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Date:

March 17, 2023

To:

Electrical Inspectors and Licensed Trades

From:

Division of Fire Safety

Subject: GFCI Directive – Heat Pumps

GFCI rule regarding 2020 NEC 210.8 (F) "Outside Outlets" Ex. 2 for listed HVAC equipment.

As you are all aware, 210.8 (F) was modified and dated for expiration in the 2020 Vermont Electrical Safety Rules with the understanding the Tentative Interim Agreement (TIA) would expire as well, hence requiring GFCI for Heat pumps and HVAC equipment. As written in the NEC 2023 - 210.8 (F) Ex. 2, The NEC moved the requirement for GFCI protection for "listed" HVAC equipment out to 2026. We will, most likely, adopt this as written sometime later this year. Until that is done electrical inspectors should not require GFCI protection for "Listed" heat pumps and HVAC equipment being fed from an "outside outlet", UNLESS SPECIFICALLY REQUIRED BY THE MANUFACTURER. In the event a non-listed or non-recognized listed piece of HVAC or heat pump equipment finds its way into Vermont, inspectors should utilize NEC 90.4 and require GFCI protection and the follow usual protocol with such equipment. IE third party listing or field evaluation by an engineer.

If contractors wish to offer GFCI protection, that would be acceptable. Some Heat Pumps and HVAC equipment are compatible with GFCI protection and some manufacturers state so in their installation manuals. (Mitsubishi for one). Feel free to discuss this with contractors. The GFCI requirement will not be required until 2026 and there won't be any requirement to upgrade until the branch circuit is altered or the equipment is replaced after 2026.

Another 3 years should allow time for all the Manufacturers of HVAC equipment to be GFCI compatible and maybe even see breaker manufacturers get caught up and so the GFCI breakers themselves will be available. In closing be sure the Non-Protected HVAC equipment has a properly terminated equipment grounding conductor and overcurrent devices are sized accordingly.

Dennis Blair, Chief Electrical Inspector

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