

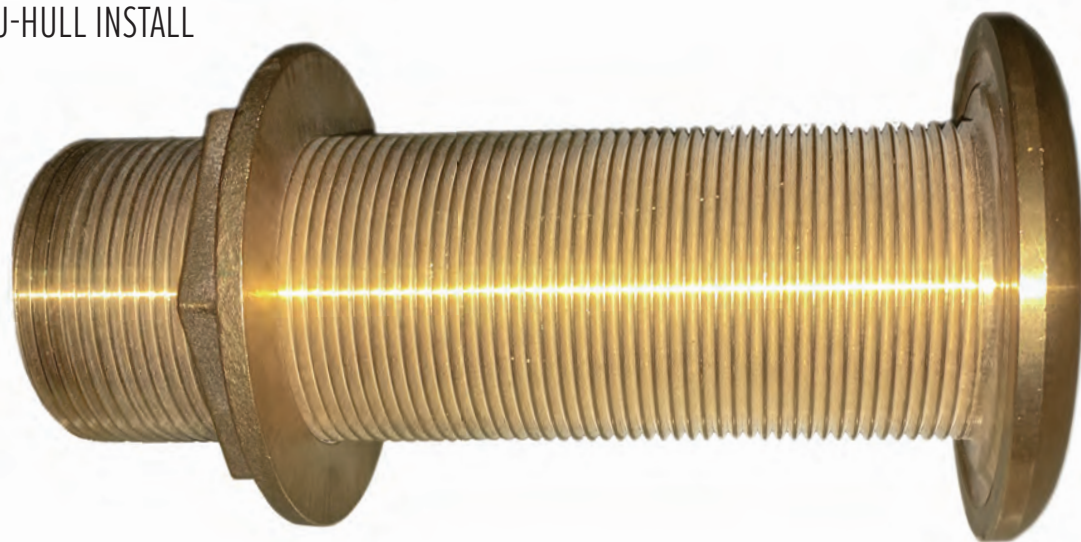
A SOUTHERN BOATING MAGAZINE SUPPLEMENT

HAUL-OUT GUIDE



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BOATS AND HOLES

When you have to install a thru-hull, do it right the first time.

By Frank Lanier

Most any boat maintenance guru worth his Veda will advise you to avoid adding additional thru-hulls if at all possible. Tapping into an existing discharge or intake thru-hull is often recommended but may not always be an option. While drilling a hole in your boat's hull is not ideal, the actual process to install a new thru-hull is pretty straightforward. Let's walk through a hypothetical installation of an air conditioning system that requires two new thru-hulls, one that's below the waterline intake and the other above the waterline discharge.

Preparation

American Boat & Yacht Council (ABYC) standards call for the installation of a seacock on thru-hulls located below the vessel's maximum heeled waterline. For the purpose of this article, we'll say the discharge thru-hull does not require a seacock; however, the raw water intake thru-hull (located below the waterline) does.

WHEN IS A SEACOCK NOT A SEACOCK?

Many builders utilize inline valves attached directly to the thru-hull. However, there are a number of problems associated with this approach. To start with, in-line valves use NPT (National Pipe Taper) threads, which are not compatible with the NPS (National Pipe Straight) used in most thru-hull fittings (unless the thru-hull fitting is machined with "combination thread"). Installing an in-line valve onto an NPS thru-hull fitting creates a mismatch of threads resulting in a weaker, less waterproof joint (due to less thread engagement). As it has no mounting flange, an in-line valve can turn or loosen from the thru-hull fitting due to vibration or through normal use. Finally, unlike proper seacocks, in-line valves are not fitted with grease nipples, bonding wire tabs or drains, each of which can create potential maintenance and winterization issues.

The discharge thru-hull for our example will be bronze. The seacock will be a typical flanged bronze unit with a compatible bronze thru-hull, although Marelon polymer seacocks and thru-hulls would be another option. Just keep in mind that the seacock and thru-hull must always be of the same material.

When planning the installation, choose a location that provides good access to the thru-hull. For our intake thru-hull, verify that the seacock can be accessed quickly in the event of an emergency and that the handle can be fully operated (i.e., no frames, bulkheads, etc., that block the throw of the handle).

