



**Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in  
or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat  
U.S. Army Corps of Engineers/National Marine Fisheries Service  
November 2017**

**Submerged Aquatic Vegetation:**

1. Avoidance. The piling-supported structure shall be aligned so as to minimize the size of the footprint over SAV beds.
2. The height of piling-supported structure shall be a minimum of 5 feet above MHW/OHW as measured from the top surface of the decking.
3. The width of the piling-supported structure is limited to a maximum of 4 feet. A turnaround area is allowed for piling-supported structures greater than 200 feet in length. The turnaround is limited to a section of the piling-supported structure no more than 10 feet in length and no more than 6 feet in width. The turnaround shall be located at the midpoint of the piling-supported structure.
4. Over-SAV bed portions of the piling-supported structure shall be oriented in a north-south orientation to the maximum extent that is practicable.
5. a. If possible, terminal platforms shall be placed in deep water, waterward of SAV beds or in an area devoid of SAV beds.  
  
b. If a terminal platform is placed over SAV areas and constructed of grated decking, the total size of the platform shall be limited to 160 square feet. The grated deck material shall conform to the specifications stipulated below. The configuration of the platform shall be a maximum of 8 feet by 20 feet. A minimum of 5 feet by 20 feet shall conform to the 5-foot height requirement; a 3 feet by 20 feet section may be placed 3 feet above MHW to facilitate boat access. The long axis of the platform should be aligned in a north-south direction to the maximum extent that is practicable.  
  
c. If the terminal platform is placed over SAV areas and constructed of planks, the total size of the platform shall be limited to 120 square feet. The configuration of the platform shall be a maximum of 6 feet by 20 feet of which a minimum 4-foot wide by 20-foot long section shall conform to the 5-foot height requirement. A section may be placed 3 feet above MHW to facilitate boat access. The 3 feet above MHW section shall be cantilevered. The long axis of the platform should be aligned in a north-south direction to the maximum extent that is practicable. If the 3 feet above MHW section is constructed with grating material, it may be 3 feet wide.
6. One uncovered boat lift area is allowed. A narrow catwalk (2 feet wide if planks are used, 3 feet wide if grating is used ) may be added to facilitate boat maintenance along the outboard side of the boat lift and a 4-foot wide walkway may be added along the stern end of the boat lift, provided all such walkways are elevated 5 feet above MHW. The catwalk shall be cantilevered from the outboard mooring pilings (spaced no closer than 10 feet apart).
7. Pilings shall be installed in a manner which will not result in the formation of sedimentary deposits("donuts" or "halos") around the newly installed pilings. Pile driving is the preferred method of installation, but jetting with a low pressure pump may be used.
8. The spacing of pilings through SAV beds shall be a minimum of 10 feet on center.
9. The gaps between deckboards shall be a minimum of ½ inch.

October 2002 - Grid Specifications and Suppliers Section modified to add an additional vendor of materials.

February 2003 – Manufacturer name changed from ChemGrate to FiberGrate

May 2003 - The terms dock and pier were removed and replaced by the term piling-supported structure, to clarify our intent.

March 2008 – Added requirement for 43% open space in grids; added additional manufacturer of grating.

November 2017 – Manufacturer of grated material updated to include Voyager Industries.

### **Marsh:**

1. The piling-supported structure shall be aligned so as to have the smallest over-marsh footprint as practicable.
2. The over-marsh portion of the piling-supported shall be elevated to at least 4 feet above the marsh floor.
3. The width of the piling-supported is limited to a maximum of 4 feet. Any exceptions to the width must be accompanied by an equal increase in height requirement.

### **Mangroves.**

1. The width of the piling-supported structure is limited to a maximum of 4 feet.
2. Mangrove clearing is restricted to the width of the piling-supported structure.
3. The location and alignment of the piling-supported structure should be through the narrowest area of the mangrove fringe.

## **Grid Specifications and Suppliers**

The following information does not constitute a U.S. Army Corps of Engineers endorsement or advertisement for any particular provider and is provided only as an example for those interested in obtaining these materials for piling-supported structure construction. Light-transmitting materials are made of various materials shaped in the form of grids, grates, lattices, etc., to allow the passage of light through the open spaces. **All light-transmitting materials used in construction for minor piling-supported structures shall have a minimum of forty-three (43) percent open space.**

A type of fiberglass grate panel is manufactured by SeaSafe (Lafayette, LA; phone: 1-800-326-8842) and FiberGrate (1-800-527-4043). A type of plastic grating is manufactured by ThruFlow Interlocking Panels (1-888-478-3569). Plastic grate panels are also distributed by Southern Pine Lumber Company (Stuart, FL; 772-692-2300). Grated panels can be obtained from Titan Deck/Voyager Industries (Brandon, MN; 877-207-4136; [www.titandeck.net](http://www.titandeck.net)). Panels are available in a variety of sizes and thicknesses. For safety, the grate should contain an anti-slip texture which is integrally molded into the top surface. The manufacturer or local distributor should be consulted to ensure that the load-bearing capacity of the selected product is sufficient to support the intended purpose. Contact the manufacturer(s) for product specifications and a list of regional distributors.

