

PDHonline Course M238 (3 PDH)

Plumbing - Description of Useful Terms

Instructor: A. Bhatia, B.E.

2020

PDH Online | PDH Center

5272 Meadow Estates Drive Fairfax, VA 22030-6658 Phone: 703-988-0088 www.PDHonline.com

An Approved Continuing Education Provider

Plumbing - Description of Useful Terms

Course Content

Terms	Description
"A" Valve	A manual gas shut-off valve
ABS	Acrylonitrile-butadiene-styrene. Rigid black plastic pipe used for Drain, waste, and vent lines
Absolute pressure	Atmospheric pressure added to gauge pressure.
Absorption Field	A leeching or seeping field, engineered to receive septic tank effluent.
AC	Alternating current. Electrical supply in which polarity of wire reverses rapidly (e.g. 60 cps)
Acceptance Factor	Bladder tank drawdown; expressed in percentage.
Access Panel	An opening in the wall or ceiling near the fixture that allows access for servicing the plumbing/electrical system.
Acidity	The level of concentration of acid in water. Acid will neutralize an alkali or base. It is usually expressed in terms of its calcium carbonate equivalent
Acrylic	A glassy, thermoplastic material that is vacuum-formed to cast and mold shapes that form the surface of fiberglass bathtubs, whirlpools, shower bases, and shower stalls.
Activated Sludge	Sludge withdrawn from the secondary clarifier in the activated sludge process, consisting of micro-organisms, nonliving organic matter and inorganic materials.
Actuator	Mechanism on outside of toilet tank used to initiate the flush of a toilet.
ADA	Americans with Disabilities Act - Effective in 1992, this act places a number of construction demands on the plumbing industry. For faucets, handles must require no pinching or grasping, and must require less than 5 lbs. of force to operate. In addition, metering faucets must run for at least 10 seconds. The Act is administered on a state-by-state basis.
Adaptor	A fitting that joins two different types of pipes together, such as ABS to cast-iron, or threaded to non-threaded
Adjustable Hot Limit Stop	Device that restricts hot water output to protect against scalding by limiting the swing to the hot side.
Adjustable Linkage	An adjustable strap or bar forming a connection between the lift rod of a faucet and the ball lever assembly of the drain.
Adjustable Wrench	Thumb-screw controlled wrench affording tight fit by varying pincher size.
Adjusting Link	An adjustable strap or bar forming a connection between the lift rod of a faucet and the ball lever assembly of the drain.
Adsorption	The process in which matter usually solid, capable of holding gases, liquids and/or suspended matter at its surface and in exposed pores.

PLUMBING TERMINOLOGY

Terms	Description
	Activated carbon is a common adsorbent used in water treatment.
Aeration	The mixing or turbulent exposure of water to air and oxgen to dissipate volatile contaminants and other pollutants into the air
Aerator	A device screwed into the end of a faucet spout that mixes air into flowing water, and controls flow to reduce splashing. It sometimes contains a baffle to reduce flow to 2.5 gpm.
Aerobic	An action or process conducted in the presence of air, such as aerobic digestion of organic matter by bacteria
AGA	American Gas Association
AIA	American Institute of Architects
Air Admittance Valve	A device that replaces a traditional vent to allow air to enter the pipe and equalize pressure, preserving the seal of water in the fixture trap.
Air Chamber	Vertical, air-filled pipe or spring coil, set above the water line to absorb pressure when water is turned off at the faucet. Pressure absorbing devices to eliminate water hammer.
Air Check	A device that allows water, but not air, to pass through it. An air check is a typical component of a treatment system using a regenerant eductor.
Air Elimination Vent	A device which automatically eliminates trapped air in the "closed- loop" hydronic system
Air Gap	A device mounted at the back of a kitchen sink, connecting to the drain line between a dishwasher and disposer to allow the dishwasher to discharge freely into the disposer while preventing contaminated water from siphoning back into the dishwasher. It can be any unobstructed vertical opening between the lowest opening of a waste line and the flood level of the device into which it empties to relieve pressure and prevent backflow contamination
Air Lock	Blockage in the flow of liquid, esp. on the suction side of a pump caused by an air bubble in the line.
Air volume Control	Maintains the air charge in a standard water storage tank. Pre- charged tanks do not require an air volume control
Air Break	An airbreak is a physical seperation which may be a low inlet into the indirect waste receptor from the fixture, appliance, or device indirectly connected.
Air-Gas-Ratio	The ratio of combustion air supply flow rate to the fuel gas supply flow rate.
Alarm Check Valve	A check valve located in the riser of a wet pipe fire sprinkler system that sounds an alarm when water begins to pass through it.
Alkali	Water-soluble mineral compound, usually a moderate strength base (as opposed to caustic hydroxide), such as a bicarbonate and carbonate compound when it is present in the water.
Alkalinity	The measurement of constituents in a water supply which determine alkaline conditions. The alkalinity of water is a measure of its capacity to neutralize acids.
Alkyl Benzene Sulfonate	A chemical compound formerly used as detergent. Sometimes called "hard" detergent, because of its resistance to biological degradation, largely replaced with linear alkyl sulfonate (LAS), which is more readily biodegradable.

