

MODPOOLS

Official Contractor's Package

MODPOOLS

A Contractor's Guide to Installing Modpools

Contents

4	What Our Price Covers
6	Base/Foundation Dimensions
9	Drainage Installation
13	Crane-Lifting the Modpool
16	Electrical & Gas Locations
18	Electrical Requirements
24	Plumbing Layout Configurations
26	Gas Line Connection
28	Infinity Edge (Optional Addon)

⚠WARNING Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

⚠WARNING **DO NOT INSTALL** a deck over the heater. Installing the heater under the deck could allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.



What Our Price Covers



Modpool & Delivery

When you purchase your Modpool, the final invoice price includes your product as well as shipping to your curbside (or as close as we can get based on road access). The Modpool arrives on a 53’ flatbed truck. It can stop on the road or enter an access point to your property.



Truck Dimensions

The measurements for the 53’ flatbed truck are as follows:

Length: 60’
Width: 8.5’
Height: 10’



Crane Yard Delivery

Alternatively, if you determine that a 60’ truck cannot access your property, we can deliver directly to your crane yard. From here, you/your crane company can transfer it to a smaller truck. The crane company is hired directly by the Modpool owner.

Base/Foundation Dimensions

If you have a custom length, your footing should be at least 12” longer than the length of your Modpool.



Step 1

Please select your Modpool size for your base/foundation dimension



Step 2

Select your subcategory of base type for your foundation

12’ Base Dimensions Options:

- ☐ **Standard 12’6” Modpool | Compacted Gravel Base**
  Length: 13’ (16’6” if accounting for mechanical room space as well)
  Width: 9’
  Height: 8”

- ☐ **Standard 12’6” Modpool | Concrete Pad**
  Length: 13'6" (17' if accounting for mechanical room space as well)
  Width: 9’6"
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

16’ Base Dimensions Options:

- ☐ **16’ Modpool | Compacted Gravel Base**
  Length: 17’ (20’6” if accounting for mechanical room space as well)
  Width: 9’
  Height: 8”

- ☐ **16’ Modpool | Concrete Pad**
  Length: 17’6" (21' if accounting for mechanical room space as well)
  Width: 9’6"
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

20’ Base Dimensions Options:

- ☐ **Standard 20’ Modpool | Compacted Gravel Base**
  Length: 21’ (24’6” if accounting for mechanical room space as well)
  Width: 9’
  Height: 8”

- ☐ **Standard 20’ Modpool | Concrete Pad**
  Length: 21'6" (25' if accounting for mechanical room space as well)
  Width: 9’6"
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

- ☐ **Widened (11’8”) 20’ Modpool | Compacted Gravel Base**
  Length: 21’6” (24’6” if accounting for mechanical room space as well)
  Width: 12’6”
  Height: 8”

- ☐ **Widened (11’8”) 20’ Modpool | Concrete Pad**
  Length: 21’6” (25' if accounting for mechanical room space as well)
  Width: 13’
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

40’ Base Dimensions Options:

- ☐ **Standard 40’ Modpool | Compacted Gravel Base**
  Length: 41’ (44’6” if accounting for mechanical room space as well)
  Width: 9’
  Height: 8”

- ☐ **Standard 40’ Modpool | Concrete Pad**
  Length: 41’6" (45' if accounting for mechanical room space as well)
  Width: 9’6"
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

- ☐ **Widened (11’8”) 40’ Modpool | Compacted Gravel Base**
  Length: 41’ (44’6” if accounting for mechanical room space as well)
  Width: 12’6”
  Height: 8”

- ☐ **Widened (11’8”) 40’ Modpool | Concrete Pad**
  Length: 41’6" (45' if accounting for mechanical room space as well)
  Width: 13’
  Height: 5”
  Please dig 3” deeper for the concrete’s gravel foundation

DO NOT INSTALL a deck over the heater. Installing the heater under the deck could



allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.



Drainage Installation

Before Installation



Drainage System

When installing you Modpool in-ground or partially in-ground, we require Big-O type drainage system.



Fill Before Backfilling

Please always have your Modpool filled with water before back filling against your pool.



Supplies

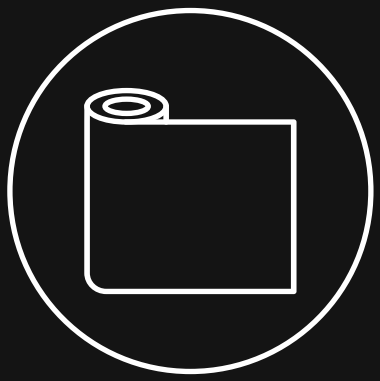
Before installing, please make sure you have the following:

- 4” Diameter Big-O Piping or Perforated PVC
- Gravel Fill
- Building Wrap/Vapor Barrier
- Sump pump (if needed)



Installation

You will need the big-O or perforated PVC to run along the perimeter of your pool where you can have a drain pipe leading away to a storm drain or dry well. Or you can install a sump pump. If using a gravity lead drain system (the labelled drain pipe) please have a professional install this.



Step 1: Vapor Barrier

Use a vapor barrier (or building wrap like Tyvek) to wrap the exterior portion of the Modpool that will be underground.



Step 2: Install

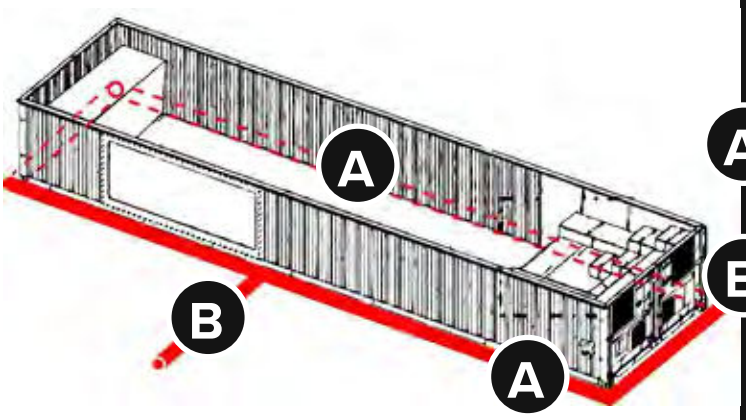
Install the pipe drainage system.



