

### Subpart 169.300—Construction and Arrangement

#### PLANS

##### § 169.305 Plans required.

(a) Except as provided in paragraphs (b) and (c) of this section the owner or builder shall, before the start of construction or before the initial inspection of the vessel, submit to the Officer in Charge, Marine Inspection of the inspection zone where the vessel is to be inspected, at least one copy of each of the following plans:

- (1) Midship section.
- (2) Outboard profile.
- (3) Inboard profile.
- (4) Arrangement of decks.
- (5) Lifesaving equipment installation and arrangement.
- (6) Machinery installation.
- (7) Electrical installation.
- (8) Fire control plan.
- (9) Fuel tanks.
- (10) Piping systems.
- (11) Hull penetrations and shell connections.
- (12) Lines and offsets, curves of form, and capacities of the tanks including size and location on vessel.
- (13) Masts, including integration into the ship's structure.
- (14) Rigging plan showing sail areas and centers of effort as well as the arrangement, dimensions, and connections of the standing rigging.

(b) For vessels less than 65 feet in length, the owner may submit specifications, sketches, photographs, line drawings or written descriptions in lieu of any of the required drawings provided the required information is adequately detailed and acceptable to the Officer in Charge, Marine Inspection.

(c) The Officer in Charge, Marine Inspection, may waive submission of some or all of the structural plans called for by paragraph (a) of this section for an existing vessel with a history of at least 5 years of safe operation, or if the design and construction of the vessel are essentially similar to a vessel which has a proven record of safe operation in similar service upon similar waters.

##### § 169.307 Plans for sister vessels.

Plans are not required for any vessel which is a sister ship to a vessel, provided that—

- (a) The approved plans for the original vessels are already on file at any Marine Inspection Office;
- (b) The owner of the plans authorizes their use for the new construction;
- (c) The regulations have not changed since the original plan approval; and
- (d) There are no major modifications to any of the systems used.

#### HULL STRUCTURE

##### § 169.309 Structural standards.

(a) Compliance with the standards established by a recognized classification society will, in general, be considered satisfactory evidence of the structural adequacy of a vessel.

(b) Masts, posts and other supporting structures are to have adequate strength to withstand the highest loadings imposed by the sail systems during all normal and emergency conditions. Particular attention must be given to the integration of the masts and rigging into the hull structure. The hull structure must be adequately reinforced and stiffened locally to ensure sufficient strength and resistance to plate buckling.

(c) The design, materials, and construction of masts, yards, booms, bowsprits, and standing rigging must be suitable for the intended service. Detailed calculations with respect to the strength of the sail system may be required. Approval by a recognized classification society may be considered satisfactory evidence of the adequacy of the sail system.

(d) When scantlings differ from established standards and it can be demonstrated that a craft approximating the same size, power and displacement has been built to the proposed scantlings and has been in satisfactory service, insofar as structural adequacy is concerned, for a period of at least 5 years, the proposed scantling may be approved. A detailed structural analysis may be required.

(e) Special consideration will be given to the structural requirements of