Case 1:13-cv-01215-TSC Document 122-5 Filed 12/22/15 IF THE IMAGE IS LESS CLEAR THAN THIS NOTICE IT IS DUE TO THE QUALITY OF THE DOCUMENT, OCT-21-1996 995 - 10:33 - A I N P.02/03 INSTRUCTIONS PLEASE READ CAREFULLY Type or print in Black Ink. Use a separate copy for each proposal. Date Rec'd Limit each proposal to a SINGLE section. All proposals must be received by NFPA by 5 p.m., E.S.T., Friday November 8, 1996 to be considered for the 1999 National Electrical Code. Proposals received Office Use Only after 5:00 p.m., E.S.T., Friday, November 8, 1996 will be returned OCT 21 1998 to the submitter. Tel. No. 1-401-726-0700 EX. 330 Date: 10/18/96 Name: Paul Petit American Insulated Wire Corp. Company City: Pawtucket State: RI Zip: 02862 P.O. Box 880 Street Address: Please Indicate Organization Represented (if any): _ Section 310 Table 310-13 1. Section/Paragraph: revised text deleted text Proposal recommends (check one): new text Proposal (include proposed new wording, or identification of wording to be deleted): For types USE and USE-2 include size 14 AWG as the smallest size to be made. (See attached table with recommended change) a law of the by 4. Statement of Problem and Substantiation for Proposal: We have had numerous requests for 14 AWG type USE over the years especially for type USE exposed to sunlight. The black thermosets type USE performs better than the black PVC type UF cables. Type USE and type USE-2 cables are suitable for direct burial but limited to 12 AWG as the smallest size, yet underground feeder cables are also suitable for direct burial and are allowed as small as 14 AWG. Therefore, 14 AWG types USE and USE-2 cables should also be allowed as a new code size. This Proposal is original material This Proposal is not original material, its source (if known) is as follow: Note: Original material is considered to be the submitter's own idea based on or as a result of his/her own experience, thought or research and, to the best of his/her knowledge, is not copied from another source. I hereby grant the NFPA the nonexclusive, royalty-free rights, including non-exclusive, royalty-free rights in copyright, in this proposal, and I understand that I acquire no rights in any publication of NFPA in which this proposal in this or another similar or analogous form is used. Signature (Required) Mail to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101 Quincy, MA 02269 or FAX to 617-770-3500

Signature (Required)

Mail to:Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park, P.O. Bo: 9101 Quincy, MA 02269 or FAX to 617-770-3500

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FORM FOR PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS

NOV 0 6 1995

DATE: 10/31/95

NAME: Thomas F. Pegg

PHONE: (412

(412) 645-8583

ADDRESS: 333 Forbes Avenue Pittsburgh, PA 15222

REPRESENTING: HILB, ROGAL AND HAMILTON COMPANY OF PITTSBURGH, INC.

- la. Document Title: National Electric Code NFPA No. & Yr.: 70-1993
- 2. Proposal Recommends: New Text
- 3. Proposal:

Add to 210-8. Ground-Fault CircuitInterupter Protection for Personnel
B. Receptacles (1)
Add language: That all outdoor outlets be
protected by Ground-Fault Protection.

4. Statement of Problem and Substantiation for Proposal:

We believe the code is ambiguous in where GFI outlets are needed or should be provided.

We have a client who is a major distributor of vending machines. They are frequently required to provide vending machines for outdoor use. It would seem logical to have these outdoor receptacles protected by GFI's.

5. This proposal is original material.

I hereby grant NFPA the non-exclusive, royalty free rights, including non-exclusives royalty-free rights in copyright, in the proposal and I understand that I acquire no rights in any publication of NFPA in which this proposal in this or another similar or analogous form is used.

Thomas F

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	FORM FOR PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS Mail to: Secretary, Standards Council National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 Fax No. 617-770-3500 Note: All proposals must be received by 5:00 p.m. EST/EDST on the published proposal-closing date.
™ \ `	If you need further information on the standards-making process, please contact the Standards Administration Department at 617-984-7249.
> .	Date 12-10-95 Name Joseph A. Tedesco Tel. No. 6175237137
	Street Address 350 NORTH Street Boston, MA 02113
:	Please Indicate Organization Represented (if any)
	1. a) NFPA Document Title NEC NFPA No. & Year 70-1996
*	b) Section/Paragraph 110-34 (C) FOR OFFICE USE ONLY
	2. Proposal Recommends: (Check one)
Ple	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted): ADL delete the word: "Substantially "So le 3rd paragraph will read as follows: Where the ltage exceeds 600 velts nominal, permanent and napricions warning signs shall be provided reading as follows: 1. DANGER High Voltage Letter OUT. 4. Statement of Problem and Substantiation for Proposal: (Note: State the problem that will be resolved by your recommenda- tion; give the specific reason for your proposal including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.) Sections 230-203, 370-72(e), 665-23,
	710-43 and 710-45 do not use the
	Word Substantially and are specific. 5. This Proposal is original material. (Note: Original material is considered to be the submitter's own idea based on or as a result of his/her own experience, thought, or research and, to the best of his/her knowledge. is not copied from another source.) 1 This Proposal is not original material; its source (if known) is as follows:
	Note 1: Type or print legibly in black ink. Note 2: If supplementary material (photographs, diagrams, reports, etc.) is included, you may be required to submit sufficient copies for all members and alternates of the technical committee. I hereby grant NFPA the non-exclusive, royalty-free rights, including non-exclusive, royalty-free rights in copyright, in this proposal and I understand that I acquire no rights in any publication of NFPA in which this proposal in this or another similar or analogous form is used.
<u> </u>	Joseph 9- Tedesso
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	PLEASE USE SEPARATE FORM FOR EACH PROPOSAL

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FORM FOR PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS

Mail to: Secretary, Standards Council
National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101
Fax No. 617-770-3500

Note: All proposals must be received by 5:00 p.m. E.S.T./E.D.S.T. on the published proposal closing date,

Date 12/14/95

Name Stan Kaufman

Tel. No. 770-798-2833

Address: AT&T, 2000 Northeast Expressway, Room 2G44, Norcross, GA 30071

Representing (Please indicate organization, company or self)

1. a) Document Title: National Electrical Code

NFPA No. & Year 70

70, 1999 FOR OFFICE USE ONLY

b) Section/Paragraph:

725-61 (f)

Log#: 255

Date Rec'd:

Proposal #:

Proposal (include proposed new or revised wording, or identification of wording to be deleted):

2. Proposal recommends: (Check one) deleted text

Delete the words "wire or" from section 725-61 (f) to read as follows;

DEC 2 5 1995

Type CL2 or CL3 cable shall be used.

4. Statement of Problem and Substantiation for Proposal:

Wire is not defined in this article.

5. This Proposal is not original material; its source (if known) is as follows:

725-61 (f)

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Signature (Required)

PLEASE USE SEPARATE FORM FOR EACH PROPOSAL

P725-61F.DOC

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FORM FOR PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS

Mail to: Secretary, Standards Council

National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101

Fax No. 617-770-3500

Note: All proposals must be received by 5:00 p.m. EST/E.D.S.T. on the published proposal closing date.

Date 12/18/95

Name Stan Kaufman

Tel. No. 770-798-2833

Proposal #:

Address: AT&T, 2000 Northeast Expressway, Room 2G44, Norcross, GA 30071

Representing (Please indicate organization, company or self)

1. a) Document Title: National Electrical Code

b) Section/Paragraph:

NFPA No. & Year

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2. Proposal recommends: (Check one) new text

3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):

Reword section 800-52 (a) as shown below,

800-52. Installation of Communications Wires, Cables, and Equipment.

Communications wires and cables from the protector to the equipment or, where no protector is required, communications wires and cables attached to the outside or inside of the building shall comply with (a) through (e) below.

- (a) Separation from Other Conductors.
- (1) In Raceways, Boxes, and Cables.
- a. Other Power-Limited Circuits. Communications cables shall be permitted in the same raceway or enclosure with cables of any of the following:
- 1. Class 2 and Class 3 remote-control, signaling, and power-limited circuits in compliance with Article 725.
 - 2. Power-limited fire alarm systems in compliance with Article 760.
 - 3. Nonconductive and conductive optical fiber cables in compliance with Article 770.
- 4. Community antenna television and radio distribution systems in compliance with Article 820.
- b. Class 2 and Class 3 Circuits. Class 1 circuits shall not be run in the same cable with communications circuits, Class 2 and Class 3 circuit conductors shall be permitted in the same cable with communications circuits, in which case the Class 2 and Class 3 circuits shall be classified as communications circuits and shall meet the requirements of this article. The cables shall be listed as communications cables or multipurpose cables.

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Exception: Cables constructed of individually listed Class 2, Class 3, and communications cables under a common jacket shall not be required to be classified as communications cable. The fire-resistance rating of the composite cable shall be determined by the performance of the composite cable.

c. Electric Light, -or Power, Class 1 and Nonpower-limited Fire Alarm Circuits.

1. <u>In Raceways, Compartments and Boxes.</u> Communications conductors shall not be placed in any raceway, compartment, outlet box, junction box, or similar fitting with conductors of electric light_s-or power, Class 1, or nonpower-limited fire alarm circuits.

Exception No. 1: Where all of the conductors of electric light_-or power, Class 1, <u>and or</u> nonpower-limited fire alarm circuits are separated from all of the conductors of communications circuits by a barrier.

Exception No. 2: Electric light, or ppower, Class 1, and or nonpower-limited fire alarm circuit conductors in outlet boxes, junction boxes, or similar fittings or compartments where such conductors are introduced solely for power supply to communications equipment, or for connection to remote control equipment. The electric light or power circuit conductors shall be routed within the enclosure to maintain a minimum of 0.25 in. (6.35 mm) separation from the communications circuit conductors.

2. In Shafts. Communications wires and cables run in the same shaft with conductors of electric light, or power, Class 1, or nonpower-limited fire alarm circuits shall be separated from electric light, or power-conductors, Class 1, and or nonpower-limited fire alarm circuit conductors by not less than 2 in. (50.8 mm).

Exception No.-1: Where either (1) all of the conductors of the-electric light, or power, Class 1, and or nonpower-limited fire alarm circuits are in a raceway, or in metal-sheathed, metal-clad, nonmetallic-sheathed, or Type UF cables, or (2) all of the conductors of communications circuits are encased in raceway.

-Exception No. 2: Where the electric light or power, Class I or nonpower-limited fire alarm conductors are in a raceway, or in metal-sheathed, metal-clad, nonmetallic-sheathed, or Type UF-cables.

(2) Other Applications. Communications wires and cables shall be separated at least 2 in. (50.8 mm) from conductors of any electric light_or power-eireuits, Class 1, and or nonpower-limited fire alarm circuits.

Exception No. 1: Where <u>either (1) all of the conductors of the</u> electric light, or power, Class 1, and or nonpower-limited fire alarm circuits conductors are in a raceway or in metal-sheathed, metal-clad, nonmetallic-sheathed, Type AC, or Type UF cables, or (2) all of the conductors of <u>communications circuits are encased in raceway</u>.

Exception No. 2: Where the communications wires and cables are permanently separated from the conductors of electric light, power, Class 1, and nonpower-limited fire alarm circuits the other-circuit by a continuous and firmly fixed nonconductor, such as porcelain tubes or flexible tubing, in addition to the insulation on the wire.

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If all the above marked revisions are accepted, section 800-52 will read as follows:

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800-52. Installation of Communications Wires, Cables, and Equipment.

Communications wires and cables from the protector to the equipment or, where no protector is required, communications wires and cables attached to the outside or inside of the building shall comply with (a) through (e) below.

- (a) Separation from Other Conductors.
- (1) In Raceways, Boxes, and Cables.
- a. Other Power-Limited Circuits. Communications cables shall be permitted in the same raceway or enclosure with cables of any of the following:
- Class 2 and Class 3 remote-control, signaling, and power-limited circuits in compliance with Article 725.
 - 2. Power-limited fire alarm systems in compliance with Article 760,
 - 3. Nonconductive and conductive optical fiber cables in compliance with Article 770.
- 4. Community antenna television and radio distribution systems in compliance with Article 820.
- b. Class 2 and Class 3 Circuits. Class 1 circuits shall not be run in the same cable with communications circuits. Class 2 and Class 3 circuit conductors shall be permitted in the same cable with communications circuits, in which case the Class 2 and Class 3 circuits shall be classified as communications circuits and shall meet the requirements of this article. The cables shall be listed as communications or multipurpose cables.

Exception: Cables constructed of individually listed Class 2, Class 3, and communications cables under a common jacket shall not be required to be classified as communications cable. The fire-resistance rating of the composite cable shall be determined by the performance of the composite cable.

- c. Electric Light, Power, Class 1 and Nonpower-limited Fire Alarm Circuits.
- 1. Raceways, Compartments and Boxes. Communications conductors shall not be placed in any raceway, compartment, outlet box, junction box, or similar fitting with conductors of electric light, power, Class 1, or nonpower-limited fire alarm circuits.

Exception No. 1: Where all of the conductors of electric light, power, Class 1, and nonpower-limited fire alarm circuits are separated from all of the conductors of communications circuits by a barrier.

Exception No. 2: Power circuit conductors in outlet boxes, junction boxes, or similar fittings or compartments where such conductors are introduced solely for power supply to communications equipment. The power circuit conductors shall be routed within the enclosure to maintain a minimum of 0.25 in. (6.35 mm) separation from the communications circuit conductors.

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2. In Shafts. Communications wires and cables run in the same shaft with conductors of electric light, power, Class 1, or nonpower-limited fire alarm circuits shall be separated from electric light, power, Class 1, and nonpower-limited fire alarm circuit conductors by not less than 2 in. (50.8 mm).

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Exception: Where either (1) all of the conductors of electric light, power, Class 1, and nonpower-limited fire alarm circuits are in a raceway, or in metal-sheathed, metal-clad, nonmetallic-sheathed, or Type UF cables, or (2) all of the conductors of communications circuits are encased in raceway.

(2) Other Applications. Communications wires and cables shall be separated at least 2 in. (50.8 mm) from conductors of any electric light, power, Class 1, and nonpower-limited fire alarm circuits.

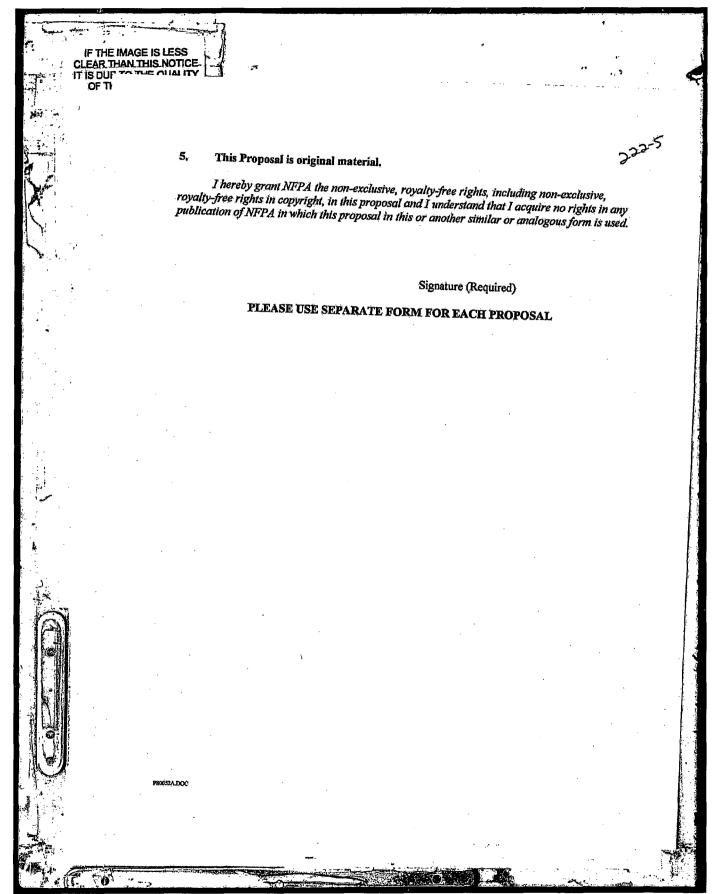
Exception No. 1: Where either (1) all of the conductors of electric light, power, Class 1, and nonpower-limited fire alarm circuits are in a raceway or in metal-sheathed, metal-clad, nonmetallic-sheathed, Type AC, or Type UF cables, or (2) all of the conductors of communications circuits are encased in raceway.

