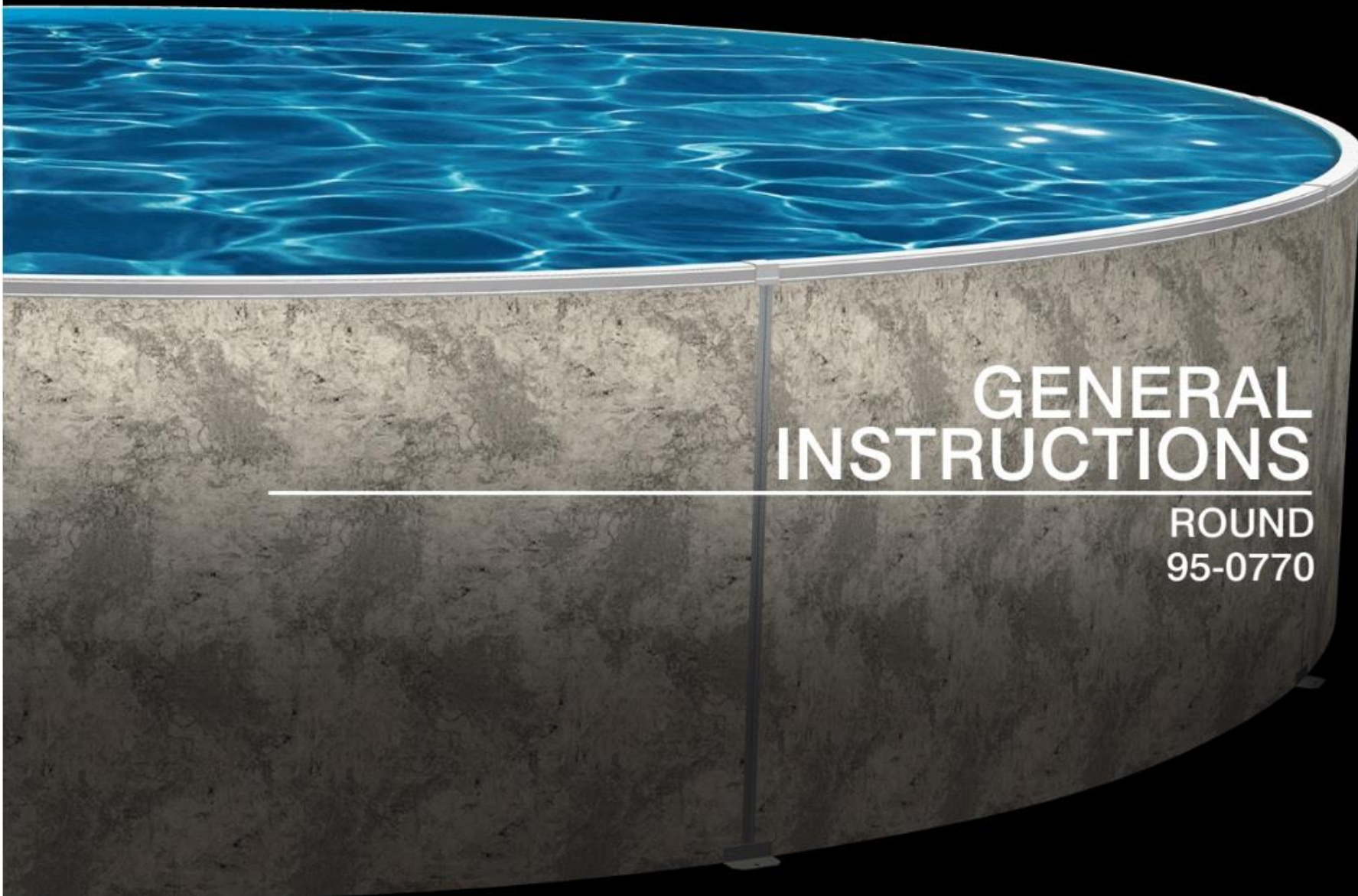




Optimum Pool

by Wilbar



GENERAL INSTRUCTIONS

ROUND
95-0770



Optimum Pool

In order for your pool warranty to be deemed valid
you **must** register your pool at

www.mypoolwarranty.com



INTRODUCTION

CONGRATULATIONS on becoming the owner of a new above ground swimming pool! This is the instruction packet for installation of your pool. The following are some helpful hints to keep in mind before installing.

- Read through the entire instruction booklet prior to installation so that you can familiarize yourself with everything involved with installing your swimming pool before you begin.
 - DO NOT ATTEMPT INSTALLATION IN WINDY OR GUSTY WEATHER. This will make installation more difficult and could damage your pool before it's even completely installed.
 - You will find that steps 1 and 2 will be the most labor intensive and time-consuming steps, although the installation is broken down into many simple steps. Once you have completed the first three steps, you should find that the rest of the installation process moves along much more quickly.
 - Please review all safety material and local code guidelines before beginning your installation. There is a yellow safety envelope packed with your pool. This envelope contains safety material and warning stickers to be placed on your pool. If any of these items are missing, please contact your dealer or the factory to obtain them. The warranty is void if all safety precautions are not followed.
- In the event that you need to make a warranty claim, it is important to know the size and model of your swimming pool in order to expedite the handling of your claim. Please fill in the information below and keep for your records. All this information can be found on the labels attached to the cartons in which your pool is packed.

NAME OF POOL: _____

SIZE OF POOL: _____

DATE OF PURCHASE: _____

NAME OF POOL WALL: _____

NAME OF LINER: _____

POOL SAFETY

PLEASE READ PRIOR TO INSTALLATION

WARNING!

Failure to observe these warnings may result in permanent injury, paralysis from a broken neck, and death due to electrocution or drowning. This pool is NOT designed for diving or jumping. Serious injuries can result from jumping or diving into shallow water! Carefully read, understand and follow all information in this user manual before installing and enjoying your swimming pool. These warnings, instructions and safety guidelines address common risks of water recreation, but they cannot cover all possible risks and dangers in all cases. Always use caution and employ common sense and good judgment when enjoying any water activity.

Your pool contains a large quantity of water, and any amount of water, even shallow water, can present serious dangers to life and health unless these safety rules are strictly observed. First-time users run the highest risk of injury. Ensure all bathers understand these safety rules, and encourage all bathers, especially children, to learn how to swim. Learn basic life support (CPR) and refresh this knowledge regularly. Instruct all bathers, including children, what to do in case of emergency. Keep a working phone and a list of emergency phone numbers near the pool. This can save a life. To ensure your pool is used safely, you MUST observe and enforce the following safety precautions:

1. NO JUMPING OR DIVING

The top rail of your pool is not a walkway and must not be used for jumping or diving. Do not permit jumping or diving into the pool from a pool deck, the top rail of the pool, or from any structure outside the pool. Diving or jumping into the pool can result in serious injury.

2. NEVER USE THE POOL ALONE

Never permit the pool to be used unless it is attended by at least one person other than the bather. Someone should always be available to lend assistance in an emergency. Designate a competent adult to supervise the pool when in use. Vigilant supervision of weak swimmers and non-swimmers by a competent adult is required at all times. Children under five are at the highest risk of drowning.

3. NEVER LEAVE CHILDREN UNATTENDED

Never leave a child alone and unsupervised in or near the pool — not even for a second. There is no substitute for constant adult supervision.

4. NO ROUGH PLAY

Do not permit rough playing or roughhousing in and around your pool. Surfaces can become slippery and hazardous when wet.

5. LIGHT THE POOL AT NIGHT

If the pool is used after dusk, adequate lighting must be provided. Illumination in the pool area must be sufficient to allow swimmers to clearly judge pool depth and all features in and around the pool. For lighting recommendations, consult your local licensed electrical contractor.

6. RESTRICT ACCESS TO THE POOL

Do not leave chairs or other furniture beside the pool that could be used by a child to access the pool. Ladders must be removed whenever the pool is unattended. A fence with a lockable gate around the pool or yard is strongly recommended and may be required by law in some areas. Secure doors and windows, where applicable, to prevent unauthorized access to the swimming pool. Remove all toys from the swimming pool and surrounding area when not in use to avoid attracting children to the pool. Barriers, pool covers, pool alarms or similar safety devices are helpful aids, but they are not substitutes for continuous adult supervision.

7. NO ALCOHOL OR DRUGS

Never drink alcoholic beverages or use any intoxicants which could hinder your judgment and reflexes in an emergency.

8. KEEP YOUR POOL CLEAN AND SANITARY

Your filter system will remove suspended particles from the water and the surface skimmer will remove insects, leaves and other debris from the water surface. Use the correct pool chemicals as directed to destroy harmful bacteria and prevent formation of algae. Remember, unsanitary water is a serious health hazard.

8. KEEP OFF THE TOP LEDGES

Do not walk or stand on the top ledges. They can become slippery and result in serious injury.

9. POOL COVER SAFETY

The pool cover (sold separately) must have a tamper-proof locking retainer cable that positions the cover around the pool wall and keeps it securely in place. Never allow anyone, especially small children on the cover. Asphyxiation or drowning could result. Be sure to remove pool cover completely from the water surface before entering the pool. When purchasing any pool cover, please consult a pool professional.

11. ELECTRICAL HAZARD

Never touch or attempt to service electrical equipment, including the filter, when your body and/or the ground is wet. Electrocution or permanent injury due to high voltage (120V AC) could result. The pool should be bonded in accordance with Section 680-26 of the National Electrical Code. For further assistance contact your dealer or a local licensed electrician. Do not use pool during electrical or rainstorms.

12. SAFETY ROPE AND POLE

Keep a safety rope measuring at least 50 feet long (15.24 meters) by 1/4" thick (.635cm) securely attached to a flotation buoy with an outside diameter of 15" (38.1cm) in a prominent, easily accessible area by your pool. Keep a pole not less than 16 feet (4.88m) long with a blunt or hook end available at poolside in case of emergencies. Weak swimmers and non-swimmers should wear personal protection equipment when using the pool.

13. POOL CHEMICALS

Store pool chemicals out of the reach of children. Do not place chlorine, chlorine tablets or sticks directly into skimmer, or winterize your pool with liquid chlorine. Damage to the skimmer, pool liner and filter will result. Failure to observe this instruction will void all component warranties. Always follow chemical manufacturer's instructions when storing, handling and dispensing pool chemicals.

14. CHECK FOR DAMAGE

Periodically inspect your pool and ladder components for damage and wear. Be sure all screws are in place and tightened according to manufacturer's instructions. Replace all damaged or worn components and tighten all screws before you use the pool, deck or ladders. At first sign of rust, remove and touch up immediately.

15. POOL PARTS

Never modify the pool, its components or its accessories, remove hardware, or drill holes in the pool, deck or ladder components unless instructed to do so by the manufacturer. Your pool wall is made of thin, but strong metal, so please use work gloves to protect your hands during installation. Always utilize original manufactured parts for replacement. Failure to do so may void your warranty.

POOL SAFETY

PLEASE READ PRIOR TO INSTALLATION

SAFETY STICKERS

The safety stickers must be installed as per the following instructions. Failure to properly install warning labels will void warranty. Failure to mount these safety labels may subject you to substantial liability in case of injury. These warnings are not to be removed under any circumstances. If they become discolored or fall off, please request replacements from the manufacturer, which will be provided free of charge.

SITE CHOICE AND PREPARATION:

- Site choice and preparation is your responsibility.
- All parts to be handled with care and free of dirt and debris.
- Confirm you have all parts.
- Assure entire framework is level.
- Pool rupture due to improper installation could cause serious property damage.

FOLLOW ALL SAFETY INSTRUCTIONS

Read and follow all safety instructions packaged with pool, ladder, deck or any other accessory. Additional pool safety publications can be obtained by contacting: The Association of Pool & Spa Professionals (www.apsp.org)

Place signs on liner above water line, opposite entry to pool



Place signs on wall next to pool entry



Remember to watch children



POOL SAFETY

PLEASE READ PRIOR TO INSTALLATION

Select a Pool Location

DO NOT locate the pool:

- over underground lines (electrical, sewage, plumbing, gas).
- over septic tanks.
- under overhead electrical lines.
- near hazardous structures.
- out of compliance with local code restrictions.

DO NOT locate the pool on a site:

- that is hilly - avoid areas with sudden slopes within 6' of pool
- that has poor drainage or tends to flood.
- in areas with sharp objects.
- on ground that has been treated with weed killer, pesticides or other chemicals.
- that has nut grass, Bermuda grass or bamboo grass growing nearby, as they can grow through your liner and puncture it.

DO NOT assemble you pool:

- on asphalt, tar or oil-based surfaces.
- with components such as filters, pumps, and heaters placed where they can be used to access the pool by young children.

DO ensure:

- the area selected has a level and firm base.
- surface is flat 2' beyond pool diameter.
- access is available to electrical and water supplies.
- the pool is installed far from structures which could encourage dangerous activities, like jumping from a roof or playset.
- you are aware of your local codes and restrictions.

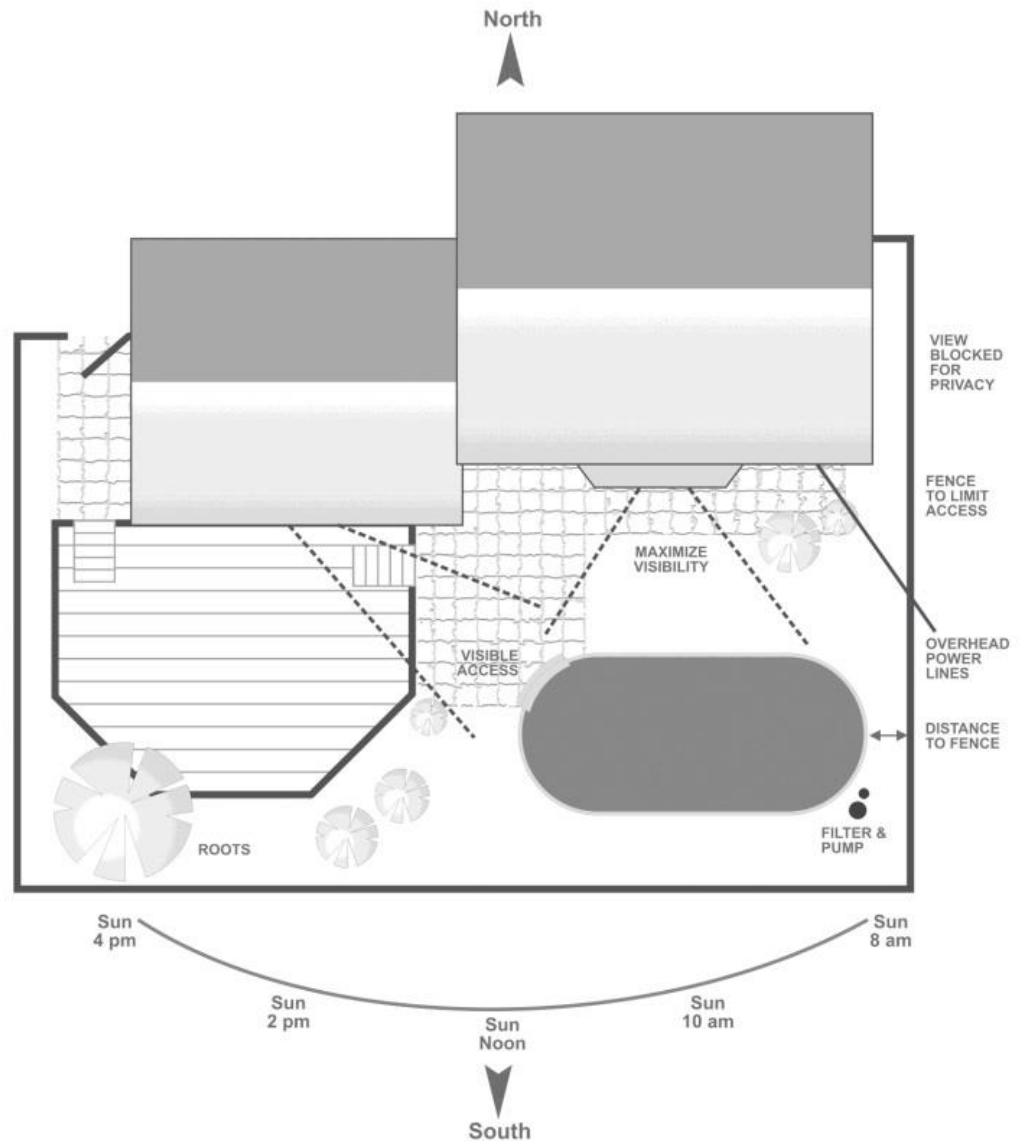


TABLE OF CONTENTS

NOTE: Start on Page 17 for installations utilizing the fully in-ground polymer step.

ABOVE GROUND / IN-GROUND

Section 1

ROUND ABOVE GROUND / IN-GROUND

Pool Components.....	6
Parts Per Pool Size.....	9
Tools You May Need	10
Create a Foundation	11
Patio Blocks.....	12
Wall Panel Installation.....	13
Anchor Plates.....	14
Sand Cove and Base.....	15
Pour Concrete Collar	16

FULLY IN-GROUND STEP

Section 2

ROUND FULLY IN-GROUND WITH POLYMER STEP

Pool Components.....	17
Parts Per Pool Size	20

Tools You May Need	21
Create a Foundation	22
Patio Blocks.....	23
Wall Installation.....	24
Anchor Plates.....	26
Step Installation.....	28
Sand Cove and Base.....	32
Pour Concrete Collar.....	33

FINISHING THE POOL

Section 3

OPTIMUM ROUND POOL

Skimmer Installation.	34
Return Fitting Installation	35
Install Top Coping	36
Pool Liner	39
Top Coping Clips	39
Filling Pool with Water	40
Installing Face Plates	40
Adding Backfill	41
POOL FOOTPRINTS.....	42

ABOVE GROUND / IN-GROUND

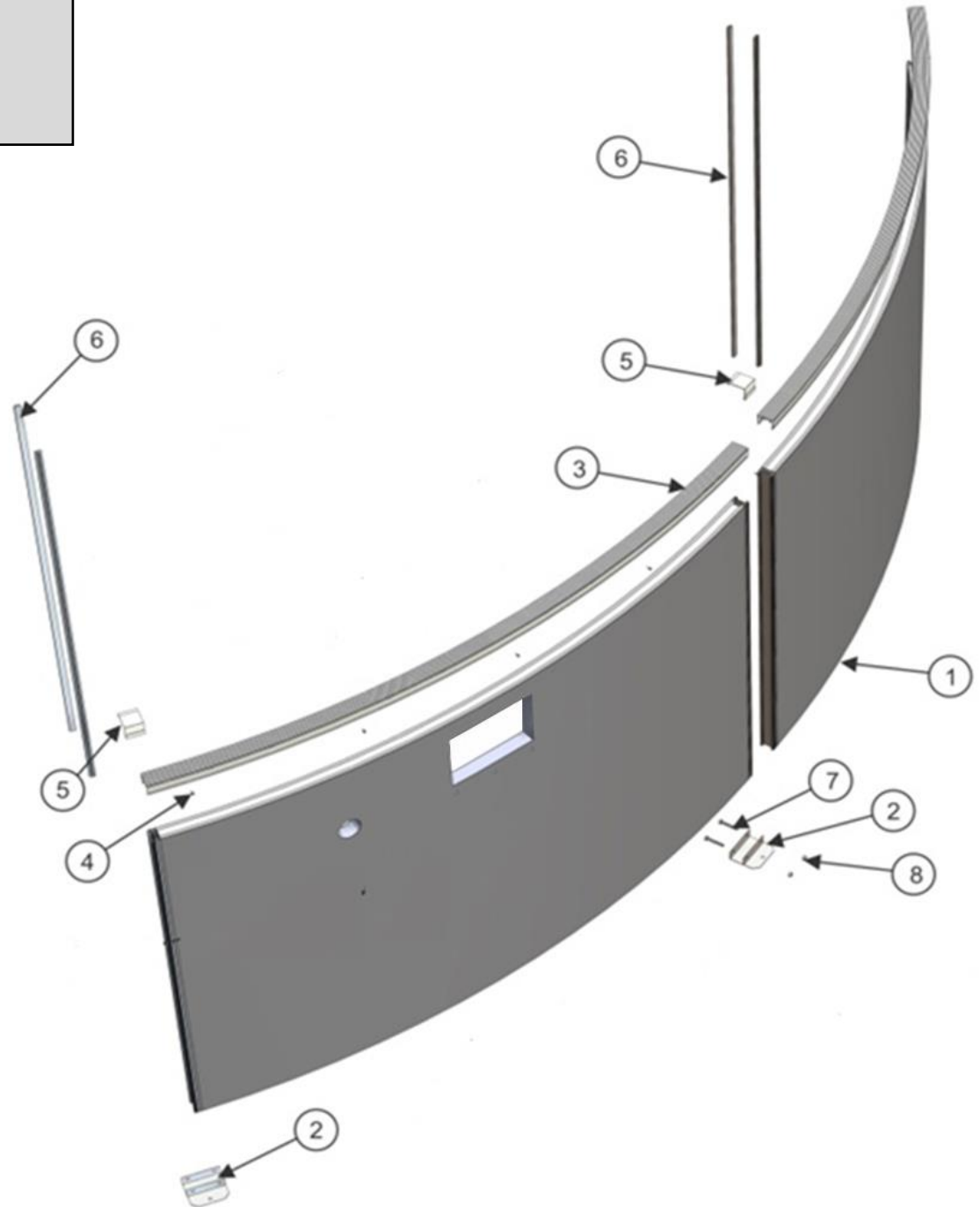
Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Pool Components Check List:

Pool

1	Panels	See Page 9
2	Anchor Plate	#77004
3	PVC Coping Standard Clay 2"	See Page 9
4	Pan Head Screw Clay #8 x 1/2"	#99-0138
5	Coping Clip Standard Clay 2-1/4"	#77310
6	Spline - 52"	#77002
7	Bolt, Hex Head Aluminum 2-1/2"	#99-0137
8	Nut, Aluminum 3/8"	#99-0134



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Pool Components Check List: Above Ground / Semi-Above Ground Skimmer Panel

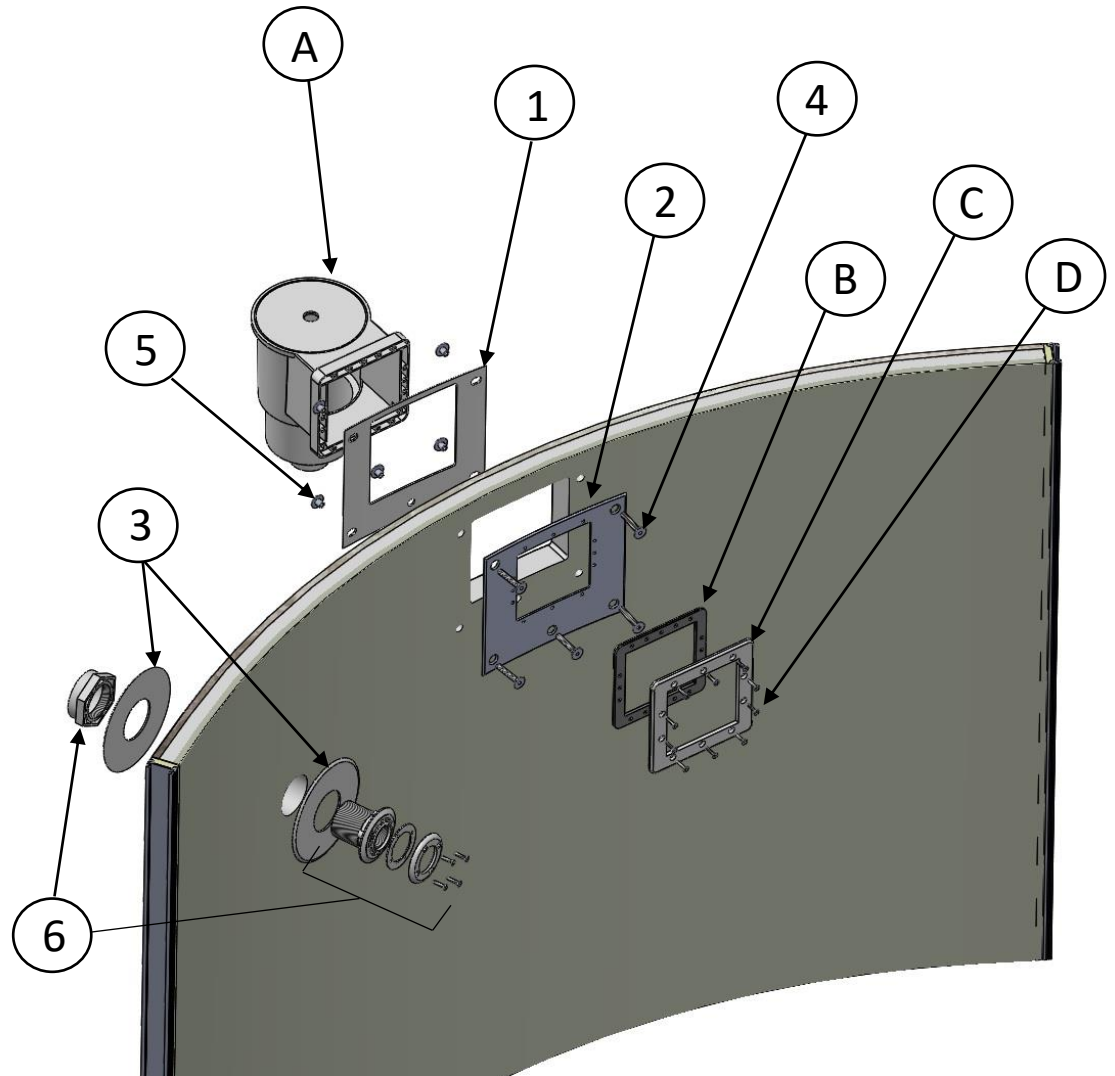
Pool

- | | |
|--|----------|
| 1. Skimmer Plate SP1091 Exterior, White | #77516 |
| 2. Skimmer Plate SP1091 Interior, Gray | #77517 |
| 3. Return Plate Interior / Exterior, White | #77064 |
| 4. Bolt, Countersunk SS 3/8" x 2-1/4" | #99-0131 |
| 5. Nut, Flat Head Rivet SS 3/8" | #99-0132 |
| 6. Extended Return Fitting Assembly | #77092 |

