



**REPORT 07**

**DEVI AHILYA VISHWAVIDYALAYA, INDORE**

**DEPARTMENT OF LIFELONG LEARNING**

**SESSION 2021-2022**

**Dr. Bharti Joshi**

**Head**

**INDUSTRY VISIT**

**DHENU MARKET INDORE**

<b>Date</b>	<b>Time</b>	<b>Platform</b>	<b>No. of. participants</b>	<b>Coordinator</b>
<b>23 September 2021</b>	<b>10 AM.</b>	M.V. Patel Industry of tiles  Dhenu Market, Indore	<b>41</b> Student of B.Voc Interior design (V sem)	<b>Mrs. Monika patodi</b>



**DEVI AHILYA VISHVAVIDHYALAYA,  
INDORE  
DEPARTMENT OF LIFE LONG  
LEARNING**

**ORGANIZES  
DOLL ALUMNI ASSOCIATION**

**PRESENTS**

**SHOWROOM VISIT**

**DATE : 23<sup>TH</sup> SEPT 2021**

**TIME: 10:00 A.M**

**VENUE - M.V. PATEL DHENU**

**MARKET**

**OWNER - MR. MANISH PATEL**



**ORGANISING HEAD  
BHARTI JOSHI  
HOD, DOLL**



**MONIKA PATODI  
INTERIOR DESIGNER**

1. Water Supply Plumbing- is the supply of the water to the building and how it is distributed around the building. A Sanitary Drainage System – refers to the pipes, fittings, fixtures and appliances used to collect and convey sewerage from the sanitary plumbing system and fixtures directly connected via the drain to the sewer.
2. Planning a construction, or making a building plan you have taken into account the plumbing and piping peculiarities. You need to make a plan that shows the layout and connection of pipes, location of plumbing equipment, etc. Even with a plan changes may be necessary as you work, but a well-done plumbing and piping plan surely makes your work much easier. Concept Draw Plumbing and Piping Plans ...
3. Plumbing and Sanitary Items used in Building Construction. The plumbing system consists of the entire system of piping, fixtures and appliances used for water supply and drainage. The plumbing water supply system consists of water supply and distribution pipes, taps, valves, storage tanks etc., while plumbing drainage system consists of wash basins, water closets, urinals, traps, soil waste pipes, vent pipes, septic tanks etc.

The Plumbing system comprises the whole system of pipe fittings and appliances used for water supply and drainage. In this supply and drainage system, different pipes are used for different purposes



Plumbing and sanitary system is an essential part of the construction. This system needs to be designed and properly planned as it ensures that hygiene is maintained in the house, office or any structure being built. It is believed that around 8% of the construction cost of a building is allotted for plumbing and sanitary work.

A plumber has to install, repair, maintain and service the plumbing fittings and fixtures. The plumber has to also thoroughly understand the mechanism behind the whole system. Besides

that, a plumber has to be laborious and effective in communication skills to get the results out from his team.

Water is supplied to the whole house from storage tanks through pipes, then the waste water from kitchen and washrooms is drained out through pipes. No building can function properly without plumbing and sanitary arrangement in place. It's important that this plumbing cycle – water is taken from a source, supplied to occupants and finally wastewater recycled in the proper manner is designed properly.

Sanitary work is about carrying the wastewater to the disposal system through plumbing fixtures.

Plumbing and sanitary items that are used in building construction are as follows:

Piping, fixtures, and appliances are used to supply water and for drainage of wastewater. A plumbing system consists of water supply and distribution pipes, taps, storage tanks, and valves. The drainage system consists of water closets, urinals, solid waste pipes, vent pipes, wash basins, etc.

## **Water Pipes:**

### **PVC :**



Used for internal and external water supply systems in buildings.

PVC pipes have been used for the last 60 years. In comparison to traditional pipe material, PVC provides energy saving service, cost-effective distribution and a maintenance-free, safe, lifetime of service. PVC pipes do not contribute to the degradation of the environment and suffer fewer leaks or breakages than other material. PVC pipes are used for water, drainage, and waste carrying because buried pipes are expected to last over 100 years.

### **Galvanized Iron Pipes:**



They have grades namely light, medium and heavy. Extensively used for water supply and drainage in building construction because they are economical.

This type of pipe is used for water supply work inside the building. These pipes are wrought steel pipes provided with zinc coating.

They are available in light, medium and heavy grades depending on the thickness of the metal. For a 15 mm GI pipe, the thicknesses are 2.0, 2.65 & 3.25 for the light, medium and heavy grades, respectively. Generally, the medium grade pipes are used for internal plumbing in the building.

Mostly screw and socket joints are used for G.I. pipes.

