

Engineering & Manufacturing Commercial Pool Products since 1940's Swimming Pools...movie stars...that's how Paddock got started back in the early 1920s, building America's first backyard pools on the estates of wealthy Southern Californians. Back then, a private pool had to be built with formed concrete using heavy machinery an exorbitantly priced luxury available only to the top echelons of society. But the idea caught on, and in a short time everybody wanted one. Paddock took the concept to the next level, and the modern pool industry was born.

By 1930s, Paddock built their first 50-meter monolithic pool using pneumatically applied concrete, called gunite, at the Biltmore in Santa Barbara. Soon, gunite was the method of choice for pool construction, enabling a new generation of specialized contractors to build affordable residential pools. By 1940s, Paddock had established its first network of franchised dealers to build its standard designs around the country.

Paddock transitioned from residential to commercial swimming pool design and construction in the 1960s when Bill Baker, Don Baker's father, purchased the company out of bankruptcy and moved it from the West Coast to Albany, New York. Paddock was reorganized and shifted their focus to commercial equipment exclusively.

The Equipment Company took center stage, introducing a number of key innovations into the market that define commercial pools today—such as; stainless steel perimeter, movable bulkhead and vacuum sand filter.

In early '70s, Paddock relocated to Rock Hill, S.C., where they fabricate a line of high performance products designed to create the most distinctive aquatic facilities in their 250,000-plus-square-foot manufacturing plant.

Today, Paddock works on projects ranging from facilities like YMCAs to Olympic style competitive 50 meter pools at universities and swim clubs.

In fact, Paddock Pool Equipment Company and its dealer group nationwide have built thousands of

www.paddockindustries.com 800-849-2729 commercial pools across the country. The company provides equipment on 80 to 120 projects each year.

# Why Paddock?

...Because we have led the way in the swimming pool industry for nearly a century, from the first backyard pools for movie stars in the early days, to today's modern multipurpose aquatic center. What's the reason? It's simple: we take a unique approach that focuses on complete project—and owner's complete satisfaction. No other company knows pools like we do, and no other company has the capability we have to do it all, start to finish.

This is why we take our vision so seriously, to create the nation's most distinctive aquatic facilities stunning pools that perform at the highest level and exceed expectations. Paddock is not just another equipment manufacturer, but a full service company dedicated to achieving the best results. Contact us in the early planning phases to benefit most from our expertise, as we can help you to design, equip, and construct the aquatic facility that meets your unique requirements.

Visit our website to learn more about the broad range of services we offer for projects of all kinds, such as world-class competition venues, YMCAs, municipal pools, military installations, family water parks, health & fitness centers, private clubs, and more.

# Equipment

Paddock is widely recognized as representing industry standard for innovation and excellence. Our perimeter recirculation systems, vacuum and pressure sand filters, and bulkheads are custom-fabricated in our own 250,000 square foot manufacturing plant for every project we build. Paddock has a product for every performance level and budget—without sacrificing quality.

But Paddock isn't just a manufacturer. We specialize



in offering complete pool equipment packages for every pool. That means we care about the little things as much as the major components, because they matter to you. As a major equipment manufacturer we offer a Customer Relations program—we want to maintain a long-term relationship with every pool that has Paddock equipment—to insure satisfaction that exceeds expectations. You shouldn't have to call a distributor, a contractor or a service company if you need something. If you have a Paddock pool, just call us and we'll take care of you. It doesn't matter if you just need a part, if you want to repair or expand your facility, or if you simply need some service arranged. Our goal is to treat our distinctly Paddock pools like family.

### Design

Paddock offers design assistance to any interested owner, architect, or consultant. Our AutoCAD Inventor drawings are prepared for each individual project and include layouts in various views, product details, and complete equipment lists, with specifications available for all items.

With literally thousands of commercial pools to our credit since the early 1960s, Paddock is uniquely qualified to assist you with the layout of any facility. We're familiar with the appropriate codes nationwide, and we understand the design requirements demanded by coaches, instructors, recreation directors, and therapists. We know what works, and what doesn't.

Integration of custom manufactured equipment for the specific intended use of a pool is the hallmark of Paddock designs. For instance; is saving space an issue? Is there a need for speed? Or, are you more concerned with aesthetics? Safety? Functional flexibility? Our interest is in providing you with the pool that best suits your purposes—down to the last detail.

We specialize in finding solutions to meet any design challenge. Contact Paddock before you begin your new pool project or major renovation. We want to be your partner in helping create a truly outstanding aquatic facility.