In addition, avoid locating the thru-hull in front of a depth transducer or knot log, both of which could be affected by the turbulence a thru-hull generates.

Once you've identified a suitable location, mark the center of the thru-hull and drill a small pilot hole from inside the vessel. This gives you one last chance to check the location on the outside of the hull to verify all is well prior to cutting the hole.

Hole saw time

Select a hole saw the same diameter or slightly larger than your thru-hull, one with a pilot drill bit, which prevents the hole saw from walking when drilling. Using the small location hole you drilled as a guide, start drilling from the outside of the hull and be sure to keep the drill perpendicular to the hull surface. Drill until the pilot bit of

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THRU-HULL INSTALL (continued)

the hole saw penetrates the hull, then move inside and finish drilling the hole. Smooth any rough edges of the hole with sandpaper.

For a cored hull, excavate the coring around the hole to a depth that encompasses an area at least as large as the thru-hull or seacock flange. Then fill the void with thickened epoxy and allow it to cure before proceeding. This epoxy compression ring provides a solid base for the thru-hull and prevents water from entering the core.

Backing plates

A backing plate provides additional support to the hull and a flat mounting surface for the thru-hull nut or seacock flange should there be any hull curvature. A fiberglass backing plate glassed into the hull is the ultimate solution, however marine-grade plywood is commonly used and perfectly acceptable.

Backing plates should be two to three inches larger in diameter than the thru-hull nut or seacock flange. Cut a circular backing plate from 3/4-inch marine plywood, then drill a hole in the center with the hole saw used to drill the thru-hull hole in the hull.

Use a sander or wood rasp to shape the backing plate as needed to match the curvature of the hull. Once fitted, mark the backing plate so you can properly orient it later.

Test run

Always dry fit the thru-hull/seacock prior to final installation. Remove the backing nut and insert the discharge thru-hull from the outside. On the inside, fit the backing plate over it, then install and snug up the flange nut.

The intake thru-hull will screw directly into the seacock. Remove the thru-hull nut, insert the thru-hull into the hull, fit the backing plate, thread the seacock onto the thru-hull, and tighten until snug.

For bronze thru-hulls, a special tool called a step wrench is used to grip the ears inside the unit and hold it securely during tightening. A wedge of plywood inserted in the thru-hull also works well in a pinch.

Once inserted into the seacock and moderately tightened, there should be a sufficient length of thru-hull inside the seacock but not enough that the thru-hull bottoms out.

If the thru-hull is too long, cut it to length. If the thru-hull is too short, use thinner plywood (1/2 inch, for example) to construct the backing plate.

Most flanged seacocks have three mounting holes to prevent the seacock from turning once installed. There are two acceptable methods to secure the seacock. The first is to drill holes through the backing plate and hull (using the flange as a guide), then install bolts through the hull and secure everything together.

The second is to screw the seacock flange to the backing plate only. This is the option we'll go with in our example. Regardless of the method chosen, ensure the



mounting bolts or screws are of the same material as the seacock. Either stainless steel or bronze is acceptable when mounting nylon seacocks.

Installation

Once the dry fit is complete, disassemble everything and seal both backing plates with three to four coats of epoxy and allow to dry. You'll need a second set of hands to hold the thru-hull in place during installation and while tightening. Apply a generous amount of marine-grade sealant (polyurethane or polysulfide) to the thru-hull's mushroom flange, then insert it into the hull.

On the inside, apply sealant to the hull (around the inserted thru-hull) and hull side of the backing plate. Slide the backing plate over the thru-hull, orient as required and press down, bedding it to the hull.

For our discharge thru-hull, the next step is to add a thick bead of sealant to the top of the backing plate hole around the thru-hull, install the thru-hull nut and tighten snugly. You should see a ring of sealant ooze from beneath the thru-hull nut.

For the intake thru-hull, apply sealant to the seacock's flange (again, enough to see "squeeze out" all around once tightened), and then thread the seacock onto the thru-hull and tighten.

Once the seacock is properly positioned and tightened, use the flange as a template to drill the mounting holes into the backing plate. Be sure to drill into the backing plate only, not into the hull (use a drill stop or piece of tape attached to the bit to prevent this). Clean the mounting holes of debris, add sealant to the holes and threads of the mounting screws, then install.

