

PLUMBING DESIGN

Rensch Engineering understands the complexities of plumbing systems and the balance between construction cost and performance.

Design Services we provide are:

- Water service sizing including meter sizing
- Grease trap sizing and authority compliance
- State energy code compliance
- LEED water credits and water use reduction
- Hot water, cold water, sewer, and vent sizing with plan and isometric layouts
- Material selection along with joining methods related to type of use
- Natural gas design and utility coordination
- Commissioning for Plumbing systems and state energy compliance
- Multi-story design including booster pumps and pressure zones
- Restaurant and coffee shop design meeting health and plumbing code standards
- Medical and veterinary design
- Food processing/production facility design
- Fire sprinkler consultation and performance design

Plumbing Systems we frequently design are:

- Hot water heating systems including solar, natural gas, electric, and new heat pump systems including those utilizing CO₂.
- Hot water boilers and steam systems used to heat domestic water systems
- Unique waste/vent systems in multi-family projects
- All types of domestic water piping systems including copper, PEX, and pressed fittings systems
- Natural gas design including low, medium, and high pressure
- Experienced with surveying existing buildings and summarizing existing systems options (see the website for specific Building Assessment services)
- Compressed air systems
- Medical gas systems including Oxygen, medical suction, and scavenger systems
- Grease waste and interceptor systems



MECHANICAL AND ELECTRICAL BUILDING DESIGN

- Acid waste and chemical dilution tanks
- Rain leaders and downspouts for roof drainage
- Wet, dry, and pre-action fire sprinkler design consultation and performance specifications