MEMORANDUM

TO: National Electrical Code® Correlating Committee
FROM: Sarah Caldwell, Committee Administrator
DATE: August 6, 2020
SUBJECT: NEC® Proposed Tentative Interim Amendment (TIA) No. 1478


A copy of the proposed TIA and the preliminary results of the CMP balloting are attached.

This proposed TIA is being submitted to you for ballot. In accordance with Section 5 of the Regulations Governing the Development of NFPA Standards, you are being balloted on any correlation issues resulting from the proposed TIA and whether this matter is of an emergency nature. A “disagree” vote is limited to subjects within the purview of the Correlating Committee. Opposition on a strictly technical basis is not sufficient grounds for substantiating a “disagree” vote.

This proposed TIA has been published for public comment in the July 2020 issue of NFPA News with a Public Comment Closing Date of August 20, 2020. Any public comments received will be circulated to the committee. Finally, the Standards Council will review and consider the issuance of this TIA.

The ballot can now be accessed through the NFPA online ballot system at the following link: NFPA Ballot Link. Please complete the ballot or before August 16, 2020 by 11:59PM (ET).

While completing your ballot, please remember the following:

- A comment is required for both Question No. 1 and Question No. 2 for the online TIA ballot. Comments must accompany all Negative, Abstaining and Agree votes.

- If you vote “Agree” on Question 1, simply add “Agree” to the comment field and if you vote “Agree” on Question 2, insert the applicable letter(s) selections in the comment field which can be found in the Instructions box on the ballot site.

You must hit SUBMIT to SAVE your work. Note: the system session will time you out after 60 minutes; any work not submitted at that time will not be saved! You may return to finish or change your ballot at any time up to the closing date. Ballot comments exceeding 4,000 characters must be submitted in a Word document via email, to Sarah Caldwell at scaldwell@nfpa.org.

Note: Please remember that the return of ballots and attendance at committee meetings are required in accordance with the Regulations Governing the Development of NFPA Standards.
1. Revise 334.10 items (2), (3), and (4) to read as follows:

334.10 Uses Permitted. …
(2) Multi-family dwellings permitted to be of Types III, IV-HT, and V construction.
(3) Other structures permitted to be of Types III, IV-HT, and V construction. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute flash rating as identified in listings of fire-rated assemblies.

(4) Cable trays in structures permitted to be Types III, IV-HT, or V where the cables are identified for the use.

Substantiation: The safe use of Type NM Cable in building Types IV-A, B, or C has not been reviewed by CMP 6 or gone through the proper ANSI process. This is of an emergency nature because, without it, the NEC® is effectively and drastically altered without public input or deliberation by the electrical experts on CMP-6, and will allow installations of unknown safety. The TIA is critical in maintaining the current code requirements as approved through the NFPA process.

Emergency Nature: The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.

This is of a critical nature because of the imminent implementation of the provisions of Type IV-A, -B, -C in numerous jurisdictions. The states of California, Washington and Oregon are in the process of adopting the provisions of Mass Timber buildings far in advance of publication and adoption of the full 2021 Edition of the International Building Code. The TIA is critical in maintaining the current code requirements as approved through the NFPA process while giving time to evaluate the impact of the new building code requirements.
MEMORANDUM

TO: NEC® Code-Making Panel 6  
FROM: Sarah Caldwell, Technical Committee Administrator  
DATE: August 6, 2020  
SUBJECT: NEC® Proposed TIA No. 1478 PRELIMINARY TC BALLOT RESULTS

According to 5.6(a) in the NFPA Regs, the preliminary results show this TIA **HAS NOT** achieved the ¾ majority vote needed on both Ballot Item No. 1 (Technical Merit) and Ballot Item No. 2 (Emergency Nature).

<table>
<thead>
<tr>
<th></th>
<th>Technical Merit:</th>
<th>Emergency Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Abstentions (<em>Hunter, Stene</em>)</td>
<td>2 Abstentions (<em>Hunter, Stene</em>)</td>
</tr>
<tr>
<td></td>
<td>7 Agree (w/comment: <em>Scearce</em>)</td>
<td>7 Agree (w/comment: <em>Crisman, Lamp, Scearce</em>)</td>
</tr>
<tr>
<td></td>
<td>5 Disagree (<em>Cross, Earl, Graser, Nielsen, Porcaro</em>)</td>
<td>5 Disagree (<em>Cross, Earl, Graser, Nielsen, Porcaro</em>)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative ¾ vote]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

1. In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.
   
   \[14 \text{ eligible} / 2 = 7 + 1 = (8)\]

2. The number of affirmative votes needed to satisfy the ¾ requirement is 9.
   
   \[(14 \text{ eligible to vote} - 0 \text{ not returned} - 2 \text{ abstentions} = 12 \times 0.75 = 9)\]

Ballot comments are attached for your review.

This proposed TIA has been published for public comment in the July 2020 issue of *NFPA News* with a Public Comment Closing Date of August 20, 2020. Any public comments received will be circulated to the committee. The Standards Council will consider the issuance of this TIA.
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A. The standard contains an error or an omission that was overlooked during the regular revision process.