Once the installation is finished, fit the seacock with an appropriately sized tailpiece/hose barb (using thread sealant) and attach the cooling system intake hose to it. Attach the air conditioning discharge hose to the hose barb of the overboard thru-hull, and it's *pa'u hana!* 🌊



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SEE CLEARLY NOW

Refurbish or replace blurry and worn clear enclosures to improve your view.

By Doug Thompson



While under way, if you confuse a scratch on your boat's enclosure with a buoy in the channel, then it's time to repair or replace your acrylic, vinyl or other type of clear marine enclosure. The scheduled down period during haul-out or any time when convenient at a marine service yard gives the professional the time to do it right. Today, the choices of clear enclosures are myriad and include products made of acrylic, polycarbonate and vinyl.

As a material's primer, acrylic enclosures are semirigid and include brands like EZ2CY. Polycarbonates fall under brands such as Makrolon, and clear vinyl includes CrystalClear, Regalite and Strataglass. Each has its own distinct attributes and applications.

Acrylic

In the sub-tropics like The Bahamas and South Florida, boats must endure high humidity and temperature swings, and that's where acrylic works the best. Acrylic does not fade or yellow over time, and you can also buff out scratches. "EZ2CY is 80-gauge acrylic and it doesn't roll, but is made to lift up," explains Andy Flack, project manager for Canvas Designers in Riviera Beach. "The panels pin to the roof or the bridge when you don't need them. Because of the thickness, it can withstand a lot more air pressure when under way and holds in the cool air if you use an air conditioner."

For boats already equipped with EZ2CY enclosures, the refurbishing and buffing process during haul-out is simple. "Once at the yard, do an inspection and if it's scratched, have the yard take it out and send it to your EZ2CY dealer," Flack recommends. "The dealer will have it buffed and polished, then hang it or store it and bring it back to the boat looking like new. Then it can be re-installed so it's perfect when the boat comes out of the yard."

Vinyl

Many boat owners need enclosures that can be rolled up out of the way, and that's where clear vinyl works well. Clear uncoated vinyl is pliable so it's easy to roll up, but users must take care because it is easily scratched. Strataglass incorporates the scratch-resistant coating VueShield that helps reduce scratches. Uncoated vinyl is less expensive than coated vinyl, and both products must be handled carefully so they don't become wrinkled or creased. In addition, vinyl will become yellow or hazy over time.

Polycarbonate

Polycarbonate enclosures like Makrolon are semirigid, so they can't be rolled up and must be pinned or unzipped and removed. Scratch-resistant coatings are used to protect the surface. Polycarbonate can be expensive; however, it offers excellent visibility. Polycarbonates are popular in northern climes and Great Lakes areas where the sun and temperatures are not as extreme as in tropical climes. Because it's a petroleum-based product, polycarbonate can yellow in tropical weather.

Maintenance

Once the new enclosures are in place, proper maintenance can help them last a long time. In the saltwater environment, the primary goal is to displace the saltwater by not using harsh chemicals. Soapy water is the strongest solution you should use because many cleaners use ammonia or alcohol, which will break down acrylic and cause it to haze and crack. Once that happens, you can't buff it or sand it out.

"Have a separate set of cleaning tools that don't get used anywhere else on the boat," Flack instructs. "You don't want to pick up any dirt or debris on your cleaning tools that could harm the glass."

Fasteners

How the enclosures are fixed to the boat is another choice that boat owners must make. Haul-out is also the time to service the zippers, Velcro and fabric borders on your enclosures.

Fasteners such as slides, snaps and zippers are used with acrylic or vinyl products from companies like Sunbrella and Herculite. Canvas Designers uses Stamoid, a dimensionally stable vinyl from Serge Ferrari. "We then connect the glass to the boat using a track-to-track application," says Flack. "There is a track in the hard top of the boat, and there is a track on the coaming of the flybridge. We sew a bolt rope on the top, and the panel on the bottom zips closed."

