

4710000 POLYMERIC FENDER SYSTEM
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comment: (7-9-14, Internal)

1. 471-1: Insert word “Section”.

471-1 Description:
→ Construct ~~fiber-reinforced-polymer (FRP)~~ fender systems using components in accordance with this Section, ~~and the Plans, Design Standards and, if applicable, the Qualified Products List (QPL) drawings.~~
→ ~~If piling configurations listed on the QPL are allowed by the Plans, at the Contractor's option, either use a QPL listed piling configuration or develop a custom design. Develop a custom design if required by the Plans. For all Contractor developed custom designs, follow and provide a design for the FRP fender system in accordance with the design criteria and guidelines in the Structures Design Guidelines, Chapter 03 and applicable Structures Design Bulletins Section 471-4.2.~~

Response: We do not use the word “Section” when referring to an Article and/or subarticle. It is used only when referring to the entire section.
No change made.

2. 471-2:

471-2 Materials:
→ Meet the following requirements:
Fiberglass ~~Fiber reinforced polymer~~ composites →
lumber (Dimensional Lumber ~~Piles, Wales, Decking & Splice Plates~~) →
..... Section 973
Fiberglass-structurally-reinforced-composite-lumber (Wales)*
..... Section 973
Concrete used to fill hollow piles Section 347
*or alternate wales as described below
→ Use only Type 316 stainless steel metallic fastening and connection hardware.

what about spacer blocks?

Response: “Spacer-blocks” will be added.
Change made.

3. 471-2: Insert “SAE” designation:

471-2 Materials:
→ Meet the following requirements:
Fiberglass ~~Fiber reinforced polymer~~ composites →
lumber (Dimensional Lumber ~~Piles, Wales, Decking & Splice Plates~~) →
..... Section 973
Fiberglass-structurally-reinforced-composite-lumber (Wales)*
..... Section 973
Concrete used to fill hollow piles Section 347
*or alternate wales as described below
→ Use only ~~SAE~~ Type 316 stainless steel metallic fastening and connection hardware.

Response: “SAE” added.

Change made.

4. 471-3: Insert word “Section”

*471-3-Product Acceptance.¶
→ Obtain fender system components from a producer that is currently on the list of Producers with Accepted Quality Control (QC) Program for Fiber Reinforced Polymer Composites. Producers seeking inclusion on the list shall meet the requirements of Section 105-3.¶
→ Provide the Engineer with a manufacturer's certification in accordance with Section 6 that the fender system components meet the material requirements of Section 973.¶*

Response: We do not use the word “Section” when referring to an Article and/or subarticle. It is used only when referring to the entire section.

No change made.

5. 471-4.1 (g): Correct misspelling; delete “specifications” and insert “Section”.

→ → (g) Pile and wale material properties including fill material used for hollow piles and required admixtures. If the material properties are defined in the Standard Specifications, a reference to the applicable specifications Section.¶

Response: Misspelling corrected. Change made.

Please see response to previous comment.

5. 471-4.2 (b): Change this wording. If this is a testing ASTM Spec, it should read something like, “test flexural properties in accordance with ASTM D6109”.

→ → → (b) A report from an independent lab verifying the flexural properties of the piling as derived from ASTM D6109 using characteristic values in accordance with ASTM D7290 with the following modifications:¶

Response: The wording is correct as is.

No change made.

6. 471-5.1 (e): Really?

→ → (e) For hollow wale sections, remaining hollow under service conditions, provide a minimum bolt pull-through and crushing resistance of 10 kips when equipped with manufacturer's detailed connection hardware at a maximum distance of 2 feet from the end of a wale with a minimum length of 4 feet is required greater than or equal to the maximum connection reaction force. Pull-through and crushing resistance is defined at the point of first yield and/or the load at which an audible crack occurs.¶

Response: Yes.

No change made.

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Comment: (7-23-14)

471-1: Reference to 471-4.2 should be expanded to 471-5 also. Consider “in accordance with this Section” instead of drilling to deep into the Section numbers. Section 471-5, items e and f: “hollow pile/wale sections remaining hollow under service conditions” was intended to relieve the testing requirements from members that arrive to the site hollow and then are filled with concrete under the in-service conditions. Consider adding this back in.

Response: Will consider for future revisions if needed.
No change made.

D5

Comment: (8-12-14)

1. 471-1 Description: at the end of this section Add "Section" before 471-4.2; 471-3 Product Acceptance: Add "Section" before 105-3

Response: We do not use the word “Section” when referring to an Article and/or subarticle. It is used only when referring to the entire section.
No change made.

2. 471-8 Basis of Payment: 471-7.1 should be 471-8.1

Response: Agree. Change made.