### Construction

Paddock's Builder network is comprised of construction specialists who adhere to the strictest quality standards. We highly recommend them for new construction or major renovations. Paddock builders are located all across the country, with skilled crews representing decades of experience. Contact us to locate a builder near you for assistance with your specific project.



### Planning, Bidding, Building: Partner with Paddock from...

A successful project is one that turns what was once just a dream into a present reality, fulfilling expectations without making compromises along the way. In short, a Project Mover should get exactly what they want in the end. We prefer the term "Project Mover" to Owner, because behind every aquatic project there is someone with a passion for competitive swimming, improved fitness, community building, instruction, family recreation, institutional growth...or any combination of these worthy endeavors. Paddock's vision — and every aspect of our business — has been shaped by over 85 years of experience and is carried out each day with the desires and demands of a Project Mover in mind.

Paddock exists to create the nation's most distinctive commercial aquatic facilities by providing quality equipment, specialized services, and customer support that exceeds expectations.

# Planning



Take advantage of Paddock's complimentary planning services:

- » Full-color artistic renderings
- » Set of architectural plans in AutoCAD
- » Sectional views & product details
- » Vendor and product evaluations
- » Complete list of equipment
- » Design narrative
- » Construction & equipment specifications
- » Budget forecasting
- » Contractor qualification guidelines
- » Coordination of related trades

# **Our Vision**

Our Vision springs from the word create, to bring something into existence that will enrich the lives of users for To that end, Paddock places a major decades. emphasis on careful, collaborative planning: bringing together as many individual experts as possible to achieve the desired result. Our approach is first to ascertain the goal of a Project Mover, then to listen to a planning team-design professionals, aquatic directors, facility managers, investors, coaches & therapists, etc.--to determine scope and uses of proposed pool. From there, we shape a preliminary proposal, present it for consideration and approval, and we're off and running. This is what we mean by the nation's most distinctive aquatic facilities—each one is special and unique. Everything that happens from this point is part of a controlled process, to ensure that what is now on paper will soon be transformed into bricks and mortar (actually, concrete, steel, and water!).





### Start to Finish.

Over fifty years ago, New York pool contractor Bill Baker took over Paddock of California and changed the company's focus from the residential to emerging commercial market. His efforts resulted in the widespread acceptance of many construction standards practiced today, such as the use of gunite and stainless steel recirculating perimeter. The goal was simply to provide products and services that would allow specialized pool contractors to assume single responsibility for their project to ensure quality result. While ownership has changed since that time, Paddock's commitment to construction expertise has not altered. Among major the pool industry, only manufacturers in Paddock the first-hand knowledge has necessary to make sure the pool drawn on the built plans can be properly, within budget, and with nothing missed along the way. Because of our historic, continuing relationship with the best pool builders in the country, we are uniquely qualified to help you cover all the bases.

### www.paddockindustries.com

something and we don't have, we'll get it. The more we have had to do with the design, equipment, and construction of your pool, the more we can help you maintain and improve your facility as years pass.

We not only design and equip many of nation's most distinctive aquatic facilities, we build them, too, through our Preferred Builder network. Can you get more expert than that?

#### Before you build, consult Paddock to:

- » Choose the approach that is best for your project (public bid, negotiated, design-build, design-bid, allowance, etc.)
- » Establish base bid/alternate specifications to ensure competitive bidding by contractors
- » Set structural requirements for pool & equipment room
- » Consider options for lighting, buildings, bathhouse or locker facilities, decks, HVAC, etc.
- » Coordinate plumbing and mechanical work
- » Coordinate electrical work
- » Outline project construction schedule phases



Once the pool is built and most contractors and suppliers are long gone, Paddock seeks to initiate a long-term relationship with the new owners of our pools. A call from our Customer Relations department provides an opportunity to evaluate the pool design, to make sure everything is working, to provide additional accessories, or to coordinate service. We're not a distribution company per se, but we do stock parts on standard products as well as quality products from other manufacturers for our pools. If you need



"We want you to be happy with your Paddock pool, not just when it opens, but always." Paddock perimeters represent nearly a half century of innovative design and precision manufacturing. Paddock was the first to promote the many benefits of a pre-fabricated, integral flow perimeter system for commercial pools—way back in the early 1960s. So it is no surprise that we continue to lead the industry in specialized products for every type of aquatic project, whether for world class competition or just plain fun. A stunning example is the Radius Section (RS) perimeter—the only free-form integrated system available today. Combining the practical benefits of an integral perimeter with enhanced aesthetics, the RS is just the newest advancement in the long history of breakthroughs in recirculation technology from Paddock.

