§ 119.710

subpart and be otherwise acceptable to
the cognizant OCMI.

§ 119.710 Piping for vital systems.

(a) Vital systems are those systems
that are vital to a vessel’s surviv-
ability and safety. For the purpose
of this part the following are vital sys-
tems:
(1) Fuel systems;
(2) Fire main;
(3) CO₂ and Halon systems;
(4) Bilge system;
(5) Steering system;
(6) Propulsion system and its neces-

sary auxiliaries and controls;
(7) Ship’s service and emergency elec-
trical generation system and its neces-
sary auxiliaries; and
(8) A marine engineering system
identified by the cognizant OCMI as
being crucial to the survival of the ves-
sel or to the protection of the person-

nel on board.

(b) For the purpose of this part, a
system not identified in paragraph (a)
of this section is a non-vital system.

(c) Piping used in a vital system
must meet § 56.60 in subchapter F of
this chapter, except that § 119.730 of
this part replaces § 56.60–20 in sub-
chapter F of this chapter.

§ 119.715 Piping subject to more than
1,034 kPa (150 psig) in non-vital sys-
tems.

Piping subject to more than 1034 kPa
(150 psig) in a non-vital system must be
designed, fabricated, and inspected in
accordance with the principles of
American National Standards Institute
(ANSI) B 31.1 “American National
Standard Code for Pressure Piping,
Power Piping,” or other standard spec-
ified by the Commandant.

§ 119.720 Nonmetallic piping materials.

Nonmetallic piping materials, includ-
ing nonmetallic flexible hose assem-
bles, must meet the requirements of
§ 56.60–25 in subchapter F of this chap-
ter.

§ 119.730 Nonferrous metallic piping
materials.

(a) Nonferrous metallic piping mate-
rials are acceptable for use in the fol-

lowing:
(1) Non-vital systems;
(2) Aluminum fuel piping on an alu-

minum hulled vessel, if at least Sched-
ule 80;
(3) Aluminum bilge, ballast, and
firemain piping on an aluminum hulled
vessel;
(4) If acceptable to the cognizant
OCMI, nonferrous metallic piping with
a melting temperature above 927 °C
(1,700 °F) may be used in vital systems
that are deemed to be galvanically
compatible; and
(5) Other uses specifically accepted
by the cognizant OCMI.

(b) Where nonferrous metallic mate-
rial is permitted for use in piping sys-
tems by this subpart, the restrictions
in this paragraph apply:
(1) Provisions must be made to pro-
tect piping systems using aluminum al-
loys in high risk fire areas due to the
low melting point of aluminum alloys;
(2) Provisions must be made to pre-
vent or mitigate the effect of galvanic
corrosion due to the relative solution
potentials of copper, aluminum, and al-
loys of copper and aluminum, which
are used in conjunction with each
other, steel, or other metals and their
alloys;
(3) A suitable thread compound must
be used in making up threaded joints in
aluminum pipe to prevent seizing. Pipe
in the annealed temper must not be
threaded;
(4) The use of aluminum alloys with
a copper content exceeding 0.6 percent
is prohibited; and
(5) The use of cast aluminum alloys
in hydraulic fluid power systems must
be in accordance with the requirements
of §58.30–15(f) in subchapter F of this
chapter.

PART 120—ELECTRICAL
INSTALLATION

Subpart A—General Provisions

Sec.
120.100 Intent.
120.115 Applicability to existing vessels.

Subpart B—General Requirements

120.200 General design, installation, and
maintenance requirements.
120.210 Protection from wet and corrosive
environments.
120.220 General safety provisions.