## **Lead pipes:**



These pipes are flexible and corrosion resistant. Taps and stop-cocks in buildings are available in iron, brass, and chromium-plated varieties.

### **Lead Pipes in Industry and Buildings**

For many centuries lead pipes were used to supply water to households, most famously during the Roman Empire. In fact, the term plumber derives from the Latin word for lead.

More recently though, due to health problems associated with lead, lead pipes have been banned for use in the home, except for some vent and drainage systems.

### **Lead Pipes in Industry**

Lead pipes are still used in the industry today because of the properties of lead that include malleability, flexibility, and resistance to corrosion. Typical applications include chemical plants, nuclear plants, paper manufacturing plants and Hydro and plating applications.

Lead Pipe for these applications is made from either chemical Pure lead or up to 6% Lead Antimony Alloy.

Lead pipes are used in pulp and paper industry in cooling systems which use sulfur dioxide gases and in transporting the bleaching stock which uses hydrogen peroxide or zinc hydrosulfite and for draining the discharge from the pulp digesters

Other applications for Lead Pipes are for Soil Waste, Ventilating, and telephone and telegraph underground piping, pressure tubes (copper lead) and cable sheathing.

### **Lead Pipe in homes and buildings**

Appliances and plumbing fixtures require vent pipes that run through the roof of a house. Lead pipe flashing is installed over vent pipes and incorporated into the shingle pattern to create a cohesive, water-resistant rooftop.

Pipe fabricated from 99.7 percent pig lead; various lead alloys are also still used for drainage. Lead Sleeves and Cones are used with Expansion Bolts for extra heavy loads or for installation in poor masonry materials.

## **Copper Pipes:**



There are two types of copper pipes- heavy gauge and light gauge. They are used for better grade houses and where ground-water is highly corrosive to steel pipes.

These pipes are used in hot water installation. They have high tensile strength and can, therefore, have thin walls and they can be bent easily.

Copper pipes are sometimes coated with chromium to enhance its appearance.

External water supply system in buildings:

This system comprises of water supply from other sources like bore well, water treatment plant or well to overhead water tanks and from overhead water tanks to the houses. For this purpose G.I. pipes and cast iron pipes are used.

### **Plumbing Drainage system:**

There are 5 types of drainage water pipes used in building construction:

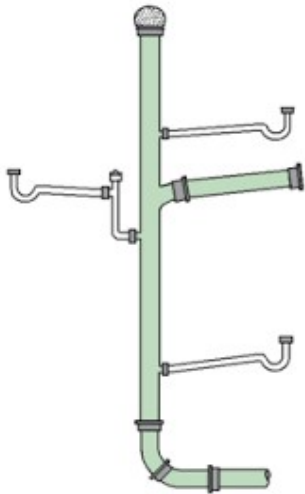
1. **Anti-siphon age pipes**
2. **Vent pipe**
3. **Soil Pipe**
4. **Waste pipe**
5. **Rainwater pipe**

### **Anti-Siphonage Pipes:**



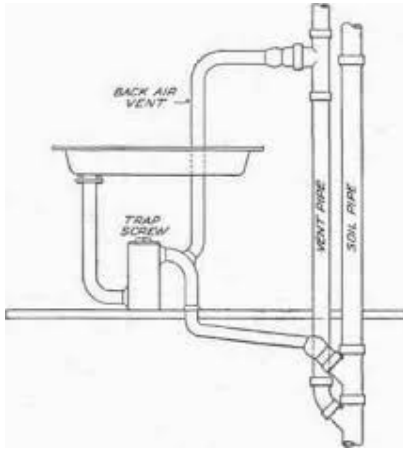
These pipes are connected to the outlets of toilets which are meant to maintain water seal to prevent the entry of foul gases of the sewer lines in toilets and bathrooms. These pipes are made of PVC. Their sizes must be in line with the standard specifications.

### **Vent pipes:**



These pipes are joint to the top of soil and waste pipes in order to release bad odors.

## **Soil pipes and waste pipes:**



These pipes get rid of sewage and greywater from the building. They are connected to the common drainage system. They are mostly fitted to the exterior part of the building. Soil pipe and waste pipe are used to remove from sinks, baths, toilets, and showers. These are fitted with vent pipes on the top so that the odor releases.

In the past cast, iron soil pipes and waste pipes were used. But, now PVC pipes are common.

Waste pipes are pipes that drain sinks, floor drains, and water fountains. Water that hasn't necessarily been "soiled" but is still considered unclean.

## **Rainwater pipes:**





These pipes are attached to the roof or open area above buildings. They are meant for removal or collection of rainwater.

The rainwater pipes are drawn to the ground level in case of removal or these are connected to the rainwater collection network or tank for rainwater harvesting. These are generally made of PVC material.

Many different types of construction materials and products are used













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