B. The NFPA Standard contains a conflict within the NFPA Standard or with another NFPA Standard.

C. The proposed TIA intends to correct a previously unknown existing hazard.

D. The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation.

E. The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.

F. The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification for the action.
QUESTION NO. 1: I AGREE with the TECHNICAL MERITS of the Proposed NEC TIA Log No. 1478 to revise 334.10 items (2), (3) and (4).

Eligible to Vote: 14
Not Returned: 0

<table>
<thead>
<tr>
<th>Vote Selection</th>
<th>Votes</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>Agree</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Kelly Lamp</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Todd Crisman</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Michelle Vassallo</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Kenneth Riedl</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Susan Newman Scearce</td>
<td>Substantiation was provided to support the TIA</td>
<td></td>
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<tr>
<td>George A. Straniero</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Gerald W. Kent</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Dennis A. Nielsen</td>
<td>The proposed language is without technical merit to justify adding the suffix -HT. The substantiation provides no rationale based on case studies nor engineering to qualify the Emergency nature.</td>
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<tr>
<td>Peter Graser</td>
<td>Claims of Safety being compromised have not been technically substantiated. I suggest employing a qualified third party laboratory to conduct an extensive fact-finding study to substantiate the claims. Or, perhaps bring real-world case studies to light where certain NEC compliant wiring methods are less safe than others.</td>
<td></td>
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</tbody>
</table>
Timothy Earl

The submitter provides no technical justification for this restriction. If there is a concern, it should be brought to the committee during the next revision cycle. As a fire safety professional, I am not aware of a safety issue with NM cable when used in currently permitted applications, or a reason why using them in taller buildings would be an issue. To the specific point about tall wood buildings (TWB), I reviewed the reports prepared by the ICC TWB Ad Hoc Committee, including all of the fire test data, and had multiple conversations with those involved in the testing. This was a robust test plan, and the provisions added to the 2021 IBC were carefully vetted and considered by the committee. The testimony at the ICC hearings was extensive. We should not respond with by “shooting from the hip” without due consideration of all the data.

Michael Thomas Porcaro

The TIA lacks technical substantiation to identify the specific risk and hazard of using NM cable in these settings.

Joseph W. Cross

It appears that subsets of Type IV Construction, (A, B, C) buildings were all tested in full-scale, multi-story fire tests performed by the AHC-TWB at the ATF Fire Research Laboratory. Also, all the mass timber buildings “are required to provide at least 2-hour fire-resistance for structural members with 3-hour fire resistance required for the structural frame or bearing walls of Type IV-A buildings”. I fully believe that a change as proposed should be fully discussed and debated during the code cycle. While adoptions of the building code concerning tall wood buildings are being considered, it is unfortunate that they do not change in a correlating fashion with the National Electrical Code. The buildings in question appear to be sprinkler protected. Also, there has been no evidence provided that NM cable in wall cavities is a problem that the NEC® needs to address without full substantiation and discussion during the code making process. At present, I do not believe we have shown there is a safety problem with the use of NM cable in any subset of Type IV construction.

Abstain 2

Susan L. Stene

Making a decision based on a ballot without discussion and hearing different arguments seems hasty and imprudent.

Christel K. Hunter

The Aluminum Association could not reach agreement on this issue.
**QUESTION NO. 2:** I AGREE that the subject is of an EMERGENCY NATURE for one or more of the reasons noted in the Instructions box.

Eligible to Vote: 14  
Not Returned: 0

<table>
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<th>Vote Selection</th>
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</tr>
</thead>
</table>
| Agree          | 7     | **Kelly Lamp**  
The proposed TIA intends to correct a circumstance in which an ICC proposal, revised IBC, and revised NFPA Standard have resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification for the action.  
**Todd Crisman**  
E- This TIA is necessary due to several states intending to adopt the provisions of Mass Timber buildings prior to the publication and adoption of the full 2021 edition of the International Building Code.  
**Michelle Vassallo**  
**Kenneth Riedl**  
**Susan Newman Scearce**  
Substantiation is provided to support the TIA and the emergency nature to process.  
**George A. Straniero**  
E. The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.  
**Gerald W. Kent**  
**Disagree**  
5  
**Dennis A. Nielsen**  
The substantiation provides no rationale based on case studies nor engineering to qualify the Emergency nature.
Peter Graser
I am not aware of any case where NM cable creates a safety hazard. The proposed TIA offers no public benefit that would lessen a known hazard nor ameliorate a continuing dangerous condition. It is not emergency in nature. It should be debated in committee during the next Code cycle.

Timothy Earl
This is not an emergency situation and should be handled through the normal revision process, especially considering that it is about to begin. Tall Wood Buildings (Type IV A, B, and C) were approved for the 2021 IBC after extensive research and testimony. This committee should not rush to change the NEC without appropriate deliberation.

Michael Thomas Porcaro
The TIA does not appear to qualify as Emergency under NFPA guidelines.

Joseph W. Cross
I do not agree that this TIA is of an Emergency Nature.

Abstain
2

Abstain

Susan L. Stene
Making a decision based on a ballot without discussion and hearing different arguments seems hasty and imprudent.

Christel K. Hunter
The Aluminum Association could not reach agreement on this issue.