter grates.
3. Ladders and grab rails are intended for the use of one swimmer at a time; they are not designed for handstands or other gymnastic stunts and they should not be used for this purpose. Ladder treads should be inspected regularly. If a tread becomes loose or damaged, the ladder should be taken out of service until repairs are made.
4. Lifeguard Chairs are intended for the individual use of trained "on duty" lifeguards, one (1) guard per chair. Lifeguard chairs are not to be used by swimmers, spectators, or by more than one (1) person at a time. There should be no diving from portable lifeguard chairs. Umbrellas should be closed or removed from portable lifeguard chairs during windy conditions. All frame connections are to be checked for tightness. The seat is bolted to the frame assembly. It is important to advise all users to periodically check to determine that the studs are firmly fastened to the seat and the nuts are tight. If they become loose or detached, it could result in serious injury. On outdoor installations or usage, it is suggested that the seat be removed and stored inside during the winter.
5. Starting Platforms should only be used by trained competitive swimmers or under the direct supervision of an instructor. Swimmers should execute shallow racing dives only. Impact with the pool bottom can cause severe injury. Starting platforms have warning labels and inform the purchaser of the need to remove the platforms during non usage. If your starting platforms do not have warning labels, please contact the manufacturer immediately.
6. Bulkheads are designed and built for strength and safety. Any grating should be kept fully secured to avoid injury. **NO swimming under bulkhead. Never use bulkhead as a support or staging for equipment.** The bulkhead includes a compressor; please refer to owner's manual provided with the unit.

For questions concerning the usage of our equipment, please contact Paddock Pool Equipment Co., customer service.



Gutter Depth Marker/ Target - Vinyl Decal Installation

Your graphics will come in three layers, a backing paper layer on the bottom to keep the adhesive from being exposed, the vinyl layer (this is your graphic), and a masking layer on top. The masking layer makes the vinyl easier to handle and keeps everything pre-spaced for you to apply your graphic as one piece.

You will need:

- Clean rags
- Denatured alcohol
- Microfiber towel
- Vinyl applicator

It is best to do this process when the pool is not in use.

1. Lower Water Level
 - a. Water level should be lowered at least an inch below the bottom level of the decal.
 - b. Make sure to turn off any auto-fill devices to keep water from rising while applying decals.
2. Clean Gutter Thoroughly
 - a. Wipe away any moisture.
 - b. Clean the entire area where the decals will be applied using denatured alcohol and a clean rag.
 - c. Wipe dry with a clean microfiber cloth.
3. Apply Decal
 - a. Peel the backing from the decal making sure they stay attached to the protective paper on the front.
 - b. Take care to make sure the decal is level and spaced correctly.
 - c. Apply the decal sticking the top part first to the cleaned gutter surface and using your hand or applicator, slowly starting from the top, slide down the decal gently pressing it onto the gutter until the decal is fully applied.
 - d. Using the applicator, firmly press the decal from the center out to push any air bubbles to the edge.
 - e. Carefully peel the protective paper off making sure the decal sticks to the gutter (If decal starts to come off with the protective paper, stop, put the protective paper back as far as needed, and use applicator to press decal to gutter surface).
4. Cure
 - a. Wait at least 12 hours before introducing water to decals.
5. You can use a SEALITPEN to seal the edges of the graphic for longer durability. Follow directions on the pen.

If you have any question(s) contact customer service see below for our information.



Designing the future of stainless steel perimeters

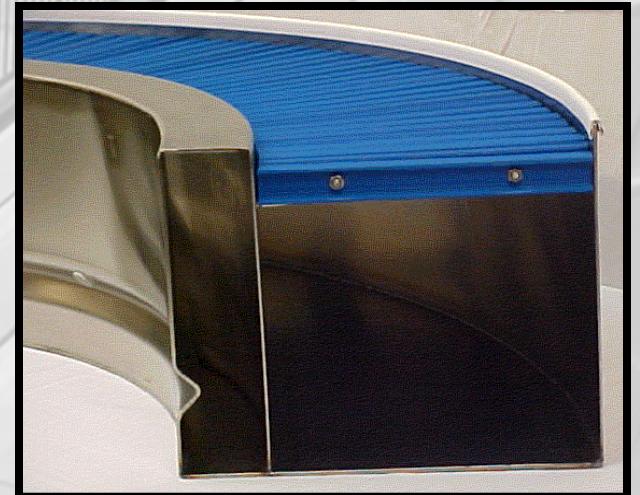
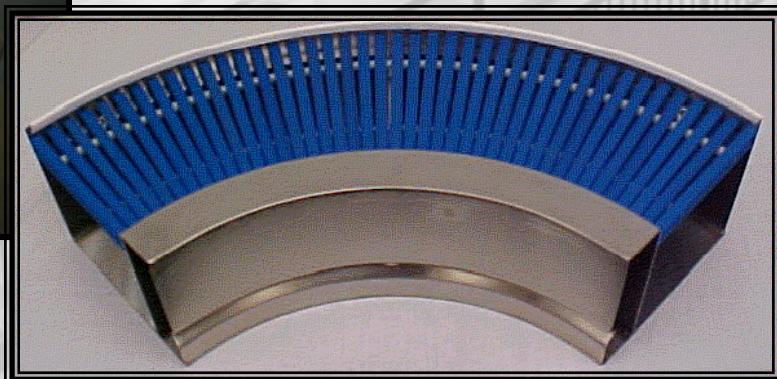


PADDOCK
POOL EQUIPMENT COMPANY

The best stainless steel perimeter just got better!

The Radius Section

- Increased Channel Efficiency and Flow
 - Safer Configuration for the User
 - Corner Maintenance Eliminated
 - Aesthetic Free Form Design



GRATING

High Density Polyethylene (HDPE)

ADJUSTMENTS & CHARACTERISTICS with CARE & CLEANING MAINTENANCE

HDPE Grating Adjustments & Characteristics

HPDE grating is highly durable and will give years of good service in the pool environment. The grating is held in place by either a front capture strip and a rear HDPE camlock or by a HDPE camlock front and back. A 1/4" x 1 1/2" x 3/16" allen head screw is used to tighten the camlock.

- Grating can be gapped up to 3/8" (three-eighths of inch), however at normal operating temperatures, the gap for indoor pool is 1/8" (one-eighth of inch) and outdoor pool is 1/4" (one-fourth of inch). An outdoor pool grating will contract and expand with sizeable temperature swings. Larger gaps can be expected in cold temperatures. At initial startup grating may need to be adjusted when pool reaches operating temperature.
- Grating fasteners needs to be inspected at the start of the swim season and periodically throughout the year. Adjust as needed, by hand loosening cam-locks with a 3/16" allen wrench, re-adjust gaps as listed above and re-tighten.

Care and Maintenance

- Paddock's HDPE grating is marine-grade polymer sheeting which is resistant to most chemicals and requires little maintenance to keep it looking new.
- Keep harsh solvents, acids, wood stains and wood preservatives away from Paddock HDPE finish. They may cause permanent staining and damage.
- Staining from rust is very difficult to remove so keep uncoated non stainless metals away from HDPE material.
- Shoes with marking soles can leave scuff marks that can be difficult to remove

Cleaning

- For daily cleaning of everyday dirt and stains, use a non-abrasive cleaner such as "Zud" or "Soft Scrub" and a nylon brush to scrub lightly. Excessively hard scrubbing can mar the finish.
- Hard to remove stains will usually go away if you soak the area with bleach. **When using this method, you must remove the grating from the stainless steel so it will not cause corrosion.** Do not use 100% granular or tablet chlorine as a bleach alternate.
- Pressure washing can mar the finish.
- Petroleum based stains can be difficult to remove, soak the area with WD-40®. Then use acetone or toluene with a white nylon scrub pad (color-based pads can transfer dye color to finish when combined with acetone)
- Do not use MEK, turpentine or naphtha solvent.
- Do not use polishes such as Armor-All ® to non-skid areas, this will reduce the slip coefficient and cause a fall/slip hazard.



Starting Platforms Non-skid

Non-Skid Change &/or Replace Material

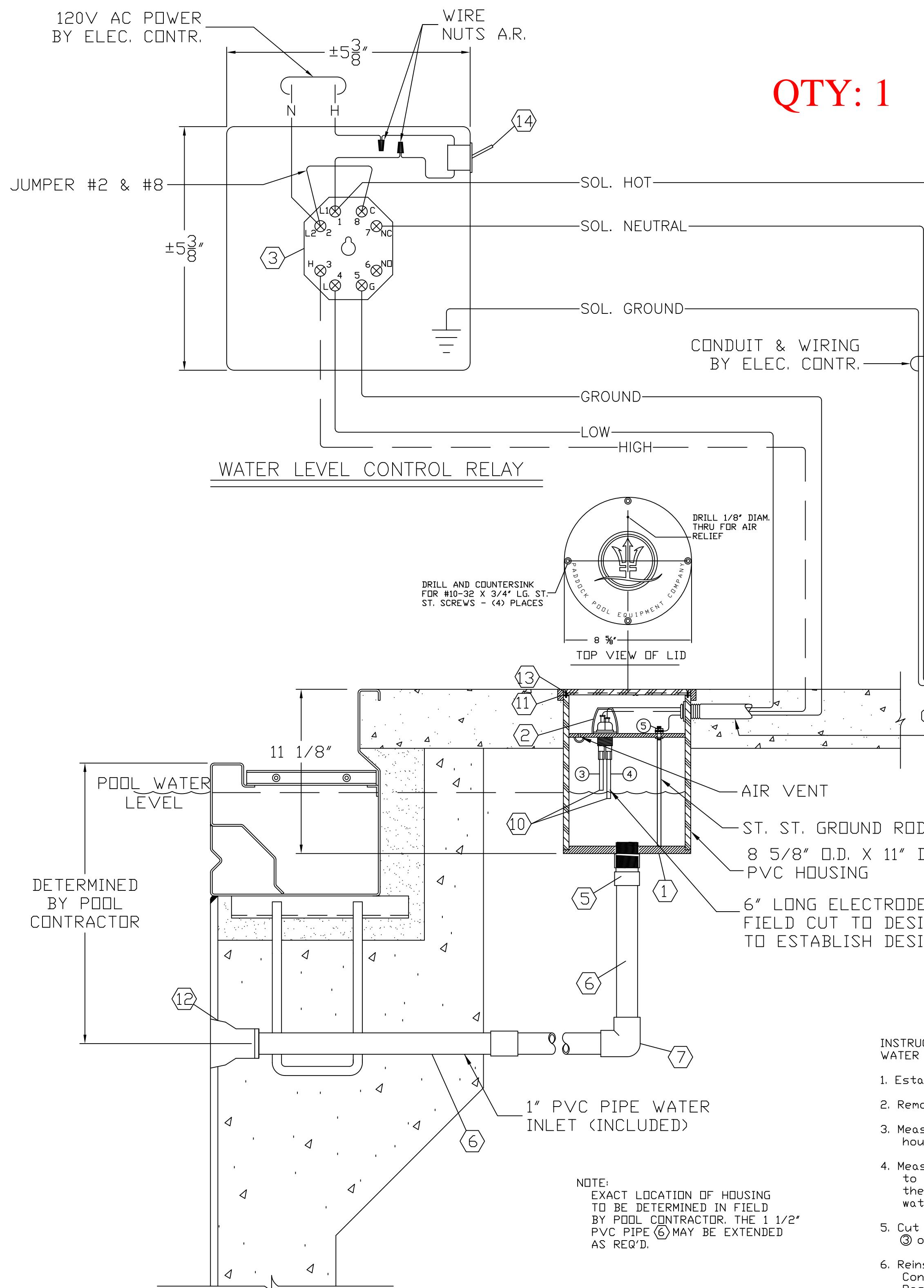
Removal:

1. Heat (hair dryer) can be applied to help loosen material.
2. Pick edge of vinyl away until you can get a grip.
3. Pull back vinyl against itself to remove. This will help keep adhesive from being left behind.
4. If any glue/adhesive is left, remove with Acetone using a lint-free paper towel. **Do not** get on the decals or hand grips. Clean thoroughly, then wipe with alcohol, we use Isopropyl 70/30. **DO NOT USE A METAL SCRAPER TO REMOVE ADHESIVE!**

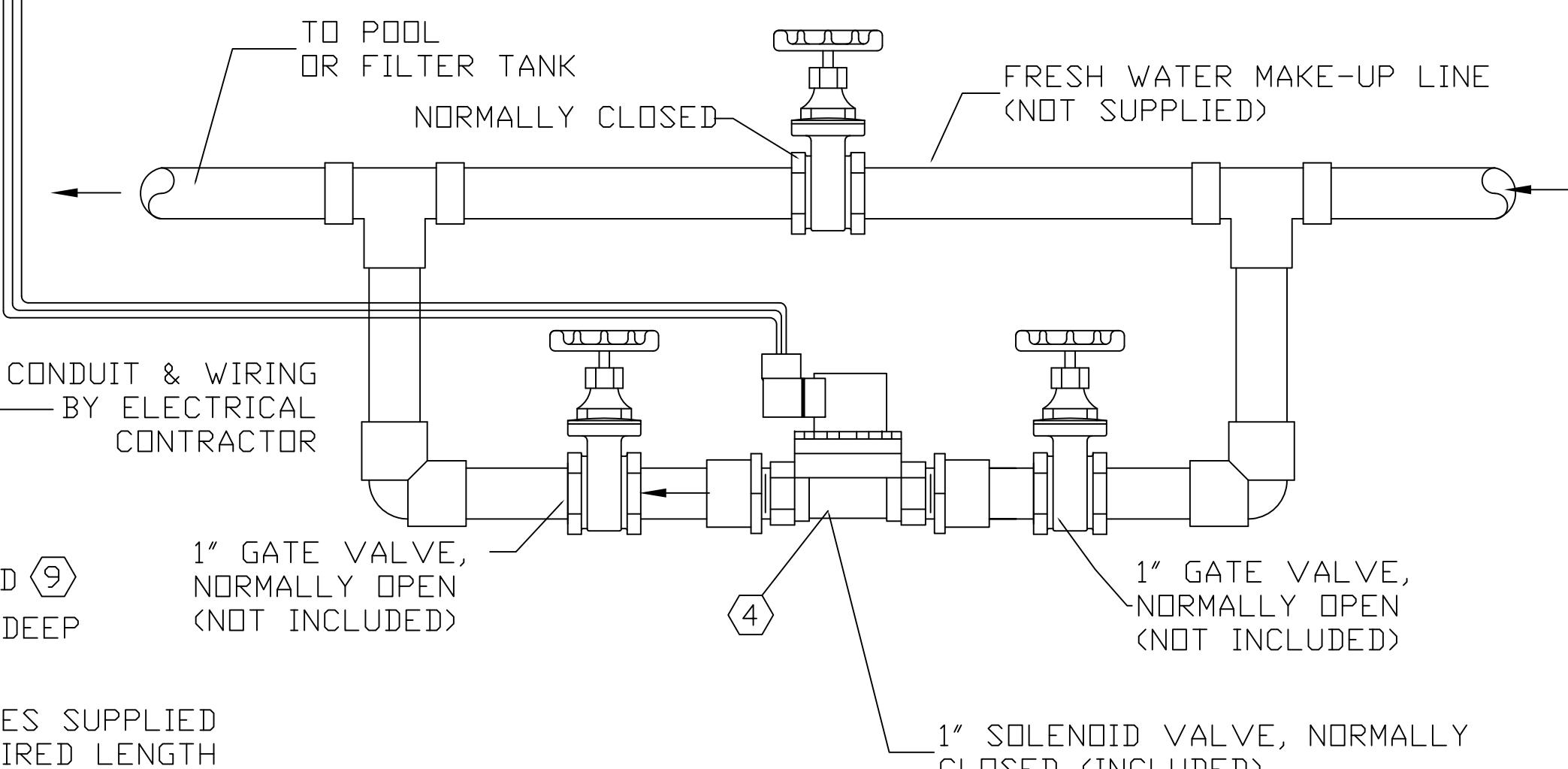
Installation:

1. Lay Vinyl on top, positioning to where it is to be installed.
2. Tape vinyl through center to the platform. Creating a "hinge" in center where the tape is located.
3. Lift up one side of the hinge, remove liner all the way back to tape and then cut liner off.
4. Lay vinyl back down, keeping tight to not create wrinkles. Using a decal squeegee work from middle out, all the way down with firm, steady, even pressure. If a small bubble appears use pin (like a needle) to bleed out air.
5. Remove tape, repeat for second side of hinge.
6. Utilize an edge sealer such a Sealitpen <http://www.sealitpen.com/> or 3M 3950 edge sealer to complete seal. This is not required but will prolong life.
7. Let material set for a day before any use.

If you have questions or need assistance, contact our Customer Service.



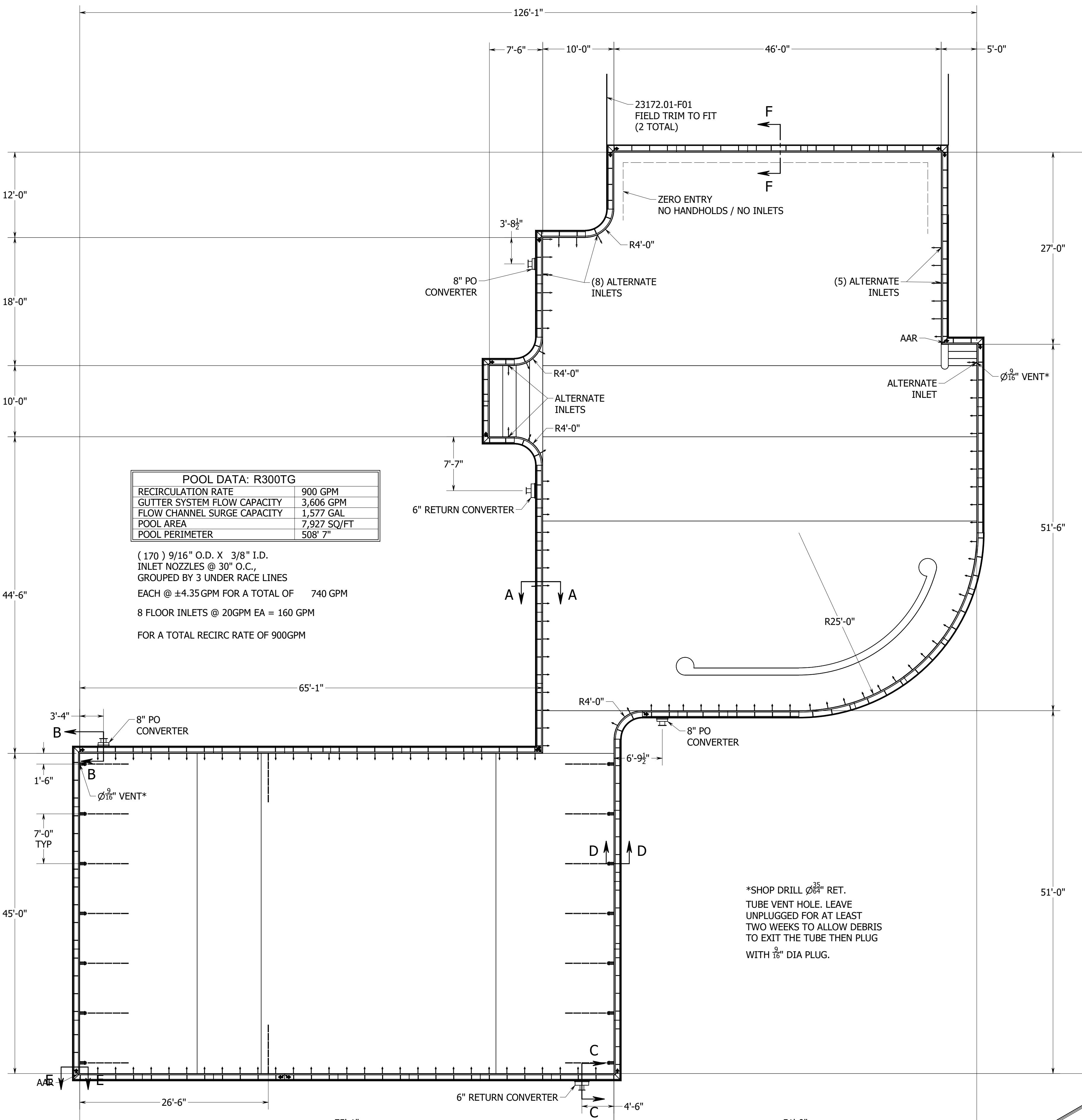
ITEM	QTY	DESCRIPTION
1	1	PVC HOUSING W/AIR VENT (AB-1325-A)
2	1	ELECTRODE HOLDER - TYPE CE 2 44500 OA B/W A-10-536
3	1	WARRICK RELAY MODEL #16MC1A1 & 5 3/8" x 5 3/8" x 3 3/4" MNT. BOX
4	1	SOLENOID VALVE-1" -110 V SLOW CLOSING ADJUSTABLE FROM 1/2 SEC. TO 4 1/2 SEC.
5	1	1" PVC MALE ADAPTOR
6	2	1" X 24" LG. PVC SCH. 80 NIPPLE T.O.E.
7	1	1" PVC SCH. 80 90° SOCKET ELL
8		
9	1	1/4"Ø X 7" L W/ 1 1/2" THD. 1 END & (3) ST. ST. NUTS & WASHERS
10	2	ELECTRODE RODS TYPE 316 ST. ST. X 6" LONG X 1/4"Ø
11	1	SOFT RUBBER GASKET (DWG. AB-2347)
12	1	HAYWARD SP-1019 GUTTER DRAIN 2" W/2" X 1" SOC X SOC BUSHING
13	4	#10-32 FLATHEAD PHILLIPS X 3/4" LONG ST. ST. SCREWS
14	1	TOGGLE SWITCH-SERVALITE #91086U, 10A, 125VAC, DOUPLE INSULATED



NOTE:
SOLENOID VALVE MUST BE INSTALLED IN THE POSITION SHOWN

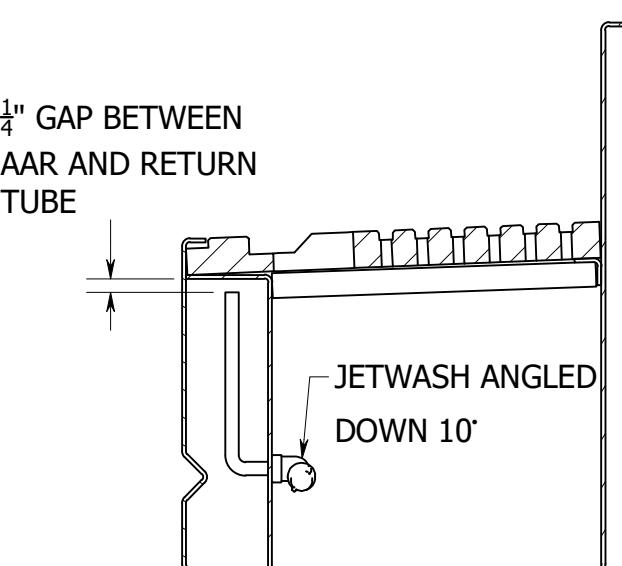
PN9500032

555 Paddock Parkway Rock Hill, SC 29730 Phone: (803)324-1111 Fax: (803)324-1116 info@paddockindustries.com	DESCRIPTION #6610 WATER LEVEL CONTROLLER DETAILS-1" SOLENOID
DO NOT SCALE DRAWING TOLERANCE UNLESS OTHERWISE NOTED: X. ± 1/16 .X. ± .020 1/X ± 1/32 .XX ± .010 X ± 1/4" .XXX ± .005	JOB NAME XXXXXX
DRAWN DCR 4/11/15	LOCATION XXXXXXXX
CHECKED	CUSTOMER XXXXXXX
APPROVED	SCALE (UNLESS NOTED): AS SPECIFIED SIZE C PART NO. XXXX
MATL: PVC	QTY. W.O. # XXX JOB: P- DWG. NO. A-1326-1"SOLE 0



POOL PLAN
SCALE 1/8" = 12"

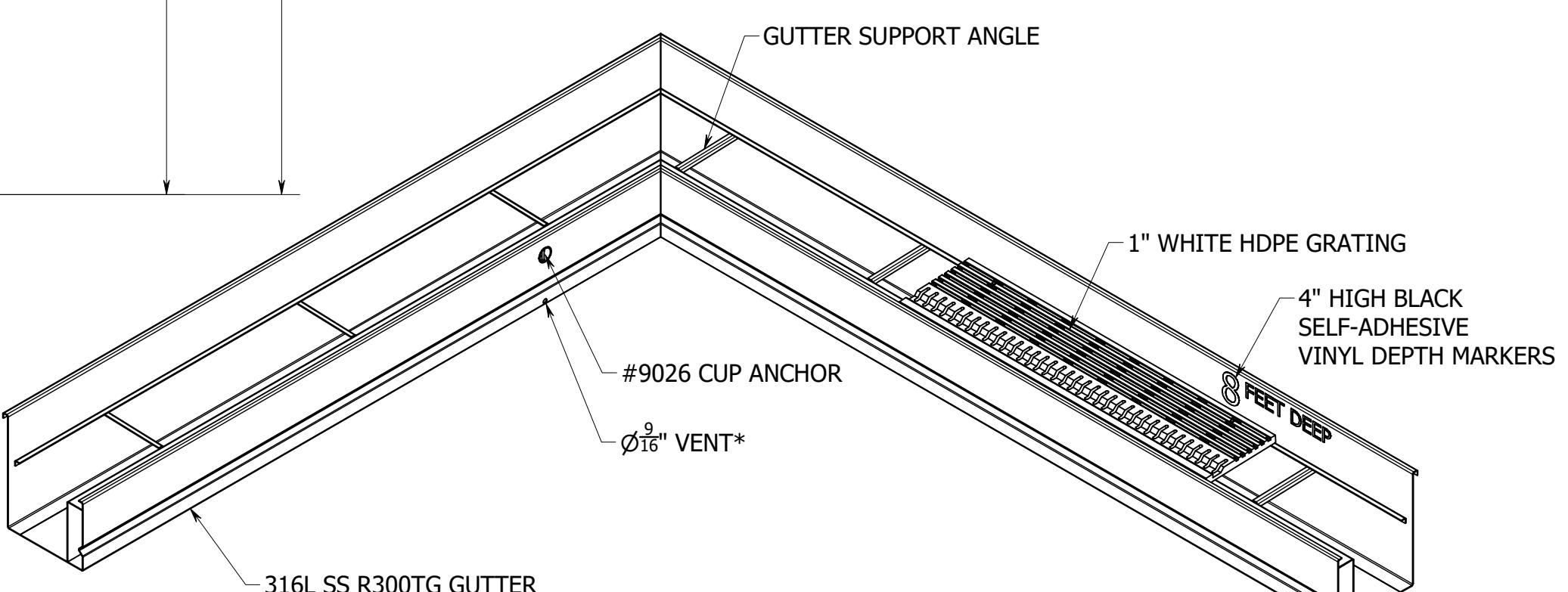
CUP ANCHOR DETAIL
SECTION D-D
SCALE 3/16" = 1"



JETWASH & AAR DETAIL
SECTION E-E
SCALE 3/16" = 1"

**BLACK VINYL SELF-ADHESIVE
DEPTH MARKER DECALS,
4" HIGH WHOLE NUMBERS,
2" HIGH LETTERS & FRACTIONAL NUMBERS**

DEPTH MARKERS	
DEPTH	
1 FOOT DEEP	3
1 1/2 FEET DEEP	1
2 FEET DEEP	2
2 1/2 FEET DEEP	3
3 1/2 FEET DEEP	5
4 FEET DEEP	5
4 1/2 FEET DEEP	2
5 FEET DEEP	2
8 FEET DEEP	5

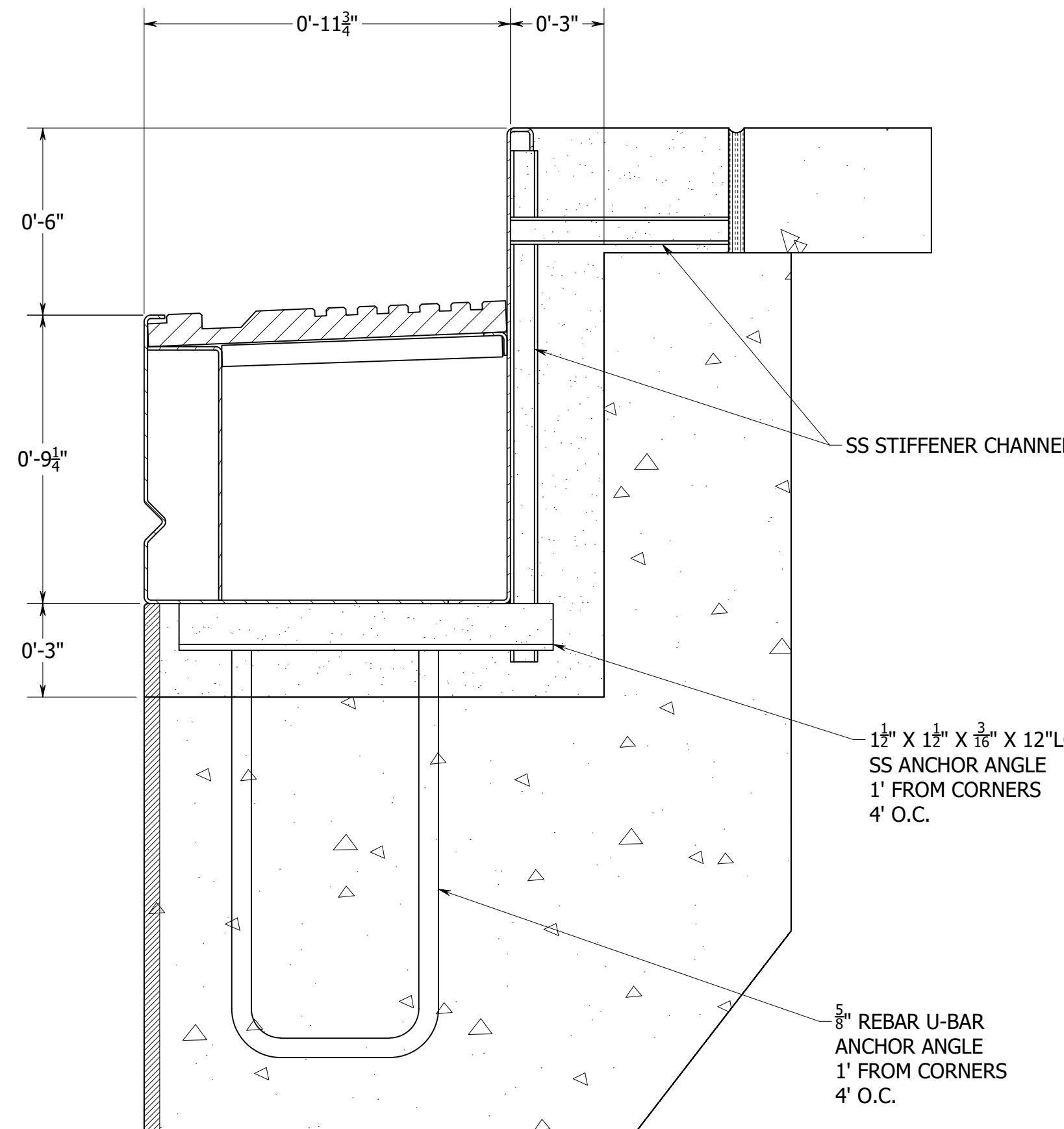


PARTS LIST		
PART NUMBER	QTY	DESCRIPTION
23172.01-SG01	11	R300, 120"
23172.01-SG02	1	R300, 105 1/2", CORNER
23172.01-SG03	1	R300, 120", CUP ANCHOR
23172.01-SG04	1	R300, 77 1/2"
23172.01-SG05	1	R300, 118", CORNER, (L) JETWASH
23172.01-SG06	1	R300, 118", CORNER, (R) JETWASH
23172.01-SG07	1	R300, 56"
23172.01-SG08	1	R300, 72"
23172.01-SG09	1	R300, 42", CORNER, ALT INLET
23172.01-SG10	1	R300, 60", CORNER, (R) JETWASH, NO INLETS
23172.01-SG11	1	R300, 60", CORNER, NO INLETS
23172.01-SG12	1	R300, 42", CORNER, (R) JETWASH, ALT INLET
23172.01-SG13	1	R300, 90", ALT INLETS
23172.01-SG14	1	R300, 78", CORNER, (L) JETWASH, ALT INLETS
23172.01-SG15	1	R300, 72", CORNER, ALT INLETS
23172.01-SG16	1	R300, 96", CORNER, (L) JETWASH, NO INLETS
23172.01-SG17	1	R300, 105 1/2", CORNER, (R) JETWASH, NO INLETS
23172.01-SG18	2	R300, 120", NO INLETS
23172.01-SG19	1	R300, 101", NO INLETS
23172.01-SG20	1	R300, 105 1/2", CORNER, (L) JETWASH, NO INLETS
23172.01-SG21	1	R300, 100 1/2", ALT INLETS
23172.01-SG22	1	R300, 118", CORNER, ALT INLETS
23172.01-SG23	1	R300, 60", DBL CORNER, NO INLETS, (R) JETWASH, AAR
23172.01-SG24	1	R300, 92 1/2"
23172.01-SG25	1	R300, 84"
23172.01-SG26	1	R300, 60", (L) JETWASH
23172.01-SG27	1	R300, 120", CUP ANCHOR
23172.01-SG28	1	R300, 120", (2) CUP ANCHORS
23172.01-SG29	1	R300, 114", CUP ANCHOR
23172.01-SG30	2	R300, 120", (2) CUP ANCHORS
23172.01-SG31	1	R300, 90", CORNER, CUP ANCHOR, (L) JETWASH
23172.01-SG32	1	R300, 90", (L) JETWASH
23172.01-SG33	1	R300, 120", CUP ANCHOR, (R) JETWASH
23172.01-SG34	1	R300, 105 1/2", CORNER
23172.01-SG35	1	R300, 90", CORNER, CUP ANCHOR, (R) JETWASH, AAR
23172.01-SG36	1	R300, 120", (2) CUP ANCHORS
23172.01-SG37	1	R300, 105 1/2", CORNER, (R) JETWASH, VENT, ALT INLET
23172.01-SG38	1	R300, 90", CORNER, CUP ANCHOR, VENT
23172.01-SG39	1	R300, 90", CORNER, CUP ANCHOR, (R) JETWASH
23172.01-SG40	1	R300, 105 1/2", CORNER, (R) JETWASH
23172.01-SG41	1	R300, 105 1/2", CORNER, (R) JETWASH, NO INLETS
23172.01-RG01	3	RADIUS R300TG, 75 13/32"
23172.01-RG02	1	RADIUS R300TG, 75 13/32", ALT INLETS
23172.01-RG03	5	RADIUS R300TG, 94 1/4"
P0813-R300-8PO	3	R300 8" PERIMETER OVERFLOW CONVERTER
P0813-R300-6RET-8IN-R1	2	R300 6" RETURN CONVERTER
23172.01-F01	2	PL12GA x 16 13/32" x 120"
P0802-3750	187	INLET NOZZLE, 9/16" O.D. X 3/8" I.D.
P0802-0000	2	INLET NOZZLE, BLIND, Ø 9/16" O.D.
P0802-0-PLUG	189	TEST PLUG, 0
P0801.01-1200-R0	145	ANCHOR ANGLE, L1 1/2" x 1 1/2" x 3/16" x 12"
P0810-10x140x060	145	UBAR ANCHOR, RB Ø 5/8" x 32 15/16"
P2103-00700.04-R0	145	STIFFENER CHANNEL, C7/8" x 9/16" x 12GA x 7"
P2103-01564.01-R0	130	STIFFENER CHANNEL, C7/8" x 9/16" x 12GA x 16 13/32"
P2103-01000.01-R0	15	STIFFENER CHANNEL, C7/8" x 9/16" x 3/32" x 10"
P0806-F14000	11	CORNER GRATE SUPPORT, p12GA x 2" x 14"
P0899-R300TG-GG-11.5	2	INST GUIDE, SH 1" x 11 1/2" x 12"
P0899-GG-025-10	2	GRATE INSTALL GUIDE, SH 1" x 10" x 12"
P2104-12000.02-R0	2	EXTRA ANGLE, PL12GA x 5 3/32" x 120"
23172.01-P0899-DEPTH MARKER	1	VINYL DEPTH MARKER SET
P0899-APPO	1	ACCESSORY PACK OF PUNCH OUTS
ZSSC-001	1	ZUD SS CLEANER
SBP-001	6	SCOTCH BRITE PAD

