



Canadian Standards Association  
Mississauga, Ontario  
**To the Part I Committee**

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Subject No. 3204

Chair: R. Chauhan

Date: March 29, 2005

Title: Ground Fault Protection of Plumbing Pipes, Rule 70-122(5)

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**Submitted by:** A.Z. Tsisserev of The City of Vancouver on October 2, 2004, 2004.

**Proposal:** Amend Rule 70-122(5) and Appendix B Note to Rule 70-122(5) as follows:

1. To amend rule 70-122(5) to read:

70-122(5) "**Notwithstanding Rule 26-214(a), a receptacle.....of electric heating for plumbing pipes and labelled in a conspicuous, legible and permanent manner identifying it as a heating cable set receptacle for plumbing pipes, need not be protected by a ground fault circuit interrupter of the Class A type if the receptacle:**

**(a) is located within 600 mm of the cold water inlet and at least 900 mm from the outside edge of the mobile home; and**

**(b) branch circuit conductors supplying this receptacle are provided with ground fault protection as described in Rule 62-300(4)."**

2. To add Appendix B Note on Rule 70-122(5) to read:

**"Intent of this Rule is to provide legible identification of the receptacle installed for use with heating cable sets for plumbing pipes. Conductors supplying these heating cable sets are not intended to be provided with ground fault protection described in rule 62-300(4) if the receptacle is protected by a ground fault circuit interrupter of the Class A Type."**

**Reasons for Request:**

To clarify a need to provide a protection of heat tracing cables intended to be installed on plumbing piping for mobile homes by means of the ground fault protection mandated by Rule 62-300(4) or by a ground fault circuit interrupter of the Class A type that protects this dedicated and legibly identified receptacle.

**Supporting Information:**

A large number of fires documented on heat tracing cables installed on plumbing piping for mobile homes.

These fires have been even made a subject of the CBC documentary.

Notes:

1. New wording of the amended Rule is shown in underlined italic letters.
2. It would be great if Raman could invite Chair of Section 62 to participate in the deliberation process.

**Chair's Comments:**

I am in support of this proposal for circulation to the Subcommittee and to seek consensus on the proposal. Chair of Section 62 should be included in the circulation/consultation.

**Subcommittee Deliberation:**

There is consensus that receptacles installed on trailers to supply heat tracing cables for heating plumbing pipes should be protected by a Class A GFCI, but the wording of this proposal is confusing and should be revised. The wording of the appendix B note is misleading. The intent of the Rule is to ensure heat tracing cables used on plumbing pipes of trailers are protected by GFCI's, not that legible identification is provided the following wording for the Rule is suggested:

70-122(5) A receptacle installed on the underside of a mobile home, intended to supply a heating cable set(s) for freeze protection of plumbing pipes, shall:

- (a) Be protected by a ground fault circuit interrupter of the Class A type, and
- (b) Be labeled in a conspicuous, legible and permanent manner identifying it for the supply of heating cable set(s) for plumbing pipes.

The appendix B note should read:

The intent of this rule is to ensure that receptacles mounted on the underside of trailers to supply power to heating cable sets for freeze protection of plumbing pipes on trailers are provided with Class A ground fault protection and that they are properly identified for that use. Heating cable sets (particularly the self limiting type) without ground fault protection have caused numerous fires on trailers.

This means that rule 62-300(4) should be amended so as to recognize GFCI receptacle in 70-122 as an exception to the ground fault protection requirement mandated by 62-300(4). Without it, both requirements to protect heating cable sets would conflict. (The Chair of the Section 62 Subcommittee has agreed to work with the Chair of Part I to examine the wording of all ground fault references throughout the Code during the next Code cycle.)

**Subcommittee Recommendation:** That the changes shown above be approved.