Terms	Description
Allen Wrench	Size-specific "L"-shaped loosening and tightening tool. Also referred to as hex key.
Alphasan	The patented antimicrobial agent used in StayClean whirlpools that inhibits the growth of bacteria & fungi that cause odors & discoloration, as well as deterioration and decay of whirlpool plumbing.
Aluminum Rail Fittings	Rail fittings made of aluminum. Used to hold pipes used for hand rails.
Ambient heat/pressure	The heat or pressure in the area where the equipment is located.
Ambient Temperature	The average temperature of the atmosphere in the vicinity of an appliance.
Americast	A patented process that uses a porcelain surface, an enameling grade steel material and a structural composite backing bonded together to create a sink that is similar to cast iron in durability but weighs considerably less.
Ampere	A unit of measure of current flow.
Anaerobic	Able to live and grow without air or free oxygen, such as some types of bacteria that break down waste in a septic system
Angle Adjuster	Hand controlled directional device controlling handshower flow direction.
Angle Discharge Tube	Discharge tube that changes direction of the flow 90 degrees.
Angle Seat Wrench	Valve seat wrench with a handle that includes a 90 degree bend.
Angle Stop	A shutoff valve between the water pipes and a faucet. Its inlet connects to the water supply pipe in a wall, and its outlet angles up 90 degrees toward the faucet or toilet. These are usually used to shut off water to a fixture in case of an emergency repair rather than daily usage.
Anion	A negatively charged ion in solution, such as bicarbonate, chloride, or sulfate. An anion [such as chloride (CI-)] may result from the dissociation of a salt, acid, or alkali.
Annealing	A softening treatment consisting of heating carbon or alloy steel to an appropriate temperature, holding at the temperature for a proper period of time and slowly cooling to room temperature.
ANSI	American National Standards Act.
Anti-clog Suction	Whirlpool water recirculating system mechanism which prevents clogging without restricting water flow.
Anti-derailing Mechanism	Device which prevents shower door panels from coming off track when they slide back and forth.
Anti-microbial Toilet Seats	Anti-microbial solid plastic toilet seats include an anti-microbial agent which is formed into the plastic. The germ-fighting properties of the agent continue to rise to the surface over time and inhibit bacteria and germ growth on the seat.
Anti-Scald	A valve that limits water flow to help prevent burn injuries.
Anti-Siphon	A device that prevents water from flowing back into supply lines, possibly contaminating the water supply. Commonly used on sprinkler systems to prevent water from dripping back into the supply that is feeding it.
Apron	A decorating portion of a bathtub that covers the rough-in area from

Terms	Description
	the floor to the top rim of the tub.
Aquamarine Glass	A watery blue glass color reminiscent of the ocean.
Aquastat	A device (thermostat) that is submerged in water and is used to control the operation of a specific device.
Aqueous	Any thingh formed by the action of water.
Aquifer	A layer or zone below the surface of the earth which is capable of yielding a significant volume of water. The upper level of the aquifer is called the water table.
Area Drain	Floor-installed overflow drain.
Arrestor Plate	A perforated plate of steel that controls the burning of vapors and prevents flames from backflashing into the room.
Arrow Head	A heavy duty auger cable tip.
Arsenic	A natural element of the earth's crust, which enters water supplies either through natural deposition or agricultural and industrial pollution. It is said to be carcinogenic and is harmful to the skin.
ASA	American Supply Association
ASHRAE	American Society of Heating, Refrigeration, Air Conditioning Engineers.
ASME	American Society of Mechanical Engineers
Aspiration	The result of mixing air with discharging water for the purpose of enhancing the hydro-massage effect of the whirlpool.
ASSE	American Society of Sanitation Engineers
ASTM	American Society for Testing Materials
Atmospheric Combustion	Burning which takes place when gaseous, liquid, or solid fuels react at an elevated temperature with oxygen, thus releasing heat.
Attrition	The breakage and abrasion of resin beads.
Auto Pilot	A gas pilot device which automatically shuts off the gas supply to the appliance burner if the pilot flame is extinguished.
Auxiliary control	A serviceable secondary control box which communicates directly with the primary control within the pump. The auxilliary control interprets and processes a variety of electronic signals, including valve and switch operation.
Avonite	Solid surface material resembling granite, used for countertops, can be worked and polished using woodworking tools.
AWG	American wire gauge. Identifies gauges of electric wire from 46 to 4.0
AWWA	American Water Works Association
B - Tank	Acetylene tank holding 40 cu-ft of gas, used for plumbing, once used to fuel boats, thus the name.
Back Flow	The circumstance of water traveling from one system back into any part of the main distribution system, usually by siphoning.
Back Flow Preventer	A device to prevent water from traveling from one system back into any part of the main distribution system, usually by siphoning, especially into a potable water supply. This is generally required for sprinkler systems, handheld showers, pullout faucet spouts, kitchen