Skimmer Kit – (NOT INCLUDED)

- For Illustration Purposes Only -

- A. Skimmer
- B. Double Layer Gasket
- C. Skimmer Face Plate
- D. Screws, Flat Head



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Pool Components Check List: Fully In-Ground Skimmer Panel

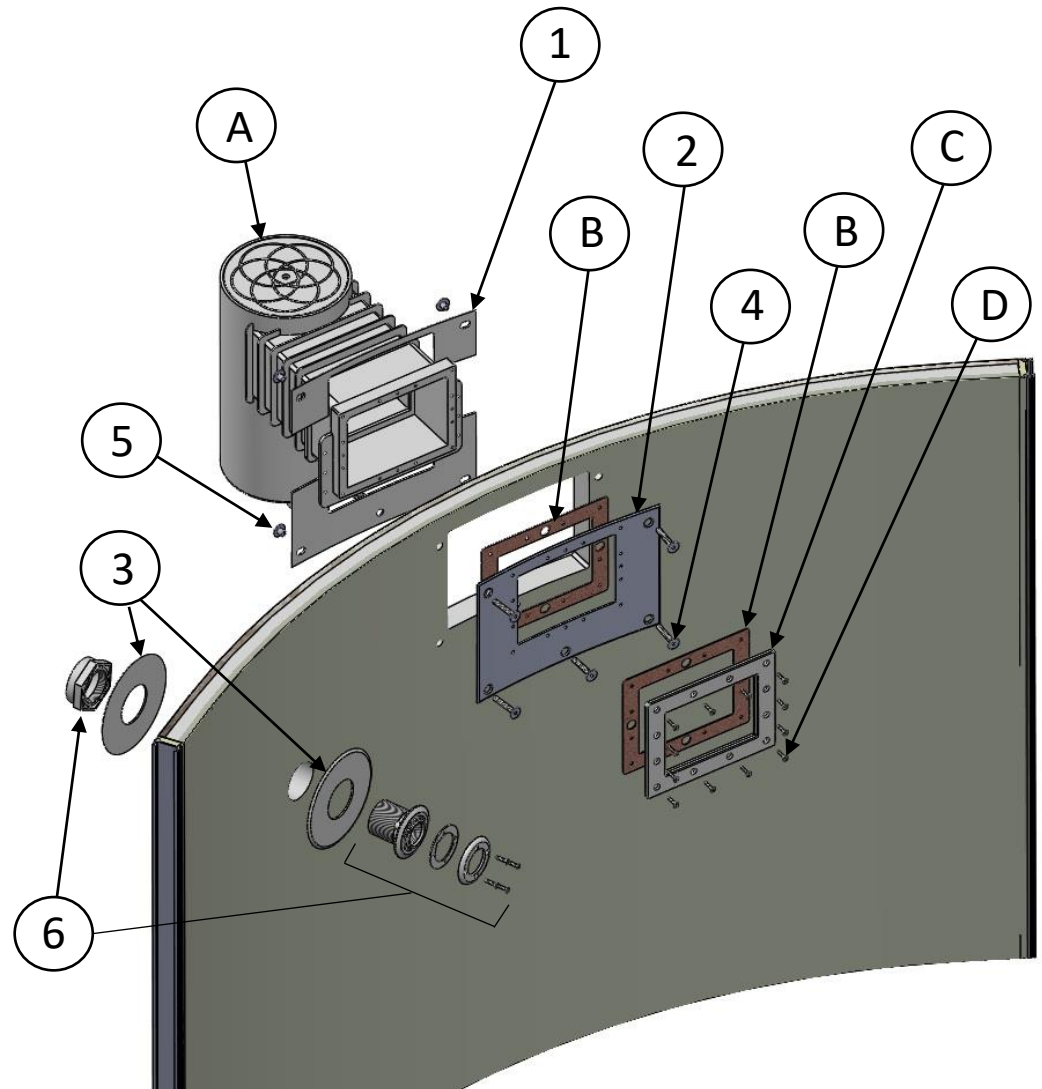
Pool

- | | |
|--|----------|
| 1. Skimmer Plate SP1084 Exterior, White | #77518 |
| 2. Skimmer Plate SP1084 Interior, Gray | #77519 |
| 3. Return Plate Interior / Exterior, White | #77064 |
| 4. Bolt, Countersunk SS 3/8" x 2-1/4" | #99-0131 |
| 5. Nut, Flat Head Rivet SS 3/8" | #99-0132 |
| 6. Extended Return Fitting Assembly | #77092 |

Skimmer Kit – (NOT INCLUDED) –

- For Illustration Purposes Only -

- | |
|-----------------------|
| A. Skimmer |
| B. Synthetic Gasket |
| C. Skimmer Face Plate |
| D. Screws, Flat Head |



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Parts Per Pool Size

PANELS	Part No	12'	14'	16'	18'	21'	24'	27'	30'
OPTIMUM 12FT PANEL, STANDARD 72-1/4"	77319	5							
OPTIMUM 12FT PANEL, IG SKIMMER 72-1/4"	77499	1							
OPTIMUM 12FT PANEL, AG SKIMMER 72-1/4"	77456								
OPTIMUM 14FT PANEL, STANDARD 84-1/4"	77334		5						
OPTIMUM 14FT PANEL, IG SKIMMER 84-1/4"	77500	1							
OPTIMUM 14FT PANEL, AG SKIMMER 84-1/4"	77457								
OPTIMUM 16FT PANEL, STANDARD 73-7/16"	77055			7					
OPTIMUM 16FT PANEL, IG SKIMMER 73-7/16"	77501			1					
OPTIMUM 16FT PANEL, AG SKIMMER 73-7/16"	77458								
OPTIMUM 18FT PANEL, STANDARD 82-3/4"	77056				7				
OPTIMUM 18FT PANEL, IG SKIMMER 82-3/4"	77502				1				
OPTIMUM 18FT PANEL, AG SKIMMER 82-3/4"	77459								
OPTIMUM 21FT PANEL, STANDARD 78"	77129					9			
OPTIMUM 21FT PANEL, IG SKIMMER 78"	77503					1			
OPTIMUM 21FT PANEL, AG SKIMMER 78"	77460								
OPTIMUM 24FT PANEL, STANDARD 89-1/16"	77057						9		
OPTIMUM 24FT PANEL, IG SKIMMER 89-1/16"	77504						1		
OPTIMUM 24FT PANEL, AG SKIMMER 89-1/16"	77461								
OPTIMUM 27FT PANEL, STANDARD 100-1/4"	77058							9	
OPTIMUM 27FT PANEL, IG SKIMMER 100-1/4"	77505							1	
OPTIMUM 27FT PANEL, AG SKIMMER 100-1/4"	77462								
OPTIMUM 30FT PANEL, STANDARD 93-1/16"	77131								11
OPTIMUM 30FT PANEL, IG SKIMMER 93-1/16"	77506								1
OPTIMUM 30FT PANEL, AG SKIMMER 93-1/16"	77463								
TOTAL PANEL COUNT	-	6	6	8	8	10	10	10	12

	Part	Part No	12'	14'	16'	18'	21'	24'	27'	30'
2	BOTTOM PLATE	77004	6	6	8	8	10	10	10	12
3	PVC TOP COPING 2"									
	PVC COPING STANDARD CLAY 12FT 77-1/8"	77309	6							
	PVC COPING STANDARD CLAY 14FT 77-1/8"	77325		6						
	PVC COPING STANDARD CLAY 16FT 77-1/8"	77006			8					
	PVC COPING STANDARD CLAY 18FT 86-5/8"	77007				8				
	PVC COPING STANDARD CLAY 21FT 80-5/16"	77158					10			
	PVC COPING STANDARD CLAY 24FT 91-3/4"	77008						10		
	PVC COPING STANDARD CLAY 27FT 103-1/4"	77009							10	
	PVC COPING STANDARD CLAY 30FT 94-7/8"	77159								12
4	PAN HEAD SCREW CLAY- #8 x 1/2"	99-0138	70	70	70	70	70	70	85	85
5	COPING CLIP STANDARD CLAY (REV)	77310	6	6	8	8	10	10	10	12
6	SPLINE - 52"	77002	12	12	16	16	20	20	20	24
7	BOLT, HEX HEAD ALUM. 3/8" x 2-1/2"	99-0137	12	12	16	16	20	20	20	24
8	NUT, ALUMINUM 3/8"	99-0134	12	12	16	16	20	20	20	24
9	SKIMMER REDUCTION INSERT	77070	1	1	1	1	1	1	1	1
10	SKIMMER PLATE SP1091 EXTERIOR, WHITE	77063	1	1	1	1	1	1	1	1
11	SKIMMER PLATE SP1091 INTERIOR, GRAY	77061	1	1	1	1	1	1	1	1
12	RETURN PLATE EXTERIOR / INTERIOR, WHITE	77064	2	2	2	2	2	2	2	2
13	BOLT, COUNTERSUNK SS 3/8" x 2-1/4"	99-0131	5	5	5	5	5	5	5	5
14	NUT, FLAT HEAD RIVET SS 3/8"	99-0132	5	5	5	5	5	5	5	5
15	REBAR - 3/8 X 15"	77001	6	6	8	8	10	10	10	12
16	EXTENDED RETURN FITTING ASSEMBLY	77092	1	1	1	1	1	1	1	1
17	HEX ALLEN KEY 7/32" (TOOL)	99-0140	1	1	1	1	1	1	1	1

ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Tools You May Need:

- | | |
|----------------------------------|-------------------------------|
| Tape measure - 100' | Pliers - channel lock |
| Marking spray paint or powder | 9/16" open end wrench |
| String - 25' length | Screwdrivers, flat & Phillips |
| Stake or peg – 12" | Metal file |
| Transit, laser level or 3' level | Utility knife |
| Rubber mallet | PVC pipe cutter |
| Hacksaw | Pool trowel |
| Spade | Cloth rag |
| Square shovel | Cooking spray |
| Pick | Shop vacuum |
| Rake | Soft bristle broom |
| Tamper square 10" or 12" | Extension cord |
| 2x4, straight - 12' | Hose with spray nozzle |
| Square | Wheelbarrow |
| Power drill | |
| 7/16" and 1/8" drill bits | |
| 1/4" hex nut driver bit | |
| Socket set | |
| Duct tape | |

Additional Items Needed:

- **Patio Blocks - 2" x 12" x 12"** (reference chart below)

In-ground installations:

- **Concrete** (when installed more than 24" below grade)
- **Backfill** (crushed stone or gravel 3/8" – 3/4" diameter)
- **Perforated Drainpipe** (for drainage if site floods easily)

Pool Size	Masonry Sand Cubic Yards	Patio Blocks	Concrete Cubic Yards (If Installing +24" Below Grade)
12'	0.8	6	1
14'	1.1	6	1-1/4
16'	1.5	8	1-1/2
18'	1.9	8	1-3/4
21'	2.5	10	2
24'	3.2	10	2-1/4
27'	4.1	10	2-1/2
30'	5.0	12	2-3/4

ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Step 1 – Create a Foundation

- 1.1 Establish the pool circumference by driving a stake into the ground at the center of the site.

Attach one end of a string to the center stake, measure the string out to equal the pool radius, plus an additional 12 inches for clearance. Holding the string taut, walk the outer perimeter of your pool site while marking the circle with either spray paint, a lawn edger or white powder.

Remove all sod, weeds and other growth from within the circle. Dig to the depth the pool will be installed for below-grade installations. Find the lowest spot within the pool area and level the surrounding ground to that lowest spot. Dig higher areas down to this level. **DO NOT** add dirt to raise the low areas, as the weight of the filled pool will cause uneven settling.

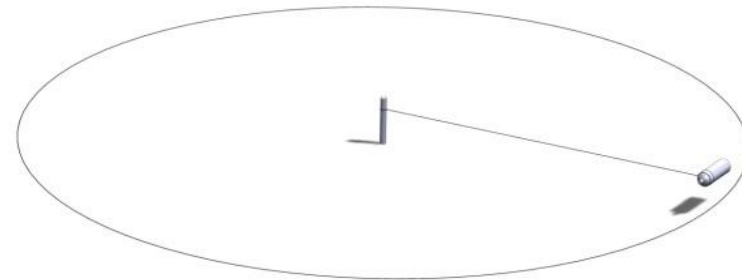
NOTE: The pool floor may be dug deeper, sloping to the center of the pool for use with an expandable liner.

Remove protruding roots, stones and other sharp objects that could damage the pool. Tamp down ground with square tamper.

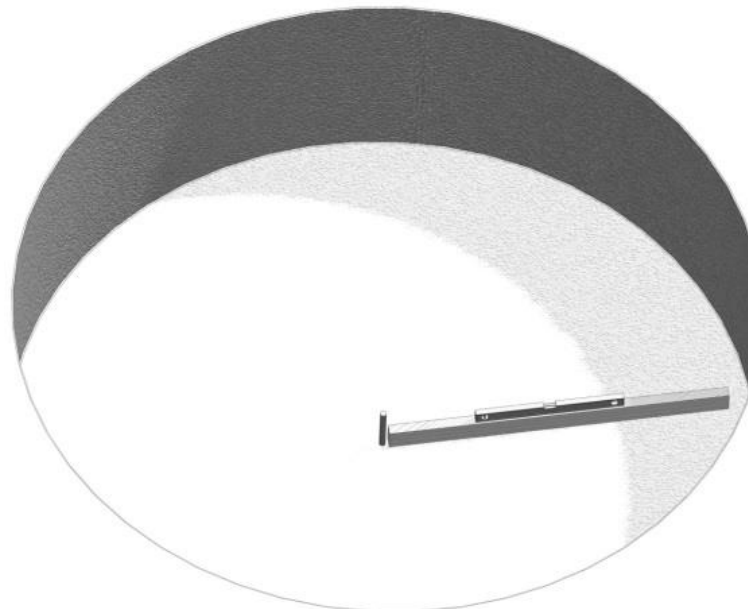
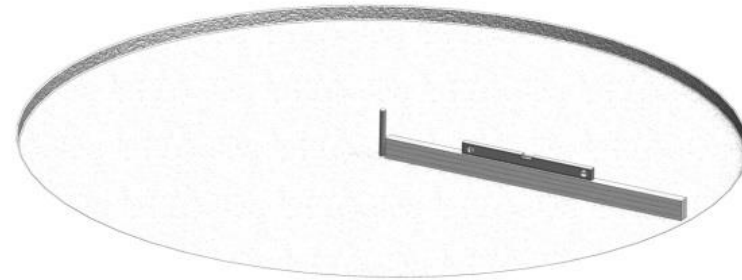
IN-GROUND INSTALLATIONS: It is recommended that the top of the pool be 2" - 6" above the surrounding area.

- 1.2 Confirm the site is level and flat using a long straight board or 2x4 and a carpenter's level or transit. Continue to remove high areas of ground if needed.

1.1



1.2



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

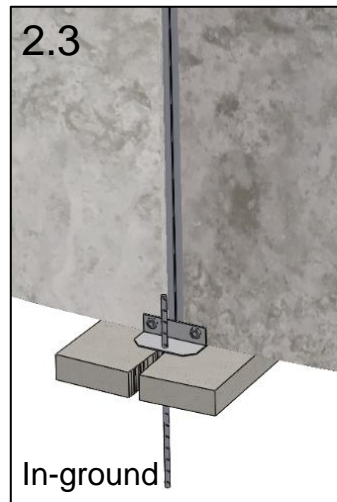
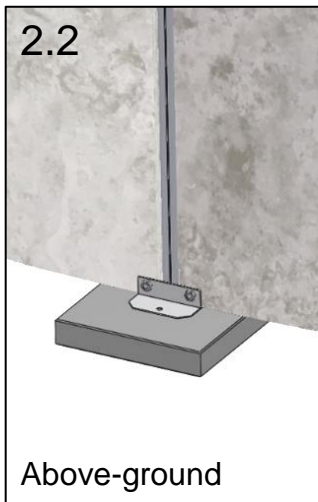
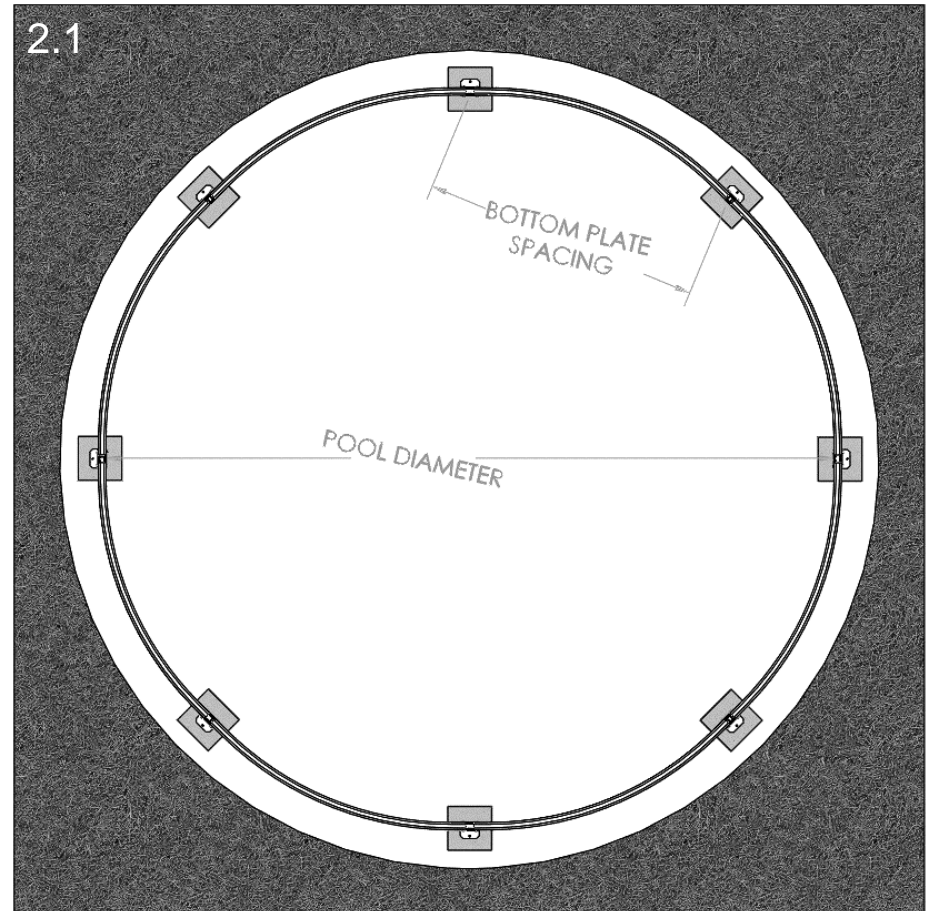
Step 2 – Install Patio Blocks

2.1 Mark exact pool radius using the center stake.

Using the chart below, mark the locations of each patio block. Sink the patio blocks flush with the ground at each marked location. All patio blocks **must be** flush and level with each other in all directions. Confirm with a straight 2x4 and level placed between blocks or by using a transit.

IN-GROUND INSTALLATIONS: Split the patio block into two halves to allow rebar to be installed later as seen in figure 2.3.

Panel joints will be located over each patio block. Place an Anchor Plate (#77004) on top of each patio block.



Pool Size	12'	14'	16'	18'	21'	24'	27'	30'
Patio Block Spacing	72-1/16"	84"	73-1/2"	82-5/8"	77-7/8"	89"	100-1/8"	93-3/16"
Reference Angle Between Markings	60 Deg	60 Deg	45 Deg	45 Deg	36 Deg	36 Deg	36 Deg	30 Deg

ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Step 3 – Wall Installation

- 3.1 Decide where the Skimmer Panel and plumbing will be located and place the Skimmer Panel accordingly. The Anchor Plates must be centered on each end of the panel.

Place the next panel, leaving a 1/8" gap between both panels, ensuring the Anchor Plates are centered at each panel joint.

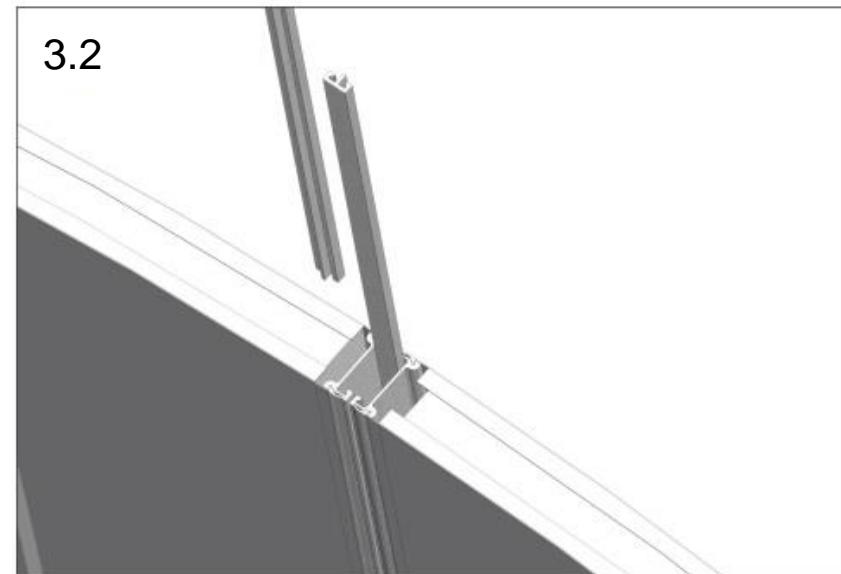
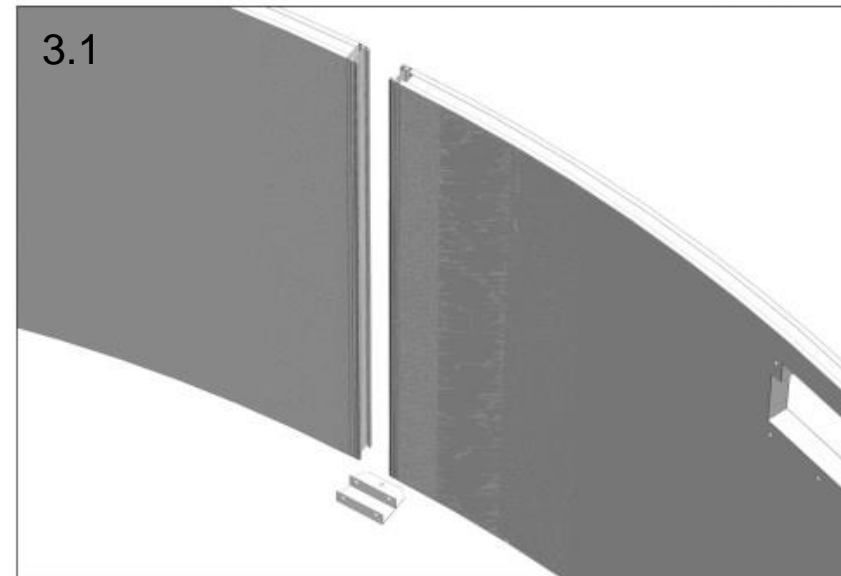
- 3.2 Slide two 52" Splines (#77002) into compression seams to lock both panels together.

If inserting the Splines is difficult:

- Apply cooking oil to lubricate and ease installation.
- Ensure a 1/8" gap between both panels is uniform top to bottom.
- Check Splines and seams are free of any sand or debris.

Repeat this step with all remaining panels.

Note – Before final panel is attached, bring sand for the floor base and cove into the interior of the pool.
(See Page 9 for proper quantities)



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Step 4 – Anchor Plate Installation

- 4.1 Ensure panels are centered and fully inserted into the Anchor Plates.

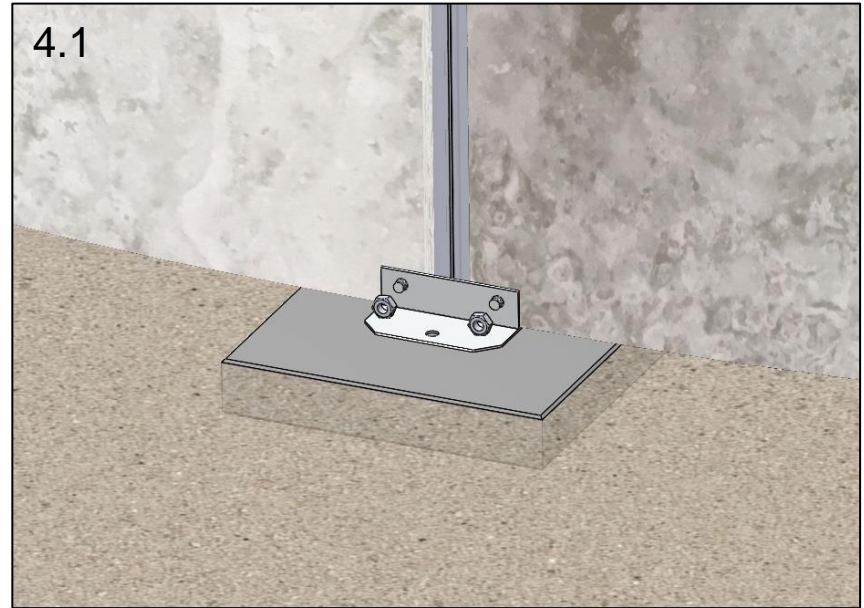
Drill two 7/16" holes through the pool panels at each Anchor Plate locations using the Anchor Plate holes as a drill guide. Secure panels with 3/8" x 2-1/2" bolts (#99-0137) and nuts (#99-0134).