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February 2003 – Manufacturer name changed from ChemGrate to FiberGrate

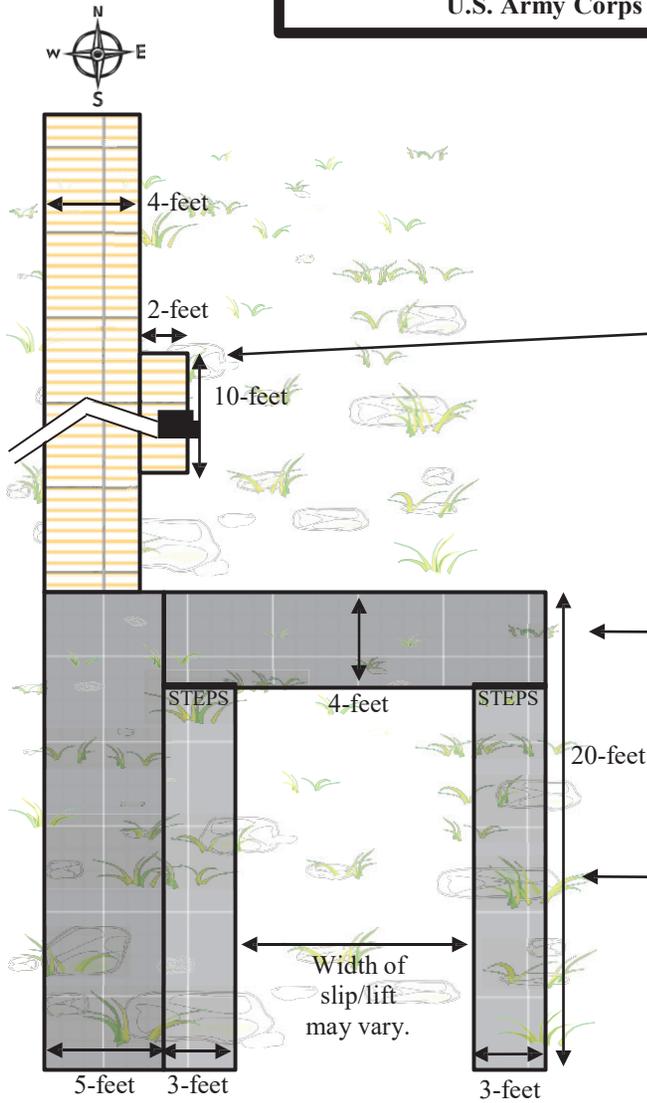
May 2003 - The terms dock and pier were removed and replaced by the term piling-supported structure, to clarify our intent.

March 2008 – Added requirement for 43% open space in grids; added additional manufacturer of grating.

November 2017 – Manufacturer of grated material updated to include Voyager Industries.

# DOCK EXAMPLE — GRATED TERMINAL PLATFORM

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OVERHEAD PLAN VIEW

**“GRATED DECKING”**  
 Means manufactured with a minimum of 43% open space.

Spacing of pilings through SAV beds shall be a minimum of 10-feet on center.

**MIDPOINT TURNAROUND**  
 Only for docks over 200-feet long.

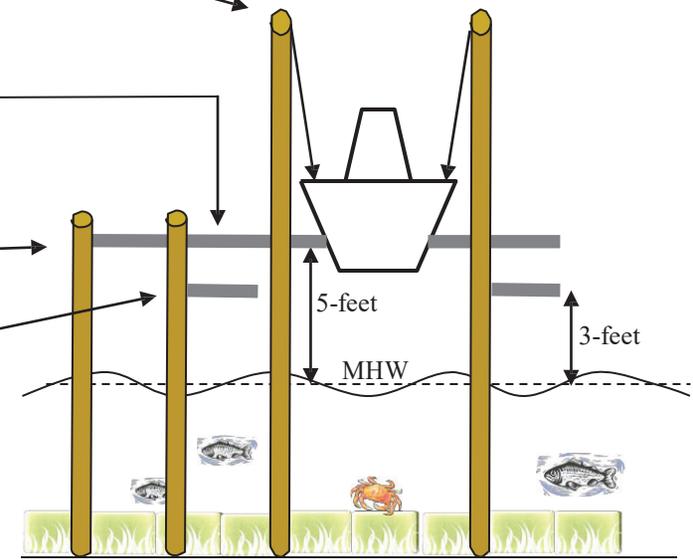
- NOTES:**
- Not to scale.
  - All widths are maximum dimension.
  - All heights are minimum dimension.
  - Piling supported structures over SAV should be oriented north-south to the extent practicable.
  - MHW = mean high water

