# Polymer Wall Swimming Pools Steel Wall Swimming Pools

# What is the Difference?



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# INTRODUCTION

In the pool building industry you hear terms like steel, polymer and vinyl liner swimming pools tossed around a lot. If you happen to be in the early stages of the pool buying process these terms can be very confusing. Therefore, let us begin by clarifying a couple quick things. Steel and Polymer are the two different types of wall structures that will make up the body of your inground pool. Once these walls have been set, a vinyl liner is then placed to give the pool its color and allow it to be filled with water. While it is important to weigh through your swimming pool wall options, it is safe to say that steel wall pools and polymer wall pools are both consider a vinyl liner pools.

> This eBook will do a detailed comparison of both vinyl liner pool structural wall types. Each type of structural wall has both their good points and bad points and you have the right to know what each of those are. Steel versus Polymer wall structure has been an POLYMER ongoing debate in the industry ever since polymer wall STEEL technology was introduced several decades ago and it continues on to this day. We will give you the information in this eBook that is necessary to clear up some of the confusion and help you make the most

informed choice as to which type of structural pool wall is best for you.

VS

# The Characteristics of Steel Pool Walls

#### The Characteristics of Steel Walled Vinyl Liner pools

Vinyl liner pools with steel walls have been around a lot longer than most people think; they have been in production in large numbers since the early sixties. Steel wall panels have continued to see many improvements over the years and todays well-made galvanized versions are a far cry and much better quality than their predecessors made all those years ago. Steel walled vinyl liner pools do have their drawbacks and have since become much less popular than polymer wall pool packages; but with that being said, they are a lower cost alternative and can still be an integral part of a vinyl liner swimming pool that will last well into the future. Let's take a closer look at steel wall pool panels to see how they are made and what their advantages and drawbacks are.

#### **CONSTRUCTION and DESIGN**

Over the years the way steel pool walls have been made has steadily improved. Latham's steel wall panels are made of heavy gauge, corrosion resistant galvanized steel. The thick galvanized coating that goes on them makes these panels a lot less prone to rusting and other types of corrosion than they were many years ago; as a matter of fact they should easily outlast most other parts of the vinyl liner swimming pool they are built as part of.



# **The Characteristics of Steel Pool Walls**

## ADVANTAGES

#### Cost

When you compare similar size pools with similar equipment on them there are no inground swimming pools that cost less than vinyl liner pools made with structural steel walls. They are the type of swimming pool that became popular because they opened up pool ownership to the masses with their affordable cost.

#### Long Warranty

**ADVANTAGES** 

Despite that fact we will point out here that steel walls have some drawbacks, we are still confident enough in this product to issue a lifetime warranty on the steel panels we manufacture. We would not do that if we did not feel our steel walls would last well into the future under normal circumstances.

#### **Precision Bracing Adjustments**

The one big advantage steel wall panels have over polymer wall pool panels when installing them is that their bracing can be precisely adjusted. The support structure for steel wall panels has attached threaded rods with screw adjustments on them which make it very easy to get these type of pool walls plumb and level.

# The Characteristics of Steel Pool Walls

#### **Over 1000 Possible Pool Configurations**

Stop listening to people that say inground vinyl liner pools with steel walls are limited in the variety of shapes and sizes they come in because it is simply not true. With all the different shaped steel wall panels there are and the choices in molded steps and other add-ons that go with them, this creates the possibility of having over 1000 different swimming pool sizes and configurations when building with steel wall pool panels.

#### **Precision Engineered Panels**

There is no better way to build a long lasting swimming pool than to do it in a way that helps it go together seamlessly when doing it. That is the very reason why all our steel wall panel sections are meticulously precision engineered for quality.

#### You Can Fill the Swimming Pool Before Backfilling

There are no stronger inground vinyl liner pool walls than those made out of galvanized steel. They are so strong and have such good support bracing that the swimming pool can even be filled before the walls have been backfilled.

#### Easier to Connect Add-ons

Due to the way they are made it is a little easier to attach add-ons such as steps, swim outs and tanning ledges to steel wall pool panels than it is when attaching these types of add-ons to polymer wall panels.



#### **Not Immune To Corrosion**

Unfortunately even galvanized pool wall panels are subject to corrosion if chlorinated water acts on them over long periods of time. This means that leaks in the vinyl liner and poor seals around plumbing fixtures must be taken care of right away when they are found. Highly acidic ground water conditions and other naturally occurring soil problems in some areas may prohibit steel wall panel use in some areas also.

#### **Salt Chlorine Generators Can Increase Corrosion**

Salt is an inherently corrosive material. While the levels of salt generated in a Salt Chlorine system are relatively low, Salt Chlorine Generators can increase corrosion on steel wall pools.

It is recommend to consult with your builder for the best approach in your backyard.

#### **Extremely Heavy Panels**

Galvanized steel pool wall panels are extremely heavy to carry; many times it takes two people to carry the bigger steel panels, put them into place and then fasten them together. This makes these pools more difficult to build than polymer wall pools because it is harder to work with the panels to get them assembled properly.

