21 NCAC 50 .0505 GENERAL SUPERVISION AND STANDARD OF COMPETENCE

(a) The general supervision required by G.S. 87-26 is that degree of supervision which is necessary and sufficient to ensure that the contract is performed in a workmanlike manner and with the requisite skill and that the installation is made properly, safely and in accordance with applicable codes and rules. General supervision requires that review of the work done pursuant to the license be performed by a licensee of the firm while the work is in progress. If a Plumbing, Heating or Fuel Piping Contractor licensed by this Board employs a properly licensed Plumbing, Heating or Fuel Piping Technician, whose Technician license is listed under the name of that licensed contractor, then the licensed technician may review and supervise work in lieu of the licensed contractor as a means to assure that the contract is performed in a workmanlike manner and with the requisite skill and that the installation is made properly, safely and in accordance with applicable codes and rules.

(b) The provisions of the North Carolina Building Code, including the provisions of codes and standards incorporated by reference, and adopted by the Building Code Council of North Carolina are the minimum standard of competence applicable to contractors licensed by the Board. Licensees shall design and install systems which meet or exceed the minimum standards of the North Carolina State Building Code, manufacturer's specifications and installation instructions and standards prevailing in the industry.

(c) Work performed under Rule .0513, Rule .0514, and Rule .0515 shall be performed by the licensed technician pursuant to the license held by that person.

(d) Every newly installed residential heating system, air conditioning system or both shall be designed and installed to maintain a maximum temperature differential of four degrees Fahrenheit room-to-room and floor-to-floor. On multilevel structures, contractors shall either provide a separate HVAC system for each floor or to install automatically controlled zoning equipment for each level with individual thermostats on each level to control the temperature for that level. The seasonal adjustment needed to maintain the four degrees Fahrenheit room-to-room and floor-to-floor maximum temperature differential shall not be accomplished through the use of manual dampers.

(e) All licensed HVAC contractors or licensed technicians shall perform a room-by-room load calculation for all newly installed residential structures prior to installing heating systems, air conditioning systems, or both, which calculations shall be specific to the location and orientation where the HVAC system or equipment is to be installed. A written record of the system and equipment sizing information shall be provided to the homeowner, owner or general contractor upon request and a copy shall be maintained in the job file of the licensee for a minimum of six years. Load calculations shall be performed by a licensee who holds the appropriate license from this Board, or a licensee may utilize a load calculation carried out for this particular structure and location by a North Carolina Licensed Professional Engineer.

(f) When either a furnace, condenser, package unit or air handler in an existing residential heating or air conditioning system is replaced, the licensed HVAC contractor or licensed technician is required to perform a minimum of a whole house block load calculation. When a furnace, condenser, package unit or air handler in a residential heating or air conditioning system is replaced, the licensee shall ensure that all systems and equipment are properly sized. The licensee may utilize industry standards, reference materials, evaluation of the structure, and load calculations. A written record of the system and equipment sizing information shall be provided to the homeowner, owner or general contractor upon request and a copy shall be maintained in the job file of the licensee for a minimum of six years. If a load calculation was not performed or if a load calculation was performed and it is later determined by the Board that the unit installed was undersized or oversized, the installation will be considered as evidence of incompetence. Load calculations shall be performed by a licensee who holds the appropriate license from this Board, or a licensee may utilize load calculations carried out for this particular structure and location by a North Carolina Licensed Professional Engineer.

(g) A licensed plumbing contractor involved in installation or replacement of a well pump or pumping equipment which includes installation or reinstallation of a well seal shall be present on site until the well is disinfected and sealed.

(h) At the time of completion of initial installation and upon any subsequent alteration, licensees who install multipurpose residential fire sprinkler systems shall assure that the two most remote fire sprinkler heads, as identified by the design professional who designed the system, undergo a water flow test at the water supply delivery volume and delivery pressure and assure that the system flows the required amount of water through each of the tested fire sprinkler heads. Failure to carry out the flow test or failure of a system to provide the required volume or water when placed in operation due to fire or otherwise shall be considered evidence of misconduct and incompetence on the part of the installing licensee.

History Note: *Authority G.S. 87-18; 87-23; 87-26;*
Eff. February 1, 1976;

Readopted Eff. September 29, 1977;
Amended Eff. July 3, 2012; January 1, 2010; March 1, 2005; January 1, 2004; July 1, 2003; July 1, 1991; October 1, 1989; May 1, 1989;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. August 22, 2015.