How often you need to replace your enclosures depends on how often you use your boat. "Some people own boats that are 25 years old that don't have 1,200 hours on them," Flack says. "Some of the sportfishing boats are two years old and have 3,000 hours on them; they run them all over the world." Sportfishing boats that compete in international tournaments often experience a worn or broken enclosure in a foreign port, and that's where it can get tricky when trying to repair or replace the panel. The ability to have a replacement shipped to your location is something to consider when purchasing



enclosures. Computer-aided design (CAD) software can store the measurements of your boat's enclosures for just such a situation. "If we put an enclosure on a 72 Viking here in Riviera Beach, it is also stored in CAD," says Flack. "Then if they are down in the Dominican Republic or Puerto Rico and they absolutely tear a panel up, we can make that panel from a computer file. We can ship that panel down to them and be 100 percent confident that it will zip onto the boat." 🐦



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SYNTHETIC DECKING



COOL AS TEAK

New synthetic teak decking keeps feet cooler.

By L.N. Evans

The beauty of real teak wood on boat decks is undeniable, but look-alike decking made of synthetic substances has become a popular trend for many reasons, including its affordability, low maintenance, nonskid appeal, uniform appearance, and soft feel underfoot. The downside has been its tendency to absorb heat, which makes the product uncomfortable for bare feet in southern boating locales that have continuous sun exposure (e.g. Florida). Over the years, however, technological improvements have enabled today's product offerings to not only be cooler underfoot, but also to benefit greatly from the type of materials used, manufacturing processes, color options, and ease of installation. Some DIYers may have the skills and patience to tackle installing new synthetic decking themselves, but an annual haul-out is the ideal time to add new decking to your boatyard's project list.

If your boat is overdue for new decking, take a look at some of the hottest, cool-comfort synthetic teak decking offerings on the market.

Flexiteek

This company has offered synthetic teak boat decking material since 2000, is the OEM supplier for many boat builders and has distributors in 38 countries. The company's newest advancement is Flexiteek 2G, which was in development for two years and is the manufacturer's "Next Generation of Decking" for its lighter weight and ability to cool 30 percent faster than traditional composite decking. Flexiteek comes in eight wood colors with black, white or gray caulking. flexiteek.com

Isiteek is the company's product made specifically for the do-it-yourselfer to install on smaller areas. isiteek.com



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PlasDECK

PlasTEAK, Inc. introduced its synthetic boat decking PlasDECK in 2005, and its popularity has been gaining momentum ever since. Offered in 25 colors and custom variations, the new PlasDECK Eco Series utilizes leftover scraps from manufacturing that are recycled for the bottom layer and makes the product even more affordable as well as eco-friendly. PlasDECK Eco Series has the identical look and feel of the standard PlasDECK boat decking, but the family-owned, Made-in-America company passes on the manufacturing cost savings directly to the customer. Product cost is further reduced by offering it in large sheet form, which is especially advantageous for resurfacing large deck spaces like houseboats, pontoons or boats with large decks. PlasDECK Eco Series won the Innovation Award at the 2018 Miami Boat Show.

PlasDECK CoolTEAK is designed to remain cooler than other PVC decking materials, which makes it ideal for swim platforms. CoolTEAK is currently only available in pre-made mats from templates and is not for DIY applications.

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Dek-king

Dek-king 2G is the company's next-generation premium synthetic teak decking that's 30 percent cooler underfoot and 32 percent lighter than previous 1G product offerings. Dek-king's lifelike graining that differs between planks replicates natural wood to provide a finish that's nearly indistinguishable from real teak.

Wilks is the British family-owned manufacturer and supplier of Dek-King synthetic teak decking. Flexiteek International announced in a press release earlier this year that an agreement has been reached to acquire Wilks, and the merger is planned to finalize later this year. Flexiteek plans to retain the Wilks manufacturing premises in Essex, northeast of London, England, along with all employees, combining the skillset of both companies to serve the international marine market.

The acquisition will facilitate the supply of synthetic teak and fendering to a list of OEM clients that include Royal Huisman, Hanse Group, Jeanneau Beneteau Group, Princess Yachts, Gulf Craft, Sunseeker International and X-Yachts. dek-king.com 🐦



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POWER DOWN

Five ways to cut down on amp usage

By Zuzana Prochazka

Most modern marine equipment has evolved to require much less power, so when you're in the boatyard this spring, check out how you can do more with less.