Terms	Description
	sprayers, etc.
Back Pressure	Pressure that resists the flow of fluid in a piping system.
Back Siphonage	The negative pressure that causes backflow.
Back Vent	Plumbing fixture's separate vent in a building drainage system.
Back Wash	The process of cleaning a filter by reversing the flow of water through it. Dirt is sent to waste.
Backfire	Flashback of flame through the burner venturi causing the gas to burn at the orifice.
Backjet	Whirlpool jets located on the fixture wall behind a reclining bather.
Backjet Pulse Cannister	A serviceable water-controlling device responsible for backjet pulsing action.
Backsplash	A raised integral portion of a wall mount sink or lavatory located at the rear to protect the wall.
Back-to back Cartridge	For use when you have two bathrooms showers back to back This cartridge keeps you from having to replumb your hot & cold lines supply lines in one of the showers (it internally has hot & cold reversed).
Backup	Overflow of a plumbing fixture due to drain stoppage
Backwater Valve	Sewer line valve that prevents sewage from flowing back into the house.
Baffle	An object placed in an appliance to change the direction of, or retard the flow of air, air-gas mixtures, or flue gases
Balancing Valve	A water heater valve that controls water flow and balances heat distribution to different locations.
Ball Check Valve	A valve that uses a ball to seal against a seat to stop flow in one direction.
Ball Joint	Spherical assembly allowing pivot rotations for showerheads.
Ball Lever	Mechanism set to control drain stopper.
Ball Passage	This refers to the size of the ball that can pass through the trapway of a toilet. This also relates to trapway size. In general, the trap size will be 1/8" larger than the maximum size ball that can pass through it
Ball Valve	A valve that uses a ball to seal against the seat.
Ball Cock	The fill valve that controls the flow of water from the water supply line into a gravity-operated toilet tank. It is controlled by a float mechanism in the tank water. When the toilet is flushed, the float drops and opens the ballcock, releasing water into the bowl. As the water in the tank is restored, the float rises and shuts off the ballcock when the tank is full.
Balloon Bag	Device that attaches to a garden hose & used to loosen a blockage in a clogged drain
Band Clamp	A flexible band made of a variety of materials that has a cinching device used to secure pipes.
Band Hanger	Type of pipe hanger that supports the pipe on a continuous strap of metal whose ends are joined at the top by a supporting rod. This rod bots through the strap and is adjustable as to height.
Barlow's Formula	An equation which shows the relationship of internal pressure to