#### **Custom Renovations**

Paddock perimeters are perfect to troublesome rehabilitate chronically old-Cutting the old gutter off the er pools. pool wall and installing a customized, prefabricated Paddock system provides a permanent fix for pools with cracked troughs leaky concrete gutter or recirculation plumbing. Simply provide us with blueprints or measurements of the existing wall dimensions and we'll submit a comprehensive solution, taking into consideration variables such as the desired flow rate, surge capacity, deck-towater, and depth of your "like new" pool.



All stainless steel perimeters consist of a main overflow channel, to receive water from the pool surface, and a filtered water return conduit, to recirculate clean, sanitized water back to the pool. The primary benefit of such a system is to eliminate maze of buried piping required for concrete troughs and skimmers, thus also eliminating potential leaks and costly repairs that accompany them. But a closer look reveals that not all stainless steel perimeters are the same.

Paddock perimeters are featured on virtually every type of pool, large and small, including fitness centers, swim clubs, and therapy pools. Until now, leisure pools have presented a unique challenge to the architect who understands the practical benefits of an integrated perimeter but desires a curving, free-form shape. The Paddock RS system provides both. For the first time, function follows form. The RS can be custom-fitted to virtually any contoured wall, limited only by the designer's imagination.

Paddock grating is available in custom colors and can be fitted to match any radius.

Special features such as ballet rails (shown here), tile, or integral deck drains can be added to any perimeter.

Fixed inlets are sized for each pool and fitted with nylon nozzles for added safety. Performance separates Paddock from rest of competition. Only Paddock has successfully developed factory-fabricated multichannel perimeters that not only carry water, but control dynamic surge as well thus creating the smoothest surface possible: the optimal condition for speed. An example is Paddock C100 ("SCRS") perimeter fitted with Auxiliary Surge Recovery (ASR), a three-channel system designed exclusively for use at championship facilities, such as Centennial Sportsplex in Nashville, and the University of Michigan in Ann Arbor.



The C200 ("SCRS-ASR") captures waves entering an overflow channel and continuously transfers surge to a covered lower channel below, where it flows uninterrupted to a filter and back to pool. Should lower channel reach a pre-set level, an auxiliary pump draws water through an ASR chamber to prevent the gutter from flooding under any conditions. The result is an aquatic environment designed for speed that cannot be duplicated by any other recirculation method.

### **Standard Features**

All Paddock perimeters are factory fabricated for simplified installation and precision fit-up. Paddock's stateof-the-art computer-driven machines insure that every perimeter is sheared, formed and welded to exact dimensions and shipped to a site in complete sections with minimum field welding required, not in multiple pieces like competitors. Fabrication and testing under controlled conditions in the Paddock plant result in the highest quality installation performed by Paddock certified technicians.

Inlets are punched in our plant - not drilled in the field - and fitted with nylon jet nozzles sized for flow rate of each pool and fixed at a 45 degree angle downward. Nozzles are recessed in a stylish V-Groove to protect plaster finish below. Inlets are spaced 36 inches on center around perimeter and grouped under racing line anchors at end walls. This insures that swimmers approaching wall are not impeded or, if touch pads are installed, recirculation is not inhibited.

Paddock's protective grating is made from slip-resistant PVC reinforced ribs running perpendicular to pool. It's 32% open area permits maximum flow into overflow channel, but minimum spacing between ribs prevent entrapment. Paddock's grating is easily adaptable to radius curves and corners.

Paddock recommends Type 316L stainless steel material to all specifying architects for maximum corrosion resistance.

Little things can make a big difference. That's why all Paddock perimeters feature jet wash fittings to flush overflow channel with filtered water to keep it clean and to prevent algae growth, a slip-resistant finish on all exposed surfaces and recessed anchors.



Paddock doesn't apply performance engineering only to elite competition venues. The same technology is employed in the versatile C300 ("IFRS-ASR") perimeter, a two-channel system designed for any pool used for competition as well as recreation, where "point" flooding is a constant problem. The ASR feature is engaged only when needed to ensure maximum surge control and efficiency at all times. No other perimeter provides as much capacity.

### **OPTIONS**

Paddock perimeters are available in custom configurations and varying dimensions, from deck-level rollout to fully-recessed designs.

A removable tile face provides a non-skid surface for flip turns and unmatched aesthetics.

In-Pool Surge Capacity is accomplished by Paddock's automatic surge control weirs, which are responsive to the changing water level in the pool.

Paddock's grating can be matched to any desired color.

Integral deck drains can be added to any perimeter.