Exception No. 2: Where the communications wires and cables are permanently separated from the conductors of electric light, power, Class I, and nonpower-limited fire alarm circuits by a continuous and firmly fixed nonconductor, such as porcelain tubes or flexible tubing, in addition to the insulation on the wire.

- (b) Spread of Fire or Products of Combustion. Installations in hollow spaces, vertical shafts, and ventilation or air-handling ducts shall be so made that the possible spread of fire or products of combustion will not be substantially increased. Openings around penetrations through fire resistance-rated walls, partitions, floors, or ceilings shall be firestopped using approved methods.
- (c) Equipment in Other Space Used for Environmental Air. Section 300-22(c) shall apply.
- (d) Cable Trays. Types MPP, MPR, MPG, and MP multipurpose cables and Types CMP, CMR, CMG, and CM communications cables shall be permitted to be installed in cable trays.
- (e) Support of Conductors. Raceways shall be used for their intended purpose. Communications cables or wires shall not be strapped, taped, or attached by any means to the exterior of any conduit or raceway as a means of support.

4. Statement of Problem and Substantiation for Proposal:

Including nonpower-limited fire alarm circuits throughout the section corrects an oversight. Deletion of reference to remote control equipment is appropriate since remote control equipment is outside the scope of the article 800. Exception No. 2 to 800-52 (a) (1) c, 1 is revised to permit only power conductors into an enclosure to provide power to a communications circuit since no other nonpower-limited circuit is appropriate. Revision of Exception No 1 to 800-52 (a) (2) permits the two inch separation rule to be waived if communications cables are enclosed in raceway, and thereby corrects an oversight. The remainder of the changes are editorial.



FORM FOR PROPOSALS ON NEPA TECHNICAL COMMITTEE DOCUMENTS

Mail to: Secretary, Standards Council

National Fire Protection Association, I Batterymarch Park, Quincy, Massachusetts 02269-9101 Fax No. 617-770-3500

If you need further information on the standards-making process, please contact the

Note: All proposals must be received by 5:00 p.m. EST/EDST on the published proposal-closing date.

Date 5 SEP 96 Name WILLIAM PRIESTLEY Tel. No. 603 76

Date 5 SEP 96 Name WILLIAM PRIESTLEY Tel. No. 603 764-5504

Company PRIESTLEY LIGHTNING PROTECTION

Street Address 1280 CAPE MOONSHINE ROAD; PIERMONT NH 03779

Please Indicate Organization Represented (if any)

STANDARD FOR THE STORAGE AND HANDLING OF

1. a) NFPA Document Title LIQUEFIED PETROLEUM GASENFPA No. & Year 58-1995

b) Section/Paragraph 3-7. 1. 3

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2. Proposal Recommends: (Check one) Inew text Log #

Drevised text

Date

Log # SEP 0 9 1996
Date Rec'd

3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):

ADD: THIS PROVISION SHALL NOT PROHIBIT BONDING
TO THE LP GAS SYSTEM, AS REQUIRED BY
NFPA 780 STANDARD FOR THE INSTALLATION OF
LIGHTNING PROTECTION SYSTEMS.

4. Statement of Problem and Substantiation for Proposal: (Note: State the problem that will be resolved by your recommendation; give the specific reason for your proposal including copies of tests; research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.) LIGHTNING ROD SYSTEMS HAVE BEEN FOUND TO HAVE

THE GAS LINE BONDING CONNECTION REMOVED BY THE GAS
SYSTEM INSTALLER. THIS CONNECTION IS REQUIRED BY
NFPA 780 SECTIONS 3-17 AND/OR 3-24.3.
IEPA 58 SECTION 3-71 3 STATES THE BOOK STATES THE SECTION 3-74.3.

NFPA 58 SECTION 3-7.1.3 STATES THAT "GROUNDING AND BONDING BONDING SHALL NOT BE REQUIRED ON LP-GAS SYSTEMS." THIS PROPOSAL CONFUSION 5. This Proposal is original material. (Note: Original material is considered to be the submitter's own idea based on order a result of his/her own experience, thought, or research and, to the best of his/her knowledge, is not copied from another source.)

☐ This Proposal is not original material; its source (if known) is as follows: _____

Note 1: Type or print legibly in black ink.

Note 2: If supplementary material (photographs, diagrams, reports, etc.) is included, you may be required to submit sufficient copies for all members and alternates of the technical committee.

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Case 1:13-cv-01215-TSC Document 122-5 Filed 12/22/15 Page 20 of 92

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	Form for Diamagele are time their and fractions of Order
2	Form for Proposals on NFPA National Electrical Code NFPA Document and Reference: NFPA 70 100 - Definitions OCT 28 1996
	SUBMITTER INFORMATION:
	First Name: Wayne D. Last Name: Moore, P.E.
, 1	Company: MBS Fire Technology, Inc. Telephone#: 770-507-0046
	Address 1: 207 Kensington Trace PO Box:
1	Address 2:
N _e -	City: Stockbridge State: GA Zip: 30281-6908
· · · · · · · · · · · · · · · · · · ·	Representing: Rockbestos/Surprenant Cable Corporation Country: USA
•	Please Indicate organization represented (If any) pate; 10/14/96
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:
5 - 4 - 5 - 4 - 5 - 6	1.a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #//30 b) Article/Section: 100 - Definitions
• • •	2. Proposal recommends: (Check one):
	3. Proposal (include proposed new or revised wording, or Identification of wording to be deleted):
: :	
	Add new definition:
	and the second of the second o
	Circuit Integrity (CI). A term used to indicate that a cable will maintain its electrical function for a given period of time under specified fire conditions.
	Biton being or sime ander absorper me seveningmi.
-	4. Statement of Problem and Substantiation for Proposal:
	A definition is needed to describe a cable that has been designed to function longer during a fire than
	standard "fire-resistant" cable and to accommodate technology presently being utilized throughout the
	world. This definition is needed to compliment companion proposals to CMP 16.
•	
	5. 🗵 This Proposal is original material.
	☐ This Proposal is not original material; its source (if known) is as follows:
*	\mathcal{D}_{ij} , which is the state of the state of \mathcal{D}_{ij} . The state of \mathcal{D}_{ij}
	Proposal for Submittal to NFPA as of 10/15/96
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Form for Proposals on NFPA National Electrical Code NFPA DOCUMENT. Form for Proposals on NFPA National Electrical Code NFPA DOCUMENT. SUBMITTER INFORMATION: FIRST NATION: OCT 28 1996 SUBMITTER INFORMATION: FIRST NATION: OCT 28 1996 FIRST Technology, Inc. Address 1: 207 Kensington Trace Address 2: City: Stockbridge Representing: Rockbestos/Surprenant Cable Corporation Please Indicate organization represented (if any) FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING: 1.aDicoment Title: National Electrical Code NFPA No.: 70 Year 1996 ##1/31 b) ArticlesSection: 760-2 2. Proposal recommends: (Check one): 3. Proposal recommends: (Check one): Add new definition: First Alarm Circuit Integrity (CI) Cable. Cable used in fire alarm systems to ensure continued operation of critical circuits during a specified time under fire conditions. 4. Statement of Problem and Substanfiation for Proposal: This definition is used to allow new technology, that is presently being used worldwide, to be used in fire alarm systems. This cable can be used in fire alarm circuits to comply with the survivability requirements of the NFPA 72-1998, National Fire Alarm Cack with the added benefit of the cable's ability to multitain its dectrical function during fire conditions for a defined period of time. 8. This Proposal is not original material: its source (if known) is as follows: Proposal for Submitted to NFPA as of 10/15/98	FOR FOR Proposals on NFPA National Electrical Code NFPA Document and Reference: NFPA 70 760-2 SUBMITTER INFORMATION: First Name: Whyne D. Company: MBS Firs Technology, Inc. Address 1: 20 Kensington Trace Address 2: Chyls Stockbridge Representing: Rockbestow/Surprunant Cable Corporation Please indicate organization represented (If any) FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FLOUNGE: 1,a)Document Title: National Electrical Code NFPA No.: 70 year: 1996 Add new definition: Fire Alarm Circuit Integrity (CI) Cable. Cable used in fire alarm systems to ensure continued operation of critical circuits during a specified time under fire conditions. 4. Statement of Problem and Substantiation for Proposal: This definition is used to allow new technology, that is presently being used worldwide, to be used in fire alarm systems the scale continued operation of critical circuits during a specified time under fire conditions. 4. Statement of Problem and Substantiation for Proposal: This definition is used to allow new technology, that is presently being used worldwide, to be used in fire alarm systems. This cable can be used in fire alarm circuits to comply with the survivability requirements of the NFPA 72-1996, National Fire Alarm Code with the added benefit of the cable's ability to maintain its decircal function during fire conditions for a defined period of time. 5. This Proposal is not original material; its source (if known) is as follows:	FIT IS DU	
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3 1	Form for Proposals on NFPA Na				
	NFPA Document and Reference: NFPA SUBMITTER INFORMATION:	A. 70 700-3 (g) IN	lew	OCT 28 1996	}
	First Name: Wayne D.	Last Name:	Moore, P.E.		
	Company: MBS Fire Technology, Inc.	Telephone#:	770-507-0046		
	Address 1: 207 Kensington Trace	PO Box:			
	Address 2: City: Stockbridge	State:	GA Zip: 30	281-6908	
	Representing: Rockbestos/Surprenant Cable Corporation				
	Please indicate organization represen		Date:	10/14/96	
1	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FO	LLOWING:	·	- 11	
	1,a)Document Title: National Electrical Code	NFPA No.: 70	Year: 1996	#1	132
	b) Article/Section: 760-3 (g) New				
	2. Proposal recommends: (Check one):			t	•
	3. Proposal (Include proposed new or revised wording, or ide				
			minant Disa Ala	rm Coda	
11.11	760-3 (g) Survivability. See the requirements in the	NFPA 72-1996, N	uuonai Fire Aia	em Coue,	
	sub-sections 3-2.4, 3-4.4, 3-12.4 and 3-12.4.3.	NFPA 72-1996, N	anonai Fire Aia	im Code	
	 sub-sections 3-2.4, 3-4.4, 3-12.4 and 3-12.4.3. A. Statement of Problem and Substantiation for Proposal: This section needs to be added to assist those individu 				
	 sub-sections 3-2.4, 3-4.4, 3-12.4 and 3-12.4.3. 4. Statement of Problem and Substantiation for Proposal: This section needs to be added to assist those individu requirements of NFPA 72-1996. 				
	 sub-sections 3-2.4, 3-4.4, 3-12.4 and 3-12.4.3. 4. Statement of Problem and Substantiation for Proposal: This section needs to be added to assist those individu requirements of NFPA 72-1996. 5. This Proposal is original material. 	als in complying w			
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	Form for Proposals on NFPA National Electrical Code	
7	NFPA Document and Reference: NFPA 70 760-31(g) OCT 28 1996	
	SUBMITTER INFORMATION:	
	First Name: Wayne D. Last Name: Moore, P.E.	
	Company: MBS Fire Technology, Inc. Telephone#: 770-507-0046 Address 1: 207 Kensington Trace PO Box:	
	Address 1: 207 Kensington Trace PO Box; Address 2:	
	City: Stockbridge State: GA Zip: 30281-6908	
	Representing: Rockbestos/Surprenant Cable Corporation Country: USA	
	Please indicate organization represented (if any) Date: 10/14/96	
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:	
	1.a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #133)
	b) Article/Section: 700-51(g)	
	2. Proposal recommends: (Check one):	
	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):	
	Renumber existing 760-31(g) to 760-31(h). Add the following words to the end of existing 760-31(g) [renumbered to 760-31(h)]: "Cables that are listed for circuit integrity shall be permitted to be identified with the suffix CI." 4. Statement of Problem and Substantiation for Proposal: Where cables are used that provide circuit integrity to meet the requirements of NFPA 72-1996.	
	Add the following words to the end of existing 760-31(g) [renumbered to 760-31(h)]: "Cables that are listed for circuit integrity shall be permitted to be identified with the suffix CI."	
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	Add the following words to the end of existing 760-31(g) [renumbered to 760-31(h)]: "Cables that are listed for circuit integrity shall be permitted to be identified with the suffix CI." 4. Statement of Problem and Substantiation for Proposal: Where cables are used that provide circuit integrity to meet the requirements of NFPA 72-1996, National Fire Alarm Code, they should be marked appropriately. This change allows the marking to be used. 5. This Proposal is original material.	