Step 3: Backfill

Backfill gravel in the space between the pool and the dirt so that water can travel to the draining pipe.
DO NOT compact any of the backfill.

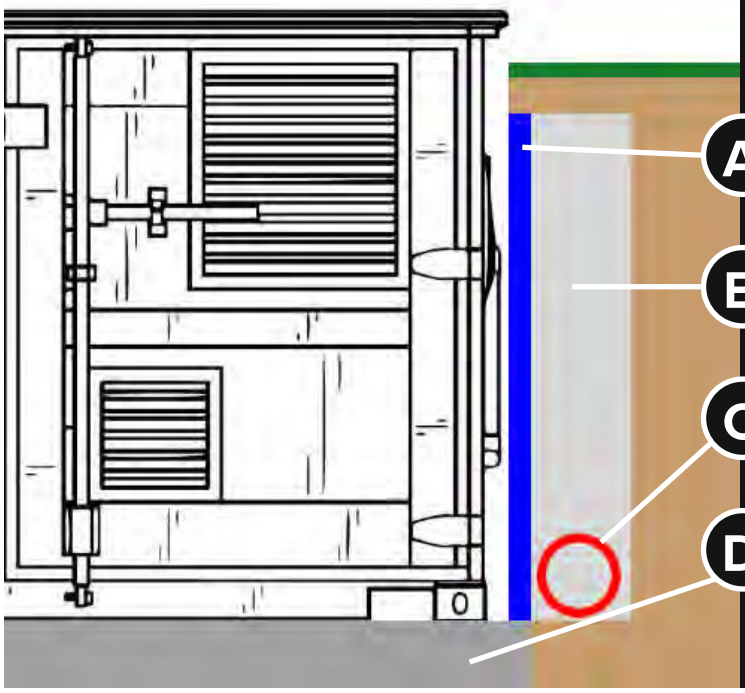
Drainage Diagrams



Drain Installation

A — Big-O Piping or Perforated PVC Piping

B — Drain Pipe (can be on any side)



Backfilling

A — Building Wrap

B — Gravel Fill (**DO NOT** compact)

C — Big-O Piping or Perforated PVC Piping

D — 8” of Compact Gravel
or 5” Concrete Slab

WARNING **DO NOT INSTALL** a deck over the heater. Installing the heater under the deck could allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.

Backfill gravel in the space between the pool and the dirt so that water can travel to the draining pipe. DO NOT compact any of the backfill.

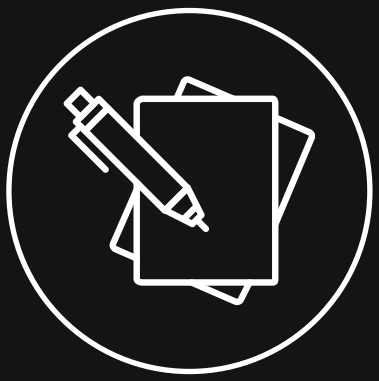


Crane-Lifting The Modpool



Crane Contractors

Please check with your local crane contractor on their requirements for ground and air space clearing. Crane companies should be willing to provide you with a free quote for this job.



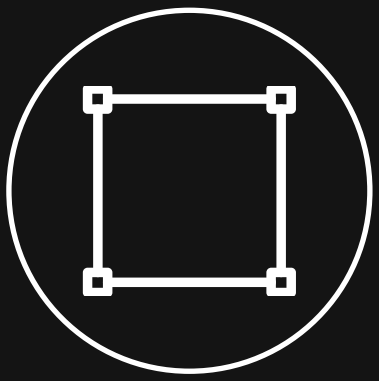
Confirm Dimensions

Note that having a cover will extend the width of the Modpool in the area that the cover box is fixed. Contractors should confirm dimensions with the signed drawings from the client.



Spreader Bar & Soft Straps

To avoid damaging the coping of your Modpool, ensure that the crane operator uses a spreader bar and soft straps when lifting the pool.

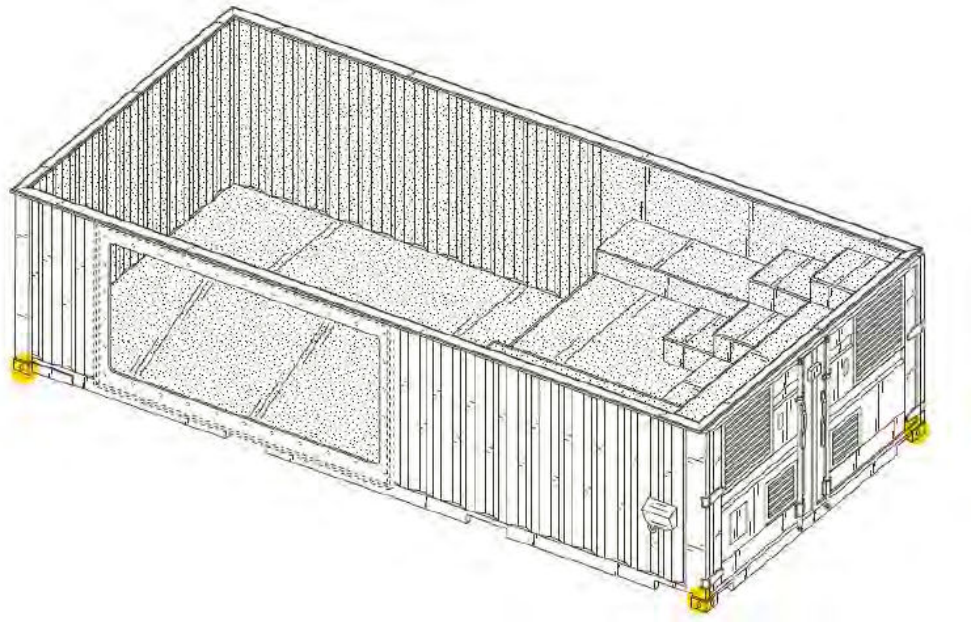


Anchor Points

Anchor points from the original container structure have been left untouched, so that the crane can easily use these 4 corners (in the following diagram).