Paddock's Zero-Depth (R100) perimeter is a complete recirculation system with both an overflow channel to receive waves lapping up at a beach area entry point, and an inverted filtered water supply tube that sprays clean, sanitized water back across the surface through fixed inlet nozzles. The result is unbroken recirculation around the entire perimeter—especially where it is needed most—with an added play feature children of all ages can enjoy.



The photo (top) shows a fully-recessed C300 perimeter system with tile. The interior of the stainless steel perimeter section is represented in the cut-away detail (above).

- 1. The main overflow channel receives waves from the pool and conducts water to the filter system.
- 2. The separate return tube delivers filtered water back to the pool.
- 3. The ASR Chamber receives water only when needed; as the overflow channel fills, a sensor reads and activates a separate pump that draws down water into this chamber and returns it to the pool. In this way the overflow channel never floods—insuring smooth, fast water.

### **The Compak Vacuum Sand Filter**

Paddock revolutionized the commercial pool industry with the introduction of the first vacuum sand filter in 1978. Today's Compak model is the most distinctive filter available, representing the state-of-the-art in every way:

**DESIGN:** The open top, square filter is fed by gravity and houses the pump(s), media, valves and piping inside the stainless steel tank installed below grade for maximum efficiency of space.

**<u>PERFORMANCE</u>**: Vacuum sand filtration has been proven to produce dramatically clearer water than pressure systems; in fact, the Compak delivers the same polished water as Regenerative filters—without the extra cost, maintenance, and environmental concerns.

<u>COMPONENTS</u>: Paddock uses only the highest quality components in the Compak, such as laterals, fiberglass equalization screens, and rigid, non-skid protective grating.



## The most economical filtration system on the market

For all of a Compak's inherent superiority over pressure filters, this might seem like an odd question. But a closer look reveals that no other system saves the owner as much in terms of money, time and valuable resources.

The Compak's efficient use of space is its first and most obvious benefit. With the Compak, an architect doesn't need to worry about how to get large pressure tanks and piping into (and out of) a equipment room, because each filter is entirely below grade. In fact, walls of equipment room can be drawn in around a Compak to the smallest possible footprint, saving significant construction costs. The resulting room is smaller but seems much larger - wide open, in fact. From headroom to square footage, a Compak saves the most space. And, because both main drain and perimeter overflow lines converge in Compak, it also acts as a balance tank, saving even more space and money.

The natural phenomenon of vacuum filtration results in much longer filter runs than with pressure filters. It is not uncommon for a Compak to require a three to four minute backwash only once every month under normal condition. This amounts to a dramatic savings in water and chemicals over time. And a Compak equipped with air scour reduces backwash rate by one-half.

The Compak is built for long-term, heavy-duty use. A stainless steel tank anchored and enclosed in a concrete floor will last life of a pool. But if normal maintenance is ever needed - to replace media or work on a valve, for instance - it is as easy as removing the grate.



#### **Theory of Vacuum Sand Filtration**

Most filters function by mechanically straining solid impurities from water. Water from a pool is forced into a pressure vessel, where filtration takes place at the top of the media bed by simple entrapment of particles. This results in shorter filterruns and frequent backwashes as upper portion of the bed becomes clogged.

By contrast, with vacuum sand filtration, water is drawn through the media, where electrostatic attraction between sand grains and contaminant particles occurs. This process, called depth filtration, utilizes the entire media bed and results in removal of extremely small particles, down to 1.0 microns in size.

Under the vacuum, even smaller colloidal particles group together to form larger particles which can be removed, resulting in the clearest, cleanest water possible.

The equalization screen is perforated to allow equal distribution of influent water across entire surface of media bed.

The main recirculating pump is mounted inside the walls of filter tank. It is easily accessible.

All internal components, such as the valve, are heavy-duty.

The main drain and perimeter overflow lines enter Compak together, allowing this filter to serve as its own balance tank.

An air scour distribution network supplements conventional backwash system for dramatic water and chemical savings.

Additional surge capacity is available in every Compak.

An Evacuator<sup>™</sup> pipe encircles inside filter to remove corrosive air and chloramines from filter and equipment room. Indoor Compak install only.





Sample of a Compak with an Evacuator<sup>TM</sup>

Swimming pool filter rooms are changing. The familiar banks of filters with associated face piping are giving way to compact, fullyautomated systems requiring little operator intervention. Gone too, are weekly rituals of backwashing thousand of gallons of heated and chemically treated water to waste. Today's filter rooms can be truly "lights out" operations.

Language of filtration is also changing. Words like, "regeneration"... bump cycle...precoat reuse...flexible septum....all contribute to a changing technology and the present state-of-the-art. Automation, a concept that a few years ago was more dream than reality, is fast becoming designer's prerequisite.