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13	Form for Proposals on NFPA National Electrical Code
<u></u>	NFPA Document and Reference: NFPA 70 760-31(g) New OCT 28 1996
	SUBMITTER INFORMATION:
(go ²	First Name: Wayne D. Last Name: Moore, P.E.
M . M	Company: MBS Fire Technology, Inc. Telephone#: 770-507-0046
	Address 1: 207 Kensington Trace PO Box:
	Address 2:
	City: Stockbridge State: GA Zip: 30281-6908
	Representing: Rockbestos/Surprenant Cable Corporation Country: USA
	Please Indicate organization represented (if any): Date: 10/14/96
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1.a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #1134
	b) Article/Section: 760-31(g) New
	2. Proposal recommends: (Check one):
Total Aug Total Aug	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):
	Insert a new section 760-31 (g) [renumber the balance of the section]
	(g) Fire Alarm Circuit Integrity (CI) Cable. Cables suitable for use in fire alarm systems to ensure
	continued operation of critical circuits during a specified time under fire conditions shall be listed as
	Circuit Integrity (CI) Cable. Cables identified in sections 760-31(d), (e), and (f) meeting the
	requirements for Circuit Integrity shall have the additional classification using the suffix "CI" (for example, NPLFPCI, NPLFRCI and NPLFCI).
	(FPN) This cable can be used for fire alarm circuits to comply with the survivability requirements of
	NFPA 72-1996, National Fire Alarm Code, that the cable must maintain its electrical function during
	fire conditions for a defined period of time.
	4. Statement of Problem and Substantiation for Proposal:
	Cables having circuit integrity are already recognized in NFPA 72-1996, National Fire Alarm Code for
	meeting survivability requirements. New technology has made the use of circuit integrity cables to be
	grantical Recourse of this cables having circuit integrity are presently being used in fire alarm systems
<u>a</u>	practical. Because of this, cables having circuit integrity are presently being used in fire alarm systems worldwide.
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OF	THE DOCUMENT.
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1	Form for Proposals on NFPA National Electrical Code
ह्या ५ - : इंग्रेस	NFPA Document and Reference: NFPA 70 760-71 (g) New OCT 2 8 1996
	First Name: Wayne D. Last Name: Moore, P.E.
	Company: MBS Fire Technology, Inc. Telephone*: 770-507-0046
	Address 1: 207 Kensington Trace PO Box:
	Address 2:
SLIF	City: Stockbridge State: GA Zip: 30281-6908
	Representing: Rockbestos/Surprenant Cable Corporation Country: USA
. :	Please Indicate organization represented (if any) Date: 10/14/96
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1.a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #1/35
	b) Article/Section: 760-71 (g) New
	2. Proposal recommends: (Check one):
	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):
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	Insert a new section 760-71 (g) [renumber the balance the of section]
	(a) Fire Alsem Circuit Intervity (CD Cable Cables suitable for use in fire alemantary to
	AND A MAN AREA OF THE PARTY AND ADDRESS OF THE
•	(g) Fire Alarm Circuit Integrity (CI) Cable. Cables suitable for use in fire alarm systems to ensure continued operation of critical circuits during a specified time under fire conditions shall be listed as
100	continued operation of critical circuits during a specified time under fire conditions shall be listed as Circuit Integrity (CI) Cable. Cables identified in sections 760-71(d), (e), and (f) meeting the
in .	continued operation of critical circuits during a specified time under fire conditions shall be listed as Circuit Integrity (CI) Cable. Cables identified in sections 760-71(d), (e), and (f) meeting the requirements for Circuit Integrity shall have the additional classification using the suffix "CI" (for
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	F THE DOCUMENT.
	ζ το.
	Form for Proposals on NFPA National Electrical Code 007 28 1996
	NFPA Document and Reference: NFPA 70 760-71(h)
	SUBMITTER INFORMATION;
	First Name: Wayne D. Last Name: Moore, P.E. Company: MBS Fire Technology, Inc. Telephone#: 770-507-0046
	Address 1: 207 Kensington Trace PO Box:
Y.	Address 2:
	City: Stockbridge State: GA Zip: 30281-6908
	Representing: Rockbestos/Surprenant Cable Corporation Country: USA
	Please indicate organization represented (if any) Date: 10/14/96
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1,a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #136 b) Article/Section: 760-71(h)
	2. Proposal recommends: (Check one):
/: 6	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):
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	Renumber existing 760-71(h) to 760-71(i).
	kidalita mada a karan alian karan di ana di Aran Baran. Aran mendiberah a karan indah mendiberah di Aran Mada Mada Aran Mada Mada Mada Mada Mada Mada Mada Ma
	Add the following words to the end of existing 760-71(h) [renumbered to 760-31(h)]: "Cables that are listed for circuit integrity shall be permitted to be identified with the suffix CL."
	Add the following words to the end of existing 760-71(h) [renumbered to 760-31(h)]: "Cables that are listed for circuit integrity shall be permitted to be identified with the suffix CI." 4. Statement of Problem and Substantiation for Proposal:
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	THAN THIS NOTICE JE TO THE QUALITY
OF I	THE DOCUMENT.
	Form for Proposals on NFPA National Electrical Code
	NFPA Document and Reference: NFPA 70 Table 760-31(g) OCT 2.8 1996
	SUBMITTER INFORMATION:
444	First Name: Wayne D. Last Name: Moore, P.E.
	Company: MBS Fire Technology, Inc. Telephone#: 770-507-0046
	Address 1: 207 Kensington Trace PO Box:
	Address 2:
	City: Stockbridge State: GA Zip: 30281-6908 Representing: Rockbestos/Surprenant Cable Corporation Country: USA
	Representing: Rockbestos/Surprenant Cable Corporation Country: USA Please Indicate organization represented (if any) Date: 10/14/96
	FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1.a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 #1/37 b) Article/Section: Table 760-31(g)
	b) Article/Section: Table 760-31(g)
	2. Proposal recommends: (Check one):
	3. Proposal (include proposed new or revised wording, or identification of wording to be deleted):
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	Renumber Table 760-31 (g) to Table 760-31 (h).
	Renumber reference to "(g)" in third column to "(h)."
	Add to the and of the Table:
	Add to the end of the Table: Note: Cables identified in the above sections 760-31(d), (e), and (f) meeting the requirements for
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IF THE IMAGE IS LESS	•
CLEAR THAN THIS NOTICE	
OF THE DOCUMENT.	
Form for Proposals on NFPA National Electrical Co	· Ii
NFPA Document and Reference: NFPA 70 Table 760-71(h)	OCT 28 1996
SUBMITTER INFORMATION: First Name: Wayne D, Last Name: Mo	
First Name: Wayne D. Company: MBS Fire Technology, Inc. Last Name: Mo Telephone#: 770	
Address 1: 207 Kensington Trace PO Box:	
Address 2:	
City: Stockbridge State: GA Representing: Rockbestos/Surprenant Cable Corporation Country: US	
Please Indicate organization represented (if any)	A Date: 10/14/96
FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF THE FOLLOWING: 1.a)Document Title: National Electrical Code NFPA No.: 70	11-11-28
b) Article/Section: Table 760-71(h)	rear: 1996 #1138
	deleted text.
3, Proposal (include proposed new or revised wording, or identification of wording to b	
Renumber Table 760-71(h) to Table 760-71(i).	
Renumber reference to "(h)" in third column to "(i)." Add to the end of the Table:	
Note: Cables identified in the above sections 760-71(d), (e), and (f) meeting	
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Proposal for Submittal to NFPA as of 10/15/96	

IF THE IMAGE IS LESS CLEAR THAN THIS NOTICE - IT IS DUE TO THE QUALITY OF THE DOCUMENT,

Formal Transmittal of Proposals to NFPA as of 10/14/96

OCT 28 1996

Mail a copy of the transmittal form with your signature. The registration of your new Proposals cannot be completed until this is received. Include this report with your disk, Mail to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park Quincy, MA 02269-9101

1138-2

Last Name	<u>First Name</u>	NFPA N	lo. / year	Article/Section	
Moore, P.E.	Wayne D.	70	1996	100 - Definitions	#1130
Moore, P.E.	Wayne D.	70	1996	760-2	#1131
Moore, P.E.	Wayne D.	70	1996	760-3 (g) New	#1132
Moore, P.E.	Wayne D.	70	1996	760-31(g)	#1133
Moore, P.E.	Wayne D.	70	1996	760-31(g) New	#1134
Moore, P.E.	Wayne D.	70	1996	760-71 (g) New	#1135
Moore, P.E.	Wayne D.	70	1996	760-71(h)	# 1136
Moore, P.E.	Wayne D.	70	1996	Table 760-31(g)	#1137
Moore, P.E.	Wayne D.	70	1996	Table 760-71(h)	#1138

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* 70

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Form for Proposals on NFPA NFPA Document and Reference, NFPA	
SUBMITTER INFORMATION:	1 Nt. O Nt. O LUINTE A
First Name: Rayindra	Last Name: Ganatra x. 29617
Company: Alcan Cable	Telephone#: (770) 392-231/
Address 1: Three Ravinia Dr.	PO Box:
Address 2: Suite 1600	
City: Atlanta	State: GA Zip: 30092
Representing:Self	Country: USA
Please indicate organization represented	(if any) Date: 11/7/96
FOR EACH PROPOSAL, PLEASE COMPLETE EACH OF TI	HE FOLLOWING:
1.a)Document Title:	
· · · · · · · · · · · · · · · · · · ·	NFPA No.: 70 Year: 1996
b) Article/Section: Section 200-7 and	
2. Proposal recommends: (Check one): new text	☑ revised text ☐ deleted text.
3. Proposal (include proposed new or revised wording,	
Rewrite Section 200-7 and the Exceptions No. 1, No. 2 used for deleted text and the new text is underlined): 200-7. Use of White or Natural Gray Color. A continuous white or natural gray covering or three contermination marking of white or natural gray color shall be exception No. 1: An insulated conductor with a white white stripes shall be permitted as an ungrounded conductis use, by painting or other effective means at its terminal visible and accessible. Exception No. 2: A cable containing an insulated conductor evering or three continuous white stripes shall be permitted ones where the white or natural gray conductor with who used for the supply to the switch, but not as a return continuous white stripes shall not be required. Exception No. 3: A flexible cord for connecting an apply white or natural gray outer finish covering or three continuous matural gray outer finish covering or three continuous matural gray outer finish covering or three continuous permitted by Section 400-22, shall be permitted whether supplied by a circuit having a grounded conductor. Exception No. 4: A white or natural gray conductor with stripes of circuits of less than 50 volts shall be required to 250-5(a).	entinuous white stripes on a conductor or a consequence only for the grounded conductor. For natural gray finish covering or thee continuous etor where permanently re-identified to indicate ation, and at each location where the conductor is actor with a white or natural gray outer finish attend for single-pole, 3-way, or 4-way switch ite covering or three continuous white stripes is a fluctor from the switch to the switched outlet. In a large conductor with white covering or three itence, having one conductor identified by a nuous white stripes or by any other means or not the outlet to which it is connected is the white covering or three continuous white
4. Statement of Problem and Substantiation for Proposal: Stripes, either extruded with insulation or painted over the conductors. Typically a single stripe is used to identify if stripes are used to identify the grounded conductors of Ty proposal maintains the white color but, seeks to add an of By eliminating "natural gray" the proposal supports the e- issue.	he ungrounded conductors. Three yellow the USE that are used by the utilities. The ption for stripes.
5. A This Proposal is original material. This Proposal is not original material; its source	(if known) is as follows:
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Proposal for Submittal to NFPA	se of 19/4/06
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Proposals cannot Mail to: Secretary, 8	transmittal form with your be completed until this Standards Council, Natior	is received. In	nclude this	report with your dis	Park			
Quincy, MA 02269-	First Name	NFPA No	. / year	Article/Section	3	982	- <i></i>	
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NFPA in which these p	op cours in miss or since							
NFPA in which these p. (770) 392-2311	, op como in mile or also	Ran	i ha	nation				

Form for Comments on NFPA National Electrical Code NFPA Decument and References NFPA 79 100 SUBMITTER INFORMATION: First Name: Jim: Company: Square D Company	E6	HE IMAGE IS LESS 3. THAN THIS NOTICE WE TO THE QUALITY ### PAGE 13 LESS 4-1-1501	P.
NPPA Document and Reference: NFPA 70 SUBMITTER INFORMATION: First Name: Jim	i e		
NPPA Document and Reference: NFPA 70 SUBMITTER INFORMATION: First Name: Jim	. 51	Form for Comments on NFPA National Electrical Code	į
First Name: Jim Company: Square D Company Address 1: 220 Lexington Green Circle Address 2: Suite 300 City: Lexington Representing: Please Indicate organization represented (if any) FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Titie: National Electrical Code NFPA No: 70 Year: 1996 b) Article/Section: 100 2. Comment creommends: (Check one): Insw text revised text deleted text 3. Comment (include proposed new or revised wording, or identification of wording to be deleted): Continue to accept the proposal. 4. Statement of Problem and Substantiation for Comment: This change is critical to clearing up confusion regarding what constitutes service conductors. These conductors should extend from a service point and not from an "other source of power". Although not intended by CMP 1 in the 1996 cycle, the addition of the words "other source of power" to the 1996 Code has led to many interpretations of service conductors that in reality were feeders within the premises wiring system. The deletion of this text will clear up much of this confusion and make it clear as to what rules apply. 5. This Comment is not original material. This Comment is not original material; its source (if known) is as follows:	A		į.
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Address 1: 220 Lexington Green Circle Address 2: Suite 300 City: Lexington Representing: Please Indicate organization represented (if any) Please Indicate organization represented (if any) Poster 9/15/97 FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Tities: National Electrical Code b) Article/Section: 100 Comment on proposal number: 1-134 2. Comment recommends: (Check one): Dev text revised text deleted text. 3. Comment (nelude proposal new or revised wording, or identification of wording to be deleted): Continue to accept the proposal. 4. Statement of Problem and Substantiation for Comment: This change is critical to clearing up confusion regarding what constitutes service conductors. These conductors should extend from a service point and not from an "other source of power". Although not intended by CMP 1 in the 1996 cycle, the addition of the words "other source of power". Although not intended by CMP 1 in the 1996 cycle, the addition of the words "other source of power" to the 1996 Code has led to many interpretations of service conductors that in reality were feeders within the premises wiring system. The deletion of this text will clear up much of this confusion and make it clear as to what rules apply. 5. This Comment is original material. This Comment is not original material; its source (if known) is as follows:		First Name: Jim Last Name: Pauley	1
Address 2: Suite 300 City: Lexington Representing: Country: USA Please indicate organization represented (if any) Date: 9/15/97 FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. allocument Titie: National Electrical Code b) Article/Section: 100 Comment on proposal number: 1-134 2. Comment (include proposad new or revised wording, or identification of wording to be deleted; Continue to accept the proposal. 4. Statement of Problem and Substantiation for Comment: This change is critical to clearing up confusion regarding what constitutes service conductors. These conductors should extend from a service point and not from an "other source of power". Although not intended by CMP 1 in the 1996 cycle, the addition of the words "other source of power" to the 1996 Code has led to many interpretations of service conductors that in reality were feeders within the premises writing system. The deletion of this text will clear up much of this confusion and make it clear as to what rules apply. 5. This Comment is original material. This Comment is not original material; its source (if known) is as follows:			1
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b) Article/Section: 100			William .
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7.7	Form for Comments on NFPA Nationa	il Electrical Code
4.1	NFPA Document and Reference: NFP	A 70 210-11 (New)
	SUBMITTER INFORMATION:	
	First Name: Roger	Last Name: Witt
7	Company: State Farm Insurance	Telephone#: 309 766 5945
	Address 1: 1 State Farm Plaza	PO Box:
	Address 2:	
111	City: Bloomington	State: 11 Zip: 61710
	Representing:	Country: USA
	Please indicate organization repres	ented (if any) Date: 10/21/97
	the state of the s	
`T.4.	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE F	OLLOWING:
	1. a)Document Title; National Electrical Cod	
	b) Article/Section: 210-11 (New)	Comment on proposal number: 2-129
	2. Comment recommends: (Check one):	ext revised text deleted text.
. : :	2 Comment (include proposed new or revised wording, or i	identification of wording to be deleted):
	We recommend the Arc-Fault Circuit-Interrupter Pr	rotection proposal as amended by the panel be
	accepted.	
	and the second s	
	Our research leads us to the conclusion that arcing I	faults are the cause of a high percentage of electrical
	fires. The AFCI technology addresses the problem.	
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	CPSC has had testing done by TII, and UL has done	subsequent testing that demonstrates that AFCIs
		subsequent testing that demonstrates that AFCIs
	CPSC has had testing done by UL and UL has done will address many of the fires from arcing faults in	e subsequent testing that demonstrates that AFCIs residential occupancies.
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FOF 1. 2. 3.	Comment recommends: (Check one):	850 24 1997 stallaton
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FOF 1. 2. 3.	UBMITTER INFORMATION: First Name: Roger Company: State Farm Insurance Address 1: 1 State Farm Plaza Address 2: City: Bloomington Representing: Please indicate organization represented (if any) Please indicate organization represented (if any) REACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 b) Article/Section: 210-7(d)(3) Comment on proposal number: 2-42 Comment (Include proposed new or revised wording, or identification of wording to be deleted): (3) Where a grounding means does not exist in the receptacle enclosure, a nongrounding-type receptacle(s) shall be permitted to be replaced with another nongrounding-type receptacle(s) the install comply with a,b, or c below: a. NO Change b. A non grounding-type receptacle(s) shall be permitted to be replaced with a ground-fault circuit-interrupter-type of receptacle(s). These receptacles shall be marked "No Equipment Grounding-type receptacles on the ground-fault circuit-interrupter-type of receptacles).	850 24 1997 stallaton
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	equipment grounding conductor shall not be connected from the ground-fault circuit-interrupter-t	
	eceptacle to any outlet supplied from the ground-fault circuit-interrupter receptacle	-y-tre-
	c. A nongrounding-type receptacle(s) shall be permitted to be replaced with a grounding-type	.
	eceptacle(s) where supplied through a ground-fault-curcuit-interupter. Brounding-type receptacl	les
	supplied through the ground-faul circuit-interrupter shall be marked "GFCI Protected" and "No	į
	Equipment Ground." An equipment grudnign conductor shall not be connected between the	į.
	grounding-type receptacles.	· •
* 4. S	Statement of Problem and Substantiation for Comment: With an increase in electronic technology, and the reliance on proper grounding to provide a nois	e free
	nvironment and a path to divert surge energy, replacement of a non-grounding type outlet with a	
g	rounding type outlet not matter if it is a GFCI device or not, is not a good practice. As we start t	to see
n	nore electronics in appliances and manufacturers protecting the electronics with surge protective	devices
	SPDs) the ground path is more and more important. If the chassis of the equipment is also conr	
	t the same ground as the SPD, then a shock potential is possible. The installation of a grounding	
	eceptacle provides a false sense of protection for the end user not wise in the theories and safety f electricity. The panel should revisit the reason the GFCI was offered as a solution for replacen	
	utlets, consider the needs of today ie power quality and the proper operation of surge protective	
S	PDs are not only used on computers, and television sets, they are used for microwave ovens, se	curity
	ystems, garage door operators etc. all types of SPDs (with one exception) require a good low	į
ir (E/A)	npedance ground path for proper operation.	ľ
5.	This Comment is original material.	, j
	This Comment is not original material; its source (if known) is as follows:	
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	Comment for Submittal to NFPA as of 10/23/97	