- 4.2 **IMPORTANT!**

Confirm roundness of the pool by measuring the diameter across the pool at each panel joint. All diameters should be identical. Adjust, as necessary. If this step is not completed, the pool may not be perfectly round, which could lead to problems later, and may void your warranty.

- 4.3 **IN-GROUND ONLY:** If the pool installation is greater than 24" below grade, the included rebar must be used with an 8" high x 12" wide concrete collar around the perimeter of the pool. Insert the rebar halfway into the ground through the Anchor Plate holes before pouring the concrete collar.

If the pool is installed less than 24" below grade, skip this step.



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

Step 5 – Create Pool Cove and Base

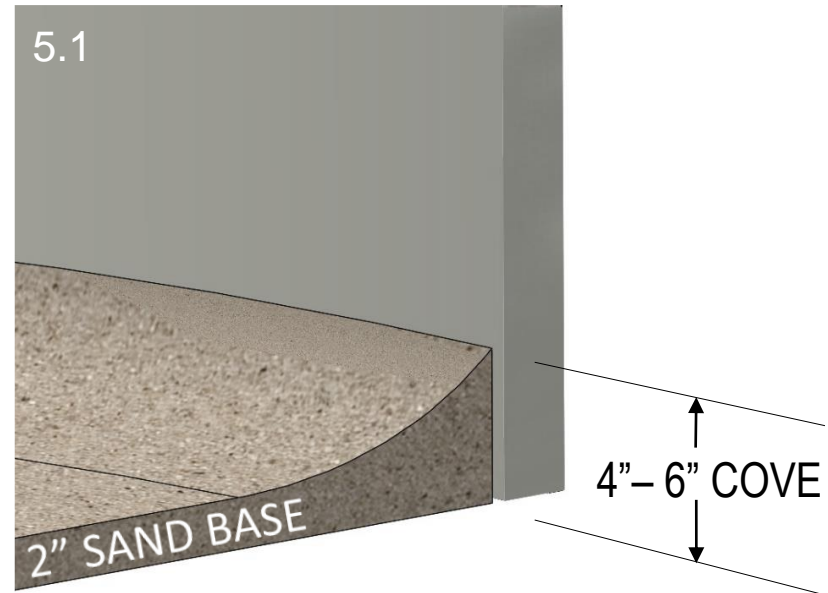
5.1 Using neutral alkalinity sifted earth, or fine sand without pebbles, create a pool cove 4"-6" high along entire inside circumference of pool – **NOT OPTIONAL!** The cove will prevent the liner from sliding beneath the pool wall once filled with water. See Figure 5.1.

DO NOT USE ANY SUBSTANCE WITH HIGH ALKALINE OR ACID CONTENT, ESPECIALLY PEAT MOSS, AS IT WILL CORRODE METAL PARTS.

Since chemicals that may be naturally occurring in the ground can cause discoloration or corrosion, we suggest laying polyethylene plastic sheeting under the cove around the perimeter of the wall, ensuring that no earth contacts the metal pool wall. Since the presence of such chemicals is beyond the control of the manufacturer, this damage is not covered by the warranty.

Use remaining sand to create 2" deep sand base over the entire pool area to protect the liner.

Rake and tamp whole area until it is level and smooth. Any bumps or ridges will be perceptible under the liner.



ABOVE GROUND / IN-GROUND

Section 1

OPTIMUM ROUND ABOVE / IN-GROUND POOL

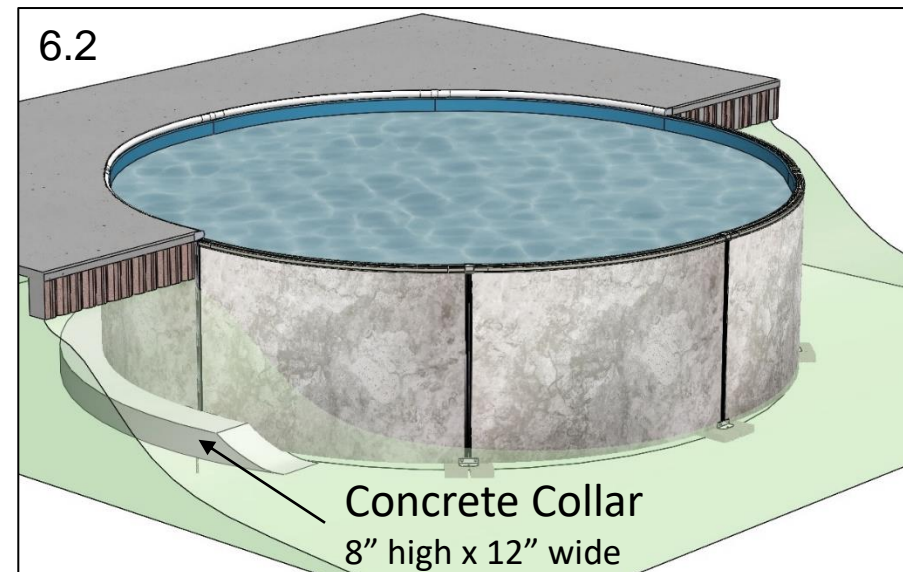
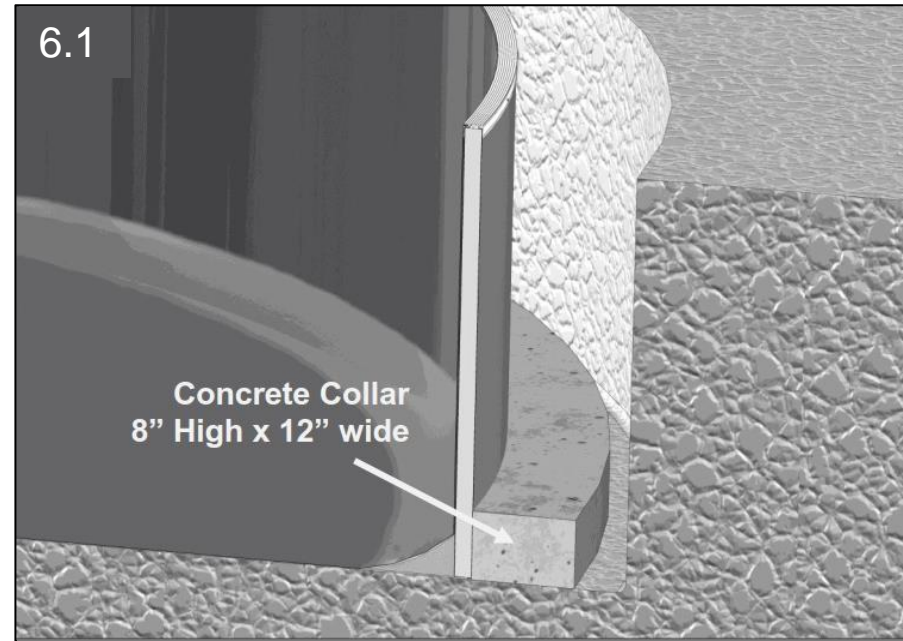
Step 6 - Install Concrete Collar

6.1 **IN-GROUND ONLY:** All pools that are buried more than 24" below grade require a concrete collar, 12" wide by 8" high, around the entire perimeter of the pool. If extra supports are required for patio or other pool features, consider installing them before pouring the concrete.

If the pool is installed into a hill, as illustrated in image 6.2, the pool still requires a concrete collar 12" wide by 8" high at any location where the pool is buried more than 24" below grade. Taper the ends of the concrete collar once the depth below grade becomes less than 24".

Step 7 - Continue to Page 34

7.1 Continue Section 3 – Finishing The Pool



FULLY IN-GROUND STEP

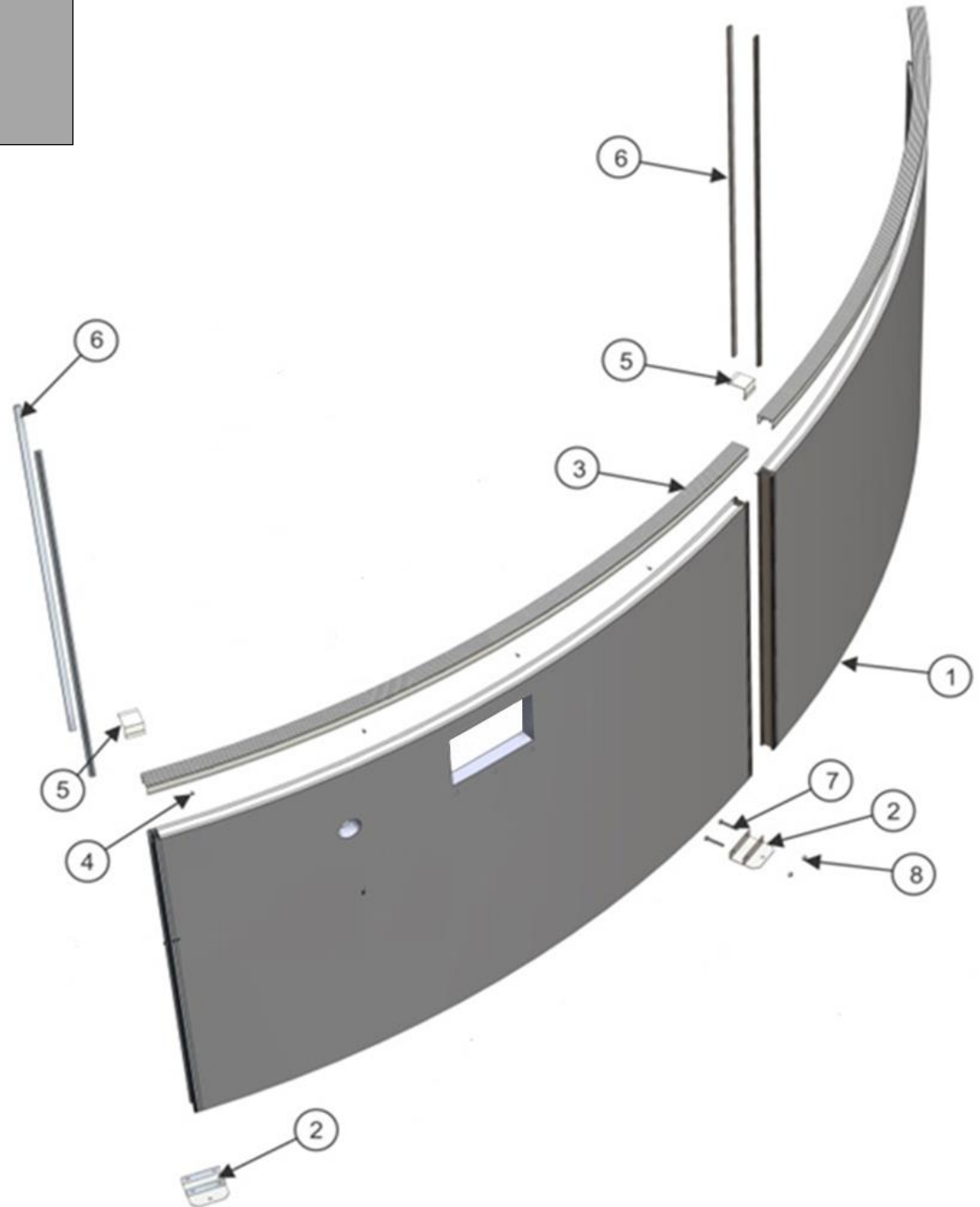
Section 2

FULLY IN-GROUND WITH POLYMER STEP

Pool Components Check List:

Pool

1	Panels	See Page 20
2	Anchor Plate	#77004
3	PVC Coping Standard Clay 2"	See Page 20
4	Pan Head Screw Clay #8 x 1/2"	#99-0138
5	Coping Clip Standard Clay 2-1/4"	#77310
6	Spline - 52"	#77002
7	Bolt, Hex Head Aluminum 2-1/2"	#99-0137
8	Nut, Aluminum 3/8"	#99-0134



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Pool Components Check List: Fully In-Ground Skimmer Panel

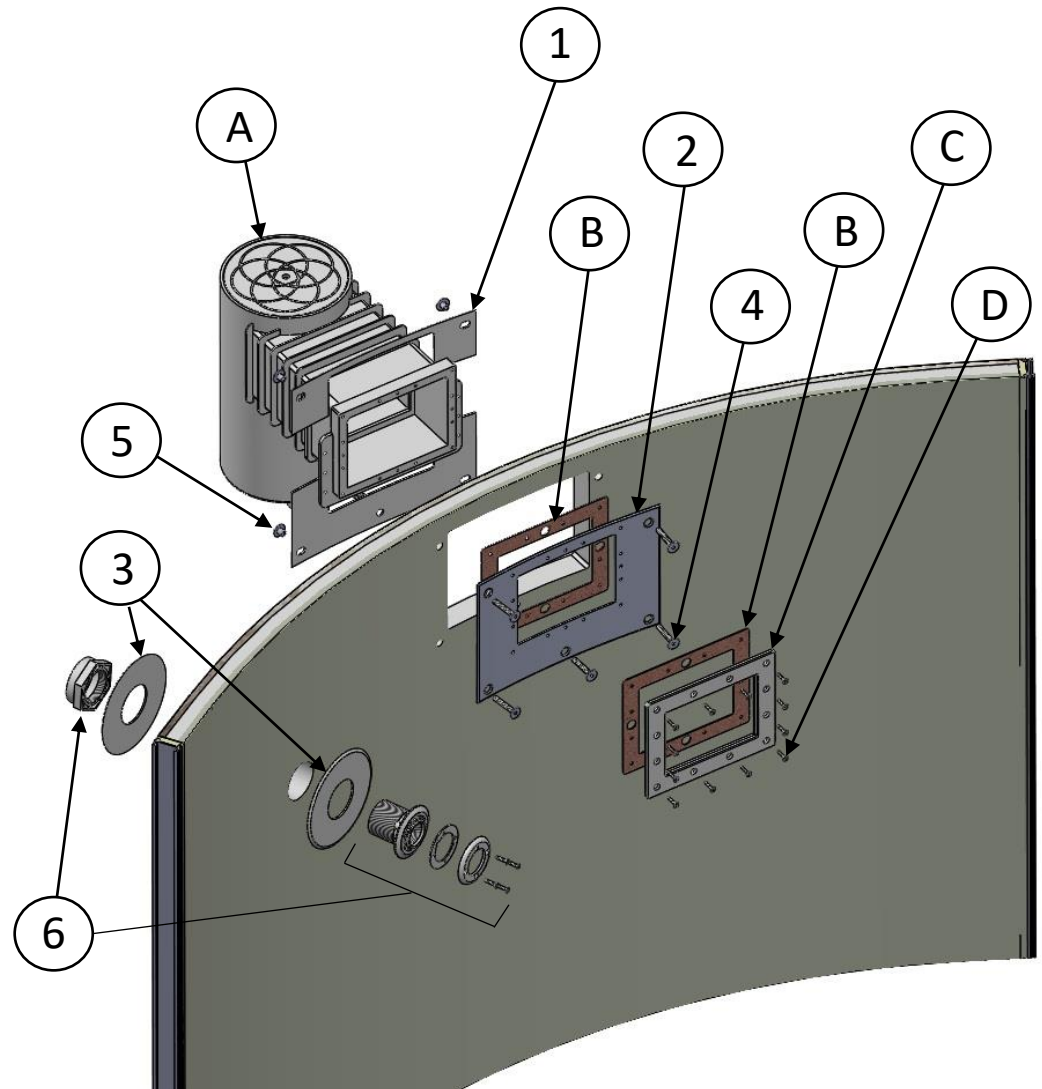
Pool

- | | |
|--|----------|
| 1. Skimmer Plate SP1084 Exterior, White | #77518 |
| 2. Skimmer Plate SP1084 Interior, Gray | #77519 |
| 3. Return Plate Interior / Exterior, White | #77064 |
| 4. Bolt, Countersunk SS 3/8" x 2-1/4" | #99-0131 |
| 5. Nut, Flat Head Rivet SS 3/8" | #99-0132 |
| 6. Extended Return Fitting Assembly | #77092 |

Skimmer Kit – (NOT INCLUDED) –

- For Illustration Purposes Only -

- | |
|-----------------------|
| A. Skimmer |
| B. Synthetic Gasket |
| C. Skimmer Face Plate |
| D. Screws, Flat Head |



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Pool Components Check List: Polymer Step

Step Assembly

18. Step Filler Panel

19. Nuts, Hex Flange 3/8" SS #10660

6. Spline - 52" #77002

20. Step Rod Extrusion 52" #77173

21. Bolts, Hex Flange 3/8" x 1" SS #99-0104

22. Step Socket Extrusion 52" #77143

23. Step Fender Washers 3/8" x 1-3/4" #77175

24. Step (NOT INCLUDED) -

25. Step Anchor Plate, Right #77142

26. Step Anchor Plate, Left #77141

15. Rebar 3/8" x 15" #77001

27. Step Diagonal Brace 18" #77146

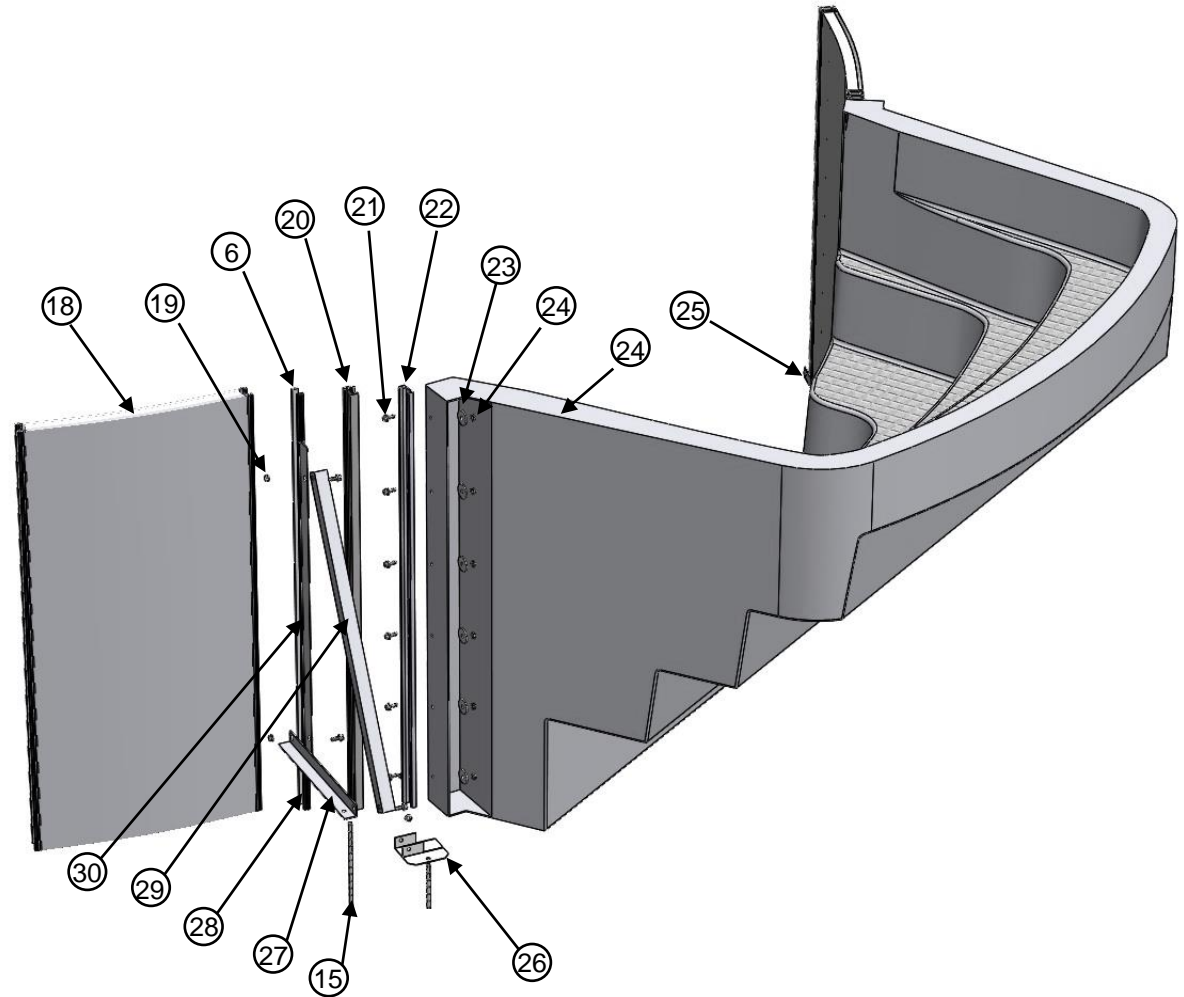
28. Short Splines 5-3/4" #77014

29. Step Horizontal Brace 37-13/16" #77148

30. Extended Spline 40-1/2" #77013

IMPORTANT:

- 12' THROUGH 18' POOLS MUST USE THE 91-3/4" WIDE RADIUS STEP
- 21' THROUGH 30' POOLS MUST USE THE 96" WIDE STRAIGHT STEP.



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Parts Per Pool Size

PANELS	Part No	12'	14'	16'	18'	21'	24'	27'	30'
OPTIMUM 12FT PANEL, STANDARD 72-1/4"	77319	3							
OPTIMUM 12FT PANEL, IG SKIMMER 72-1/4"	77499	1							
OPTIMUM 12FT PANEL, STEP FILLER 24-3/16"	77323	2							
OPTIMUM 14FT PANEL, STANDARD 84-1/4"	77334		3						
OPTIMUM 14FT PANEL, IG SKIMMER 84-1/4"	77500		1						
OPTIMUM 14FT PANEL, STEP FILLER 37-15/16"	77338		2						
OPTIMUM 16FT PANEL, STANDARD 73-7/16"	77055			5					
OPTIMUM 16FT PANEL, IG SKIMMER 73-7/16"	77501			1					
OPTIMUM 16FT PANEL, STEP FILLER 26-1/4"	77133			2					
OPTIMUM 18FT PANEL, STANDARD 82-3/4"	77056				5				
OPTIMUM 18FT PANEL, IG SKIMMER 82-3/4"	77502				1				
OPTIMUM 18FT PANEL, STEP FILLER 36"	77134				2				
OPTIMUM 21FT PANEL, STANDARD 78"	77129					7			
OPTIMUM 21FT PANEL, IG SKIMMER 78"	77503					1			
OPTIMUM 21FT PANEL, STEP FILLER 29-3/8"	77135					2			
OPTIMUM 24FT PANEL, STANDARD 89-1/16"	77057						7		
OPTIMUM 24FT PANEL, IG SKIMMER 89-1/16"	77504						1		
OPTIMUM 24FT PANEL, STEP FILLER 40-1/8"	77136						2		
OPTIMUM 27FT PANEL, STANDARD 100-1/4"	77058							7	
OPTIMUM 27FT PANEL, IG SKIMMER 100-1/4"	77505							1	
OPTIMUM 27FT PANEL, STEP FILLER 51-1/4"	77137							2	
OPTIMUM 30FT PANEL, STANDARD 93-1/16"	77131								9
OPTIMUM 30FT PANEL, IG SKIMMER 93-1/16"	77506								1
OPTIMUM 30FT PANEL, STEP FILLER 44-1/4"	77138								2
TOTAL PANEL COUNT	-	6	6	8	8	10	10	10	12

PART	Part No	12'	14'	16'	18'	21'	24'	27'	30'
2 ANCHOR PLATE	77004	5	5	7	7	9	9	9	11
3 IN-GROUND COPING ADAPTER CLIP	77176	51	51	68	68	68	85	102	102
4 SCREW, TEK SS - #10 X 3/4	99-0090	102	102	136	136	136	170	204	204
5 FWP IN GROUND COPING FOAM STRIP 10'	77177	5	5	7	7	9	9	10	10
6 SPLINE - 52"	77002	12	12	16	16	20	20	20	24
7 BOLT, HEX HEAD ALUM. - 2-1/2"	99-0137	12	12	16	16	20	20	20	24
8 NUT, ALUM. - 3/8"	99-0134	12	12	16	16	20	20	20	24
9 SKIMMER REDUCTION INSERT	77070	1	1	1	1	1	1	1	1
10 SKIMMER PLATE SP1084 WHITE (EXTERIOR)	77140	1	1	1	1	1	1	1	1
11 SKIMMER PLATE SP1084 GRAY (INTERIOR)	77139	1	1	1	1	1	1	1	1
12 RETURN PLATE WHITE (EXTERIOR/INTERIOR)	77064	2	2	2	2	2	2	2	2
13 BOLT, COUNTERSUNK SS - 2-1/4"	99-0131	5	5	5	5	5	5	5	5
14 NUT, FLAT HEAD RIVET SS- 3/8"	99-0132	5	5	5	5	5	5	5	5
15 REBAR - 3/8 X 15"	77001	6	6	8	8	10	10	10	12
16 EXTENDED RETURN FITTING	77092	1	1	1	1	1	1	1	1
17 HEX ALLEN KEY 7/32" (TOOL)	99-0140	1	1	1	1	1	1	1	1
PART (Step Adaptor Kit)	Part No	16'	16'	16'	18'	21'	24'	27'	30'
18 STEP FILLER PANEL	-	2	2	2	2	2	2	2	2
19 NUT, HEX FLANGE 3/8" SS	10660	18	18	18	18	18	18	18	18
20 STEP ROD EXTRUSION 52"	77173	2	2	2	2	2	2	2	2
21 BOLT, HEX FLANGE 3/8" X 1" SS	99-0104	18	18	18	18	18	18	18	18
22 STEP SOCKET EXTRUSION 52"	77143	2	2	2	2	2	2	2	2
23 STEP ATTACHMENT WASHER 3/8" X 1-3/4"	77175	12	12	12	12	12	12	12	12
25 STEP ANCHOR PLATE MODIFIED RIGHT	77142	1	1	1	1	1	1	1	1
26 STEP ANCHOR PLATE MODIFIED LEFT	77141	1	1	1	1	1	1	1	1
27 STEP DIAGONAL BRACE ANGLE 18" PIECE	77146	2	2	2	2	2	2	2	2
28 FWP SHORT SPLINES 5-3/4"	77014	4	4	4	4	4	4	4	4
29 STEP HORIZONTAL BRACE ANGLE 37-13/16"	77148	2	2	2	2	2	2	2	2
30 FWP EXTENDED SPLINE 40-1/2"	77013	2	2	2	2	2	2	2	2

FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Tools You May Need:

- Tape measure - 100'
- Marking spray paint or powder
- String - 25' length
- Stake or peg – 12"
- Transit, laser level or 3' level
- Rubber mallet
- Hacksaw
- Spade
- Square shovel
- Pick
- Rake
- Tamper square 10" or 12"
- 2x4, straight - 12'
- Square
- Power drill
- 7/16" and 1/8" drill bits
- 1/4" hex nut driver bit
- Socket set
- Duct tape
- Pliers - channel lock
- 9/16" open end wrench
- Screwdrivers, flat & Phillips
- Metal file
- Utility knife
- PVC pipe cutter
- Pool trowel
- Cloth rag
- Cooking spray
- Shop vacuum
- Soft bristle broom
- Extension cord
- Hose with spray nozzle
- Wheelbarrow

Additional Items Needed:

- **Patio Blocks - 2" x 12" x 12"** (reference chart below)

In-ground installations:

- **Concrete** (when installed more than 24" below grade)
- **Backfill** (crushed stone or gravel 3/8" – 3/4" diameter)
- **Perforated Drainpipe** (for drainage if site floods easily)

Pool Size	Masonry Sand Cubic Yards	Patio Blocks	Concrete Cubic Yards (If Installing +24" Below Grade)
12'	0.8	6	1
14'	1.1	6	1-1/4
16'	1.5	8	1-1/2
18'	1.9	8	1-3/4
21'	2.5	10	2
24'	3.2	10	2-1/4
27'	4.1	10	2-1/2
30'	5.0	12	2-3/4

FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 1 – Create a Foundation

- 1.1 Establish the pool circumference by driving a stake into the ground at the center of the site.