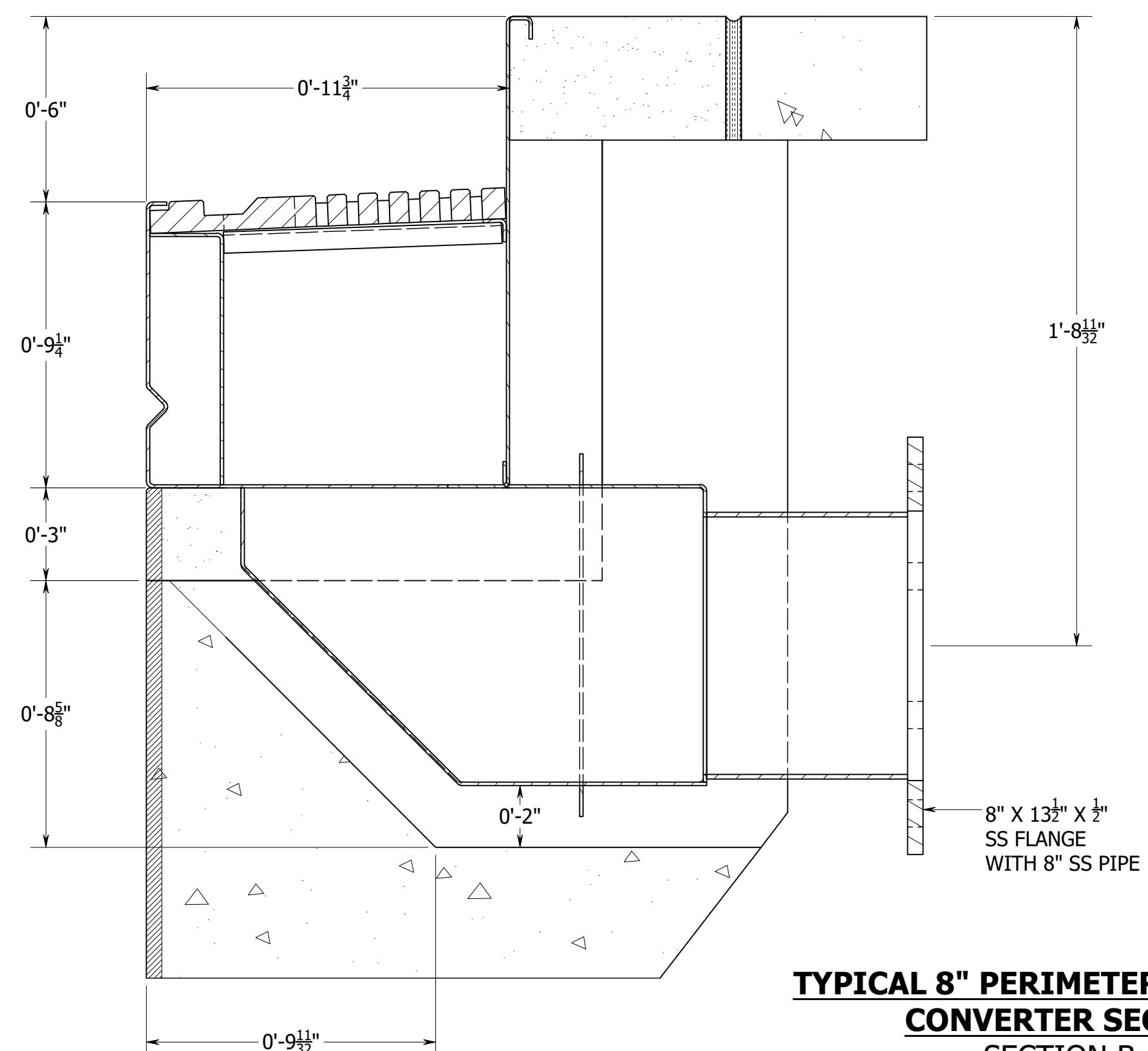
0	7/19/23	RDT	ORIGINAL ISSUE
REV	DATE	BY	DESCRIPTION
REVISION HISTORY			
555 Paddock Parkway Rock Hill, SC 29738 Phone: (803)324-1111 Fax: (803)324-1116 info@paddockindustries.com			
DO NOT SCALE DRAWING			
TOLERANCE UNLESS OTHERWISE NOTED:			
X ± 1/16"	.XX ± 0.010"		
1/X ± 1/32"	.XXX ± 0.005"		
X ± 1/4"			
JOB NAME: SCHENECTADY CENTRAL PARK			
DRAWN	BY	DATE	
CHECKED			
APPROVED			
MATERIAL	QTY:	W.O. #	DWG. NO.
		23172.01	SHEET #
			1 OF 2

CONFIDENTIAL

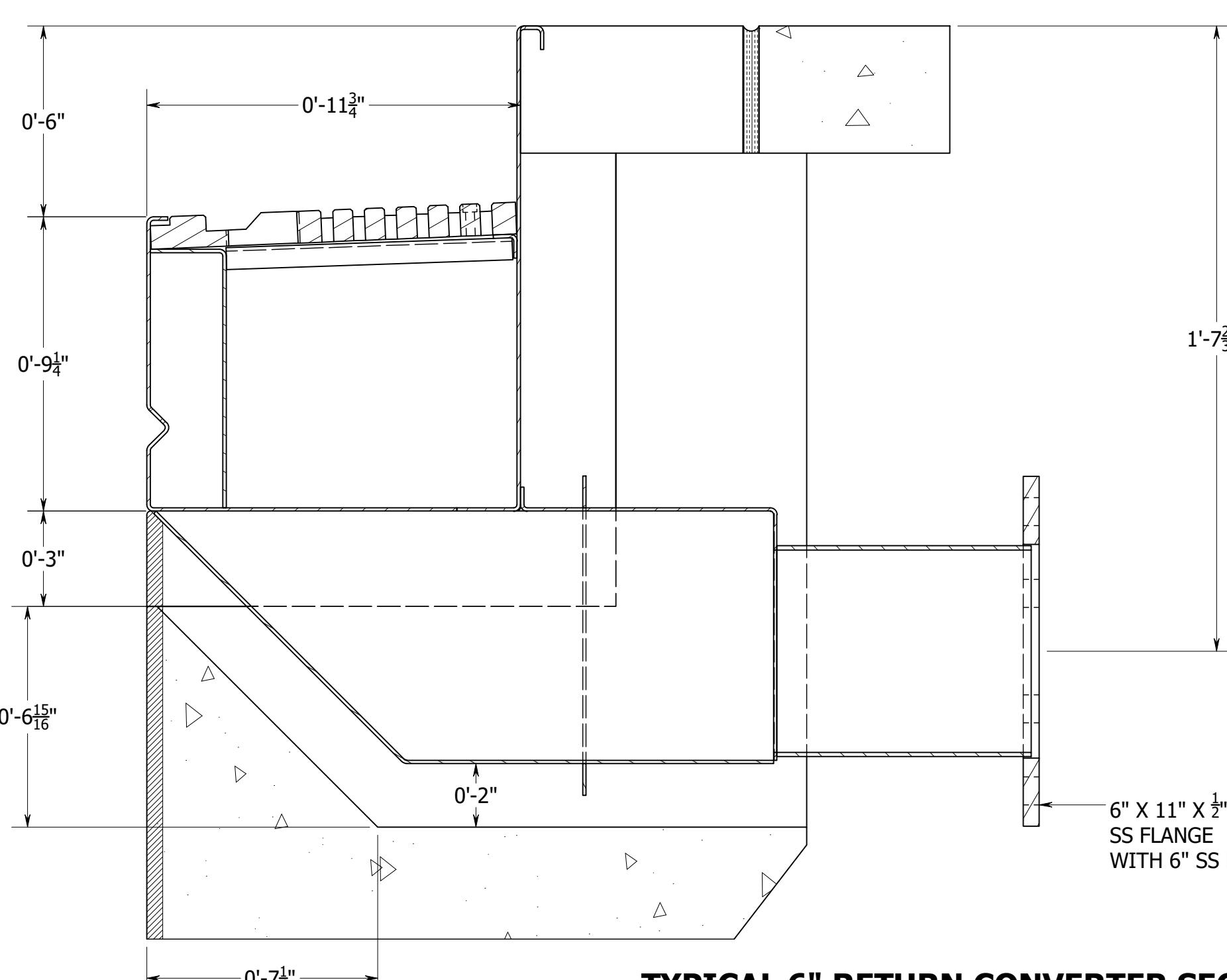
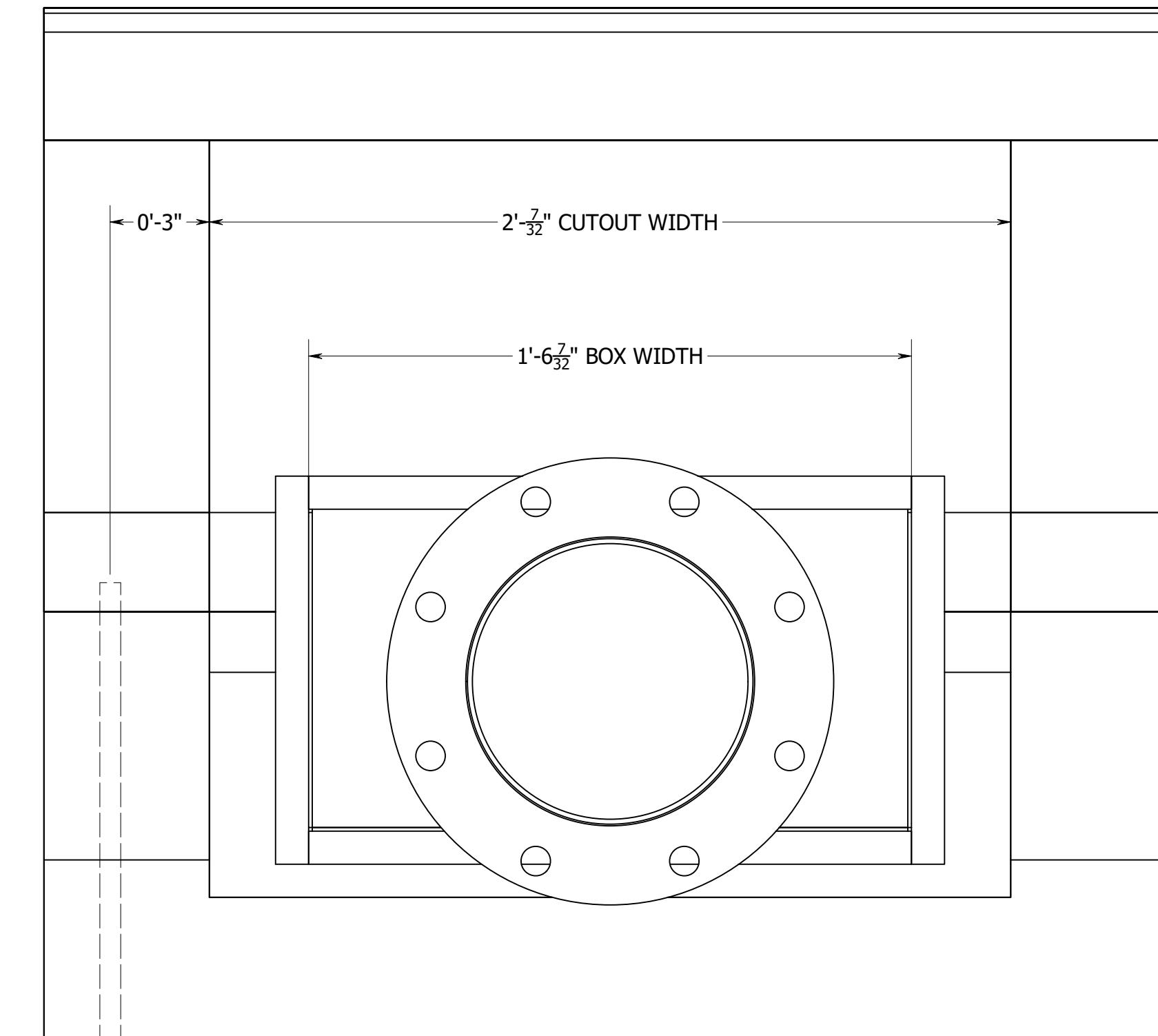
PROPRIETARY INFORMATION OF
PADDOCK POOL EQUIPMENT CO.
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(UNPUBLISHED)



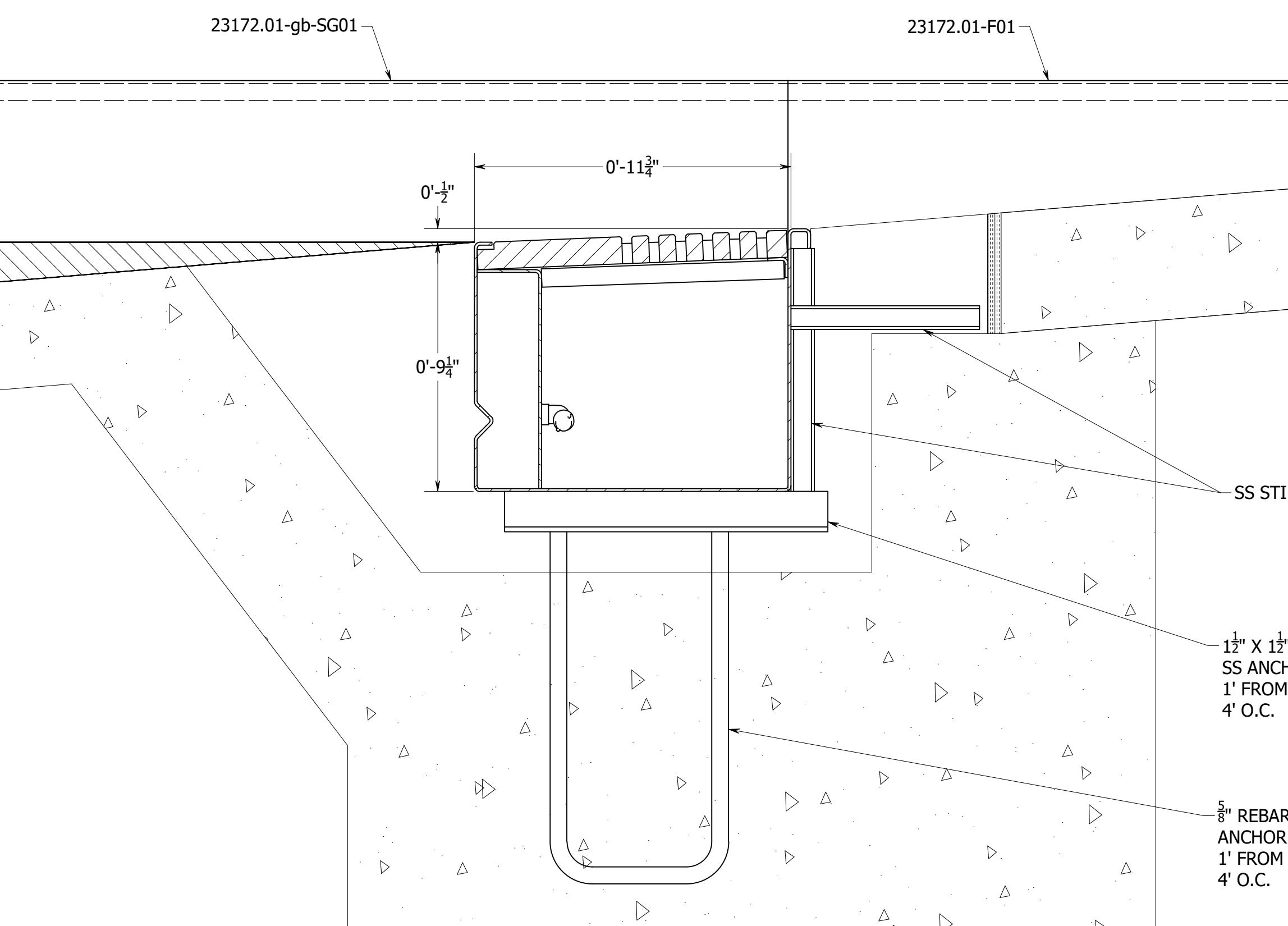
TYPICAL R300TG GUTTER SECTION
SECTION A-A
SCALE 1/4" = 1"



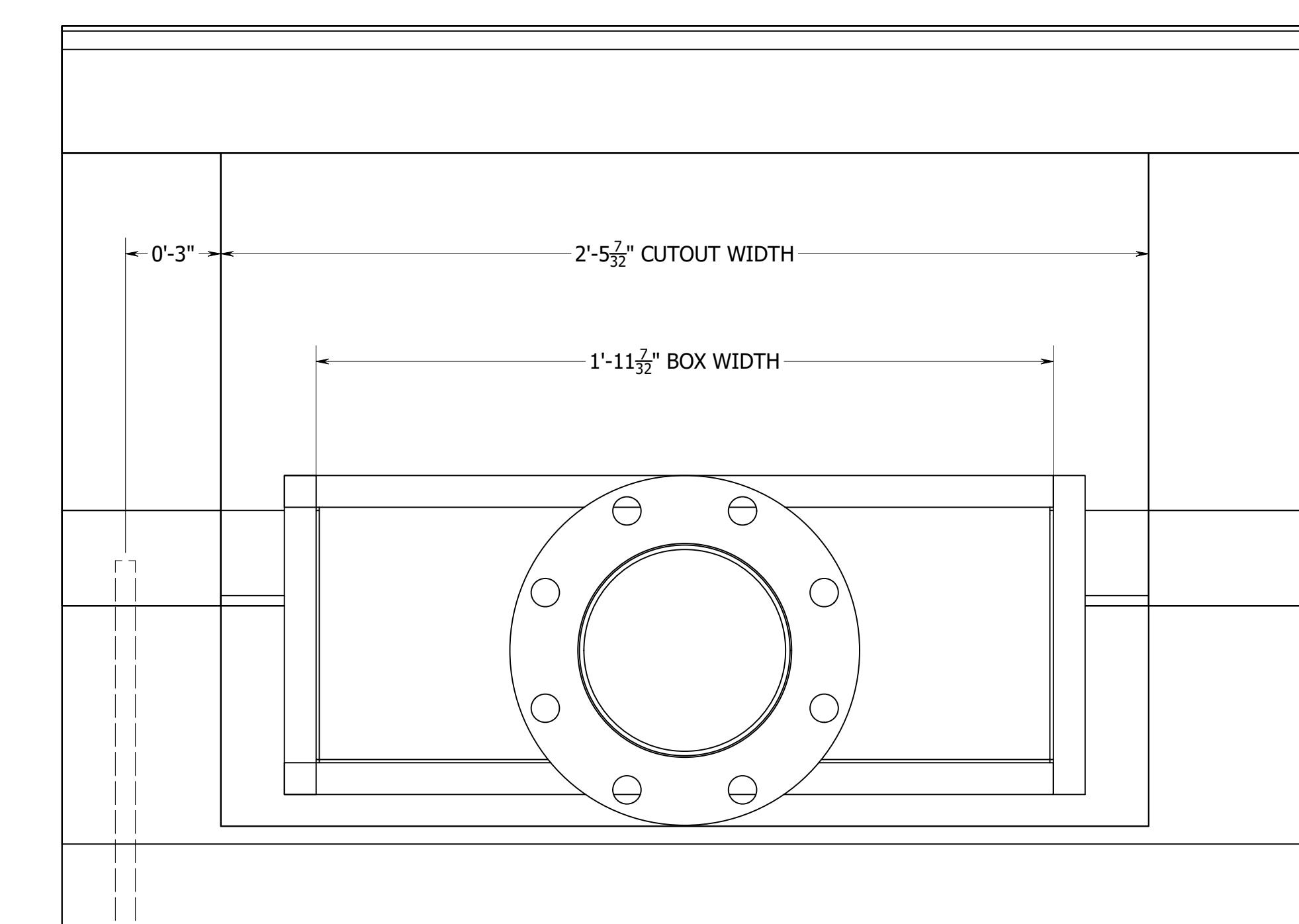
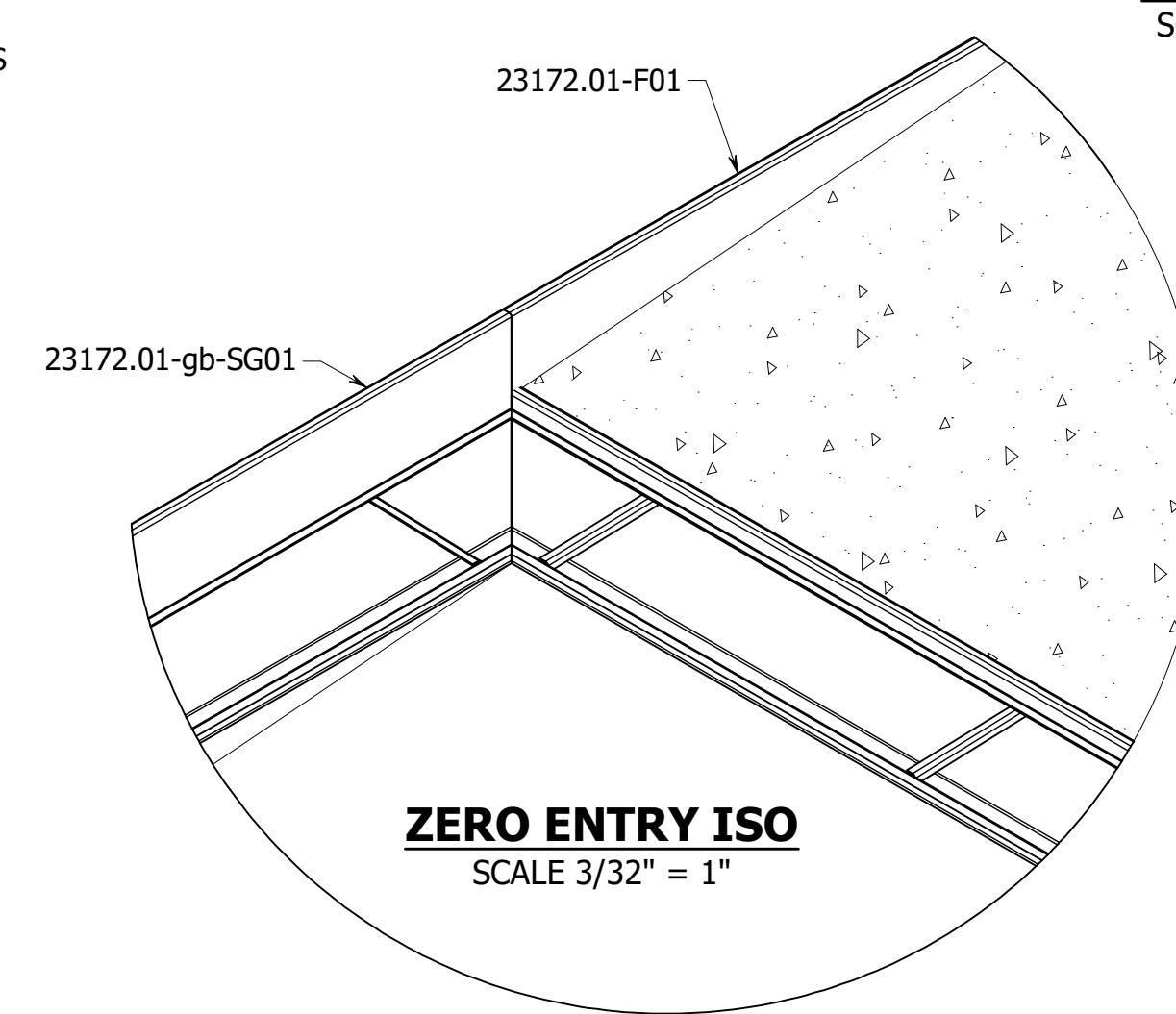
TYPICAL 8" PERIMETER OVERFLOW CONVENTER SECTION
SECTION B-B
SCALE 1/4" = 1"



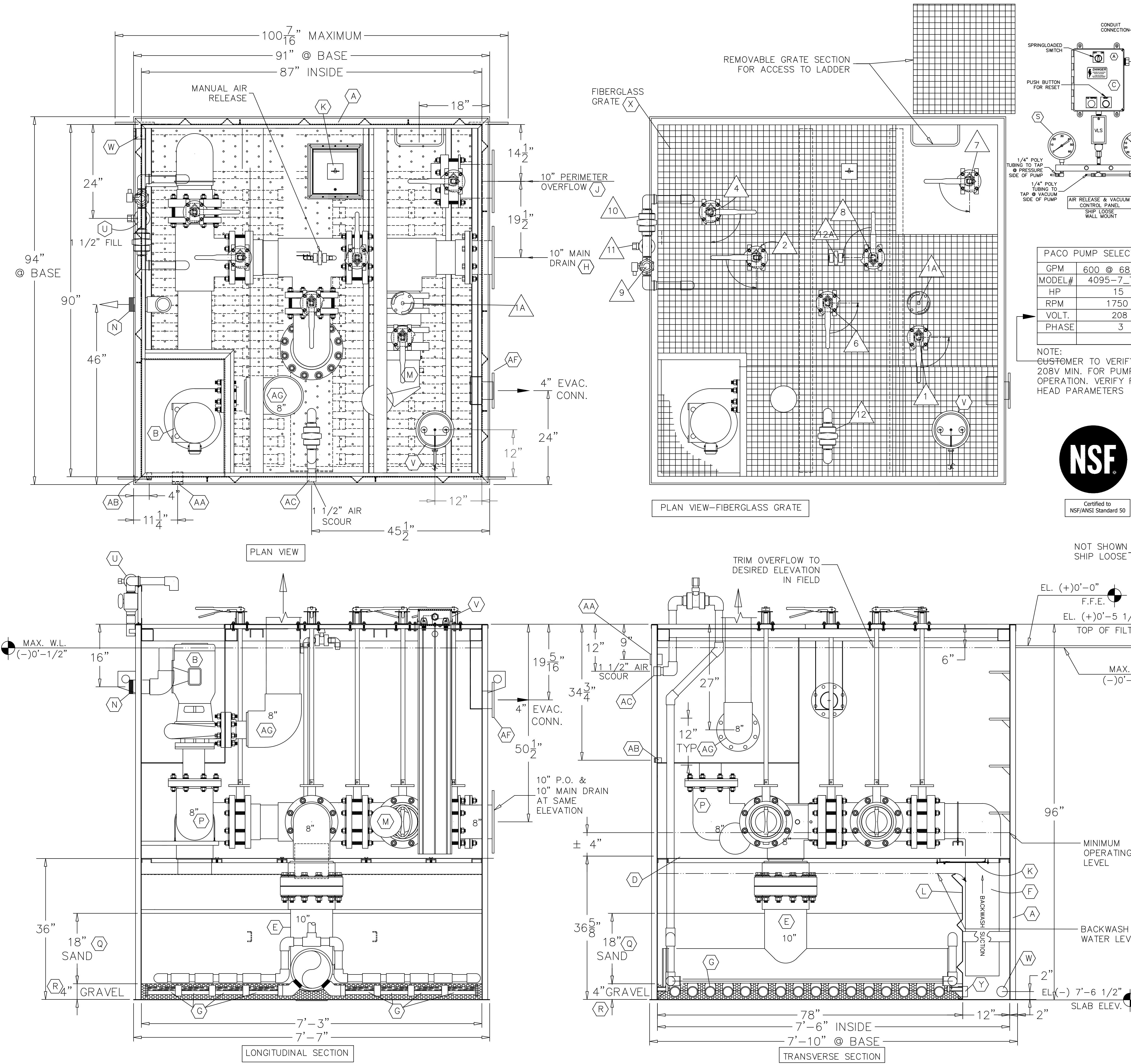
TYPICAL 6" RETURN CONVERTER SECTION
SECTION C-C
SCALE 1/4" = 1"



TYPICAL R300TG @ ZERO ENTRY SECTION
SECTION F-F
SCALE 1/4" = 1"



0	7/19/23	RDT	ORIGINAL ISSUE
REV	DATE	BY	DESCRIPTION
REVISION HISTORY			
555 Paddock Parkway Rock Hill, SC 29730 Phone: (803)324-1111 Fax: (803)324-1116 info@paddockindustries.com			PADDOCK
DO NOT SCALE DRAWING			POOL EQUIPMENT COMPANY
DIMENSION UNLESS OTHERWISE NOTED:			DESCRIPTION 508" 7" 316L SS R300TG GUTTER
X ± 1/16" .XX ± 0.010"			JOB NAME SCHENECTADY CENTRAL PARK
1/X ± 1/32" .XXX ± 0.005"			CUSTOMER NORBERTO POOLS
X ± 1/4" .XXXX ± 0.002"			APPROVED
DRAWN BY DATE	7/18/23		SCALE (UNLESS NOTED)
CHECKED			SIZE
APPROVED			PART NO.
MATL:	QTY:	W.O. #	DWG. NO.
		23172.01	SHEET #
			2 OF 2 REV.



