



Tentative Interim Amendment

## NFPA<sup>®</sup> 70<sup>®</sup>

### *National Electrical Code<sup>®</sup>*

#### 2023 Edition

**Reference:** Article 100 (Ignitable Fibers/Flyings), 506.5, and 506.9(B)

**TIA 23-2**

(SC 22-4-8 / TIA Log #1617)

**Note:** Text of the TIA was issued and approved for incorporation into the document prior to printing.

1. *Revise Article 100 Ignitable Fibers/Flyings to read as follows:*

**Ignitable Fibers/Flyings.** Fibers/flyings where any dimension is greater than 500 µm in nominal size, which are not likely to be in suspension in quantities to produce an explosible mixture, but could produce an ignitable layer fire hazard. [499:3.3.4.2]

Informational Note No.1: This definition and Informational Note No. 2 have been extracted from NFPA 499-2021, *Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas*. The NFPA 499 reference is in brackets. Only editorial changes were made to the extracted text to make it consistent with this Code.

Informational Note No. 2: Section 500.5 of this Code prescribes a Class III location as one where ignitable fibers/flyings are present, but not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures. This description addresses fibers/flyings that do not present a flash-fire hazard or explosion hazard by test. This could be because those fibers/flyings are too large or too agglomerated to be suspended in air in sufficient concentration, or at all, under typical test conditions. Alternatively, this could be because they burn so slowly that, when suspended in air, they do not propagate combustion at any concentration. In this document the zone classification system includes ignitable fibers/flyings as a fire hazard in a layer, which is not addressed in the IEC zone system (see IEC 60079-10-2, *Explosive atmospheres — Part 10-2: Classification of areas — Explosive dust atmospheres*). Where these are present, the user could also consider installation in accordance with Article 503 of this Code. [499:A.3.3.4.2]

2. *Revise Section 506.5 to read as follows:*

#### **506.5 Classification of Locations.**

**(A) Classifications of Locations. ...**

**(B) Zone 20, Zone 21, and Zone 22 Locations. ...**

**(1) Zone 20.** A Zone 20 location is a location where one of the following apply:

(1) Ignitable concentrations of combustible dust, ~~or~~ combustible fibers/flyings, or ignitable fibers/flyings are present continuously or for long periods of time.

...

**(2) Zone 21. ...**

**(3) Zone 22.** A Zone 22 location is a location where one of the following apply:

(1) ...

(2) Combustible dust, combustible fibers/flyings, or ignitable fibers/flyings are handled, processed, or used...

(3) ...

3. *Revise Section 506.9(B) to read as follows:*

#### **506.9 Equipment Requirements.**

...

**(B) Listing.** Equipment that is listed for Zone 20 shall be permitted in a Zone 21 or Zone 22 location of the same combustible dust, combustible fiber/flying, or ignitable fiber/flying. Equipment that is listed for Zone 21 ~~can be used~~ shall be permitted in a Zone 22 location of the same combustible dust, combustible fiber/flying, or ignitable fiber/flying.

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