DRAWBACKS

#### The Characteristics of Polymer Pool Walls

If you take a quick glance below at the length of the list of polymer pool wall advantages it's easy to tell right away why these have become the structure of choice for inground vinyl liner pools. Although steel wall panels have been around a long time doing a good job, many people choose polymer walls to eliminate even the slightest chance that things such as corrosion or rust will take place and weaken the pool wall structure.

Let's take a closer look at polymer wall pool panels to see how they are made and what are the advantages and drawbacks associated with them.

#### **CONSTRUCTION and DESIGN**

There are many reasons why people are choosing polymer pool wall structure more often than steel wall structure these days. A lot of it has to do with the specially POLYMER WALLS designed thermal plastic molding process they are made with. The panel's key ingredient is an all-resin structural polymer that gives these panel's incredible strength and durability. It is a process that has gotten so good that our polymer wall panels are almost as strong as the steel ones but without all their inherent drawbacks. Another characteristic that make Latham's polymer wall panels ideal for use is their extra-rigid quality that reduces the potential of warping and bowing due to thermal expansion; this can be a problem with more traditionally made polymer wall panels.

#### **ADVANTAGES**

#### **Precision Engineered Panels**

Our polymer wall pool panels are precision engineered to make sure the panels fit together seamlessly when being assembled so the finished pool looks amazing.

#### Will Not Corrode or Rust

Chances are that sometime in the life of your vinyl liner pool you will get a hole in the liner or have a leak around a plumbing fixture such as a skimmer or light. When things such as these happen on a polymer wall panel you do not have to worry about any secondary damage from corrosion and rust over time like you do on a steel wall panel. No chance of corrosion on the pool wall panels also promotes longer vinyl liner life.

#### High Impact Resistance and Will Not Dent

Our polymer wall pool panels are high impact resistant so there will not be any imperfections after the building is done and they will not dent under any circumstances with normal pool use.

#### Lightweight

Unlike their heavier galvanized steel counterparts, polymer pool wall panels are much lighter in weight. Most panels can easily be moved by a single person which makes the pool wall structure much easier to assemble.

#### **ADVANTAGES**

#### Salt Chlorine Generator Compatible

There is no easier and less expensive way to add chlorine to your swimming pool than with a salt chlorine generator. They are 100% safe and recommended for use with polymer pool wall panels.



#### Less Over Digging Required

The support structure for polymer wall panels is not as wide as the support structure for steel wall panels. This results in up to a foot less over digging when shaping the hole to build the swimming pool in.

#### Almost as Strong as Steel Panels

We already went over that the all-resin structural polymer that goes into making our polymer pool wall panels makes them almost as strong as the steel wall panels we manufacture.

#### **Over 1000 Sizes and Configurations to Choose from**

Just like steel wall pool panels, there is a large variety of shapes and sizes to choose from when building a pool with polymer structural walls. We even have the ability to make custom panels for those tight spaces that are hard to fit pools in or to create uniquely shaped pools.

#### ADVANTAGES

#### **Different Shallow End Depths**

Polymer wall panels come in both 42" and 48" panel depths. This is great for those pool buyers that prefer to have a little deeper shallow end than is traditional with most types of swimming pools.

#### Long Warranty

Talk about confidence in a product; our polymer wall panels and braces carry a lifetime, non-prorated and completely transferable warranty.



#### DRAWBACKS

#### Need to Backfill 'before' Filling the Swimming Pool

Unlike steel walled pools which can be backfilled before filling, polymer wall pools need to be filled and backfilled alternately during the process to make sure that the walls stay plumb and level.

#### Takes More Panels to Make a Curve

When making a curve in the swimming pool shape it takes more polymer panels put together to make the curve than it would if you were building your pool with steel wall panels. This can result in a little extra time being spent assembling the walls on a swimming pool with many rounded edges.

#### **Excess Dirt**

Backfilling with gravel is recommended in some instances with polymer wall panels. If this is the case for you then you will have some excess dirt leftover from the excavation that you will have to get rid of someplace.



# CONCLUSION

By now you have probably noticed that some characteristics that were listed for each type of pool wall panel were advantages for both steel wall pool panels and polymer wall pool panels. This was necessary in order to give you the most accurate information on each type of pool wall panel in order to help you make the most informed decision as to which one you want to build your new swimming pool with. It also shows that there are a lot of good things about each type of pool panel and why both types of panels will last you well into the future no matter which one you decide is right for you.

Is there a type of pool panel that we here at Latham favor? Without a doubt we lean toward the installation of polymer wall pool panels in most situations, especially with the recent advances that have made them even stronger and also given the fact that they will not rust or corrode. With that being said, we would not sell our steel wall panels if there was going to be a lot of problems with them and they do help more people fit a swimming pool into a tight budget. That is why it is always best to have one of our dealers visit your home during the sales process and take a look at your yard to assist you in making the best vinyl liner pool wall choice for your individual situation.

There is one sure thing regarding our pool wall panels; no matter what your situation there is a pool wall panel type that will more than adequately fit your needs and contribute to you having a vinyl liner swimming pool built for you that is both affordable and long lasting.





Latham Pool Products is the leading manufacturer of in-ground residential fiberglass swimming pools, pool covers, and vinyl pool liners in North America.

Click here to **Request a catalog** or **Ask a local pool builder** about Latham's array of high quality fiberglass pools from one of these fine brands.

#### Behind Every Pool.

