§ 116.300 Structural design.  
Except as otherwise allowed by this subpart, a vessel must comply with the structural design requirements of one of the standards listed below for the hull material of the vessel.

(a) Steel hull vessels:
   (1) Rules and Regulations for the Classification of Yachts and Small Craft, Lloyd’s Register of Shipping (Lloyd’s); or
   (2) Rules for Building and Classing Steel Vessels Under 61 Meters (200 Feet) in Length, American Bureau of Shipping (ABS);

(b) Aluminum hull vessels:
   (1) Rules and Regulations for the Classification of Yachts and Small Craft, Lloyd’s; or
   (i) For a vessel of more than 30.5 meters (100 feet) in length—Rules for Building and Classing Aluminum Vessels, ABS; or
   (ii) For a vessel of not more than 30.5 meters (100 feet) in length—Rules for Building and Classing Steel Vessels Under 61 Meters (200 Feet) in Length, ABS, with the appropriate conversions from the ABS Rules for Building and Classing Aluminum Vessels; or
   (2) ABS Guide for High Speed Craft.

(c) Steel hull vessels operating in protected waters—Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways, ABS.


§ 116.340 Alternate design considerations.  
The Commanding Officer, Marine Safety Center, may approve the structure of a vessel of novel design, unusual form, or special materials, which does not meet the requirements of §116.300, if it is shown by systematic analysis based on engineering principles that the vessel structure provides adequate safety and strength. An owner seeking approval of an alternate design shall submit detailed plans, material component specifications, and design criteria, including the expected operating environment, resulting loads on the vessel, and design limitations for such a vessel, to the Marine Safety Center.

Subpart D—Fire Protection

§ 116.400 Application.
(a) This subpart applies to:
   (1) Vessels carrying more than 150 passengers; or
   (2) Vessels with overnight accommodations for more than 49 passengers but not more than 150 passengers.

(b) A vessel with overnight accommodations for more than 150 passengers must comply with §72.05 in subchapter H of this chapter.

§ 116.405 General arrangement and outfitting.
(a) Fire hazards to be minimized. The general construction of the vessel must be such as to minimize fire hazards insofar as it is reasonable and practicable.

(b) Combustible materials to be limited. Limited amounts of combustible materials such as wiring insulation, pipe hanger linings, nonmetallic (plastic) pipe, and cable ties are permitted in concealed spaces except as otherwise prohibited by this subpart.

(c) Combustibles insulated from heated surfaces. Internal combustion engine exhausts, boiler and galley uptakes, and similar sources of ignition must be kept clear of and suitably insulated from combustible material.

§ 116.330 Sailing vessels.  
The design, materials, and construction of masts, posts, yards, booms, bowsprits, and standing rigging on a sailing vessel must be suitable for the intended service. The hull structure must be adequately reinforced to ensure sufficient strength and resistance to plate buckling. The cognizant OCMI may require the owner to submit detailed calculations on the strength of the mast, post, yards, booms, bowsprits, and standing rigging.