DOCK DESIGN OPTIONS

wahoo DOCKS

Dock Design Options

Discover the *Difference*

www.WahooDocks.com

Design Options Overview

Wahoo Docks custom builds more unique docks for more locations throughout the world than any other dock manufacturer. We design docks to suit a wide range of tastes, needs, regulatory requirements and environmental conditions. Yet, in each and every installation, the same attention to detail, proprietary structural materials and exceptional design standards are maintained to ensure *unparalleled durability, low maintenance* and *aesthetic appeal.*

Regulatory criteria typically drive the general design of a dock, especially regarding its overall dimensions. However, even in the most stringent cases, customers can personalize their docks through shape, colors, materials and other options to satisfy their particular needs and tastes. Each dock is uniquely their own.

The docks in this brochure represent only a sampling. In fact, we rarely build two docks that are exactly the same, but these examples should provide a good foundation to help you make educated design decisions about your dock—specifically, with regard to layout, roof style and anchoring method.

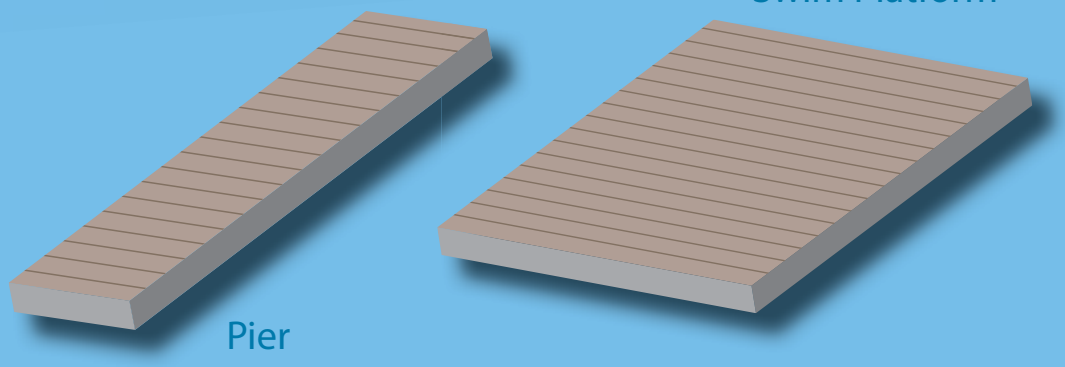
Dock Layouts

I don't build to have clients. I have clients in order to build.
Howard Roark from Ayn Rand's *The Fountainhead*

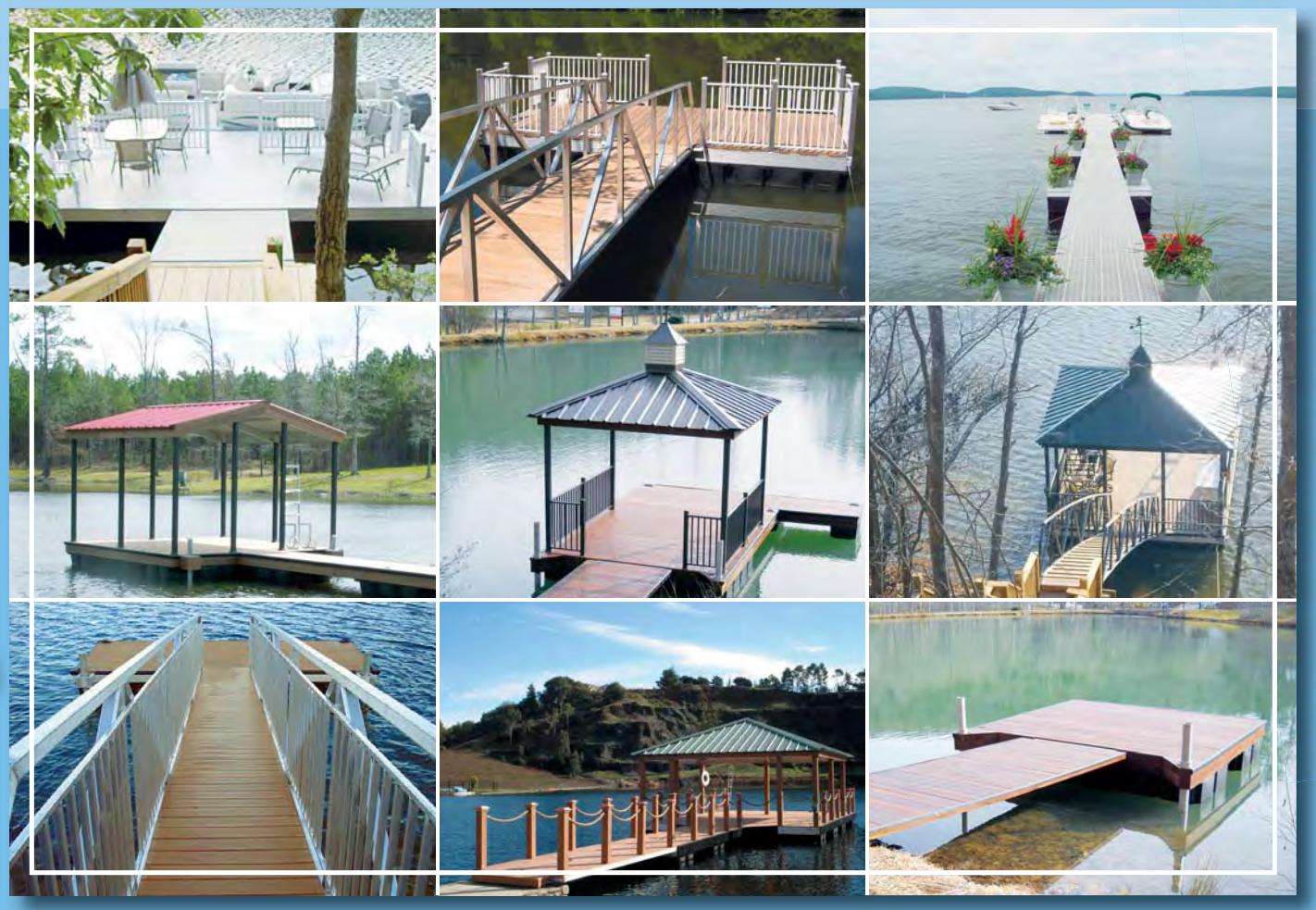
The layout, or footprint, is often the most critical element to a dock's utility and is generally driven by the expected boating or recreational needs of a user. A waterfront property owner with no boats, seeking a dock for fishing, swimming or lounging purposes may opt for a Platform configuration. Alternatively, if one's expectations are to own one or two boats, a traditional Single or Double Slip Dock may be more suitable because of the protection and convenience a slip can provide. Moreover, waterfront property owners with one boat and one or two personal watercrafts (PWC) have popularized our Side Slip Dock layout because of the generous water-level lounging area. As you can imagine, there are endless combinations around these basic layouts, but the vast majority of all docks are based on the following basic footprints.

