

FUEL GAS SERVICE TECHNICIAN LICENSE

40 HOUR Classroom requirements consisting of an **Service Technician Course** combined with a minimum of 2000 hours of field experience (approximately 2 years) including the Gas Piping Installer and Gas Equipment Installer license requirements to become licensed as a New Hampshire Gas Equipment Installer. (STN/STP License)

This class qualifies you to install piping systems for both Natural and LP Gases. *See below for regulations*

Prerequisites for this course: Gas Piping Installer and Gas Equipment Installer requirements.

WHAT IS COVERED?

Total time = 40 hours

Total time with GPI & EIN/EIP = 140 hours

Service Technician	Ignition Modules	Direct Spark Ignition
Customer Service	Hot Surface Ignition	Troubleshooting Appliances
Basic Electricity	Direct Spark Ignition	Thermostats
Basic Circuits	Integrated Control Boards	Service Techniques
Controls	Ignition Systems	Combustion & Gas Flames
Transformers	Standing Pilot	Combustion Analysis
Capacitors	Thermo-piles	Using Combustion Analyzers
Relays	Hot Surface Ignition	Placing Gas Appliances in Operation

STATE OF NEW HAMPSHIRE GAS LICENSING REQUIREMENTS

Saf-Mec 305.04 Eligibility Requirements for initial Individual Fuel Gas Fitting Licensure as a Fuel Gas Service Technician.

- a) A fuel gas service technician specialty license shall be provided to individuals engaged in the servicing and repair of liquefied propane and natural gas piping from the point of delivery to the appliance(s) and/or the service and repair of residential or non-residential fuel gas appliances and any other fuel gas utilization equipment using liquefied propane and or natural gas.
- b) An individual for the fuel gas service technician specialty license, shall demonstrate the following:
 - 1) A minimum of 140 hours of educational training in the following subject matter:
 - a) Basic gas theory involving a thorough understanding of the physical properties and characteristics of propane and natural gas;
 - b) Reading and interpretation of fuel gas piping plans and drawings;
 - c) Determining proper fuel gas piping systems using appropriate sizing tables and charts;

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(Subject matter continued)

- d) Piping installation involving review of gas pipe sizing, gas pipe material selection, proper installation of underground and above ground fuel gas piping supply and distribution systems, placing a fuel gas system in service including purging, initial pressure testing and leak check of gas distribution piping and appliances;
 - e) The documentation of fuel gas piping system pressure testing, leak checking including customer notification as to the safety procedures and recognition of fuel gas odors;
 - f) Liquefied propane and natural gas piping appliance installation including clearance to combustibles, combustion, dilution, and ventilation air requirements are properly sized; and
 - g) Liquefied propane and natural gas appliance venting including venting categories, selection and use of proper venting materials, vent sizing and clearance and installation; and
 - h) Placing propane and natural gas appliances equipment into service while controlling propane/air mixtures for proper combustion;
 - i) Verification for proper operation of safety controls and devices
 - j) The proper utilization of combustion analyzing equipment with respect to applicable codes and manufacturer's installation instructions;
 - k) Troubleshooting electrical circuits and control devices while measuring electrical quantities using an electrical meter;
 - l) Identifying operating characteristics and components of common appliance safety and sensing devices including the testing and replacement of operating controls;
 - m) Gas pressure measurements including supply and appliance burner pressure detection;
 - n) Ignition safety systems including the 100 percent pilot safety shut-off and other electronic safety shut-off devices;
 - o) Flue gas analysis and carbon monoxide detection;
 - p) Interpret gas appliance equipment wiring diagrams to determine the sequence of operation of any given appliance;
 - q) Fuel gas equipment maintenance, inspection, heat exchanger inspection, and routine service requirements;
 - r) Application of NFPA 54, National Fuel Gas Code, and NFPA 58, The LP Code as it relates to the items above; and
- 2) A minimum of 2,000 working hours of on-the-job experience in the trade or its equivalent in an approved educational setting as defined in Saf-Mec 303.18, relevant to the installation of gas piping, installation of fuel gas utilization equipment, and the servicing of fuel gas equipment within 60 consecutive months, 750 hours of which may be applied if the applicant can demonstrate proof of relevant field experience installing, servicing and repairing heating oil fired equipment.