EQUIPMENT LIST		
ITEM	QTY	SIZE AND DESCRIPTION
A	1	FILTER TANK ASSEMBLY, 7'-7" x 7'-10" x 8'-0", 45 SQ. FT.
B	1	RECIRCULATION PUMP, PACO PER CHART
C	1	MARK V CONTROL PANEL, AIR RELEASE & VACUUM LIMIT
D	1	VACUUM EQUALIZATION SCREEN, 14 GA. ST. ST.
E	1	SUCTION HEADER, 10" SCH. 80 PVC
F	1	8" BACKWASH DRAIN LINE
G	128	2" SLOTTED NORYL UNDERDRAIN LATERAL
H	1	10" MAIN DRAIN LINE CONNECTION
J	1	10" PERIMETER OVERFLOW CONNECTION
K	1	VIEWPORT HATCH, 12" x 12"
L	1	ST. ST. BACKWASH TROUGH
M	1	8" PVC FLOAT VALVE
N	1	3" TANK OVERFLOW CONNECTION (TRIM TO ELEVATION IN FIELD)
P	1	8" PUMP SUCTION CONNECTION
Q	67 CU FT	SAND MEDIA, FINE FILTER SAND, 1 CU. FT. PER BAG.
R	12 CU FT	GRAVEL MEDIA, 1/16"-1/8", 1 CU. FT. PER BAG.
S	1	PRESSURE GAUGE, 4 1/2" DIAMETER
T	1	VACUUM GAUGE, 4 1/2" DIAMETER
U	1	1 1/2" AUTO MAKE-UP WATER ASSEMBLY-SHIPPED AS LOOSE PARTS
V	1	6610 WLC HOUSED IN 8" PVC STILL WELL
W	1	2" TANK DRAIN ASSEMBLY
X	A/R	FIBERGLASS GRATING, 1 1/2" x 3/16" BARS
Y	1	2" ST. ST. DRAIN COUPLING WITH SS SCREENED NIPPLE
Z	1	1 1/2" BACKWASH SIGHT GLASS, NOT SHOWN
AA	1	2" ST. ST. ELECTRICAL COUPLING
AB	1	3/4" PUMP COMPARTMENT DRAIN CONNECTION
AC	1	1 1/2" AIR SCOUR CONNECTION
AD	1	AIR SCOUR BLOWER, ALL STAR RBH4-2-3, 2 HP.(NOT SHOWN)
AE	1	TD MIXVENT-150 FAN FOR EVACUATOR
AF	1	4" EVACUATOR DRAW POINT CONNECTION
AG	1	8" PUMP DISCHARGE CONNECTION, SCH. 80 PVC



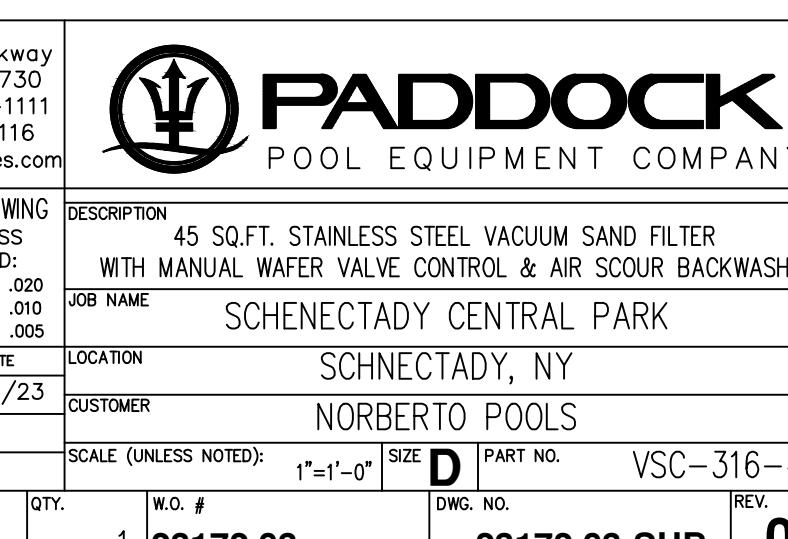
Certified to
NSF/ANSI Standard 50

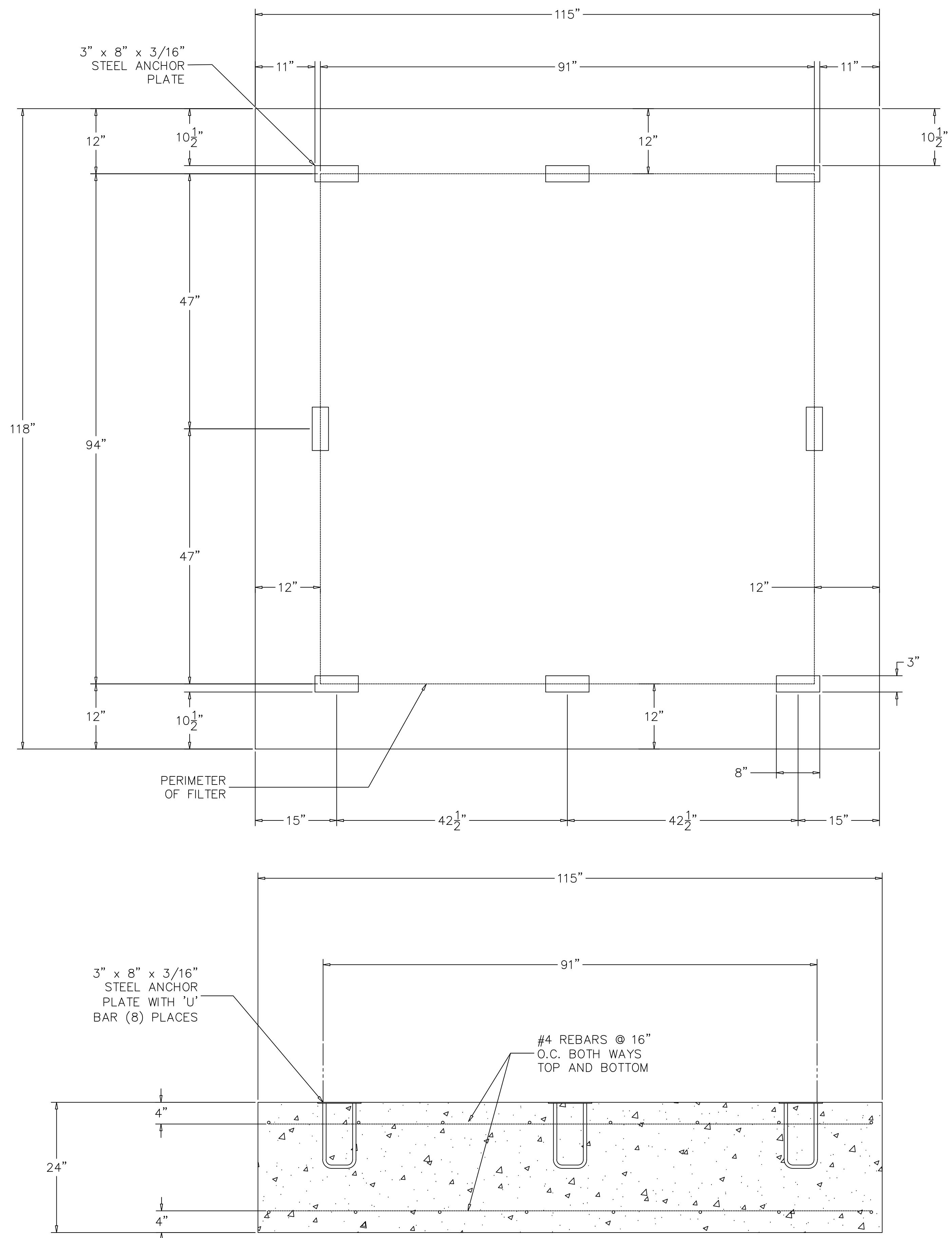
NOT SHOWN SHIP LOOSE	2 SUCTION HEADER WAFER VALVE W/LEVER OPERATOR	8"	O	X	O
	3 RETURN TO POOL WAFER VALVE W/LEVER OPERATOR	8"	O	X	X
	4 BACKWASH TROUGH WAFER VALVE W/LEVER OPERATOR	8"	X	O	X
	5 PUMP BACKWASH TO WASTE WAFER VALVE W/LEVER OP	8"	X	O	O
	6 UNDERDRAIN CONTROL VALVE W/LEVER OPERATOR	8"	O	O	X
	7 PERIMETER OVERFLOW WAFER VALVE W/LEVER OPERATOR	8"	O	X	X
	8 BACKWASH INFLUENT WAFER VALVE W/LEVER OPERATOR	8"	X	O	O
	9 AUTOMATIC WATER LEVEL CONTROL SOLENOID VALVE	1 1/2"	AUTO	X	X
	10 MANUAL WATER MAKE UP	1 1/2"	MANUAL AS REQ'D		
	11 MAKE UP WATER CONTROL VALVE	1 1/2"	O	X	X
	12 AIR SCOUR CONTROL VALVE (REF. OPERATORS MANUAL)	1 1/2"	X	X	X
	12A MANUAL AIR BLEED BALL VALVE	3/4"	SEE OPERATOR'S MANUAL		

NOTES:

1. TANK MATERIAL IS TYPE 316L STAINLESS STEEL, 3/16" FLOOR, 1/8" WALLS.
2. ALL BOLTS, STUDS AND NUTS USED TO ASSEMBLE PIPING ARE NON-CORROSIVE WITHIN FILTER COMPARTMENT.
3. MAXIMUM FILTER RATE IS 15 GALLONS PER MINUTE PER SQUARE FOOT OF FILTER AREA.
4. 115V, 60 Hz, 10 AMP CIRCUIT POWER TO BE BROUGHT AND CONNECTED TO THE VSC AIR RELEASE AND VACUUM LIMIT SWITCH CONTROL ASSEMBLY BY THE ELECTRICAL CONTRACTOR. THE CONTROL ASSEMBLY TO BE CONNECTED TO A 115V ELECTRICALLY HELD CONTACTOR IN THE MOTOR STARTER. POWER SOURCE, CONNECTION TO CONTACTOR, MOTOR STARTER AND CONNECTION TO MOTOR BY ELECTRICAL CONTRACTOR. MOTOR START-STOP CONTROLLED BY PADDOCK ASSEMBLY. NO OTHER START-STOP STATION TO BE INSTALLED.
5. FACE PIPING SHALL BE PVC, SCH. 40 ABOVE EQUALIZATION SCREEN.
6. FLANGES SHALL BE SCH. 80 PVC BELOW EQUALIZATION SCREEN OR STAINLESS STEEL WITHIN THE FILTER COMPARTMENT.
7. EXTERIOR OF TANK BELOW FILTER ROOM FLOOR TO HAVE (2) COATS OF BITUMASTIC 300M APPLIED. INTERIOR TO BE COATED WITH BITUMASTIC 300M ABOVE EQUALIZATION SCREEN.
8. ALL VALVES TO HAVE A NYLON COATED CAST IRON BODY, NYLON COATED DUCTILE IRON DISC, 316 STEM, EPDM SEAT AND A STAINLESS STEEL HANDLE EXTENSION.
9. FILTER IS SHIPPED WITH ALL VALVES CLOSED.
10. AIR SCOUR BLOWER MUST BE ELECTRICALLY INTERCONNECTED THRU A RELAY TO THE MAIN RECIRCULATION PUMP SO THAT THE AIR BLOWER MAY NOT BE ENERGIZED WHILE THE RECIRCULATION PUMP IS RUNNING.
11. TO ASSURE PROPER FUNCTIONING, FILTER TANK MUST BE SET AT THE ELEVATIONS SHOWN.
12. FILTER IS WARRANTED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF (1) YEAR.

	SUBMITTAL SHOP DRAWINGS FABRICATION CANNOT COMMENCE UNTIL WE RECEIVE APPROVED SHOP DRAWINGS		
SUBMITTAL DATE: 1/11/13			
DISPOSITION	BY	DATE	
<input type="checkbox"/> APPROVED AS SUBMITTED			
<input type="checkbox"/> APPROVED AS CORRECTED			
<input type="checkbox"/> NOT APPROVED—RESUBMIT			

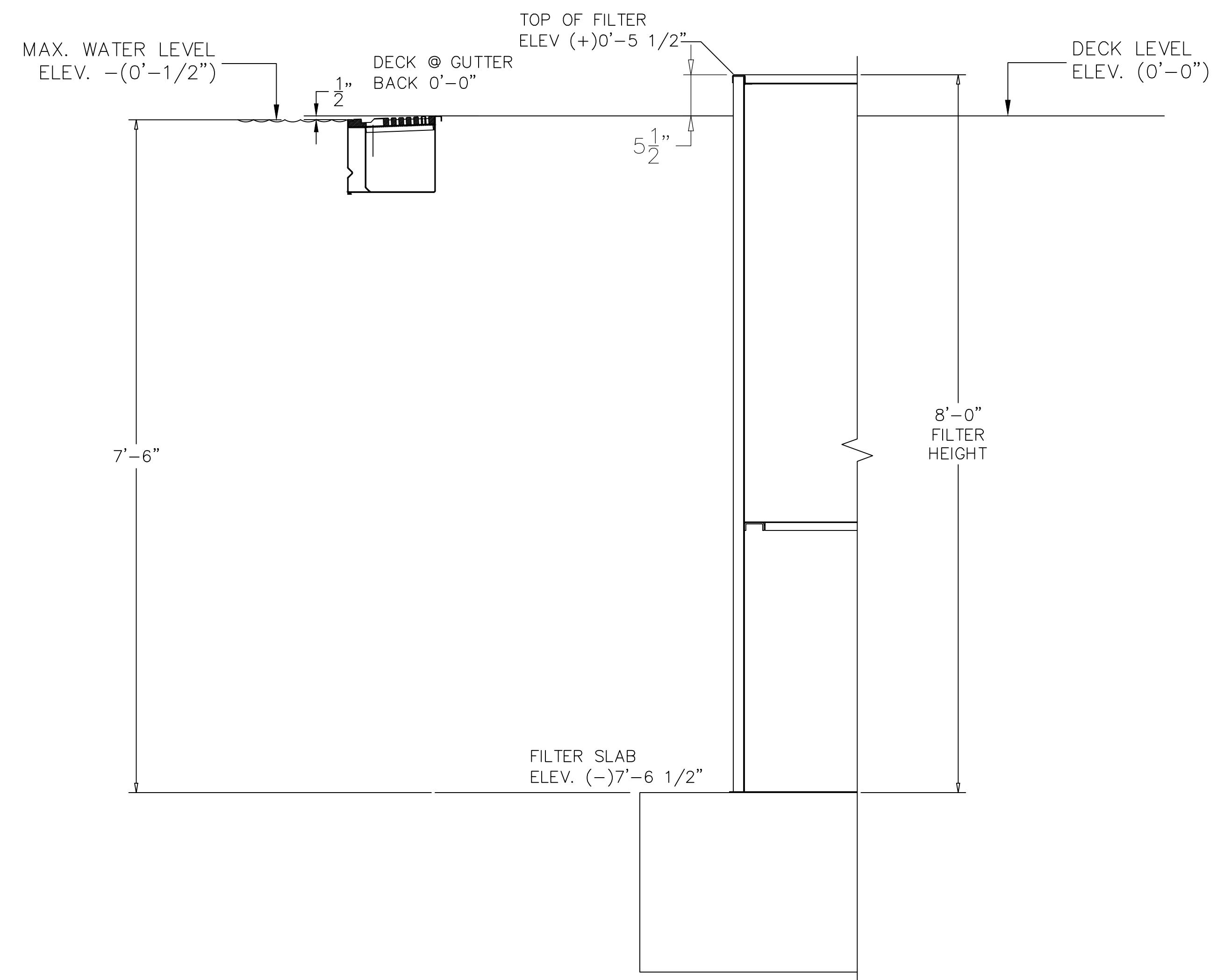




NOTES:

- NOTES:

 1. COMPAK VSC TANK SHIPPING WEIGHT: ±3,200 LBS
 2. FILTER FOOTPRINT: 59.4 SQ. FT.
 3. (8) 3" x 8" x 3/16" ANCHOR PLATES W/ 'U' BARS REQUIRED



	SUBMITTAL SHOP DRAWINGS FABRICATION CANNOT COMMENCE UNTIL WE RECEIVE APPROVED SHOP DRAWINGS		
SUBMITTAL DATE: 1/11/13			
DISPOSITION	BY	DATE	
<input type="checkbox"/> APPROVED AS SUBMITTED			
<input type="checkbox"/> APPROVED AS CORRECTED			
<input type="checkbox"/> NOT APPROVED—RESUBMIT			

55 Paddock Parkway Rock Hill, SC 29730 Phone: (803)324-1111 Fax: (803)324-1116 fo@paddockindustries.com			 PADDOCK POOL EQUIPMENT COMPANY					
DO NOT SCALE DRAWING TOLERANCE UNLESS OTHERWISE NOTED: .X. ± 1/16 .X. ± .020 .1/X ± 1/32 .XX ± .010 .X' ± 1/4" .XXX ± .005			DESCRIPTION ANTI-FLOATATION SLAB FOR MANUAL 45 SQ.FT. VACUUM SAND FILTER					
DRAWN BY DATE DCR 4/13/23			JOB NAME SCHENECTADY CENTRAL PARK					
			LOCATION SCHNECTADY, NY					
			CUSTOMER NORBERTO POOLS					
			SCALE (UNLESS NOTED): 1"=1'-0"		SIZE	PART NO.		
					D	VSC-316-45		
APPROVED								REV.
CTL.: XXX			QTY.	W.O. #	DWG. NO.			
			1	23172 03			23172 03-S	0

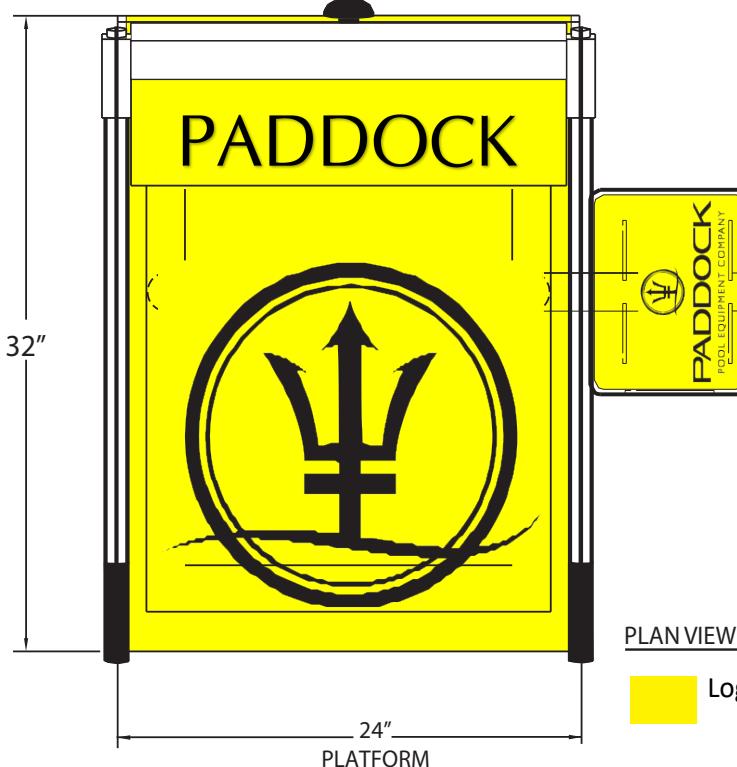


4912 Fast Track Starting Platform Custom Logo

Name of Job SO23172 Schnectady Central Park Pool

Custom Logo Art Requirements:

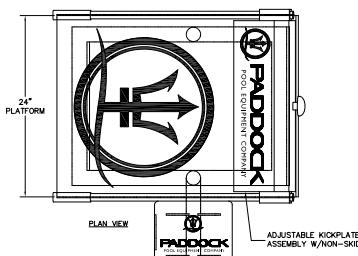
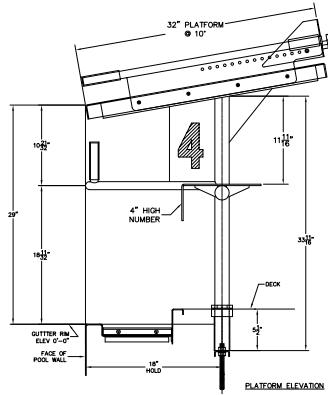
- Facility's Contact person name _____
 - phone # _____
 - email address _____
- Vector format saved as CS6 Adobe Illustrator or eps format with **all layers**.
- Resolution at full scale.
- Send all fonts (name & size) used in the artwork or convert all text to outlines before saving.
- Logo guidelines for fonts and colors are also required.
- **Note: - PMS code color for all color(s) that are used in the logo. Please include the name & size of the font(s).**



Logo Area - We do not recommend using solid white background due to the maintenance.



Fast Track Starting Platform



Paddock's **Fast Track Starting Platform** is quickly and easily removable.

The platform shall be side mounted and have a 24" wide x 32" long stainless steel top.

Flush with front edge of platform is a backstroke starting bar. There are also two vertical backstroke grips made of stainless steel positioned 15" on center.

Lane numbers will be visible from all four sides of platform.

On top of starting platform shall be equipped with side rails made from 1" O.D. stainless steel tube welded to 1/8" stainless steel plate.

Mounted to side rails will be a removable "wedge" made of 12 gauge, stainless steel with a 45 degree incline on the surface facing forward to pool. Front surface shall have a non-slip surface. The wedge will use spring loaded plunger pins to lock securely into place. Single mechanism will be used to retract both pins simultaneously with one hand for ease of adjustment. Wedge shall slide uninhibited along guide rails on sides of platform.

Top of starting platform shall be with a non-slip solid surface.

Colors and custom logos are available as options.

Anchors with 19" spacing are sold separately, P/N 9400110, Model 4912-A.

P/N 9400115, Model 4912, Type 304, Qty _____

P/N **9400113** Model 4912, Type 316L, Qty **6**

**# 4ME98 - Electric Air Compressor: 5 hp, 1 Stage, Vertical, 60 gal Tank,
14.2 cfm, Splash Lubricated**



PN210021

Auto Drain Valve

PN210024

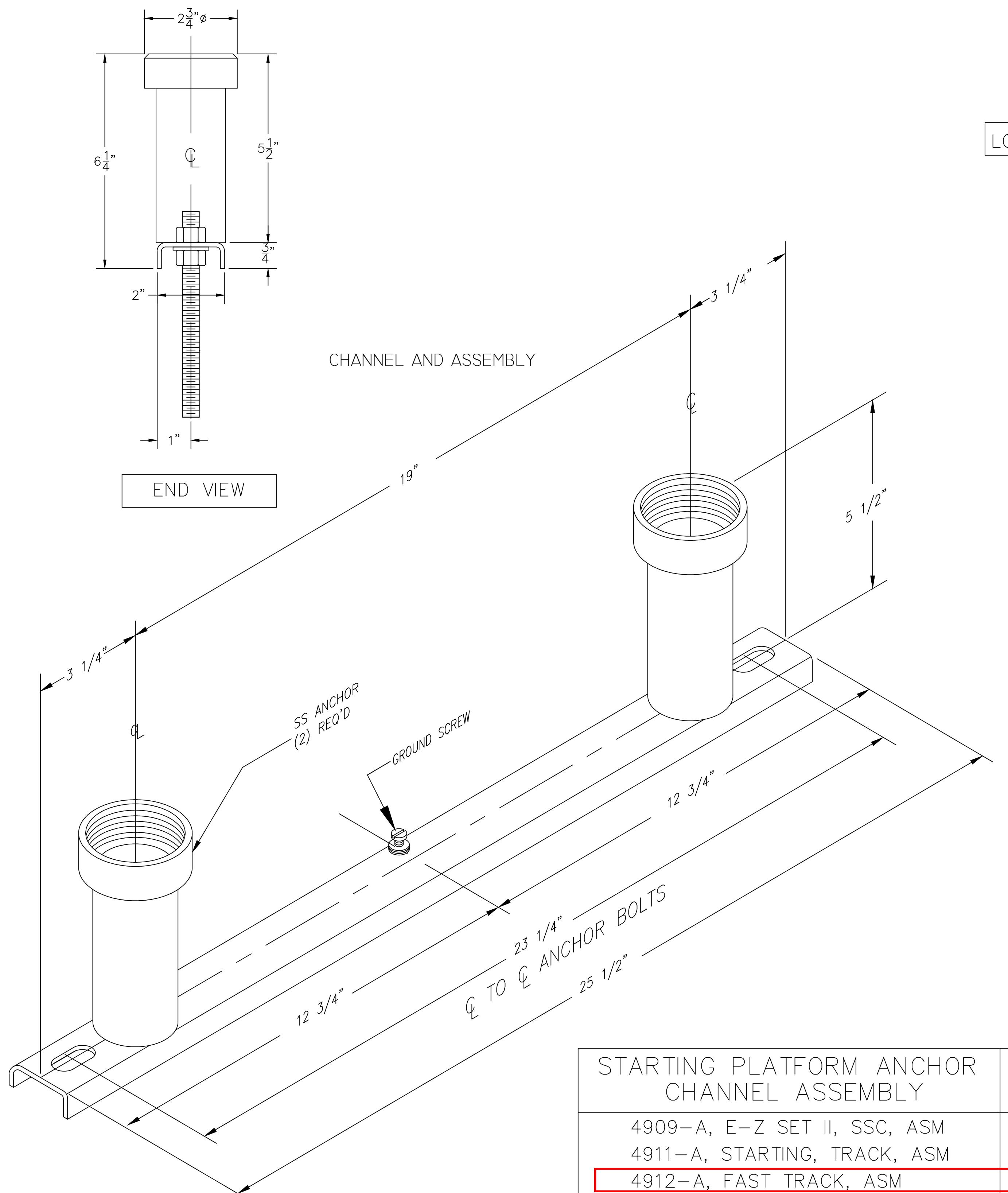
.5 HP, 60 gal., Vertical Splash Lubricated
Tank Mounted Electric Air Compressor

14.2

Item # **4ME98**

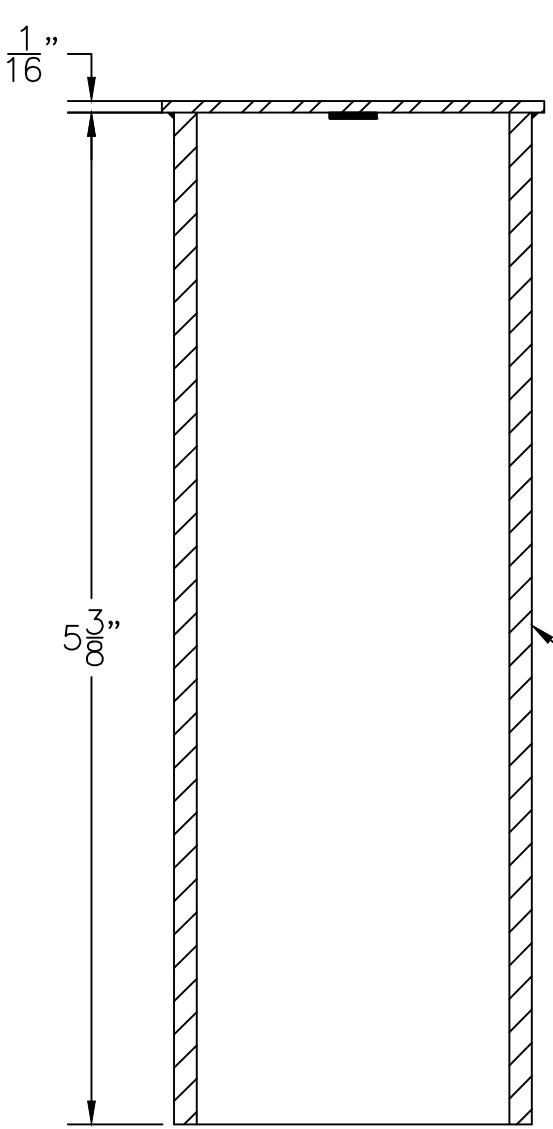
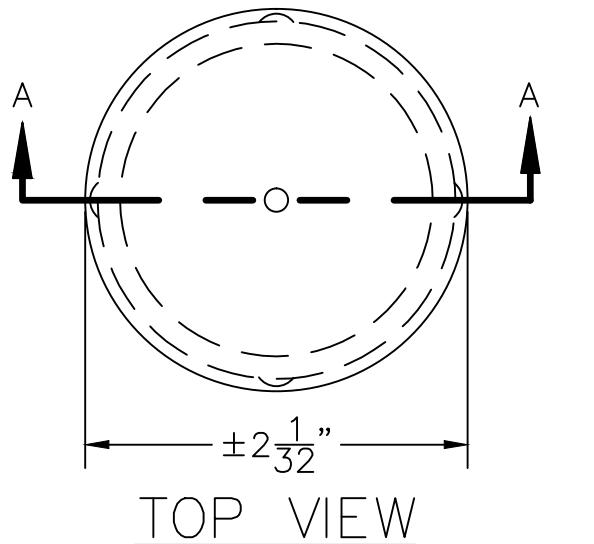
Mfr. Model #4ME98

ITEM	ELECTRIC AIR COMPRESSOR	DUTY CYCLE	INTERMITTENT
LUBRICATION TYPE	SPLASH LUBRICATED	THERMAL PROTECTION	YES
AIR TANK STYLE	VERTICAL	SOUND LEVEL	85 dBA
Number of stages	1	INCLUDES	MANUAL DRAIN VALVE, OIL SIGHT GLASS, PRESSURE GAUGE, PRESSURE SAFETY VALVE
OUTPUT POWER	5 HP	CYLINDER MATERIAL	CAST IRON
FREE AIR FLOW RATE @ MAXIMUM PRESSURE	14.2 CFM	FINISH	POWDER COATED
MAXIMUM OPER. PRESSURE	135 PSI	ASME TANK	YES
AIR TANK SIZE	60 GAL	CONTROL TYPE	PRESSURE SWITCH
INPUT VOLTAGE	208-240V AC, 480V AC	ON PRESSURE SWITCH SETTING	105 PSI
PHASE	THREE	OFF PRESSURE SWITCH SETTING	140 PSI
FREQUENCY	60Hz	INLET SIZE	¾ IN
COMPRESSOR PACKAGE TYPE	BASE MODEL	OUTLET SIZE	¾ IN
PUMP STYLE	SIMPLEX	OUTLET TYPE	NPT
PUMP TYPE	RECIPROCATING	OUTLET GENDER	FEMALE
PUMP LOCATION	TOP MOUNT	OVERALL LENGTH	23 IN
PUMP OIL CAPACITY	40 FLOZ	OVERALL WIDTH	31 IN
MOTOR TYPE	OPEN DRIPPROOF	OVERALL HEIGHT	71 IN
CURRENT RATING	13.4 TO 13.2 A, 6.6 A	STANDARDS	ASME APPROVED, CSA, CALIFORNIA CODE 462(L)(2), UL LISTED, UL1450
MAXIMUM SPEED	950 RPM		

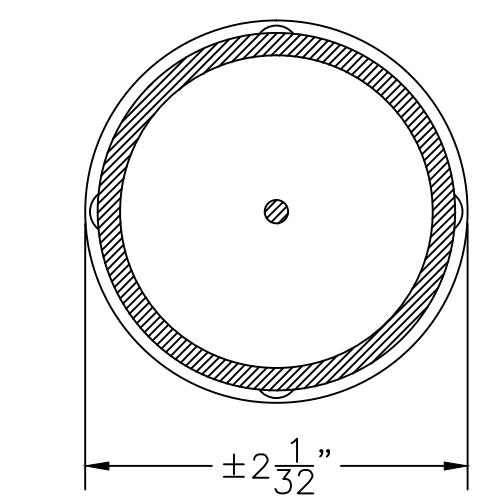


LOCKING COLLAR (BUSHING)
PART NO. 8000158

SS CLOSURE CAP



SECTION A-A



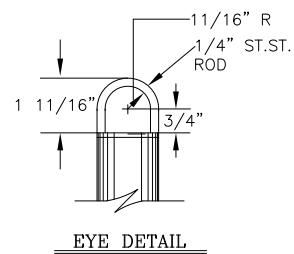
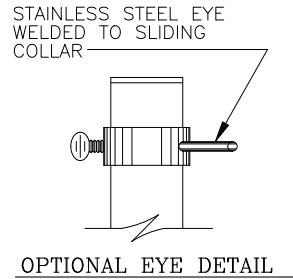
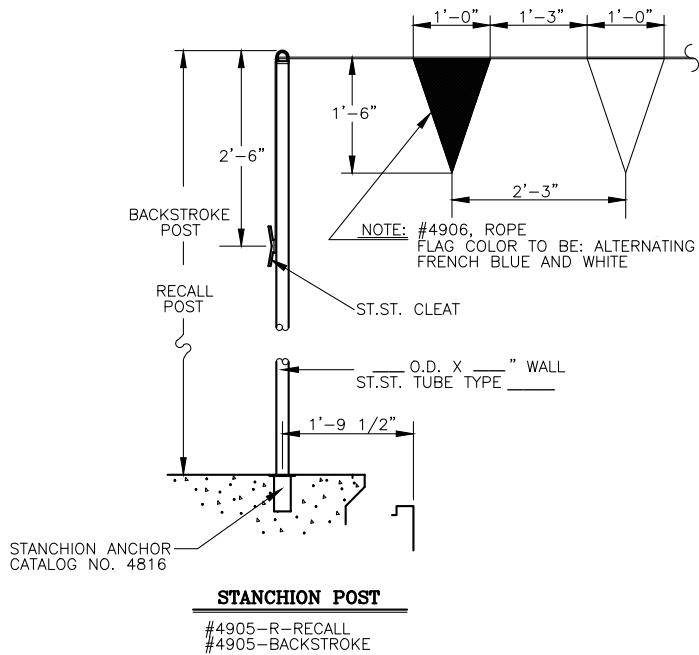
BOTTOM VIEW

STARTING PLATFORM ANCHOR CHANNEL ASSEMBLY	PART NO.	MODEL NO.	QTY
4909-A, E-Z SET II, SSC, ASM		4909S	
4911-A, STARTING, TRACK, ASM		4911S	
4912-A, FAST TRACK, ASM	9400154	4912	6
LOCKING COLLAR (BUSHING)	8000158	ALL MODELS	

CAP SLIP-IN FOR ANCHOR ASSEMBLY	PART NO.	MODEL NO.	QTY
SS CAP, SLIP-IN FOR ANCHOR ASM	8000162	ALL MODELS	



Stanchion Post



Paddock's **Backstroke Posts and Recall Posts** are fabricated from Type 304 or 316L stainless steel tubing with outside diameter of 1.90" and standard wall thickness .083" (.120" and .145" are also available)

Each post is provided with an eyebolt at the top and a cleat for securing rope.

Posts are held by anchor sockets located in pool bottom and pool deck so they can be removed if necessary.

Standard height of backstroke post is 7 feet. Also available in other heights.

Standard height of recall post is 5 feet. Also available in other heights.

Sliding collar is optional.