Diagrams & Dimensions

Anchor Points Highlighted in Yellow



Modpool Size	Approximate Dimensions	Approximate Dry Weight
12’6”	12’6” x 8’3” x 4’7”	6,000 lbs*
16’	16’ x 8’3” x 4’7-3/4”	7,000 lbs*
20’	20’ x 8’3” x 5’2-3/4”	8,500 lbs*
20’ x 11’8”	20’ x 12’ x 5’2-3/4”	11,000 lbs*
40’	40’2” x 8’6” x 5’4-3/4”	17,500 lbs*
40’ x 11’8”	40’2” x 12’ x 5’4-3/4”	20,000 lbs*

* Weight subject to change based on changes made to the interior of the pool and options added.

⚠WARNING **DO NOT INSTALL** a deck over the heater. Installing the heater under the deck could allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.

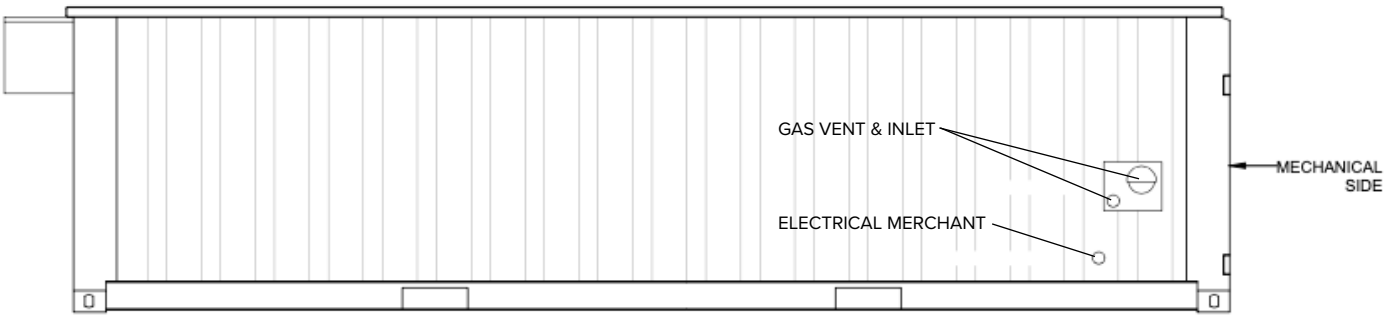


Electrical & Gas Locations

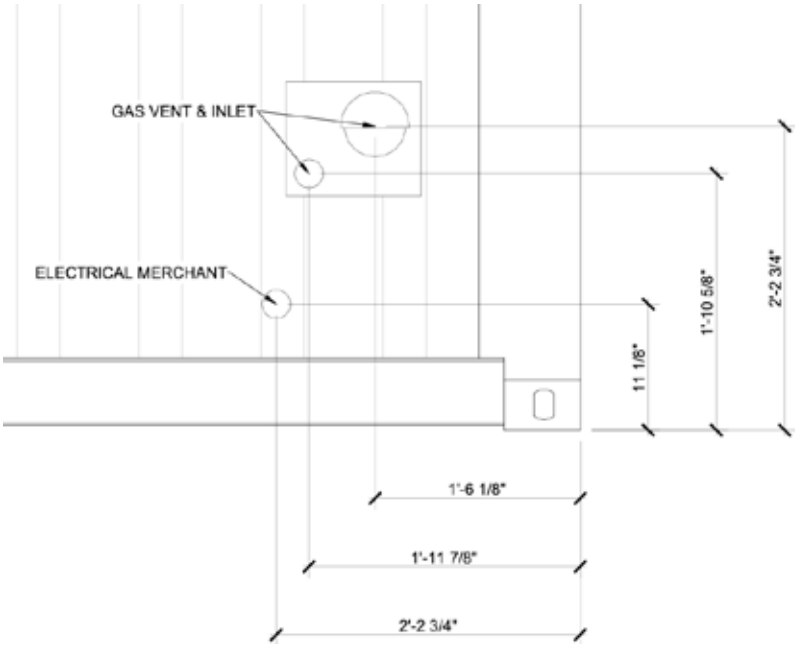
Dig Trenches

Trenches will need to be dug to the electrical and gas merchants. If the gas vent is buried for an in-ground installation, your plumber/gas fitter will need to “chimney” up to above ground upon install. Consult your local municipality for building codes regarding proper gas exchange.

Gas Vent, Inlet & Electrical Merchant Elevation



* Approximate Measurements*



WARNING **DO NOT INSTALL** a deck over the heater. Installing the heater under the deck could allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.



Electrical Requirements

⚠WARNING Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

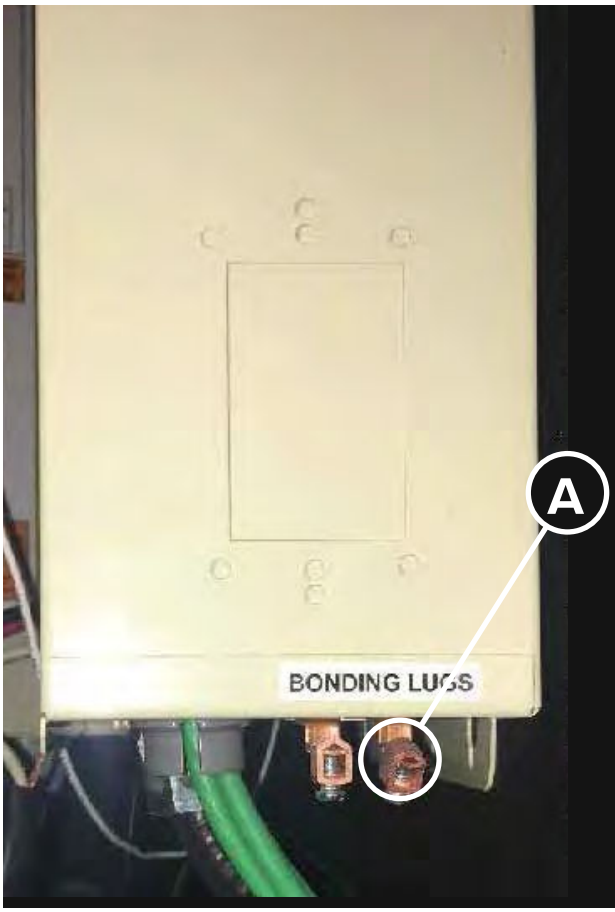
Wiring

All pools require a minimum designated #6 ground wire attached to the copper grounding lugs under the Pentair control panel.