Today's filter room is a meld of hydraulic, electromechanical and solid state technology. Through these mechanisms, basic functions of moving water, removing particulate matter from it, sterilizing it and finally, condition its chemistry and temperature are accomplished.

Paddock Regenerator<sup>™</sup> filter provides a resource conserving solution. Utilizing a system of filter-aid regeneration and an innovative filter element called the Flex-Tube<sup>™</sup>, the Regenerator<sup>™</sup> System provides unparalleled water clarity and remarkable operating efficiency.



Patented, Flex-Tube<sup>™</sup> filter element provides basis for regenerative cycling. Its pore size is variable. During filtration, the pore is smallest, creating a retentive support for the filter-aid, called the precoat.

#### **BENEFITS OF THE REGENERATOR™:**

- Best available technology through automation.
- Reduces operating costs by increasing filter run lengths.
- Conserves resources by greatly reducing water usage.
- Provides superior water clarity.
- Head and body type is low carbon stainless steel. Longest lasting vessels on market.
- All wetted components passivated to Federal Specification QQ-P- 35D following fabrication.
- True ASME flanged and dished head for superior flow collection / distribution in the filter top end.
- Maximum 36" length conservative design limits rise rate and prolongs elements life.
- Element cores are low carbon stainless steel.
- This is a **GREEN SYSTEM** and lends itself well for **LEED** accreditation.

If you are looking for best Regenerative filter on market, look no further than a Paddock Regenerator<sup>™</sup>. It is most reliable (40 years service) and cost effective filter to last life of a facility.





**Variable Frequency Drives (or VFDs)** are becoming almost standard part of aquatics equipment room packages. Most VFDs are fairly simple to install and operate however, they are quite complex with respect to their sophisticated hardware and software implementations. VFD functionality and operation can be greatly improved by understanding basic VFD theory, terminology and interfacing options.

#### What is a VFD?

Simply put, a VFD is a power conversion device. The VFD converts a basic fixed-frequency, fixed voltage sine-wave power (line power) to a variable-frequency, variable-voltage output used to control speed of induction motors.

#### Why Use a VFD?

Primary function of a VFD in aquatic applications is to provide energy savings. By controlling speed of a pump rather than controlling flow through use of throttling valves, energy savings can be substantial. By way of example, a speed reduction of 20% can yield energy savings of 50%. In addition to energy savings, impeller, bearing and seal life is greatly improved.

#### **BENEFITS OF THE VFD:**

- Energy savings.
- Better process control.
- Used for control of process temperature, pressure or flow without use of a separate controller.
- Maintenance costs can be lowered, since lower operating speeds result in longer life for bearings and motors.
- Eliminates throttling valves and dampers also does away with maintaining these devices and all associated controls.
- A soft starter for motor is no longer required
- Controlled ramp-up speed in a liquid system can eliminate water hammer problems.
- Ability of a VFD to limit torque to a user-selected level can protect driven equipment that cannot tolerate excessive torque.

### **Dual Cell Vertical Pressure Sand Filtration**



When a Paddock Compak vacuum sand filter is impractical (such as with a below-grade equipment room, a filter replacement in a restricted space, or for a small pool), choose one of Paddock's pressure sand filters for sparkling clear water.

Paddock's Type 316L Stainless Steel Verticel filter saves both floor space and water. Its two or three vertically oriented cells are backwashed individually and sequentially with filtered water, reducing the flow of water to waste, and allowing the reduction of piping and elimination of holding tanks. Underdrain laterals are covered with stainless steel mesh and fitted to a sand bed of 18" minimum depth. Dual cell filters range from 36" diameter (212 gpm) to 120" diameter (2,356 gpm). All models are NSF listed. The Verticel is also available in carbon steel with epoxy interior and exterior linings. ASME Code and Labeled filters are available and recommended.

Standard on every Paddock Verticel is a dividing head (in lieu of competition's flat plate) to separate the cells, providing added strength and protection against deflection, which can damage the internal distribution system.

## **Dual Cell Horizontal Pressure Sand Filtration**

There's no sense in wasting water, crowding limited space, or throwing money away that's the rationale behind Paddock's line of dual cell horizontal pressure sand filters. Why fill a filter room with two tanks when one will do? Just because the site dictates a limited backwash capacity doesn't mean the filter room must be crammed full of individually backwashed filters to accommodate the restriction. The dual cell horizontal features two filtration cells in a single tank; backwash one at a time and you have solved your restriction problem without having to install new plumbing, or expand or modify the existing equipment room to handle multiple tanks. Stack them and you reduce your backwash rate even more. All filters are made from Type 316L Stainless Steel, are NSF listed, can be operated by manual or automatic control, and feature all the standard high quality Paddock components.