Attach one end of a string to the center stake, measure the string out to equal the pool radius, plus an additional 12 inches for clearance. Holding the string taut, walk the outer perimeter of your pool site while marking the circle with either spray paint, a lawn edger or white powder.

Remove all sod, weeds and other growth from within the circle. Dig to the depth the pool will be installed for below-grade installations. Find the lowest spot within the pool area and level the surrounding ground to that lowest spot. Dig higher areas down to this level. **DO NOT** add dirt to raise the low areas, as the weight of the filled pool will cause uneven settling.

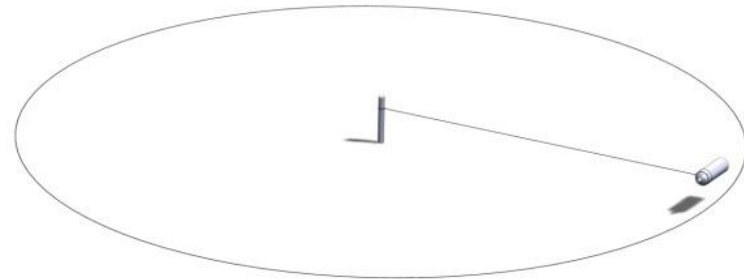
NOTE: The pool floor may be dug deeper, sloping to the center of the pool for use with an expandable liner.

Remove protruding roots, stones and other sharp objects that could damage the pool. Tamp down ground with square tamper.

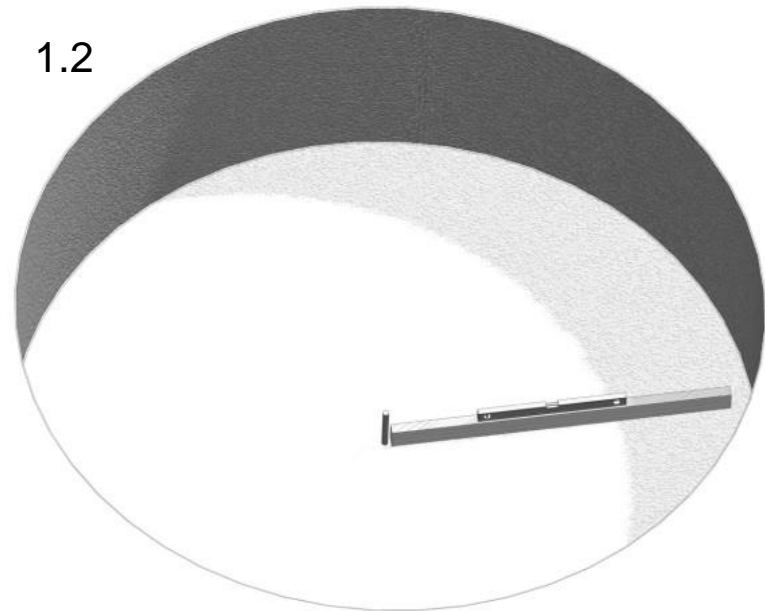
IN-GROUND INSTALLATIONS: It is recommended that the top of the pool be 2" - 6" above the surrounding area.

- 1.2 Confirm the site is level and flat using a long straight board or 2x4 and a carpenter's level or transit. Continue to remove high areas of ground if needed.

1.1



1.2



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

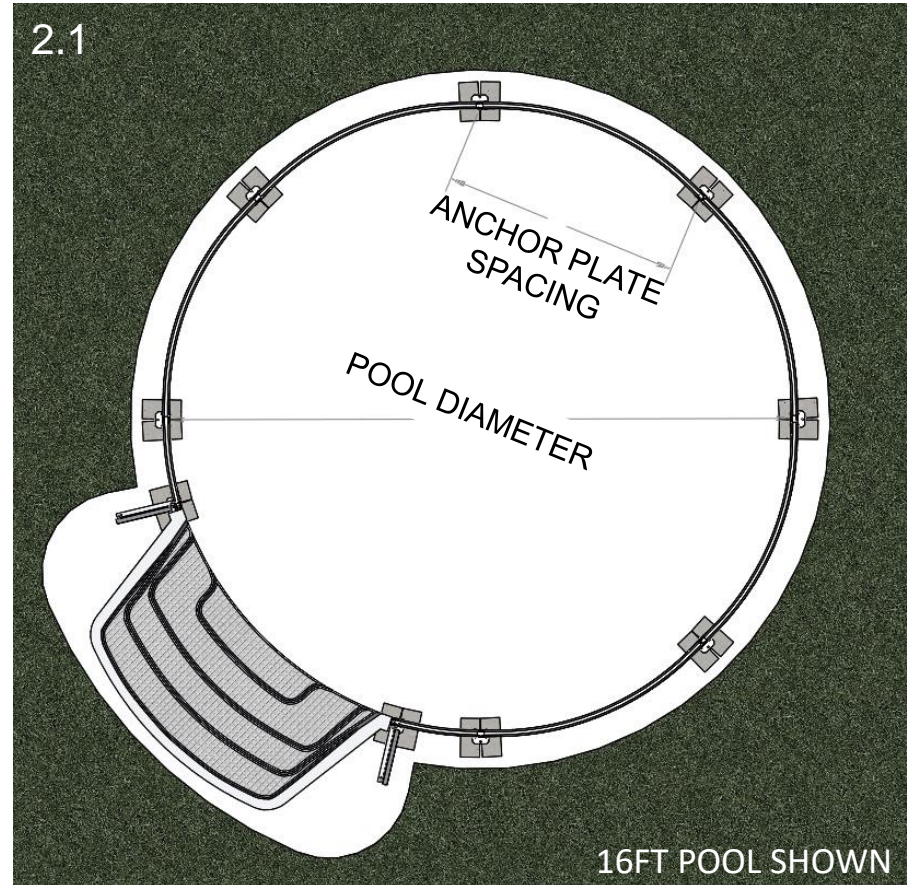
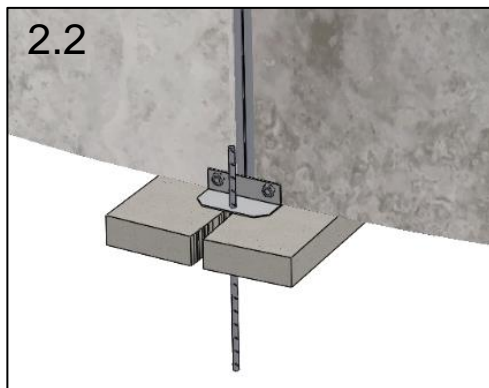
Step 2 – Install Patio Blocks

2.1 Mark exact pool radius using the center stake.

Using the chart below, in accordance with the pool footprints (Page 42-49), mark the locations of each patio block.

Break patio block into two halves to allow rebar to later be installed through the anchor plate (Figure 2.2). Sink the patio blocks flush with the ground at each marked location. All patio blocks **must be** flush and level with each other in all directions. Confirm with a straight 2x4 and level placed between blocks or by using a transit

Panel joints will be located over each patio block. Place an anchor plate (#77004) on top of each patio block.



Pool Size	16'	18'	21'	24'	27'	30'
Patio Block Spacing	73-1/2"	82-5/8"	77-7/8"	89"	100-1/8"	93-3/16"
Reference Angle Between Markings	45 Deg	45 Deg	36 Deg	36 Deg	36 Deg	30 Deg

FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

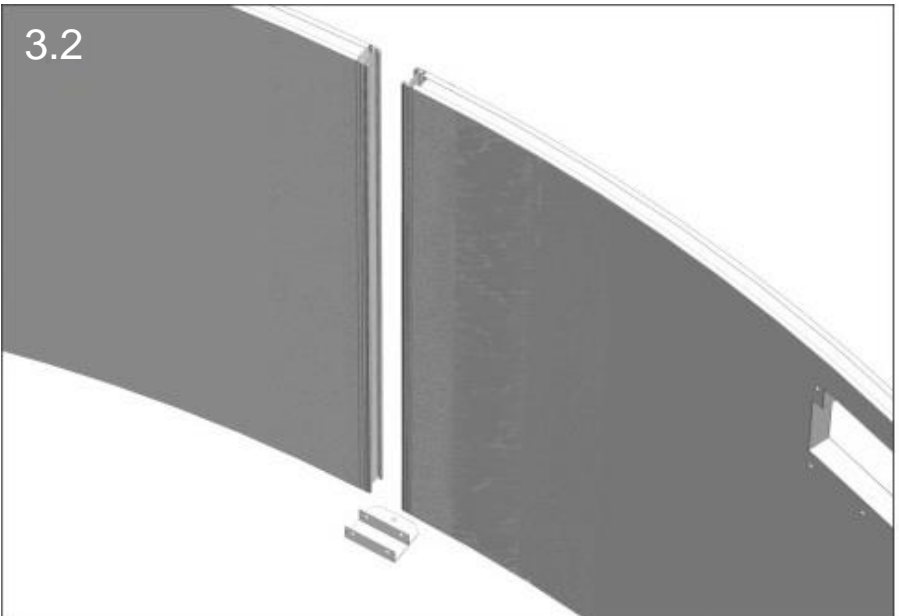
Step 3 – Wall Installation

3.1 The Optimum Pool with Polymer Step excludes two standard sized panels. This void in the pool is where the step and two shorter “Filler Panels” will be located. Assemble the pool as instructed below while keeping this void at the specific desired location of the step.

3.2 Decide where the Skimmer Panel and plumbing will be located and place the Skimmer Panel accordingly. The Anchor Plates must be centered on each end of the panel.

Place the next panel, leaving a 1/8” gap between both panels, ensuring the Anchor Plates are centered at each panel joint.

3.1



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 3 – Wall Installation (Continued)

3.3 Slide two 52" Splines (#77002) into compression seams to lock both panels together.

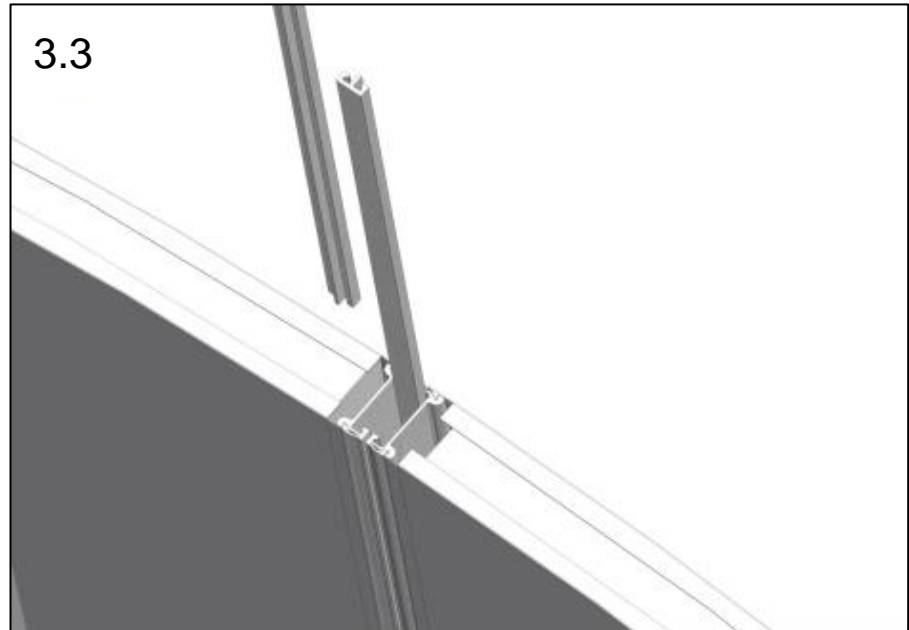
If inserting the Splines is difficult:

- Apply cooking oil to lubricate and ease installation.
- Ensure a 1/8" gap between both panels is uniform top to bottom.
- Check Splines and seams are free of any sand or debris.

Repeat this step with all remaining panels.

3.4 Assemble shorter Filler Panels on each side of the void where the step will be placed using two 52" Splines and an Anchor Plate (#77004).

Note: shorter Filler Panels must be located on each side of the step.



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 4 – Anchor Plate Installation

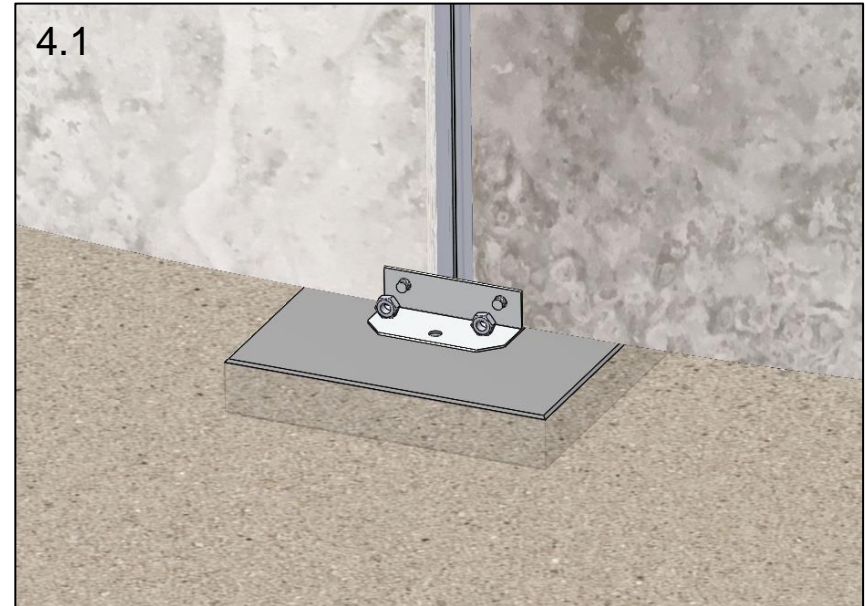
- 4.1 Ensure panels are centered and fully inserted into the Anchor Plates.

Drill two 7/16" holes through the pool panels at each Anchor Plate locations using the Anchor Plate holes as a drill guide. Secure panels with 3/8" x 2-1/2" bolts (#99-0137) and nuts (#99-0134).

- 4.2 **IMPORTANT!**

Confirm roundness of the pool by measuring the diameter across the pool at each panel joint. All diameters should be identical. Adjust, as necessary. If this step is not completed, the pool may not be perfectly round, which could lead to problems later, and may void your warranty.

- 4.3 The included rebar must be used with an 8" high x 12" wide concrete collar around the perimeter of the pool. Insert the rebar halfway into the ground through the Anchor Plate holes before pouring the concrete collar.



FULLY IN-GROUND STEP

Section 2

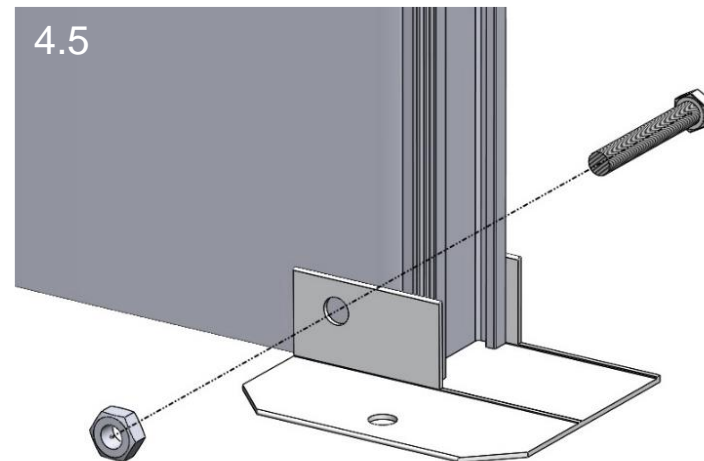
FULLY IN-GROUND WITH POLYMER STEP

Step 4 – Anchor Plate Installation (Continued)

4.4 Two Anchor Plates included with the pool have only one mounting hole as pictured in figure 4.5. These are to be used on the filler panels at the step void. There is a specific left and right Anchor Plate for these two locations (Figure 4.4).

4.5 Drill one 7/16" hole through each filler panel at the Bottom Plate hole location and secure with one 2-1/2" bolt (#99-0137) and nut (#99-0134).

**Note – Before final panel is attached, bring sand for the floor base and cove into the interior of the pool.
(See Page 9 for proper quantities)**



FULLY IN-GROUND STEP

Section 2

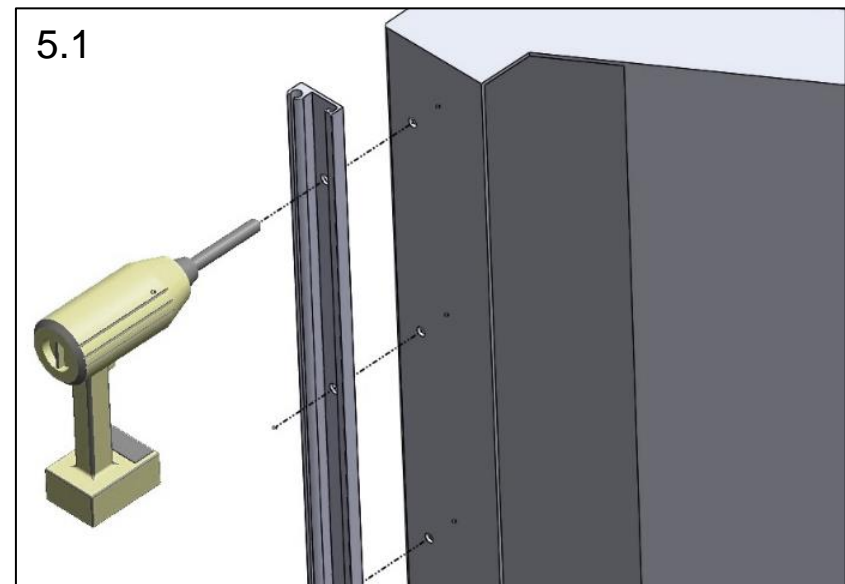
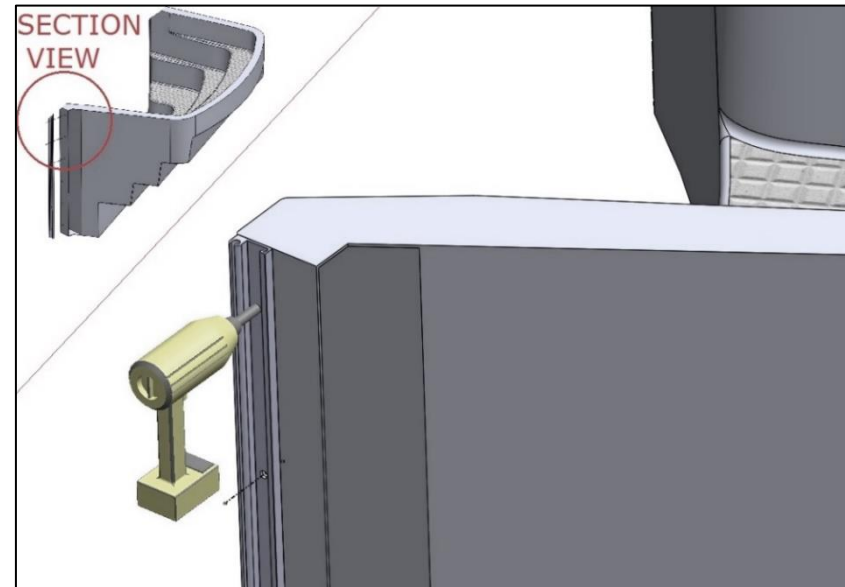
FULLY IN-GROUND WITH POLYMER STEP

Step 5 – Step Installation

- 5.1 Use the Step Socket Spline (#77143) as a drill template on the side flange of the step. Make sure the socket side of the extrusion is towards the interior of the pool as illustrated and drill six 13/32" holes.

Repeat for opposite side.

NOTE – The front face of the step and Step Socket Spline must be parallel to each other before drilling. This will ensure the step is correctly positioned once installed into the pool.



