PF Lesson 2.1 Flashcards

1 History of the Trades

Facilities use piping systems to transport gas and liquid

1.1.1 Piping System Changes

1.1.2 Plumber Definition

The Latin word plumbum or lead: plumber

1.1.3 Ages of Europe

Dark - 476 to 1000

Helpless - 5 centuries

First plumbing laws - 1800s

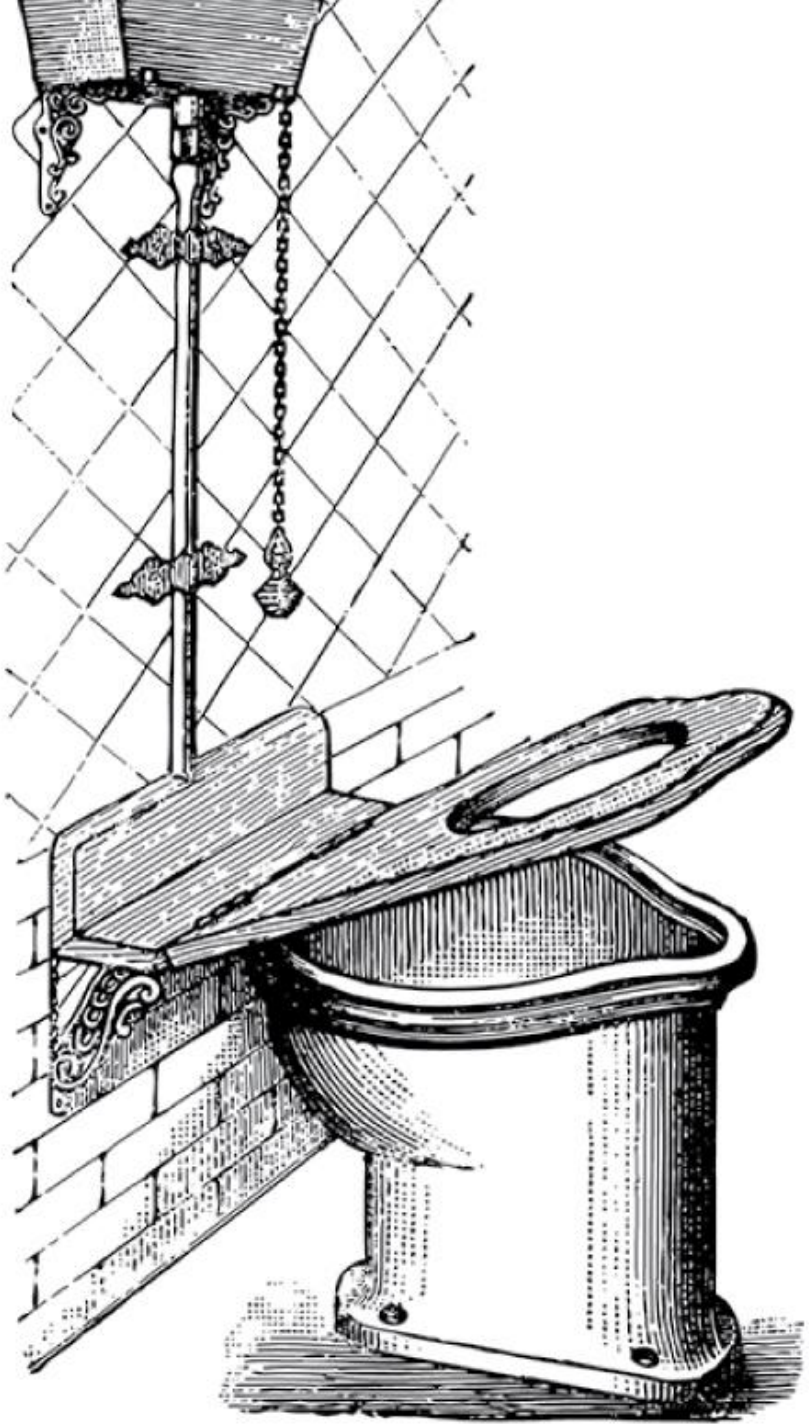
1.1.4 Plumber Science

Scientific method applied to planning and construction of plumbing systems

1.1.5 1900 Plumbing

Started installing plumbing fixtures like bowls

1.1.5.1 Water Closet



Bowl

1.1.6 Plumber Laws

States passed laws concerning plumbing after bowl.