# **Single Cell Pressure Sand Filtration**



#### Type 316L Stainless Steel Filters

#### **Built for Strength**

- Molded Header/Lateral internal distribution system
- Marine Grade Stainless Steel for maximum protection in corrosive environments
- ASME (Optional)
- Epoxy Exterior Coating
- 50 PSI rating
- NSF Listed

Horizontal Pressure Filters are an economically sound investment for smaller commercial pools, and are perfect for renovations. Paddock offers two choices: Type 316L Stainless Steel (pictured above) or Fiberglass tanks (pictured below). Both offer benefits of all horizontal filters—low price, easy to install, and simple operation. Both can be stacked or installed side by side, and both can be manually or automatically operated. But each has its own distinct advantages as well. There are more sizing options with stainless steel tanks, with models ranging from 36" diameter and 4' side shell length to 96" diameter and 12' side shell length—a total of 99 sizes to choose from! This makes it easy to select a single filter for your pool, which means more efficient filtration and fewer backwashes. And, Type 316L Stainless Steel tanks can be built to ASME Code and Labeled. The independent third-party inspections during the fabrication process insures the owner of getting a product certified by strict ASME standards. Fiberglass pressure vessels cost less and weigh less, and are thus better for renovations of existing pools, where there are tight budgets and tight spaces. Paddock's horizontal filters represent the highest quality and greatest flexibility available.

#### Fiberglass Filters:

- Gel coat interior barrier for protection against corrosion and abrasion from sand
- Additional layers of fiberglass and isothalic polyester resin, with woven fiberglass reinforcement.
- Type 304 Stainless Steel hardware in wetted areas
- NSF Listed



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### **Two Pools in One**

A movable dividing bulkhead is the simplest and most cost-effective way to maximize the efficient use of any aquatic facility. It allows for ultimate flexibility in programming by creating separate areas for competition, instruction, or recreation in the same pool to be conducted concurrently, if desired. So, the swim coach can hold practice while the fitness instructor is teaching water aerobics class, or while the aquatics director is conducting a lifesaving course, or while kids are playing. Because a bulkhead is movable, competition courses can be easily changed from 25 yards to 25 meters or 50 meters. Deep and shallow areas can be segregated, minimized, or expanded depending on scheduled activity. For large pools, two or more bulkheads can create even more options. And, by adding a bulkhead to the design, an owner essentially gets two or more pools for a price of one. Capital and operational costs can be dramatically reduced by using a bulkhead in one pool instead of building two separate pools for various uses.



## **The Proven Leader**

Paddock bulkheads are custom-built entirely from stainless steel and are engineered for strength and durability, ease of use, and low maintenance. Our first bulkheads were built in 1971, and with over three decades of experience with installations at such notable venues as Arizona State, LSU, Notre Dame, the University of Michigan, and the University of Houston, Paddock remains the leader in the industry.

Most of our bulkheads are four feet wide, but five and six foot wide bulkheads are becoming more popular. Paddock can fabricate a bulkhead to exacting specifications, with any width and depth desired by the customer. When used on pools with our stainless steel recirculating perimeters, Paddock bulkheads are fitted with wheels for easy movement; our skid-mounted bulkheads can be installed on any new or existing pool wall. Starting platforms, timing equipment, and stanchion posts are commonly included. Today's Paddock bulkheads are made with Type 316L stainless steel to resist staining in corrosive environments.



# **Flow-Through Design**

A singular advantage of stainless steel bulkhead construction is its flow-through characteristics. While the bulkhead takes the appearance of a solid, floating bridge in the pool, there is actually an open area of 32% in the target panels installed in each lane. Sanitized water is constantly entering and flowing inside the structure on both sides. The benefits of this design include:

*Ease of Movement.* The Paddock bulkhead displaces less water and is therefore less restrictive during movement.

*Improved Sanitation.* There are no closed, dark spaces within the bulkhead interior where algae can grow.

<u>Speed.</u> Because water is passing through the target as the swimmer approaches, the rebound of waves is minimized during flip turns, improving times.

## **Safe Surfaces**

While its steel framework gives the Paddock bulkhead strength and durability, only about 30% of the visible surface of the Paddock bulkhead is stainless steel. The remainder is comprised primarily of reinforced, slip-resistant PVC grating to maximize safety, enhance aesthetics, and create versatility. The grating is the same type used in Paddock recirculating perimeters. Design features incorporating grating include:

<u>Targets and Tops.</u> Contact surfaces are formed with knurled, slip-resistant PVC grating that is excellent for flip turns, and for walking or standing on the "deck" of the bulkhead.