FULLY IN-GROUND STEP

Section 2

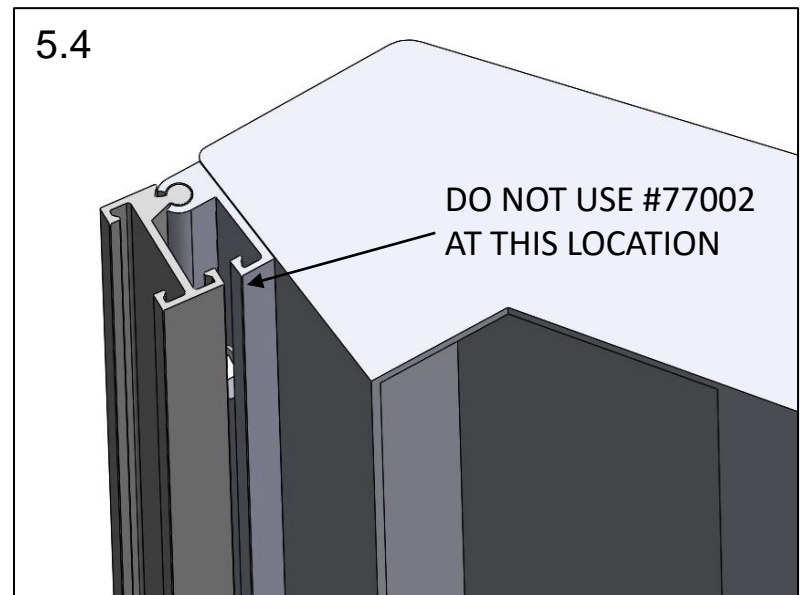
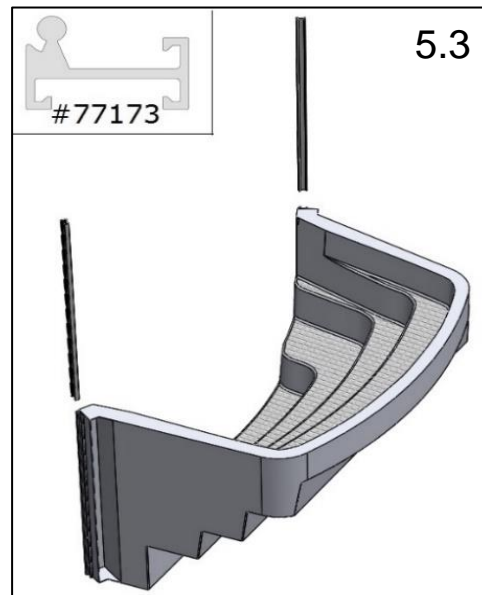
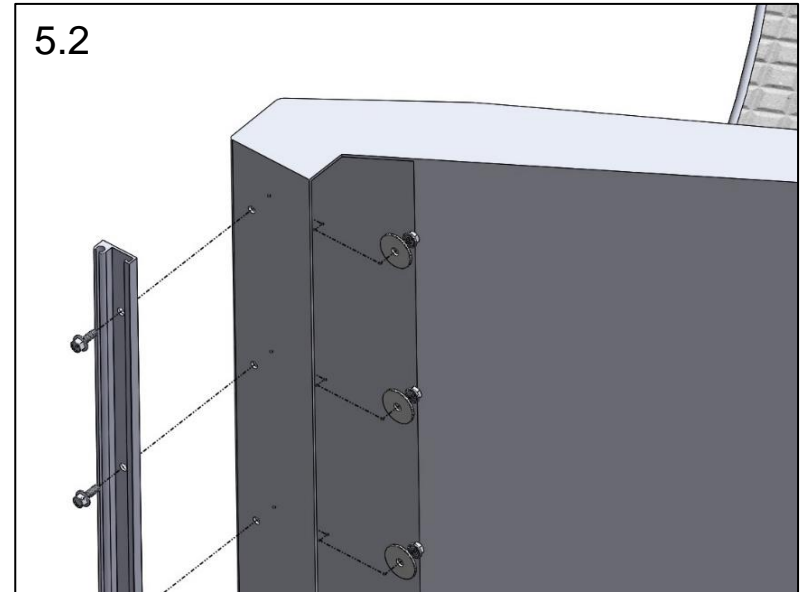
FULLY IN-GROUND WITH POLYMER STEP

Step 5 – Step Installation (Continued)

5.2 Attach STEP SOCKET SPLINE (#77143) to each side of the step with the included 3/8" X 1" bolts, nuts and 1-3/4" fender washers as illustrated. (Hardware bag #77144)

5.3 Slide Step Rod Spline (#77173) into the Step Socket Spline on both sides of the step.

5.4 **NOTE - These parts must articulate freely within the Step Socket Spline. Do not insert spline (#77002) into this compression joint.**



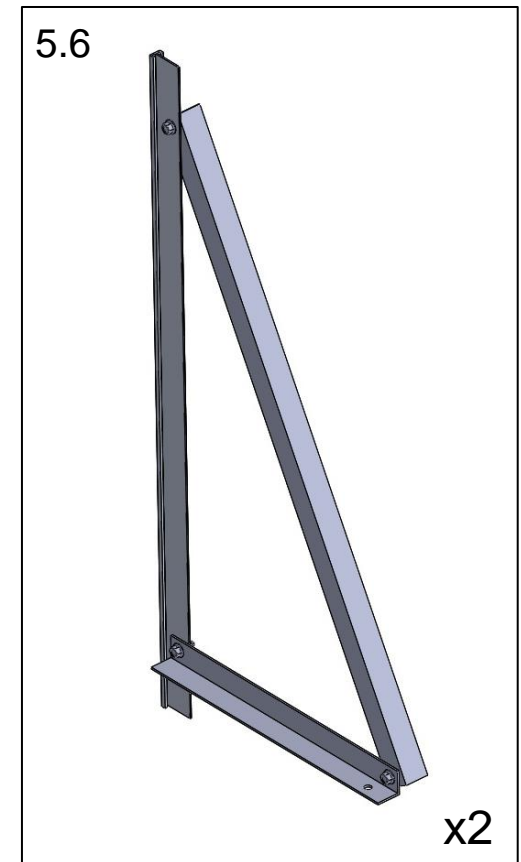
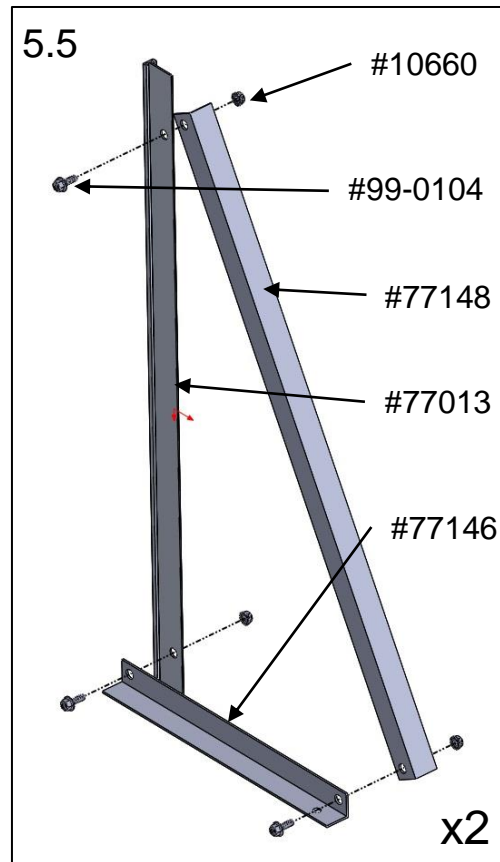
FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 5 – Step Installation (Continued)

- 5.5 Assemble A-frame step (Figure 5.5) with the included 3/8" x 1" bolts (99-0136) and nuts (99-0134). There will be two of these assemblies, one for each side of the step.



FULLY IN-GROUND STEP

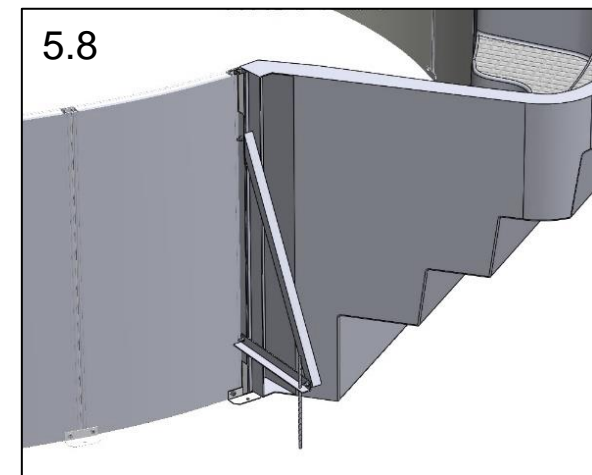
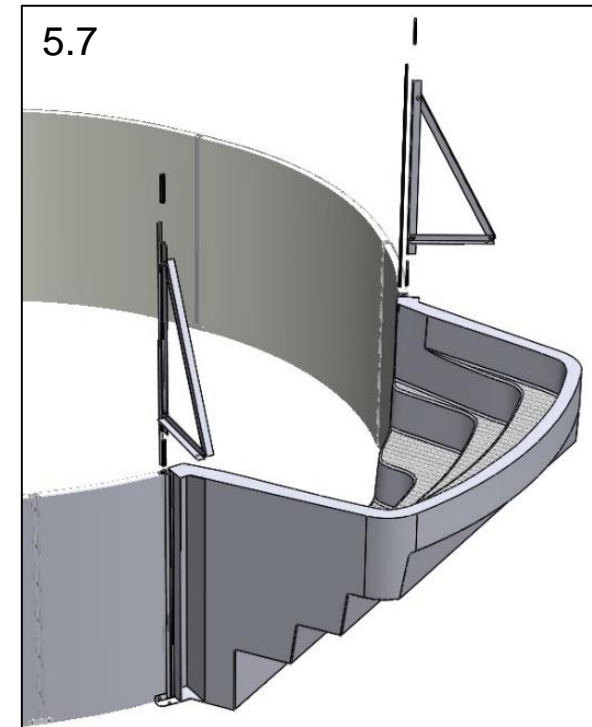
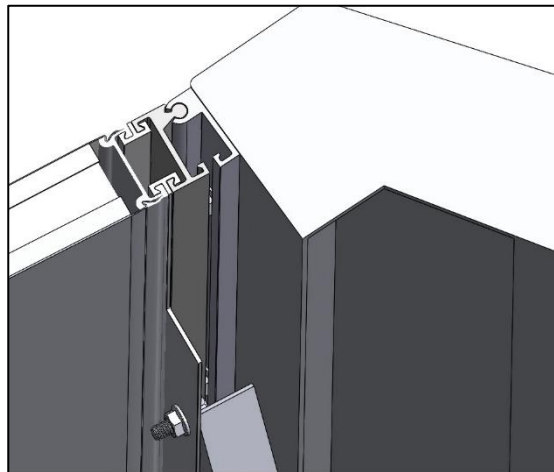
Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 5 – Step Installation (Continued)

- 5.7 Position step within the void of the pool wall. Ensure the Step Rod Splines are parallel to the ends of each Filler Panel. Slide a 52" Spline (#77002) into the interior compression seams to lock the step to the Filler Panels.
- 5.8 Slide one 5-3/4" Short Spline (#77014) into the exterior compression seam between the Filler Panel and Step Rod Spline. Follow with the A-frame step support previously assembled in Step 5.5 and one additional 5-3/4" Short Spline (#77014). Once complete there should be three components stacked within the same joint.

Repeat for the opposing side.



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 6 – Create Pool Cove and Base

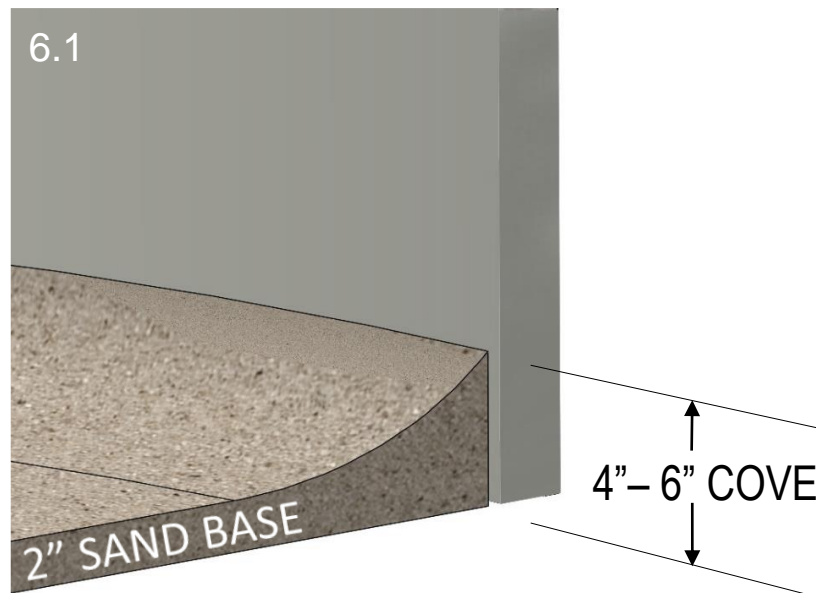
6.1 Using neutral alkalinity sifted earth, or fine sand without pebbles, create a pool cove 4"-6" high along entire inside circumference of pool – **NOT OPTIONAL!** The cove will prevent the liner from sliding beneath the pool wall once filled with water. See Figure 6.1.

DO NOT USE ANY SUBSTANCE WITH HIGH ALKALINE OR ACID CONTENT, ESPECIALLY PEAT MOSS, AS IT WILL CORRODE METAL PARTS.

Since chemicals that may be naturally occurring in the ground can cause discoloration or corrosion, we suggest laying polyethylene plastic sheeting under the cove around the perimeter of the wall, ensuring that no earth contacts the metal pool wall. Since the presence of such chemicals is beyond the control of the manufacturer, this damage is not covered by the warranty.

Use remaining sand to create 2" deep sand base over the entire pool area to protect the liner.

Rake and tamp whole area until it is level and smooth. Any bumps or ridges will be perceptible under the liner.



FULLY IN-GROUND STEP

Section 2

FULLY IN-GROUND WITH POLYMER STEP

Step 7 – Concrete Collar

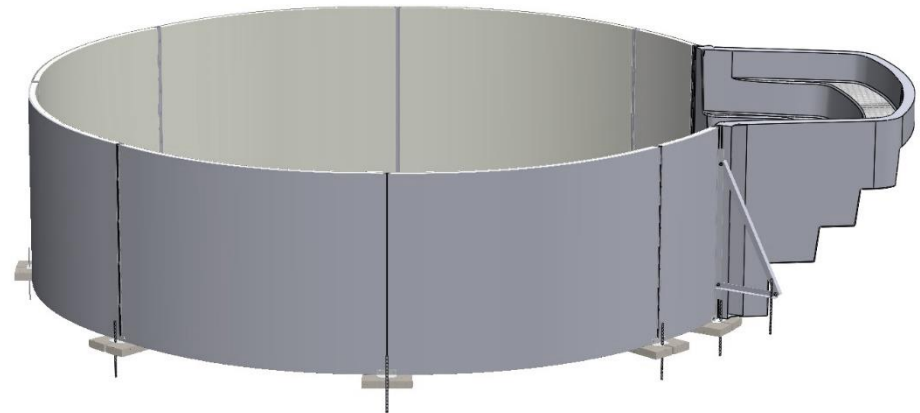
- 7.1 Use the included step footprint for the specific pool size to ensure the layout dimensions are correct and adjust accordingly. Distance between all panel joints should be identical.
- 7.2 Make sure the supplied 3/8" x 15" rebar (#77001) is inserted halfway into the ground through every Anchor Plate hole around the perimeter of the pool. Also insert two lengths of rebar through the hole on the A-frame assembly from Step 5.5. If extra supports are required for patio or other pool features, consider installing them before pouring the concrete.

Note - Double check the pool is level and square before pouring concrete!

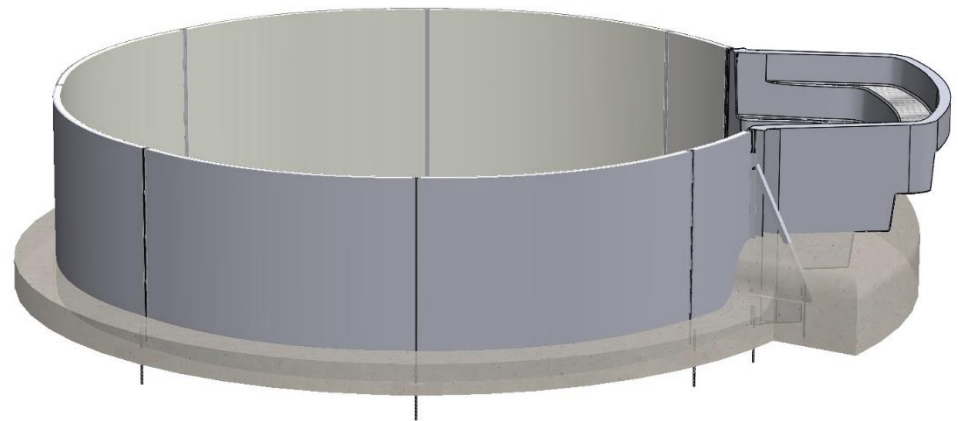
- 7.3 A concrete collar is required on all in-ground pools. Pour 8" high by 12" wide concrete collar around the perimeter of the pool. Pour concrete foundation around the backside of the step. (See footprint for recommended quantity)

Note: Do not fill with water until concrete has cured.

7.2



7.3



FINISHING THE POOL

Section 3

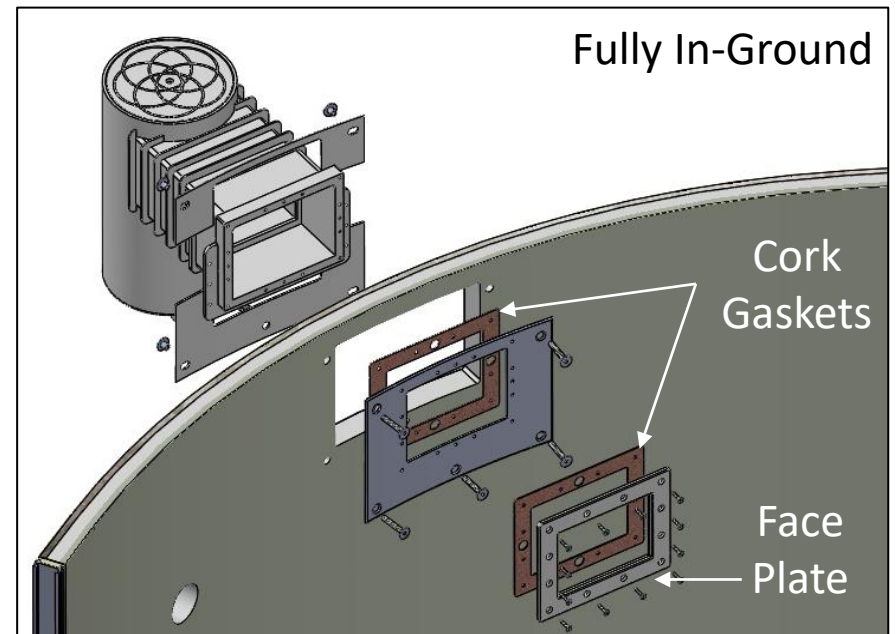
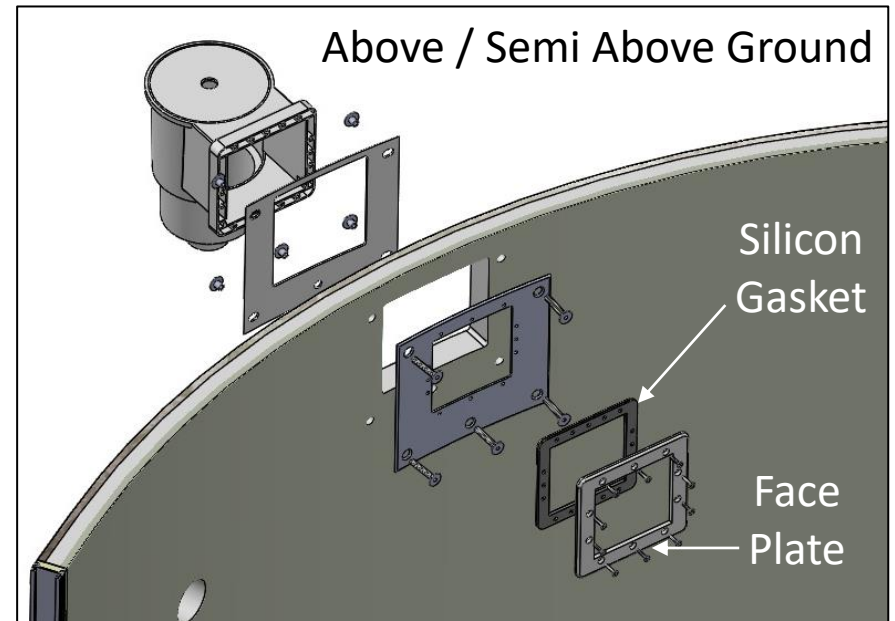
OPTIMUM ROUND POOL

Step 8 – Skimmer Installation

- 8.1 Place the gray mounting plate with gasket(s) on the interior side of the pool. Place the white mounting plate on the exterior of the pool, sandwiching the skimmer flange within the skimmer panel cutout.
- 8.2 With hardware provided in the skimmer kit, secure skimmer assembly to the gray mounting plate with four #12 x 1" screws at each corner. These screws will ensure the skimmer mounting plates and gasket(s) are aligned for the next step.

NOTE: The #12 x 1" screws will be removed to install the pool liner. Once the pool is partially filled with water, the skimmer face plate and #12 x 1" screws will be re-installed. Refer to the skimmer kit installation instructions for more information.

- 8.3 Secure with five 3/8" x 2-1/4" countersunk bolts (#99-0131) and flat-head rivet nuts (#99-0132) using the included hex key tool while keeping the skimmer assembly level. Do not overtighten.



FINISHING THE POOL

Section 3

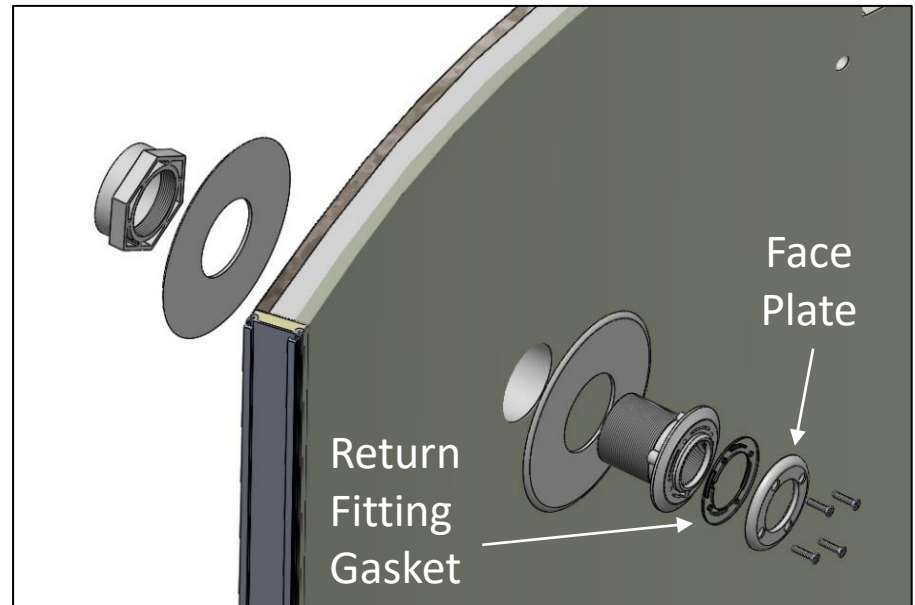
OPTIMUM ROUND POOL

Step 9 – Return Fitting Installation

- 9.1 Place white return plates (#77064) over each side of the skimmer panel return hole with the beveled edge facing outward.

Insert extended return fitting (#77092) through assembly from the interior side of the pool. Secure assembly in place with extended return fitting nut. Do not overtighten.

NOTE: Return fitting face plate and four screws will be installed after the pool is partially filled with water. The return fitting gasket installs behind the pool liner.



FINISHING THE POOL

Section 3

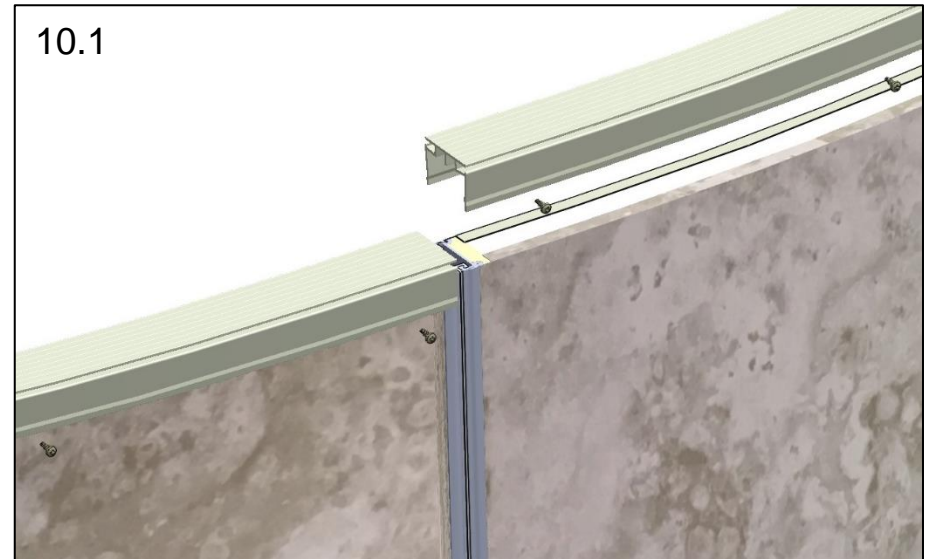
OPTIMUM ROUND POOL

Step 10 - Installing Top Coping

Above Ground Coping

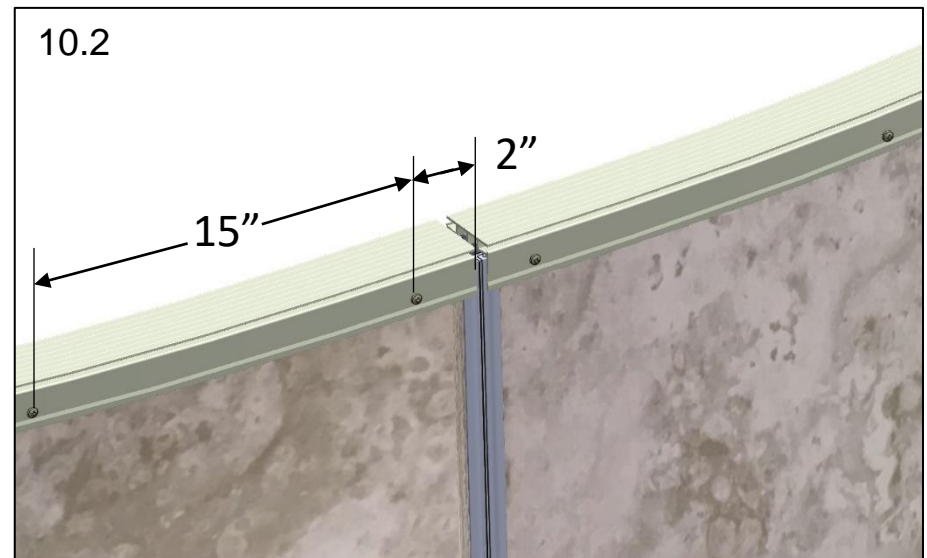
10.1 Place 2" PVC Top Coping onto each pool panel leaving a 1/2" gap between each length at the wall joints.

- Above ground Coping **MUST NOT** overlap wall joints.



10.2 Each length of Top Coping will be attached with screws from the exterior side of the pool only. Using a pencil, create a point where each screw will be placed following the guidelines listed below.

- Screws **MUST** be placed 2" from each end of coping.
- Screws **MUST** be placed at least every 15".



Ensuring the Top Coping is fully seated on each panel, attach the Top Coping to the panels with colored Head Cap Screws #8 x 1/2" (#99-0138). DO NOT OVERTIGHTEN.

FINISHING THE POOL

Section 3

OPTIMUM ROUND POOL

Step 10 - Installing Top Coping (Continued)

In-Ground Coping

- 10.3 Place Coping Adaptor Clips (#77176) around the perimeter of the pool with raised edge facing outward. **Attach to the exterior pool wall only** with one #10 x 3/4" Tek Screw (#99-0090).