Radar



Arguably, you use radar under way when your engines are running, so who really cares how much power it's using? On the other hand, if

your electronics suite is due for an upgrade, why not consider a unit that's more efficient? In standby mode, radar doesn't draw much, but when it's transmitting, the power needs are quite high. Consider one of the new units like the Simrad Halo that comes with either open or closed array antennas. This solid-state, pulse compression radar delivers a mix of close-in and long-range detection and excellent target definition with low clutter. It has five modes to help process a variety of targets and a range from 48 to 72 nautical miles. The Halo is available for both 24- and 12-volt applications, and an added bonus is its ultra-low electromagnetic and radiation emissions. That means you can put one on the flybridge with you and not worry too much about scrambling your brain when the radar is running.

Climate Control



Air conditioners create the greatest energy loads aboard, and chances are the older your system, the more power it takes. New units from companies like Dometic are smaller,

self-contained and quieter with vibration-isolation mounts. Their high efficiency rotary and scroll blowers use fewer amps and notably reduce fatiguing sound.

Italian company Termodinamica (TMD) offers 24-volt DC units that don't even need a genset. Made with titanium heat exchangers, the TMD units tout a power consumption rate that's 50 percent lower than other comparably sized units on the market. Many air conditioners today also have an ECO

mode where they ramp down if they are running off of batteries, via an inverter, and the battery voltage starts to fall. Adding window shades and tinted glass will also relieve the pressure on air conditioners and may even help refresh your interior design.

Refrigeration



The fridge also is a major power hog. Refrigerator efficiency has to do with the type of unit (air, water or keel-cooled) and the quality of insulation around the box. Frigoboat has highly efficient fridges in both 12- and 24-volt applications with refrigerator, freezer or combo solutions. Their unique keel-cooled system is reliable, efficient and quiet with no pump or fan to create noise, and it doesn't need winterizing. Check the

age and condition of your insulation, too, or just tear out the old stuff and install some stainless steel drawers that will also upgrade the boat's aesthetics.

Isotherm offers plug-and-play solutions with their cabinet refrigerators powered by 12/24-volt Danfoss compressors. These units feature extra thick, but still compact, insulation so the boxes stay cold with less power. They even have stand-alone, plug-in coolers for use on deck so you can keep your beverages nearby and not have to open the galley refrigerator as much. These Travel Boxes (shown) also have ECO modes to slow the compressor once the food and drinks are already chilled.

Lighting

Most new boats now come standard with interior and exterior LED lighting, but if your vessel is of an older vintage, it would be worth swapping out your deck, salon and galley lights for new ones that draw less power. Imtra offers a variety of fixtures to help you upgrade the look of your interior including courtesy

lights that create an impressive ambience. As design trends move from direct to indirect lighting, options migrate from down and spot lights to strip and rope lighting hidden behind valences and under furniture. Evolved whites in LED options are now available, so it's not hard to create a warm glow.

Efficient lights include navigation or running lights like those by Attwood, Perko, LopoLight, and Aqua Signal. You're bound to save a few amps with an LED anchor light that you forget to turn off in the morning.

Finally, don't forget those power-hogging heat generators below the waterline. Underwater lights are known as large consumers of power. New developments in optical design, thermal management and marinized electrical components have created lights that are brighter and use less power. Lumishore's thru-hull and surface mount, full color cycling lights can replace older lights and provide better color while they use less power, and they can even be paired with sound to "dance" to music.

That's worth the price of admission alone.



Battery Efficiency

Finally, efficiency comes down to the size, quality and type of your battery bank. Charging with a genset is more efficient than charging with the engines and alternators, but a good battery bank is also important to your onboard power equation. The better the efficiency of a battery, the higher its charge acceptance rate, which is the amount of energy that can be pumped into a battery in a given period. Wet cells are about 60 percent efficient, gel cells 75 percent and AGMs 85 percent. AGMs, especially any of the thin plate, pure lead (TPPL) variants, also have the highest charge acceptance rate, so they will optimize system performance.

How you charge is also important. Charging cool batteries quickly is most efficient, so for banks that are especially depleted, it may be best to charge with engines and the genset simultaneously. As batteries heat up during charging, it takes longer to get that last percent of charge pushed in despite the genset running just as hard as in the beginning.