Platforms

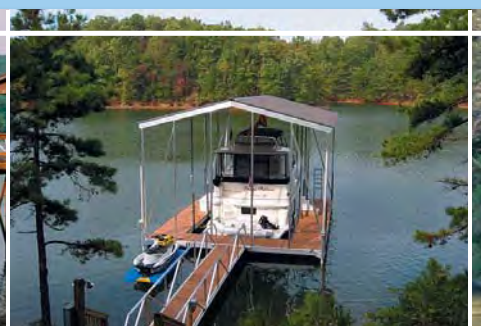
Swim Platform



Pier

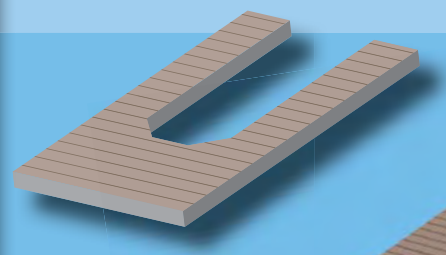


Single Slips

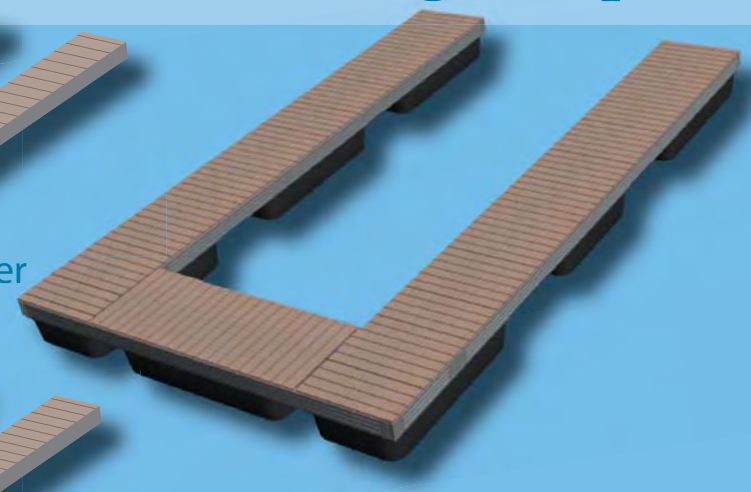



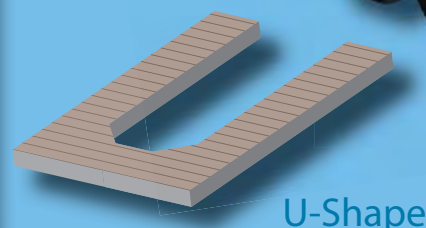




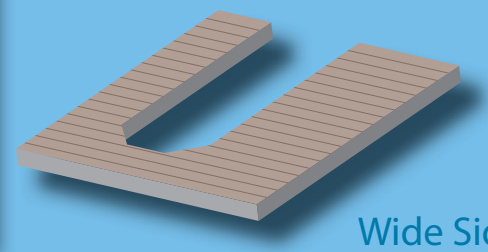



Extended Header

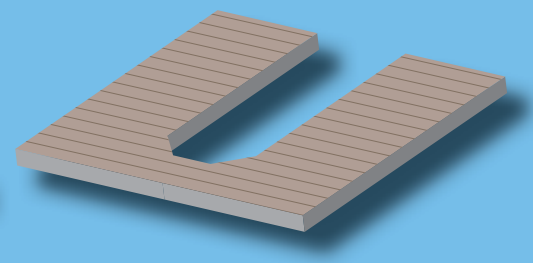




U-Shaped

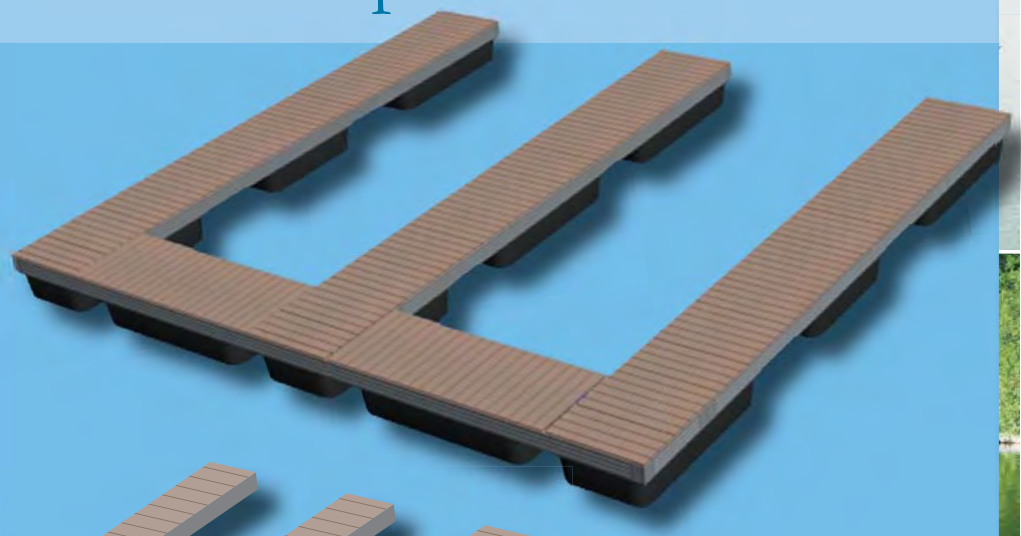


Wide Side



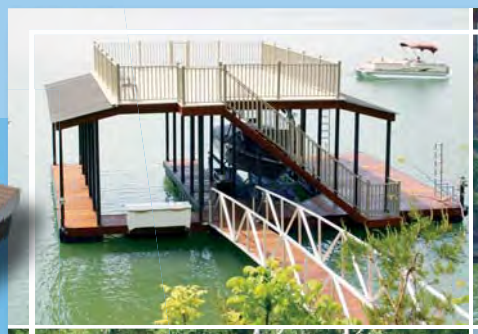
Double Wide Side

Double Slips



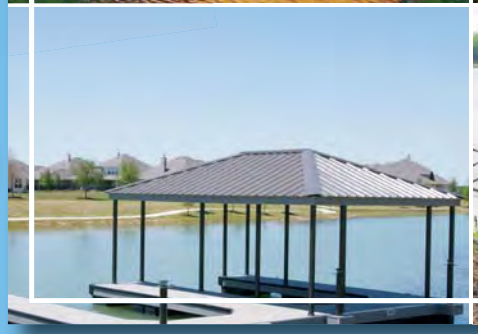