PAVER COPING:

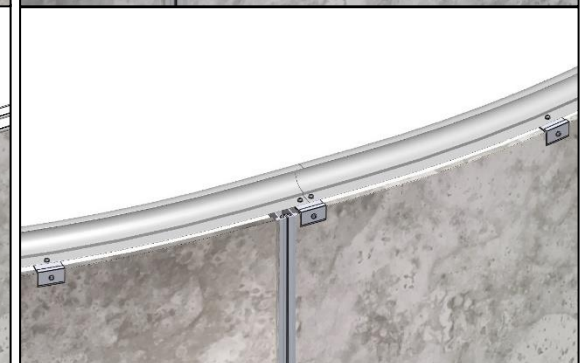
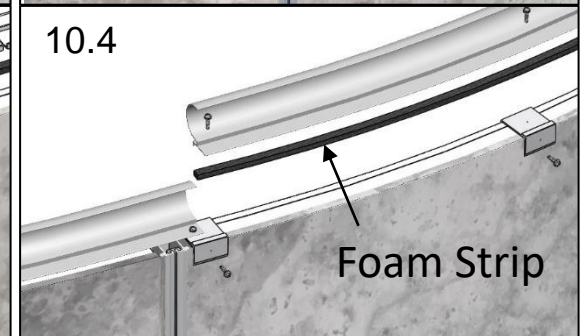
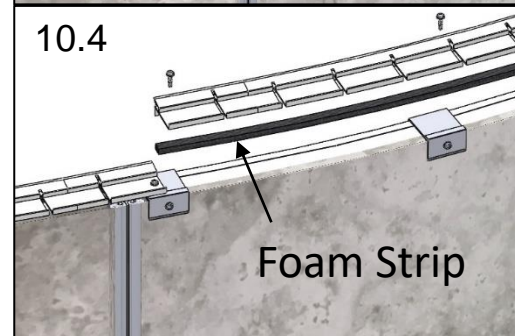
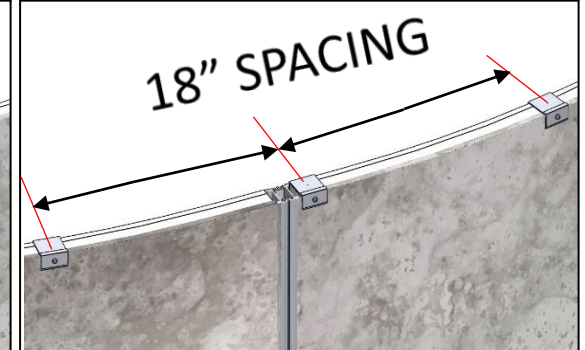
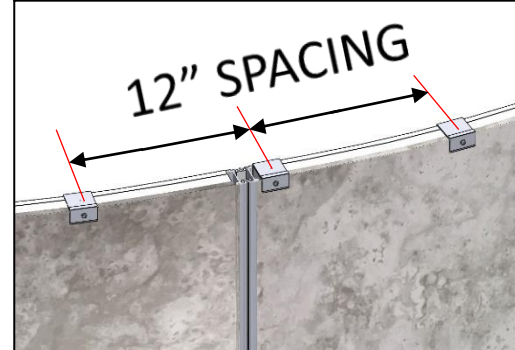
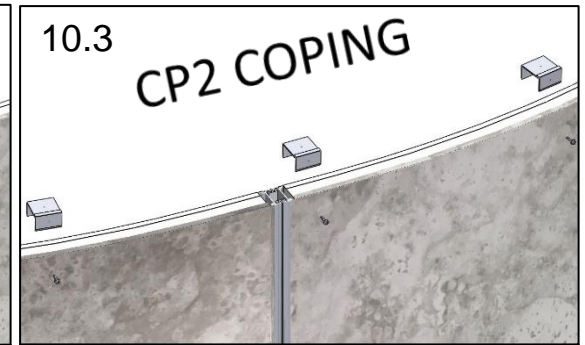
Space Adaptor Clips ~**12 inches** on center

CP2 COPING OR DECK COPING:

Space Adaptor Clips ~**18 inches** on center

- 10.4 Place Foam Sealer Strip (#77177) under the inside edge on each length of in-ground coping. This foam strip will prevent debris from falling behind the liner once the pool is backfilled.

Use one #10 x 3/4" Tek Screw (#99-0090) to attach the in-ground coping (not included) to each Coping Adaptor Clip.



FINISHING THE POOL

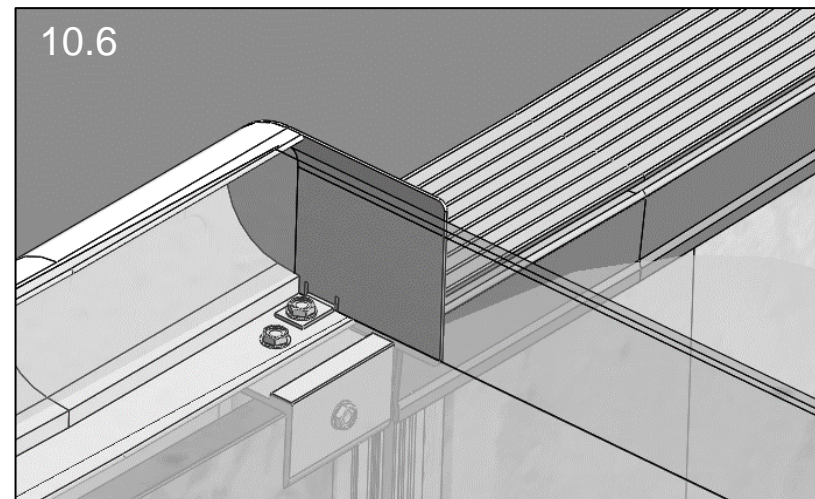
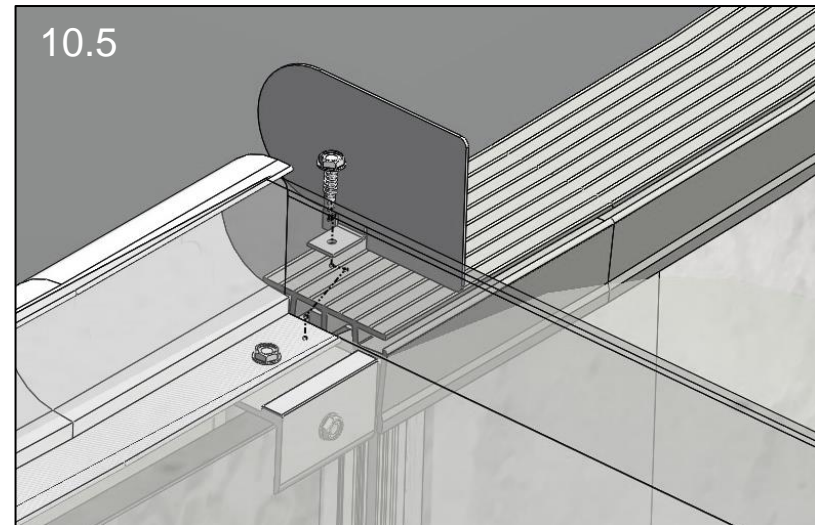
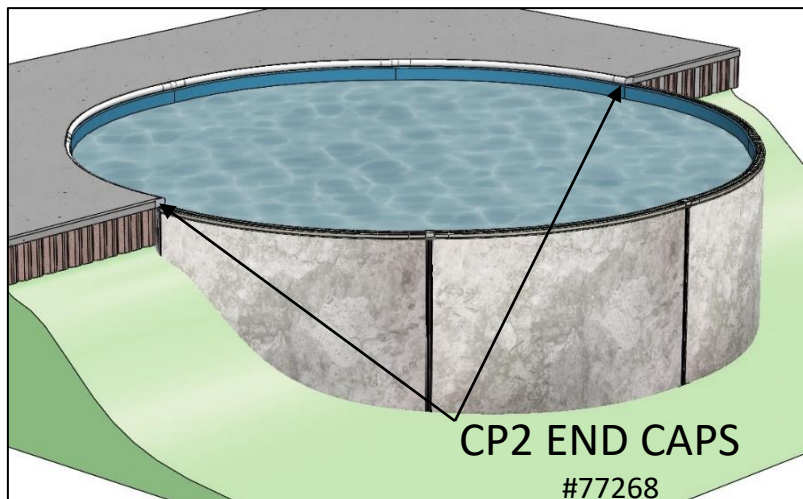
Section 3

OPTIMUM ROUND POOL

Step 10 - Installing Top Coping (Continued)

A CP2 transition kit is available (#77268) for pools that are installed into a hillside and will utilize both 2" PVC Top Coping and in-ground CP2 coping. This kit includes two stainless steel plates to give a finished end to the CP2 coping.

- 10.5 Bend the lower tab of the End Plate slightly past 90 degrees in the appropriate direction.
- 10.6 Attach the End Plate with #10 x 3/4" Tek Screw (#99-0090) through the CP2 coping and into the Coping Adaptor Clip (#77176). Repeat at opposing end.



FINISHING THE POOL

Section 3

OPTIMUM ROUND POOL

Step 11 – Install liner

11.1 Check sand in pool is level and tamped with no impressions.

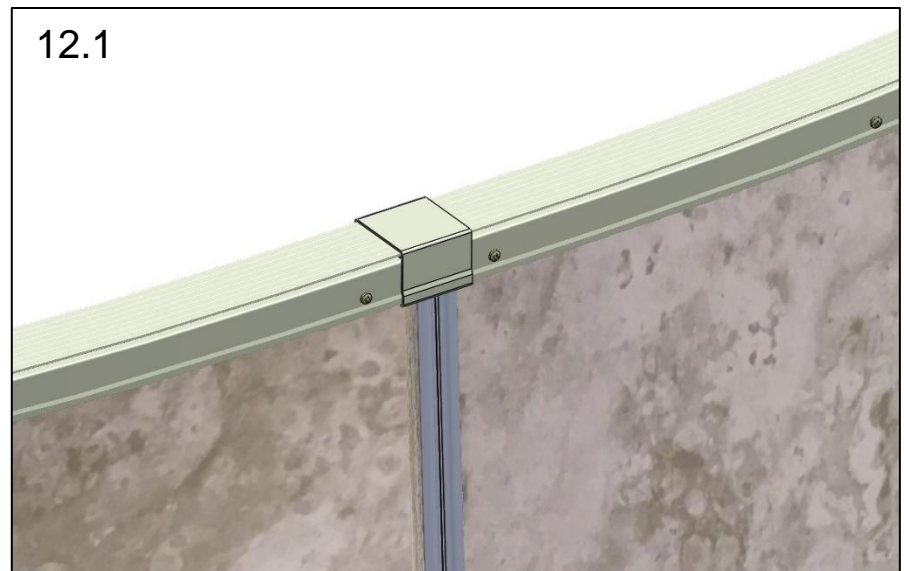
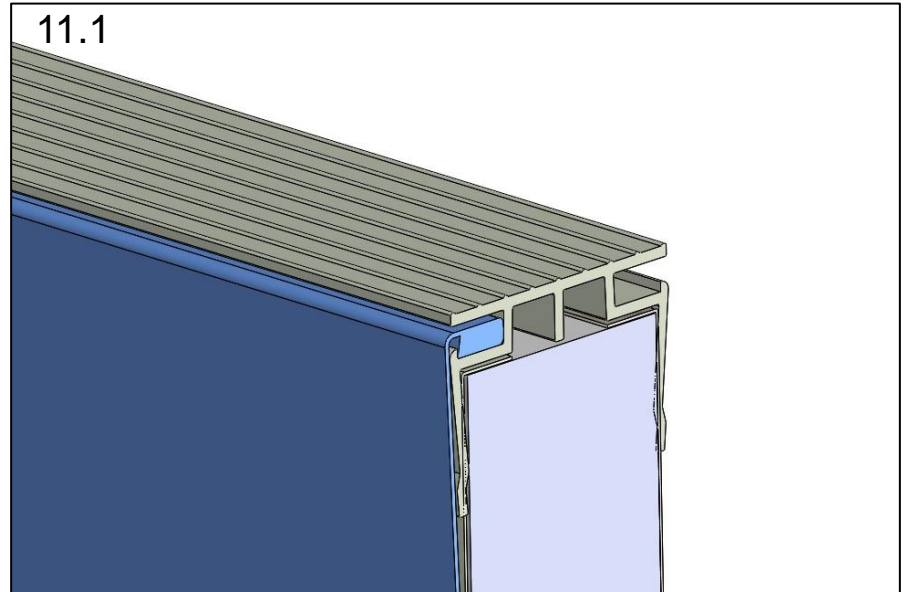
Remove beaded liner (NOT INCLUDED) from carton and unfold liner outside of the pool. Allowing the liner to sit in the sun will ease installation. Gently place liner in the pool, taking care to not disturb the smoothed sand base.

While standing outside of the pool, snap liner bead into coping receiver track around entire pool. Remove as many wrinkles from the liner as possible by gently tugging on the liner or using a soft broom. Do not add any water until the liner is situated perfectly. A shop vacuum can be used to remove wrinkles by attaching the vacuum hose to the skimmer outlet and sealing with duct tape.

Step 12 – Install Coping Clips

12.1 Install Coping Clips (#77310) by inserting interior lip then snapping into place at each panel joint. **Do not screw coping clips into place.**

CP2 coping (NOT INCLUDED) – install Coping Clips by first hooking top edge then pressing down firmly to lock in place.



FINISHING THE POOL

Section 3

OPTIMUM ROUND POOL

Step 13 – Add Water

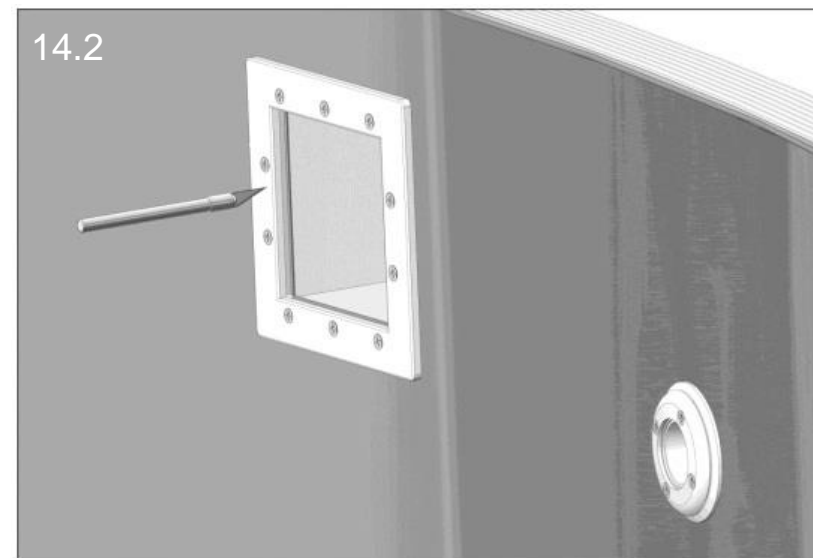
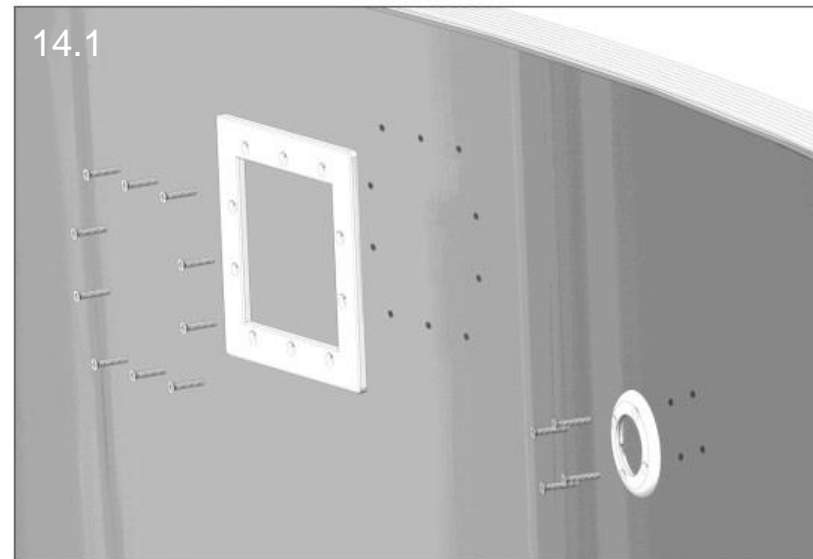
- 13.1 Start filling the pool with water once the concrete has cured, if applicable.

Once the water level reaches 2-3" below the Return Fitting, install the Faceplates on the Return Fitting and Skimmer as shown in Figures 14.1 and 14.2.

When Faceplates are installed, complete filling the pool until water level is at the middle of the Skimmer opening.

Step 14 – Install Face Plates

- 14.1 Locate skimmer and return screw holes through the pool liner. Carefully pierce liner through the screw holes with a nail or awl. Attach Skimmer and Return Faceplates using screws provided in the Skimmer Kit and tighten.
- 14.2 Using a sharp blade, carefully cut away liner inside the Skimmer and Return openings. Install eyeball (not included) into Return Fitting.



FINISHING THE POOL

Section 3

OPTIMUM ROUND POOL

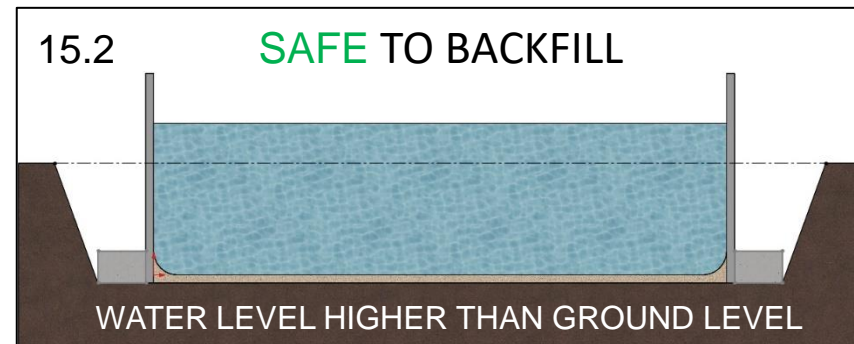
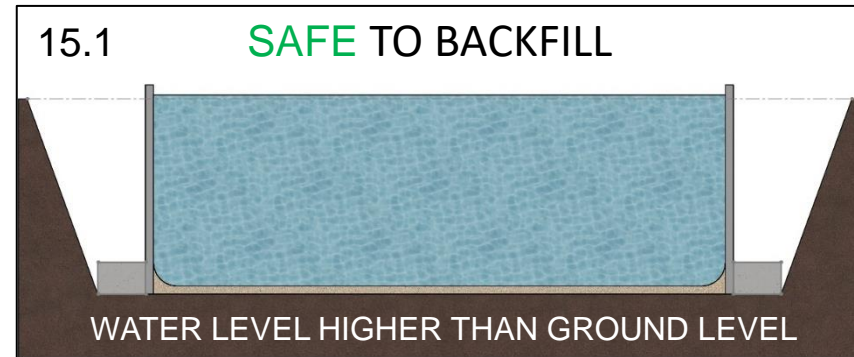
Step 15 - Backfill

- 15.1 Ensure all electrical bonding required in your area is completed before backfilling the pool. Add any concrete foundation forms or perforated drainpipes if they will be used.

IMPORTANT: Before backfilling, the pool water level **MUST** exceed the height of the surrounding backfill required. Failure to do so will put excessive inward pressure on the pool panels which may cause irreversible damage and void the warranty.

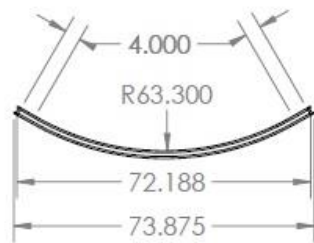
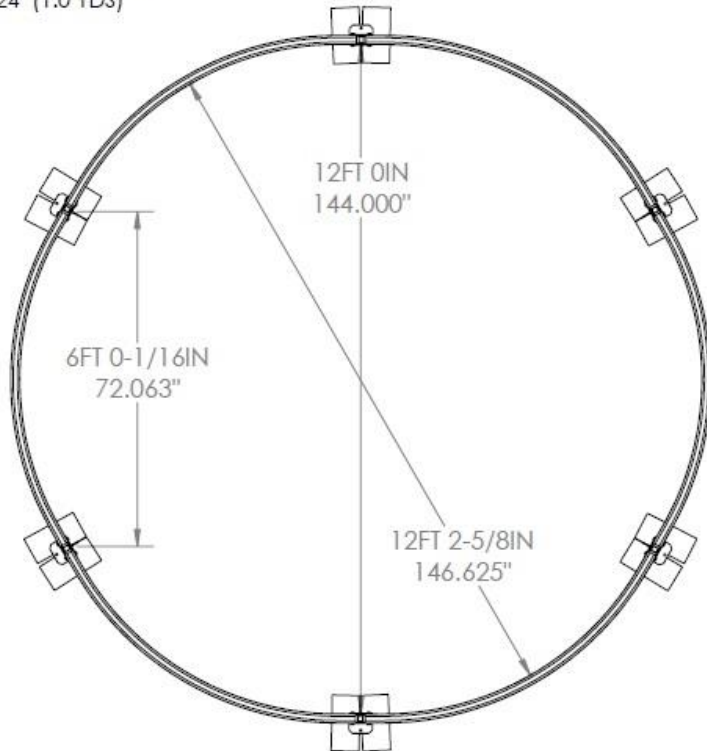
Crushed stone or gravel aggregate, 3/8" to 3/4" in diameter is the recommended backfill material which may be placed directly against the pool wall. Do not use expansive soils such as clay since this type of soil will place additional stress on the pool and not allow for proper drainage away from the surrounding area.

Only compact the backfill material manually by hand. Do not use heavy machinery, especially around the skimmer and plumbing fittings.



POOL FOOTPRINTS

CONCRETE REQUIRED
WHEN DEPTH IN-GROUND
EXCEEDS 24" (1.0 YDS)



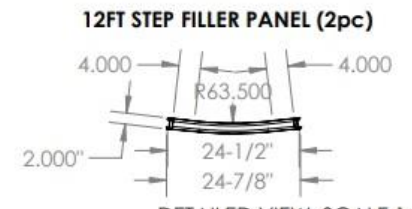
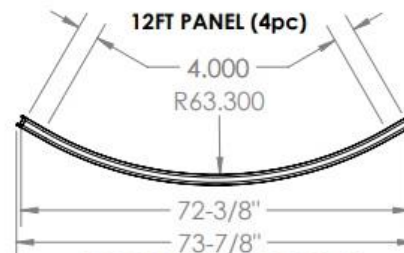
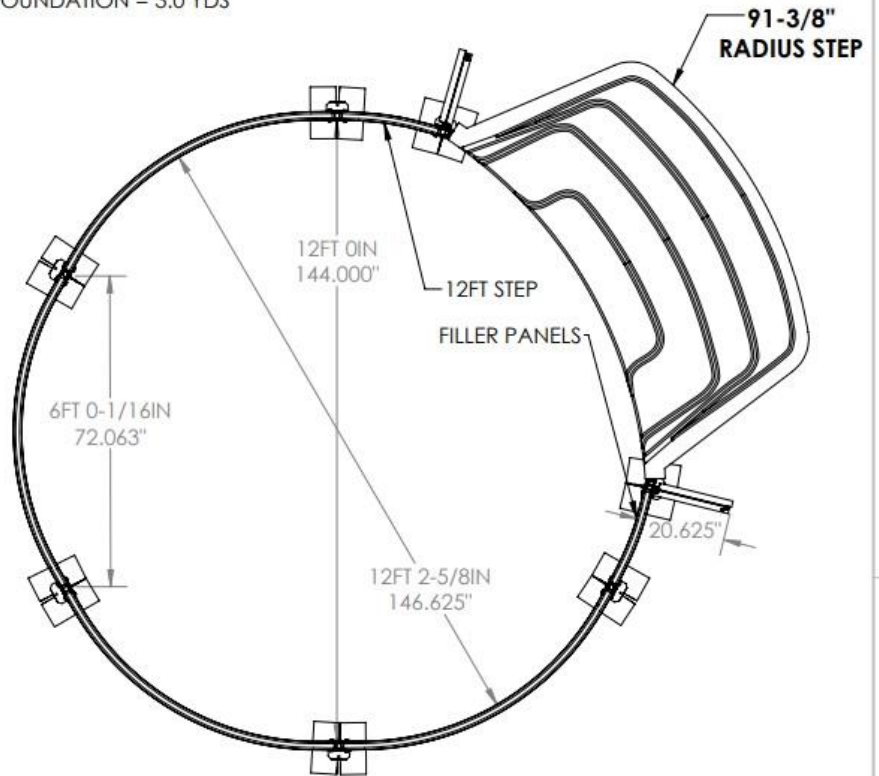
WILBAR
INTERNATIONAL

12 FOOT ROUND

PERIMETER: 37'-8 1/4" AREA: 113 SQ. FT. GALLONAGE: 3,243 GAL. SAND REQ: 0.8 YDS MODEL NO: POPT52-1200R

SCALE: 1:32 DATE: 2/26/18 DRAWN BY: P.INMAN DRAWING NO. 10467

CONCRETE REQUIRED
CONCRETE COLLAR = 1.0 YDS
STEP FOUNDATION = 3.0 YDS



WILBAR
INTERNATIONAL

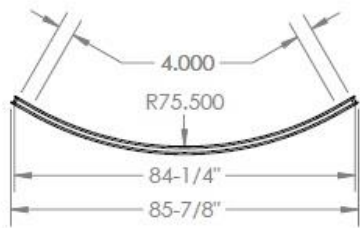
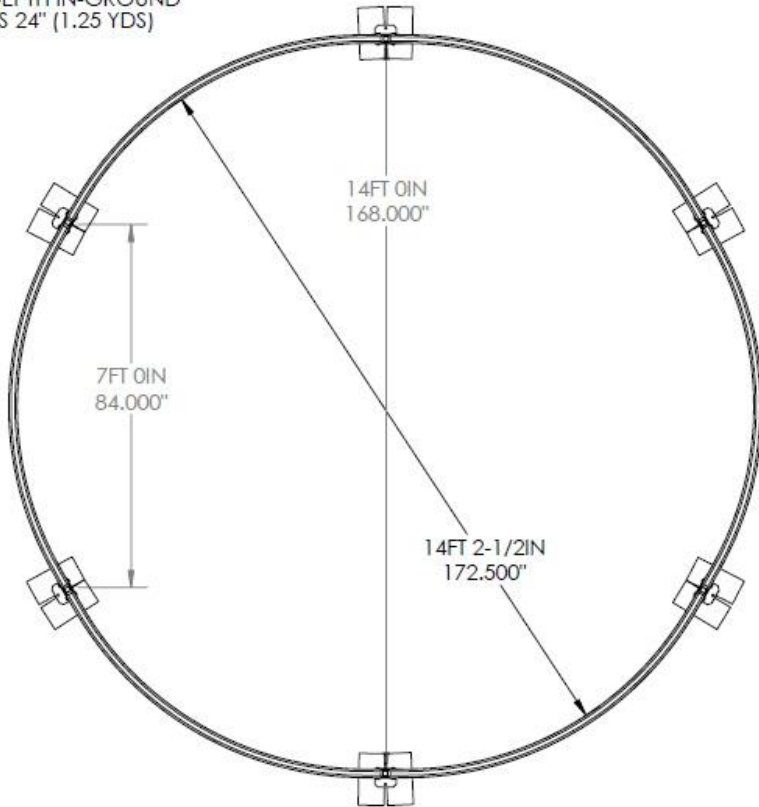
12 FOOT ROUND WITH STEP