Terms	Description
	allowable stress, nominal thickness and diameter.
Barrier-Free	Relating to handicap access, e.g. a shower enclosure system having minimal or no bottom track and openings that are wheelchair-accessible.
Base	A substance that releases hydroxyl ions when dissolved in water. Bases react with acids to form salt and water.
Base Faucet	Part of lavatory faucet that includes the spout, valve bodies, and drain assembly. Does not include handles, which are sold separately as part of the handle kit. For bath faucets, the base valve does not include the faceplate, handle, showerhead, or spout.
Basin	Compartment designed to hold water discharge.
Basin Wrench	A wrench with a long handle with jaws mounted on a swivel that allows the jaws to reach and handle nuts to fasten faucets to a previously installed sink.
Basket Strainer	Basket shaped strainer with holes and a slot that fits the kitchen sink drain allowing water to run out while catching food or other solids. Can also be closed to fill the sink with water.
Batch Feed	Type of garbage disposer in which garbage is fed into unit one load at a time, and then activated by placing the stopper into the drain opening.
Bath Waste	Remote control drain for tubs involving internal plugging mechanisms as opposed to a "pop-up" type drain. Also known as "trip lever drain".
Bath/rim Mount	Term used to describe a faucet mounted directly on an integral bathtub faucet ledge.
Bath/rim mount	Term used to describe a faucet mounted directly on an integral bathtub faucet ledge.
Bathtub	Non-jetted receptacle for water, shaped to fit a human body, in which a person bathes.
BC	Brushed Chrome finish used on faucets.
Beam Clamp	A device to attach a pipe hanger to an overhead I-beam. These may be malleable, carbon steel, or galvanized, and may be primed or painted.
Bed Depth	The height of the ion exchange or filter media in the vessel after preparation for service.
Bed	The ion exchange resin or filter media contained in a column or vessel.
Bedpan Closet	Toilet-like fixture used for disposing of bedpan contents. Also known as a "clinic service sink" or "flushing rim sink".
Bedpan Washer	Faucet used in conjunction with a conventional toilet for washing bedpans. The most common types are "hose" and "swing down".
Beehive Strainer	A strainer inserted into a urinal to prevent foreign matter from falling into the drain.
Bending Rod	Device used to safely bend certain pipes and tubes by providing even pressure along an arc.
Bernoulli's law	The principle that a stream of liquid or gas exerts less sideways pressure while in motion than while at rest. As a result, fluids seem to be drawn into the stream, but are really pushed in by higher outside

Terms	Description
	pressure. Bernoulli's equation states that the static pressure (p) in the flow plus one half of the density (r) times the velocity (V) squared is equal to a constant throughout the flow, which we call the total pressure (pt) of the flow.
	$pt = p + .5 * r * V^2$
Beveled Washer	Washer with tapered edge used to tighten faucet assemblies.
BHP	Brake horse power. The actual amount of horsepower being consumed by a pump as measured on a dynamometer.
Bicarbonate Alkalinity	Alkalinity of water due to the presence of bicarbonate ions.
Bidet	A personal hygiene plumbing fixture similar in appearance to a toilet bowl used for washing genitals and posterior areas of the body. It is mounted on the floor next to a toilet and consists of a washing basin, a hot and cold faucet, and sprayer.
Biochemical Oxygen Demand	Amount of oxygen consumed in the oxidation of organic matter by biological action under standard test conditions; often used as a measure of the strength of sewage and waste water.
Biochemical Oxygen Demand (BOD	A quantitative measure of the oxygen needed by bacteria and microorganisms for the biological oxidation of organic wastes in a unit volume of waste water. BOD is generally measured in milligrams per liter (rng/1) of oxygen consumed over a five-day period. Although complete biological decomposition of, organic waste requires about 20 days, the five-day BOD is about two-thirds of the total oxygen requirement and, therefore, is a practical measure of waste concentration. In waste treatment language, BOD is most frequently stated as the percentage removed during treatment, or remaining after treatment.
Bio -degradable	Subject to degradation to simpler substances by biological action, such as the bacterial breakdown of detergents, sewage wastes and other organic matter.
Biological Oxidation	The process by which bacteria and other types of micro-organisms consume dissolved oxygen and organic substances in waste water: using the energy released to convert organic carbon into carbon dioxide and cellular material.
Bisque	The rough, unpolished finish found in unglazed areas of vitreous china fixtures, such as inside the tank or the bottom of the bowl.
Black Oiled	Term associated with pipe surface whereby material ordered in this manner is protected with a varnish-type oil on the O.D. for temporary corrosion protection during transit and in short-term storage.
Black Pipe	Lacquer-finish cast iron pipe.
Black water	Wastewater from toilets or latrines and sinks used for food preparation or disposal, or for the disposal of chemicals.
Bleed	To drain a pipe of excess air by opening a valve at the end of the pipe
Blind Plug	Plug used on No Hub pipe.
Block Sensor Mode	For Touchless faucets, a system mode which occurs when the faucet continually senses an object, causing the faucet to stop functioning normally. The faucet will appear to be "OFF", and will self-actuate every two hours to alert you to its condition.
Blockage	An obstruction. Blockage in pipe is removed by using a plunger.

