Manufactured Home Installations On-Site Systems Testing: Electrical

Manufactured home systems must be tested after completion at the installation site (CFR 3285 and CFR 3286)

If the <u>retailer or installer</u>, as part of the manufactured home purchase agreement, has agreed to provide any portion of the electrical, plumbing, or mechanical services for the home utility connections, the retailer or installer must provide verification required for the systems testing.

If the <u>consumer</u>, as part of their manufactured home purchase agreement, has agreed to contract any portion of the electrical, plumbing or mechanical services provided for the home utility connections, the dealer/retailer or their agent must provide a copy of this on-site utility services inspections form to the consumer. The consumer must have the home's on-site systems testing completed and verified prior to occupancy.

Electrical testing:

3285.702 (f) (1)

1. After completion of all electrical wiring and connections, including crossovers, electrical lights, and ceiling fans, the electrical system must be inspected and tested at the site.

3285.702 (f) (2)

- 1. Continuity test to ensure metallic parts are effectively bonded,
- 2. Operational tests of all devices and utilization equipment (except water heaters, electric ranges/furnaces/dishwashers/clothes dryers & washers, and portable appliances) to demonstrate that they are connected and in working order,
- **3.** For electrical equipment installed or completed during installation of the home, electrical polarity checks must be completed.

Electrical on-site testing may be completed by;

- The licensed electrical contractor of record for the project, or
- The MN licensed manufactured home installer of record, if the installer has been approved as capable of completing the on-site electrical testing by CCLD, or
- Manufacturer's IPIA agent.

Completed testing is required to be witnessed and documented. If non-compliances are noted, they shall be reported to the homeowner, the dealer, the installer of record, and if the home is new, to the homes manufacturer.

I certify the electrical tests described above have been completed and are found to be in compliance. (continuity, operational, polarity and smoke alarm testing)

Signature:	Date:	
Please print name legibly:		
	(Name and agency/company performing testing)	
Home owner's name:		

Manufactured Home Installations

On-Site Systems Testing: Plumbing

Water supply testing: The piping and connections up to the home connections are to be tested in accordance with Minnesota State Plumbing Code (MSPC), Chapter 4715.2820. The home is to be tested to CFR 3285 requirements. 3285.603 (e)

- 1. Water heater must be disconnected during testing.
- 2. Water line must be tested with air or water at 100 psi for 15 minutes without loss of pressure.

Drainage system testing: The piping and connections up to the home connections to be tested in accordance with MSPC Chapter 4715.2820. The home to be tested to CFR 3285 requirements. **3285.604 (d)**

- 1. Drain, waste and vent systems must be tested by one of the three following methods;
 - a) Water test: before plumbing fixtures are connected, all of the openings into the piping must be plugged and the entire piping system subjected to a static water test for 15 minutes by filling it with water to the top of the highest vent opening with no evidence of leaking.
 - b) Air test: after all fixtures have been installed, the traps filled with water, and the remaining openings securely plugged, the entire system must be subjected to a 2-inch (manometer) water column air test.
 - c) Flood level test: the entire system must be filled with water to the rim of the water closet bowl (tub and shower drains must be plugged), the test must be sustained for 15-minutes without evidence of leaks. The system must then be unplugged and emptied. The waste piping above the water closet bowl must then be tested to show no evidence of leakage when the high fixtures are filled with water and emptied simultaneously to obtain the maximum flow to drain piping.

Plumbing on-site testing may be completed by;

- The licensed plumbing contractor of record for the project, or
- The Minnesota-licensed manufactured home installer of record, if the installer has been approved by CCLD as capable of completing the on-site plumbing testing, or
- The manufacturer's IPIA agent.

Completed testing is required to be witnessed and documented.

I certify the plumbing tests described above have been completed and passed the tests. (water line, flood, and fixture testing)

Examiner's Signature: _	Date:		
(Printed name, company name and phone number of testing agency)			
Print legibly home owner	's name:		

Manufactured Home Installations On-Site Systems Testing: Gas Supply System

Fuel supply system testing: The piping and connections up to the home to be tested in accordance with MSMC Chapter 1346.5406. The home to be tested to CFR 3285 requirements. 3285.605 (c)

- 1. After the appliances are connected, the piping system must be pressurized to not less than 10 inches or more than 14 inches water column (6 to 8 ounces per square inch) and the appliance connections tested for leakage with soapy water or bubble solution. The system must be isolated from the air pressure source and maintain this pressure for not less than ten minutes without showing any drop in pressure.
- 2. If the appliances are not furnished or have not been installed, piping systems must stand a pressure of at least six inches mercury or 3 PSI gage for a period of not less than ten minutes without showing any drop in pressure. Pressure must be measured with a mercury manometer or slope gage calibrated to read in increments of not greater than one-tenth pound, or an equivalent device.

Fuel supply system testing may be completed by;

- The gas supplier for the home (local utility or independent supplier), or
- Minnesota-bonded mechanical contractor, or
- Manufacturer's IPIA agent.

Completed testing is required to be witnessed and documented. The witnessing authority may be the gas utility supplier, Minnesota-bonded mechanical contractor, Minnesota-licensed building inspector, the approved third-party inspector responsible for the installation inspection, or the manufacturer's IPIA (in plant inspection agency's) agent.

If during the testing, non-compliances of the code are found that were the result of the construction of a new manufactured home by the home manufacturer, notification must be sent to the Minnesota Department of Labor and Industry, Construction Codes and Licensing Division for proper notification to the manufacturer and their IPIA for corrections of non-compliances and re-testing. If the home is used and testing identifies non-compliances that were not caused by the manufacturer during construction, corrections orders must be issued to the responsible parties by the local authority having jurisdiction.

I certify the gas tests described above have been completed and are found to be in compliance.

Examiner's signature:	Date:	
(Printed name, company name ar	nd phone number of testing agency)	
Print legibly home owner's name:		
Site address:		