P/N **9400181**, Model 4905-____, Backstroke Post Height Required **8** FT **1.9**" OD x **.109**" Wall Type **316** Qty **4**

P/N _____, Model 4905R-____, Recall Post Height Required _____ FT _____" OD x _____" Wall Type _____ Qty _____

P/N 9500043, Model 4905SC, Sliding Collar with Eyebolt Qty **4**

P/N _____, Model 4906, Backstroke Pennant Line, 48 Nylon Pennants per 100' Line Qty _____

DECK EQUIPMENT

Escutcheon

4
8
3
7



The polished stainless steel round 1.90" escutcheon plates are used with mounting anchors.

Note: 4 1/2" diameter

Submittal Information:

QTY: 28 Type: 316L

PN 200058

Additional Information

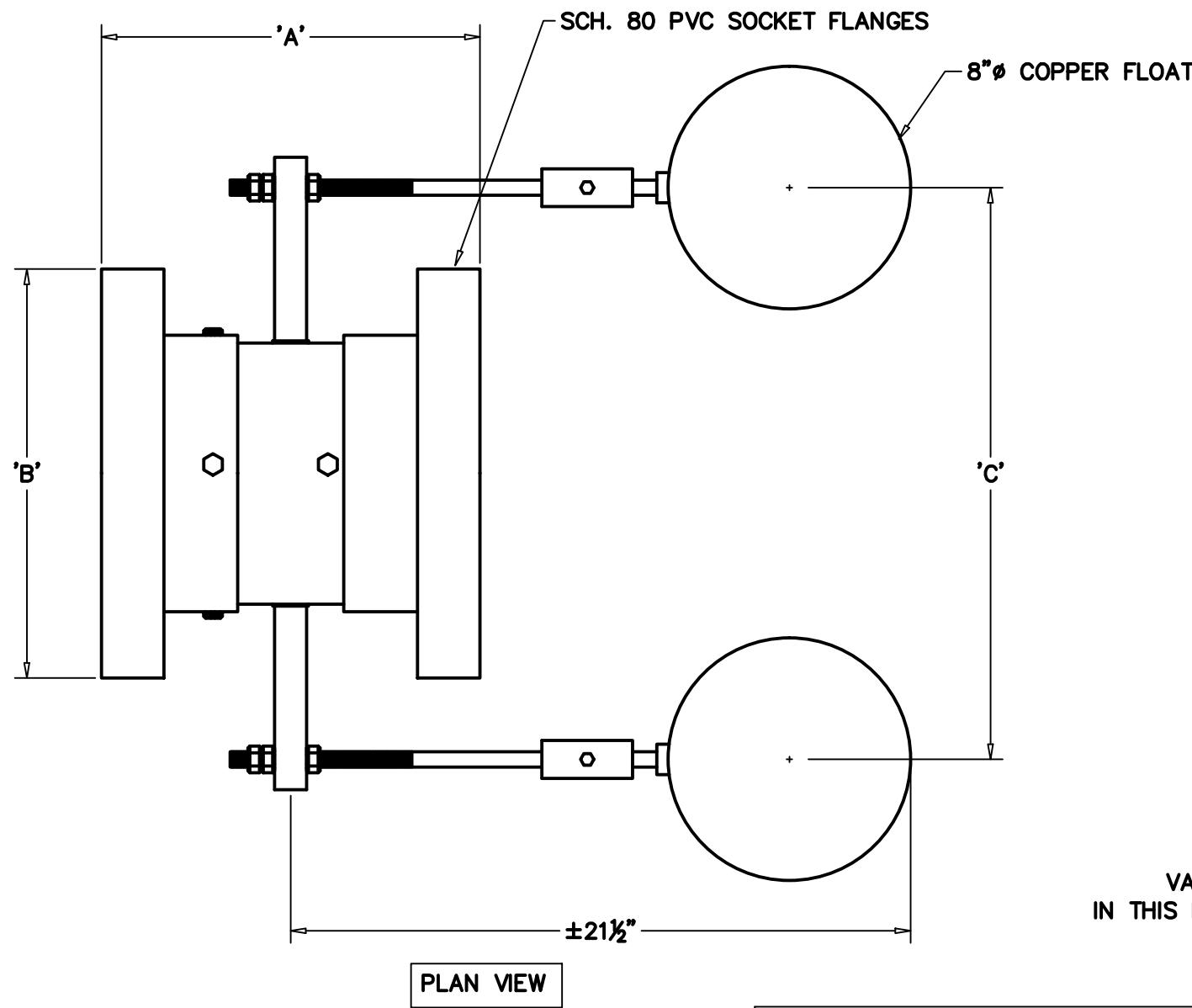


555 Paddock Parkway
Rock Hill, SC 29730
Ph: 803-324-1111
Fx: 803-324-1116



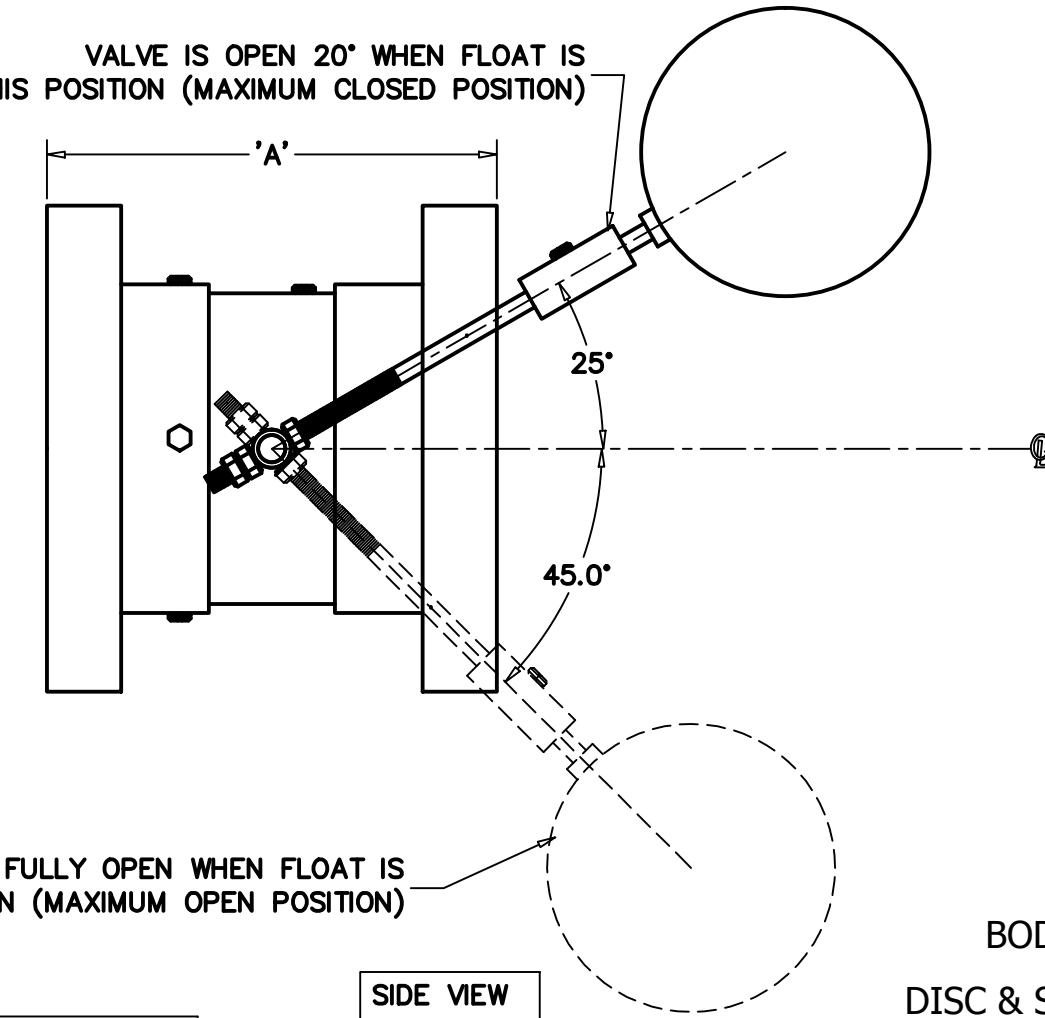
FILTER SYSTEM: Schenectady Central Park			QTY
REGENERATOR FILTER PPEC	700S		1
MAGMETER	SIGNET 2551 BLIND		1
AIR COMPRESSOR PN210021	4ME98, 60 GAL	5HP, 3 PHASE	1

DATE	REV	REVISIONS DESCRIPTION		BY



PLAN VIEW

VALVE IS OPEN 20° WHEN FLOAT IS
IN THIS POSITION (MAXIMUM CLOSED POSITION)



VALVE IS FULLY OPEN WHEN FLOAT IS
IN THIS POSITION (MAXIMUM OPEN POSITION)

SIDE VIEW

BODY - SCH 80 PVC
DISC & SHAFT - T304 ST. ST.
FLOAT ARMS - T304 ST. ST.
FLOATS - COPPER

VALVE SIZE, PIPE,
FLANGE, & FLOAT
CENTER DISTANCE

PN #	QTY.	SIZE	A	B	C
9000150		3"	9 1/2"	7 1/2"	12 3/4"
9000151		4"	10"	9"	14 1/4"
9000152		6"	12 1/2"	11"	16 3/8"
9000153		8"	12 1/2"	13 1/2"	18 7/8"
9000154	1	10"	16 1/2"	16"	26"
9000155		12"	18"	19"	29"

555 Paddock Parkway
Rock Hill, SC 29730
Phone: (803)324-1111
Fax: (803)324-1116
email@paddockpool.com



DO NOT SCALE DRAWING
TOLERANCE UNLESS
OTHERWISE NOTED:
X. ± 1/16 .X. ± .020
1/X ± 1/32 .XX. ± .010
X' ± 1/4" .XXX ± .005

DESCRIPTION 3"-12" PVC FLOAT VALVE WITH DUAL FLOATS

JOB NAME XXX

LOCATION XXX

CUSTOMER XXX

SCALE (UNLESS NOTED):

APPROVED	NTS	SIZE	STD.	W.O. #	SHEET	OF
MATL.:	CALC. WT.	QTY.	W.O. #	DWG. NO.	SHEET	REV.
PVC	XXX	X	P-	XXX	1	1

IP66

Up to 22kW

- ✓ Outdoor rated
- ✓ Dust-tight
- ✓ Washdown ready

See [Page 5](#)



Key Features

- ✓ Internal Category C1 EMC filter
- ✓ Internal PI control
- ✓ Internal brake chopper
- ✓ Dual analogue inputs
- ✓ Operates up to 50°C
- ✓ **Bluetooth®** connectivity
- ✓ Option for control of single phase motors (see [Page 8](#))

Modbus RTU CAN

on-board as standard

Internal Category C1 EMC Filter

An internal filter in every Optidrive E3 saves cost and time for installation.

Cat C1 according to EN61800-3:2004



OPTIDRIVE™ E³

IP66 Outdoor

Up to 22kW

Outdoor rated enclosed drives for direct machine mounting, dust tight and ready for washdown duty



Locally customisable

Flat front to terminal cover with mounting points for switches and an internal PCB.



Switched or non-switched

Conformal coating as standard



Coated Heatsink as Standard

Ideal for hygiene based operations requiring washdown — such as food and beverage



1 2 x RJ45 ports

eliminate the need for a splitter.

2 Easily accessible EMC disconnect

3 Easy to wire

due to the large, accessible chamber and removable gland plate.

IP66/Nema 4X outdoor rated

Built with tough polycarbonate plastics specifically chosen to withstand degradation by ultra violet (UV), greases, oils and acids. Also robust enough not to be brittle at -20°C.

Dust-Tight Design

Install directly on your processing equipment and be sure of protection from dust and contaminants.

Washdown Ready

With a sealed ABS enclosure and corrosion resistant heatsink, the Optidrive E3 IP66 is ideal for high-pressure washdown applications.

Switched models

Simply wire up the drive, turn the inbuilt potentiometer and the motor will start running – allowing immediate energy savings.

Saving energy cannot be easier than this!

For ultimate ease of use



Local Speed Potentiometer

Run Reverse / Off / Run Forward Switch

Lockable Mains Disconnect / Isolator



Application Macros

Switch modes at the touch of a button to optimise Optidrive E3 for your application

Single parameter application macro selection



Industrial Mode

Industrial Mode optimises Optidrive E3 for load characteristics of typical industrial applications.

Applications include:

- ✓ Conveyors
- ✓ Mixers
- ✓ Treadmills

Sensorless Vector provides high starting torque and excellent speed regulation

IP20 panel mount units or
IP66 for direct machine mounting



Rapid parameter cloning using
OPTISTICK Smart



Pump Mode

Pump Mode makes energy efficient pump control easier than ever.

Applications include:

- ✓ Dosing Pumps
- ✓ Borehole Pumps
- ✓ Transfer Pumps
- ✓ Swimming Pools
- ✓ Spas
- ✓ Fountains

- Constant or variable torque
- Internal PI control



Fan Mode

Fan Mode (inc. fire operation) makes air handling a breeze, ideal for simple HVAC systems.

Applications include:

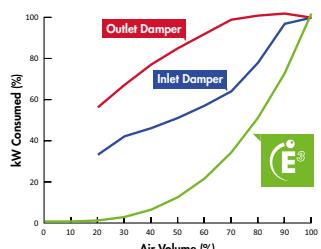
- ✓ Air Handling Units
- ✓ Ventilation Fans
- ✓ Circulating Fans
- ✓ Air Curtains
- ✓ Kitchen Extract



- High efficiency **variable torque** motor control
- Flying start capability
- Mains loss ride through
- PI control

Instant Power Savings

The graph below shows the incredible efficiency of Optidrive E3 for controlling airflow compared to traditional damper control methods.



Modbus RTU CAN

on-board as standard

How much energy could you save?

Estimate potential energy savings, CO₂ emissions and financial savings for your application with the Invertek Drives Energy Savings Calculator app.



Download on the
App Store

GET IT ON
Google Play

www.invertekdrives.com/calculator



OPTIDRIVE™ E³

	kW	HP	Amps	Frame	Model Code	Product Family	Generation	Frame Size	Voltage Code	Output Current x 10	Supply Phases	EMC Filter	Breaker Monitor	Enclosure Option
110–115V±10% 1 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 1 0023 - 1 0 1 #									
	0.75	1	4.3	1	ODE - 3 - 1 1 0043 - 1 0 1 #									
	1.1	1.5	5.8	2	ODE - 3 - 2 1 0058 - 1 0 4 #									
200–240V±10% 1 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 2 0023 - 1 # 1 #									
	0.75	1	4.3	1	ODE - 3 - 1 2 0043 - 1 # 1 #									
	1.5	2	7	1	ODE - 3 - 1 2 0070 - 1 # 1 #									
	1.5	2	7	2	ODE - 3 - 2 2 0070 - 1 # 4 #									
	2.2	3	10.5	2	ODE - 3 - 2 2 0105 - 1 # 4 #									
	4	5	15.3	3	ODE - 3 - 3 2 0153 - 1 0 4 #									
200–240V±10% 3 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 2 0023 - 3 0 1 #									
	0.75	1	4.3	1	ODE - 3 - 1 2 0043 - 3 0 1 #									
	1.5	2	7	1	ODE - 3 - 1 2 0070 - 3 0 1 #									
	1.5	2	7	2	ODE - 3 - 2 2 0070 - 3 # 4 #									
	2.2	3	10.5	2	ODE - 3 - 2 2 0105 - 3 # 4 #									
	4	5	18	3	ODE - 3 - 3 2 0180 - 3 # 4 #									
	5.5	7.5	24	3	ODE - 3 - 3 2 0240 - 3 # 4 #									
	7.5	10	30	4	ODE - 3 - 4 2 0300 - 3 # 4 #									
	11	15	46	4	ODE - 3 - 4 2 0460 - 3 # 4 #									
	15	20	61	5	ODE - 3 - 5 2 0610 - 3 F 4 2									
	18.5	25	72	5	ODE - 3 - 5 2 0720 - 3 F 4 2									
380–480V±10% 3 Phase Input	0.75	1	2.2	1	ODE - 3 - 1 4 0022 - 3 # 1 #									
	1.5	2	4.1	1	ODE - 3 - 1 4 0041 - 3 # 1 #									
	1.5	2	4.1	2	ODE - 3 - 2 4 0041 - 3 # 4 #									
	2.2	3	5.8	2	ODE - 3 - 2 4 0058 - 3 # 4 #									
	4	5	9.5	2	ODE - 3 - 2 4 0095 - 3 # 4 #									
	5.5	7.5	14	3	ODE - 3 - 3 4 0140 - 3 # 4 #									
	7.5	10	18	3	ODE - 3 - 3 4 0180 - 3 # 4 #									
	11	15	24	3	ODE - 3 - 3 4 0240 - 3 # 4 #									
	15	20	30	4	ODE - 3 - 4 4 0300 - 3 # 4 #									
	18.5	25	39	4	ODE - 3 - 4 4 0390 - 3 # 4 #									
	22	30	46	4	ODE - 3 - 4 4 0460 - 3 # 4 #									
	30	40	61	5	ODE - 3 - 5 4 0610 - 3 F 4 2									
	37	50	72	5	ODE - 3 - 5 4 0720 - 3 F 4 2									

Replace # in model code with colour-coded option

Enclosure Types

A		IP66 Outdoor Use Non-switched
B		IP66 Outdoor Use Switched

IP20

2		IP20
F		Internal EMC Filter
0		No Internal EMC Filter

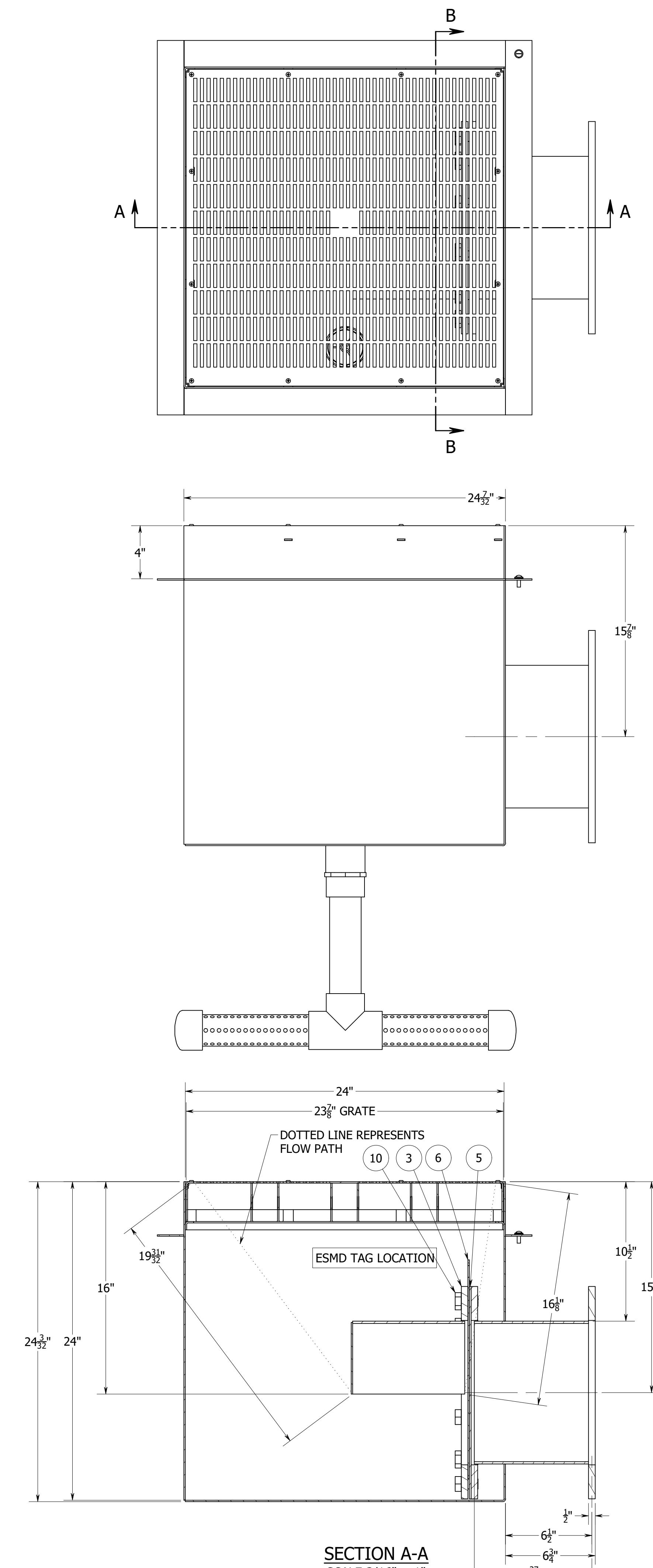
IP20	
Size	1 2 3 4 5
mm Height	173 221 261 420 486
mm Width	83 110 131 171 222
mm Depth	123 150 175 212 226
kg Weight	1.0 1.7 3.2 9.1 18.1
Fixings	4xM5 4xM5 4xM5 4xM8 4xM8

IP66	
Size	1 2 3 4
mm Height	232 257 310 360
mm Width	161 188 210.5 240
mm Depth	162 182 238 275
kg Weight	2.5 3.5 7.0 9.5
Fixings	4xM4 4xM4 4xM4 4xM4

Drive Specification

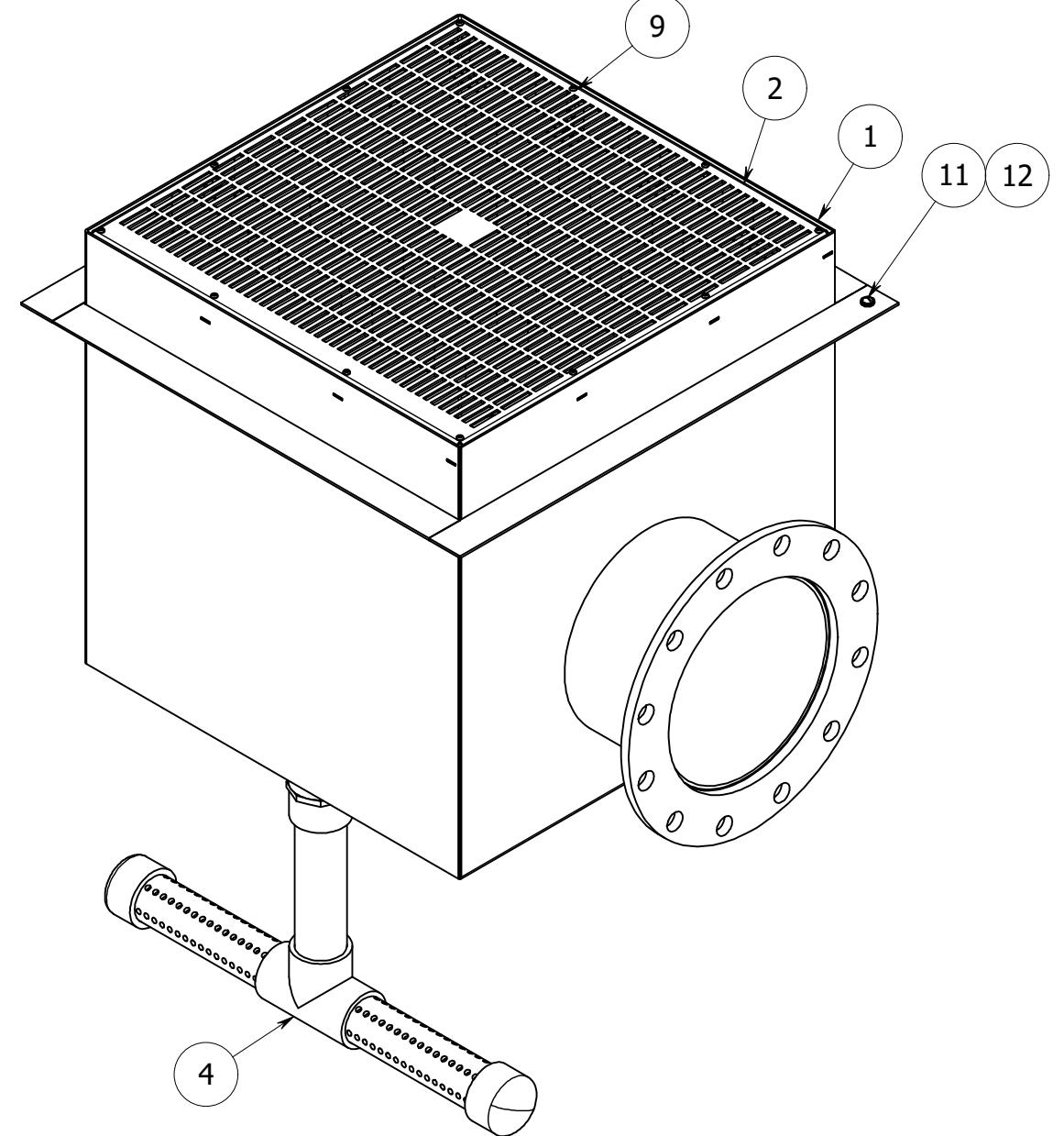
Input Ratings	Supply Voltage 110 – 115V ± 10% 200 – 240V ± 10% 380 – 480V ± 10%	Programming Keypad Display PC	I/O Specification Power Supply Programmable Inputs Digital Inputs Analog Inputs Programmable Outputs Relay Outputs Analog Outputs Application Features Fire Mode Maintenance & Diagnostics Standards Compliance
Output Ratings	Output Power 110V 1 Ph Input: 0.5–1.5HP [230V 3 Ph Output] 230V 1 Ph Input: 0.37–4kW [0.5–5HP] 230V 3 Ph Input: 0.37–11kW [0.5–15HP] 400V 3 Ph Input: 0.75–22kW 460V 3 Ph Input: 1–30HP	Control Specification Control Method PWM Frequency Stopping Mode Braking Skip Frequency	Fault Memory Data Logging Monitoring
Ambient Conditions	Temperature Storage: -40 to 60°C Operating: -20 to 50°C	Setpoint Control Analog Signal Digital	Low Voltage Directive EMC Directive Machinery Directive Conformance
Altitude	Up to 1000m ASL without derating Up to 2000m maximum UL approved Up to 4000m maximum (non UL)	Fieldbus Built-in Modbus RTU	Adjustable speed electrical power drive systems. EMC requirements 2014/30/EU Cat C1 according to EN61800-3:2004 2006/42/EC CE, UL, RCM
Humidity	95% Max, non condensing	CANopen 125–1000 kbps	
Vibration	Conforms to EN61800-5-1	Modbus RTU 9.6–115.2 kbps selectable	
Enclosure	Ingress Protection IP20, IP66		

**QTY: 2 - Lap Pool
Area A**



PARTS LIST		
ITEM	QTY	PART NUMBER
1	1	ESMD-2424-10-1.01-R0
2	1	FC-2424.01-R1
3	1	AVRD-10.01-R0
4	1	HSRL-01
5	1	P2104-100x02.11-R0
6	1	BP10-304
7	1	SP1056
8	1	ADPTR-0200MPTx0200SOC.08-R0
9	12	PHMP-#08Cx0108-316
10	12	HHMB-075Cx0104-316
11	1	RHMSL-025Cx0012-BR
12	2	FW-025-BR

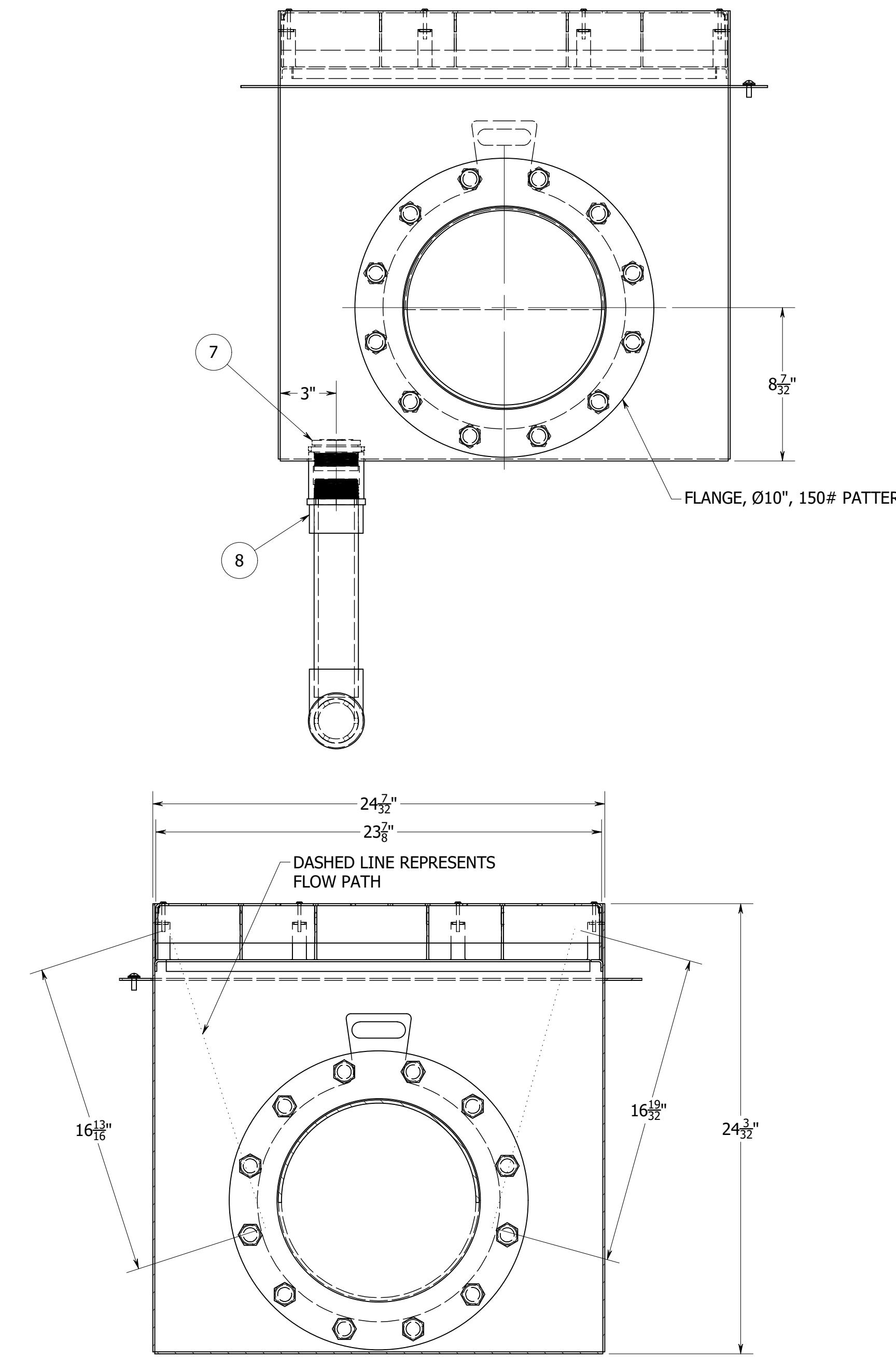
DRAWN BY	DATE	SPEC. NO.
PTT	02/25/22	MD-304-2424FC-2424-10-1-R0
CHECKED BY	DATE	REVISION HISTORY
APPROVED BY	DATE	SHEET #



2424 PCFC STAINLESS STEEL FRAME AND GRATE IN 24x24 SUMP					
VELOCITY (FT/SEC)	OPEN AREA (IN²)	MAX FLOW (GPM)	TOTAL QTY	TOTAL OPEN AREA (IN²)	TOTAL MAX FLOW (GPM)
1.39	212.89	920	1	212.89	920
1.0	212.89	663.55	1	212.89	663.55
0.5	212.89	331.78	1	212.89	331.78

NSF MAXIMUM SAFE FLOW RATE OF ONE (1) 2424PCFC EQUALS 920GPM

* THE NSF SAFETY FLOW IS THE MAXIMUM FLOW MEETING THE ANSI/APSP/ICC-16 2017 REQUIREMENTS. THE RECOMMENDED MAXIMUM DESIGN FLOW IS BASED ON A VELOCITY THAT DOES NOT EXCEED 1.39 FT/SEC. PADDOCK CERTIFIED COVERS & GRATES COMPLY WITH BODY BLOCKING ELEMENT TEST PER ANSI/APSP/ICC-16 2017



