

CANADIAN ELECTRICAL CODE

SUBJECT: Section 62 – Fixed Electric Space and Surface Heating Systems

Rule 62-124 Field repair, modification or assembly of series heating sets

Industry has requested clarification as to the information required on the permanent tag. The following information is provided to assist industry with the permanent tag information and installation.

Field Repair

Rule 62-124(a); when the total length of the heating portion of the sets is not changed by more than 3% no tag is required.

Modification or Assembly

Rule 62-124(b)(i) requires a permanent tag with new design information to be installed on series heating sets that have been field modified or field assembled. Although the design information is not specified in the rule, Standard C22.2 No. 130-03 provides guidance as to the marking of field-assembled heating device sets. Minimum marking requirements on the permanent tag should include:

1. the manufacturers name
2. the word “series” and usage markings
3. the rated voltage
4. the rated output in watts per unit length or area and the specified temperature for that output for those heating devices that vary their power output with temperature
5. the maximum permissible steady-state current
6. a reference number or other similar identification which relates to a permanent record of the assembly or modification

Nameplates bearing the original markings shall **not** be removed. The new permanent tag should be installed directly beside the original nameplate.

The permanent tag shall be clear, legible and suitable for the environment (outdoors, corrosive environment, etc.). The tag should be permanently secured adjacent the original nameplate.

Rule 62-212 Installation of Heating Panels and Heating Panel Sets**Flexible Heating Panels**

Several fires in Canada have been attributed to the installation of flexible heating panels. Although the actual cause has yet to be determined, investigations have revealed the need for extreme care with installation practices.

The Electrical Technical Council advises the following practices as necessary to reduce the risk of fire or product failure:

1. Flexible heating panels are to be installed by qualified persons who have been trained in the proper installation of the product.
2. The work of the various trades must be coordinated. The installation of the electric heating panels, the construction practices involved in the area where the panels are located, the type of insulation used, etc. are critical to the safety of the final installation.
3. It is strongly recommended that the heating panel manufacturer or representative be directly involved in the installation to ensure the product, building construction and the insulation type are correct for the heating product to operate safely.
4. Permits for a flexible heating panel installation should identify the type of heating panel used.
5. Resistance measurements taken in compliance with the manufacturer's instructions are to be in the form of a permanent record at either the distribution panel location or the thermostat location.

Rule 62-300 Electric Surface Heating

To protect from fires caused by high impedance faults in electric surface heating systems, Subrule (4) requires that ground fault protection be provided. When using a Type A ground fault circuit interrupter (GFCI), be careful that nuisance tripping will not result. It may be necessary to provide ground fault protection with an adjustable trip setting set at a mA level high enough to allow normal operation of the heater.