Terms	Description
Blow Torch	A torch used to solder pipes, activated by pressurized fuel and air to generate its flame.
Blow Bag	A drain-cleaning device consisting of a rubber bladder with a hose fitting on one end and a nozzle on the other. The device attaches to a water hose and is inserted into a clogged drainpipe. As water is introduced, it expands to grip the pipe, and releases pulsating bursts of water through the nozzle, forcing water through the pipe to clear the obstruction.
Blowdown	Partial venting or draining, under pressure, of the water side of a boiler to reduce or remove unwanted contaminants. Also the pressure drop after releasing a pressure-relief valve.
Blown-Out Water Closet	A water closet bowl having a non-siphoning trapway at the rear of the bowl, and an integral flushing rim and jet.
Blowout	A flushing design using a non-siphoning trapway at the rear of the bowl, and an integral flushing rim, relying entirely on high water volume.
BN	Brushed Nickel finish used on faucets.
Body	Basic housing that allows you to build your faucet for specific applications.
Body Jet Valves	For 8-Jet BodySpa, serviceable components used to manually select the desired Body Jet array(s).
Body Spray	Shower component used in conjunction with a showerhead to deliver flow of water. It is commonly used in multiples to create a custom showering space.
Boiler	A sealed tank where water is turned to steam for heating or power.
Boiling Point	The temperature at which liquid changes to vapor by the addition of heat.
Bolt Cap	Cap used to protect and cover toilet floor-mount bolts.
Bonnet	The top portion of a compression valve assembly, it holds the valve in place as it is tightened against the valve seat at the other end of the assembly.
Bowl	Water-containing receptacle that receives liquid and solid body waste; usually classified as round or elongated
Box	Internal (female) threaded end of pipe.
Box Flange	Flange containing internal (female) threaded pipe fitting
Brackish Water	Water containing bacteria between 1,000 and 15,000 ppm of dissolved solids
Braided Hose	Flexible connecting hose.
Braided Tubing	A flexible pressure tubing of synthetic material encased in braided threads of steel, usually chrome plated or stainless. The braiding protects the tube from damage due to abrasion or crimping. Often used in water supply lines.
Branch	Any part of a drain system other than the main, riser, or stack.
Branch Vent	A vent connecting one or more individual vents with a vent stack.
Brass	Slang for faucets and fittings regardless of materials used.
Brine	A strong solution of sodium chloride (salt) used in the regeneration of

Terms	Description
	ion exchange water softeners
Brine Seal	Ring made from flexible plastic material placed on element end cap in order to prevent flow bypass around the outside of an element.
BTU	A unit of heat energy required to raise the temperature of 1 lb. of water 1 degree Fahrenheit.
Bubbler	Drinking faucet with flow-regulated push-button self-closing valve. Also referred to as a water fountain.
Building Drain	The lowest point in a drainage system where the interior drainage pipes meet and are conveyed it to the sewer.
Building	A building is a structure built, erected, or framed of component structural parts designed for housing, shelter, enclosure, or support of persons, animals, or property of any kind.
Bumper	Wall protector for sliding shower door assembly designed to cushion impact.
Burner	A heat producing device where the flame or heat is produced.
Burst Pressure	The internal pressure that will cause piece of tubing to fail
Bushing	A pipe fitting used to join two pipes of different sizes. A bushing is threaded inside and out. Also a cylindrical part used as a lining or guide
Butterfly valve	A serviceable valve that allows water to flow through it when open, and stops the water flow when closed.
Buttress	The raised portion of a shower curb that is on more than one level.
BX Cable	Metallic sheathed cable containing A/C electrical wiring. Typically used when wiring would otherwise be exposed.
Bypass	Type of shower door that consists of two or more panels running in parallel tracks.
CAD	Computer Aided Design
Calcium Carbonate	$CACO_3$ - a white precipitate that forms in water lines, water heaters and boilers in hard water areas; also known as scale.
Calcium/ Magnesium	Two of the principal elements that, when dissolved, make water hard. Their presence contributes to the formation of scale and insoluble soap curds.
Carbon Dioxide	A gas present in the atmosphere, formed by the decay of organic matter; the gas in carbonated beverages; dissolved in water it forms carbonic acid.
Carbonate Alkalinity	Alkalinity due to the presence of the carbonate ion.
Carbonate Hardness	Water hardness due to the presence of calcium and magnesium carbonates and bicarbonates in water; the smaller of the total hardness and the total alkalinity.
Carbonizing	In a pump, where a reduction of hydrocarbons results in the formation of carbon residue that will interfere with the movement of a mechanical seal. Often called coking.
Cartridge	Typically refers to a valve cartridge. It is a single-piece unit that replaces the use of separate seats, stems, and seals for water-flow control.
Carved Glass	An artistic form of sandblasting that creates a multi-dimensional effect