<u>Recessed Handholds.</u> Positioned at the waterline in each lane, the convenient handholds also feature protective grating to prevent access to the interior of the bulkhead and possible injury to a swimmer who might get a hand or foot caught inside.

**Target Spacing.** The gaps between the PVC ribs in the Paddock bulkhead target grating are 9/32"—large enough to allow water to flow through, but small enough to prevent entrapment of toes or fingers.

## Unsinkable

Moving a bulkhead is often made easier by injecting air inside to lighten its load in water. But, improper design can result in disaster if water accidentally rushes into the interior compartment, sending the bulkhead to the bottom—and it can happen very quickly. Not only has Paddock never had a bulkhead sink, the fact is that a Paddock bulkhead simply can't sink, because it is designed with both fixed and variable buoyancy. Inside every bulkhead is a buoyancy chamber to allow 100% of its weight to be displaced for easy movement. Filling vents and relief valves are installed to vary weight of bulkhead. Thus the bulkhead is always structurally stable—and unsinkable.









It is all too common to walk into an indoor pool facility and smell "chlorine". The layman's typical reaction is that there is too much chlorine in the pool. However, this odor chlorine is not caused by excess chlorine but rather by a chlorine compound called that is being created chloramine in the water and off-gassing from the surface of a pool. Our industry has known about chloramine formation for many years, but in recent years it has become more apparent that the tell-tale odor is also the primary cause of facility corrosion and has proven to be a considerable health risk to pool patrons, lifequards, coaches and observers. Paddock Pool Equipment Company has designed a system, the Paddock Evacuator<sup>™</sup>, to minimize the level of airborne chloramines which in turn, provides excellent air quality in natatoriums.

This approach Paddock took to address the problem of airborne chloramines is unique in our industry. The Evacuator<sup>™</sup>, a one-of-a kind system providing both immediate and long-term benefits, *removes high concentrations of chloramines and immediately improves air quality* throughout your indoor facility. This improves our body's ability to process oxygen, increasing performance of competitive swimmers and increasing well-being and enjoyment of recreational swimmers.

The Paddock Evacuator<sup>™</sup> restricts noxious air to a pool surface and pushes room air toward pool - all while minimizing air disturbance at pool's surface. While the Evacuator's design is complex, its use actually simplifies daily operations, reducing maintenance required for deck equipment and metal building components. Constructed of Type 316L stainless steel and PVC components, the Evacuator<sup>™</sup> is a Green System and perfect choice when seeking LEED Certification because it can reduce power consumption, improve air quality and recover heat from water surface air.

The Paddock Evacuator<sup>™</sup> *provides value by immediately improving HVAC performance* and extending the life of HVAC equipment and building elements by greatly reducing chloramine damage to components.



Westside Aquatic Center Gutter Evacuator™ Install Greenville, SC



Jenks Aquatic Center Gutter Evacuator™ Install Jenks, OK

Along with an in-gutter option, the Paddock Evacuator<sup>™</sup> can be retrofitted for existing facilities via a bench, wall mount, or an in-deck system all tailored to your natatorium's specific needs with a custom design. As previously stated, the Evacuator<sup>™</sup> is a source capture system that exhausts trichloramines, which develops directly above a pool surface in an area called the "chloramine bubble", out of the facility.



An evaluation will be done by a certified Paddock Evacuator<sup>™</sup> dealer to find the ideal solution for each

individual facility. Our designers work closely with Mechanical Engineers to ensure the Evacuator™ system is properly configured with existing HVAC equipment.

Paddock Evacuator Company, an affiliate of Paddock Pool Equipment Company, is passionate about helping provide the best air quality available and making indoor pool experiences a pleasure. They are committed to working with owners, operators, and engineers to evaluate and develop facility specific solutions. For more information or to set up a consultation with a dealer in your area, please visit www.paddockevacuator.com or call toll free at 855-PAD-EVAC (723-3822).





Huntersville Family Fitness & Aquatics Bench Evacuator<sup>™</sup> Install Huntersville, NC



Rock Hill YMCA Retrofit Evacuator™ Install Rock Hill, SC



Paddock's **Figure Four Grab Rails** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083".

Outside diameter of 1.5" or wall thickness of .120" is also available.

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

California Style Grab Rails are made in the same design as Pretzel Bend Grab Rails but extend an additional 9" to accommodate pools with very wide gutters and/or unusually extreme deck-to-water dimensions.



Paddock's **Pretzel Bend Grab Rails** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083".

