

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-647-0001**

GFCI Protection in a Crawl Space

Code: 2017 Electrical Code
Section: 210.8(A)(4)

Date: June 12, 2018

Question:

Does section 210.8 of the electrical code prohibit a 125-volt, single phase, 15- or 20-ampere GFCI receptacle from being installed in a crawl space because the receptacle is not “readily accessible” from the normal occupied areas of the dwelling?

Answer:

A GFCI receptacle located in a crawl space is not typically readily accessible from the normal occupied areas of the dwelling. Outlets located in normal occupied areas of the dwelling that possess GFCI protection located within the crawl space creates a hindrance to the occupants when such GFCI protection must be reset from within the crawl space.

However, a GFCI receptacle is typically readily accessible from within the crawl space where such receptacle is being utilized for servicing HVAC or plumbing equipment.

Therefore, a GFCI receptacle is allowed in the crawl space if the GFCI only protects the outlet(s) within the crawl space. Nothing in this document is meant to suggest that the branch circuit supplying the GFCI protected receptacle(s) within the crawl space is prohibited from also supplying outlets in the normally occupied areas of the dwelling. Additionally, nothing in this document is meant to suggest that the GFCI protection for the receptacle(s) in the crawl space must be located within the crawl space.

Example: There are two outside receptacles on the exterior of a dwelling (one on the front and one on the back) and one crawl space receptacle near an air handler. The branch circuit originates at a panelboard, then to the receptacle at the air handler, then to the receptacle at the front, and finally to the receptacle at the back.

A GFCI receptacle is installed at the air handler in the crawl space with no circuitry connected to the load side of the GFCI receptacle; thus, there is no GFCI protection on the branch circuit as it leaves the crawl space.

A GFCI receptacle is installed on the front of the dwelling and the branch that extends to the non-GFCI receptacle on the back of the dwelling is connected to the load side of the GFCI receptacle on the front of the dwelling; thus, the GFCI protection for the front and back receptacles is located only at the front of the dwelling.

210.8(A)(4) - GFCI Protection in a Crawl Space