Terms	Description
	through the varying depth of the design pattern.
Casing	A tubular structure intended to be watertight installed in the excavated or drilled hole to maintain the well opening and to prevent ground water from entering the well.
Cast iron	Material used to manufacture such plumbing fixtures as sinks, bathtubs and lavatories. Iron is formed by molding it while it is in a molten state. It is then coated with an enamel powder which contains pigments to provide fixture color and is fired at extremely high temperatures. This melts and fuses the enamel into a glass-like coating.
Catch Basin	Large underground container, with a grate on the top, for collection of storm water run-off. It catches or collects dirt and other debris and prevents them from polluting streams and lakes.
Cathode	The electrode of an electrochemical cell at which reduction occurs.
Cation	A positively charged ion in an electrolyte solution, attracted to the cathode by a difference in electrical potential.
Caustic	The tendency of any substance to burn or destroy animal flesh or tissue. The term is usually applied to strong bases.
Caustic Soda	The common name for sodium hydroxide.
Cavitation	The vacuum created when the discharge capacity of the pump exceeds the replacement in the suction line. This causes bubbling and vibrations that can damage the pump if they occur over an extended period.
CBD	Certified Bathroom Designer
CC	Copper to copper soldered.
Celcon Nut	Connectors used to hand-tighten faucets to lavatory from underside of lavatory.
Centerset	Style of bathroom faucet having combined spout and handles, with handles 4 inches apart, center-to-center. Also a single-handle faucet installed on 4 inches center-to-center faucet holes.
Centerspread	Bathroom faucet which installs into fixture holes set 4" apart like a centerset faucet, but with the waterway between the two handles and the spout concealed below the lavatory deck.
Centrifugal Pump	A pump that moves water by centrifugal force developed by rapid rotation of an impeller As the rotating impeller whirls the water around, centrifugal force builds up pressure forcing the water through the discharge outlet.
Ceramic Cartridge	A self-contained cartridge housing two ceramic discs. Full-on / full-off with 1/4 turn of the handle.
Ceramic Disk Valve	A valve that relies on two-part revolving disks in a sealed cylinder. Each disk has a port in it that, when aligned with the other, it will allow water to pass through.
Ceramic Valve	Single cartridge, washerless valving system which uses ceramic discs to control water flow. Considered the hardest, most reliable valving material in the industry.
Cesspool	A cesspool is a lined excavation in the ground which recieves the discharges of a drainage system or part thereof, so designed as to retain the organic matter and solids discharging therein, but permitting

Terms	Description
	the liquids to seep through the bottom and sides.
CFM	Cubic feet per minute
CFT	Hundred feet. A selling unit of measure for pipe.
CGR	Certified Graduate Remodeler
Chain Wrench	An adjustable wrench in which a chain is used for gripping. Commonly used on large pipes.
Chamfer	Beveled end, usually done on pipe prior to threading
Check Stop	Shut-off valve used with tub/shower faucets that is activated by turning a slotted stem with a screwdriver. Also known as a "screwdriver stop" or a "service stop".
Check Valve	A type of backflow preventer installed in a pipe run that allows water to flow in only one direction.
Chemical Oxygen Demand (COD)	A quantitative measure of the amount of oxygen required to oxidize all organic components in a unit volume on waste water - non- biodegradable as well as the BOD. The COD level can be determined more readily than BOD, but this measurement does not indicate how much of the waste can be decomposed by biological oxidation.
Chloride	Cleaning chemical that may corrode stainless steel. Care must be taken to immediately rinse stainless steel with water if cleaners containing chloride are used. Cleaners with chloride must not be allowed to remain in contact with stainless steel components for long periods of time.
Chlorination	The application of chlorine to water, sewage, or industrial wastes, generally for the purpose of disinfection, but frequently for accomplishing other biological or chemical results.
Chlorine	A gas, Cl2, widely used in the disinfection of water and an oxidizing agent for organic matter, iron, etc.
CI	Cast Iron
Circuit Vent	Plumbing drainage system vertical vent which is run from the last two traps on a horizontal drain line to the main vent stack of a building drainage system.
Circulating system	The system of tubes and fittings around a whirlpool basin where water is drawn from the suction inlet, through the pump, is mixed with air and is forced back into the basin through jets.
Cistern	A tank for storing water.
Clamp Straps	Straps used to hold or support pipes.
Cleanout Plug	A plug in a trap or drain pipe that provides access for the purpose of clearing an obstruction.
Clear	Shower door glass with no pattern or design. It exposes the showering area, creating a spacious look in the bath.
Clevis	A U-shaped piece of metal with holes in the ends through which a pin is run to attach to pipes.
Clevis Hanger	A type of pipe hanger with a swivel yoke supported at the top by an adjustable vertical rod. This yoke bolts to pin holding a U-strap of metal (clevis) that supports the pipe.
Clevis Insulator	A clevis hanger with an insulating bushing where the vertical rod bolts