Run #6 wire to the house grounding grid.

Electrician

All wiring **must** be done by a qualified electrician to your local electrical code.



Pentair Pool Control Panel

Modpool will come pre-bonded and this will only need to be done if adding more equipment

Connect Here with a #6 Copper Bonding Wire

6

Electrical Combinations

Based On How Your Modpool Was Designed

Gas Heaters

1 Standard Modpool

One 2 pole 30A, 120/240V
GFCI breaker to power pump

2 Standard Modpool With Electrical Cover

One 2 pole 30A, 120/240V
GFCI breaker to power pump

One 15A, 110V GFCI breaker
to power Electric Cover

3 Modpool with Fastlane Feature

One 2 pole 60A, 120/240V GFCI breaker
to power pump & Fastlane

4 Modpool with Fastlane & Electric Cover

One 2 pole 60A, 120/240V
GFCI breaker to power pump & Fastlane

One 15A, 110V GFCI breaker
to power Electric Cover

Electric Heaters

Standard 11KW

5 Standard Modpool

One 2 pole 70 or 80A, 120/240V
breaker to power pump

6 Standard Modpool With Electrical Cover

One 2 pole 70 or 80A, 120/240V
breaker to power pump

One 15A, 110V GFCI breaker
to power Electric Cover

7 Modpool with Fastlane Feature

One 2 pole 100A, 120/240V breaker to
power pump & Fastlane

8 Modpool with Fastlane & Electric Cover

One 2 pole 100A, 120/240V breaker
to power pump & Fastlane

One 15A, 110V GFCI breaker
to power Electric Cover

Wiring Configurations

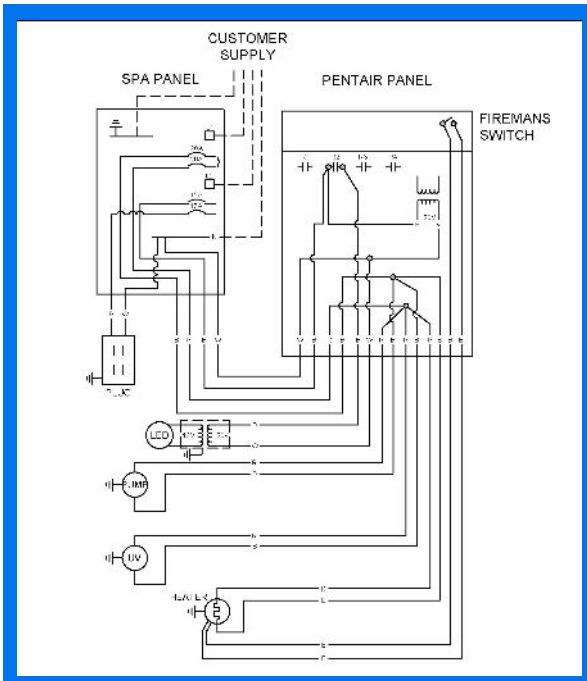
Panel should only be touched performing maintenance or adding to configuration and performed by a trained professional.



Breaker Panel

For #1-6 Modpool Configurations:
Connect Here

* Configuration will vary based what features have been added to the pool



General Diagram of electrical connections.

Pentair Panel:
Connections set up by Modpools customer does not need to adjust any connections in this box.

Spa Panel:
Dotted lines are where customers conections will be made also highlighted in photo above.

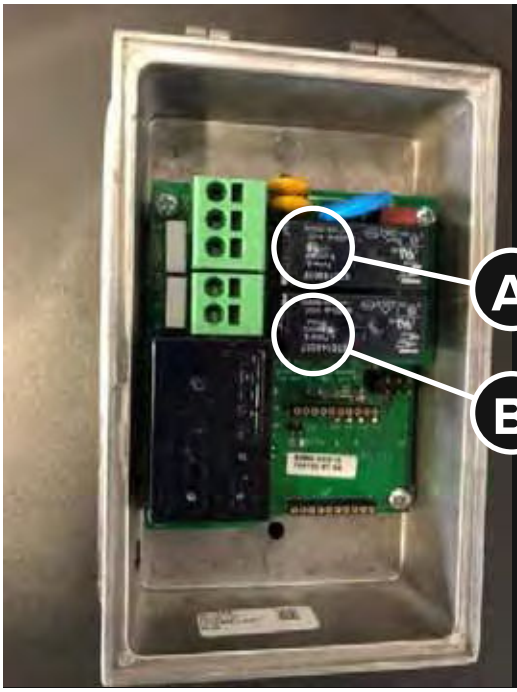
* Configuration will vary based what features have been added to the pool

Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

WARNING

Electric Cover Requirements

A separate 15A, 120V GFCI circuit needs to run from the electrical panel to the desired location of the control key pad for the electric cover.

