

## Chapter E 339

UNDERGROUND FEEDER AND BRANCH  
CIRCUIT CABLE

## Type UF

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**E 339.01 Description and marking.** (1) **DESCRIPTION.** Underground feeder and branch circuit cable shall be an approved type UF cable in sizes No. 14 to No. 4/0 AWG, inclusive. The conductors shall be types TW, RHW, or other conductors approved for the purpose. In addition to the insulated conductors, the cable may have an approved size of uninsulated or bare conductor for grounding purposes only. The overall covering shall be flame-retardant, moisture-resistant, fungus-resistant and corrosive-resistant, and suitable for direct burial in the earth.

(2) **MARKING.** In addition to the provisions of section E 310.02 the cable shall have a distinctive marking on the exterior for its entire length specifying cable type.

**History:** Cr. Register, January, 1968, No. 145, eff. 2-1-68.

**E 339.02 Other chapters.** In addition to the provisions of this chapter, installations of underground feeder and branch circuit cable (type UF) shall comply with other applicable provisions of this code. See especially chapter E 300 and subsection E 310.02 (2).

**History:** Cr. Register, January, 1968, No. 145, eff. 2-1-68.

**E 339.03 Use.** (1) Underground feeder and branch circuit cable may be used underground, including direct burial in the earth, as feeder or branch circuit cable when provided with overcurrent protection of the rated current-carrying capacity as required in section E 339.04.

(2) Where single conductor cables are installed, all cables of the feeder circuit, sub-feeder circuit, or branch circuit, including the neutral conductor, if any, shall be run together in the same trench or raceway.

(3) A minimum depth of 18 inches shall be maintained for conductors and cables buried directly in the earth, when supplementary protection from physical injury such as a covering board, concrete pad, raceway, etc., is not provided.

(4) Type UF cable may be used for interior wiring in wet, dry, or corrosive locations under the recognized wiring methods of this code, and when installed as non-metallic sheathed cable it shall conform with the installation provisions of chapter E 336 and shall be of the multiple conductor type, except where recognized under the provisions of section E 422.44.

(5) This type of cable shall not be used: (a) as service-entrance cables; (b) in commercial garages; (c) in theaters except as provided in Wis. Adm. Code section E 520.04; (d) in motion picture studios; (e) in storage battery rooms; (f) in hoistways; (g) in any hazardous location; (h) embedded in poured cement, concrete or aggregate, except where recognized in chapter E 422; (i) when exposed to direct rays of the sun, unless approved for the purpose.

**History:** Cr. Register, January, 1968, No. 145, eff. 2-1-68.

**E 339.04 Overcurrent protection.** Overcurrent protection shall be provided in accordance with provisions of section E 240.05.

**History:** Cr. Register, January, 1968, No. 145, eff. 2-1-68.

**E 339.05 Rated ampacity.** The ampacities of conductors in type UF cable shall be according to tables E 310.12 and E 310.14.

**History:** Cr. Register, January, 1968, No. 145, eff. 2-1-68.