PERIMETER: 37'-8 1/4" AREA: 113 SQ. FT. GALLONAGE: 3,495 GAL. SAND REQ: 0.8 YDS MODEL NO: POPT52-1200RIGS

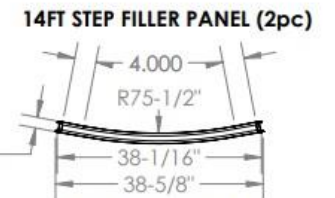
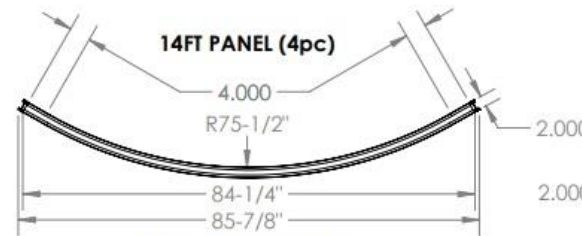
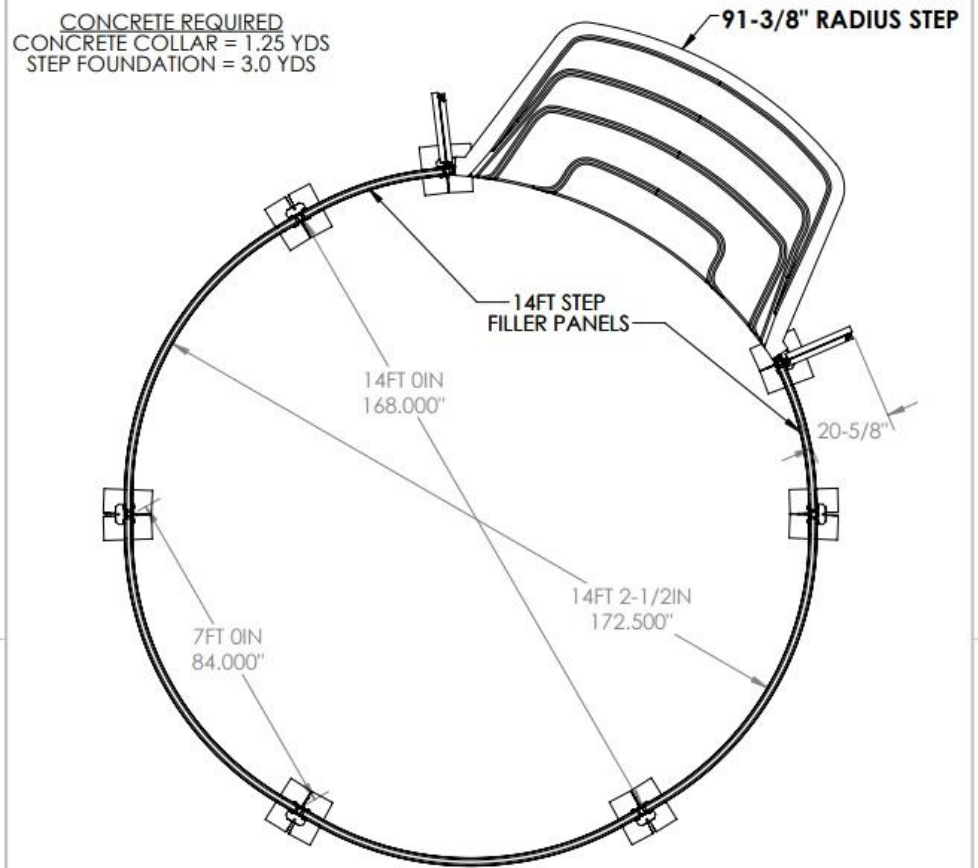
SCALE: 1:32 DATE: 03/25/20 DRAWN BY: P.INMAN DRAWING NO. 10555

POOL FOOTPRINTS

CONCRETE REQUIRED
WHEN DEPTH IN-GROUND
EXCEEDS 24" (1.25 YDS)



CONCRETE REQUIRED
CONCRETE COLLAR = 1.25 YDS
STEP FOUNDATION = 3.0 YDS



WILBAR
INTERNATIONAL

14 FOOT ROUND

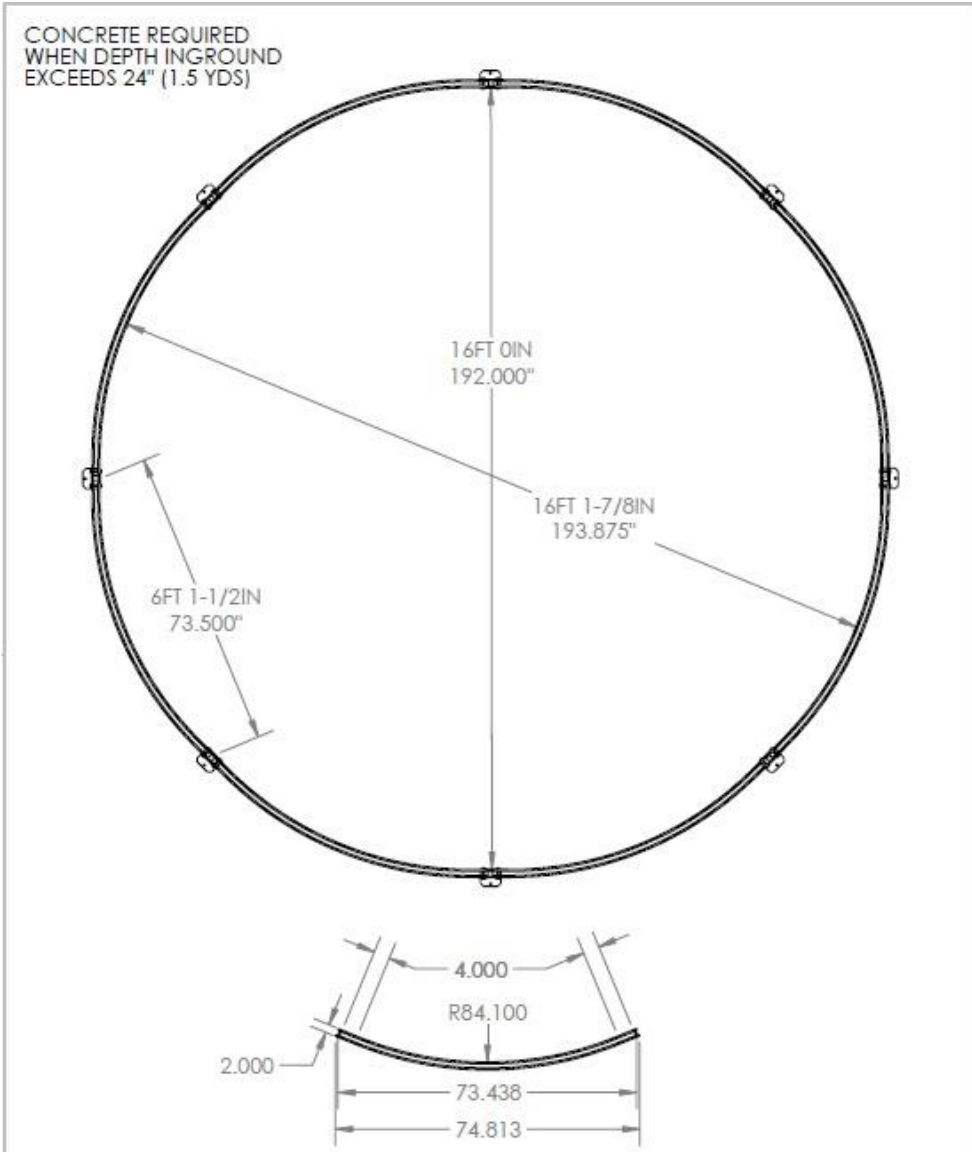
PERIMETER:	43'-11 7/8"	AREA:	154 SQ. FT.	GALLONAGE:	4,414 GAL.	SAND REQ:	1.1 YDS	MODEL NO.:	POPT52-1400R
SCALE:	1:30	FOAM WALL POOL		DATE:	2/26/18	DRAWN BY:	P.INMAN	DRAWING NO. 10468	

WILBAR
INTERNATIONAL

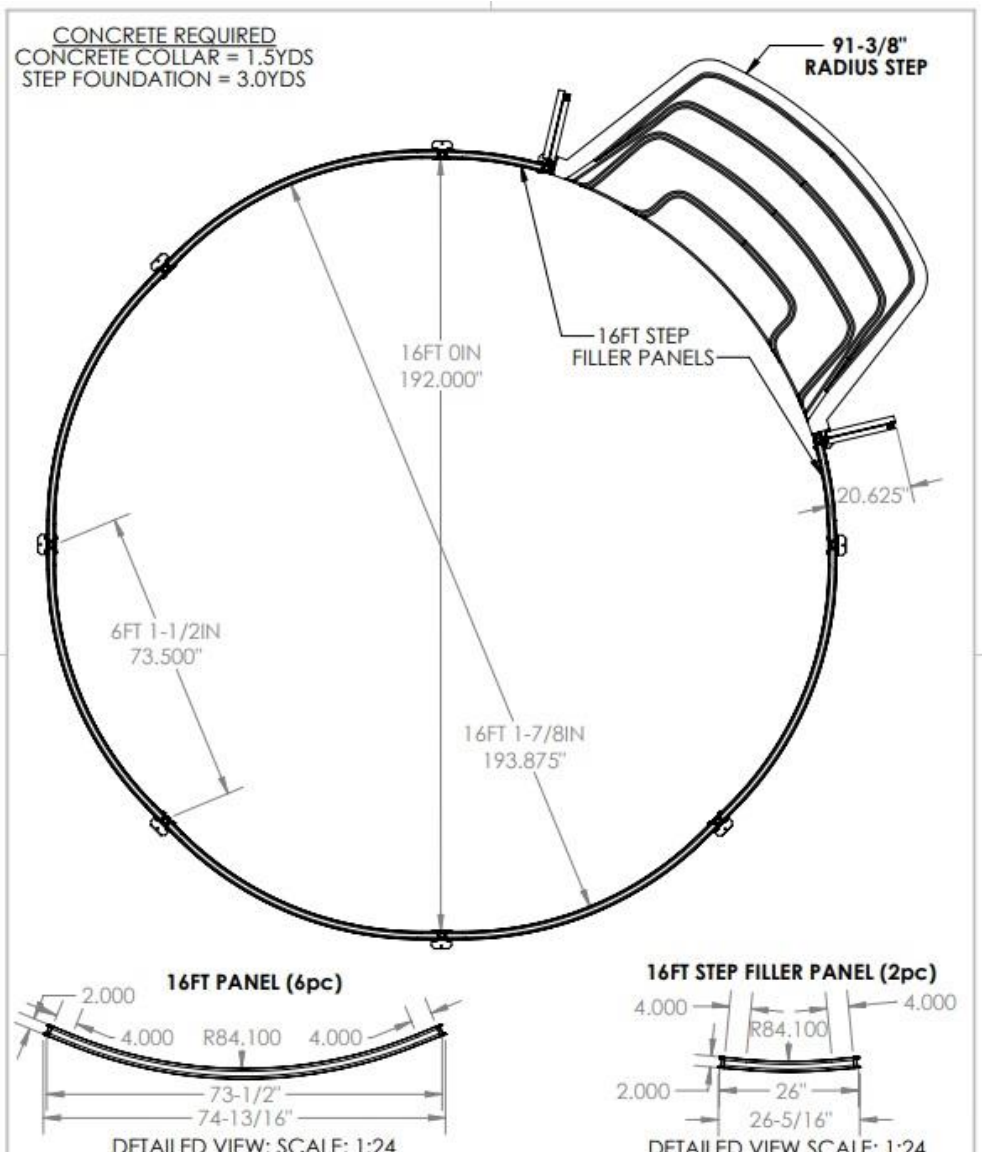
14 FOOT ROUND WITH STEP

PERIMETER:	43'-11 7/8"	AREA:	154 SQ. FT.	GALLONAGE:	4,665 GAL.	SAND REQ:	1.1 YDS	MODEL NO.:	POPT52-1400RIGS
SCALE:	1:32	FOAM WALL POOL		DATE:	03/25/20	DRAWN BY:	P.INMAN	DRAWING NO. 10554	

POOL FOOTPRINTS



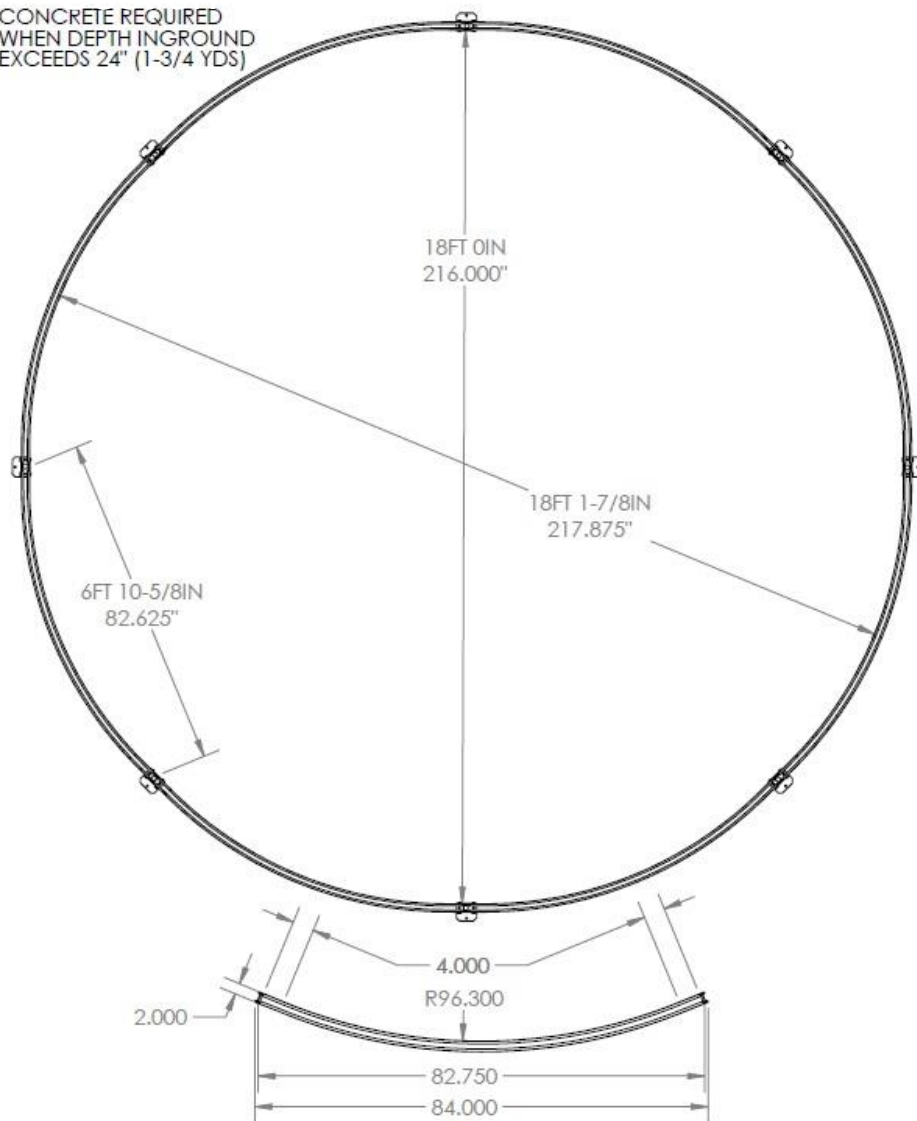
WILBAR INTERNATIONAL		16 FOOT ROUND			
PERIMETER: 50'-3 1/2"	AREA: 201 SQ. FT.	GALLONAGE: 5,515 GAL.	SAND REQ: 1.5 YDS	MODEL NO. POPT52-1600R	DRAWING NO. 10360
SCALE: 1:32	FOAM WALL POOL		DATE: 12/21/16	DRAWN BY: P.INMAN	



WILBAR INTERNATIONAL		16 FOOT ROUND WITH STEP			
PERIMETER: 50'-3 1/2"	AREA: 241 SQ. FT.	GALLONAGE: 5,815 GAL.	SAND REQ: 1.5 YDS	MODEL NO. POPT52-1600RIGS	DRAWING NO. 10390
SCALE: 1:32	OPTIMUM POOL		DATE: 07/05/17	DRAWN BY: P.INMAN	

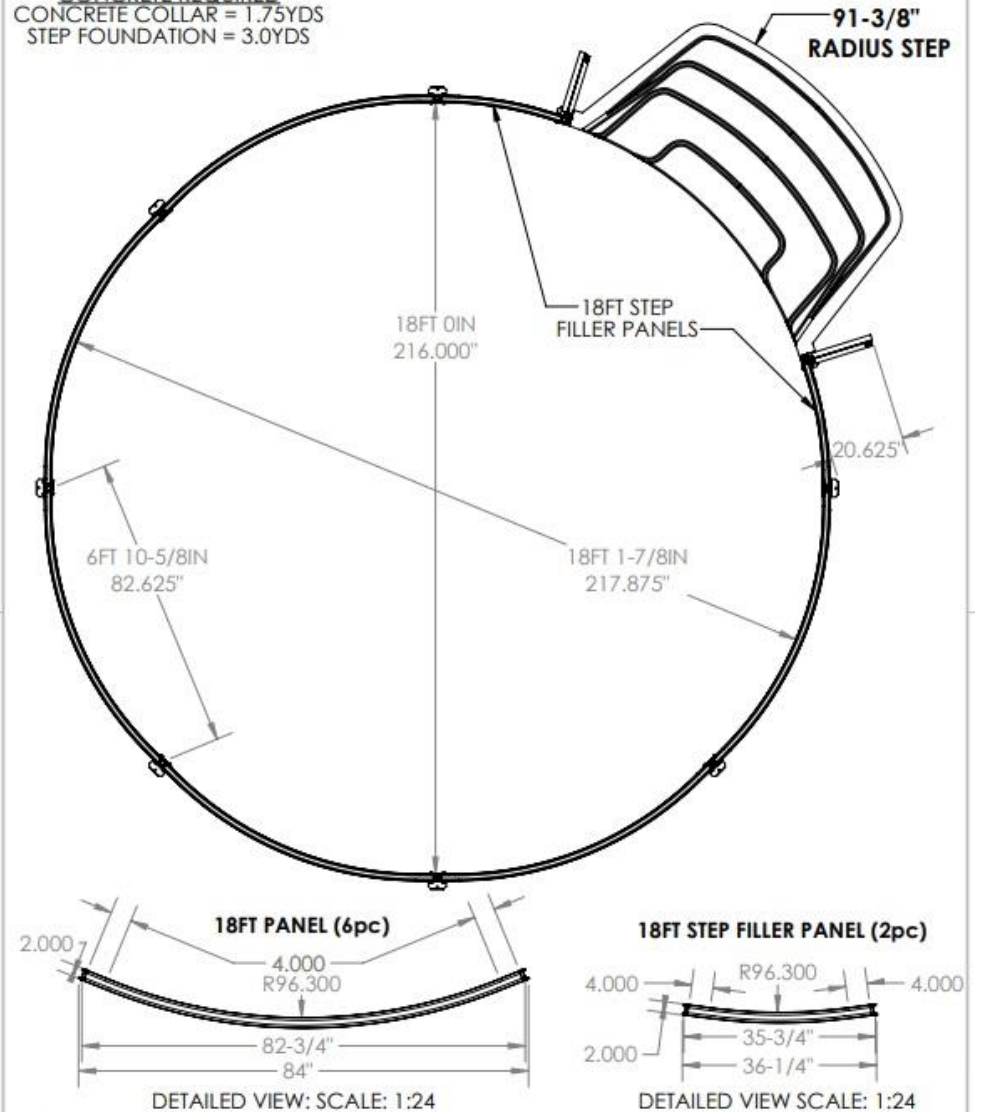
POOL FOOTPRINTS

CONCRETE REQUIRED
WHEN DEPTH INGROUND
EXCEEDS 24" (1-3/4 YDS)



WILBAR INTERNATIONAL		18 FOOT ROUND			
PERIMETER: 56'-6 1/2"	AREA: 254 SQ. FT.	GALLONAGE: 6,980 GAL.	SAND REQ: 1.9 YDS	MODEL NO. POPT52-1800R	
SCALE: 1:32	FOAM WALL POOL		DATE: 12/21/16	DRAWN BY: P.INMAN	DRAWING NO. 10361

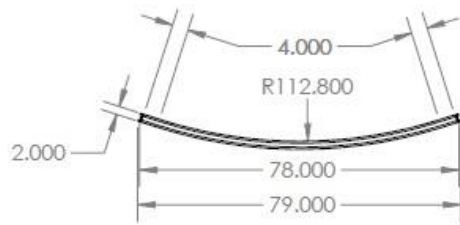
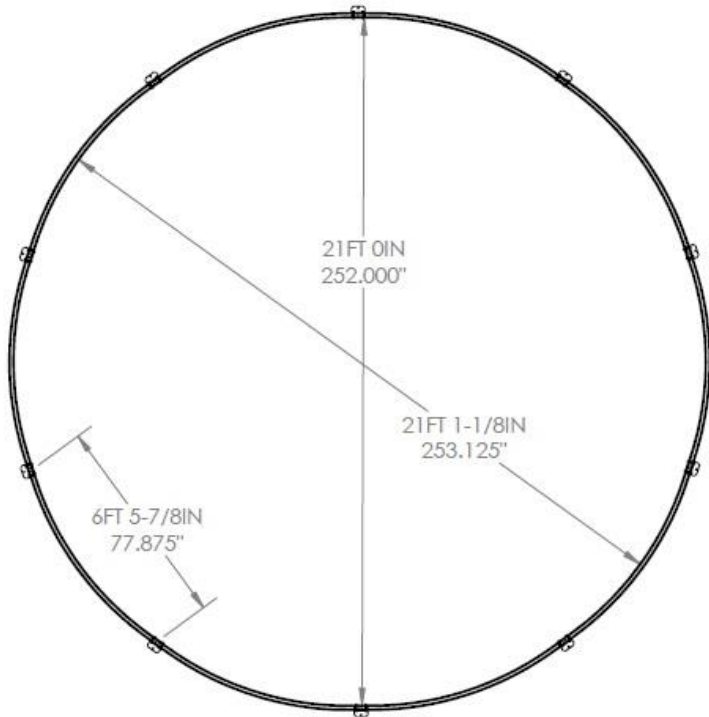
CONCRETE REQUIRED
CONCRETE COLLAR = 1.75YDS
STEP FOUNDATION = 3.0YDS



WILBAR INTERNATIONAL		18 FOOT ROUND WITH STEP			
PERIMETER: 56'-6 1/2"	AREA: 294 SQ. FT.	GALLONAGE: 7,280 GAL.	SAND REQ: 1.9 YDS	MODEL NO. POPT52-1800RIGS	
SCALE: 1:36	OPTIMUM POOL		DATE: 07/05/17	DRAWN BY: P.INMAN	DRAWING NO. 10391

POOL FOOTPRINTS

CONCRETE REQUIRED
WHEN DEPTH INGROUND
EXCEEDS 24" (2 YDS)



DETAILED PANEL VIEW: 1:32

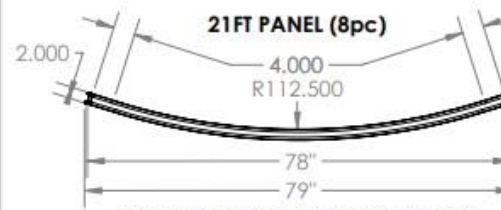
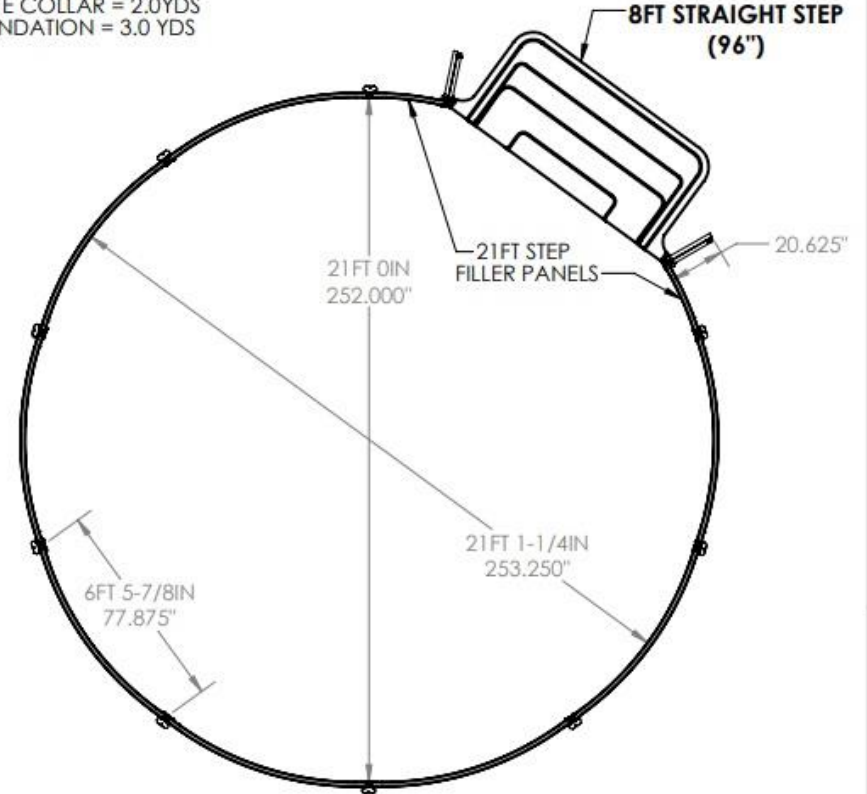
WILBAR
INTERNATIONAL

