Coast Guard, DHS

§ 111.59—Busways

§ 111.59–1 General.

Each busway must meet Article 368 of NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10–1).


§ 111.59–3 No mechanical cooling.

A busway must not need mechanical cooling to operate within its rating.


Subpart 111.60—Wiring Materials and Methods

§ 111.60–1 Construction and testing of cable.

(a) Each marine shipboard cable must meet all the requirements for construction and identification of either IEEE 1580, UL 1309, IEC 60092–353, or NPFC MIL–C–24640A or NPFC MIL–C–24643A (all five standards incorporated by reference; see 46 CFR 110.10–1), including the respective flammability tests contained therein, and must be of a copper-stranded type.

(b) Each cable constructed to IEC 60092–353 must meet the flammability requirements of Category A of IEC 60332–3–22 (incorporated by reference; see 46 CFR 110.10–1).

(c) Medium-voltage electric cable must meet the requirements of IEEE 1580 and UL 1072 (incorporated by reference; see 46 CFR 110.10–1), where applicable, for cables rated above 5,000 volts.

(d) Electrical cable that has a polyvinyl-chloride insulation with a nylon jacket (Type T/N) must meet either UL 1309, IEEE 1580, or section 8 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1).

(e) Electrical cable regardless of construction must meet, at a minimum, all of the performance and marking requirements of section 5.13 of IEEE 1580.


§ 111.60–2 Specialty cable for communication and RF applications.

Specialty cable such as certain coaxial cable that cannot pass the flammability test contained in IEEE 1580, test VW–1 of UL 1581, or Category A of IEC 60332–3–22 (all three standards incorporated by reference; see 46 CFR 110.10–1) because of unique properties of construction, must:

(a) Be installed physically separate from all other cable; and

(b) Have fire stops installed—

(1) At least every 7 meters (21.5 feet) vertically, up to a maximum of 2 deck heights;

(2) At least every 15 meters (46 feet) horizontally;

(3) At each penetration of an A or B Class boundary;

(4) At each location where the cable enters equipment; or

(5) In a cableway that has an A–60 fire rating.


§ 111.60–3 Cable application.

(a)(1) Cable constructed according to IEEE 1580 must meet the provisions for cable application of section 24 of IEEE 45–2002 (both incorporated by reference; see 46 CFR 110.10–1).

(2) Cable constructed according to IEC 60092–353 or UL 1309 (both incorporated by reference; see 46 CFR 110.10–1) must meet section 24 of IEEE 45–2002, except 24.6.1, 24.6.7, and 24.8.

(3) Cable constructed according to IEC 60092–353 must be applied in accordance with IEC 60092–352 (incorporated by reference; see 46 CFR 110.10–1), Table 1, for ampacity values.

(b)(1) Cable constructed according to IEEE 1580 must be applied in accordance with IEC 60092–352 (incorporated by reference; see 46 CFR 110.10–1), Table 1, for ampacity values.

(2) Cable constructed according to IEC 60092–353 must be derated according to IEC 60092–352, clause 8.

(3) Cable constructed according to NPFC MIL–C–24640A or NPFC MIL–C–24643A must be derated according to NAVSEA MIL–HDBK–299 (SH) (all three standards incorporated by reference; see 46 CFR 110.10–1).