These are just a few ideas on how you can save power and thereby burn less fuel and shrink your carbon footprint. Some of these are bigger projects, while others are a matter of just upgrading aging equipment. Chances are that some of these systems will pay for themselves down the road in operation costs, fuel and wear and tear on your engines or genset. 🌊

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IN CONSIDERATION OF WATERMAKERS

While once the domain of larger yachts, today's well-engineered and dependable watermakers have trickled down in both size and affordability.

By Ken Kreisler

Now that you have decided to purchase your new boat and are considering options, or you're contemplating a little overdue and much-wanted retrofit, one viewpoint that may help you make the right decision is to identify just how you use your boat and what you can and cannot be without.

That's easier said than done. Practicality is not the province of the boat owner, which is one of the reasons you decided to partake in the lifestyle in the first place. However, should you find yourself taking long weekends away from your home dock or cruising in search of new horizons, you may want to

think about installing a watermaker. But before we dive into several systems from a variety of manufacturers, let's take a look at how they work.

If you still remember some of your high school science facts, you might manage to dredge up something about semi-permeable membranes and the process of reverse osmosis. The former is a structure allowing certain molecules—for our discussion, water particles—to pass through but not others. The latter is the actual procedure.

To boil things down then, watermakers take in salt water and, under pressure of about +/-800 psi, force it through a



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Haul-Out Guide

DESALINATION (continued)

semi-permeable membrane. The result on the other side is the fresh water molecules. Everything else, including all those contaminants you know are thriving in the water is held back. The impurities are then pumped back overboard while a new measure of salt water is introduced for processing in continuing cycles. In the end, about 10 percent of the original amount is retained. This last fact will be important to help you select the right unit to fit your needs in terms of how much water you actually require.

“As you operate a watermaker while underway or dockside, and depending on the kind of water you are running in, you may have to adjust the pressure your particular unit is operating at,” says Greg Newman, the East Coast, Caribbean, and South America sales manager for Parker Hannifin, Sea Recovery’s parent company. “This prevents you from overflowing your system.” In other words, it avoids making more water than you need and putting unwanted stress on the system.

To avoid this, consider installing a fully automated unit to prevent unnecessary trips to the engine room or dedicated space where your watermaker is located. In fact, a remote touchscreen control panel is definitely the way to go. “You can start it up from this panel and monitor all the functions and even use your iPhone if you have our system connected to the network,” says Dometic’s Ben Koppenhoefer. “Every machine that we make can be mounted in a frame design that can be bolted together as well as having the ability to be taken apart for remote mounting. This is especially helpful for any new boat options list where the vessel presents limited space. This especially holds true for boat owners who are considering retrofitting as well.”

As the heart of any of these systems are its membranes, and as most manufacturers agree that the pressure limit should be around 850 psi, the flow rate limit comes into play. “It’s important to know the rate of your particular unit. For example, if you are running your watermaker at 1gpm and you hit your threshold before the 850-psi mark, there is no need to ramp things up as this will put unwanted stress on the membrane,” explains Koppenhoefer. “It all depends on the kind of water you are in, and there is a big difference between brackish and saltwater areas.”

The majority of watermakers will require an AC generator for power and, again, with the wide variety, size and output available, you should be able to match a unit for your needs.

Maintenance involves two basic actions: changing the oil in the high-pressure



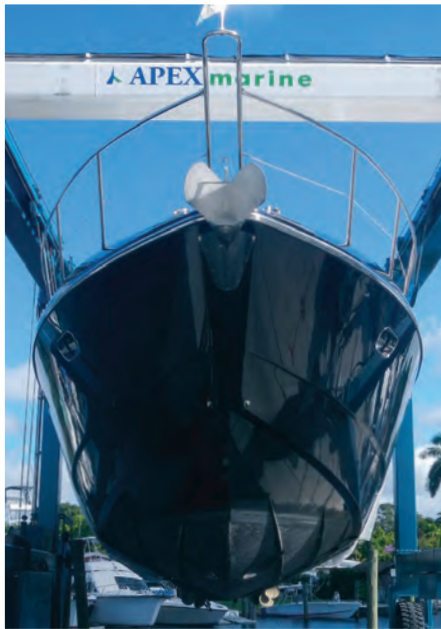
pump, usually after 500 hours, and the freshwater flush filter at four month intervals. The membranes have longevity—5 to 10 years can be expected—but for the complete regimen, it’s always best to check with and follow the manufacturer’s recommendations. “With our units and during general operation, for example, we have auto alarms for dirty pre- and regular filters that will turn the unit off and indicate it’s time for a change,” says Newman. “The system will also divert any dirty water on startup to discharge and keep only the freshest for use aboard.” To keep the membrane from fouling, your system must have an automatic back-flushing mode that will take care of this on a weekly basis.