21 FOOT ROUND

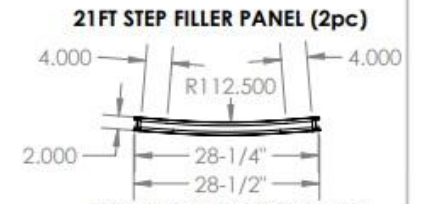
PERIMETER: 65'-11 1/4" AREA: 346 SQ. FT. GALLONAGE: 9,500 GAL. SAND REQ: 2.5 YDS MODEL NO. POPT52-2100R

SCALE: 1:48 DATE: 12/21/16 DRAWN BY: P.INMAN DRAWING NO. 10362

CONCRETE REQUIRED
CONCRETE COLLAR = 2.0YDS
STEP FOUNDATION = 3.0 YDS



DETAILED PANEL VIEW: SCALE 1:24



DETAILED VIEW: SCALE 1:24

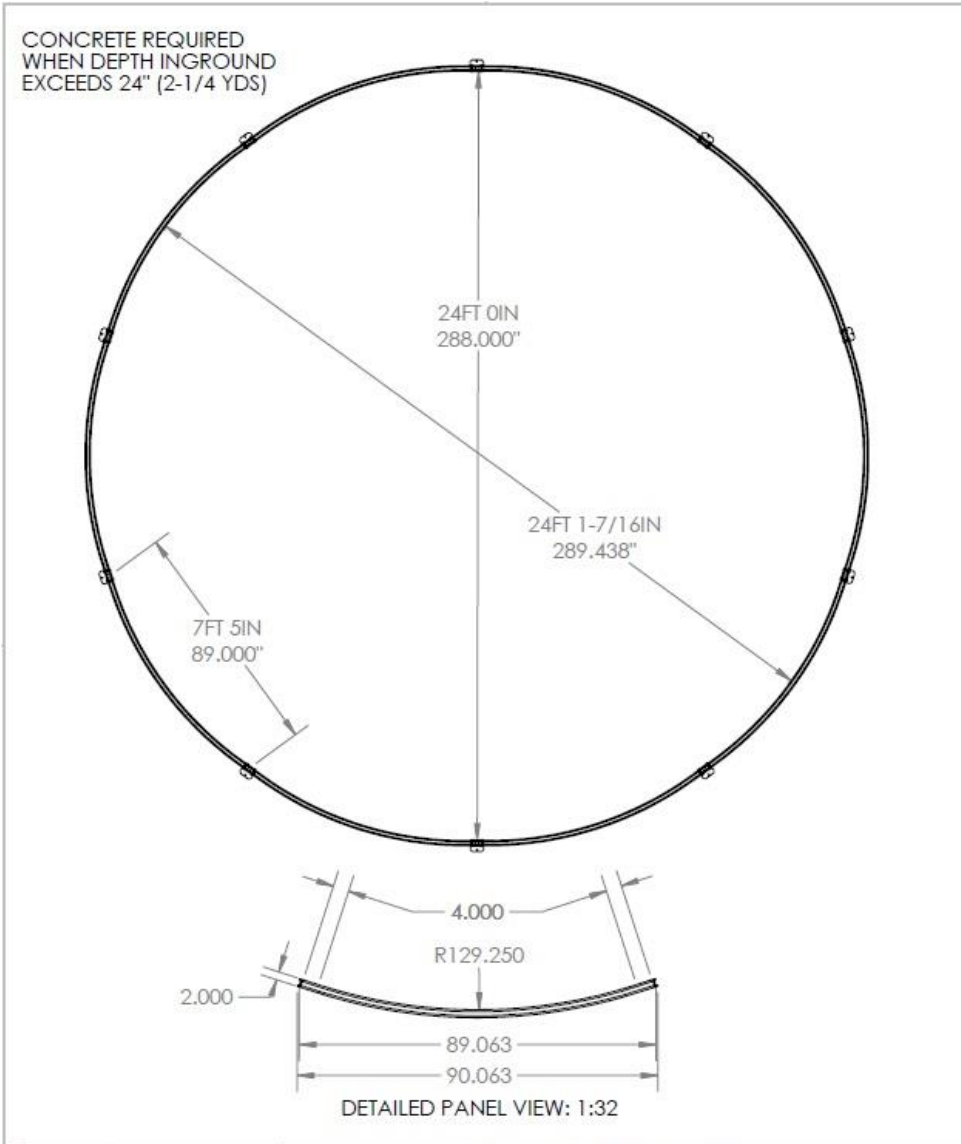
WILBAR
INTERNATIONAL

21 FOOT ROUND WITH STEP

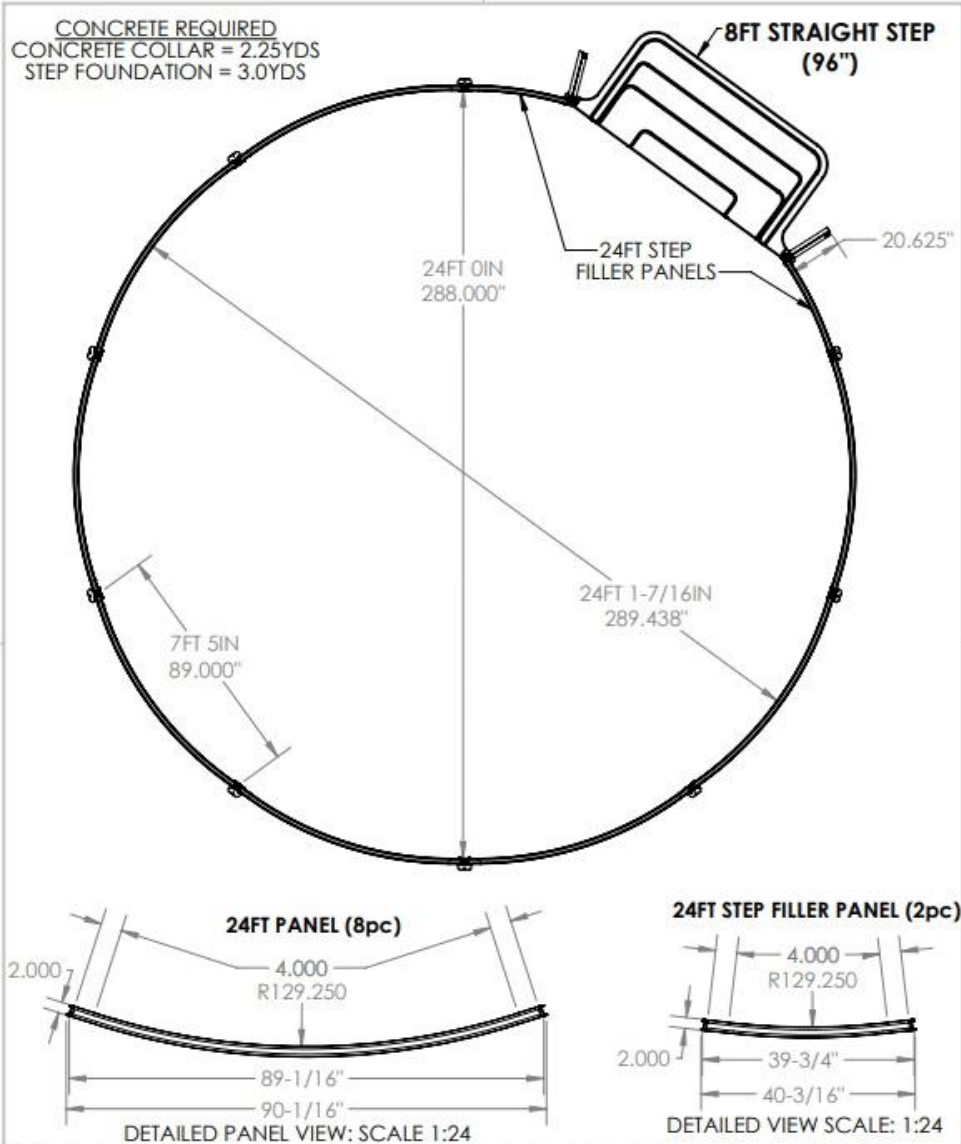
PERIMETER: 65'-11 1/4" AREA: 386 SQ. FT. GALLONAGE: 9,752 GAL. SAND REQ: 2.5 YDS MODEL NO. POPT52-2100RIGS

SCALE: 1:48 DATE: 07/05/17 DRAWN BY: P.INMAN DRAWING NO. 10392

POOL FOOTPRINTS

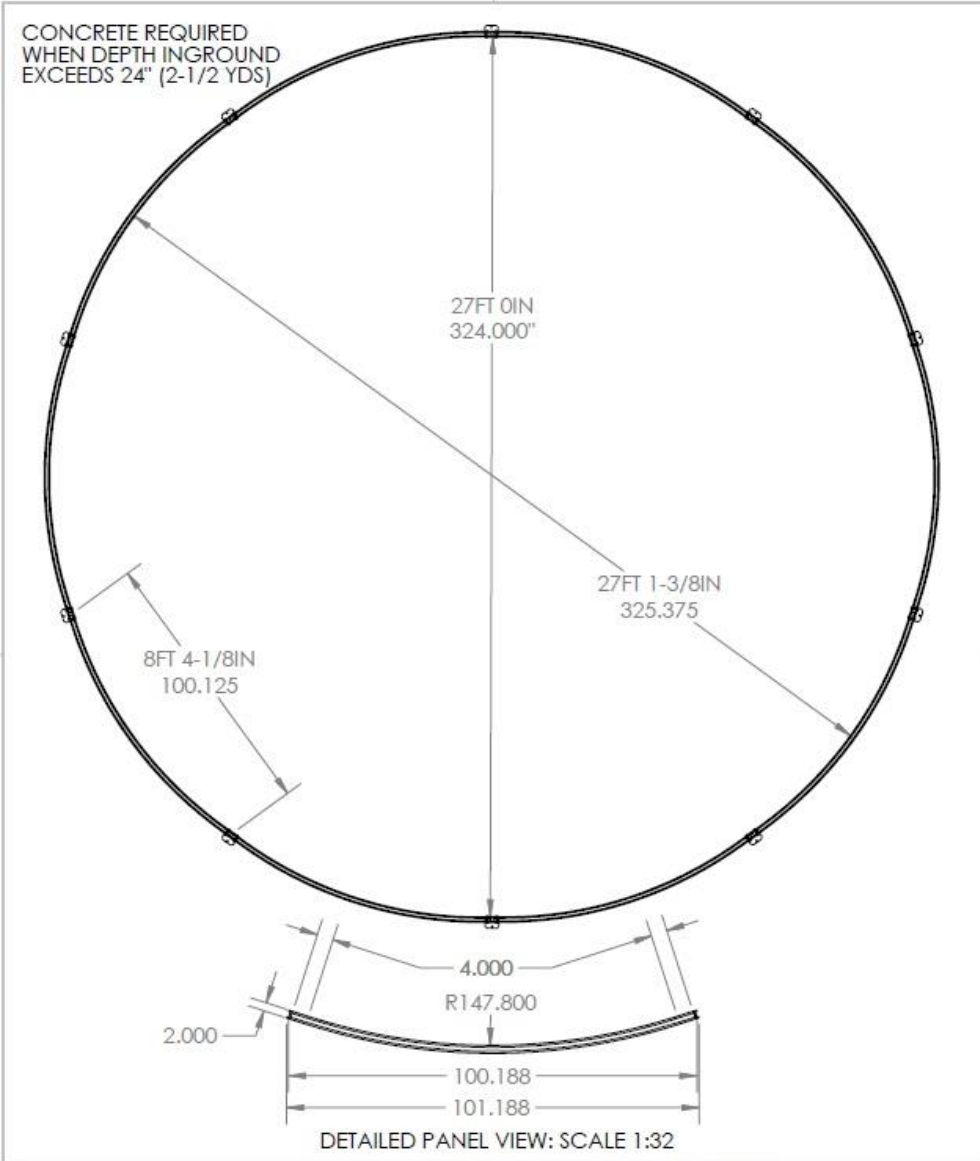


WILBAR INTERNATIONAL		24 FOOT ROUND			
PERIMETER: 75'4-7/8"	AREA: 452 SQ. FT.	GALLONAGE: 12,408 GAL.	SAND REQ: 3.2 YDS	MODEL NO. POPT52-2400R	
SCALE: 1:48	FOAM WALL POOL	DATE: 12/21/16	DRAWN BY: P.INMAN	DRAWING NO. 10363	

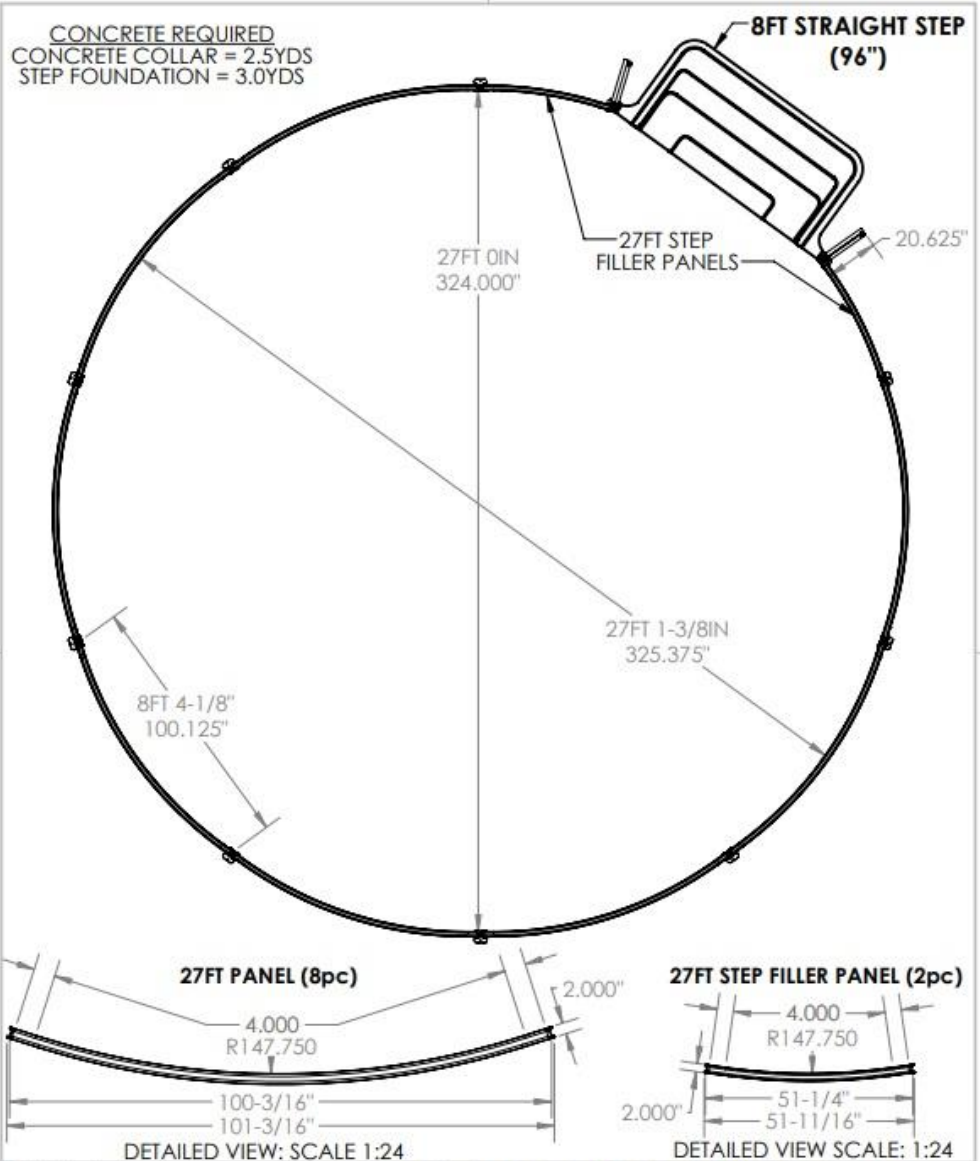


WILBAR INTERNATIONAL		24 FOOT ROUND WITH STEP			
PERIMETER: 75'4-7/8"	AREA: 492 SQ. FT.	GALLONAGE: 12,666 GAL.	SAND REQ: 3.2 YDS	MODEL NO. POPT52-2400RIGS	
SCALE: 1:48	OPTIMUM POOL	DATE: 07/05/17	DRAWN BY: P.INMAN	DRAWING NO. 10393	

POOL FOOTPRINTS



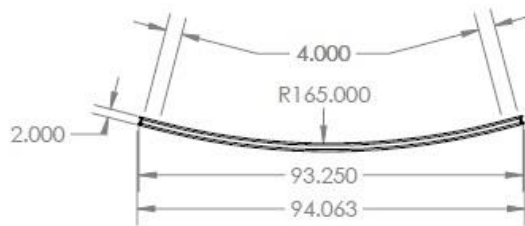
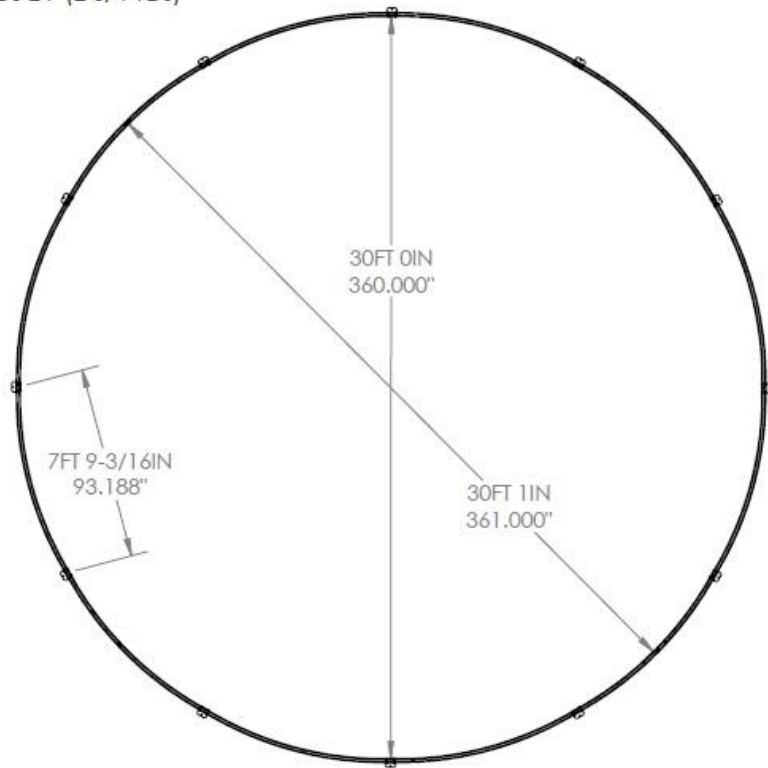
WILBAR INTERNATIONAL		27 FOOT ROUND			
PERIMETER: 84' 9- ¹ / ₈ "	AREA: 573 SQ. FT.	GALLONAGE: 15,704 GAL.	SAND REQ: 4.1 YDS	MODEL NO. POPT52-2700R	
SCALE: 1:48	FOAM WALL POOL		DATE: 12/21/16	DRAWN BY: P.INMAN	DRAWING NO. 10364



WILBAR INTERNATIONAL		27 FOOT ROUND WITH STEP			
PERIMETER: 84' 9- ¹ / ₈ "	AREA: 613 SQ. FT.	GALLONAGE: 15,967 GAL.	SAND REQ: 4.1 YDS	MODEL NO. POPT52-2700RIGS	
SCALE: 1:50	OPTIMUM POOL		DATE: 07/05/17	DRAWN BY: P.INMAN	DRAWING NO. 10394

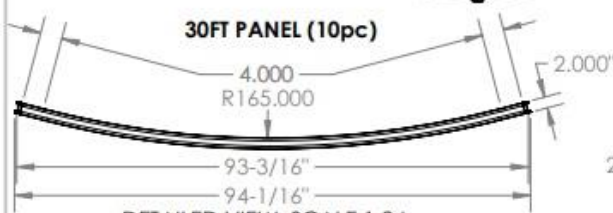
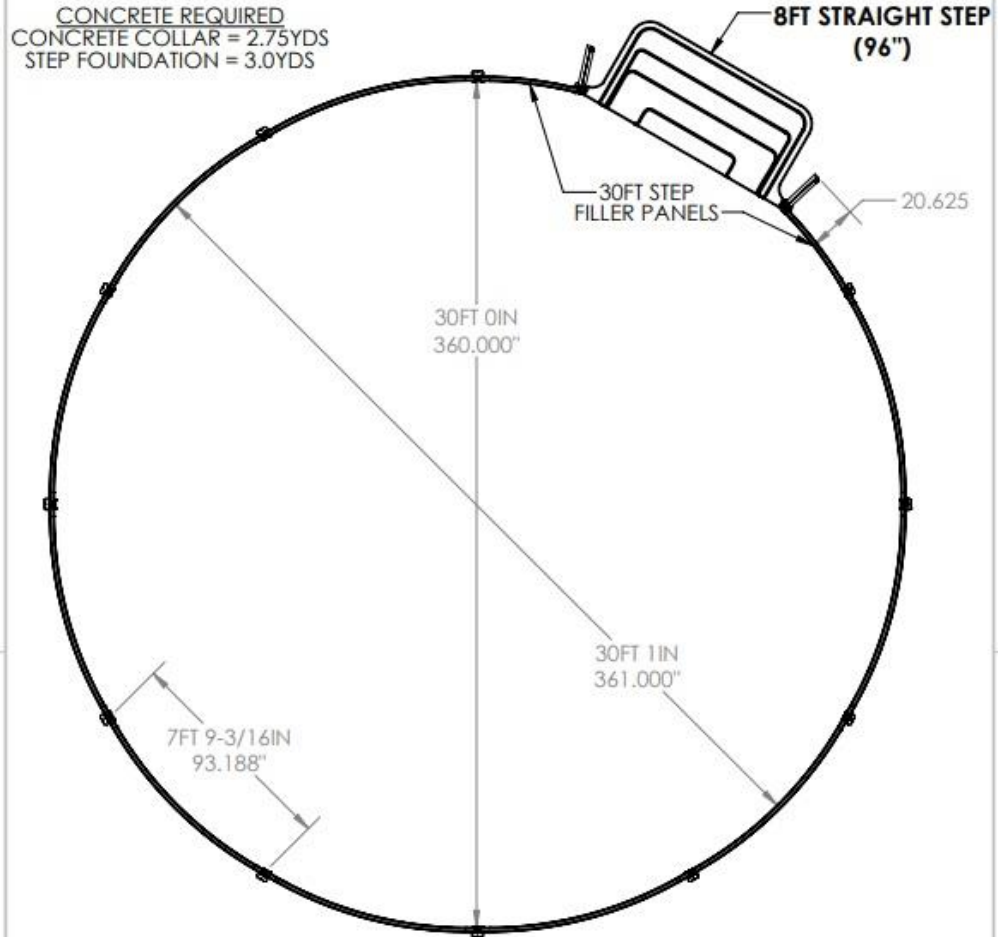
POOL FOOTPRINTS

CONCRETE REQUIRED
WHEN DEPTH INGROUND
EXCEEDS 24" (2-3/4 YDS)

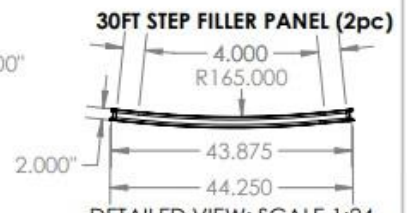


DETAILED PANEL VIEW: SCALE 1:32

CONCRETE REQUIRED
CONCRETE COLLAR = 2.75YDS
STEP FOUNDATION = 3.0YDS



DETAILED VIEW: SCALE 1:24



DETAILED VIEW: SCALE 1:24

WILBAR INTERNATIONAL		30 FOOT ROUND			
PERIMETER: 94' 2- ³ / ₁₆ "	AREA: 707 SQ. FT.	GALLONAGE: 19,388 GAL.	SAND REQ: 5.0 YDS	MODEL NO. POPT52-3000R	DRAWING NO. 10365
SCALE: 1:64	FOAM WALL POOL		DATE: 12/21/16	DRAWN BY: P.INMAN	

WILBAR INTERNATIONAL		30 FOOT ROUND WITH STEP			
PERIMETER: 94' 2- ³ / ₁₆ "	AREA: 747 SQ. FT.	GALLONAGE: 19,655 GAL.	SAND REQ: 5.0 YDS	MODEL NO. POPT52-3000RIGS	DRAWING NO. 10395
SCALE: 1:56	OPTIMUM POOL		DATE: 07/05/17	DRAWN BY: P.INMAN	