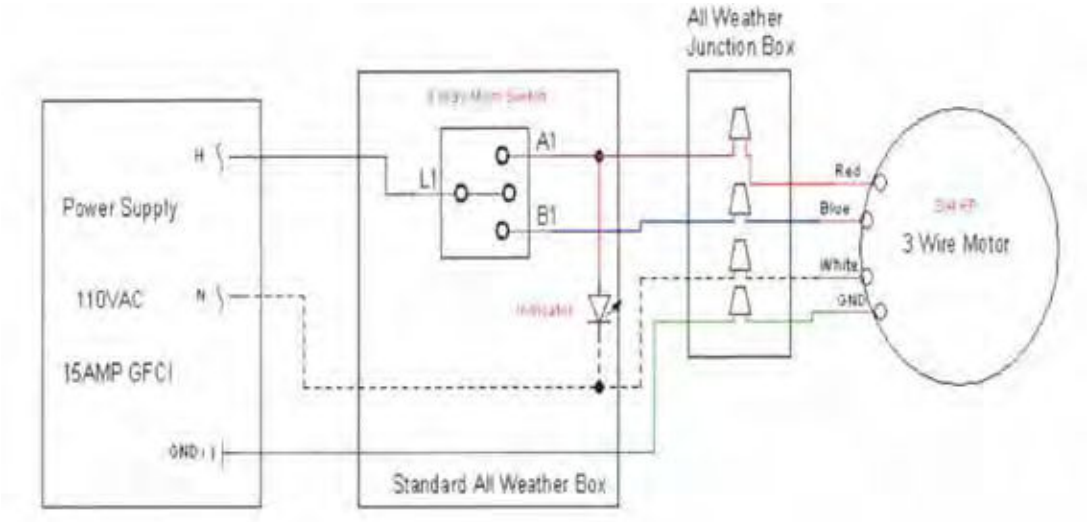


Backside of Keypad

Power Connections From Electrical Panel

Control & Power Going to Cover Motor on Modpool

Circuit Diagram





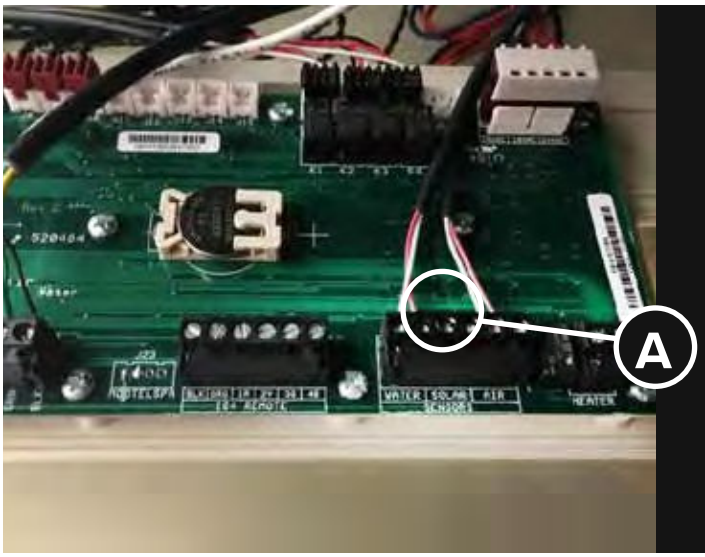
Electric Cover Motor Connection

Red: Directional
Green: Ground
White: Neutral
Black: Directional



Keypad & Parts

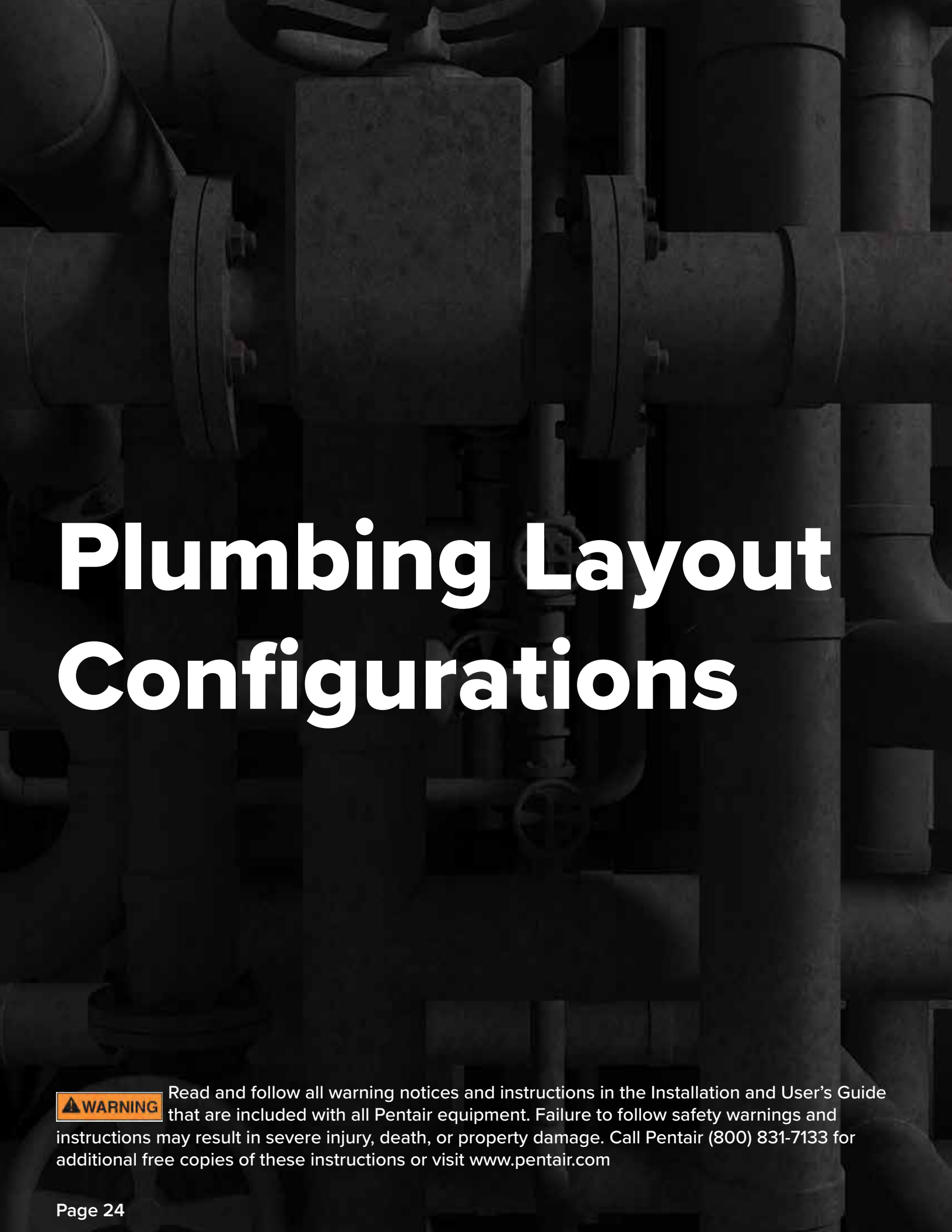
Key pads have a built-in lid and need to be mounted on a weather proof box on a desired location. We recommend a Scepter brand F.D. single gang box.



