

VIRGINIA STATE BUILDING CODE TECHNICAL REVIEW BOARD

I N T E R P R E T A T I O N

Interpretation Number: 3/2022

Code: NFPA 70 - National Electrical Code/2017

Section No(s): Article 336

ARTICLE 336

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Power and Control Tray Cable: Type TC

Part I. General

336.1 Scope. This article covers the use, installation, and construction specifications for power and control tray cable, Type TC.

336.2 Definition.

Power and Control Tray Cable, Type TC. A factory assembly of two or more insulated conductors, with or without associated bare or covered grounding conductors, under a nonmetallic jacket.

336.6 Listing Requirements. Type TC cables and associated fittings shall be listed.

Part II. Installation

336.10 Uses Permitted. Type TC cable shall be permitted to be used as follows:

- (1) For power, lighting, control, and signal circuits.
- (2) In cable trays, including those with mechanically discontinuous segments up to 300 mm (1 ft).
- (3) In raceways.
- (4) In outdoor locations supported by a messenger wire.
- (5) For Class 1 circuits as permitted in Parts II and III of Article 725.
- (6) For non-power-limited fire alarm circuits if conductors comply with the requirements of 760.49.

cable tray to ensure that the minimum bending radius is not exceeded.

- (8) Where installed in wet locations, Type TC cable shall also be resistant to moisture and corrosive agents.
- (9) In one- and two-family dwelling units, Type TC-ER cable containing both power and control conductors that is identified for pulling through structural members shall be permitted. Type TC-ER cable used as interior wiring shall be installed per the requirements of Part II of Article 334 and, where installed as exterior wiring, shall be installed per the requirements of Part II of Article 340.

Exception: Where used to connect a generator and associated equipment having terminals rated 75°C (140°F) or higher, the cable shall not be limited in ampacity by 334.80 or 340.80.

Informational Note No. 1: TC-ER cable that is suitable for pulling through structural members is marked "JP."

Informational Note No. 2: See 725.136 for limitations on Class 2 or 3 circuits contained within the same cable with conductors of electric light, power, or Class 1 circuits.

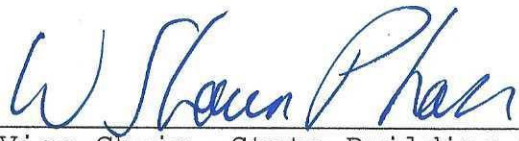
- (10) Direct buried, where identified for such use

Informational Note: See 310.15(A)(3) for temperature limitation of conductors.

QUESTION: Does the use of TC-ER (JP) cable meet the intent of the code when installed as the inverter output circuit for a solar photovoltaic system in one-and two-family dwelling units?

ANSWER: Yes.

This Official Interpretation was issued by the State Building Code Technical Review Board at its meeting of August 19, 2022.

A handwritten signature in blue ink that reads "W. Shaun Pharr". The signature is written in a cursive style with a large initial "W" and a long, sweeping underline.

Vice-Chair, State Building Code Technical Review Board