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	AR THAN THIS NOTICE
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	Form for Comments on NFPA National Electrical Code
	NFPA Document and Reference: NFPA 70 250
î. a	SUBMITTER INFORMATION:
•	First Name: Roger Last Name: Witt
*	Company: State Farm Insurance Telephone#: 309 766 5945
•	Address 1: 1 State Farm Plaza PO Box:
	Address 2:
	City: Bloomington State: Il Zip: 61710
100	Representing: Country: USA
	Please Indicate organization represented (if any) Date: 10/21/97
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 0 1007
	b) Article/Section: 250 Comment on proposal number: 5-41 OCT 2 4 1997
	2. Comment recommends: (Check one):
	3, Comment (include proposed new or revised wording, or identification of wording to be deleted):
	250-64 Resistance of Made Electrodes. A single electrode consisting of a rod, pipe, or plate that does
	not have a resistance to ground of 25 ohms or less shall be augmented by one additional electrode or any
	of the types specified in Section 250-60 or 250-62. Where multiple rod, pipe, or plate electrodes are
	installed to meet the requirements of this section, they shall not be less than 16 ft. (4.9m) 6 ft. (1.83m) apart.
	upaca
	250-78. Connections to Electrodes. The grounding conductor shall be connected to the grounding
-	electrode by exothermic welding, listed lugs, listed pressure connectors, listed clamps, or other listed
_	means. Connections depending on solder shall not be used. Ground clamps shall be listed for the
	materials of the grounding electrode and the grounding electrode conductor and, where used on pipe, rod,
	or other buried electrodes shall also be listed for direct soil burial. Not more than one conductor shall be
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	or other buried electrodes shall also be listed for direct soil burial. Not more than one conductor shall be connected to the grounding electrode by a single clamp or fitting unless the clamp or fitting is listed for multiple conductors,. One of the methods indicated in (a), (b), or (c), or (d) below shall be used. a. NO CHANGE b. NO CHANGE c. Sheet-Metal-Strap Type Ground Clamp. A listed sheet-metal-strap type ground clamp having a rigid metal base that seats on the electrode and having a strap of such material and dimensions that it is not likely to stretch during or after installation. d. c. Other Means. An equally substantial approved means. 250-130(b) Equipment Grounding Conductor (b) For Ungrounded System. The connection shall be made by bonding the equipment grounding conductor to the grounding electrodes conductor and to the grounded service conductor. Exception for (a) and (b): For replacement of non grounding-typed receptacles with grounding type receptacles and for branch-circuit extensions only in existing installations that do not have an equipment grounding conductor in the branch circuit, the grounding or a grounding type receptacle outlet shall be permitted to be grounded to an accessible point on the grounding electrode system as described in 250-60, or to any accessible point on the grounding electrode conductor (FPN): See section 210-7(d) for the use of a ground fault circuit -intrrupter-type receptacle

IF THE IMAGE IS LESS CLEAR THAN THIS NOTICE IT IS DUE TO THE QUALITY OF THE DOCUMENT.

resistance will not be halved unless the additional rods are at least several rod lengths apart. With this information, why not change the distance requirement from 6 feet to 16 feet. The cost of this additional rod, wire and clamp is less than the cost to measure the resistance of a single rod.

250-78 Connections to electrodes: Since there are band clamps that do stretch, why not just delete the allowance totally. If an inspector cannot determine which clamp will stretch and which will not, and there are homes being built that do not have the benefit of the inspection process so maybe the contractor or homeowner does not know which band clamp will or will not stretch, the homeowner suffers in the end and the purpose of the NEC requirements for proper bonding and grounding is negated.

250-130(b) Equipment grounding conductor: Should the equipment grounding conductor run parallel to the phase and neutral, and in the same enclosure or not? When considering the safety issues of the circuit and how that circuit is utilized, is a separate grounding conductor with an unknown distance, routing and impedance safe? Consider the use of surge protective devices. Will the grounding wire be suitable to divert the energy safely to ground or will an alternate path be taken, Since this is an unknown, and safety is the issue, I recommend that where a grounded type receptacle is replacing a non grounded receptacle and there is no grounding conductor in the box, that a new set of circuit wires be installed from the panel to the device wiring that includes the grounding conductor. The FPN note was also struck to eliminate the replacement of non grounded receptacles with grounding receptacles of any type. If a ground is needed by an appliance, whether for safety or proper operation, a non grounded device will not work adequately

5. 🔯 This Comment is original material.

☐ This Comment is not original material; its source (if known) is as follows:

Comment for Submittal to NFPA as of 10/23/97

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	Form for Comments on NFPA National	Electrical Cada
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	SUBMITTER INFORMATION:	70
•	First Name: Roger	t max blammar 377/45
	Company: State Farm Insurance	Last Name: Witt
	Address 1: 1 State Farm Plaza	Telephone#: 309 766 5945
	Address 2:	PO Box:
	City: Bloomington	State: II Zip: 61710
	Representing:	Country: USA
	Please Indicate organization represen	
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ŗ	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOL	LOWING:
	1. a)Document Title: National Electrical Code	LOWING: NFPA No.: 70 Year: 1996 2852
	b) Article/Section: 250	Comment on proposal number: 5-41A
	2. Comment recommends: (Check one):	t ⊠ revised text □ deleted text. 10.7 2 4 1997
	3. Comment (Include proposed new or revised wording, or ide	ntification of wording to be deleted):
	الوريوس فيوروس في المراجع المر	ت مستوسلا کو مرتو موقور مرخوش و در و
	installed to meet the requirements of this section, they apart. (FPN): The parelleling efficiency of rods longer than ft. (1.83m) apart. 250-70. Grounding Conductor Connections to Electroconnected to the grounding electrode by exothermic wellisted clamps, or other listed means. Connections depishall be listed for the materials of the grounding electrowhere used on pipe, rod, or other buried electrodes shat than one conductor shall be connected to the grounding clamp or fitting is listed for multiple conductors. On below shall be used. a. NO CHANGE b. NO CHANGE c. Sheet-Metal-Strap Type Ground Clamp. A listed shape of the ground clamp. A listed shape of the ground clamp.	8 ft (2.44m) is improved by spacing greater than 6 odes. The grounding conductor shall be velding, listed lugs, listed pressure connectors, ending on solder shall not be used. Ground clamps ode and the grounding electrode conductor and, all also be listed for direct soil burial. Not more g electrode by a single clamp or fitting unless the e of the methods indicated in (a), (b), or (c), or (d)
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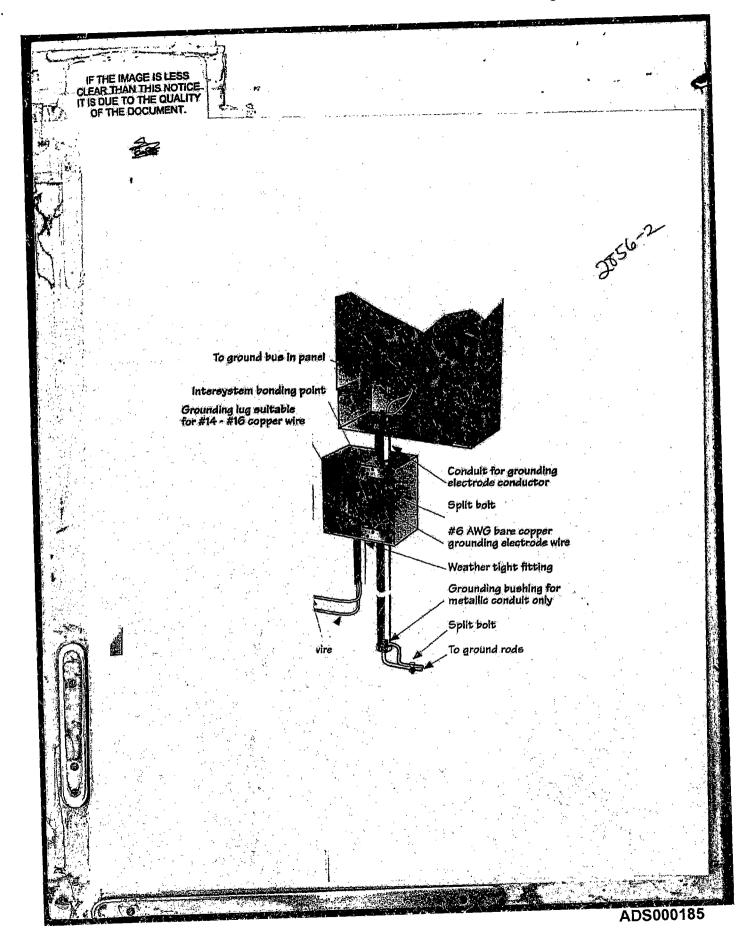
IF THE IMAGE IS LESS CLEAR THAN THIS NOTICE IS DUE TO THE QUALITY OF THE DOCUMENT. 250-56 Substantiation: Using the table 5, Table 8 and Table 9 in the IEEE green book, it appears that adding and additional rod less than one rod length does not appreciably reduce the resistance. And the resistance will not be halfed unless the additional rods are at least several rod lengths apart. With this information, why not change the distance requirement from 6 feet to 16 feet. The cost of this additional rod, wire and clamp is less than the cost to measure the resistance of a single rod. 250-70 Connections to electrodes: Since there are band clamps that do stretch, why not just delete the allowance totally. If an inspector cannot determine which clamp will stretch and which will not, and there are homes being built that do not have the benefit of the inspection process so maybe the contractor or homeowner does not know which band clamp will or will not stretch, the homeowner suffers in the end and the purpose of the NEC requirements for proper bonding and grounding is negated. 250-130(b) Equipment grounding conductor: Should the equipment grounding conductor run parallel to the phase and neutral, and in the same enclosure or not? When considering the safety issues of the circuit and how that circuit is utilized, is a separate grounding conductor with an unknown distance, routing and impedance safe? Consider the use of surge protective devices. Will the grounding wire be suitable to divert the energy safely to ground or will an alternate path be taken, Since this is an unknown, and safety is the issue, I recommend that where a grounded type receptacle is replacing a non grounded receptacle and there is no grounding conductor in the box, that a new set of circuit wires be installed from the panel to the device wiring that includes the grounding conductor. The FPN note was also struck to eliminate the replacement of non grounded receptacles with grounding receptacles of any type. If a ground is needed by an appliance, whether for safety or proper operation, a non grounded device will not work adequately ☐ This Comment is original material. ☐ This Comment is not original material; its source (if known) is as follows: Comment for Submittal to NFPA as of 10/23/97

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OF TH	E DOCUMENT.
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	Form for Comments on NFPA National Electrical Code
1	NFPA Document and Reference: NFPA 70 250-50 (a)
	SUBMITTER INFORMATION:
	First Name: Roger Last Name: Witt Company: State Farm Insurance Telephone#: 309 766 5945
9 , il	
	Address 1: 1 State Farm Plaza PO Box: Address 2:
	City: Bloomington State: 11 Zip: 61710
	Representing: Country: USA
	Please indicate organization represented (If any) Date: 10/22/97
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 2153
	b) Article/Section: 250-50 (a) Comment on proposal number: 5-150
	2. Comment recommends: (Check one): new text revised text deleted text.
Grand Control of the	3. Comment (Include proposed new or revised wording, or identification of wording to be deleted): 0CT 2 4 1997
	Panel Action Revision:
	Delete sub paragraph c1, c2,c4 and c5, and the FPN
	4. Statement of Problem and Substantiation for Comment:
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	Form for Comments on NFPA National Electrical Code
	NFPA Document and Reference: NFPA 70 250-50 (a)
	SUBMITTER INFORMATION:
ا بح	First Name: Roger Last Name: Witt
	Company: State Farm Insurance Telephone#: 309 766 5945
	Address 1: 1 State Farm Plaza PO Box:
14	Address 2:
	City: Bloomington State: [] Zip: 61710
	Representing: Country: USA Please indicate organization represented (if any)
1	Please Indicate organization represented (If any) Date: 10/22/97
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4	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 2854
Official Section (1997) Marie Carlos	b) Article/Section: 250-50 (a) Comment on proposal number: 5-161
	2. Comment recommends: (Check one): new text revised text deleted text.
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):
in the	Delete proposed exception in sub paragraph a OCT 2 4 1997
4 14	(b) For ungrounded System. The connection shall be made by bonding the equipment grounding
, All	conductor to the groudning electrode conductor and to the grounded service conductor.
	Deletethe exception under sub paragraph b and the FPN
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	Form for Comments on NFPA National Electrical Code NFPA Document and Reference: NFPA 70 250-50a	1
	SUBMITTER INFORMATION:	
£ .	First Name: Roger Last Name: Witt	
	Company: State Farm Insurance Telephone#: 309 766 5945	
	Address 1: 1 State Farm Plaza PO Box:	
1	Address 2:	
He fr	City: Bloomington State: Il Zip: 61710	
	Representing: Country: USA	
	Please Indicate organization represented (If any) Date: 10/22/97	
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:	
61 £ 3 6.	1. a)Document Title: National Electrical Code NEPA No.: 70 Year: 1996 2055	
,7,	b) Article/Section: 250-50a Comment on proposal number: 5-162	
	2. Comment recommends: (Check one):	
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):	
	Same comments as for comment on proposal 5-161 OCT 2 4 1997	İ
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The state of the s	Form for Comments on NFPA National Electrical Code	
	NFPA Document and Reference: NFPA 70 250-71 (b) SUBMITTER INFORMATION:	
A	First Name: Roger Last Name: Witt Company: State Farm Insurance Telephone#: 309 766 5945	È.
	Address 1: 1 State Farm Plaza PO Box:	
	Address 2:	
A Harris	City: Bloomington State: Il Zip: 61710	
•	Representing: Country: USA	1
	Please indicate organization represented (If any) Date: 10/23/97	
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:	ţ
*	1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 b) Article/Section: 250-71 (b) Comment on proposal number: 5-189	
	b) Article/Section: 250-71 (b) Comment on proposal number: 5-189	*
	2. Comment recommends: (Check one):	į.
	Comment (include proposed new or revised wording, or Identification of wording to be deleted): Revise as follows:	
	 (b) Bonding to Other Systems. An accessible means external to service equipment enclosures for connecting intersystem bonding and grounding conductors shall be provided at the service by at least one of the following means: (1) NO CHANGE (2) NO CHANGE (3) NO CHANGE (4) An enclosure containing a grounding bar with 6 positions for #14 - #6 copper conductors. The grounding bar shall be bonded to the grounding electrode with #6 copper conductor. The enclosure shall be mounted below the service entrance revenue metering equipment for the building. The enclosure shall be a cast box with a gasketed coverplate. The marking "INTERSYSTEM BONDING" shall be 	
	provided on the enclosure and coverplate. For the purpose of providing an accessible means for intersystem bonding, the disconnection means at a separate building or structure as permitted in Section 250-23(a), Exception No. 1 shall be considered the service equipment.	
	4. Statement of Problem and Substantiation for Comment: The present code language allows for an opportunity for proper intersystem bonding, however, we have observed that these opportunities are not obvious enough to be utilized. Observation of missing bonding bushings on both ends of metallic conduit and evidence of separate ground rods driven for communication services without bonding to the electrical system grounding electrode, have been made. It is the contention of this writer that if a well marked and accessible intersystem bonding point is established, proper intersystem grounding may be provided. Illustration attached.	
	5. Mathic Comment is original material. This Comment is not original material; its source (if known) is as follows:	
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	Comment for Submittal to NFPA as of 10/23/97	a said