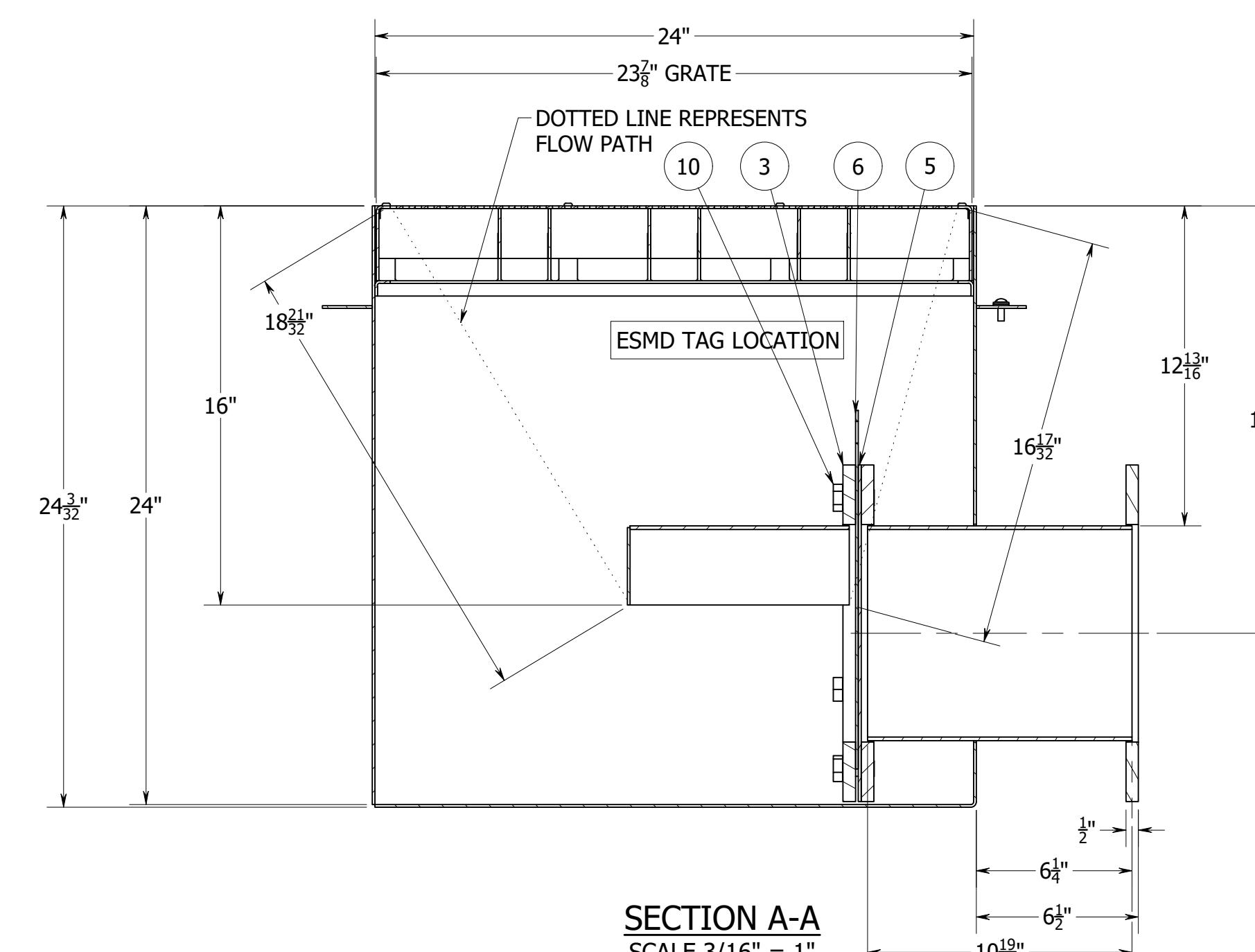
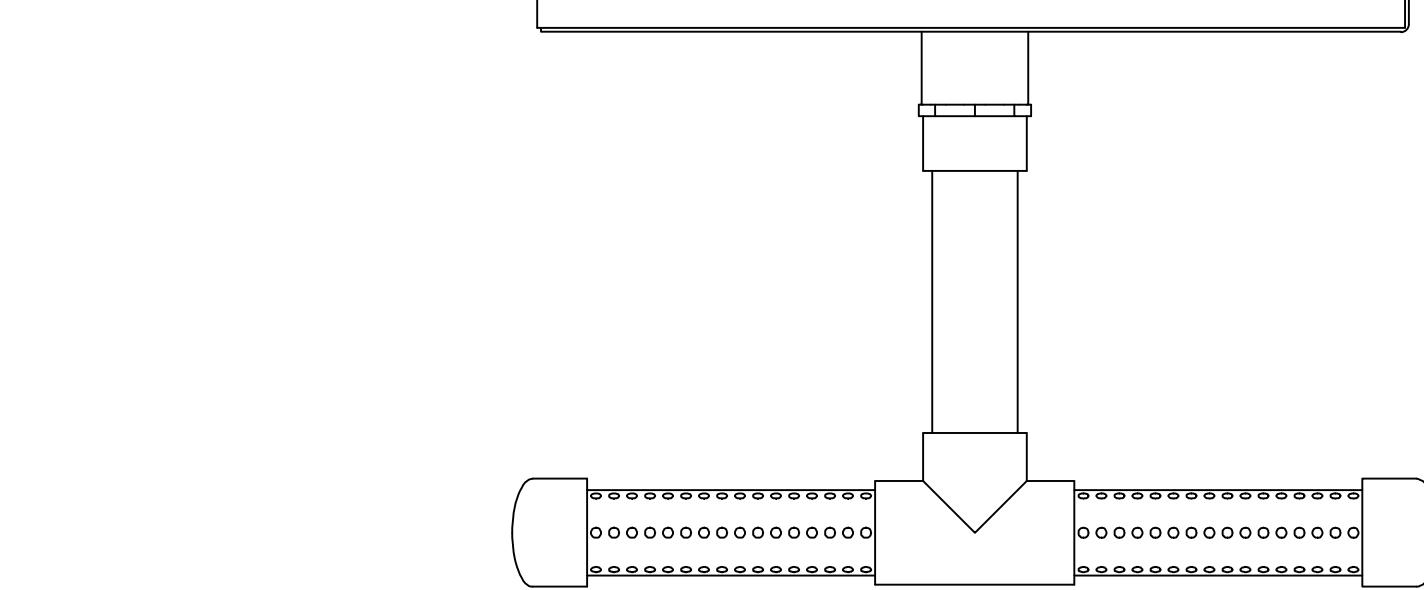
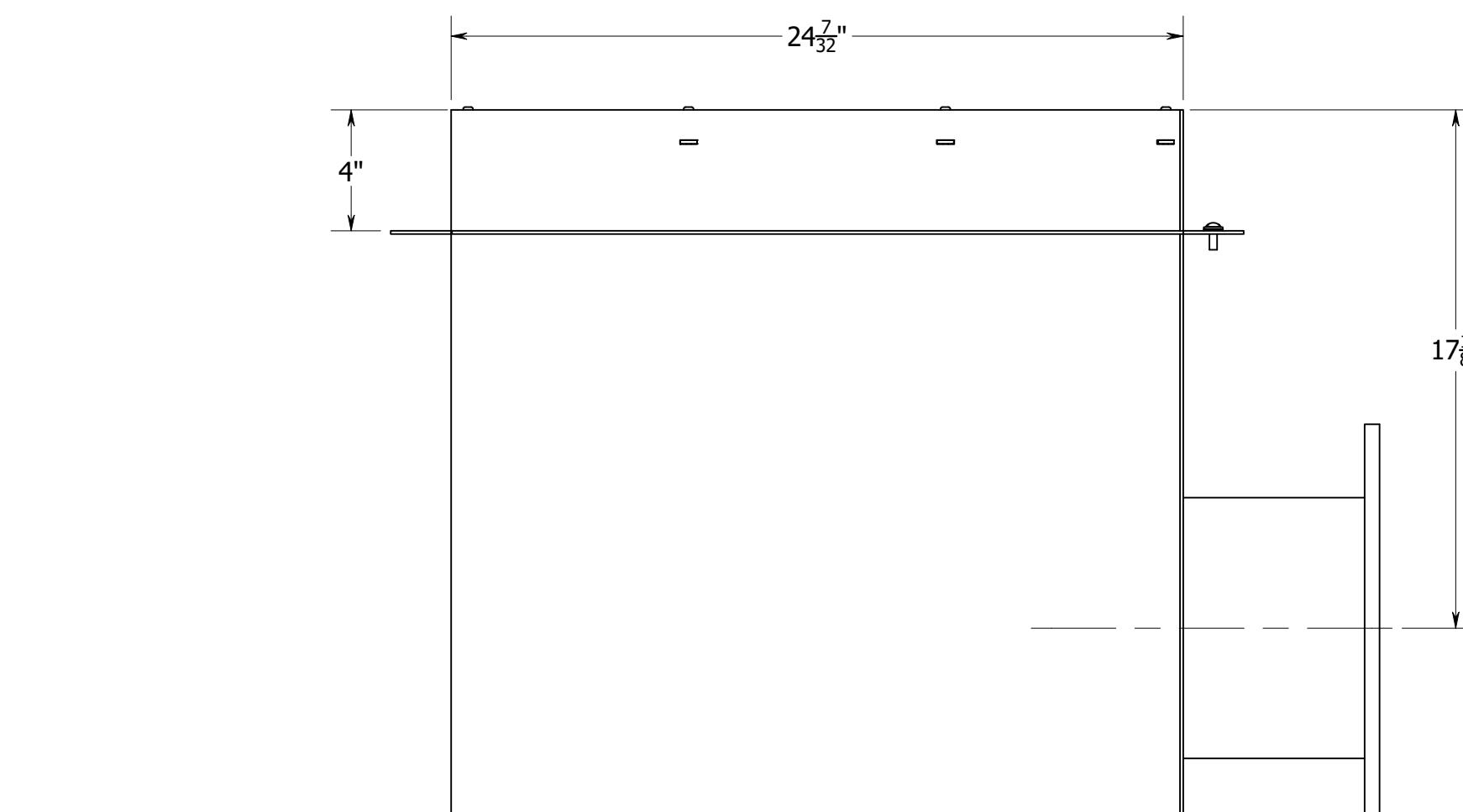
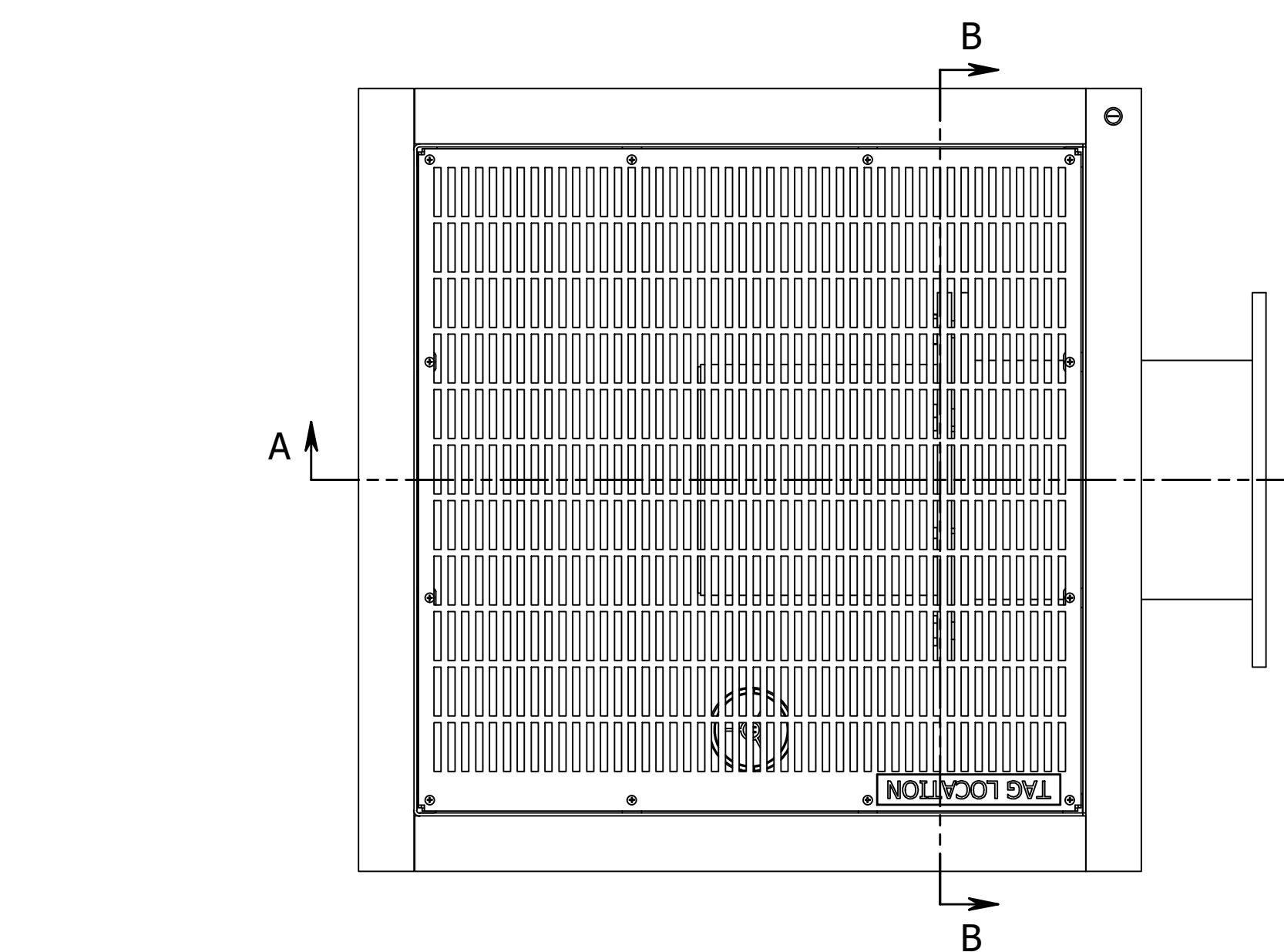
NSF/ANSI/CAN 50 &
ANSI/APSP - 16

PART NUMBER: 9300007

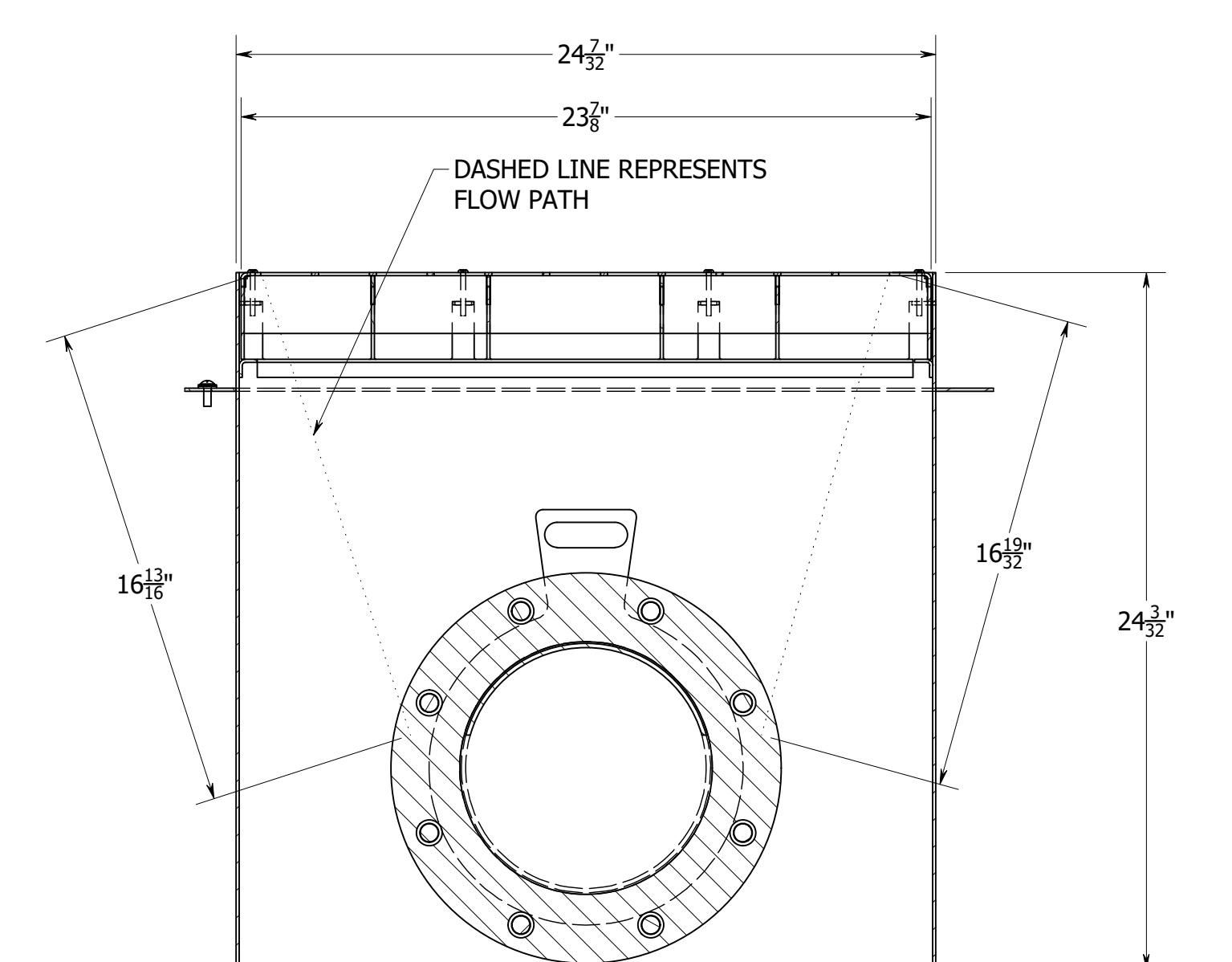
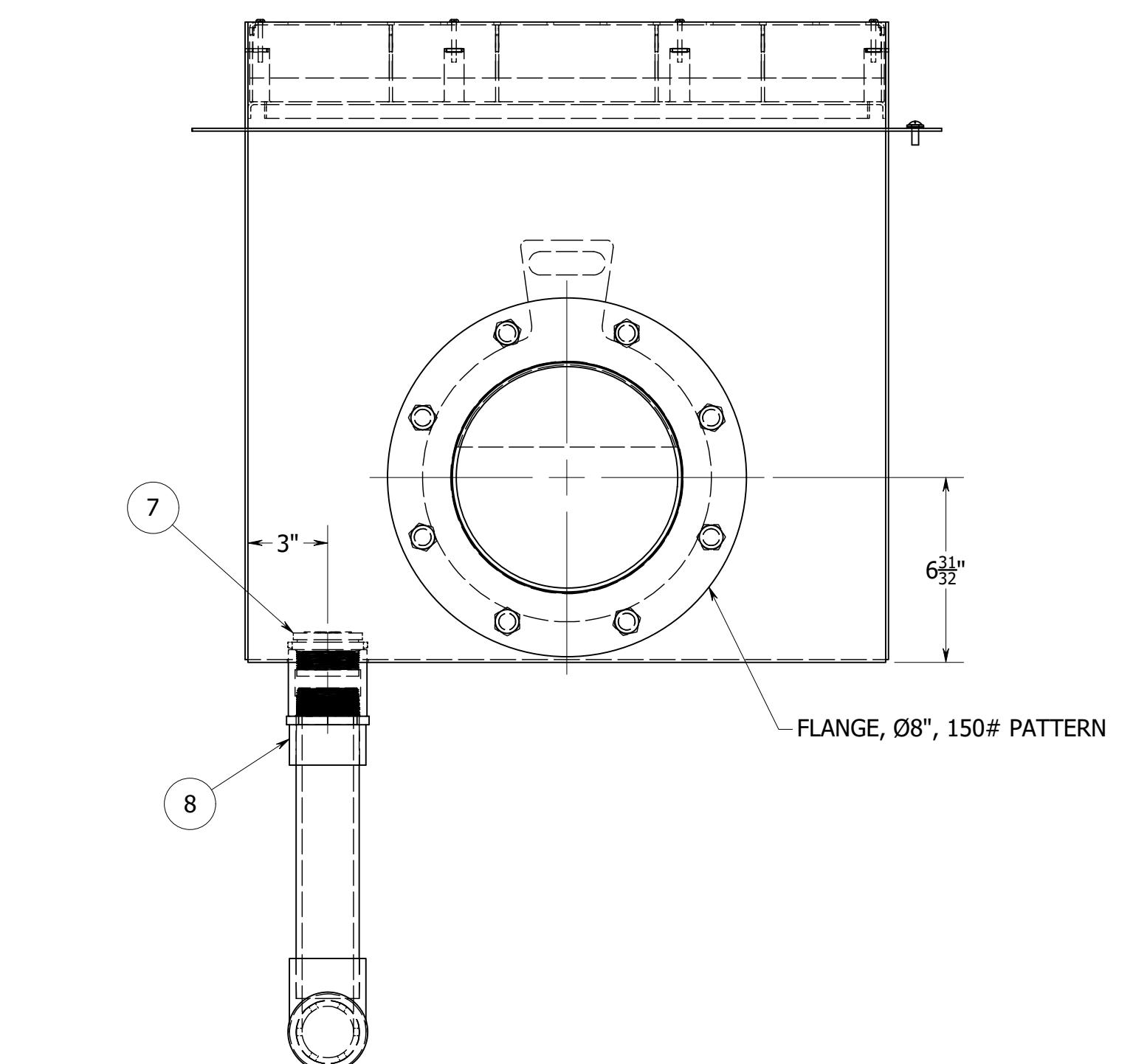
SECTION B-B
SCALE 3/16" = 1"

1	11/07/22	PTT	ADDED FLOW DATA
0	02/28/22	PTT	ORIGINAL ISSUE
REV	DATE	BY	DESCRIPTION
REVISION HISTORY			
DO NOT SCALE DRAWING TOLERANCE UNLESS OTHERWISE NOTED: X ± 1/16" X ± 0.020" 1/X ± 1/32" XX ± 0.010" X ± 1/4" XXX ± 0.005" DRAWN BY PTT DATE 02/25/22 CHECKED BY DATE APPROVED BY DATE			

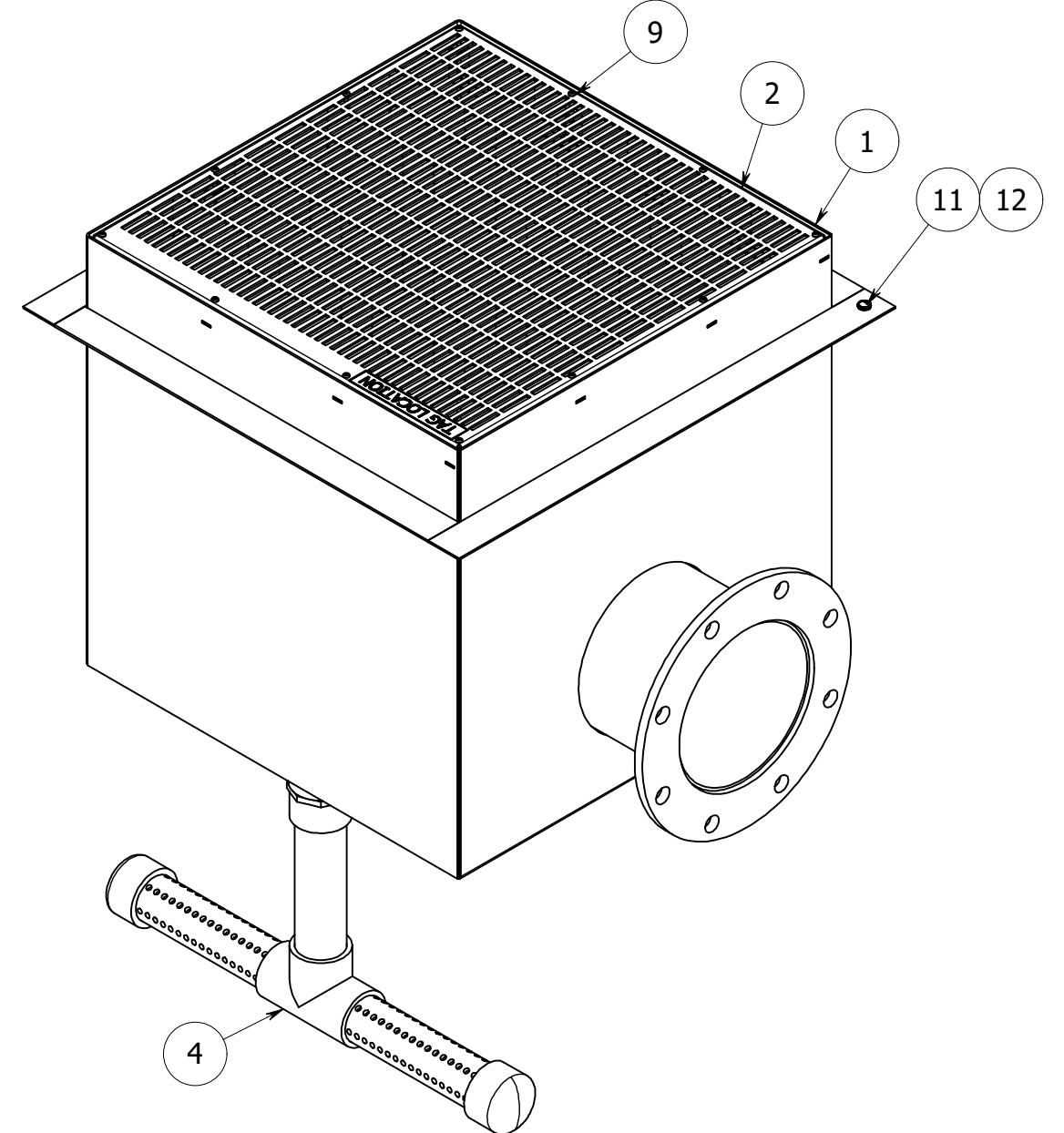
DWG. NO.	MD-304-2424FC-2424-10-1-R0
SHEET #	1 OF 1



**QTY:2 - Leisure Pool
Area B**



ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	ESMD-2424-8-1	WELDMENT, 24" X 24" ESMD, (1) 8" CONNECTION	304L SS
2	1	FC-2424	WELDMENT, 24" X 24" FLAT MD COVER	304L SS
3	1	AVRD-08	WELDMENT, 8" AVRD FOR 24" X 24"	304L SS
4	1	HSRL-01	SHOP ASSEMBLY, HYDROSTATIC RELIEF FOR MAIN DRAIN BOXES	PVC
5	1	P2104-080x02.11-R0	GASKET, Ø8", 150# PATTERN, PL 1/8" x Ø13 1/2"	NEO
6	1	BP08-304	BLANKING PLATE, PL12GA x 14 3/8" x 10 7/8"	304L SS
7	1	SP1056	CYC HYDRO RELIEF VALVE, 1.5IN/2IN - ABS WHITE	CYCOLAC/HAYWARD
8	1	ADPTR-0200MPTx0200SOC.08-R0	2" MALE ADAPTER SOCKET	PVC
9	12	PHMP-#08Cx0108-316	PAN HEAD PHILLIPS SCREW, TORQUE RATING 19.8 INCH LBS, #8-32 X 1 1/2"	316 SS
10	8	HHMB-063Cx0104-316	HEX HEAD BOLT, 5/8"-11 X 1 1/4"	316 SS
11	1	RHMSL-025Cx0012-BR	ROUND HEAD SLOT MACHINE SCREW, 1/4"-20 X 3/4"	BRONZE
12	2	FW-025-BR	FLAT WASHER, Ø1/4"	BRONZE



PART NUMBER: 9300006

0	02/28/22	PTT	ORIGINAL ISSUE
REV	DATE	BY	DESCRIPTION
REVISION HISTORY			
DO NOT SCALE DRAWING			
TOLERANCE UNLESS OTHERWISE NOTED: X ± 1/16" X ± 0.020" 1/X ± 1/32" XX ± 0.010" X ± 1/4" XXX ± 0.005"			
DESCRIPTION 24" X 24" MAIN DRAIN W/ (1) 24" X 24" FLAT COVER & (1) Ø8" CONN.			
DRAWN BY	DATE	SPEC JOB NUMBER:	
PTT	02/25/22		
CHECKED	APPROVED	DWG. NO.	MD-304-2424FC-2424-8-1
APPROVED		SHEET #	1 OF 1



PADDOCK

EMPLOYEE OWNED SINCE 2019

PPEC REGENERATOR FILTER COMPONENTS

Included in Regenerator Pkg

Item	Name
R1	PPEC Regenerator Filter
R2	Pneumatic On-Stream Valve
R3	Pneumatic Precoat Valve
R4	Precoat Fill Valve
R5	Flow Meter
R6	Control Panel
R7	Bump Assembly
R8	Vacuum Transfer Pump
R9	Drain Valve

Optional Filter Accessories

F10	Check Valve
F11	Valve
F12	Strainer
F13	Reducing Precoat Tee
F14	Pump (not by PPEC)
F15	Reducer
F16	Air Compressor
F17	Auto Air Bleed
F18	Receiver Tank
F19	Air Dryer
F20	Air Line
F21	VFD
F22	Air Bleed (not by PPEC)



REGENERATOR FILTER SCHEMATIC

Drain Requirements:

- Gravity drainage of filter is needed to properly waste heavily laden media.
- Slop drainage pipe away from filter, terminating in an open sump/sewer connection. (Check local codes for air-break requirements and media discharge containment.)
- Filter drainage rate is controlled at approximately 50 GPM. Ideally, drainage plumbing should be designed for 500 GPM, providing adequate run-off capacity in case of operator error.
- If sewer is higher than the filter drain, a gravity sump with a sump pump to lift the waste the sewer is required. Match sump to filter volume notated on attached chart.

Electrical Requirements:

- The Control Panel requires a dedicated 120V 20-amp circuit.
- VFD - 2 pairs of 22/4 or 18/4 shielded wire for interface (single conduit)
- UV System, Chemical Controller, Heater, Dehumidification - 22/4 or 18/4 shielded wire for interface (single conduit per unit)
- Flow Meter - 22/4 or 18/4 shielded wire from meter to MOD1 control box(single conduit)
- All panel penetrations should be made on the sides or bottom of panel.
- The filter & all other equipment need to be bonded.

Filter Location:

- Side clearance of three feet should be provided around the filter to allow for operator access.
- Minimum clearance over the filter is 13", more clearance improves service access.
- Provide a mount point(one-ton minimum safe load) above the filter to facilitate head removal.
- Typical clearance underneath the filter (measured from face of drain flange to floor) is 14".

Flow Meter Installation Location:

- The flow meter should be installed on the straight run of pipe into the influent connection between the pump and the filter (allows flow to be monitored through the pre-coat & on-stream cycles).
- The flow meter requires a distance of 20x the pipe diameter before and 5x the pipe diameter after.

Air Supply:

- The PPEC Regenerative filters require a continuous supply of dry 80 PSI air to operate 2 pneumatic valves & a pneumatic "bump" mechanism.
- Multiple filters may require multiple compressors/receivers.
- Air lines should be Ø3/4" braided 300 PSI hose or ¼" copper.
- Do not heat fittings within 2' of filter connection, direct heat can damage regulator components.
- An air dryer may be installed and plumbed between the air supply and the filter. This will help pull any remaining moisture out before it reaches the filter. By-Pass valve to be provided with dryer.

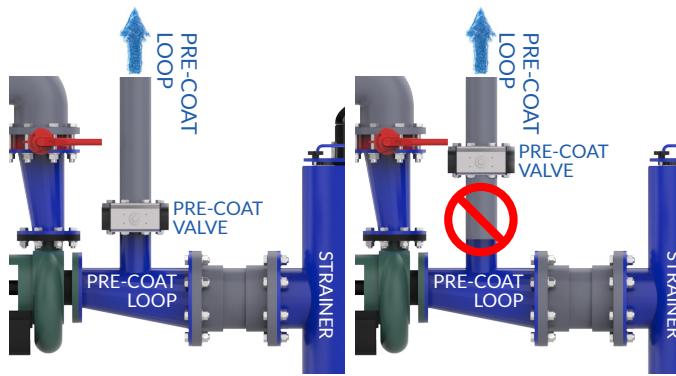
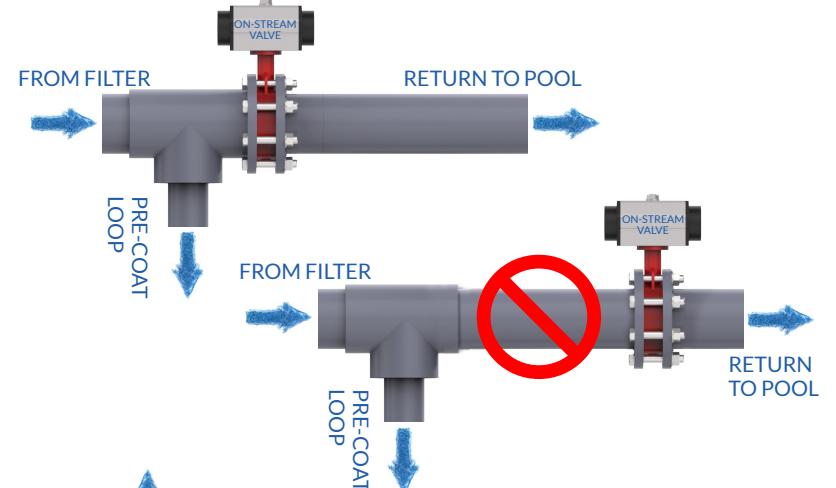


Plumbing Design Guidelines:

- The PPEC Regenerator filters will operate efficiently above or below pool level. A check valve is needed either in front of the pump strainer or between the pump strainer & pre-coat tee. If the pump is below water level a check valve is suggested above the pump discharge as well.
- Efficient filter operation requires a minimum 5' straight run of pipe going into the influent connection. Refer to flow meter location for more information.
- Reduce the number of fittings and plane changes between the pump discharge and the filter.
- Use sweeping 90's or two 45's to decrease turbulence if 5' straight run is not possible.
- Any increase or reduction in piping size should be done as close to the pump discharge as possible.

On-Stream Valve Location:

- Locate valve actuator to allow operator to view valve status, do not mount below pipe.
- Install On-Stream Valve with a spigot flange to decrease the area prior to the valve to prevent media build-up. This reduces media returning to the pool.



Pre-coat Valve Location:

- The pre-coat valve should be installed as close as possible to the pre-coat tee between the pump and strainer. If this is not done, the resulting entrained air can be pushed into the filter and cause media separation which will result in media getting into the pool.
- The pre-coat line and valve are one significant pipe size smaller than the filter connections.

Filter Media Selection:

- Regenerators are NSF approved for diatomaceous earth (DE)* or perlite filter media.
- PPEC provides PF-60 perlite media

*PPEC's preferred media

Air Lines to Valves:

- Pneumatic valves should be connected to their respective control solenoid located on the right side of the filter control mounting bracket (top is on-stream, bottom of pre-coat) using ¼" x 0.04" wall nylon or poly tubing.
- Speed control set screws for valves are located on the front of the solenoid, adjust to a 3-5 sec open & closure rate.

