

Electrical Bulletin

Information for Electrical Contractors

Information contained in this bulletin does not negate the responsibility of Electrical Contractors, and others, to comply with the requirements of the Canadian Electrical Code, the *Public Safety Act*, the *Electrical Regulations* and the supply authority.

Re: 62-130 and 62-132 of the Canadian Electrical Code - Heater Controls and Devices

There has been considerable discussion around the use of the Class-A, GFCI Electronic Thermostat within washrooms. This thermostat is for use with in-floor heating where the thermostat is located less than 1 M from a sink, tub or shower stall.

The thermostat that is supplied with in-floor heat has built in Class-A GFCI protection. This thermostat does meet the requirements of 62-132(2) and protects the conductors to the in-floor heat and the heater. The concern is that the thermostat itself is not protected and cannot meet compliance with 62-130(2).

The Chair of the Section 62 Sub-Committee has the final say on the intent of any codes within Section 62 and as the Chair; he did forward an email to all Provinces, to provide the interpretation from the sub-committee.

It seems that all manufacturers provide an internal Class-A GFCI for their floor warming electronic thermostats. The Class-A GFCI is certified to c22.2 no. 144.1 and only provides protection for outgoing conductors to the heater (and heater of course) so it would meet the requirements for 62-132 (2). This internal Class-A GFCI does not provide protection for the thermostat itself, therefore not meeting the requirements of 62-130 (2).

If the thermostat is located less than the 1m distance from the sink, tub or shower stall as per 62-130 (2) and 62-132(2), a Class-A GFCI is required at both the thermostat and upstream from the thermostat. (i.e. a Class-A, GFCI breaker is required in the electrical panel).

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