Today’s watermakers are high-tech, sophisticated, safe, and easy-to-use systems with convenient monitoring, are NMEA 2000 compatible, have touchscreen interface displays, remote controls, and are designed with modular, space-saving profiles and built-in reliability. With the wide selection available, it is just a matter of choosing the right one for your needs. 🌊





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DOCK PLAN

Regular maintenance on your dock will keep it safe for your boat and guests.

By Steve Davis



It wouldn't be wrong to say every boat owner has at least an ounce of pride in their vessel no matter its condition, with most taking great strides to make sure it's cared for and in good shape. No one wants to miss the opportunity to get out on the water when the time is right. In addition to keeping the boat up to snuff, the same goes for its home port: the dock.

If you're lucky enough to own your own dock or even if you rent one, it's important to maintain the structure and add features that protect both the boat and those who walk on it.

Inspect it

Safety should always be in the forefront. Each time you walk the dock, look at it with an eye for imperfection. Look for nails or screws backing out of wood planks and for loose and rotting boards. You don't want the kids or guests to trip and fall or catch splinters in their feet.

Is there anything missing? Take a look at the structure both above and below the waterline. Are fasteners, bolts, nuts, and cross beams solid? When you jerk the dock, does it feel like the pilings are loose? Are lashing straps tight around the floating platform? If you think "I should fix that," then don't wait. Plan to do it as soon as possible.

Keep it clean

Besides keeping your dock clear of debris, toys and loose gear, clean it. A stiff scrub brush with biodegradable soap or environmentally safe cleaning solutions like baking soda paste are usually effective, but a pressure washer makes the job easier. Remember that using a pressure washer can "burn" the wood if the spray nozzle is too close. Afterward, the wood will be softer and splinters will appear, so take a sander to the boards and smooth out the rough spots. Also take time to sand out any rust spots on steel parts or supports.

Don't forget to remove growth as well. Barnacles and other creatures as well as plants cause damage that can't be seen until they're removed. A putty knife usually does the trick, but scrub the area with an abrasive pad after removal to make sure.

Fix it

Don't wait to make repairs. Murphy's Law will find its way, and covering the dock with carpet or such only hides what will continue to get worse and cost more later. If there are damaged areas in a wood dock, use marine putty or wood filler to repair holes or splits. Replace screws or nails if they're backing out, and if they are, evaluate if the board needs to be replaced.

It doesn't matter how much the dock is used; hardware will loosen and rust with weather. Lubricate moving pieces such as chains, and replace rusted parts when necessary.

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Haul-Out Guide



SPRUCE UP YOUR DOCK

Seal it



Wood docks, in particular, are vulnerable to the marine environment through moisture, sun and changing temperatures, so use only treated lumber. Once the dock is cleaned, repaired and sanded, apply a waterproof sealant that is environmentally friendly. There are sealants

available that are low volatile organic compounds (VOC), but check local regulations before applying. If you remove the dock during the winter, allow the sealant to completely dry before installation.

Dress it up

Now that the dock is clean, safe and secure, trim the dock with a few accessories. Protect the boat from accidental bumps by attaching dock bumpers and rub rails. The areas that cause the most damage are the corners, and bumpers come in a variety of configurations and lengths as well as materials. They mount in a number of ways from along the sides, corners, flush with the top, around pilings, and more.

Another safety feature is to add lights. "Docks and seawalls can be precarious and dangerous areas, and any additional lighting is beneficial for accident prevention," says Mick McDonald of Lumitec. "Lighting adds an additional level of security to your property to help protect expensive investments." Lights also add ambience to your dock and property and attract marine life to watch on a warm summer evening.

Chances are, your dock is used for a variety of activities as well as a place to store gear. If you inspect it regularly and keep it solid, clean and safe, it'll be the perfect home for your boat and a great place to hang out for many seasons to come. 🦋



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