High Vent Air Bleed:

- Must be installed at the highest point in the return line between filter effluent & the on-stream valve to prevent entrained air from re-circulation.
- If the air bleed is improperly installed it could result in decreased filter performance.



Model #	Width (inches) "A"	Overall & Shipping Height (inches) "B"	Tank Influent Connection (inches) "C"	Max Design Filtration Rate (GPM/ft ²)**	Effective Filtration (Area/sq.ft.)	Design Flow Range (gpm)	Tank Volume (gals)	PreCoat Perlite (lbs)	PreCoat (+) DE (lbs)	Operating Weight (lbs)	Shipping Weight (lbs)	Drain Connection (Nom. Pipe Size)	Tank Connection (Nom. Pipe Size)	Minimum Sump Size (gals)	Compressor / Receiver Tank Sizes (gals)
PPEC 225S	27.00	86.75	24.00	1.60	208.7	212-335	129	26	50	1500	1025	4	4	100	60 / N/A
PPEC 350S	33.00	88.25	24.44	1.60	351.2	337-565	244	41	79	2600	1300	4	6	165	60 / N/A
PPEC 500S	39.50	92.48	25.88	1.60	519.4	528-835	291	65.5	126	4250	1750	4	6	225	60 / N/A
PPEC 700S	45.00	96.69	28.25	1.60	707.3	719-1138	396	82	158	4800	2200	4	8	390	60 / N/A
PPEC 900S	50.63	104.19	30.13	1.60	819.0	819-1310	496	95	190	6000	2750	4	8	446	60 / N/A
PPEC 1275	51.00	103.63	30.81	1.60	935.8	950-1505	525	109	210	6500	3100	4	8	670	60 / 30
PPEC 1400S	58.63	107.69	32.63	1.60	1141.0	1141-1825	721	135	260	9900	4100	4	10	810	60 / 30
PPEC 2100	63.50	116.49	34.19	1.60	1538.8	1560-2490	890	182	350	11600	5800	4	10	960	60 / 30

**Contact manufacturer for assistance in proper plumbing layout.

(+) Preferred Media

REGENERATOR DESIGN BEST PRACTICES

PADDOCK DEMINERALIZING COMPOUND

Paddock Regenerator™ Environmental Regenerative Filter



PADDOCK DEGREASING CONCENTRATE

Paddock Regenerator™ Environmental Regenerative Filter



PRECAUTIONARY INFORMATION

Avoid contact with eyes or skin. The use of safety goggles, rubber gloves and dust mask is recommended when handling this product.

CONTAINS

Citric Acid
Methyl Red Hydrochloride

CAS

77-92-9
439-52-7

EYES: Do not wear contact lenses when working with this material. Flush immediately with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface.
SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN: Wash with soap and water. If irritation develops, SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, induce vomiting by sticking finger down throat. Drink large quantities of water. NEVER give anything by mouth to an unconscious person.
SEEK MEDICAL ATTENTION IMMEDIATELY.

For Technical Support call 1-800-849-2729

NET CONTENTS: 50 LBS.

PRECAUTIONARY INFORMATION

Avoid contact with eyes or skin. The use of safety goggles, and rubber gloves is recommended when handling this product.

CONTAINS

Sodium Metasilicate
Sodium Carbonate
Ethoxylated Alcohols, C9-C11
Na-A-Zeolite

CAS

6834-92-0
497-19-8
68439-46-3
68989-22-0

EYES: Flush immediately with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface.
SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN: Wash with water. If irritation develops, SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, DO NOT induce vomiting. Drink large quantities of water. If available, drink several glasses of milk. NEVER give anything by mouth to an unconscious person. SEEK MEDICAL ATTENTION IMMEDIATELY.

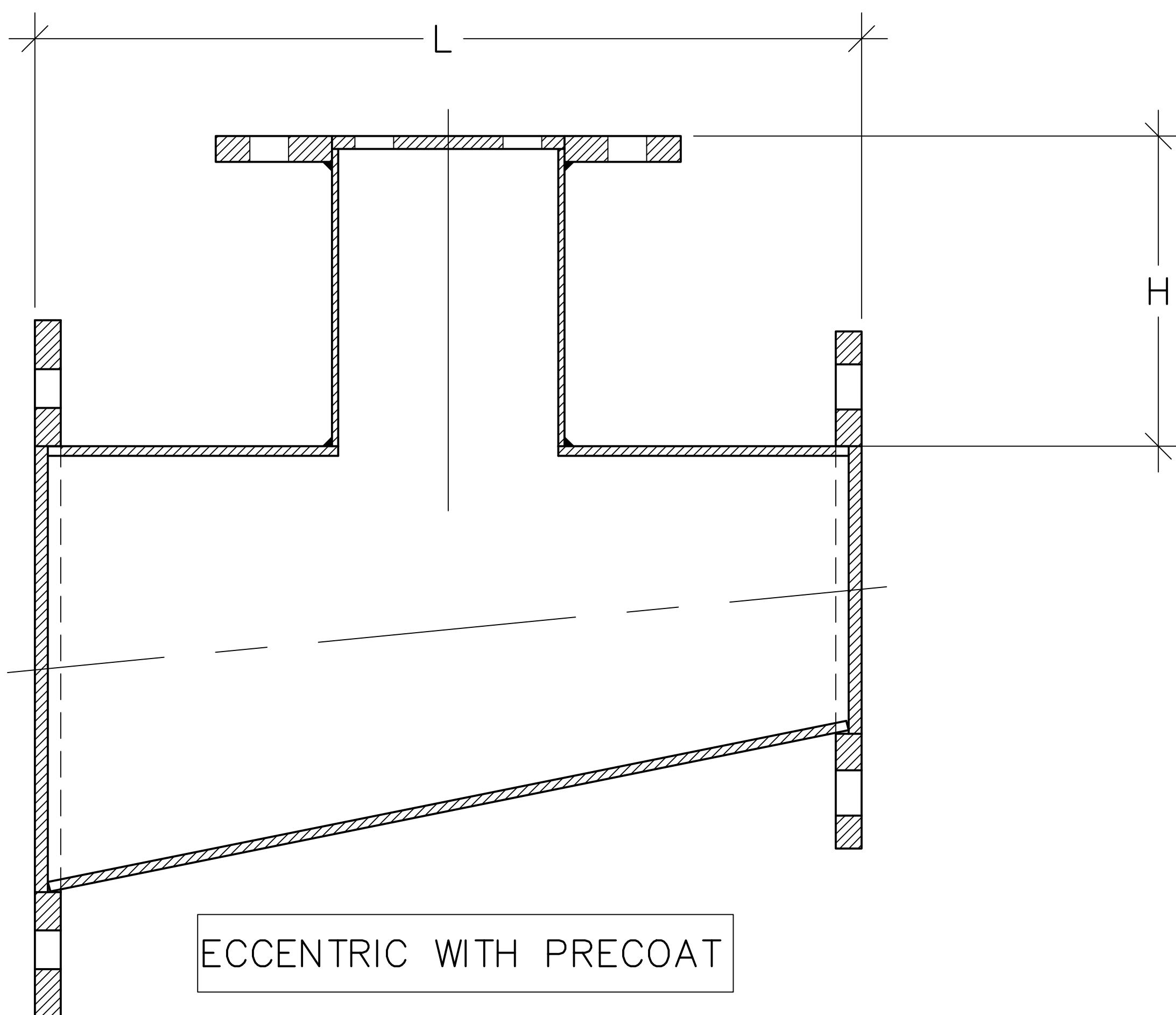
For Technical Support call 1-800-849-2729

NET CONTENTS: 50 LBS.

STAINLESS STEEL FLANGED REDUCERS WITH PRECOAT CONNECTION

REDUCER FLANGES MEET ANSI STANDARD 125# FLANGE DRILLING

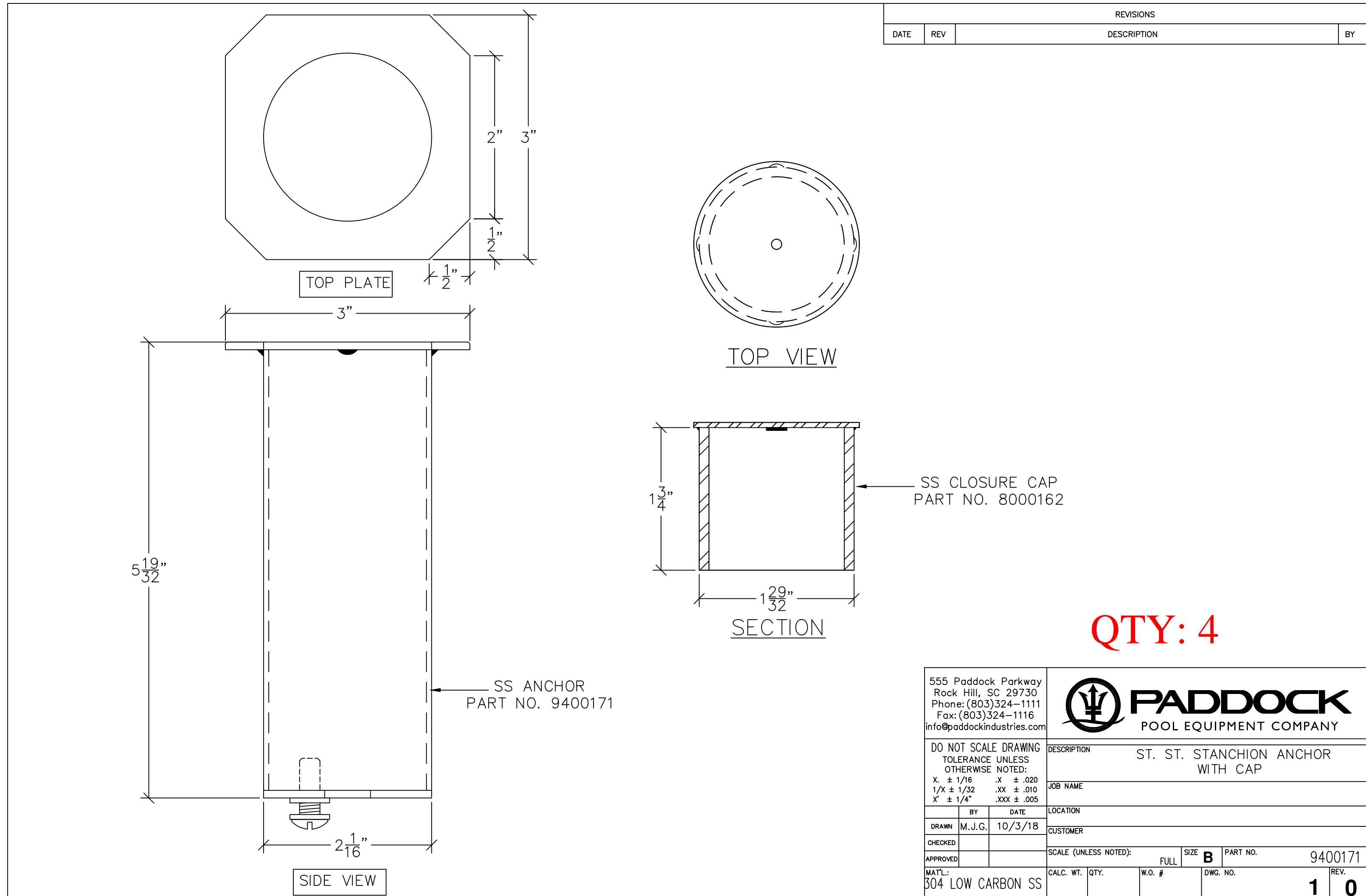
Paddock Pool Equipment Co.
555 Paddock Parkway
Rock Hill SC 29730

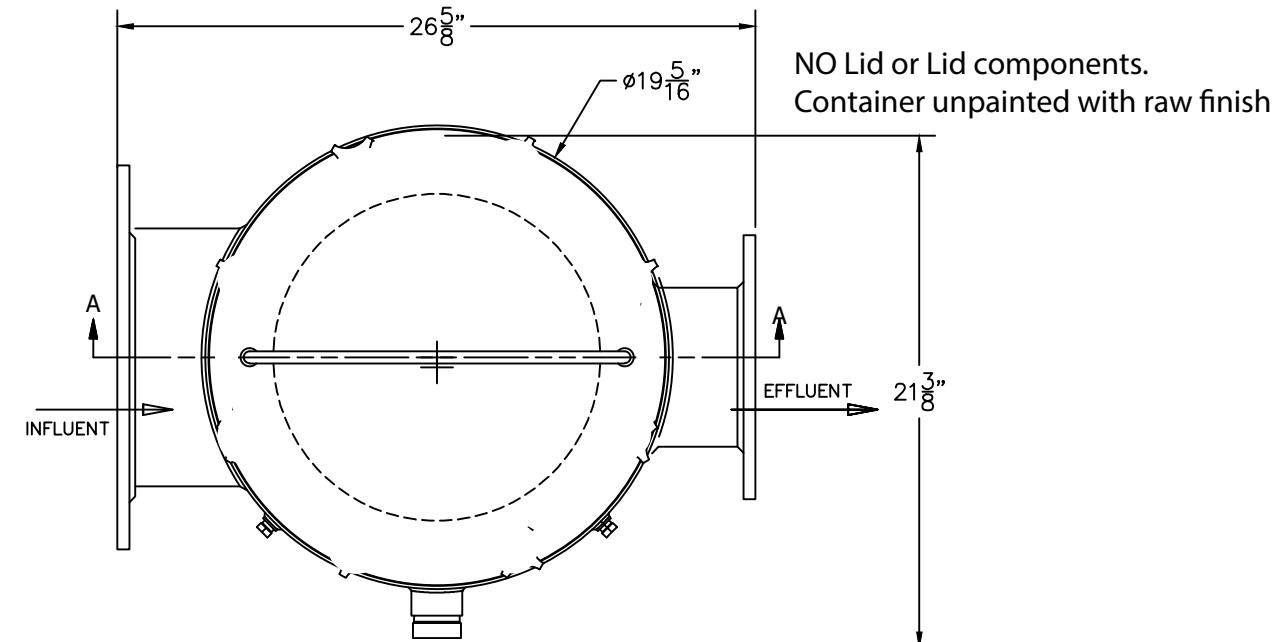


ECCENTRIC REDUCERS W/PRECOAT

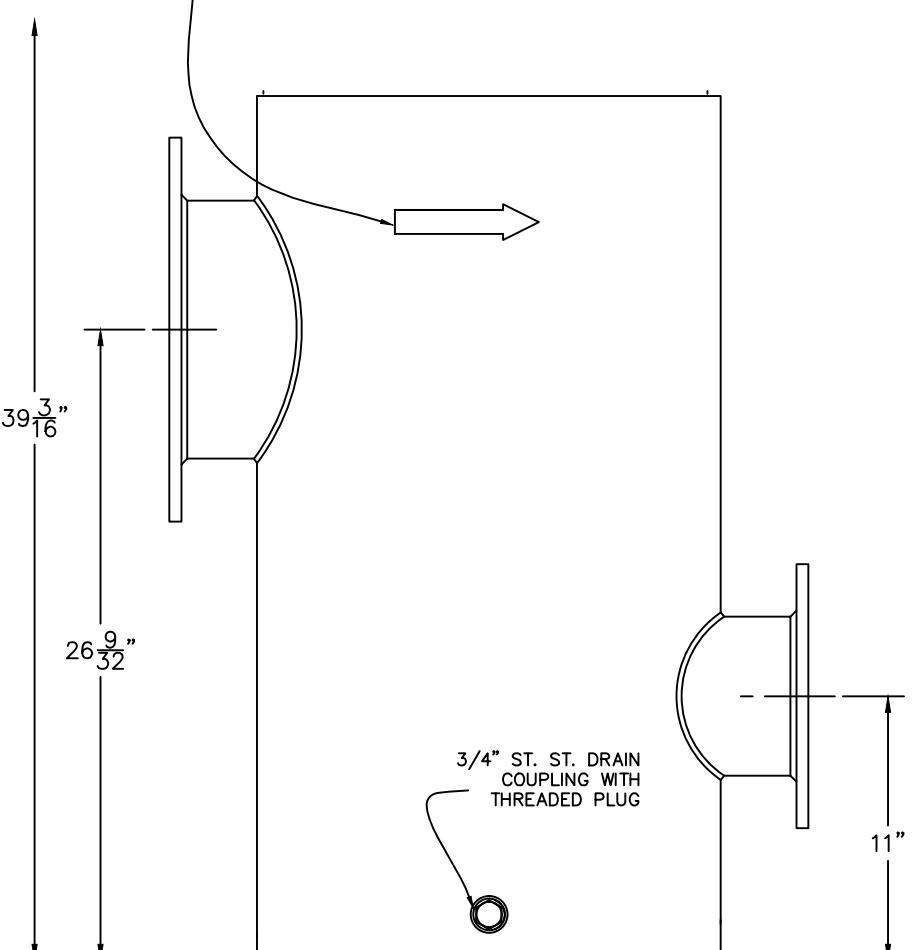
SIZE	"L"	"H"	PRECOAT	PART NUMBER	SIZE	"L"	"H"	PRECOAT	PART NUMBER
3" X 2"	16"	6"	NONE		10" X 5"	16"	6"	4"	
3" X 2½"	16"	6"	NONE					6"	
4" X 2"	16"	6"	4"		10" X 6"	16"	6"	8"	
4" X 2½"	16"	6"	4"					4"	
4" X 3"	16"	6"	4"		10" X 8"	16"	6"	6"	
5" X 4"	16"	6"	4"					8"	
6" X 3"	16"	6"	4"		12" X 6"	16"	6"	4"	
6" X 4"	16"	6"	4"					6"	
6" X 5"	16"	6"	4"		12" X 8"	16"	6"	8"	
8" X 4"	16"	6"	4"					4"	
8" X 5"	16"	6"	4"		12" X 10"	16"	6"	6"	
8" X 6"	16"	6"	4"					8"	
			6"		14" X 8"	16"	6"	4"	
			8"					6"	
			4"		14" X 10"	16"	6"	8"	
			6"					4"	
			8"		14" X 12"	16"	6"	6"	
			4"					8"	
			6"					4"	
			8"					6"	

QTY- 1





TOP VIEW
SCALE 1/8" = 1"



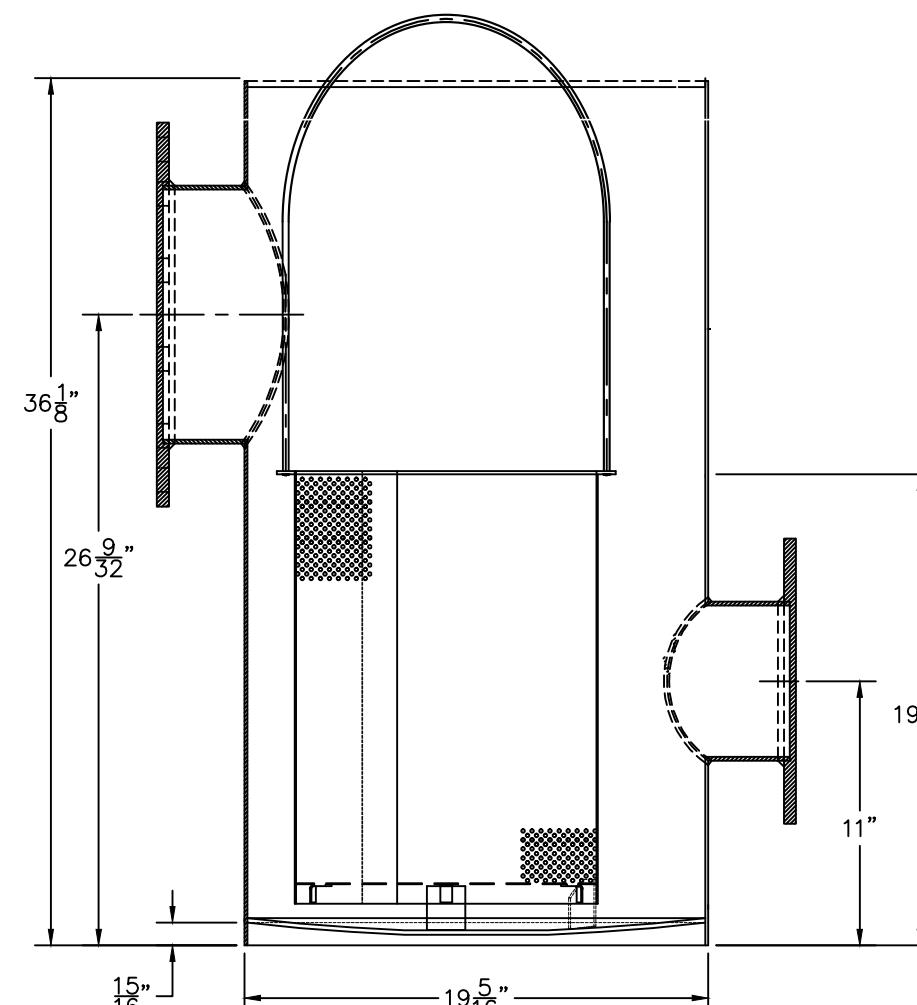
FRONT ELEVATION
SCALE 1/8" = 1"

QTY	STRAINER SIZE	INLET SIZE	FLANGE DIAMETER	OUTLET SIZE	FLANGE DIAMETER	OPEN AREA	RATIO	WT (#)
1	10 X 10	10"	16"	10"	16"	71.8 IN ²	5.66:1	303.0
	10 X 8	10"	16"	8"	13 1/2"	71.8 IN ²	5.66:1	301.2
	10 X 6	10"	16"	6"	11"	71.8 IN ²	5.66:1	299.9
	10 X 5	10"	16"	5"	10"	71.8 IN ²	5.66:1	299.4
	12 X 12	12"	19"	12"	19"	101.64 IN ²	4:1	315.0
	12 X 10	12"	19"	10"	16"	101.64 IN ²	4:1	313.2
	12 X 8	12"	19"	8"	13 1/2"	101.64 IN ²	4:1	311.4
	12 X 6	12"	19"	6"	11"	101.64 IN ²	4:1	310.0
	12 X 5	12"	19"	5"	10"	101.64 IN ²	4:1	309.5

WITH EXTRA STRAINER BASKET

PADDOCK HAIR AND LINT STRAINERS ARE FABRICATED FROM TYPE 304 1/8" THICK STAINLESS STEEL.

STAINLESS STEEL DRAIN COUPLING WITH THREADED PLUG ARE PROVIDED

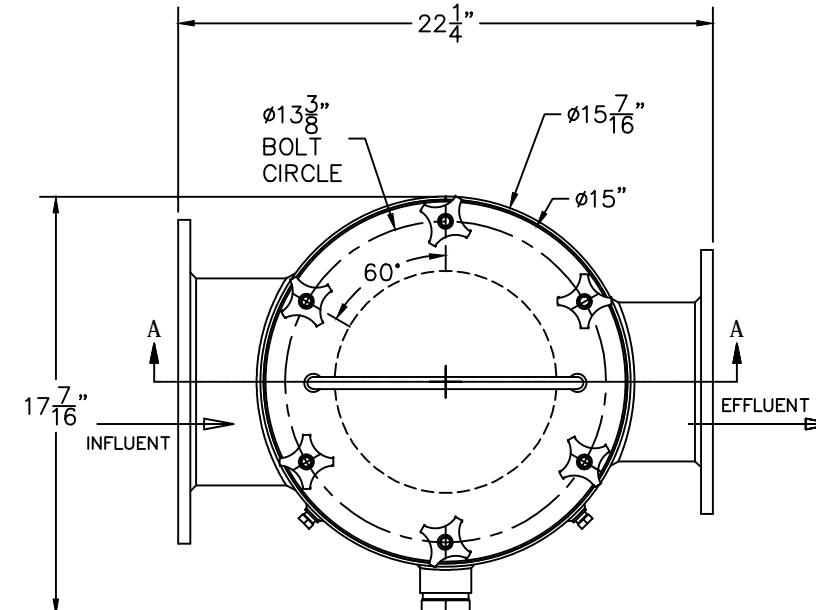


SECTION A-A
SCALE 1/8" = 1"

PERFORATED BASKET IS CONSTRUCTED OF 18 GAUGE TYPE 304 STAINLESS STEEL W/A 52% OPEN AREA AND 1/8" PERFORATED HOLES.

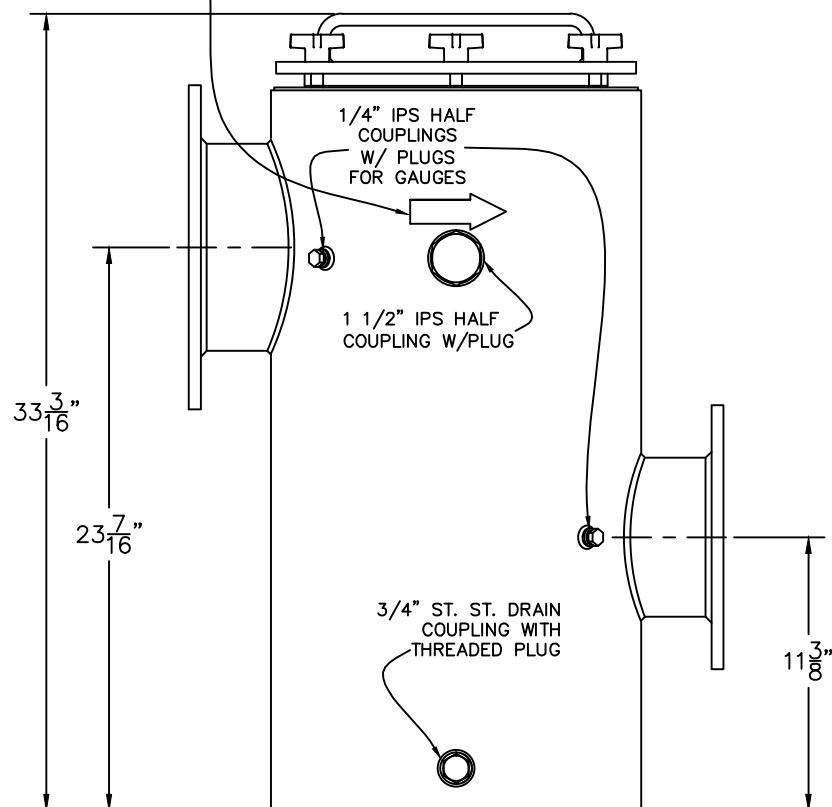
STRAINER IS SHIPPED WITH (1) EXTRA BASKET.

555 Paddock Parkway Rock Hill, SC 29730 Phone: (803)324-1111 Fax: (803)324-1116 info@paddockindustries.com			 PADDOCK POOL EQUIPMENT COMPANY		
DO NOT SCALE DRAWING TOLERANCE UNLESS OTHERWISE NOTED: X. ± 1/16 .X. ± .020 1/X ± 1/32 .XX ± .010 X' ± 1/4" .XXX ± .005			DESCRIPTION MEDIUM 304 STAINLESS STEEL ROUND STRAINERS		
JOB NAME _____			LOCATION _____		
DRAWN	BY	DATE	CUSTOMER	_____	
BLC		5/7/12		_____	
CHECKED			SCALE (UNLESS NOTED):	1/8" = 1"	SIZE B
				STD. DWG. NO. XXX	SHEET 1 OF 1
APPROVED			MATL.:	CALC. WT.	QTY.
					W.O. # P-
					DWG. NO. _____
					REV. 0

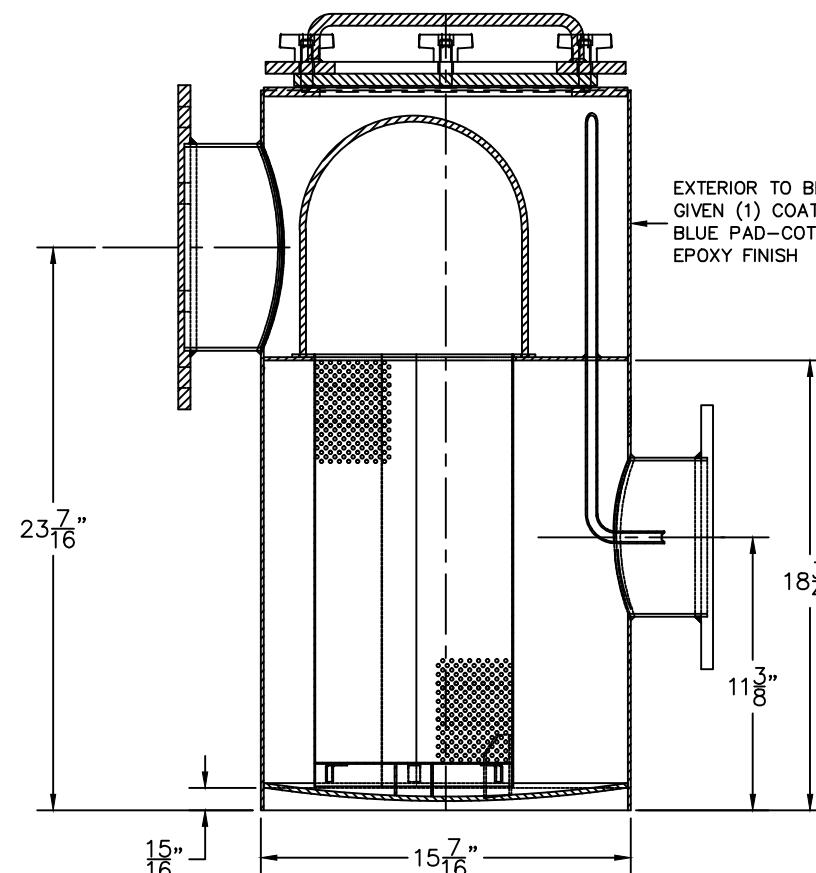


TOP VIEW
SCALE 1/8" = 1"

FLOW DIRECTIONAL
ARROW DECAL ON
SIDE OF STRAINER



FRONT ELEVATION
SCALE 1/8" = 1"



SECTION A-A
SCALE 1/8" = 1"

QTY	STRAINER SIZE	INLET SIZE	FLANGE DIAMETER	OUTLET SIZE	FLANGE DIAMETER	OPEN AREA	RATIO	WT (#)
1	4 X 4	4"	9"	4"	9"	11.5 IN ²	20.6:1	191.7
	4 X 3	4"	9"	3"	7 1/2"	11.5 IN ²	20.6:1	191.3
	6 X 6	6"	11"	6"	11"	26.07 IN ²	9.16:1	194.2
	6 X 5	6"	11"	5"	10"	26.07 IN ²	9.16:1	193.7
1	6 X 4	6"	11"	4"	9"	26.07 IN ²	9.16:1	193.0
	6 X 3	6"	11"	3"	7 1/2"	26.07 IN ²	9.16:1	192.5
1	8 X 8	8"	13 1/2"	8"	13 1/2"	45.7 IN ²	5.22:1	196.9
	8 X 6	8"	13 1/2"	6"	11"	45.7 IN ²	5.22:1	195.6
1	8 X 5	8"	13 1/2"	5"	10"	45.7 IN ²	5.22:1	195.1
	8 X 4	8"	13 1/2"	4"	9"	45.7 IN ²	5.22:1	194.3

WITH EXTRA STRAINER BASKET

Per Strainer Size

PADDOCK HAIR AND LINT STRAINERS ARE FABRICATED FROM TYPE 304 1/8" THICK STAINLESS STEEL.

4", 6", AND 8" STRAINERS FEATURE A 1/2" STAINLESS STEEL COVER RING WITH 1/2" THICK POLYCARBONATE VIEWPORT.

LIDS ARE MACHINED TO ELIMINATE SHARP EDGES AND ARE SEALED WITH A 1/4" DIAMETER RUBBER 'O'-RING GASKET.

LOCKING ASSEMBLIES PERMIT EASY ACCESS AND CLOSING WITHOUT USE OF TOOLS.

STAINLESS STEEL DRAIN AND VACUUM COUPLINGS WITH THREADED PLUGS ARE PROVIDED ALONG WITH DRILLED AND TAPPED GAUGE CONNECTIONS.

SYSTEM IS DESIGNED FOR 60 PSI WORKING PRESSURE.

PERFORATED BASKET IS CONSTRUCTED OF 18 GAUGE TYPE 304 STAINLESS STEEL W/A 52% OPEN AREA AND 1/8" PERFORATED HOLES.

STRAINER IS SHIPPED WITH (1) EXTRA BASKET.

555 Paddock Parkway Rock Hill, SC 29730 Phone: (803)324-1111 Fax: (803)324-1116 info@paddockindustries.com	 PADDOCK POOL EQUIPMENT COMPANY			
DO NOT SCALE DRAWING TOLERANCE UNLESS OTHERWISE NOTED: X. ± 1/16 .X. ± .020 1/X ± 1/32 .XX. ± .010 X' ± 1/4" .XXX ± .005	DESCRIPTION SMALL 304 STAINLESS STEEL ROUND STRAINERS			
JOB NAME	—			
DRAWN BY DATE	LOCATION —			
DRAWN BLC 5/4/12	CUSTOMER —			
CHECKED	SCALE (UNLESS NOTED):			
APPROVED	1/8" = 1"	SIZE B	STD. DWG. NO. XXX	SHEET 1 OF 1
MAT'L.: CALC. WT.	QTY.	W.O. # P-	DWG. NO.	REV. 0



Paddock Regenerator™

Environmental Regenerative Filter



The Paddock **Regenerative Filter** provides a resource conserving solution. Utilizing a system of filter-aid regeneration and an innovative filter element called the Flex-Tube™, the Paddock **Regenerative Filter System** provides unparalleled water clarity and remarkable operating efficiency. Most reliable, stainless steel and cost effective regenerative filter in commercial pool market when considering life of facility investment on equipment. Contact Paddock on how to size regenerative filter to your specific facility.