Double Slip

Double Slip Wide Side

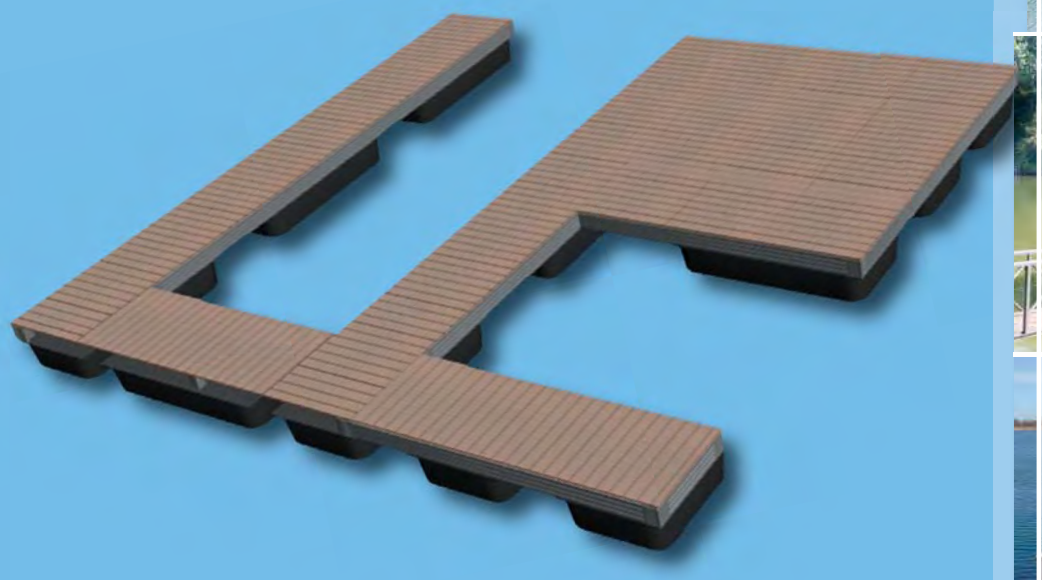


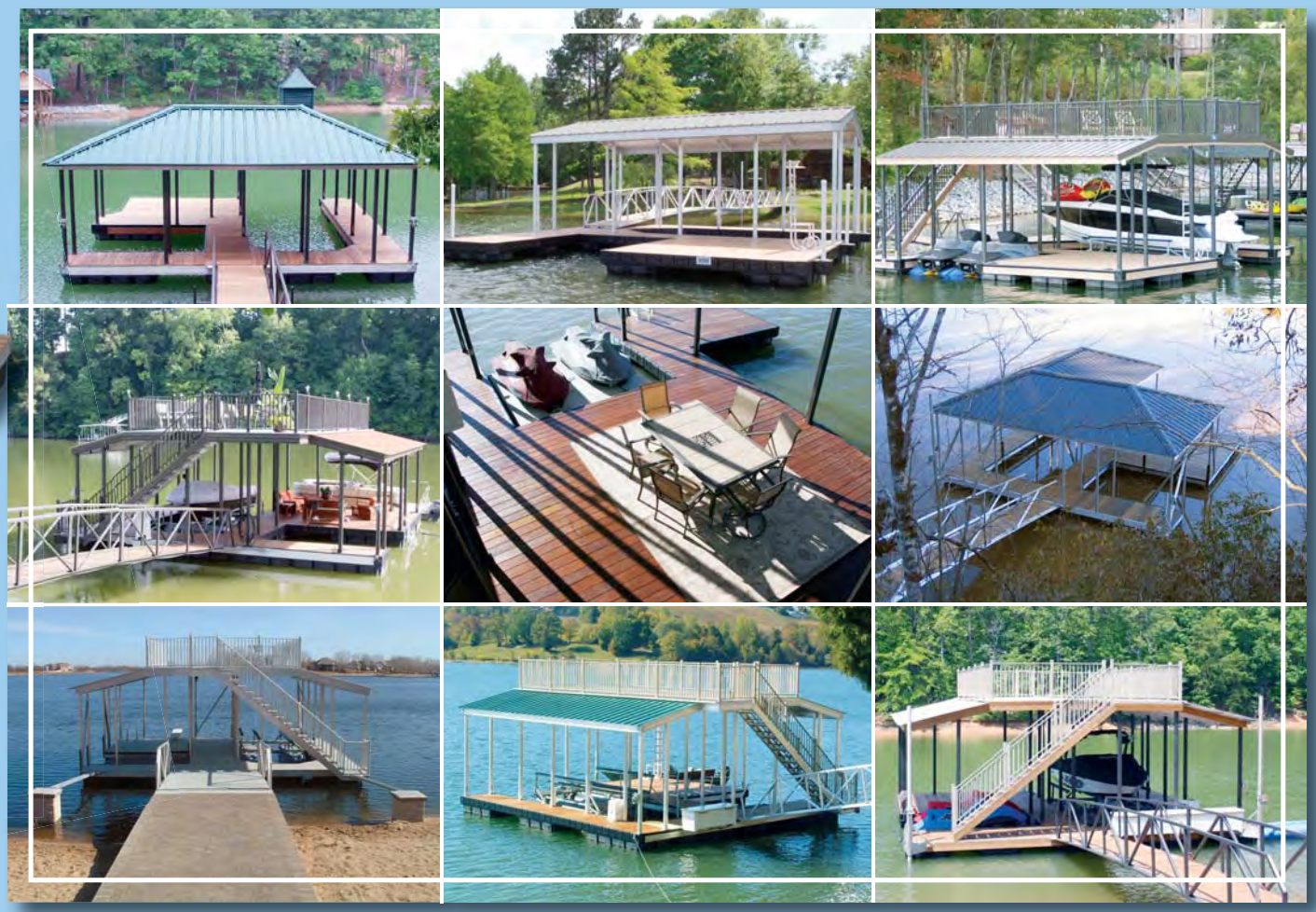




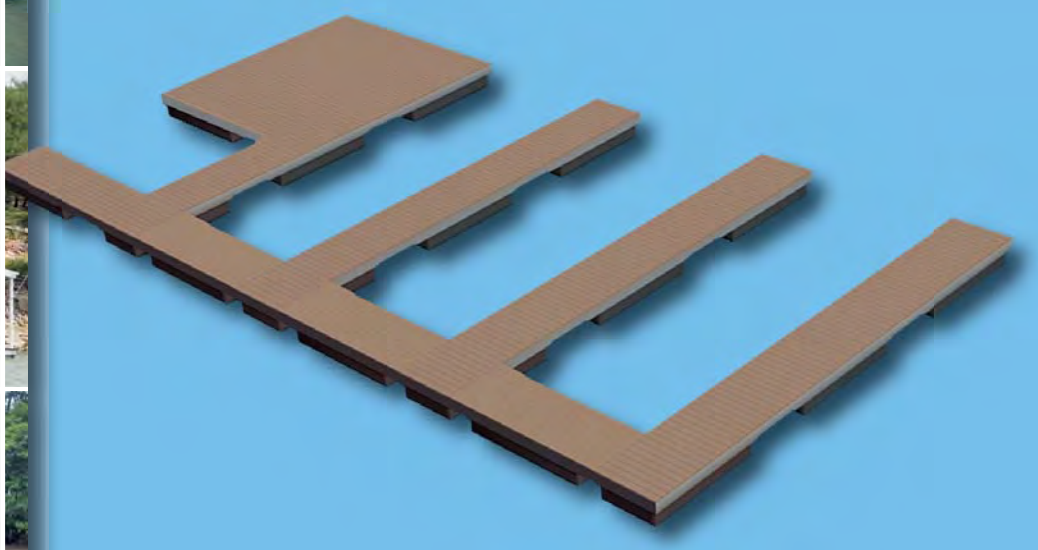


PWC Slips

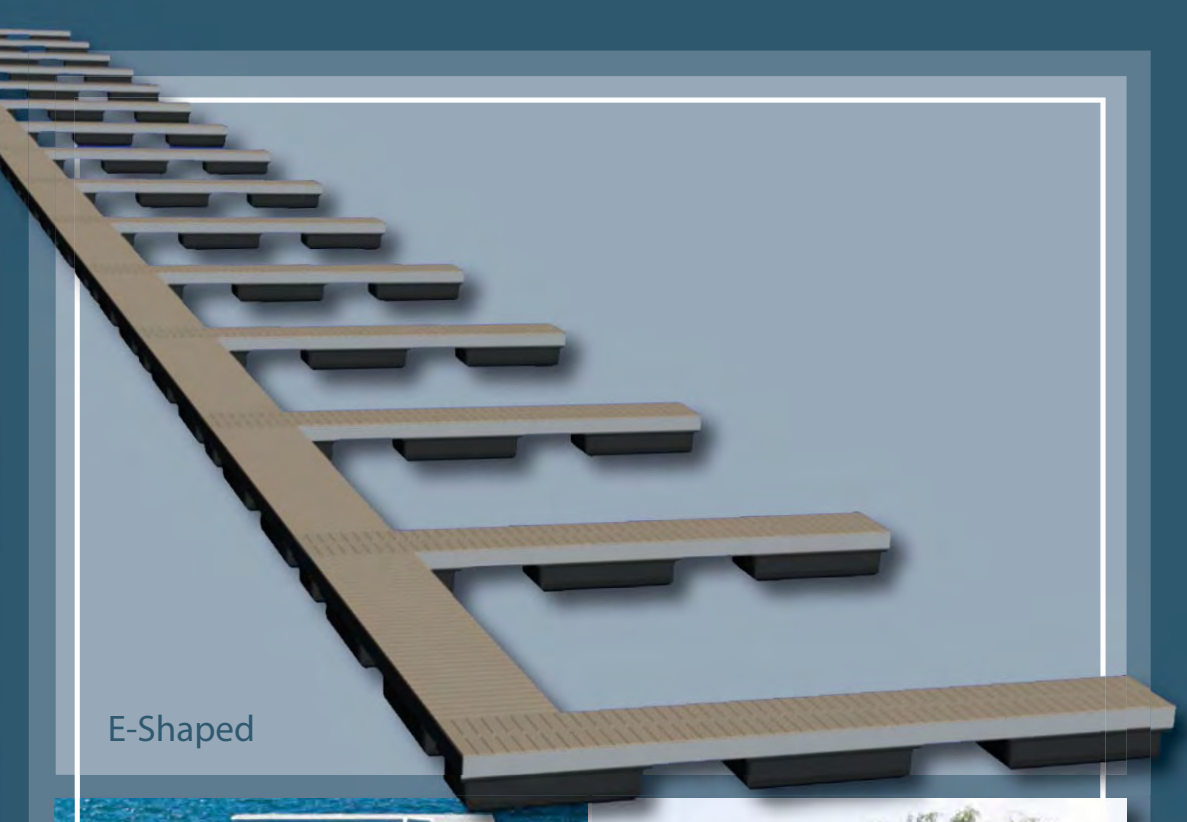




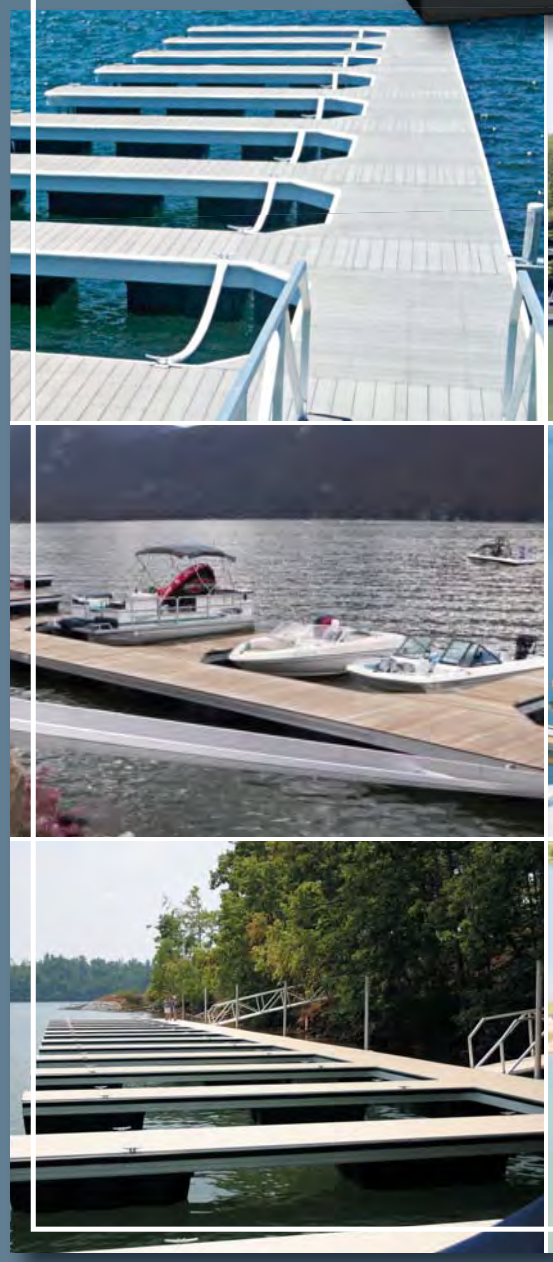
Custom Slips

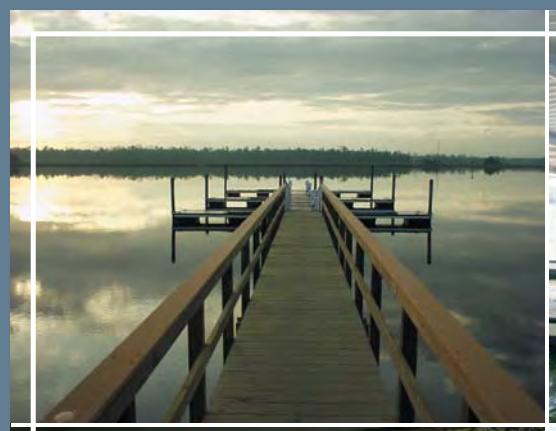


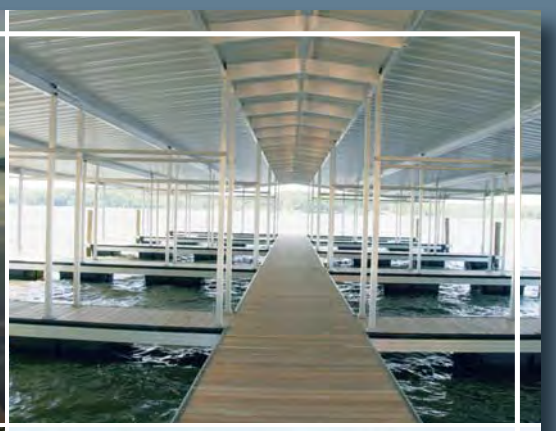
Commercial Dock Layouts

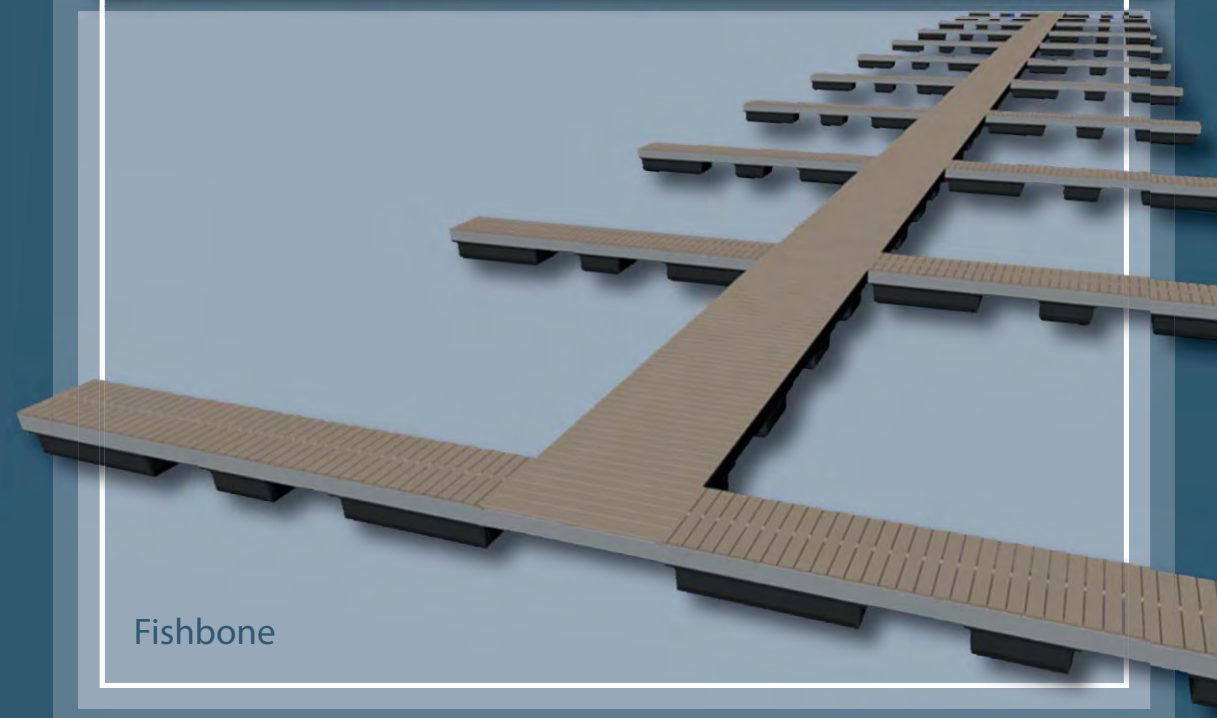


E-Shaped









Fishbone