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	Form for Comments on NFPA National Electrical Code
THE STATE OF THE S	NFPA Document and Reference: NFPA 70 250-81 (c)
ا برا	SUBMITTER INFORMATION:
e de	First Name: Roger Last Name: Witt
	Company: State Farm Insurance Telephone#: 309 766 5945
	Address 1: 1 State Farm Plaza PO Box:
M F	Address 2: City: Bloomington State: II Zip: 61710
Y	Representing: Country: USA
	Please indicate organization represented (if any) Date: 10/23/97
79	Date.
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:
	1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 395 /
	b) Article/Section: 250-81 (c) Comment on proposal number: 5-241
	2. Comment recommends: (Check one):
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):
	c) Concrete Encased Electrode. An electrode encased by at least 2 in. (50.8mm) of concrete, located
	within and near the bottom of a concrete foundation or footing that is in direct contact with the earth
6.1404	
	consisting of at least 20 ft. (6.15m) of one or more bare or zinc galvanized or other electrically conductive
	coated steel reinforcing bars or rods of not less than 1/2" in. (12.7mm) diameter, or consisting or at least
	coated steel reinforcing bars or rods of not less than 1/2" in. (12.7mm) diameter, or consisting or at least 20 ft. (6.1m) of bare copper conductor not smaller than No. 4.
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	SUBMITTER INFORMATION:
	First Name: Roger Last Name: Witt Company: State Farm Insurance Telephone#: 309 766 5945
	Address 1: 1 State Farm Plaza PO Box: Address 2:
机等。	City: Bloomington State: Il Zip: 61710
	Representing: Country: USA
	Please Indicate organization represented (If any) Date: 10/23/97
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	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 3858
	b) Article/Section: 250-84 Comment on proposal number: 5-252
arah Ma Masa	2. Comment recommends: (Chack one):
	3. Comment (Include proposed new or revised wording, or identification of wording to be deleted): OCT 2 4 1997
	250-84. Resistance of Made Electrodes.
	When the electrode consisting of a rod, pipe, or plate is used, the electrode shall consist of a minimum of
	two rods, pipes, or plates spaced 16 ft. (4.8 m) apart and bonded together with #6 bare copper wiring.
24. ·	The connection of the wiring to the electrode shall be made with nonreversible connectors A single electrode consisting of a plate that does not have a resistance to ground of 25 ohms or less shall
	be augmented by one additional electrode of any of the types specified in Section 250-81 or 250-83.
	Where multiple rod, pipe or plate electrode is installed to augment the resistance of a plate electrode, they
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7	City: Bloomington Representing:	State: II Zip: 61710	
	Represenung: Please Indicate organization represented (if any	Country: USA Date: 10/23/97	ŀ
	Piease indicate organization represented in any	Date: 10/25/2/	*
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:	<u> </u>	
		FPA No.: 70 Year: 1996 7059	į
		t on proposal number: 5-337	
		vised text deleted text.	
	3. Comment (include proposed new or revised wording, or identification	(IG1 Z 4 1997	
T.	This is in support of the proposed new article on Surge Protect	* · · · · · · · · · · · · · · · · · · ·	ļ.
	4. Statement of Problem and Substantiation for Comment:		
	The Panel did not seem to object to the proposed article other t		
	arrestor and a surge protective device, and why a new article w	as proposed.	
	A surge arrestor is a device that A surge protective device is a device that		
	2. The reason for a new article was to differentiate between re	esidential occupancies and other types of	1
	occupancies. The differences being that in residential occupan	cies it has been encouraged that all power	
	and communications services to the building enter the building		
F %.	intersystem bonding can be readily done. In buildings with oth antenna systems on the roof where it is impractical to bond to t		13:
	antenna systems on the roof where it is impractical to bond to t and as noted in article 280 the bonding is to be connected to the		1!
l l	appears to relate to equipment most commonly found in non re		1
	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	aldelitai oogapaaojes.	
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	Form for Comments on NFPA National Electrical C	•
	NFPA Document and Reference: NFPA 70 410-30 (d)	
7 -	SUBMITTER INFORMATION:	
įį l	First Name: Roger Last No	ime: Witt
	Company: State Farm Insurance Telepho	ne#: 309 766 5945
? .{	Address 1: 1 State Farm Plaza POI	Box:
	Address 2:	
1,1	City: Bloomington S	tate: II Zip: 61710
	Representing: Cou	ntry: USA
1	Please indicate organization represented (if any)	Date: 10/23/97
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ł	For each comment, please complete each of the following:	(1) 110
,	1. a)Document Title: National Electrical Code NFPA N	o.: 70 Year: 1996 2860
4.5	b) Article/Section: 410-30 (d) Comment on p	roposal number: 18-46
	2. Comment recommende: (Check one):	text deleted text. OCT 24 1997
	3. Comment (include proposed new or revised wording, or identification of wo	
	Do not include the proposed 410-30(d) in the National Electrical Co	·
	in principle paragraph 410-30(d)	21 esseries perer haner accohem
	Tr. branchis Karabankar 1-0 pri(-)	·
:	4. Statement of Problem and Substantiation for Comment: The substantiation for this-code change seems to be the ability to ear correspond to modular wall a furnishing changes. Plexible metal comodular wiring connectors are an accented practice and conform to	nduit or MC assemblies with
	The substantiation for this code change seems to be the ability to ear	anduit or MC assemblies with the code requirements today. And as to be a design problem and not one ble cord above a ceiling and especially les, non specified attachment means, sible cross talk or EMI with ergency paging systems and the like nector plug has not been addressed. If after the code makes an allowance onsiders it an acceptable wiring tie in the US, since the issues of ty, flammability etc. have not been ting this proposal to the NEC.
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-3.	Form for Comments on NFPA National Electrical Code NFPA Document and Reference: NFPA 70 800-10 (c)	
	The Appearation and Toloronge, 141 12 ye	
	SUBMITTER INFORMATION:	
	First Name: Roger Last Name: Witt	
	Company: State Farm Insurance Telephone#: 309 766 5945	
	Address 1: 1 State Farm Plaza PO Box:	
	Address 2:	ŀ
	City: Bloomington State: Il Zip: 61710	
	Representing: Country: USA	į
	Please Indicate organization represented (if any) Date: 10/22/97	
	PARTICULOS DE PLACE ACUAL CHE EL PLACE DE PLACE	
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996	
	b) Article/Section: 800-10 (c) Comment on proposal number: 16-164	
	2. Comment recommends: (Check one):	
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted): 0CT 2.4 1997	ľ
	Add new Section 800-10(c) to read as follows:	ļ' •
	(c) Point of Entry. The point of entry for communications wiring and cables shall be within 5 feet of the electrical service entry point.	-
į	(FPN): The distance to the electrical system, grounding electrode has a direct relationship to the potential	ĺ
100	difference between the communications circuits and the power circuits.	
	Exception: Where it is not practicable to install the communications and electrical service in this manner,	i.
	a separate grounding electrode, installed in compliance with 250-83 (c), shall be installed for the	5
1	communications systems and the grounding electrodes for the electrical and communications systems	
	shall be connected with a bare or insulated #4 copper conductor. The conductor shall not be exposed to	-
	mechanical injury, and when buried, shall be buried to a depth of 24 inches	É
Tr.	4. Statement of Problem and Substantiation for Comment: Change in proposed text as recommended by one of the panel members and shown in the ROP.	١.
	By requiring a specific point of entry, the requirement becomes enforceable. Single point grounding for	-
	all communications services and power services is needed to provide equal potential between the systems.	
	There is evidence that when communications services are installed remote from the power system service,	
	separate ground rods are installed and not bonded to the electrical service grounding electrode. By	٠,
2 7 3	specifying a service entrance location adjacent to the power system service entrance a better chance of	į.
	single point grounding is presented.	
1	5. 🖸 This Comment is original material.	1
	☑ This Comment is not original material; its source (if known) is as follows:	· .
	Suggested comment from CMP panel member Katz, after review of original Proposal	
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間 .	Comment for Submittal to NFPA as of 10/23/97	-
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	Form for Comments on NFPA National	l Electrical Code	<u> </u>
	NFPA Document and Reference: NFPA	4 70 800-11(c)	
	SUBMITTER INFORMATION:	e e e e e e e e e e e e e e e e e e e	:
	First Name: Roger	Last Name: Witt	
	Company: State Farm Insurance	Telephone#: 309 766 5945	-
	Address 1: 1 State Farm Plaza	PO Box:	- [
	Address 2:	· ·	
	City: Bloomington	State: II Zip: 61710	
	Representing:	Country: USA	
	Please indicate organization represer	inted (If any) Date: 10/23/97	
•			-
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOR 1. a)Document Title: National Electrical Code		
	b) Article/Section: 800-11(c)	NFPA No.: 70 Year; 1996 2860 Comment on proposal number: 16-166	-
		10-100	ii k
	2. Comment recommends: (Check one):		
	3. Comment (include proposed new or revised wording, or ide	lentification of wording to be deleted): OCT 2	4 1997
	Add new Section 811-10(c) to read as follows:		į.
			· ·
	(c) Point of Entry. The point of entry for communica	ations wiring and cables shall be within 5 feet of the	
	(c) Point of Entry. The point of entry for communica electrical service entry point.		ļ
	(c) Point of Entry. The point of entry for communical electrical service entry point.(FPN): The distance to the electrical system, ground	ling electrode has a direct relationship to the potential	
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	 (c) Point of Entry. The point of entry for communical electrical service entry point. (FPN): The distance to the electrical system, ground difference between the communications circuits and the electrical system. 	ling electrode has a direct relationship to the potential the power circuits.	والتواوية والمراجعة والمواوية والمواوية والمواوية والمواوية والمواوية والمواوية والمواوية والمواوية والمواوية
·.	 (c) Point of Entry. The point of entry for communical electrical service entry point. (FPN): The distance to the electrical system, ground difference between the communications circuits and the Exception: Where it is not practicable to install the original entry. 	ling electrode has a direct relationship to the potential the power circuits. communications and electrical service in this manner,	فالمنابذ والمالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية وا
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CLE	THE IMAGE IS LESS AR THAN THIS NOTICE
	OF THE DOCUMENT.
- ¥	Form for Comments on NFPA National Electrical Code
TP/CCP3	NFPA Document and Reference: NFPA 70 800-40 (b)
ومحو	SUBMITTER INFORMATION:
	First Name: Roger Last Name: Witt Company: State Farm Insurance Telephone#: 309 766 5945
* # 25	
)	Address 1: 1 State Farm Plaza PO Box:
	City: Bloomington State: II Zip: 61710
F	Representing: Country: USA
•	Please indicate organization represented (if any). Date: 10/23/97
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 2863
 •.	
	b) Article/Section: 800-40 (b) Comment on proposal number: 16-172 OCT 2 4 1997
	2. Comment recommends: (Check one):
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):
	Revise as follows:
To the second	(b) Electrode. The grounding conductor shall be connected a follows:
	(1) To the negreet accessible location on (1) the building or structure arounding electrode system of
	(1) To the nearest accessible location on (1) the building or structure grounding electrode system as covered in Section 250-81 and 250-71 (b). (2) the grounded interior metal water piping system as
	(1) To the nearest accessible location on (1) the building or structure grounding electrode system as covered in Section 250-81 and 250-71 (b), (2) the grounded interior metal water piping system as covered in Section 250-80 (a), (2) the intersystem bonding point as covered in Section 250-71(b)
er Tal	covered in Section 250-81 and 250-71 (b), (2) the grounded interior metal water piping system as covered in Section 250-80 (a), (2) the intersystem bonding point as covered in Section 250-71(b) excluding the interior water piping system (3) the power service accessible means external to enclosures
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	covered in Section 250-81 and 250-71 (b), (2) the grounded interior metal water piping system as covered in Section 250-80 (a), (2) the intersystem bonding point as covered in Section 250-71(b) excluding the interior water piping system (3) the power service accessible means external to enclosures as covered in Section 250-71 (b), (4) the metallic power service raceway, (5) the service equipment enclosure, or (6) the grounding electrode conductor or the grounding electrode conductor metal
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OF TI	DE TO THE QUALITY HE DOCUMENT.
14k)	
	Form for Comments on NFPA National Electrical Code
- House	NFPA Document and Reference: NFPA 70 810-21(f)
	SUBMITTER INFORMATION:
X *	First Name: Roger Last Name: Witt
	Company: State Farm Insurance Telephone#: 309 766 5945
1	Address 1: 1 State Farm Plaza PO Box:
	Address 2: City: Bloomington State: Il Zip: 61710
	City: Bloomington State: Il Zip: 61710 Representing: Country: USA
	Please Indicate organization represented (if any) Date: 10/23/97
	i inna minate alfainment inhiminet in mil i Mile:
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: 1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 b) Article/Section: 810-21(f) Comment on proposal number: 16-206
	2. Comment recommends: (Check one):
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):
	Revise as follows:
	(b) Electrode. The grounding conductor shall be connected a follows:
	(1) To the nearest accessible location on (1) the building or structure grounding electrode system as covered in Section 250-81 and 250-71 (b), (2) the grounded interior metal water piping system as
	covered in Section 250-80 (a), (2) the intersystem bonding point as covered in Section 250-71(b)
	excluding the interior water piping system (3) the power service accessible means external to enclosures
1	as covered in Section 250-71 (b), (4) the metallic power service raceway, (5) the service equipment enclosure, or (6) the grounding electrode conductor or the grounding electrode conductor metal
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	structure disconnecting means that is grounded to an electrode as covered in Section 250-24;
∱ # Login	4. Statement of Problem and Substantiation for Comment:
	Delete the option for bonding to the water piping system because piping systems can be repaired with non conductive parts leaving an ungrounded system. 250-80a makes no conditions about electrical
	non conductive parts leaving an ungrounded system. 250-80a makes no conditions about electrical continuity or integrity nor does it require limitations on connection point or location of connection. Add
	the intersystem grounding point per 250-71b as it is referenced for such a bonding location. Delete the
The second	metallic power service raceway because this raceway is not required to be properly bonded to the
	grounding electrode conductor or electrode. ie the raceway is connected to the meter box and stubbed into the ground, there is no provision to have grounding bushings installed on both ends of that conduit
M	leaving a question does that condition present a low impedance path to ground?. The Panel mentioned a
	long term history of safe and reliable performance. Consider that todays appliances have more electronic
	components and operate at lower voltage than in the past, the goal of this proposal is to require bonding at
	a verifiable location and at a location where the characteristics of the grounding will not change (case of metallic piping). If the connection point for intersystem bonding is required to be at the electrical service
	entrance point of entry then it may force the point of entry for the cable system to be adjacent to the
4011	electrical system and offer the best performance for equal potential between the two services and low
6	impedance paths.
104	5. 🛛 This Comment is original material.
	☐ This Comment is not original material; its source (if known) is as follows:
	Comment for Submittal to NFPA as of 10/23/97
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	R THAN THIS NOTICE
	THE DOCUMENT,
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M , T	
У	Form for Comments on NFPA National Electrical Code
	NFPA Document and Reference: NFPA 70 810-55
A .	SUBMITTER INFORMATION:
	First Name: Roger Last Name: Witt
l i	Company: State Farm Insurance Telephone#: 309 766 5945
1 1	Address 1: 1 State Farm Plaza PO Box;
$A(\beta)$	Address 2:
•	City: Bloomington State: II Zip: 61710
1	Representing: Country: USA
	Please indicate organization represented (if any) Date: 10/23/97
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING:
a .	1. a)Document Title: National Electrical Code NFPA No.: 70 Year: 1996 2865
	11 A-1 1 20 11 910 66 October 1 910 66
	2. Comment recommends: (Check one):
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted):
	3. Comment (include proposed new or revised wording, or identification of wording to be deleted): Add the following paragraph to the existing:
	The point of entry for communications wiring and cables shall be within 5 feet of the electrical service
	entry point.
•	(FPN): The distance to the electrical system, grounding electrode has a direct relationship to the potential
	difference between the communications circuits and the power circuits. Exception: Where it is not precticable to install the communications and electrical service in this manner.
	Exception: Where it is not practicable to install the communications and electrical service in this manner, a separate grounding electrode, installed in compliance with 250-83 (c), shall be installed for the
	communications systems and the grounding electrodes for the electrical and communications systems
	shall be connected with a bare or insulated #4 copper conductor. The conductor shall not be exposed to
100	mechanical injury, and when buried, shall be buried to a depth of 24 inches
• . •	4. Statement of Problem and Substantiation for Comment: Change in proposed text as recommended by one of the panel members and shown in the ROP.
- 1 - 2	Change in proposed text as recommended by one of the panel members and shown in the ROP. By requiring a specific point of entry, the requirement becomes enforceable. Single point grounding for
	all communications services and power services is needed to provide equal potential between the systems.
	There is evidence that when communications services are installed remote from the power system service,
·	separate ground rods are installed and not bonded to the electrical service grounding electrode. By