Benefits:

- § Best available regenerative technology through reliable automation for over 45 years
- § Reduces operating costs by increasing filter run lengths per media charge. Conserve water, thermal heat loss, chemical loss and power usage due to increased filter run lengths
- § Provides superior water clarity using either Diatomaceous Earth (DE) or Perlite media
- § Filters are designed to run at full filtration range with minimal loss of effectiveness
- § True ASME flanged and dished head for superior flow collection / distribution in the filter top end
- § Maximum 36" element length. Conservative design limits rise rate and prolongs elements life
- § Head, body, internals, and other type 304 ELC stainless steel are fully passivated following fabrication to Federal Specification QQ-P-36D, (excludes fasteners)
- § Element cores are low carbon stainless steel, fully annealed and passivated to Federal Specifications QQ-P-35D
- § Double boot mechanism for extra air capacity to assist in more active regeneration and better pre-coat mixing of media
- § This regenerative filter is a **GREEN SYSTEM** and lends itself well for **LEED** accreditation



PADDOCK

EMPLOYEE OWNED SINCE 2019

PPEC REGENERATOR FILTER COMPONENTS

Included in Regenerator Pkg

Item	Name
R1	PPEC Regenerator Filter
R2	Pneumatic On-Stream Valve
R3	Pneumatic Precoat Valve
R4	Precoat Fill Valve
R5	Flow Meter
R6	Control Panel
R7	Bump Assembly
R8	Vacuum Transfer Pump
R9	Drain Valve

Optional Filter Accessories

F10	Check Valve
F11	Valve
F12	Strainer
F13	Reducing Precoat Tee
F14	Pump (not by PPEC)
F15	Reducer
F16	Air Compressor
F17	Auto Air Bleed
F18	Receiver Tank
F19	Air Dryer
F20	Air Line
F21	VFD
F22	Air Bleed (not by PPEC)



REGENERATOR FILTER SCHEMATIC

Drain Requirements:

- Gravity drainage of filter is needed to properly waste heavily laden media.
- Slop drainage pipe away from filter, terminating in an open sump/sewer connection. (Check local codes for air-break requirements and media discharge containment.)
- Filter drainage rate is controlled at approximately 50 GPM. Ideally, drainage plumbing should be designed for 500 GPM, providing adequate run-off capacity in case of operator error.
- If sewer is higher than the filter drain, a gravity sump with a sump pump to lift the waste the sewer is required. Match sump to filter volume notated on attached chart.

Electrical Requirements:

- The Control Panel requires a dedicated 120V 20-amp circuit.
- VFD - 2 pairs of 22/4 or 18/4 shielded wire for interface (single conduit)
- UV System, Chemical Controller, Heater, Dehumidification - 22/4 or 18/4 shielded wire for interface (single conduit per unit)
- Flow Meter - 22/4 or 18/4 shielded wire from meter to MOD1 control box(single conduit)
- All panel penetrations should be made on the sides or bottom of panel.
- The filter & all other equipment need to be bonded.

Filter Location:

- Side clearance of three feet should be provided around the filter to allow for operator access.
- Minimum clearance over the filter is 13", more clearance improves service access.
- Provide a mount point(one-ton minimum safe load) above the filter to facilitate head removal.
- Typical clearance underneath the filter (measured from face of drain flange to floor) is 14".

Flow Meter Installation Location:

- The flow meter should be installed on the straight run of pipe into the influent connection between the pump and the filter (allows flow to be monitored through the pre-coat & on-stream cycles).
- The flow meter requires a distance of 20x the pipe diameter before and 5x the pipe diameter after.

Air Supply:

- The PPEC Regenerative filters require a continuous supply of dry 80 PSI air to operate 2 pneumatic valves & a pneumatic "bump" mechanism.
- Multiple filters may require multiple compressors/receivers.
- Air lines should be Ø3/4" braided 300 PSI hose or ¼" copper.
- Do not heat fittings within 2' of filter connection, direct heat can damage regulator components.
- An air dryer may be installed and plumbed between the air supply and the filter. This will help pull any remaining moisture out before it reaches the filter. By-Pass valve to be provided with dryer.

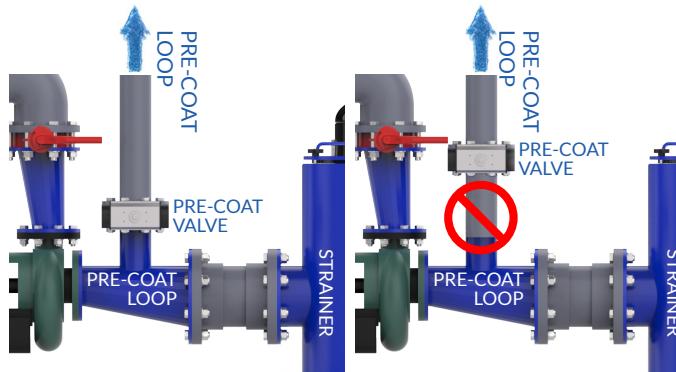
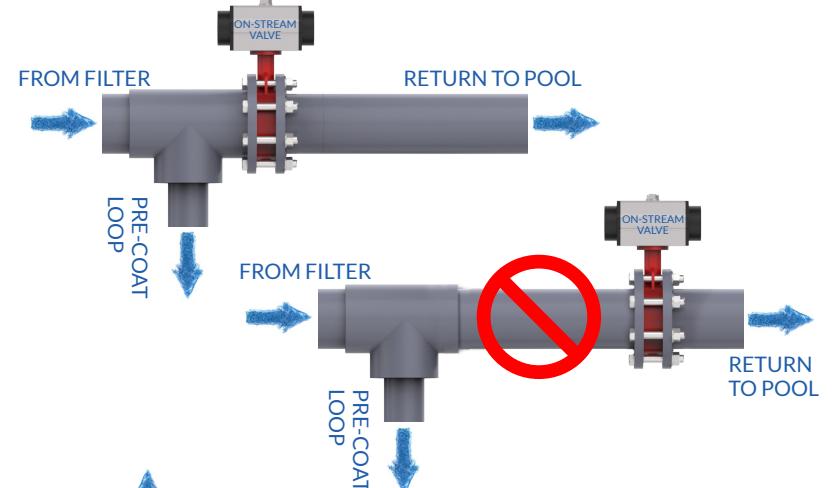


Plumbing Design Guidelines:

- The PPEC Regenerator filters will operate efficiently above or below pool level. A check valve is needed either in front of the pump strainer or between the pump strainer & pre-coat tee. If the pump is below water level a check valve is suggested above the pump discharge as well.
- Efficient filter operation requires a minimum 5' straight run of pipe going into the influent connection. Refer to flow meter location for more information.
- Reduce the number of fittings and plane changes between the pump discharge and the filter.
- Use sweeping 90's or two 45's to decrease turbulence if 5' straight run is not possible.
- Any increase or reduction in piping size should be done as close to the pump discharge as possible.

On-Stream Valve Location:

- Locate valve actuator to allow operator to view valve status, do not mount below pipe.
- Install On-Stream Valve with a spigot flange to decrease the area prior to the valve to prevent media build-up. This reduces media returning to the pool.



Pre-coat Valve Location:

- The pre-coat valve should be installed as close as possible to the pre-coat tee between the pump and strainer. If this is not done, the resulting entrained air can be pushed into the filter and cause media separation which will result in media getting into the pool.
- The pre-coat line and valve are one significant pipe size smaller than the filter connections.

Filter Media Selection:

- Regenerators are NSF approved for diatomaceous earth (DE)* or perlite filter media.
- PPEC provides PF-60 perlite media

*PPEC's preferred media

Air Lines to Valves:

- Pneumatic valves should be connected to their respective control solenoid located on the right side of the filter control mounting bracket (top is on-stream, bottom of pre-coat) using ¼" x 0.04" wall nylon or poly tubing.
- Speed control set screws for valves are located on the front of the solenoid, adjust to a 3-5 sec open & closure rate.

High Vent Air Bleed:

- Must be installed at the highest point in the return line between filter effluent & the on-stream valve to prevent entrained air from re-circulation.
- If the air bleed is improperly installed it could result in decreased filter performance.



Model #	Width (inches) "A"	Overall & Shipping Height (inches) "B"	Tank Influent Connection (inches) "C"	Max Design Filtration Rate (GPM/ft ²)**	Effective Filtration (Area/sq.ft.)	Design Flow Range (gpm)	Tank Volume (gals)	PreCoat Perlite (lbs)	PreCoat (+) DE (lbs)	Operating Weight (lbs)	Shipping Weight (lbs)	Drain Connection (Nom. Pipe Size)	Tank Connection (Nom. Pipe Size)	Minimum Sump Size (gals)	Compressor / Receiver Tank Sizes (gals)
PPEC 225S	27.00	86.75	24.00	1.60	208.7	212-335	129	26	50	1500	1025	4	4	100	60 / N/A
PPEC 350S	33.00	88.25	24.44	1.60	351.2	337-565	244	41	79	2600	1300	4	6	165	60 / N/A
PPEC 500S	39.50	92.48	25.88	1.60	519.4	528-835	291	65.5	126	4250	1750	4	6	225	60 / N/A
PPEC 700S	45.00	96.69	28.25	1.60	707.3	719-1138	396	82	158	4800	2200	4	8	390	60 / N/A
PPEC 900S	50.63	104.19	30.13	1.60	819.0	819-1310	496	95	190	6000	2750	4	8	446	60 / N/A
PPEC 1275	51.00	103.63	30.81	1.60	935.8	950-1505	525	109	210	6500	3100	4	8	670	60 / 30
PPEC 1400S	58.63	107.69	32.63	1.60	1141.0	1141-1825	721	135	260	9900	4100	4	10	810	60 / 30
PPEC 2100	63.50	116.49	34.19	1.60	1538.8	1560-2490	890	182	350	11600	5800	4	10	960	60 / 30

**Contact manufacturer for assistance in proper plumbing layout.

(+) Preferred Media

REGENERATOR DESIGN BEST PRACTICES

PADDOCK

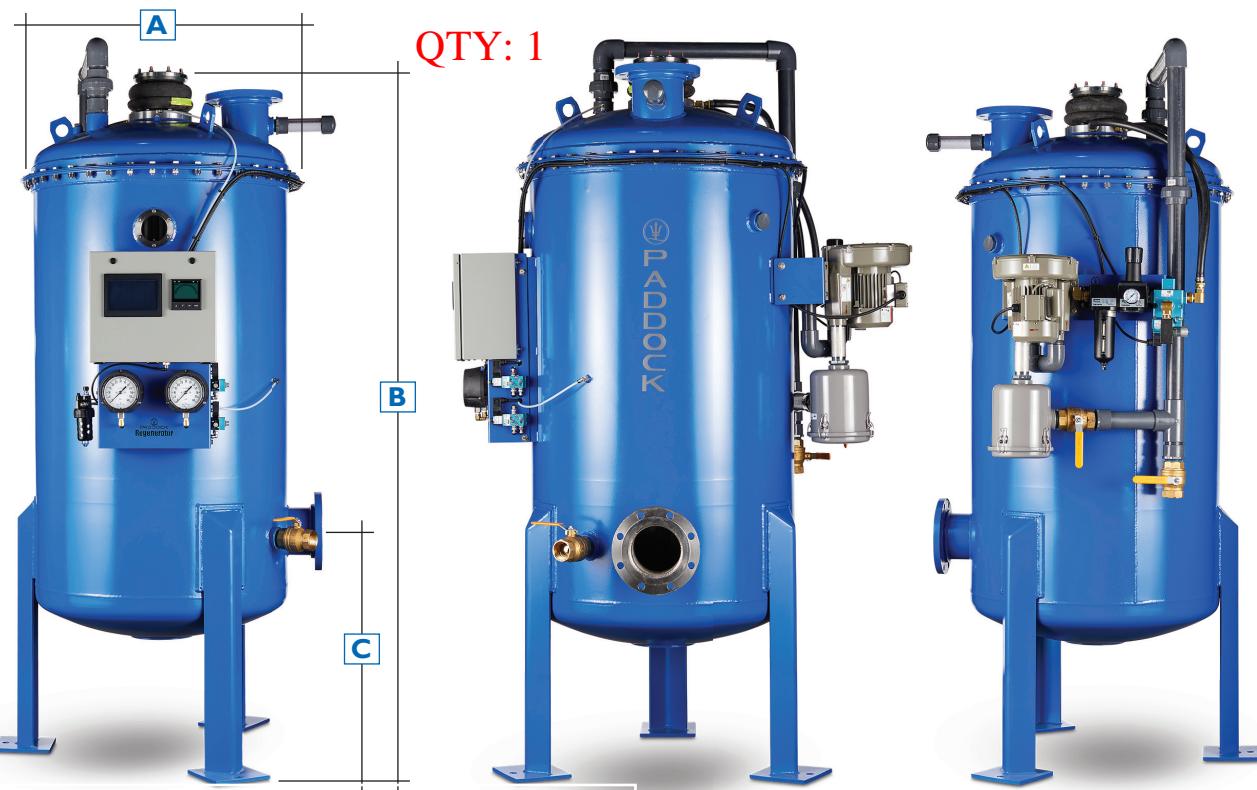
Regenerator™

Environmental Regenerative Filter



FEATURES

- Stainless Steel Components
- No Backwashing
- Fully Automated System with Manual Override Options Available
- Small Footprint in Equipment Room
- Integration with VFD and other secondary components
- True ASME Domed Head for Enhanced Hydraulics
- Double Convoluted Boot Mechanism for Superior Regeneration
- ROI on Heat, Water, & Chemical Loss
- 4" Drain Connection on All Series



QTY: 1

For Maintenance & Service add 2' (ft) Clearance to "B"

Regenerator Model #	Width 'A'	Overall Height 'B'	Tank Influent Connection 'C'	Maximum Design Filtration*	Effective Filtration Area	Flow Range	Tank Volume	PreCoat Perlite	PreCoat Diatomaceous Earth (DE)**	Operating Weight	Shipping Weight	Precoat Piping	Tank Connection Influent & Effluent
Unit	Inches	Inches	Inches	GPM/FT ²	FT ²	GPM	Gallons	Pounds	Pounds	Pounds	Pounds	Ø, Inches	Ø, Inches
PPEC 225S*	27.00	89.750	23.438	1.60	208.7	212 - 335	129	26.0	50	1500	1025	3	4
PPEC 350S*	33.00	90.188	24.469	1.60	351.2	337 - 565	244	41.0	79	2600	1300	4	6
PPEC 500S*	39.50	95.500	27.500	1.60	519.4	528 - 835	291	65.5	126	4250	1750	4	6
PPEC 700S*	45.00	98.031	28.313	1.60	707.3	719 - 1138	396	82.0	158	4800	2200	6	8
PPEC 900S*	50.63	104.344	30.125	1.60	819.0	819 - 1310	496	95.0	190	6000	2750	6	8
PPEC 1275*	51.00	105.563	29.063	1.60	935.8	950 - 1505	525	109.0	210	6500	3100	6	8
PPEC 1400S*	58.63	109.688	32.688	1.60	1141.0	1141 - 1825	721	135.0	260	9900	4100	8	10
PPEC 2100*	63.50	116.938	34.250	1.60	1538.8	1560 - 2490	890	182.0	350	11600	5800	8	10

*Contact Manufacturer for assistance in proper plumbing layout

**Preferred Media

Drain Connection Note: All models have a 4" drain connection.

REV 2021.07.08

Available in a variety of wetted materials and ideal for pipe sizes up to DN900 (36 in.)



Blind Version



The Signet 2551 Magmeter is an insertion style magnetic flow sensor that features no moving parts. The patented* sensor design is available in corrosion-resistant materials to provide long-term reliability with minimal maintenance costs. Material options include PP with stainless steel, PVDF with Hastelloy-C, or PVDF with Titanium. Utilizing the comprehensive line of Signet installation fittings, sensor alignment and insertion depth is automatic. These versatile, simple-to-install sensors deliver accurate flow measurement over a wide dynamic range in pipe sizes ranging from DN15 to DN900 (½ to 36 inches), satisfying the requirements of many diverse applications.

Signet 2551 Magmeters offer many output options of frequency/digital (S³L) or 4 to 20 mA which are available on both the blind and display versions. The frequency or digital (S³L) sensor output can be used with Signet's extensive line of flow instruments while the 4 to 20 mA output can be used for a direct input to PLCs, chart recorders, etc. Both the 4 to 20 mA output and digital (S³L) sensor interface is available for long distance signal transmission. An additional benefit is the empty pipe detection which features a zero flow output when the sensors are not completely wetted. Also, the frequency output is bi-directional while the 4 to 20 mA output can be set for uni- or bi-directional flow using the display or the 3-0250 USB to Digital (S³L) Configuration/ Diagnostic setup tool which connects to PCs for programming capabilities.

In addition the display version of the 2551 Magmeter is available with relays and features permanent and resettable totalizer values which can be stored and seen on the display. Also, the display contains multi-languages with English, Spanish, German, French, Italian and Portuguese menu options.

Features

- Test certificate included for -X0, -X1
- Patented Magmeter technology*
- No moving parts
- Bi-directional flow
- Empty pipe detection
- Installs into pipe sizes DN15 to DN900 (0.5 to 36 in.)
- Operating range 0.05 to 10 m/s (0.15 to 33 ft/s)
- Accurate measurement even in dirty liquids
- Polypropylene or PVDF retaining nuts
- Blind 4 to 20 mA, digital (S³L), frequency, relay output
- No pressure drop
- Corrosion resistant materials; PP or PVDF with SS, Hastelloy-C, or Titanium
- Multi-language display menu available



Certified to
NSF/ANSI 61 & 372
(3-2551-PX-XX
version only)

Applications

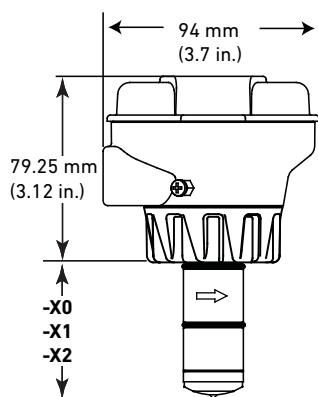
- Chemical Processing
- Water and Wastewater Monitoring
- Metal Recovery and Landfill Leachate
- Commercial Pools, Spas, and Aquariums
- HVAC
- Irrigation
- Scrubber Control
- Neutralization Systems
- Industrial Water Distribution

Dimensions

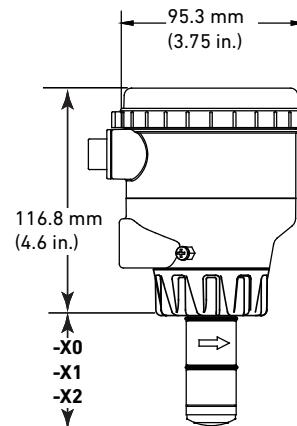
Pipe Range	
1/2 to 4 in.	-X0 = 58 mm (2.3 in.)
5 to 8 in.	-X1 = 91 mm (3.6 in.)
10 to 36 in.	-X2 = 167 mm (6.6 in.)

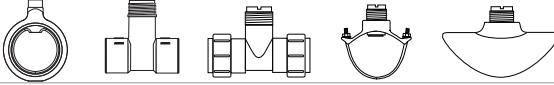
X = Sensor Body P, T, or V

Blind version



Display version



System Overview	Stand-Alone	Panel Mount	Field Mount - Pipe, Tank, Wall	4 to 20 mA Input
	Signet Model 2551 Magmeter 	Signet Instruments 8550 8900 9900 9900-1BC  	Signet Instruments 8550 9900 with 3-8050 Universal Mount Kit  + 	Customer Supplied Chart Recorder or Programmable Logic Controller  OR 
		Signet 2551 Magmeter 		
	Signet Fittings 			All sold separately

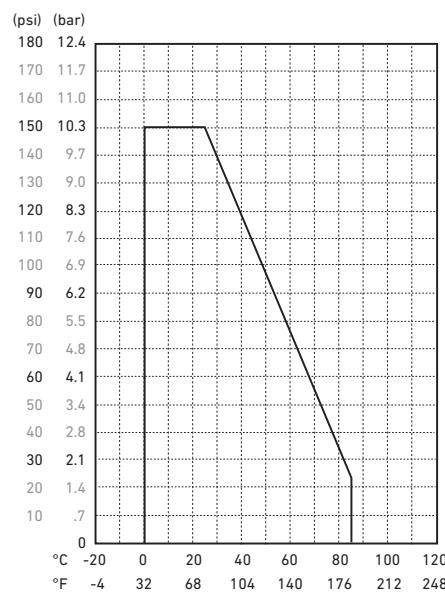
Operating Temperature/Pressure Graphs

Note:

The pressure/temperature graphs are specifically for the Signet sensor. During system design the specifications of all components must be considered. In the case of a metal piping system, a plastic sensor will reduce the system specification. When using a PVDF sensor in a PVC piping system, the fitting will reduce the system specification.

Application Tips

- Note minimum process liquid conductivity requirement is 20 $\mu\text{s}/\text{cm}$.
- Install sensor using standard Signet installation fittings for best results.
- Sensor is capable of retrofitting into existing 515 and 2536 fittings.

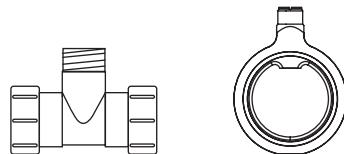
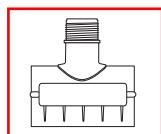
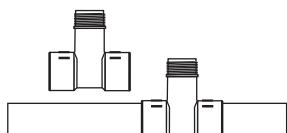


Please refer to Wiring, Installation, and Accessories sections for more information.

Specifications

General		
Operating Range	0.05 to 10 m/s	0.15 to 33 ft/s
Pipe Size Range	DN15 to DN900	½ in. to 36 in.
Linearity	± 1% reading plus 0.1% of full scale	
Repeatability	±0.5% of reading @ 25 °C (77 °F)	
Minimum Conductivity	20 µS/cm	
Wetted Materials		
Sensor Body/Electrodes and Grounding Ring	-P0, -P1, -P2: PP/316L SS -T0, -T1, -T2: PVDF/Titanium -V0, -V1, -V2: PVDF/Hastelloy-C	
O-rings	FPM (standard) EPR (EPDM), FFFPM (optional)	
Case	PBT	
Display Window	Polyamide (transparent nylon)	
Protection Rating	NEMA 4X/IP65	
Electrical		
Power Requirements	4 to 20 mA Frequency Digital (S ³ L)	24 VDC ±10%, regulated, 22.1 mA max. 5 to 24 VDC ±10%, regulated, 15 mA max. 5 to 6.5 VDC, 15 mA max.
Auxiliary (only required for units with relays)		9 to 24 VDC, 0.4 A max.
Reverse Polarity and Short Circuit Protected		
Current Output 4 to 20 mA	Loop Accuracy Isolation Maximum Cable Error condition Max. Loop Resistance Compatible with PLC, PC or similar equipment 4 to 20 mA load needed	32 µA max. error (25 °C @ 24 VDC) Low voltage < 48 VAC/DC from electrodes and auxiliary power 300 m (1000 ft) 22.1 mA 300 Ω 4 to 20 mA load needed
Frequency Output	Output Modes Max. Pull-up Voltage Max. Current Sink Maximum Cable Compatible with Signet Model 8550, 8900, 9900, 9900-1BC	Freq., or Mirror Relay (display version only) 30 VDC 50 mA, current limited 300 m (1000 ft) Compatible with Signet Model 8550, 8900, 9900, 9900-1BC
Digital (S ³ L) Output	Serial ASCII, TTL level 9600 bps Compatible with Model Signet 8900 controller	
Relay Specifications		
#1, #2 Type	Mechanical SPDT	
Rating	5 A @ 30 VDC max., 5 A @ 250 VDC max.	
#3 Type	Solid State	
	50 mA @ 30 VDC, 50 mA @ 42 VAC	
Hysteresis	User adjustable for exiting alarm condition	
Alarm On Trigger Delay	Adjustable (0 to 9999.9 sec.)	
Relay Modes	Off, Low, High, Window, and Proportional Pulse	
Relay Source	Flow Rate, Resettable Totalizer	
Error Condition	Selectable; Fail Open or Closed	
Display		
Characters	2 x 16	
Contrast	User-set in four levels	
Backlighting (only on relay versions)	Requires external 9-24 VDC, 0.4 mA max.	
Max. Temperature/Pressure Rating		
Storage Temperature	-20 °C to 70 °C	-4 °F to 158 °F
Relative Humidity	0 to 95% (non-condensing)	
Operating Temperature	Ambient Media	-10 °C to 70 °C 0 °C to 85 °C
Maximum Operating Pressure		10.3 bar @ 25 °C 1.4 bar @ 85 °C
		150 psi @ 77 °F 20 psi @ 185 °F
Environmental		
		NEMA 4X / IP65 Enclosure (with cap installed)
Shipping Weight		
	0.680 kg	1.50 lb
Standards and Approvals		
		CE, FCC, UL, CUL, NSF (3-2551-PX-XX version only) RoHS compliant, China RoHS Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety

Calibration Data: K-Factors and Full Scale Current Values



Plastic Installation Fittings: PVC Tees and Saddles

Pipe Size (In.)	Fitting Type	K-Factor Gallons	K-Factor Liters	20 mA= in GPM	20 mA= in LPM
-----------------	--------------	------------------	-----------------	---------------	---------------

SCH 80 PVC-U TEES FOR SCH 80 PVC PIPE

1/2	MPV8T005	2277.0	601.58	13.1	49.6
3/4	MPV8T007	1407.6	371.90	20.97	79.38
1	MPV8T010	861.17	227.52	34.21	129.5
1 1/4	MPV8T012	464.91	122.83	67.1	253.99
1 1/2	MPV8T015	331.43	87.56	92.54	350.25
2	MPV8T020	192.89	50.96	145.15	549.38

SCH 80 PVC TEES FOR SCH 80 PVC PIPE

2 1/2	PV8T025	131.46	34.73	228.2	863.74
3	PV8T030	82.52	21.80	363.55	1376.04
4	PV8T040	44.78	11.83	669.88	2535.49

SCH 80 PVC TEES FOR SCH 80 CPVC PIPE

1/2	MCPV8T005	2277.0	601.58	13.18	49.87
3/4	MCPV8T007	1407.6	371.90	21.31	80.67
1	MCPV8T010	861.17	227.52	34.84	131.86
1 1/4	MCPV8T012	464.91	122.83	64.53	244.24
1 1/2	MCPV8T015	331.43	87.56	90.52	342.62
2	MCPV8T020	192.89	50.96	155.53	588.70

SCH 80 PVC SADDLES FOR SCH 80 PVC PIPE

2	PV8S020	193.83	51.21	154.77	585.81
2 1/2	PV8S025	138.01	36.46	217.38	822.78
3	PV8S030	83.89	22.16	357.62	1353.60
4	PV8S040	40.88	10.80	733.88	2777.74
6	PV8S060	22.53	5.95	1331.85	5041.06
8	PV8S080	12.52	3.31	2395.41	9066.64
10	PV8S100	7.94	2.10	3778.75	14302.57
12	PV8S120	5.71	1.51	5256.69	19896.57

SCH 80 PVC SADDLES FOR SCH 40 PVC PIPE

2	PV8S020	180.01	47.56	166.66	630.81
2 1/2	PV8S025	123.72	32.69	242.49	917.82
3	PV8S030	75.81	20.03	395.71	1497.76
4	PV8S040	41.87	11.06	716.56	2712.19
6	PV8S060	19.71	5.21	1521.92	5760.46
8	PV8S080	11.73	3.10	2558.12	9682.50
10	PV8S100	7.43	1.96	4037.60	15282.3
12	PV8S120	5.23	1.38	5734.87	21706.48

Plastic Installation Fittings for Metric Pipes:

Polypropylene True Union Tees and Wafers
PVDF True Union Tees, PVC True Union Tees

Pipe Size (Metric)	Fitting Type	K-Factor Gallons	K-Factor Liters	20 mA= in GPM	20 mA= in LPM
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POLYPROPYLENE FITTINGS (DIN/ISO, BS, ANSI)

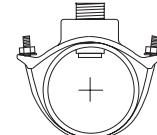
DN15	PPMT005	2192.73	579.32	13.68	51.78
DN20	PPMT007	1327.81	350.81	22.59	85.52
DN25	PPMT010	737.16	194.76	40.70	154.04
DN32	PPMT012	453.46	119.81	66.16	250.41
DN40	PPMT015	275.03	72.66	109.08	412.86
DN50	PPMT020	164.17	43.35	182.74	691.66

PVDF FITTINGS (DIN/ISO, BS, ANSI)

DN15	SFMT005	1946.49	514.26	15.41	58.34
DN20	SFMT007	1158.05	305.96	25.91	98.05
DN25	SFMT010	749.09	197.91	40.05	151.58
DN32	SFMT012	439.51	116.12	68.26	258.36
DN40	SFMT015	248.93	65.77	120.52	456.16
DN50	SFMT020	146.85	38.80	204.30	773.26

PVC FITTINGS (DIN/ISO, BS, ANSI)

DN15	PVMT005	2067.76	546.30	14.51	54.91
DN20	PVMT007	1136.61	300.29	26.39	99.90
DN25	PVMT010	716.52	189.31	41.87	158.47
DN32	PVMT012	446.07	117.85	67.25	254.56
DN40	PVMT015	278.83	73.67	107.59	407.23
DN50	PVMT020	159.36	42.10	188.26	712.55



Metal Installation Fittings

Iron Saddles

Pipe Size (In.)	Fitting Type	K-Factor Gallons	K-Factor Liters	20 mA= in GPM	20 mA= in LPM
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SCH 80 IRON SADDLE ON SCH 80 PIPE

2	IR8S020	194.85	51.48	153.96	582.75
2 1/2	IR8S025	142.28	37.59	210.86	798.10
3	IR8S030	87.53	23.13	342.72	1297.20
4	IR8S040	40.62	10.73	738.58	2795.54
5	IR8S050	29.28	7.74	1024.43	3877.48
6	IR8S060	22.30	5.89	1345.58	5093.03
8	IR8S080	12.52	3.31	2395.41	9066.64
10	IR8S100	7.94	2.10	3778.75	14302.57
12	IR8S120	5.65	1.49	5311.45	20103.83

SCH 80 IRON SADDLE ON SCH 40 PIPE

2	IR8S020	185.35	48.97	161.85	612.61
2 1/2	IR8S025	127.47	33.68	235.36	890.83
3	IR8S030	76.62	20.24	391.54	1481.99
4	IR8S040	40.23	10.63	745.72	2822.57
5	IR8S050	27.32	7.22	1098.24	4156.83
6	IR8S060	19.71	5.21	1521.92	5760.46
8	IR8S080	11.61	3.07	2584.23	9781.30
10	IR8S100	7.36	1.94	4078.8	15438.2
12	IR8S120	5.18	1.37	5793.39	21927.98

PADDOCK DEMINERALIZING COMPOUND

Paddock Regenerator™ Environmental Regenerative Filter



PADDOCK DEGREASING CONCENTRATE

Paddock Regenerator™ Environmental Regenerative Filter



QTY: 1

PRECAUTIONARY INFORMATION

Avoid contact with eyes or skin. The use of safety goggles, rubber gloves and dust mask is recommended when handling this product.

CONTAINS

Citric Acid
Methyl Red Hydrochloride

CAS

77-92-9
439-52-7

EYES: Do not wear contact lenses when working with this material. Flush immediately with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface.
SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN: Wash with soap and water. If irritation develops, SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, induce vomiting by sticking finger down throat. Drink large quantities of water. NEVER give anything by mouth to an unconscious person.
SEEK MEDICAL ATTENTION IMMEDIATELY.

For Technical Support call 1-800-849-2729

NET CONTENTS: 50 LBS.

QTY: 1

PRECAUTIONARY INFORMATION

Avoid contact with eyes or skin. The use of safety goggles, and rubber gloves is recommended when handling this product.

CONTAINS

Sodium Metasilicate
Sodium Carbonate
Ethoxylated Alcohols, C9-C11
Na-A-Zeolite

CAS

6834-92-0
497-19-8
68439-46-3
68989-22-0

EYES: Flush immediately with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface.
SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN: Wash with water. If irritation develops, SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, DO NOT induce vomiting. Drink large quantities of water. If available, drink several glasses of milk. NEVER give anything by mouth to an unconscious person. SEEK MEDICAL ATTENTION IMMEDIATELY.

For Technical Support call 1-800-849-2729

NET CONTENTS: 50 LBS.