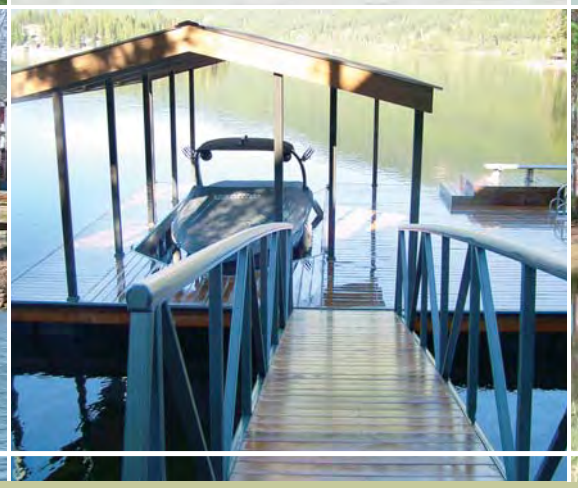
Roof Styles

Excellence is not a skill. It is an attitude.
— Ralph Marston's *The Daily Motivator*

Wahoo categorizes roof types into three fundamental styles: Gables, Hips and Upper Decks. Within these basic styles, we offer variations to accommodate a range of dock layouts, local nuances and personal preferences. Roof choices are typically made with equal regard given to personal aesthetic appeal, desired utility and cost.

The most economical roofs are our Gables and Hips and between these two options, the Hip roof offers slightly better protection from the elements and is often considered more attractive than the more cost efficient Gable roof. When additional recreational space is desirable, especially when a larger water level footprint is not possible, our Upper Decks offer a great solution. Wahoo Docks pioneered the Sun Deck with Gables style over a decade ago and today this style continues to stand as our most popular roof type.