Pentair Panel Circuit Board

Temperature Sensor: **Connect Here**

*Solar-T Option Only



Plumbing Layout Configurations

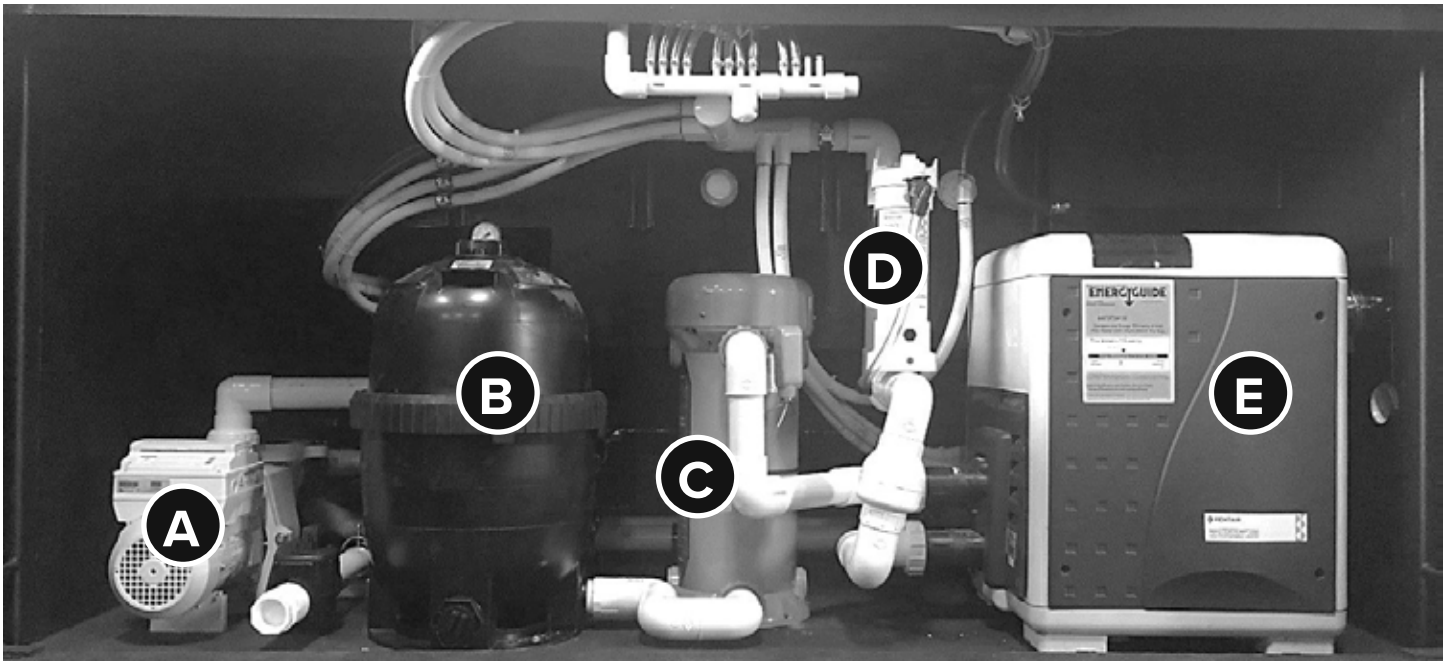
⚠WARNING Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

Plumbing Layouts

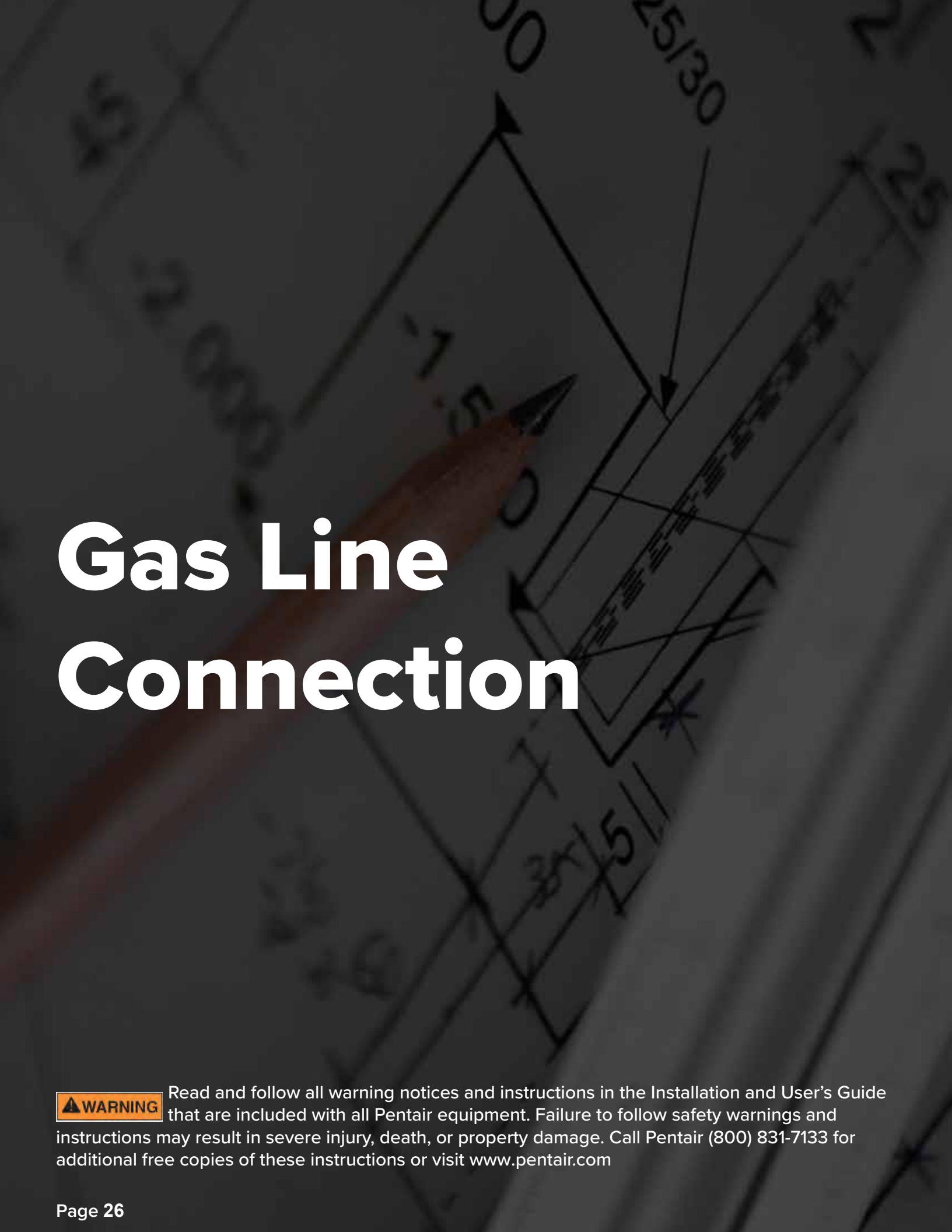
Can Vary Based On Pool Specifications

Modpool With UV Water Sanitation System

- **A** Pump (take 2-3 minutes to start)
- **B** Sediment Filter
- **C** UV Light
- **D** Chlorinator (optional)
- **E** Heater



WARNING **DO NOT INSTALL** a deck over the heater. Installing the heater under the deck could allow by-products of combustion and vent gases to be released to up on the deck which can cause damage to the heater, property damage, personal injury, (including brain damage), or death. If installed under a deck, there is a probability of carbon monoxide being released on the deck.