Terms	Description
	to the yoke. Most often used with roller hangers and electrical conduit.
Close Coupled	A toilet with a separate tank and bowl, secured to each other, and with a separate tank cover. Also known as a two-piece toilet.
Close Nipple	Short lengths of pipe that are threaded on both ends. The threads that are so close together they almost join in the center.
Closed System	A system where the incoming cold water supply has a device that will not allow water to expand when heated (i.e. check valve, backflow preventer, pressure reducing valve, etc.)
Closet	A term used for a Toilet.
Closet Auger	A flexible rod with a curved end used to access the toilet's built-in trap and remove clogs.
Closet Bend	A curved fitting mounted immediately below the toilet that connects the closet flange to the toilet drain
Closet Bolt	Two main anchor bolts that attach a toilet to the floor. Also known as toilet bolts or T-bolts. They slide into a channel on a toilet closet flange. After a toilet is moved into position, a nut threaded onto the bolt helps pull the toilet toward the closet flange and seat it into final position.
Closet Flange	A flange that secures a toilet and attaches permanently to the waste line pipe. Has graduated slots into which closet or T-bolts lock. A wax ring or closet gasket is placed above the flange to provide an effective seal.
Closet Gasket	Also known as a wax ring or bowl gasket. A gasket designed to form a seal between the toilet base and the floor or closet flange. It typically fits over either a 3" or 4" outlet, is wide enough to fill modest gaps, and should maintain a seal despite bowl or building movement.
Closet Plunger	Also known as a plunger, force cup, or plumber's helper. A rubber suction cup on a handle used to free plumbing traps and waste outlets of obstructions. Effective for removing moderate blockage, but can complicate more serious blockage.
Closet Riser	Flexible supply tube with flat end used to make the final supply connection to ballcock (toilet fill valve).
Closet Seat	Toilet seat. A rim placed over a toilet as a seating surface.
Closet Tube	A water supply tube used for toilets.
СО	Cleanout
Coagulant	A material, such as alum, which will form a gelatinous precipitate in water, and cause the agglomeration of finely, divided particles into larger particles which can then be removed by settling and/or filtration.
Coagulant Aid	A material which is not a coagulant, but which improves the effectiveness of a coagulant, often by forming larger or heavier particles, speeding the reactions, or permitting reduced coagulant dosage.
Coagulation	The process in which very small, finely divided solid particles, often colloidal in nature, are agglomerated (lumped) into larger particles.
Cock	A valve used for regulating water flow.
Cockhole Cover	A round cover-plate or disk installed on a sink to cover an unused faucet hole.