Outside diameter of 1.5" or wall thickness of .120" is also available.



Paddock's **Ladders** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083".

Outside diameter of 1.5" or wall thickness of .120" is also available.

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

To learn more about our deck equipment and other items we offer....

Paddock's **Portable Lifeguard Chair** features a welded Type 304 or 316L stainless steel frame with a molded fiberglass seat six feet above pool deck. The rigid 19" wide slip-resistant high density polyethylene platform is reached via a 15 degree sloping ladder with 19" stainless steel treads. Rubber bumpers protect deck when chair is in place. Wheels secured to frame allows for easy positioning at various poolside locations. An umbrella socket on one side behind seat is an integral part of chair frame.

Paddock's Lifeguard Observation Platform provides maximum visibility across a wide area and extra space for uninterrupted lifeguard station changes. Designed for strength and stability, the chair features a welded Type 304 or 316L stainless steel frame with a molded fiberglass seat 5 feet above pool deck. Curved handrails permit safe access and descent and provides security for lifeguards standing on platform. Area directly in front of seat is open to enhance lifeguard's vision and permit a quick rescue. Rubber bumpers protect deck when chair is in position. An umbrella socket on one side behind seat is an integral part of chair frame.

Paddock's **EZ Set II Starting Platform** is quickly and easily removable. Platform is rear mounted and has a 20" wide x 21 1/4" long top. A mounting tread shall be positioned off rear legs. At each side of platform, attached to legs, shall be a stainless steel plate on which lane number is displayed with a 4" standard black numeral. Frame and backstroke bar is fabricated from Type 304 or 316L stainless steel tubing.

Also available in Long Reach with 24" setback and PVC grating top.

Paddock's **EZ Set II Track Start Platform** is quickly and easily removable. Its 24" x 32" platform gives competitive swimmers a faster start. Stainless steel mounting tread is positioned off side of platform. At each side of platform, attached to legs, shall be a stainless steel plate on which lane number is displayed with a 4" standard black numeral. Frame and backstroke bar is fabricated from Type 304 or 316L stainless steel tubing.

Also available in Long Reach with 24", 30" & 36" setback and PVC grating top.









#### call 800-849-2729





Paddock's **Ramp Rails** are fabricated from Type 304 or 316L stainless steel tubing with an outside diameter of 1.90" and standard wall thickness of .083". Because they are custom fabricated, we can manufacture any length required.

Outside diameter of 1.5" or wall thickness of .120" is also available.



Paddock hair and lint **strainers** are made from 1/8" Type 304 stainless steel and features a 1/2" stainless steel cover ring with 1/2" thick LEXAN viewport. Lids are machined to eliminate sharp edges and are sealed with a 1/4" diameter rubber o-ring gasket. Locking assemblies permit easy access and closing without the use of tools. Stainless steel drain and vacuum couplings with threaded plugs are provided, along with drilled and tapped gauge connections. The system is designed for 60 psi working pressure. The preforated basket is constructed of 18 gauge Type 304 stainless steel with a 52% open area.



Paddock's **Fast Track Starting Platform** is quickly and easily removable. Its 24" x 32" platform gives competitive swimmers a faster start. Stainless steel mounting tread is positioned off side of platform. Flush with front edge of platform, there shall be a backstroke bar. There will also be two vertical backstroke grips made of Type 304 or 316L stainless steel, positioned 15" on center. On top of platform there are side rails with a removable "wedge" with a 45 degree incline on surface facing forward to pool. Wedge slides uninhibited along guide rails on sides of platform. Lane number displayed with standard black numeral will be visible from all four sides of platform. Frame and backstroke bar is fabricated from Type 304 or 316L stainless steel tubing.









Patent Pending

All Paddock Certified Covers can be used on field fabricated outlets, new or retrofit, when designed and certified by a Registered Architect or Engineer.

Standard Features

- \$ ANSI/APSP-16 Approved
- § All Models are NSF Certified
- § 304 Stainless Steel



### Patent Pending

Paddock Certified Flat Cover (FC) or Paddock Certified Drain Cover (DC) is designed and approved with the use of Paddock *Entrapment Safe Sump Box* with *Anti-Vortex Reduction Device (AVRD)*.

Paddock Certified Flat Cover (FC) or Paddock Certified Drain Cover (DC) can be used on field fabricated outlets, new or retrofit, when designed and certified by a Registered Architect or Engineer.

Standard Features

- § ANSI/APSP-16 Approved
- § All Models are NSF Certified
- § 304 Stainless Steel
- § Suction Outlet Fitting Includes Anti-Vortex Reduction Device



### PO Box 11676 (29731)

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