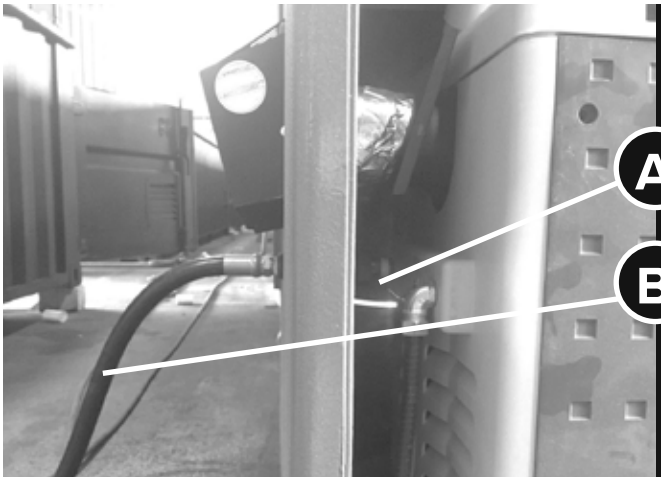
Gas Line Connection

WARNING Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

Gas Line Connecting to Natural Gas/Propane

1. Starting from the Heater Gas Valve, use a ¾” pipe or hose.
2. At the union connect a 1” hose (minimum) running to a 1” regulator *
3. On the other side of the 1” regulator, connect a 1 ¼” flex hose at high pressure.
4. Run that 1 ¼” flex hose to your meter (maximum 100ft)
5. If the gas vent is covered (likely by decking), it is recommended that your plumber run venting elsewhere to exhaust into open air space.

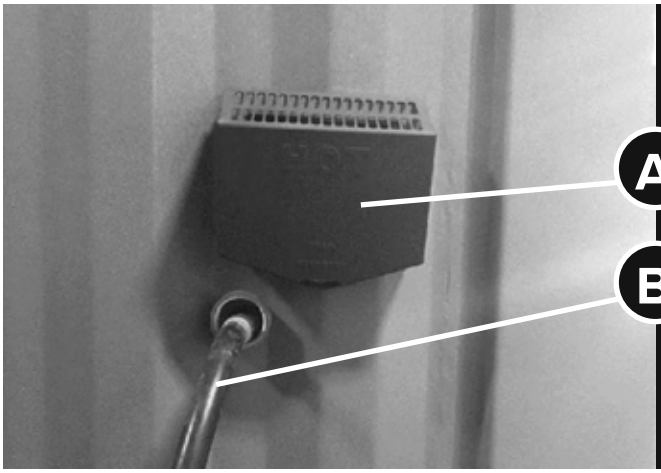
*** A 1” hose should be good up to 25ft, but go by the recommendation of your gas fitter.**



Gas Line Side View, Internal

A 3/4” Line

B 1” Gas Line



Gas Line Side View, Internal

A Heat Vent

B 1” Gas Line



Infinity Edge Optional Addon

WARNING Read and follow all warning notices and instructions in the Installation and User's Guide that are included with all Pentair equipment. Failure to follow safety warnings and instructions may result in severe injury, death, or property damage. Call Pentair (800) 831-7133 for additional free copies of these instructions or visit www.pentair.com

