

## APPENDIX F

### MINIMUM CONSTRUCTION AND MAINTENANCE REQUIREMENTS FOR PRIVATE FLOATING FACILITIES

1. General. This appendix is designed to assist the applicant and dock permittee in constructing a safe, well-maintained private dock on projects within the Little Rock District.
2. General Requirements.
  - a. The mooring location for a boat dock must be approved by the Operations Manager prior to the construction. Each Applicant must furnish two sets of plans for the dock, drawn to an appropriate scale, for review and approval by the Operations Manager prior to starting work. The plans must be stamped and signed by a registered professional Engineer stating that the plans and specifications meet or exceed the minimum construction and maintenance requirements for private floating facilities.
  - b. The facility will be subject to periodic inspection by the Operations Manager during construction and/or assembly. No deviation or changes from approved plans will be permitted without prior written approval of the Operations Manager. Upon completion, all docks placed or operated on the project are subject to periodic inspection by the Operations Manager. If the inspection reveals conditions that make the dock unsafe from a safety, navigation, or other standpoint, such conditions must be corrected within the time period specified by the Operations Manager.
  - c. Additional requirements may be specified on the (ENG FORM 4262-R) and/or in the Shoreline Management Plan for the project.
3. Design Criteria.
  - a. Design Loads (Minimum).
    - (1) Deck loads and walkways loads (substructure) 30 psf.
    - (2) Wind loads (sub and superstructure) 20 psf.
    - (3) Roof loads (superstructure) 10 psf.
    - (4) Bracing – all columns and/or studs must be adequately braced to resist wind loads. Bracing shall be designed and constructed to counteract design loads, while allowing sufficient flexibility so wave action will not damage the structural and/or roof system.

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b. Flotation.

(1) Must meet 36 CFR 327.30 Appendix C on all new docks and/or on repairs to existing docks.

(2) Flotation may not be stacked under the dock structure.

(3) Adequate flotation must be provided to maintain the substructure a minimum of 8 inches above the water's surface.

c. Roofs. Roofs may be gabled or single-pitched. The roofs must be securely fastened to the superstructure to resist wind uplift. Minimum thickness: steel 28 ga., aluminum .032 inches.

d. Anchorage. An anchorage system shall provide secure mooring of the private floating facility. Anchorage system utilizing dead man or ground stakes shall be installed flush with the existing grade. Anchor cables or other securing devices shall be maintained in good repair and located to minimize obstruction hazards to pedestrians, boaters, and vehicular traffic. Anchor cables will not be attached to trees, stumps, power poles, guardrail posts, etc. Minimum requirements for anchor cables: 3/8 inch steel cable. Galvanized and/or stainless steel cable of same size or larger may be used.

e. Main Dock Structure and Walkways (access to main dock structure). Main walkways shall be a minimum of 3 feet wide and a maximum of 6 feet in width.

f. Construction Materials.

(1) The entire dock must be constructed of similar type design and construction materials i.e., wood, metal, aluminum.

(2) All materials used in construction of the dock must meet Environmental Protection Agency (EPA), National, State, and local guidelines on all new docks and/or repairs to existing docks.

g. Handrails.

(1) Handrails will be provided on at least one side of the walkway leading to the dock and perimeter areas of the dock. Gates or safety chains may be used in areas on the perimeter of the dock where frequent loading/unloading takes place. No gaps wider than 4 feet should be present.

(2) Handrails shall be approximately 42 inches in height with a guardrail approximately 22 inches in height below the handrail.

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- (3) Handrails must be structurally sound and maintained in a state of good repair.
- (4) Handrails must withstand a load of at least 200 pounds applied in any direction at any point with a minimum of deflection.

h. Electrical.

(1) A Real Estate instrument must be obtained prior to installing service on public property. All electrical facilities must meet the National Electrical Code (NEC), state and local codes. Underground electrical service is required; however, due to rocky terrain, soil conditions, and pool fluctuations this requirement may be impractical and other types of service may be permitted on a case-by-case basis. A certified electrician must sign and date two sets of plans indicating compliance the NEC, state and local codes.

(2) Temporary Power Service Requirements. During construction or assembly of the dock, three wire grounding extension cords may be used to provide temporary electrical service to the dock-mooring site. Extension cords will be kept out of reach of pedestrian traffic, and they will be removed when not in use or fully supervised by the dock owner/builder. Extension cords may not be used on the dock or as a source of electricity for docks once constructed and installed.