APR 164 : PLUMBING BASIC INSTALLATION 1

Transcript title

Plumbing Basic Installation 1

Credits

4

Grading mode

Standard letter grades

Total contact hours

80

Other hours

80

Prerequisites

APR 163.

Course Description

Presents techniques for installing and testing water supply piping, as well as basic plumbing fixtures, valves, and faucets. Introduces principles of electricity commonly applied in plumbing-related systems and the interaction between plumbing and electrical components. Establishes proper methods for the installation and testing of water heaters, including compliance with federal guidelines and industry best practices. Reviews code requirements to ensure all installations meet regulatory standards and industry expectations. Designed for registered apprentices in the plumbing trade.

Course learning outcomes

1. Identify various fixtures, valves, and faucets and their typical application.

2. Prepare elementary single-line sketches of drainage and vent systems and drawings for both drainage and water piping systems using detailed symbols.

3. Develop a material takeoff from a given set of plans.

4. Use plans and fixture rough-in sheets to determine the location of fixtures and the route of the water supply piping.

5. Prepare take offs from plans, locate fixture route pipe, and locate and size water meters for installation of a water system.

6. Explain requirements and techniques necessary to modify structural members in plumbing installation.

7. Explain sizing and installation of a water service line, including back flow prevention, and proper testing of a water supply system.

8. Describe procedures required in safely installing and repairing bathtubs, shower stalls, valves, faucets, water closets, sinks, lavatories and urinals.

9. Identify circuit, voltage and Ohm's when using electrical testing equipment on electrical components used in plumbing equipment.

Content outline

- 1. Techniques for installing and testing water supply piping.
- 2. Experience with basic plumbing fixtures, valves, and faucets.
- 3. Principles of electricity relevant to plumbing-related systems.

- 4. Explore the interaction between plumbing and electrical components.
- 5. Proper methods for water heater installation and testing.
- 6. Compliance with federal guidelines and industry best practices for water heaters.
- 7. Review and apply code requirements for all installations.
- 8. Develop skills to meet regulatory standards and industry expectations.

Required materials

Materials not required.