

Construction Industry Communication#19

From: Amit Ghosh, Chief Building Official
Re: Installation of Floor Heat Mats and Cables
Date: July 1, 2009

Requirements: National Electrical Code Article 424.46: Cable installations shall be made with due care to prevent damage to the cable assembly and shall be inspected and approved before cables are covered or concealed.

Columbus Building Code Section 4115.01: All work for which a permit is required shall be subject to an inspection by the building official. No part of the work shall be made inaccessible for inspection until it has been inspected, tested and approved.

Background: The City of Columbus has experienced a recent increase in the number of floor heat mats or cables that have been installed and covered without the required inspections and tests.

Memorandum: In order to ensure a safe installation, all heat mats and cables must be inspected before they are covered or concealed by any floor covering including thin-set mortar and tile. The heat mats or cables are to be installed and tested according to Article 424 of the National Electrical Code and according to the manufacturer's instructions. The identification labels on the non-heating leads shall not be removed.

Inspections: A rough inspection will be required to verify installation is according to manufacturer's instructions. A final inspection will be required after the installation is complete and a copy of the required resistance readings per the manufacturer's instructions must be on site. The inspector will attach the readings to the electrical permit in the document tab.