

1. All **Commercial construction will require a plan review** except the very simplest furnace replacement or something that is like a home furnace installation. The commercial thing is different for duct gauge, ventilation rates, make-up air and nearly everything else. At least call....or you may get caught paying for something the customer is supposed to.
2. **WATER HEATERS....**In general, water heaters need a permit for initial installation and for changes in location. For me, if a customer replaces a water heater with a like model, ie, power vent for power vent, gravity vent for gravity vent and the same vent is used, no permit is required. This assumes everything else is the same. If a power vent replaces a gravity vent, different venting is required as is a change in combustion air. Needs an inspection and permit. If a heater is moved to another location, new venting will have to be installed requiring an inspection and a permit.
3. **DRYER SPACE AIR...** The code requires a pass through grille on enclosed dryer spaces. The code says Section 504.5 "Installations exhausting more than 200 cfm shall be provided with makeup air. Where a closet is designed for the installation of a clothes dryer, an opening having an area of not less than 100 square inches shall be provided in the closet enclosure."
4. **DRYER ROUGH IN REQUIRED...** 504.6.2 says " Where a compartment or space for a domestic clothes dryer is provided, an exhaust duct system shall be installed in accordance with Sections 504.6 and 504.6.1" This means it is to be inspected during the rough-in inspection.
5. **FLEXIBLE CONNECTOR LENGTH...** 603.6.2.1 Requires "Flexible air connectors shall be limited in length to 14 ft." This is not flexible duct, which is unlimited in length but connector. Contractors use these for venting bath rooms. Looks like tin foil. Remember 14 ft. It says on each connector what the length is not to exceed.
6. **NEW LAW GIVES CONTRACTORS HYDRONICS** New legislation now finally goes back to the original concept for hydronics licenses. According to Kevin at the Mech Div, the new law allows holders of a category 1 license endorsement, the right to install water heaters and boilers in residences (up to 6 apartments). No provisions for commercial installations which will still require a boiler installers license.
7. **POOL HEATERS REQUIRE PERMIT** A mechanical license and permit is required for pool heaters. It is a gas fired appliance and in the code book (sec G2441) of the residential and (sec 916) of the mechanical code. I verified this with the state and they concur with my understanding.
8. **MAKEUP AIR FOR VENTILATION** There is no specific requirement for makeup air in a residence except as follows (G2407.4) Makeup air provisions. Makeup air requirements for the operation of exhaust fans, Kitchen ventilation systems, clothes dryers and fireplaces shall be considered in determining the adequacy of a space to provide combustion air requirements. *That means you have to check to see a naturally ventilated water heater does not suck CO back down the vent pipe and the fireplace doesn't draft back into the room when the appliances are in operation.* These provisions consider the fact that fuel fired appliances have combustion air requirements that are not optional. Fresh air or ventilation air is for the health of the occupants first and as a secondary for combustion.

9. **LINK TO MICHIGAN CONSTRUCTION BULLETINS.**

http://www.michigan.gov/dleg/0,1607,7-154-10575_17573-190399--,00.html

10. **MOBILE HOME HOOKUPS.** Mobile home hookup in a park may be done by a mechanical contractor

or by a repairer/installer. This is as it comes from the factory. If the gas pipe has to be lengthened or changed it must be done by a Mechanical contractor as it is a change to the original factory installation. On private lots everything must be done by a mechanical contractor except for owners that do the work themselves. On either site, Air Conditioners must be installed by a Mechanical contractor. This applies on used or new equipment. As to repairs, repairer/installers may repair or replace factory installed equipment that was part of the original equipment from the factory in a mobile home park. Installing a grill outlet requires a permit and mechanical contractor. Repairer/installers are required to pull permits.

11. **MOBILE HOME WOOD STOVES**. All woodstoves installed in mobile homes must be listed and labeled for mobile home use and installed exactly as required in the installation instructions which will be available at time of inspection. NO exceptions will be permitted.

12. **WOOD FIRED YARD BOILERS AND SOLID FUEL IN GARAGES**

New SOLID FUEL HYDRONIC Water Heater Technical Bulletin

By Tennison Barry, Chief Mechanical Division

The bureau has posted a new [Technical Bulletin –Publication No. 56, Solid Fuel Hydronic Heaters \(Outdoor Furnaces\)](#) (see links on item 9 above). Outdoor water heaters are actually solid fuel hydronic heaters using a large fire box to heat water in an open reservoir. The hot water is circulated through an underground pipe system to a heat exchanger in the building and then returned to the reservoir. Technical Bulletin 56 was developed to address how a mechanical inspector can inspect and approve these devices – basically, walking an inspector through the process. The Michigan Mechanical Code, Section 301.4 requires all equipment be listed and labeled. As an alternative to listing and labeling, the code official may approve the equipment, or the manufacturer may have the equipment approved in accordance with the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230. Questions should be directed to the Mechanical Division at (517) 241-9325.

Solid Fuel-Burning Appliance Misconceptions

By Jonathon Paradine, Senior Mechanical Inspector Mechanical Division

With the price of heating fuels on the rise, many people are turning to solid fuel-burning appliances to heat their buildings. The Mechanical Division has received numerous telephone calls regarding listing, labeling, and installation requirements for the equipment. According to the 2006 Michigan Mechanical Code (MMC), Section 301.4 states, “Appliances regulated by this code shall be listed and labeled for the application in which they are installed and used...” Please refer to Chapter 2 of the 2006 MMC for the proper definitions for listing and labeling. The 2006 MMC along with the NFPA-211-2006 edition cover the installation requirements for solid fuel-burning appliances. A common misconception is if it is not installed in a building, then no permit or inspections are required. This is not true. Section 101.2 Scope from the MMC states, “This code regulates the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, equipment, and appliances specifically addressed in this code.” Therefore, permits and inspections are required. A question often asked is if a solid fuel-burning appliance can be installed in a garage. The answer is, no, it cannot. The NFPA-211 2006 edition, Section 12.2.4 states, “Solid fuelburning appliances shall not be installed in any garage.” Also Section 12.2.3 states, Solid fuel-burning appliances shall not be installed in any location where gasoline or any other flammable vapors or gases are present.” Additional questions may be directed to the Mechanical Division at (517) 241-9325.

As of August 20, 2010, the hydronics section on wood fired boilers is now law and in the code book. Listing and labeling is required unless the inspector is willing to provide an inspection under section 105 of the code.

(Walt)