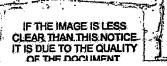
T .	specifying a service entrance location adjacent to the power system service entrance a better chance of
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. 100	Form for Comments on NFPA Nation	nal Electrical Code	
() () 	NFPA Document and Reference: NF		•
	SUBMITTER INFORMATION:		
(i	First Name: Roger	Last Name: Witt	·
	Company: State Farm Insurance	Telephone#: 309 76	6 5945
\$ - p	Address 1: 1 State Farm Plaza	PO Box:	
	Address 2:	Mindre VI	The similar
	City: Bloomington	State: II	Zip: 61710'
	Representing:	Country: USA	
1.4	Please indicate organization repre	esented (if any)	Date: 10/23/97
	FOR EACH COMMENT, PLEASE COMPLETE EACH OF THE 1. a)Document Title: National Electrical Co	FÖLLOWING: de nfpa No.: 70	Year; 1996 2800
	b) Article/Section: 820-11(c)	Comment on proposal numb	er: 16-220 OCT 2 4 1997
	2. Comment recommends: (Check one):	text revised text de	leted text.
	3. Comment (include proposed new or revised wording, o	r identification of wording to be d	eleted):
- ,	Add new Section 820-11(c) to read as follows:		
	(c) Point of Entry. The point of entry for commun	nications wiring and cables sha	all be within 5 feet of the
	electrical service entry point.		
	(FPN): The distance to the electrical system, grou		elationship to the potential
	difference between the communications circuits ar		
- 1	Exception: Where it is not practicable to install the		
	a separate grounding electrode, installed in compliance		
	communications systems and the grounding electr shall be connected with a bare or insulated #4 cop		
•	mechanical injury, and when buried, shall be burie		shall not be exposed to
	4. Statement of Problem and Substantiation for Comment:	- · · · · · · · · · · · · · · · · · · ·	
	Change in proposed text as recommended by one	of the panel members and sho	wn in the ROP.
			igle point grounding for
	By requiring a specific point of entry, the requirem	ient decomes enjorceadle. Sil	
	all communications services and power services is	needed to provide equal pote	itial between the systems.
	all communications services and power services is There is evidence that when communications servi	needed to provide equal potenices are installed remote from	the power system service,
	all communications services and power services is There is evidence that when communications servi separate ground rods are installed and not bonded to	needed to provide equal pote ices are installed remote from to the electrical service ground	the power system service, ling electrode. By
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Form for Comments on NFPA Natio	onal Électrical Code
NFPA Document and Reference: N	
SUBMITTER INFORMATION:	
First Name: Roger	Last Name: Witt
Company: State Farm Insurance	Telephone#: 309 766 5945
Address 1: 1 State Farm Plaza	PO Box:
Address 2:	
City: Bloomington	State: Il Zip: 61710
Representing:	Country: USA
Please Indicate organization rep	resented (if any) Date: 10/23/97
FOR EACH COMMENT, PLEASE COMPLETE EACH OF TH	E FOLLOWING:
1. a)Document Title: National Electrical C	ode NFPA No.: 70 Year: 1996 867
b) Article/Section: 820-40(b)	Comment on proposal number: 16-222
2. Comment recommends: (Check one):	w text revised text deleted text.
3. Comment (include proposed new or revised wording,	
Revise as follows:	
(b) Electrode. The grounding conductor shall be	
(1) To the nearest accessible location on (1) the covered in Section 250-81 and 250-71 (b), (2) the	e building or structure grounding electrode system as
covered in Section 250-81 and 250-71 (b), (2) the intersystem	
	power service accessible means external to enclosures
	power service raceway, (5) the service equipment
enclosure, or (6) the grounding electrode conductions of (7) to the	
structure disconnecting means that is grounded to	ductor or the grounding electrode of a building or
4. Statement of Problem and Substantiation for Commen	•
Delete the option for bonding to the water piping	system because piping systems can be repaired with
	em. 250-80a makes no conditions about electrical
	ons on connection point or location of connection. Add is referenced for such a bonding location. Delete the
metallic power service raceway because this race	
	e raceway is connected to the meter box and stubbed
	unding bushings installed on both ends of that conduit
	ow impedance path to ground?. The Panel mentioned a c. Consider that todays appliances have more electronic
	the past, the goal of this proposal is to require bonding at
a verifiable location and at a location where the cl	haracteristics of the grounding will not change (case of
	system bonding is required to be at the electrical service
	t of entry for the communication system to be adjacent to ce for equal potential between the two services and low
impedance paths.	so for equal potential between the two solvines and low
5. 🔀 This Comment is original material.	
☐ This Comment is original material:	e (if known) is as follows:
Comment for Submittal t	o NFPA as of 10/23/97
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e .	Form for Comments on NFPA Nati	ional Electrical Code	
•	NFPA Document and Reference: I	NFPA 70 ^{§30}	
,	SUBMITTER INFORMATION:		
1 .	First Name: Roger	Last Name: Witt	
	Company: State Farm Insurance	Telephone#: 309 766 5945	
• . ;	Address 1: 1 State Farm Plaza	PO Box:	_
. .	Address 2: City: Bloomington	State: I1 Zip: 61710	
	Representing:	State: II Zip: 61710 Country: USA	-
	Please Indicate organization rep		
•	i idade indicate organization tel	Date: Date:	
1.	FOR EACH COMMENT, PLEASE COMPLETE EACH OF TH	HE FOLLOWING:	
	1. a)Document Title: National Electrical C	Comment on proposal number: 16-236	
	b) Article/Section: 830	Comment on proposal number: 16-236	
• •	2. Comment recommends; (Check one):	w text revised text deleted text.	
	3. Comment (include proposed new or revised wording,	or identification of wording to be deleted): OCT 2.4.1	997
	Return the proposed 830 to committee		
	 Statement of Problem and Substantiation for Commer It is not our intent to prevent new technology fro and there are a few issues that the proposed artic. 	om being implemented however the NEC is a safety code sle does not seem to address:	
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2	Form for Comments on NFPA National Electrical Cod	e	
***************************************	NFPA Document and Reference: NFPA 70 90-3		
s	UBMITTER INFORMATION:		
المحمولة المحافظة الم	First Name: Roger Last Name	Witt	,
		#: 309 766 5945	
₹ 1] 1411	Address 1: 1 State Farm Plaza PO Box		
\	Address 2:		
	City: Bloomington State	: Il Zip: 61710	
)	Representing: Country	" USA	
	Please indicate organization represented (if any)	Date: 10/21	/97
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the state of the s	R EACH COMMENT, PLEASE COMPLETE EACH OF THE FOLLOWING: a)Document Title: National Electrical Code NFPA No.:	70 Year: 1996	2869-1
i i i i i i i i i i i i i i i i i i i		osal number: 1-23	
			OCT 24 1997
	Comment recommends: (Check one):		
	Comment (include proposed new or revised wording, or identification of wording		
	Revise as follows: 90-3. Code Arrangement. This Code is divided int		
	chapters. Chapter 1,2,3 and 4 apply generally; Chapters 5, 6, and 7 appropriate the conditions; Chapter 8 applies to conditions; Chapter 8 applies to conditions;		cies,
	specifically as it relates to the communications service entrance to the		hese latter
	chapters supplement or modify the general rules. Chapter 1 through 4 a		
	Chapters 5,6,7 and 8 for the particular conditions.	11.7	•
	Chapter 8 covers communications systems and is independent of the of	ther chapters except who	ere they are
· ·	specifically referenced therein		
4.	Statement of Problem and Substantiation for Comment:		l_4_ 4_
	Proposed and rejected with "Panel Statement" "The substantiation does warrant a change to a time tested provision to the NEC" There is a pr		
	hapter 8: Proposed Article 830 - Network-Powered Broadband Comm		
	eriously requires the inclusion of Chapter 8 work subject to the first 7		
	rticle 830 references quite a few provisions of the earlier chapters, but		
	vercurrent provisions, and possibly a few other rules that are importan		
	ncluding Chapter 8, Code enforcement can apply to the communicatio		
	omment was based on code enforcement of grounding to prevent elect		
	roposed 830 section it appears even more relevant since the system re- turrent to the occupancy.	taining to 650 provides V	onage and
	outent to the occupancy. Outher Research: Prior to the annual meeting, check the grounding on y	your house and your neigh	ghbors
	ouse, see if you can determine if the Telephone and TV services have		
t	he electrical service. This represents only data points, the requirement	t of single point groundi	ng is valid,
	s it is stated in the NEC, but the "time tested provision" stated by the l		
	hought that single point grounding is indeed practiced. One of the imp		
- L-40 (III)	rogram is to ensure or promote the safety and welfare of the public. V	without enforceable code	es, mis
C	annot happen.		
5.		W. C.	•
W	☐ This Comment is not original material; its source (if known) is as follows	s:	
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Page 4	المستقدمات المستورة والمراز والموالية المرازية والمراز المراز الم		9
*	Comment for Submittal to NFPA as of 10/23/97		
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Formal Transmittal of Comments to NFPA as of 10/23/97

Mall a copy of the transmittal form with your signature. The registration of your new Comments cannot be completed until this is received, Include this report with your disk. Mall to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park Quincy, MA 02269-9101

Last Name	First Name	NFPA I	lo. / year	Article/Section	Till de la la la la la la la la la la la la la
Witt	Roger	70	1996 Cor	nment on prop#	July 1
Witt	Roger	70	1996 Con	210-11 (New) nment on prop# 2-129	2849
Witt	Roger	70	1996 Con	210-7(d)(3) ment on prop# 2-42	2850
Witt	Roger	70	1996 Con	250 nment on prop# 5-41	2851
Witt	Roger	70	1996 Con	250 iment on prop# 5-41A	2852
Witt	Roger	70	1996 Com	250-50 (a) ment on prop# 5-150	2853
Witt	Roger	70	1996 Com	250-50 (a) ment on prop# 5-161	2854
Witt	Roger	70	1996 Com	250-50a ment on prop#_ 5-162	2855
Witt	Roger	70	1996 Com	250-60 ment on prop#	blank
Witt	Roger	70	1996 Com	250-71 (b) ment on prop# 5-189	285%
Witt	Roger	70	1996 Com	250-81 (c) ment on prop# 5-241	2857
Witt	Roger	70	1996		OT 2 4 1997 2858
Witt	Roger	70	1996	290 (NEW) ment on prop# 5-337	2859
Witt	Roger	70	1996	410-30 (d) ment on prop# 18-46	2860

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Mail to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park Quincy, MA 02269-9101

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<u>Last Name</u>	First Name	NFPA N	Vo. / year	Article/Section	
Witt	Roger	70	1996 Cor	800-10 (c) mment on prop# 16-164	2861
Witt	Roger	70	1996 Cor	800-11(c) nment on prop# 16-166	2862
Witt	Roger	70	1996 Cor	800-40 (b) nment on prop# 16-172	2863
Witt	Roger	70	1996 Cor	810-21(f) nment on prop# 16-206	2864
Witt	Roger	70	1996 Con	810-55 nment on prop# 16-208	2865
Witt	Roger	70	1996 Con	820-11(c) nment on prop# 16-220	2866
Witt	Roger	70	1996 Con	820-40(b) nment on prop# 16-222	2867
Witt	Roger	70	1996 Con	830 nment on prop# 16-236	2868
Witt	Roger	70	1996 Con	90-3 ment on prop# 1-23	2869

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EXHIBIT 72

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FORM FOR COMMENTS ON NFPA REPORT ON PROPOSALS 1999 Spring Association Technical MEETING

FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, October 2, 1998 FOR OFFICE USE For further information on the standards-making process, please contact the Codes and Standards Administration at 617-884-7249 For technical assistance, please call NFPA at 617-770-3000 Dale Rec'd: Please indicate in which formst you wish to receive your ROP/ROC 💭 electronic 🔲 paper 🗖 download (Note: In choosing the download option you intend to view the ROP/ROC from our Website, no copy will be sent to you.)

Tel. No. 316-585-6935 Reinert Propage inc. Company _ Ks. Zip City Inman Street Address 444 8th Ave. 67546 Please Indicate Organization Represented (if eny) NFPA No. & Year 58 98 Edition 7. a) NFPA Document Title_ LP GAS HANDBOOK 95 EDITION b) Section/Paragraph 3-2:7.5 2. Comment on Proposal No. (from ROP): __ 3. Comment recommends: (check one) new text Z. revised text deleted text 4. Comment (include proposed new or ravised wording, or identification of wording to be deleted): (Note: Proposed text should be in legislative format: i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (deloted wording).

See attached: copy 5. Statement of Problem and Substantiation for Comment: (Note: State the problem that will be resolved by your recommendation; give the specific reason for your comment including oppies of losis, research papers, the experience, etc. if more than 200 words, it may be abstracted for publication.)

NFPA 3B 98 EGITION, SECTION 3 22. does not address the height of the vent, as it does in the LP GAS HANDROOK 95 Edition on page 204. Figure 3.14 8. 🕊 This Comment is original meterial. (Note: Original material is considered to be the submitter's own idea based on or as a result of his/her own experience, thought, or research ad, to the best of his/her knowledge, is not copied from another source,) This Comment is not original material, its source (if known) is as follows: I hereby grant the NPPA the nonexclusive, revelop-free rights, including nonexclusive, revelop-free rights in copyright, in this comment, and I understand that I acquire no rights array publication of NIPM which this comment in this or another similar or analogous form is Signature (Regulred) PLEASE USE SEPARATE FORM FOR EACH COMMENT - NFPA Fax: (677) 770-3500

Midit to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park; P.O. Sox 9101, Quincy, MA 02269

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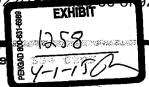
3-2.7.5 The point of discharge from the required pressure relief device on regulating equipment installed outside of buildings in fixed piping systems shall be located at least 24" aboveground and not less than 3ft (1m) horizontally away from any building opening below the level of such discharge, and not beneath any building unless this space is well ventilated to the outside and is not enclosed for more than 50 percent of its perimeter. The point of discharge shall also be located not less than 5 ft (1.5m) in any direction away from any source of ignition, openings into direct-vent (sealed combustion system) appliances, or mechanical ventilation air intakes.

