WATER DISTRIBUTION INSTALLATION

34.1. Vocabulary

Ex. 1. *Match the words with their definitions.*

1. sizing calculations	a. an opening made through a floor for pipes or cables to pass through.
2. wall penetration	b. determining the appropriate diameter for pipes based on their use.
3. load bearing	c. able to support weight and hold up structures above it.
4. water distribution system	d. the smallest amount or lowest level that is acceptable or required.
5. in-wall	e. a network that delivers water from one place to various locations for use.
6. non-load bearing	f. mathematical methods used to find the correct dimensions for objects.
7. notching	g. the process of making a hole in a surface using a tool.
8. drilling	h. not designed to support any weight from above.
9. floor penetration	i. located inside the wall, not visible from the outside.
10. maximum	j. cutting small grooves or indentations into a material.
11. stub out	k. to extend a pipe or wire partway and leave it open for future connections.
12. pipe sizing	l. the largest amount or highest level that is allowed or possible.
13. minimum	m. creating an opening in a wall for utilities like wires or pipes.

Ex. 2. *Complete the sentences with the given words.*

stub out, notching, Pipe sizing, minimum, wall penetration, Drilling, maximum, load bearing, in-wall installations, sizing calculations

The contractor explained that _____(1) is necessary for running pipes in new buildings.

We need to determine the _____(2) flow rate for the water distribution system to avoid any issues.

After measuring, I realized that _____(3) the beams was essential for fitting the new plumbing system properly.

_____(4) helps us decide which diameter to use for different sections of the water distribution system.

For our home renovation, the architect performed careful _____(5) to ensure everything fits well.

The water distribution system must have a _____(6) pressure to function correctly throughout the house.

Remember to _____(7) the pipes before finishing the drywall installation, so it's easier later.

_____(8) holes through the walls is necessary for passing the pipes from one room to another.

The contractor pointed out that _____(9) keep the pipes hidden and save space nicely.

It’s important to know if a wall is _____(10) before making any changes during renovations.

34.2. Reading

Ex. 1. *Read the text.*

Installing a water distribution system in a building involves careful planning and execution. First, you need to consider pipe sizing. Proper sizing is crucial to ensure that the system operates efficiently. Calculations are required to determine both the maximum and minimum load capacities. When drilling through walls for wall penetration, it is important to differentiate between load bearing and non-load bearing walls. For in-wall installations, you might need to do notching, especially if routing around structural elements.

Usually, you'll have to perform floor penetration to connect the system vertically. It’s key to reinforce holes drilled through load-bearing floors to prevent weakening the structure. When setting up the system, make sure to plan for stub outs where fixtures will be connected.

Remember, all these steps are part of creating a reliable water distribution system. Proper pipe sizing and accurate calculations help in achieving a durable installation.

Ex. 2. *Answer the questions.*

1. Why is proper pipe sizing crucial for a water distribution system?

2. What calculations are necessary when determining load capacities for a water distribution system?

3. Why is it important to differentiate between load bearing and non-load bearing walls when drilling for wall penetration?

4. When might notching be necessary for in-wall installations of a water distribution system?

5. Why is it key to reinforce holes drilled through load-bearing floors during floor penetration?

6. What should be planned for when setting up a water distribution system to ensure fixtures can be connected?

7. How do proper pipe sizing and accurate calculations contribute to creating a reliable water distribution system?

34.3. Communication

Ex. 1. *Make sentences using the following words:*

1. plumber/installed/water
2. leak/bathroom/have
3. important/dripping/faucets
4. shower/low/water
5. checked/meter/lately
6. basement/pipes/insulation
7. know/shut/main
8. dishwasher/connected/supply
9. kitchen/tightening/faucet
10. replaced/shower/head