1.2 Piping Systems Defined

Plumbing has a system that carries water into buildings

1.2.1 Pipefitting

creating pipes for piping systems to convey water

1.2.1.1 Steam Fitting

piping system use to convey steam

1.2.1.2 Gas Fitting

pipefitting systems that convey gases

1.2.1.3 Process Fitting

piping system used to convey fluids and solids

1.2.1.4 Service Tunnel

Combined piping systems

1.2.2 Pipefitting Types

local code - enforce requirements

licensing laws - special permission

labor agreements - piping task

1.3 Codes Related to Plumbing and Pipefitting

Title / Content

1.3.1 Code

Rules and regulations for products and installation

1.3.1.1 Electrical Code

Title / Content

1.3.1.2 Plumbing Code

Title / Content

1.3.1.3 National Code

Title / Content

1.3.2 Model Codes

UPC - Uniform Plumber Code

NPC - National Plumbing Code

IPC - International Plumbing Code

1.3.3 Using a Code Book

Title / Content

1.3.3.1 Code Book

Definitions unique to the code

1.3.3.1.1 Definitions

Title / Content

1.3.3.1.2 General Regulations

Title / Content

1.3.3.1 Plumbing Conditions

Each chapter has it own code and special number

1.3.4 Plumbing Code Basic Principles

1. Must supply potable water
2. Right pressure
3. Must hot
4. Consistent
5. Seperate heating device
6. Connect to sewer
7. Basic plumbing fixtures
8. Cleanout able
9. Durable material
10. Out to air not water
11. Leak check
12. Prevent sewage against backflow
13. Light less
14. Disposal no sewer
15. Maintain system
16. Observe walls strength
17. No sewage discharge

1.3.5 Standards

Collection of regulations for a particular component or material

1.3.5.1.1 Specification Standard

Qualities a product must conform to where dimensions and tolerance are given

1.3.5.1.2 Performance Standard

Performance factors for a certain type of product

1.3.5.1.3 Combination Standards

Materials and performance are required of a product

1.3.5.2 Typical Plumbing Code

Pipe size, strength, and tempature

1.3.5.3 Committees

Specifications and performance standards are prepared by committees

1.3.5.3.1 Balanced

procedure is balanced if the committee assigned to write a standard is composed of an equal number of consumers and producers

1.3.5.3.2 Voluntary

person volunteers their time to create standards at a committee

1.3.5.3.3 Consensus

agreement with all members of a group

1.4 Structure of the Trades

different types of work related to plumbing

1.4.1 Apprenticeship System

apprentice learns a trade with class and a job

1.4.1.1 Class

Four years of class to a journeyman

1.4.1.2 Examination

local code issues exams to be classified

1.4.1.3 Federal Office of Apprenticeship and Training

apprenticeship programs are here

1.5 Licensing

practice of authorizing a person to perform a technical service for benefit of the public

1.5.1 Licensing

specialized trained persons

1.5.2 Trades

two years as a journeyman for craftsman

1.5.3 Seperate Licenses

mechanical license used to operate a business

1.5.4 Certification

achieved competence in a specific skill

1.6 Permits and Inspections

an authorization to perform construction

1.6.1 Permit

(1) schedule building inspector (2) job is inspected

1.6.1.1 Inspector's Time

Inspector gets scheduled to project

1.6.1.2 Inspected

conform to local code, contract documents, and specification

1.6.1.2.1 Building Inspector

visits site

1.6.1.2.2 Inspection Agency

employs inspectors