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EXHIBIT 73

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Polk Co Fire Departmen



FORM FOR COMMENTS ON NFPA REPORT ON PROPOSALS 2000 NOVEMBER ASSOCIATION TECHNICAL MEETING

THAL DATE FOR NECELPT OF COMMENTS: 5:50 phi E31, MARCH 31, 2000
For further information on the standards-making process, please contact the Codes
and Standards Administration at 517-984-7249
For technical assistance, please call NFRA at 617-770-3000 Date Rec'd:
Please Indicate in which format you wish to receive your ROP/ROCelectronicpaperdownload (Note: In choosing the download option you intend to view the ROP/ROC from our Website; no copy will be sent to you.) Date 3-14-06
Street Address Blod. 250/suite 1 Thy Bantow State FL. ZID 35831
Please Indicate Organization Represented (Many) FLorida Fire Chiefs Association
1.:ii) NFPA Document Title NFPA No. & Year 38 - 1997
b) Section/Paragraph Sec. 3-2.5 / PARAGRAPH 3-2.5.
2. Comment on Proposal No. (from RDP): 58-107 Log #70
3. Comment recommends: (check:one) 🔀 new text 🔲 revised text 🔲 deleted text
 Comment (include proposed new or revised wording, or identification of wording to be deleted): (Note: Proposed text should be in legislative format i.e., use underscore to denote wording to be inserted (inserted wording) and strike through to denote wording to be deleted (deleted wording).
Cylinders shall wot be permitted on roof tous.
5. Statement of Problem and Substantiation for Comment: (Note: State the problem that will be resolved by your ecommendation; give the specific reason for your comment including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)
p) ease Attached
This Comment is original material. (Note: Original material is considered to be the submitters own idea based on or as a
esult of his/her own experience, thought, or research ad, to the best of his/her knowledge, is not copied from another source.)
This Comment is not original material, its source (if known) is as follows:
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Signature (Required) Webby W. Howard
PLEASE USE SEPARATE FORM FOR EACH COMMENT - NFPA Fex: (617) 770-3500

Mall to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park, P.D. Box 9101, Quincy, MA 02268

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Polk Co Fire Departmen

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P-2

ANRchment 58-107 Log #70

Installation of propane tanks on roofs, brings on a multifaceted problem for the fire service, starting with the fire ground tactics. Approaching a propane tank is an extremely complex problem, accerbated by the situation being on a roof top. The proper compliment of manpower, equipment and water capacity are not the only concerns facing this sort of issue. Rescue, interior attack, and time are of extreme importance. Locating permanent tanks on roofs will have a direct adverse effect on all the issues mentioned. The proper strategy of firefighters will be immensely changed.

The speed required to set up elevated platforms and ladders for an attack on a roof top installation promotes recklessness. Valuable time is wasted, while the fire service is setting up equipment. The fire service is dedicated to responding to all types of dangers. However, placing firelighters on a roof, with no escape route is against everything learned in Hazardous Materials Training.

Propane is heavier than air. The approach of the fire service will obviously be lower than what the tank is. Firefighters will be required to go through the hazard to get to the problem. Once again, this is against everything learned in Hazardous Materials Training. There is no viable approach to a leaking tank on a roof.

In researching the NFPA guidelines, I could not find one document that spoke to propose leaks or fires located on roofs. It take this to mean that no information is together that the fire service can use to attack a tank located on a roof. Tacfics have been written, researched, and papers written on above ground tanks, underground tanks and even tanker trucks. Nothing addresses the issue of an attack on roof top installations. Having no measure to go by, gives the fire service nothing to turn to for information. The lack of information alone millifies the use of LP storage tanks on roof tops.

A propose tank on fire on a roof top, is a situation that no fire department wishes to contend with. Firefighters have the commitment of rescue in buildings. That commitment will be shortened due to the grave danger of the firemen and equipment. An interior attack would be accessed on minute by minute situation. Having a BLEVE over the heads of emergency responders would be a nightmare.

The incident of having to rescue firefighters on a roof that have been hurt during a BLEVE would be to the point of being totally unmanageable to handle. The involvement would introduce risks beyond what any firefighter should face.

3-14-2000 Westy W. Hayn

EXHIBIT 74 (FILED UNDER SEAL)

EXHIBIT 75 (FILED UNDER SEAL)

EXHIBIT 76 (FILED UNDER SEAL)

EXHIBIT 77



Approved 28 April 1999

INTELLECTUAL PROPERTY POLICY OF ASTM

I. <u>INTRODUCTION.</u>

- A. Section 1 of the ASTM Charter states in part: "The corporation is formed for the development of standards on characteristics and performance of materials, products, systems and services; and the promotion of related knowledge."
- B. By-law 4.4 states: "The Board shall delegate to such committees and other groups those powers necessary for the fulfillment of their assigned function."
- C. By-law 7.1 states: "The Board of Directors is empowered to promulgate procedures for the development and adoption of voluntary consensus standards ...".
- D. The Standing Committee on Publications advises the Board of Directors on the formulation of publications policy. The Committee is responsible for the publications program of the Society except the acceptance for publication of ASTM's standards. "The Committee administers the Society's publications program ..."
- E. The Committee on Technical Committee Operations ("COTCO") is responsible for the Regulations Governing ASTM's Technical Committees 18.1, which state: "Documents [including standards and provisional standards], technical papers, reports, minutes, letters to the editor, and related materials should be released for publication only through ASTM's Headquarters."

F. The Committee on Standards is responsible for the manual, "Form and Style for ASTM Standards." Regulation 10.7 of the Regulations Governing ASTM Technical Committees requires the current edition of Form and Style for ASTM Standards shall be followed in the writing of standards. Section F of that manual covers policies and procedures governing reference to patents, trademarks, similar marks, and reference to standards of other organizations in ASTM Documents.

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internet/website files and publications, multimedia, CD-ROM's, videotapes, audiotapes, and training programs.

C. <u>Trademark.</u> A trademark is either a word, phrase, symbol or design, or combination of words, phrases, symbols or designs, which identifies and distinguishes the source of goods or services from one party from those of others. A service mark is the same as a trademark except it identifies and distinguishes the source of a service rather than a product. Trademark rights may be used to prevent others from using a confusingly similar mark but not to prevent others from making the same goods or from selling them under a non-confusing mark.

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- H. Electronic Networks.
 - The Copyright Act provides copyright protection for certain works fixed in any tangible medium expression, now or later developed, from which they can be perceived, reproduced or otherwise communicated, either directly or with the aid of technology.

2. As more and more sophisticated technology becomes available, it may become increasingly difficult to determine and enforce ownership of ASTM Intellectual Property rights. Therefore, inputting, uploading, downloading, reproducing, or transmitting ASTM Intellectual Property without ASTM's prior written permission is prohibited, with the exception that ASTM is not intending to limit the applicability of the "fair use" doctrine developed under the Copyright Act.

VI. PROCEDURE.

- A. Intellectual Property -- Standards.
 - Standards and related documents developed by ASTM committees are copyrighted by ASTM as a "Work for Hire" as given in the U.S. Copyright Act. When an individual accepts appointment to a committee, the individual may also be asked to acknowledge that copyrights and all rights to all materials produced by ASTM committees are owned by ASTM and that ASTM may register the copyright in its own name.
 - 2. If, in developing a standard or related document, a committee proposes to incorporate material from the copyrighted publication of another organization, the committee should request ASTM staff to obtain written permission from the publisher to reprint the material. Reference to a patented item should be avoided, but the ASTM patent policy (F3 of Form and Style for ASTM Standards) must be complied with. Regulations Governing ASTM Technical Committees, Form and Style for ASTM Standards (including but not limited to F3, F4 and F5), and ASTM staff should be consulted for guidelines if patented items are to be referenced in a standard or document.

- ASTM standards may currently include copyrighted material reproduced under agreement with the copyright holder. Similarly, ASTM may permit others to reprint its material based on appropriate license agreements.
- 4. The provision stated in A.3 (above) apply to all forms, including, for example, both hard copy and electronic media.
- 5. ASTM registers its trademarks and service marks in the United States and in countries around the world. As a condition for membership, members agree that the marks are the property of ASTM at all times.
- Guidance to committees on protection of ASTM's Intellectual Property rights
 and avoidance of infringement of the rights of others is provided by the ASTM
 staff.
- B. Intellectual Property Other Than Standards
 - 1. ASTM recognizes different ways to assign intellectual property rights:
 - a) When individual authors submit manuscripts for technical papers for publication by ASTM in an ASTM Special Technical Publication or ASTM Technical Journal, the author must sign an agreement whereby ownership of the material is assigned to ASTM. However, if the technical paper was prepared in the course of the author's employment by the U.S., Canadian, or British Governments, ASTM acknowledges that copyright does not exist.

- b) When ASTM contracts, subsidizes, or agrees with writers, authors, editors, or others to prepare or otherwise help create ASTM Intellectual Property other than technical papers as given in 1a above, a "Work for Hire" agreement must be signed in which copyright is assigned to ASTM. Copyright shall be granted and assigned exclusively to ASTM, including any and all rights protected by the Copyright Laws of the United States and all other countries as set forth in the respective agreement.
- 2. When ASTM creates and distributes its Intellectual Property, ASTM may do so in whatever manner it decides. This will not, however, preclude the use of the Intellectual Property by authors and editors as set forth in the applicable agreements given in 1a and 1b above.
- 3. ASTM will take reasonable precautions to preserve the property rights of an author of a manuscript not accepted for publication by ASTM.
- C. Licensing -- ASTM requires any individual or entity who desires to copy, reproduce, market, or distribute any of ASTM's Intellectual Property (e.g. Standards, Draft Standards, Technical Papers, Manuals, Software, Training Course Materials, Logos) to execute an appropriate ASTM License Agreement. Such agreements will normally require, among other things, that licensees not modify the ASTM property and to make appropriate copyright acknowledgments and royalty payments. ASTM has no obligation to execute such agreements.

Adopted by the ASTM Board of Directors, 28 April 1999

EXHIBIT 78

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Originally Approved 28 April 1999

INTELLECTUAL PROPERTY POLICY OF ASTM INTERNATIONAL ("POLICY")

- I. INTRODUCTION. Ownership and use of ASTM's Intellectual Property is vital to the ability of ASTM to fulfill its mission. ASTM owns and maintains the rights to its Intellectual Property; it is the responsibility of ASTM's Board of Directors ("Board"), staff, members, participants and authorized resellers/distributors to protect these valuable assets and ensure that they are used in accordance with this Policy.
- A. Section 1 of the ASTM Charter states in part: "The corporation is formed for the development of standards on characteristics and performance of materials, products, systems and services; and the promotion of related knowledge."
- B. ASTM By-law 4.4 states: "The Board shall delegate to such committees and other groups those powers necessary for the fulfillment of their assigned function."
- C. By-law 7.1 states: "The Board of Directors is empowered to promulgate procedures for the development and adoption of voluntary consensus standards ..."
- D. The Standing Committee on Publications ("COP") advises the Board on the formulation of publications policy. COP is responsible for the publications program of the Society except the acceptance for publication of ASTM's standards. "The Committee administers the Society's publications program ..."
- E. The Committee on Technical Committee Operations ("COTCO") is responsible for the Regulations Governing ASTM's Technical Committees ("Regulations"), of which 17.1, states: "Documents [including standards and provisional standards], technical papers, reports, minutes, letters to the editor, and related materials should be released for publication only through ASTM's Headquarters." Regulation 15 governs the use or reference to a patent in an ASTM standard.
- F. The Committee on Standards ("COS") is responsible for the manual, Form and Style for ASTM Standards ("Form and Style"). Regulation 10.7 requires the current edition of Form and Style shall be followed in the writing of standards. Section F of that manual sets forth policies and procedures governing reference to patents, trademarks, similar marks, and reference to standards of other organizations in ASTM documents.

II. TYPES OF INTELLECTUAL PROPERTY.

Intellectual property includes patents, trademarks, and copyrights and trade secrets, as defined in various federal and state statutes.

- A. Patent. A patent is a property right granted by the government to individuals who invent new and useful inventions. Patents may be granted on any new and useful process, machine, manufactured article, composition of matter, or any new and useful improvements thereof. During a patent's limited term, its owner has the right to exclude others from making, using, selling, offering for sale or importing the patented invention into the United States.
- B. Copyright. A copyright is a property right granted to the creators (i.e. authors) of original works which are fixed in a tangible medium of expression and which are independently created and possess some minimal degree of creativity. The exclusive rights provided by a copyright include protection against unauthorized printing, publishing, copying, selling, distributing, and/or performing of the copyrighted work. Copyrighted materials include not only traditional written works but also such things as computer

software, electronic files and publications, internet/website files and publications, multimedia, CD-ROM's, videotapes, audiotapes, and training programs.

C. Trademark. A trademark is either a word, phrase, symbol or design, or combination of words, phrases, symbols or designs, which identifies and distinguishes the source of goods or services from one party from those of others. A service mark is the same as a trademark except it identifies and distinguishes the source of a service rather than a product. Trademark rights may be used to prevent others from using a confusingly similar mark but not to prevent others from making the same goods or from selling them under a non-confusing mark.

III. PURPOSE OF THIS POLICY.

The purpose of this Policy is to specify and protect the interests of ASTM in its intellectual property rights, and to describe the means by which ASTM has addressed protection of its rights and recognition of the intellectual property rights of others. ASTM's intellectual property rights and revenue generated by utilization of those rights enables ASTM to carry out its mission. All ASTM staff, members and others as given in IV.B, below, are expected to comply with this Policy.

IV. SCOPE.

- A. This Policy applies to any ASTM standard, draft standard or related document defined in *Regulation* 2 (and any adjuncts to such standard or document), as well as to all other ASTM publications and related intellectual property, in all forms (including CD-ROM, software, multimedia, ASTM Internet Web Site, videotapes, audiotapes, and written), such as Special Technical Publications, Manuals, Technical Journals, Proficiency Test Program materials, Professional and Technical Training materials, as well as use of trademarks, service marks and Logos (collectively referred to here as "ASTM Intellectual Property"). (Many of these, as well as other examples of ASTM Intellectual Property, are listed in the ASTM Publications Catalog and related brochures. Logos are specifically covered by the *ASTM Logo Policy* as adopted by the ASTM Board on October 15, 1998.)
- **B.** This Policy applies to all employees, members, officers, directors, participants, authorized resellers/distributors and others involved with the development, adoption, publication, use and/or distribution of ASTM Intellectual Property. For purposes of this Policy, "committee" or "technical committee" includes sub-committees and task groups.
- C. Participants, members and authorized resellers/distributors acknowledge and agree that the adoption, enactment, reference, or incorporation of any of the ASTM Intellectual Property by any government or agency has not and will not effect, transfer, modify or alter the copyrights of the ASTM Intellectual Property in any way.

V. POLICY.

- A. All of ASTM's Intellectual Property rights must be protected, regulated and maintained, no matter how wide the information is distributed in print, electronically, or otherwise. Such protection is essential to ASTM's ability to fulfill its mission.
 - B. ASTM's owns and maintains the rights to its Intellectual Property.
- C. ASTM reserves the right to copyright any of its print, electronic products, databases, audio/visual products and any other subject matter covered by the Copyright Act. This is intended to protect ASTM and its members from unauthorized copying and distribution of ASTM Intellectual Property.

- **D.** By participating in any ASTM technical committee and/or participating in the creation, development and/or adoption of ASTM's Intellectual Property, participants and committee members acknowledge that the copyright to such Intellectual Property resides in ASTM. Such participants and committee members agree if requested by ASTM, to execute any and all documents deemed necessary or appropriate by ASTM to transfer and effectuate ownership of all such rights, including but not limited to copyrights, they may possibly have in ASTM Intellectual Property. The rights granted to ASTM by this assignment or transfer shall belong to ASTM in perpetuity.
- E. All participants, members and staff agree to abide by and follow the requirements of the ASTM Charter, By-laws, Logo Policy, Regulations Governing ASTM Technical Committees, and Form and Style for ASTM Standards, as well as this Policy, as each may be amended from time to time, when creating, developing or utilizing ASTM Intellectual Property.
- F. It is ASTM policy that the copyrights and other intellectual property rights of third parties be respected and not infringed by ASTM or any of its committees, or any employee, member or other person acting on behalf of ASTM.
- G. It is ASTM policy that, if at all possible, proprietary and/or patented equipment, apparatus, material or information not be included in a standard. If such inclusion is necessary, By-law 15 must be complied with.
- H. ASTM registers its trademarks and service marks in the United States and in countries around the world. As a condition for membership, members agree that the marks are the property of ASTM at all times. Use of the marks is subject to, among other things, ASTM's Logo Policy.

I. Electronic Networks.

- 1. The Copyright Act provides copyright protection for certain works fixed in any tangible medium expression, now or later developed, from which they can be perceived, reproduced or otherwise communicated, either directly or with the sid of technology.
- 2. As more and more sophisticated technology becomes available, it may become increasingly difficult to determine and enforce ownership of ASTM Intellectual Property rights. Therefore, inputting, uploading, downloading, reproducing, or transmitting ASTM Intellectual Property without ASTM's prior written permission is prohibited.