Gable: A-Frame



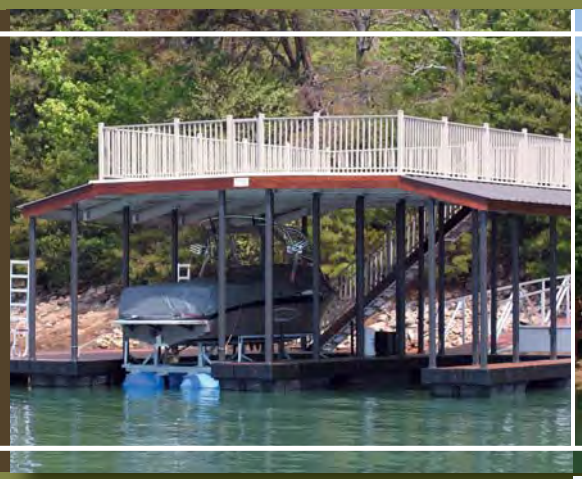
Gable Front-to-Back

Hip

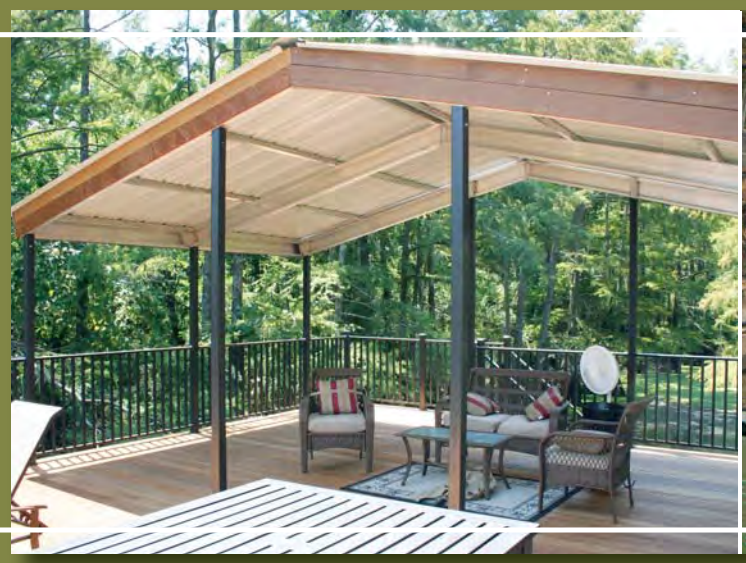
Gable and a Half

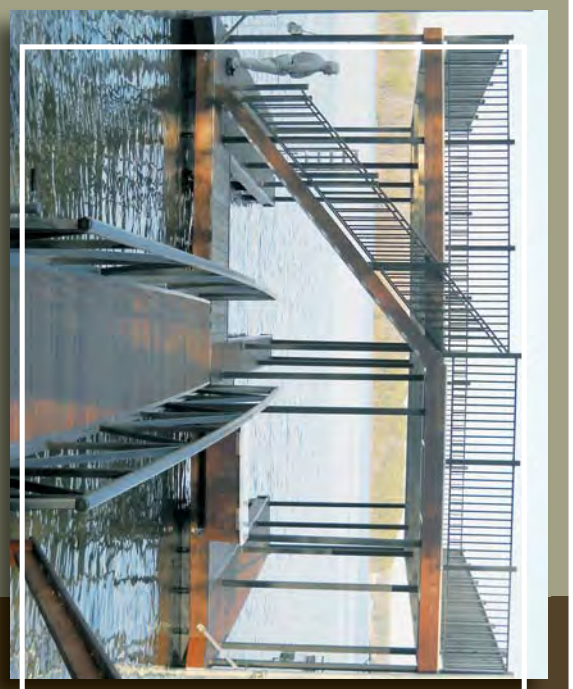
Hip and a Half

Sun Deck with Gables

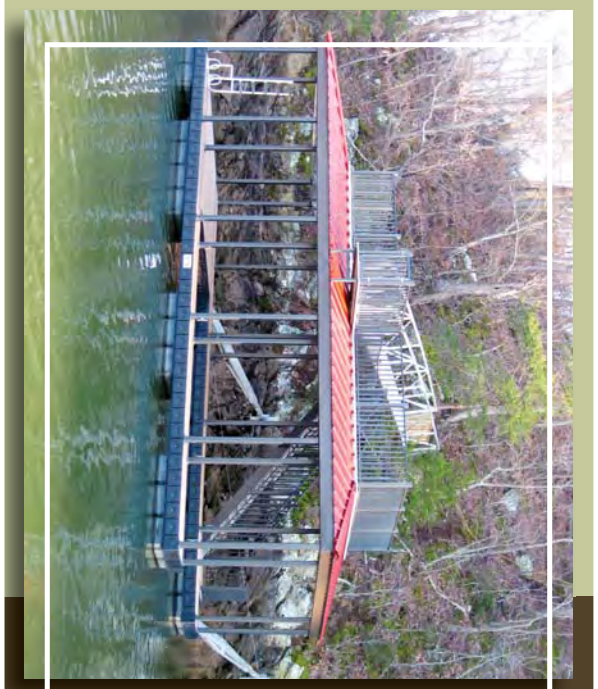


Upper Deck Shade

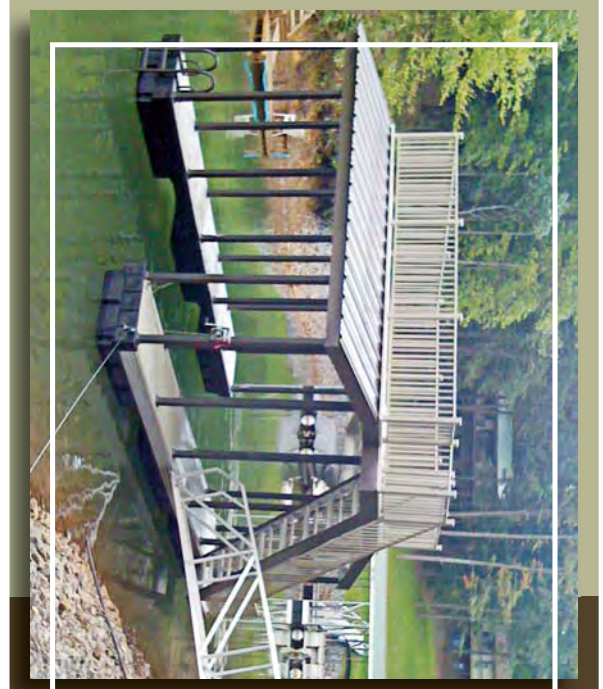




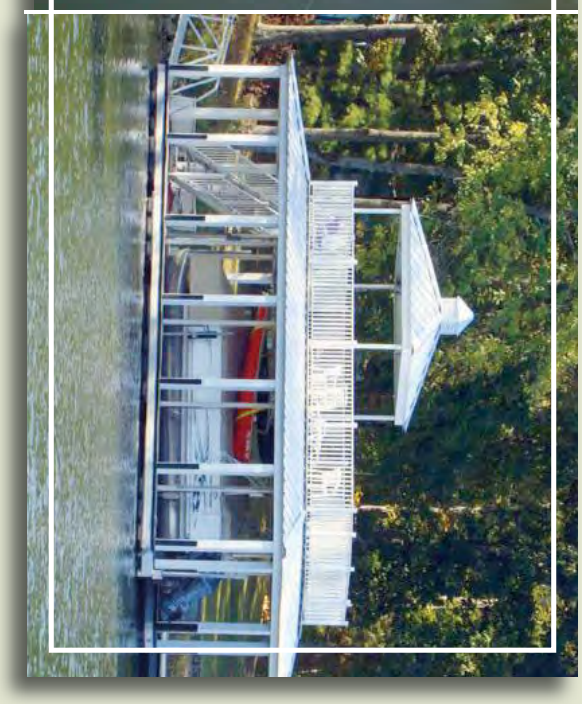
Full Sun Deck



Sun Deck
with Hip



Sun Deck
with Gables:
Front to Back



Anchoring Methods

Be a yardstick of quality…used to an environment where excellence is expected.
— Steve Jobs, Co-Founder, Chairman & CEO of Apple Inc.

The method and quality of anchoring on a floating dock is critical to its durability, longevity and maintenance requirements. For the most part, the anchoring on a floating dock is intended to keep a dock in place and not for stabilization purposes. Although we have used a wide variety of anchoring methods over the years, the vast majority of all docks are anchored using one or a combination of the methods described below.

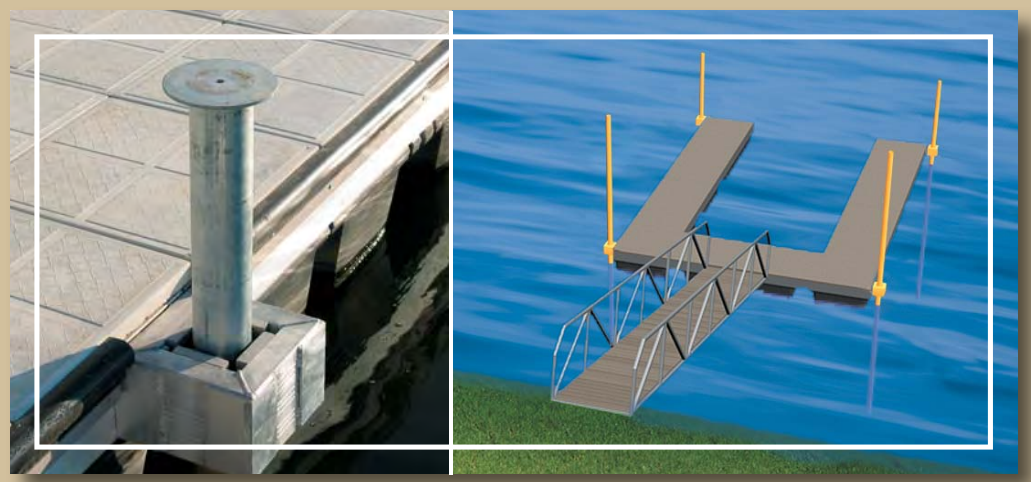
Particular anchoring decision factors include the water depth, the distance the dock needs to reside from the shore, the potential amount and frequency of water level fluctuation, the amount of wind and wave loads that will be placed on the dock, the dock configuration and local regulatory restrictions, among others. Because the anchoring points on a dock are subjected to exceptionally high stresses, we uniquely reinforce our docks at all anchoring locations and use intelligent designs to minimize any stresses that result from the constant, multi-dimensional forces that influence floating docks.

Pole & Sleeve Anchoring

This anchoring method is useful for docks that experience heavy wind and wave loads, but require the flexibility to move toward and away from the shore to follow the water level during seasonal water fluctuations. The system consists of rigid sleeves that are attached to the dock through which slide 4" diameter by 20' poles. Because the sleeves keep the poles vertical, the poles naturally bury themselves into the ground and do not need to be driven unless the bottom is particularly rocky. A winch is commonly secured to the sleeve to reel in a cable attached to the bottom of the pole to facilitate its withdrawal from the ground when the dock needs to be moved.

Pile Anchoring

This a stable anchoring method is suitable for heavy-load locations and is a good option for docks that do not need to chase the water during seasonal fluctuations. Two piling and multi-piling options are common and the piles can consist of a variety of materials including wood, steel, concrete and fiberglass. Docks are secured to piles using either Pile Rollers, which consist of UHMW-PE rollers enclosed in a welded aluminum box (this generates very little wear on the piles), or Pile Slides, which consist of polyethylene slats enclosed in a welded aluminum box.