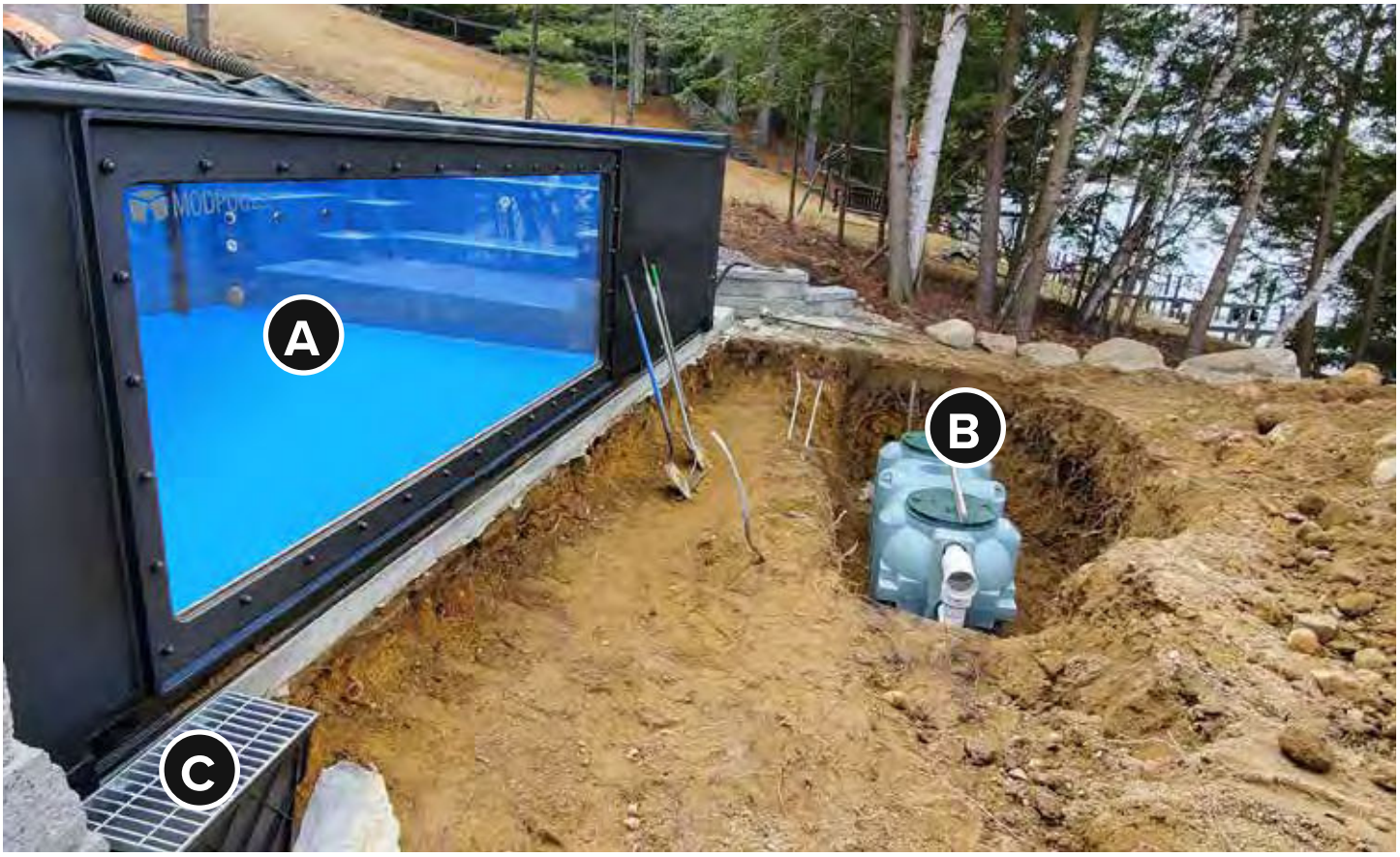
Infinity Edge Layouts

Modpool With Infinity Edge

A Modpool

B Water Tank

C Catchment



Attaching Catchment

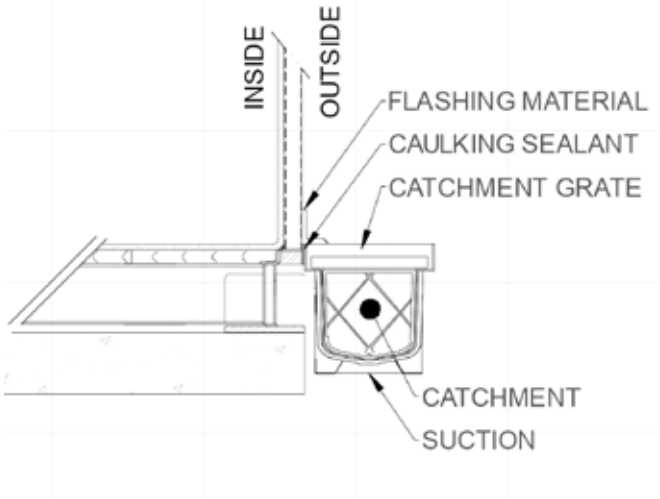
For Modpools With An Infinity Edge

We Supply:

1. Flashing
2. Catchment / Grate

You Will Need:

1. Caulking Black Polyurathane







Infinity Edge Plumbing Layout

For Modpools With An Infinity Edge

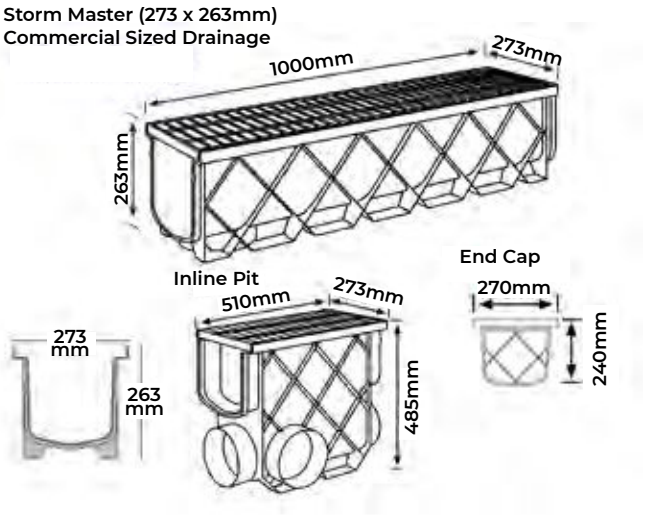
We Supply:

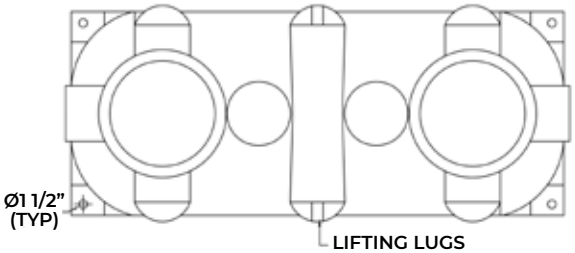
1. Tank RKP300LP
2. Fitting
   - a. 6” Sch.20 (catchment to tank)
   - b. 3” Sch.40 (tank to Modpool)

You Will Need:

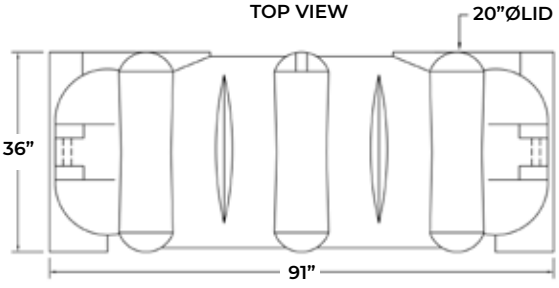
*May Vary

1. 6” PVC Drain Pipe
2. 3” Sch.40 PVC Pipe

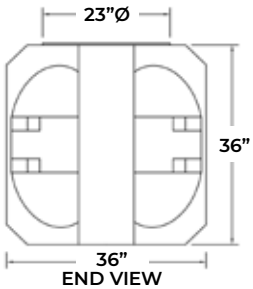




TOP VIEW



ELEVATION VIEW



END VIEW

MODEL RKP300LP
LOW PROFILE U.G. PUMP CHAMBER
VOL. CAP. - 300 I.GALS
MADE FROM HDLPE POLYETHYLNE

MODPOOLS

Need Additional Information?

Contact Us

info@modpools.com
CAN: 1-778-652-8338
USA: 1-650-482-8234