VI. PROCEDURE.

A. Intellectual Property - Standards.

- 1. Standards and related documents developed by or for ASTM committees are copyrighted by ASTM as set forth in the U.S. Copyright Act. When an individual or entity joins, volunteers for or accepts appointment to the Society or a committee, the individual or entity, as a condition of membership and participation, expressly acknowledges and agrees that copyrights and all rights to all materials produced by or for ASTM committees are owned by ASTM and that ASTM will register the copyright in its own name.
- 2. If, in developing a standard, other document or adjuncts to such standards or documents, a committee proposes to incorporate material from the copyrighted publication of another organization, the committee should request ASTM staff to obtain written permission from the publisher copyright holder to reprint the material. Reference to a patented item should be avoided if at all possible, but in all cases the ASTM Patent Policy (By-law 15) and F3 of Form and Style for ASTM Standards must be complied with. Regulations Governing ASTM Technical Committees, Form and Style for ASTM Standards (including but not limited to F3, F4 and F5), and ASTM staff should be consulted for guidance if patented items or trade/service marks are to be referenced in a standard or document.
 - 3. ASTM standards may currently include copyrighted material reproduced under

agreement with the copyright holder. Similarly, ASTM may permit others to reprint its material based on appropriate license agreements. F3 of *Form and Style* must be followed when referencing standards of other organizations.

- 4. The provision stated in A.3 (above) applies to all forms of media, including, for example, both hard copy and electronic formats.
- 5. Guidance to committees and members on protection of ASTM's Intellectual Property rights and avoidance of infringement of the rights of others is provided by the ASTM staff.
- 6. Only [an officer] of ASTM can grant permission for the use, copying or distribution of ASTM Intellectual Property by others. Any requests for such permission must be forwarded to ASTM staff for consideration and further action.

B. Intellectual Property Other Than Standards

- 1. ASTM recognizes different ways to assign intellectual property rights:
- a) When individual authors submit manuscripts for technical papers for publication by ASTM in an ASTM Special Technical Publication or ASTM Journal, the author must sign an agreement (Author Agreement) whereby ownership of the material is assigned to ASTM. However, if the technical paper was prepared in the course of the author's employment by the U.S., Canadian, or British Governments, ASTM acknowledges that copyright does not exist.
- b) When ASTM contracts, subsidizes, or agrees with writers, authors, editors, or others to prepare or otherwise help create ASTM Intellectual Property other than technical papers as given in 1a above, a "Work for Hire" Agreement must be signed in which copyright is acknowledged to reside in ASTM or will be assigned to ASTM. Copyright shall be granted and/or assigned exclusively to ASTM, including any and all rights protected by the Copyright laws of the United States and all other countries as set forth in the respective agreement.
- 2. When ASTM creates and distributes its Intellectual Property, ASTM may do so in whatever manner it decides. This will not, however, preclude the use of the Intellectual Property by authors and editors as set forth in the applicable agreements described in 1a and 1b above.
- 3. ASTM will take reasonable precautions to preserve the property rights of an author of a manuscript submitted but not accepted for publication by ASTM.
- C. Licensing. ASTM may, at its sole discretion, assign, license or permit the use by others of its Intellectual Property. ASTM requires any individual or entity who desires to copy, reproduce, market, create a derivative work utilizing or distribute any of ASTM's Intellectual Property (e.g. Standards, Draft Standards, Adjuncts, Technical Papers, Research Reports, Manuals, Software, Training Course Materials, Logos) to execute an appropriate ASTM License Agreement. Such agreements will normally require, among other things, that licensees not modify the ASTM Intellectual Property and to make appropriate copyright acknowledgments and royalty payments. ASTM has no obligation to execute such agreements.

As amended by the ASTM Board of Directors.	2003.

EXHIBIT 79

Originally Approved 28 April 1999

INTELLECTUAL PROPERTY POLICY OF ASTM INTERNATIONAL ("POLICY")

I. INTRODUCTION. Ownership and use of ASTM International's Intellectual Property (e.g. Standards, Draft Standards, Adjuncts, Certification Programs and related materials, Technical Papers, Research Reports, Manuals, Software, Training Course Materials and Logos collectively referred to as "ASTM IP") are vital to the ability of ASTM International to fulfill its mission. ASTM International owns and maintains the rights to its Intellectual Property; it is the responsibility of ASTM International's Board of Directors ("Board"), staff, members, and others who participate in the creation of ASTM IP (collectively "Participants"), as well as authorized resellers/distributors of ASTM IP, to protect these valuable assets and ensure that they are used in accordance with this Policy.

A. Section 1 of the ASTM International Charter states in part: "The corporation is formed for the development of standards on characteristics and performance of materials, products, systems and services; and the promotion of related knowledge." Section 9 of the Charter also states, in part: "...the Corporation shall not engage in any activity which is not educational, technical, scientific or charitable..."

- B. ASTM International By-law 4.4 states: "The Board shall delegate to such committees and other groups those powers necessary for the fulfillment of their assigned function."
- C. ASTM International By-law 7.1 states: "The Board of Directors is empowered to promulgate procedures for the development and adoption of voluntary consensus standards ..."
- **D.** The Standing Committee on Publications ("COP") advises the Board on the formulation of publications policy. COP is responsible for all publications programs of the Society except the acceptance for publication of ASTM International's standards.
- E. The Committee on Technical Committee Operations ("COTCO") is responsible for the Regulations Governing ASTM's Technical Committees ("Regulations"), of which Regulation 17.1 states: "Documents [including standards and provisional standards], technical papers, reports, minutes, letters to the editor, and related materials should be released for publication only through ASTM's headquarters."
- F. Regulation 10.7 requires that the current edition of the manual, Form and Style for ASTM Standards ("Form & Style") will be followed in the writing of standards (the Committee on Standards ("COS") is responsible for Form & Style). Section F of Form & Style sets forth policies and procedures governing, among other matters, reference to patents, trademarks, similar marks, and reference to standards of other organizations, in ASTM International documents. Regulation 15 governs the use or reference to a patent in an ASTM International standard.

II. TYPES OF INTELLECTUAL PROPERTY.

Intellectual property includes patents, trademarks and copyrights, as defined in various federal and state statutes.

A. Patent. A patent is a property right granted by the government to inventors of new and useful inventions. Patents may be granted on any new and useful process, machine, manufactured article, composition of matter, or any new and useful improvements thereof. During a patent's limited term, its owner has the right to exclude others from making, using, selling, offering for sale or importing the patented invention into the United States.

- B. Copyright. A copyright is a property right granted to the creators (i.e. authors) of original works that are fixed in a tangible medium of expression and that are independently created and possess some minimal degree of creativity. The exclusive rights provided by a copyright include protection against unauthorized printing, publishing, copying, selling, distributing, and/or performing of the copyrighted work. Copyrighted materials include not only traditional written works but also such things as computer software, electronic files and publications, internet/website files and publications, multimedia, CD-ROMs, DVDs, videotapes, audiotapes, and training programs.
- C. Trademark. A trademark is a word, phrase, symbol or design, or combination of words, phrases, symbols or designs, which identifies and distinguishes the source of goods or services from one party from those of others. A service mark is the same as a trademark except it identifies and distinguishes the source of a service rather than a product. Trademark rights may be used to prevent others from using a confusingly similar mark but not to prevent others from making the same goods or from selling them under a non-confusing mark.

III. PURPOSE OF THIS POLICY.

The purpose of this Policy is to specify and protect the interests of ASTM International in its Intellectual Property rights, and to describe the means by which ASTM International has addressed protection of these rights and recognition of the intellectual property rights of others. ASTM International's Intellectual Property rights and revenue generated by utilization of those rights enable ASTM International to carry out its mission. All ASTM International staff, members, and others as stated in IV.B, below, are expected to comply with this Policy.

IV. SCOPE.

A. This Policy applies to any ASTM International standard, draft standard or related document (hereinafter referred to as "ASTM Documents")defined in Regulation 2 of the Regulations Governing ASTM Technical Committees, and any adjuncts to such ASTM Documents, as well as to all other ASTM International publications and related property, in all forms (including CD-ROM, software, multimedia, ASTM Internet Web Site, videotapes, audiotapes) and written materials such as Certification Programs and materials, Special Technical Publications, Manuals, Technical Journals, Proficiency Test Program materials, Professional and Technical Training materials, as well as use of trademarks, service marks, certification marks and Logos (collectively part of ASTM IP). (Many of these, as well as other examples of ASTM IP, are listed in the ASTM International Publications Catalog and related brochures. Logos are specifically covered by the ASTM International Logo Policy as adopted and amended by the Board.)

B. This Policy applies to all ASTM International employees, members, officers, directors, Participants, resellers/distributors and others involved with the development, adoption, publication, use and/or distribution of ASTM IP. For purposes of this Policy, "committee" or "technical committee" includes subcommittees and task groups.

C. Participants, members, and authorized resellers/distributors acknowledge and agree that the adoption, enactment, reference, or incorporation of any of the ASTM IP by any government or agency has not and will not effect, transfer, modify or alter the copyrights of the ASTM IP in any way.

V. POLICY.

A. All of ASTM International's Intellectual Property rights must be protected, regulated and maintained, no matter how wide the information is distributed in print, electronically, or otherwise. Such protection is essential to ASTM International's ability to fulfill its mission and maintain its Intellectual Property. The Board of Directors has approved the <u>Principles for the Use of ASTM Intellectual Property by Other Standards Organizations</u>.

B. ASTM International owns and maintains the rights to its Intellectual Property.

- C. ASTM International reserves the right to copyright any of its print, electronic products, databases, audio/visual products and any other subject matter covered by Copyright (pursuant to the US Copyright Act and International Copyright law). This is intended to protect ASTM International and its members from unauthorized copying and distribution of ASTM IP.
- **D.** By participating in any ASTM International technical committee and/or participating in the creation, development and/or adoption of ASTM IP, Participants and committee members acknowledge that the copyright to such Intellectual Property resides in ASTM International. Each member agrees, by such participation and enjoyment of his/her annual membership benefits, to have transferred any and all ownership interest, including copyright, they possess or may posses in the ASTM IP to ASTM. If requested by ASTM International, such Participants and committee members agree to execute any and all documents deemed necessary or appropriate by ASTM International to transfer and effectuate ownership of all such rights, including but not limited to copyrights, they may possibly have in ASTM IP. The rights granted to ASTM International by this assignment or transfer shall belong to ASTM International in perpetuity.
- **E.** All Participants, members and staff agree to abide by and follow the requirements of the ASTM International Charter, ASTM International By-laws, Regulations Governing ASTM Technical Committees, and Form and Style for ASTM Standards, ASTM International Logo Policy, as well as this Policy, as each may be amended from time to time, when creating, developing or utilizing ASTM IP.
- **F.** It is ASTM International's policy, reflected in **Form & Style F5**, that the copyrights and other intellectual property rights of third parties be respected and not infringed by ASTM International or any of its committees, or any employee, member or other person acting on behalf of ASTM International.
- G. It is ASTM International policy that, if at all possible, proprietary and/or patented equipment, apparatus, material or information not be included in a standard. If such inclusion is necessary, ASTM International's Patent Policy (Regulation 15) must be complied with.
- H. ASTM International registers its trademarks and service marks in the United States and in countries around the world. As a condition of membership, members agree that the marks are the property of ASTM International at all times. Use of the marks is subject to, among other things, ASTM International's Logo Policy.

I. Electronic Networks.

- 1. The US Copyright Act (as well as International Copyright law) provides copyright protection for certain works fixed in any tangible medium expression, now or later developed, from which they can be perceived, reproduced or otherwise communicated, either directly or with the aid of technology.
- 2. As more and more sophisticated technology becomes available, it may become increasingly difficult to determine and enforce ownership of ASTM International's Intellectual Property rights; therefore, inputting, uploading, downloading, reproducing, or transmitting ASTM IP without ASTM International's prior permission (or in conformity with ASTM International's applicable License Agreements) is prohibited.

VI. PROCEDURE.

A. Intellectual Property -- Standards.

- 1. Standards and related documents developed by or for ASTM International committees are copyrighted by ASTM International, as set forth in the U.S. Copyright Act. When an individual or entity joins, volunteers for or accepts appointment to the ASTM International or an ASTM International committee, the individual or entity, as a condition of membership and participation, expressly acknowledges and agrees that copyrights and all rights to all materials produced by or for ASTM International committees are owned by ASTM International and that ASTM International will register the copyright and hold all intellectual property rights in its own name.
- 2. Copyrights and Patents in ASTM Standards. If, in developing an ASTM Document or adjuncts to such ASTM Documents, a committee proposes to incorporate material from the copyrighted publication of another organization, the committee should request ASTM International staff to obtain written permission from the copyright holder to reprint the material. Reference to a patented item should be avoided, if at all possible, but in all cases section F5 of Form & Style must be complied with. Regulation 15 of the Regulations Governing ASTM Technical Committees, and Form and Style for ASTM Standards (including but not limited to sections F3 and F4), as well as ASTM International staff, should be consulted for guidance if patented items or trade/service marks are to be referenced in an ASTM Document.
- 3. ASTM International standards may currently include copyrighted material reproduced under agreement with the copyright holder. Similarly, ASTM International may permit others to reprint its material based on appropriate license agreements. Section F5 of Form and Style must be followed when referencing standards of other organizations.
- 4. The provision stated in A.3 (above) applies to all forms of media, including, for example, both hard copy and electronic formats.
- 5. Guidance to committees and members on protection of ASTM IP and avoidance of infringement of the rights of others is provided by the ASTM International staff.
- 6. Permission to Use ASTM IP. Only the President of ASTM International or the Vice President of Publications of ASTM International (in commercial transactions) can grant permission for the use, copying or distribution of ASTM IP by others. Any requests for such permission must be forwarded to ASTM International staff for consideration and further action.

B. Intellectual Property Other Than Standards

- 1. ASTM International recognizes different ways to assign intellectual property rights:
- a) When individual authors submit manuscripts of technical papers for publication by ASTM International, the author must sign an agreement (Author Agreement) whereby ownership of the material is assigned to ASTM International; however, if the technical paper was prepared in the course of the author's employment by the U.S., Canadian, or British Governments, ASTM acknowledges that copyright does not exist.
- b) When ASTM International contracts, subsidizes, or agrees with writers, authors, editors, or others to prepare or otherwise help create ASTM IP other than technical papers as given in 1a above, a "Work for Hire" Agreement must be signed in which copyright is acknowledged to reside in ASTM International or will be assigned to ASTM International. Copyright shall be granted and/or assigned exclusively to ASTM International, including any and all rights protected by the copyright laws of the United States and all other countries as set forth in the respective agreement.
- 2. When ASTM International creates and distributes ASTM IP, ASTM International may do so in whatever manner it decides. This will not, however, preclude the use of the Intellectual Property by authors and editors as set forth in the applicable agreements described in 1a and 1b above.

3. ASTM International will take reasonable precautions to preserve the property rights of an author of a manuscript submitted, but not accepted, for publication by ASTM International. C. Licensing. ASTM International may, at its sole discretion, assign, license or permit the use by others of ASTM IP. ASTM International requires any individual or entity who desires to copy, reproduce, market, create a derivative work utilizing or distribute any of ASTM International's Intellectual Property (e.g. Standards, Draft Standards, Certification Programs and materials, Adjuncts, Technical Papers, Research Reports, Manuals, Software, Training Course Materials, Certification Marks and Logos) to execute an appropriate ASTM License Agreement. Such agreements will normally require, among other things, that licensees not modify the ASTM IP and that they make appropriate copyright acknowledgments and royalty payments. ASTM International has no obligation to execute such agreements.

As amended by the ASTM International Board of Directors, October 28, 2003 and April 13, 2010

EXHIBIT 80 (FILED UNDER SEAL)