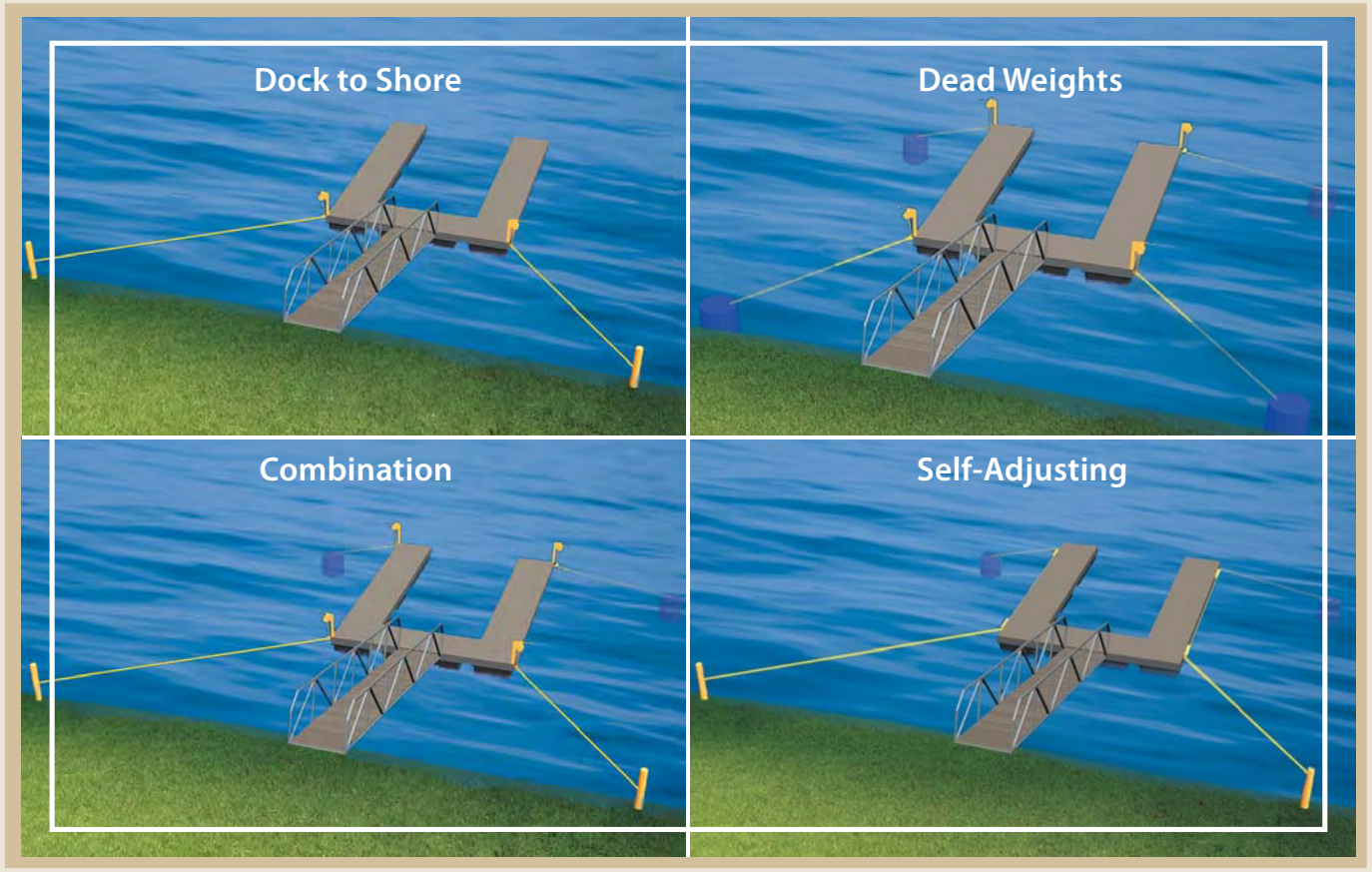
Depth	maximum water depth in which an anchoring system can be used without significant alterations
Fluctuation	amount of fluctuating water level the dock's anchoring system can effectively handle
Action	maximum wave and wind load the anchoring system can manage
Moveable	the anchoring system permits the dock to be moved towards and away from the shore to follow seasonal water level fluctuations
Cost	the relative cost of the anchoring system under typical circumstances
Maintenance	the amount of monitoring/adjusting required to ensure system is properly tuned with fluctuating water levels

Stiff Arm Anchoring

This anchoring method provides a relatively economical, effective means for dock anchoring and is especially suitable when a dock layout runs primarily along the shoreline and the dock does not need to chase seasonal water fluctuations. In all cases, cables running diagonally between the Stiff Arms are required to adequately secure the dock and, in many instances, the gangway provides one 'leg' of the stiff-arm arrangement in residential dock applications. Wahoo incorporates several Stiff Arm designs depending on the expected loads placed on the system and the overall reach required.

Cable Anchoring

This common anchoring method is often the best system for anchoring a floating dock. Not only simple and cost-effective, it is suitable for situations that challenge certain other anchoring methods. This includes areas where water fluctuations are severe or where water depths are extreme. Moreover, it can be used on docks that need to chase the water during seasonal fluctuations. There are four general forms of cable anchoring: dock to shore, dead weights, self-adjusting and combination. The features of each form provide solutions for different applications.



Comparison of Anchoring Methods

Pole	Pile	Stiff Arm
15′	20′+ location dependent	Unlimited
Unlimited	15′+ location dependent	Variable dependent on stiff arm length
Heavy	Heavy	Moderate
Yes	No	No
Moderate	Moderate to High	Moderate
Low	None	None

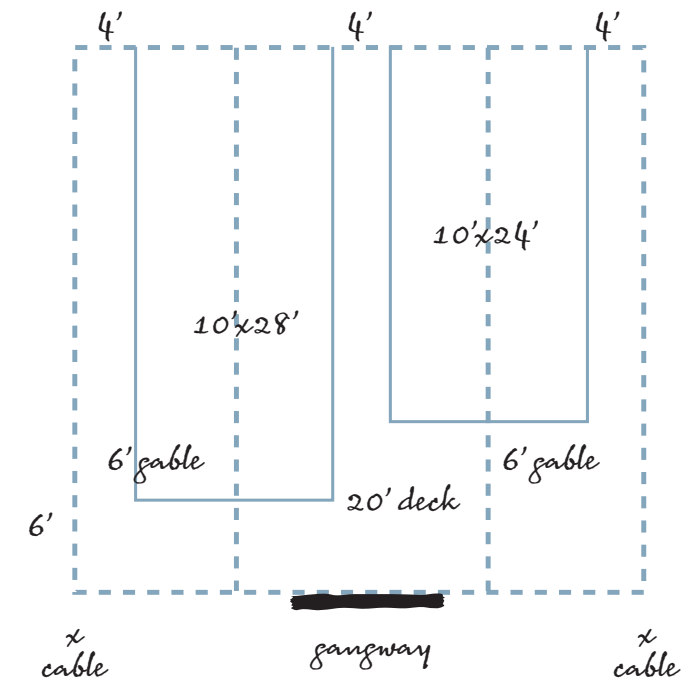
Comparisons of Cable Anchoring Forms

Dock to Shore	Dead Weights	Combination	Self-Adjusting
Unlimited	Unlimited	Unlimited	Unlimited
Unlimited	Unlimited	Unlimited	Unlimited
Moderate	Moderate	Moderate	Moderate
Yes	Yes (limited)	Yes (limited)	Yes
Low	Moderate	Moderate	Moderate
Low high if not perfectly aligned	High	High	Moderate

35′
30′
25′
20′
15′
10′
5′
4′
3′
2′
1′
0′

0′ 1′ 2′ 3′ 4′ 5′ 10′ 15′ 20′ 25′ 30′ 35′

Example:



Notes:

Decking

Lower Level _____
Upper Level _____
Gangway _____

Gangway

Length _____
Width _____
Shore Hinge _____
Dock Hinge _____

Roof Type

- ☐ Gable A-Frame
- ☐ Gable Front-to-Back
- ☐ Gable and a Half
- ☐ Hip
- ☐ Hip and a Half

Sun Deck

- ☐ with Gables
- ☐ with Gable Front-to-Back
- ☐ with Hip
- ☐ Upper Shade
- ☐ Full Sun, No Roof

Roof Color _____

Anchoring Method

_____

Accessories

- ☐ Ladder
- ☐ Dock Box
- ☐ Other _____

_____

Name

_____

Contact Details

_____

_____

_____

_____

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