(3) In theaters and similar locations
(4) In motion picture studios
(5) In storage battery rooms
(6) In hoistways or on elevators or escalators
(7) In hazardous (classified) locations, except as specifically permitted by other articles in this *Code*
(8) Embedded in poured cement, concrete, or aggregate, except where embedded in plaster as nonheating leads where permitted in 424.43
(9) Where exposed to direct rays of the sun, unless identified as sunlight resistant

Informational Note: The sunlight-resistant marking on the jacket does not apply to the individual conductors.

(10) Where subject to physical damage
(11) As overhead cable, except where installed as messenger-supported wiring in accordance with Part II of Article 396

Type UF cable suitable for exposure to the direct rays of the sun is tagged and marked with the designation "Sunlight Resistant." This physical protection requirement ensures that Type UF cable, as it emerges from underground, is protected from ultraviolet damage.

340.24 Bending Radius. Bends in Type UF cable shall be so made that the cable is not damaged. The radius of the curve of the inner edge of any bend shall not be less than five times the diameter of the cable. For flat cables, the major diameter dimension of the cable shall be used to determine the bending radius.

340.80 Ampacity. The ampacity of Type UF cable shall be that of 60°C (140°F) conductors in accordance with 310.14.

If Type UF cable is installed as nonmetallic-sheathed cable, the ampacity of the cable is determined according to rules for Type NM cable in 334.80.

Part III. Construction Specifications

340.104 Conductors. The conductors shall be sizes 14 AWG copper or 12 AWG aluminum or copper-clad aluminum through 4/0 AWG.

340.108 Equipment Grounding Conductor. In addition to the insulated conductors, the cable shall be permitted to have an insulated or bare equipment grounding conductor.

340.112 Insulation. The conductors of Type UF shall be one of the moisture-resistant types listed in Table 310.4(1) that is suitable for branch-circuit wiring or one that is identified for such use. Where installed as a substitute wiring method for NM cable, the conductor insulation shall be rated 90°C (194°F).

340.116 Sheath. The overall covering shall be flame retardant; moisture, fungus, and corrosion resistant; and suitable for direct burial in the earth.

ARTICLE
342 Intermediate Metal Conduit (IMC)

Part I. General

342.1 Scope. This article covers the use, installation, and construction specifications for intermediate metal conduit (IMC) and associated fittings.

IMC is thinner-walled and lighter in weight than rigid metal conduit (RMC) and is satisfactory for uses in all locations where RMC is permitted to be used. Threaded fittings, couplings, connectors, and so forth are interchangeable between IMC and RMC. Threadless fittings for IMC are suitable only for the type of conduit indicated by the carton marking.

342.6 Listing Requirements. IMC, factory elbows and couplings, and associated fittings shall be listed.

Part II. Installation

342.10 Uses Permitted.

(A) All Atmospheric Conditions and Occupancies. Use of IMC shall be permitted under all atmospheric conditions and occupancies.

(B) Corrosion Environments. IMC, elbows, couplings, and fittings shall be permitted to be installed in concrete, in direct contact with the earth, in direct burial applications, or in areas subject to severe corrosive influences where protected by corrosion protection approved for the condition.

Other documents, such as the Steel Tube Institute's 2015 *Guidelines for Installing Steel Conduit/Tubing*, and ANSI/NECA 101-2013, *Standard for Installing Steel Conduits (Rigid, IMC, EMT)*, should be consulted for approval guidance of corrosion-resistant materials or for requirements prior to the installation of nonferrous metal (aluminum) conduit in concrete, since chloride additives in the concrete mix can cause corrosion.

(C) Cinder Fill. IMC shall be permitted to be installed in or under cinder fill where subject to permanent moisture where protected on all sides by a layer of noncinder concrete not less than 50 mm (2 in.) thick; where the conduit is not less than 450 mm (18 in.) under the fill; or where protected by corrosion protection approved for the condition.

(D) Wet Locations. All supports, bolts, straps, screws, and so forth, shall be of corrosion-resistant materials or protected against corrosion by corrosion-resistant materials.

Informational Note: See 300.6 for protection against corrosion.

Galvanized IMC installed in concrete does not require supplementary corrosion protection. Similarly, galvanized IMC installed in contact with soil does not generally require supplementary