**LIFT ONLY**  
 No roof.  
 Vessel should be stored as high above MHW as possible.

**STERN WALKWAY**  
 Allowed if lift constructed.  
 May be less than 4-feet wide if longer slip is needed.

**MINIMUM HEIGHT**  
 No less than 5-feet above MHW

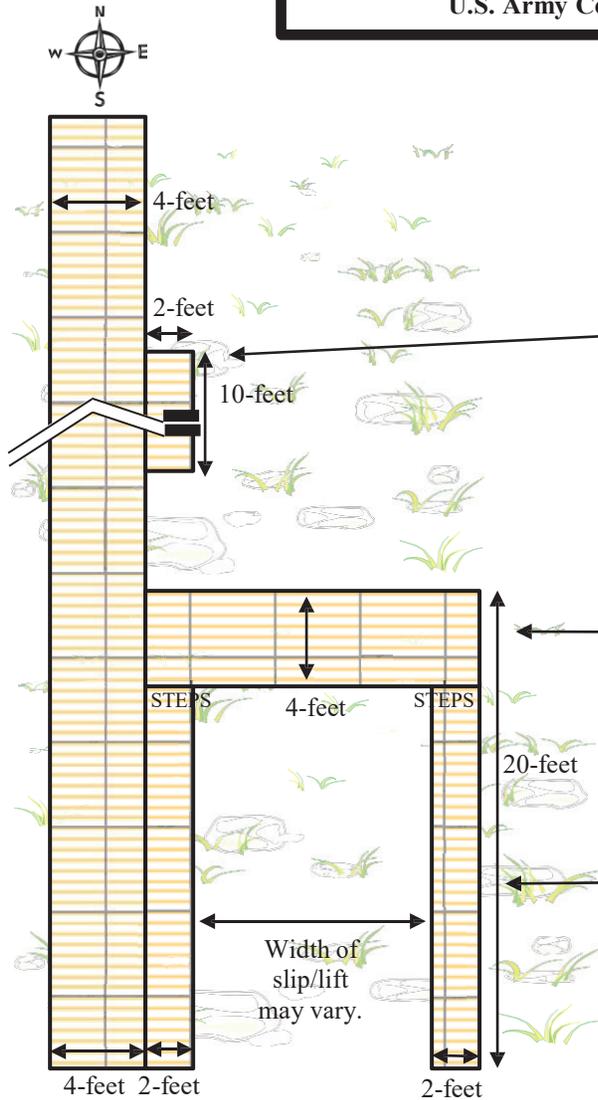
**ACCESS CATWALKS**  
 3-feet wide if grated decking.  
 3-feet above MHW to facilitate boat access.  
 Cantilevered off main structures; no additional pilings.



FRONT PLAN VIEW

# DOCK EXAMPLE — WOOD P LANK TERMINAL PLATFORM

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OVERHEAD PLAN VIEW

The gaps between deckboards shall be a minimum of 1/2 inch.

Spacing of pilings through SAV beds shall be a minimum of 10-feet on center.

**MIDPOINT TURNAROUND**  
Only for docks over 200-feet long.

**LIFT ONLY**  
No roof.  
Vessel should be stored as high above MHW as possible.

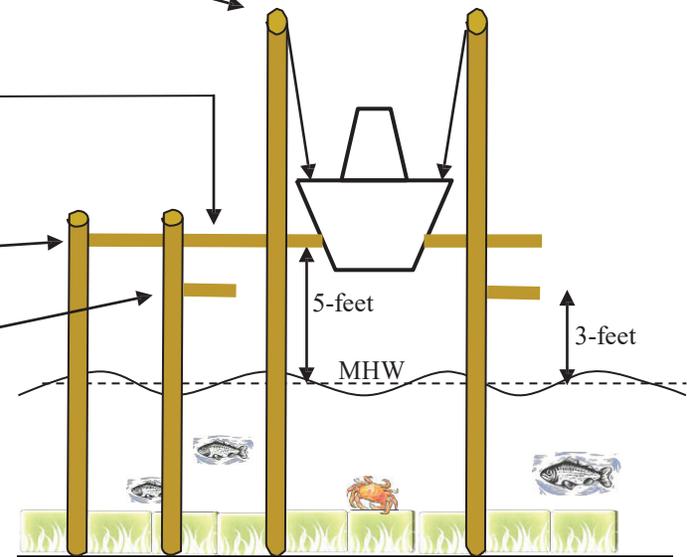
**STERN WALKWAY**  
Allowed if lift constructed.  
May be less than 4-feet wide if longer slip is needed.

**MINIMUM HEIGHT**  
No less than 5-feet above MHW

**ACCESS CATWALKS**  
2-feet wide if wood decking.  
3-feet above MHW to facilitate boat access.  
Cantilevered off main structures;  
no additional pilings.

**NOTES:**

- Not to scale.
- All widths are maximum dimension.
- All heights are minimum dimension.
- Piling supported structures over SAV should be oriented north-south to the extent practicable.
- MHW = mean high water



FRONT PLAN VIEW