**# 4ME98 - Electric Air Compressor: 5 hp, 1 Stage, Vertical, 60 gal Tank,
14.2 cfm, Splash Lubricated**



QTY: 1

PN210021

Auto Drain Valve

PN210024

.5 HP, 60 gal., Vertical Splash Lubricated
Tank Mounted Electric Air Compressor

14.2

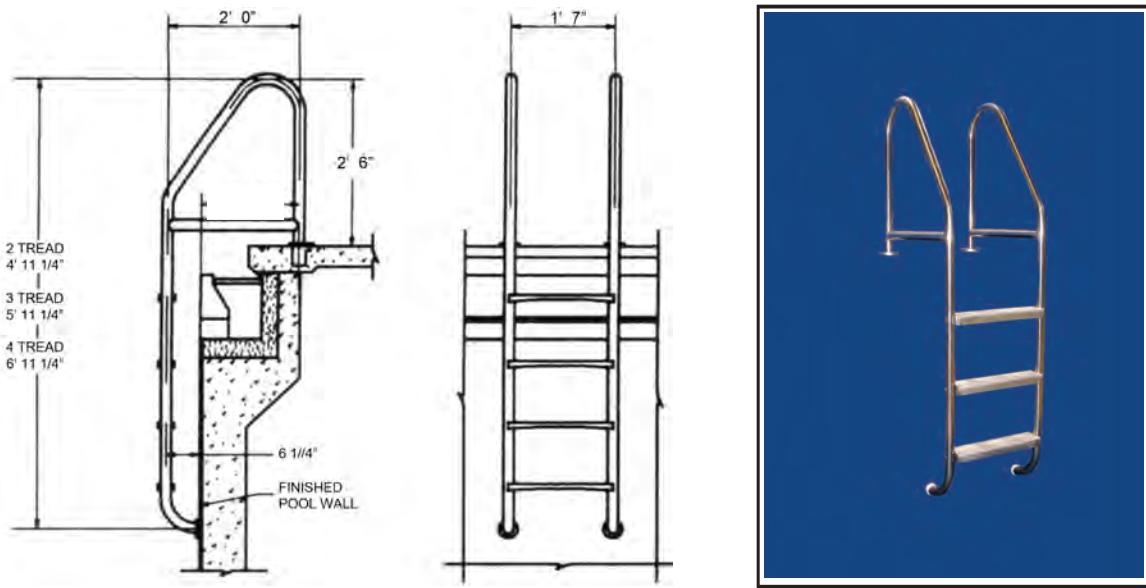
.Item # **4ME98**

Mfr. Model #4ME98

ITEM	ELECTRIC AIR COMPRESSOR	DUTY CYCLE	INTERMITTENT
LUBRICATION TYPE	SPLASH LUBRICATED	THERMAL PROTECTION	YES
AIR TANK STYLE	VERTICAL	SOUND LEVEL	85 dBA
Number of stages	1	INCLUDES	MANUAL DRAIN VALVE, OIL SIGHT GLASS, PRESSURE GAUGE, PRESSURE SAFETY VALVE
OUTPUT POWER	5 HP	CYLINDER MATERIAL	CAST IRON
FREE AIR FLOW RATE @ MAXIMUM PRESSURE	14.2 CFM	FINISH	POWDER COATED
MAXIMUM OPER. PRESSURE	135 PSI	ASME TANK	YES
AIR TANK SIZE	60 GAL	CONTROL TYPE	PRESSURE SWITCH
INPUT VOLTAGE	208-240V AC, 480V AC	ON PRESSURE SWITCH SETTING	105 PSI
PHASE	THREE	OFF PRESSURE SWITCH SETTING	140 PSI
FREQUENCY	60Hz	INLET SIZE	¾ IN
COMPRESSOR PACKAGE TYPE	BASE MODEL	OUTLET SIZE	¾ IN
PUMP STYLE	SIMPLEX	OUTLET TYPE	NPT
PUMP TYPE	RECIPROCATING	OUTLET GENDER	FEMALE
PUMP LOCATION	TOP MOUNT	OVERALL LENGTH	23 IN
PUMP OIL CAPACITY	40 FLOZ	OVERALL WIDTH	31 IN
MOTOR TYPE	OPEN DRIPPROOF	OVERALL HEIGHT	71 IN
CURRENT RATING	13.4 TO 13.2 A, 6.6 A	STANDARDS	ASME APPROVED, CSA, CALIFORNIA CODE 462(L)(2), UL LISTED, UL1450
MAXIMUM SPEED	950 RPM		



Ladder



Paddock's **Ladders** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083". (Outside diameter of 1.5" or wall thickness of .120" is also available.)

Ladder rails are spaced 19" apart with a cross brace for added stability and furnished with slip-resistant stainless steel treads.

Exposed surfaces shall be polished to a Paddock buff finish.

A rubber bumper on each rail protects the interior pool finish.

Paddock deck anchors with Paddock escutcheon plates are available.

P/N _____, Model 4539-_____, 2-Tread Ladder Type _____, ____" OD x _____ Wall Less Anchors, Qty _____

P/N _____, Model 4540-_____, 3-Tread Ladder Type **316**, **1.9**" OD x **.083** Wall Less Anchors, Qty **2**

P/N _____, Model 4541-_____, 4-Tread Ladder Type **316**, **1.9**" OD x **.083** Wall Less Anchors, Qty **2**

P/N _____, Model 4542-_____, 5-Tread Ladder Type _____, ____" OD x _____ Wall Less Anchors, Qty _____

DECK EQUIPMENT

Wedge Deck Anchor

4
8
0
1



The body shall be constructed of cast bronze and shall have a tapered chamber to receive wedge by means of which a ladder or other rail may be held securely.

Wedge shall be of cast bronze and shall be drawn against rail being anchored by means of a $\frac{1}{2}$ " bolt.

Wedge deck anchor shall be provided with a ground connection at its base and shall have an anchoring protrusion at its center.

PN 200153

Paddock No. 4837 stainless steel escutcheon gracefully covers wedge deck anchor.

1.90" OD Tubing

Submittal Information:

QTY - 28

Additional Information



555 Paddock Parkway
Rock Hill, SC 29730
Ph: 803-324-1111
Fx: 803-324-1116

Z1000 Bypass Package



1 - 500 HP

HVAC Optimized with Intelligent Bypass and Advanced BAS Interface

Features

- Two Contactor Bypass
- 100K AIC Package Rating
- Input "Non-Fused" Disconnect
- Drive H-O-A Keypad used for Bypass
- Standard Digital Inputs (5)
 - Run
 - Safety
 - BAS Interlock
 - Auto Transfer to Bypass
 - Smoke Purge
- Programmable Digital Inputs (3)
- Form "C" Programmable Relays (4)
- Built-in BACnet protocol (BTL certified), Apogee, Metasys, Modbus/Memobus accessible via RS-422/485 communication, which is standard
- All Bypass Functions Work with Serial Communications
- Phase Loss & Low Voltage Monitor – Protects Against Contactor Coil Burn-out
- Motor Amp Display in Bypass
- Duct Pressurization Function (Pre-run)
- Bypass Sync

**NEMA 1 Wall-Mount Enclosed**

- 50 - 100HP, 208V
- 100 - 200HP, 480V

**NEMA 1 Floor Mount**

- 125 - 150HP, 208V
- 250 - 500HP, 480V

OPTIONS

- ▶ Circuit Breaker - 100K AIC
- ▶ Drive Service Switch
- ▶ Three Contactor Bypass
- ▶ Custom Nameplate
- ▶ EtherNet/IP
- ▶ LonWorks

Z1000 Bypass Package

Models and Ratings

208V Models

	D002	D003	D004	D007	D010	D016	D024	D030	D046	D059
Base No.: Z1Bx [] (x denotes enclosure type)										
Rated Output Current (A)	2.4	3.5	4.6	7.5	10.6	16.7	24.2	30.8	46.2	59.4
Nominal HP	0.5	0.75	1	2	3	5	7.5	10	15	20
Type 1	Height	41.60				45.10		48.20		
Type 12	Width	6.77						10.18		
Type 12	Depth	12.92						13.19		
Type 12	Weight	70				80		90		
Type 3R	Height	28.8				34.8		39.8		
Type 3R	Width	17.9				20.5		25.5		
Type 3R	Depth	17.9						17.3		
Type 3R	Weight	150				210		275		

	D074	D088	D114	D143	D169	D211	D273	D343	D396
Base No.: Z1Bx [] (x denotes enclosure type)									
Rated Output Current (A)	74.8	88.0	114.0	143.0	169.0	211.0	273	343	396
Nominal HP	25	30	40	50	60	75	100	125	150
Type 1	Height	52.80	42.79	49.09		84.16			
Type 12	Width	12.68	25.80	28.41		41.26			
Type 12	Depth	14.20	16.06	20.87		33.94			
Type 12	Weight	160	280	380		950	1250	1650	1700
Type 3R	Height	39.8	51.2	84.2					
Type 3R	Width	25.5	32.7	41.3					
Type 3R	Depth	17.3	22.8	32.0					
Type 3R	Weight	275	420	490	850	945	1215	1300	1350
Type 3R	Height	40.1	51.1	91.1					
Type 3R	Width	28.7	39.0	41.3					
Type 3R	Depth	21.4			50.7		46.6		
Type 3R	Weight	275	420	490	850	945	1215	1300	1350

Note: Data subject to change.



NEMA 1



NEMA 12



NEMA 3R

YASKAWA

Z1000 Bypass Package

Models and Ratings

480V Models

Base No.: Z1Bx [] (x denotes enclosure type)	B001	B002	B003	B004	B007	B011	B014	B021	B027	B034	B040	B52L	B052
Rated Output Current (A)	1.6	2.1	3.2	4.8	7.6	11.0	14.0	21.0	27.0	34.0	40.0	52.0	52.0
Nominal HP	0.5 / 0.75	1	2	3	5	7.5	10	15	20	25	30	40	40
Dimensions (in) and Weight (lb)	Type 1	Height	41.60				45.10			48.20	52.80		
	Type 12	Width	6.77							10.18	12.68		
	Type 12	Depth	12.92							13.19	14.20		
	Type 12	Weight	70			80			90		160		
	Type 3R	Height	28.8			34.8			39.8				
	Type 3R	Width	17.9			20.5			25.5				
	Type 3R	Depth	17.9						17.3				
	Type 3R	Weight	150			210			275				
	Type 1	Height	29.1			34.8			40.1				
	Type 1	Width	21.2			23.7			28.7				
	Type 1	Depth	21.4										
	Type 1	Weight	150			210			275				

Base No.: Z1Bx [] (x denotes enclosure type)	B065	B077	B096	B124	B156	B180	B240	B302	B361	B414	B477	B590		
Rated Output Current (A)	65.0	77.0	96.0	124.0	156.0	180.0	240.0	302	361	414	477	590		
Nominal HP	50	60	75	100	125	150	200	250	300	350	400	500		
Dimensions (in) and Weight (lb)	Type 1	Height	52.80	42.79		49.09	84.16							
	Type 12	Width	12.68	25.80		28.41	41.26			69.76				
	Type 12	Depth	14.20	16.06		20.87	33.94			30.50				
	Type 12	Weight	160	280		380	1250	1600	1700	1800	2100	2200		
	Type 3R	Height	51.2			84.2								
	Type 3R	Width	32.7			41.3	69.8							
	Type 3R	Depth	22.8			32.0	30.5							
	Type 3R	Weight	410	475	500	550	850	950	1200	1300	1315	1900	2100	
	Type 1	Height	51.1			91.1								
	Type 1	Width	39.0			41.3			66.3					
	Type 1	Depth	21.4			50.7			46.6		43.5			
	Type 1	Weight	410	475	500	550	850	950	1200	1300	1315	1900	2100	

Note: Data subject to change.



NEMA 1



NEMA 12



NEMA 3R

Rail Drawings - Signature Block

I authorize S.R. Smith, LLC to fabricate the custom rail product(s) shown on this drawing in accordance with Customer's Purchase Order No. _____

I understand and agree that custom rail products are unique and are made to the specifications shown on this drawing. SR Smith, LLC warrants only conformance to specification; not installation. ALL OTHER WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE ARE SPECIFICALLY DISCLAIMED.

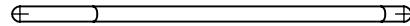
DO NOT INSTALL ANCHORS PRIOR TO RECEIVING ANY CUSTOM RAILING.

Customer Name: _____

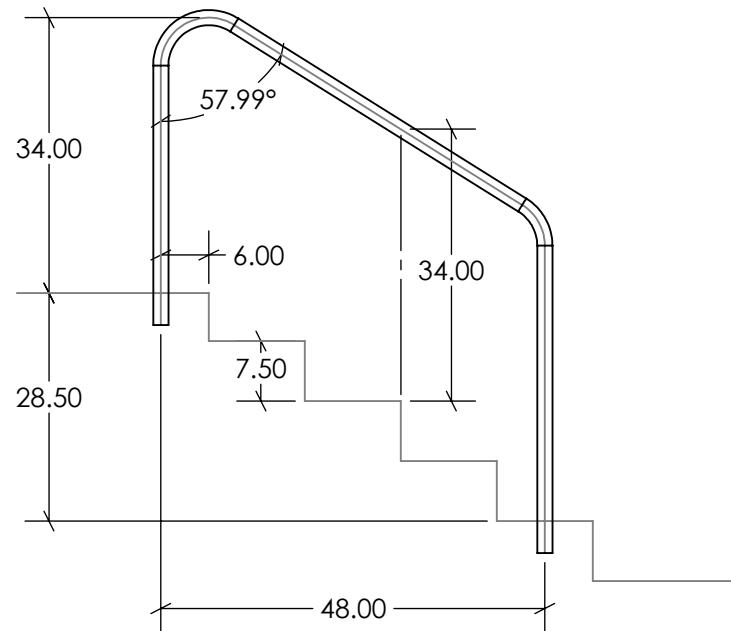
Date: _____

Authorized Signature: _____

Authorized Name (Print): _____



* LEG LENGTHS INCLUDE 4"
TO GO INTO ANCHORS.

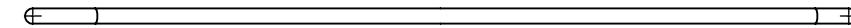
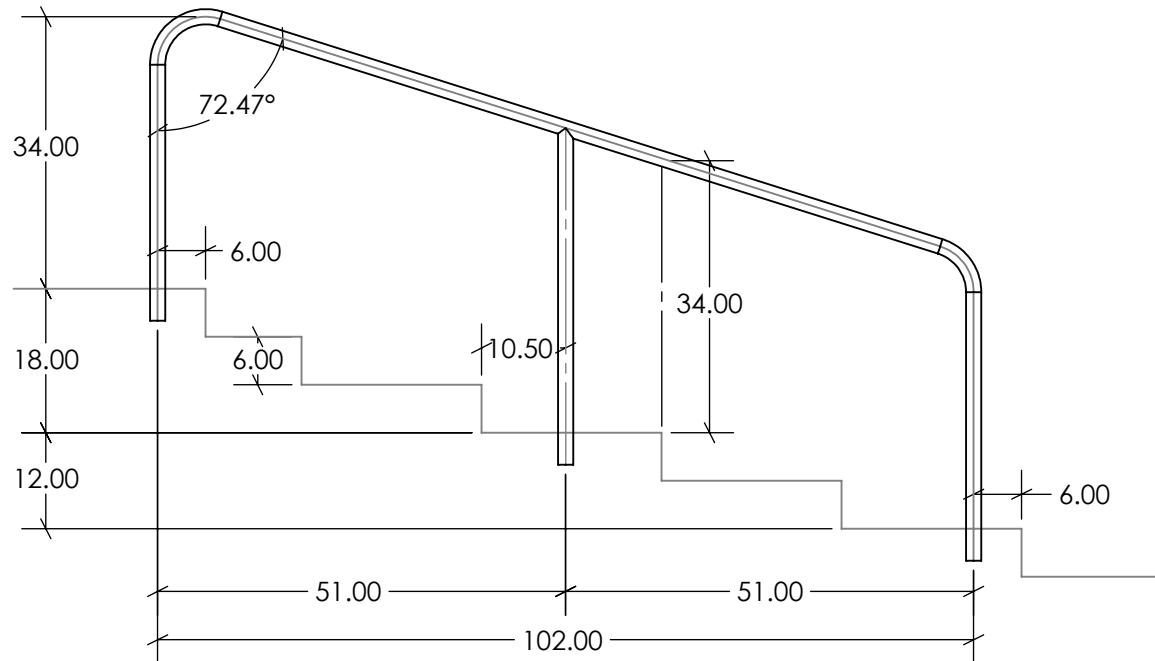


RAIL #	JOB #	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES, TOLERANCES ARE:		DESCRIPTION: PADDOCK POOL EQUIPMENT	REV. A
QUANTITY: 2	WEIGHT: 30.0 LBS.	WELDED LEG LOCATION.....+/- .125 ANGLES.....+/- .5 DEGREES ELEVATIONS.....+/- .125 OVERALL LENGTH UNDER 18'.....+/- .188 OVER 18'.....+/- .375	MATERIAL: 1.90 x .109 (304) 600 GRIT S/S TUBING QUOTE NO.: 64367A	DRAWN BY: DTJ CHECKED BY: DATE: 2/18/24	
				DATE:	SIZE: A SCALE: 1:24 SHEET 1 OF 1

Rail Drawings - Signature Block

I authorize S.R. Smith, LLC to fabricate the custom rail product(s) shown on this drawing in accordance with Customer's Purchase Order No. _____

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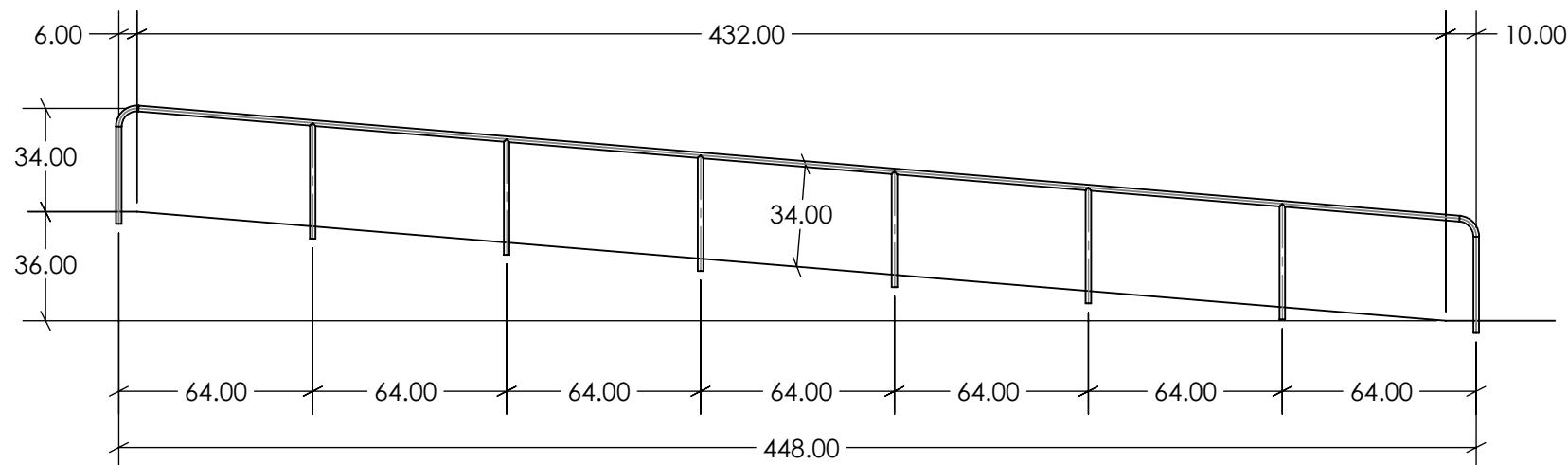
DO NOT INSTALL ANCHORS PRIOR TO RECEIVING ANY CUSTOM RAILING.Customer Name: _____
Date: _____Authorized Signature: _____
Authorized Name (Print): _____*** LEG LENGTHS INCLUDE 4"
TO GO INTO ANCHORS.**

RAIL #	JOB #	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES, TOLERANCES ARE:		DESCRIPTION: PADDOCK POOL EQUIPMENT	REV. A
QUANTITY: 2	WEIGHT: 50.0 LBS.	WELDED LEG LOCATION.....+/- .125 ANGLES.....+/- .5 DEGREES ELEVATIONS.....+/- .125 OVERALL LENGTH UNDER 18'.....+/- .188 OVER 18'.....+/- .375	MATERIAL: 1.90 x .109 (304) 600 GRIT S/S TUBING QUOTE NO.: 64367B	DRAWN BY: DTJ CHECKED BY: DATE: 2/18/24	
				DATE:	SIZE: A SCALE: 1:24 SHEET 1 OF 1

Rail Drawings - Signature Block

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DO NOT INSTALL ANCHORS PRIOR TO RECEIVING ANY CUSTOM RAILING.Customer Name: _____
Date: _____Authorized Signature: _____
Authorized Name (Print): _____*** LEG LENGTHS INCLUDE 4"
TO GO INTO ANCHORS.**

RAIL #	JOB #	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES, TOLERANCES ARE:		DESCRIPTION:		
QUANTITY:	WEIGHT:	WELDED LEG LOCATION.....+/- .125 ANGLES.....+/- .5 DEGREES ELEVATIONS.....+/- .125 OVERALL LENGTH UNDER 18'.....+/- .188 OVER 18'.....+/- .375	DRAWN BY: DTJ CHECKED BY: DATE: 2/18/24 SIZE: A SCALE: 1:24 SHEET 1 OF 1	PADDOCK POOL EQUIPMENT	REV. A	P.O. BOX 400 - 1017 S.W. BERG PARKWAY CANBY, OREGON 97013 PHONE (503) 266-2231
2	170.0 LBS.	MATERIAL: 1.90 x .109 (304) 600 GRIT S/S TUBING QUOTE NO.: 64367C				
COPYRIGHT © 2024 S.R. SMITH, LLC. ALL RIGHTS RESERVED						

SR Smith™P.O. BOX 400 - 1017 S.W. BERG PARKWAY
CANBY, OREGON 97013
PHONE (503) 266-2231

Rail Drawings - Signature Block

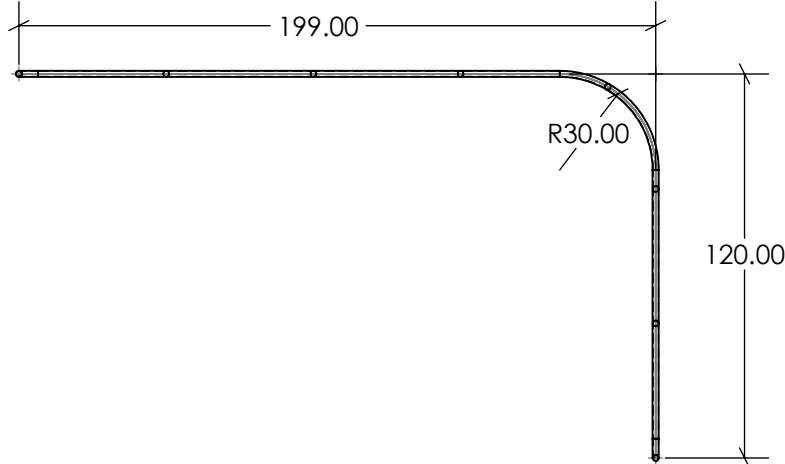
I authorize S.R. Smith, LLC to fabricate the custom rail product(s) shown on this drawing in accordance with Customer's Purchase Order No. _____

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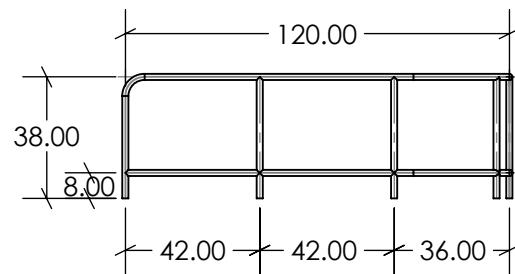
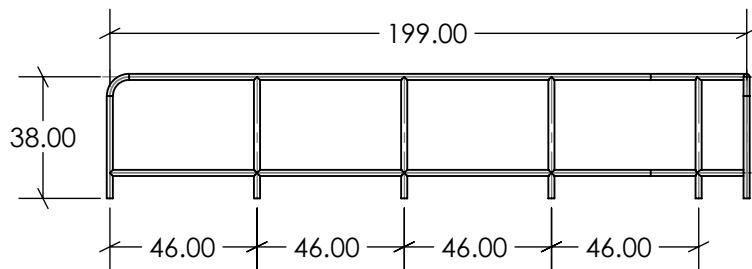
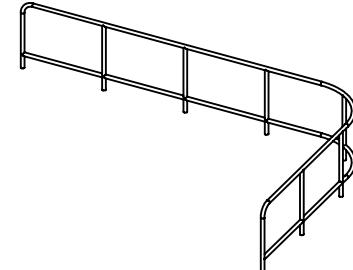
DO NOT INSTALL ANCHORS PRIOR TO RECEIVING ANY CUSTOM RAILING.

Customer Name: _____
Date: _____

Authorized Signature: _____
Authorized Name (Print): _____



* LEG LENGTHS INCLUDE 4"
TO GO INTO ANCHORS.



RAIL #	JOB #
QUANTITY: 1	WEIGHT: 215.0 LBS.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES,
TOLERANCES ARE:

WELDED LEG LOCATION.....+/- .125
ANGLES.....+/- .5 DEGREES
ELEVATIONS.....+/- .125
OVERALL LENGTH
UNDER 18'.....+/- .188
OVER 18'.....+/- .375

DESCRIPTION:
PADDOCK POOL EQUIPMENT

MATERIAL:
1.90 x .109 (304) 600 GRIT S/S TUBING

QUOTE NO.: 64367D **REV.** A

DRAWN BY: DTJ **DATE:** 2/18/24

CHECKED BY: **DATE:**

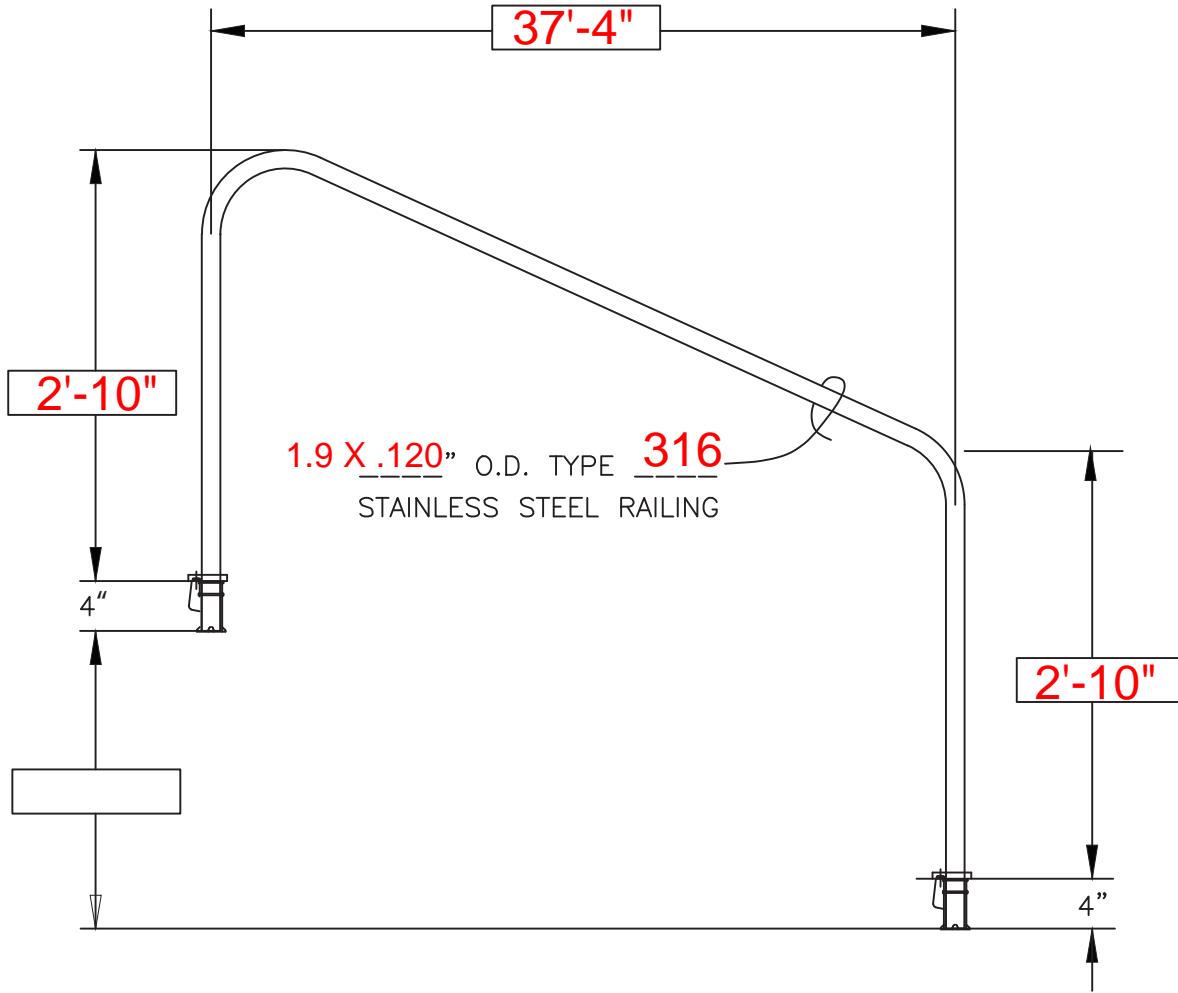
SR Smith™

P.O. BOX 400 - 1017 S.W. BERG PARKWAY
CANBY, OREGON 97013
PHONE (503) 266-2231

SIZE: A **SCALE:** 1:24 **SHEET 1 OF 1**



Ramp Rails Handrails



Paddock's **Handrails** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083". (Outside diameter of 1.50", or wall thickness of .120" and .145" are also available)

Handrails are 34" above pool floor and inclines at same angle as that of stairs or ramp.

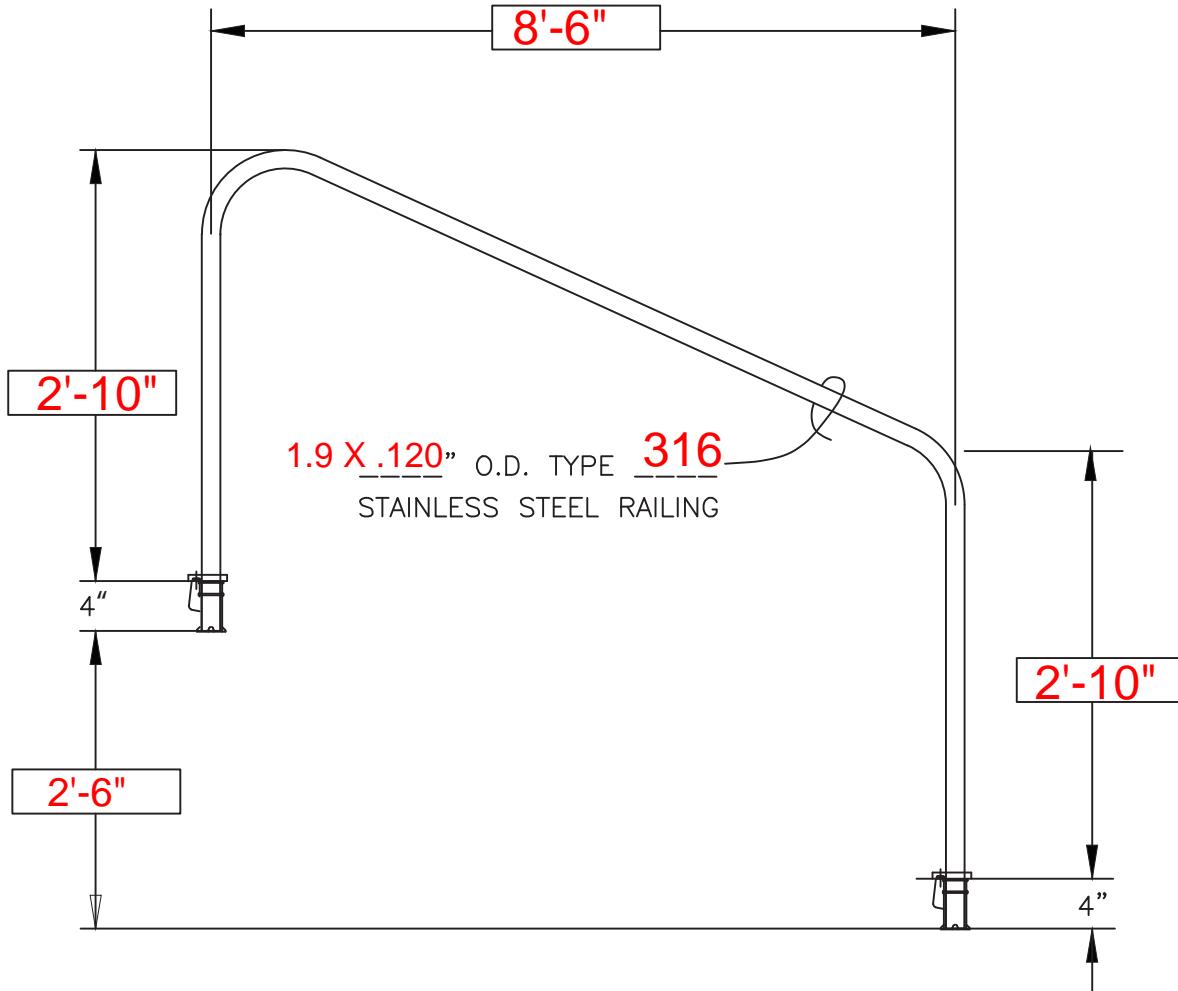
They are held by anchor sockets located in pool bottom and pool deck so they can be removed if necessary.

Paddock deck anchors with Paddock escutcheon plates are available.

P/N 9400128, Model 4718-C, Type 316, 1.9 " OD x .120 " Wall Less Anchors, Qty 2



Step Rails Handrails



Paddock's **Handrails** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083". (Outside diameter of 1.50", or wall thickness of .120" and .145" are also available)

Handrails are 34" above pool floor and inclines at same angle as that of stairs or ramp.

They are held by anchor sockets located in pool bottom and pool deck so they can be removed if necessary.

Paddock deck anchors with Paddock escutcheon plates are available.

P/N 9400119, Model 4718-C, Type 316, 1.9 " OD x .120 " Wall Less Anchors, Qty 2