Terms	Description
Coil Spring Tube Bender	A flexible heavy-wire coil, which, when slipped over copper tubing, allows it to be bent without crimping.
Cold drawn	Pipe or tubing that's pulled through a die to reduce diameter and wall Produces closer tolerances and higher strength
Cold Vapor	Method to test water for the presence of mercury.
Coliform Bacteria	Non-pathogenic microorganisms used in testing water to indicate the presence of pathogenic bacteria
Collar	A galvanized sheet metal restricting device used in conjunction with plastic pipe. Its function is to direct and control the intumescent action of the firestopping material
Collet	A metal band, collar, ferrule or flange.
Colloid	Very finely divided solid particles that remain suspended in a solution; the removal of colloidal particles usually requires coagulation.
Combination Boiler	A boiler that provides both central heating and instant hot water.
Combined Sewer	A sewer system that carries both sanitary waste and storm water runoff.
Combustion Chamber	The location where combustion takes place.
Combustion Gases	Gases released when a gaseous, liquid, or solid fuel reacts at an elevated level that needs to be vented with gas or oil-fired water heaters.
Commercial	Product intended for non-residential applications such as schools, hospitals, etc.
Commercial Heater	Water heaters used for more than a single-family dwelling.
Commode	Toilet. The device which receives and flushes bodily waste.
Common Vent	Building drain system vertical vent which connects two or more fixture branches on the same level.
Compensated Hardness	A calculated value based on the total hardness, the magnesium to calcium ratio, and the sodium concentration of a water. It is used to correct for the reductions in hardness removal capacity caused by these factors in cation exchange water
Complete Unit	Console tables that come complete with lavatory basin and leg supports. The Memoirs Console Table features a detachable shelf which provides convenient storage for towels or personal items below the basin.
Composite	Composite sinks made from high-tech, high-strength, and color- impregnated that resists shipping and scratching.
Composting Toilet	A self-contained toilet that use the process of aerobic decomposition (composting) to break down feces into humus and odorless gases
Compression	Term used to describe a faucet in which the flow of water is shut off by means of a washer that is forced down onto its seat.
Compression Fitting	A kind of tubing or pipe connection where a nut, and then a sleeve or ferrule is placed over a copper or plastic tube and is compressed tightly around the tube as the nut is tightened, forming a positive grip and seal without soldering. Also a flexible connector that has a nut and gasket designed to attach directly to an SAE standard compression thread, without the use of a sleeve or ferrule.

Terms	Description
Compression Valve	A type of valve that is often used for water faucets. It is opened or closed by raising or lowering a horizontal disk by a threaded stem.
Compression-Fit	Installation which utilizes telescoping wall jambs which expand or contract against walls, even if they are out of plumb. Forum enclosures from Kohler offer compression-fit installation which may eliminate the need to drill holes into tile or wall surround.
Concealed Arm Carrier	One of a variety of common mechanisms to securely mount a wall- mount lavatory. Unlike a hanger which only supports the lavatory where it meets the wall, the carrier has long arms onto which the lavatory slides.
Condensation	Water vapor that separates from products of combustion due to a reduction in heating surface temperatures to below the dew point of surrounding air. Water formed when water vapor formed in gas combustion loses heat before it passed out of the venting system.
Conductance	In water conditioning, the readiness of water to carry electricity. The unit of measure for conductance is the mho (reciprocal ohm); it is used to approximate the dissolved solids content of water.
Conductivity	The quality or power to carry electrical current; in water, the conductivity is related to the concentration of ions capable of carrying electrical current.
Conduit	Tube that houses electrical wiring.
Conduit Clamp	A screw-down, U-shaped spring clamp formed out of a band of metal used to hold conduit pipe
Conical Sponge Washer	Sealing washer on urinal between outlet connection at the wall and the china to make a watertight seal.
Connecting rod	Also known as lift rod. The rod that causes the drain to close when lifted.
Console Lavatory	A lavatory in which the basin is attached by table or piano legs at the front and to a wall at the back.
Console Table	A table-like fixture with an integral lavatory. The back is fixed to a wall and the front is supported by brackets or legs.
Consumables	Items to be used and then thrown away after use.
Consumptive Water Use	Total amount of water used by vegetation, man's activities, and evaporation of surface water
Continuous Feed	Wall switch activated type of garbage disposer in which garbage is fed into the unit while running.
Continuous Hinge Door	A shower door that has a full-length continuous metal hinge on the side of the door.
Control Unit	Housing for electronic operation components.
Conventional Vent	Atmospheric venting that utilizes the natural convective rise of hot flue gases through the system to release the products of combustion.
Corner	Style of bathtub or whirlpool where two sides form a right angle to fit in the corner of two adjacent walls. This style utilizes room space and requires a tub surround to be built around exposed sides.
Corporation Cock	A stopcock screwed into the street water main to provide the house service connection
Corporation Stop	The stop connected to the water main, usually made of brass and can

Terms	Description
	be connected to the main with a special tool without shutting off the municipal supply.
Corrosion	The disintegration of a metal by electrochemical means.
Corrosive Water	A water condition of low pH (acid condition) that can corrode metal pipes, pool fixtures and pumps. (Unbalanced water)
Countertop	Style of lavatory which drops in or adapts to a cutout in the countertop.
Countertop Sink	Style of lavatory which drops in or adapts to a cutout in the countertop.
Coupling	Device that serves to connect the ends of adjacent parts or objects. A means of electric connection of two electric circuits by having a part common to both.
Cover	The top portion of a toilet seat. Also the top lid on a toilet's tank.
Cowl	A short fitting used to join two pieces of pipe.
СР	Chrome Polished finish used on faucets
CPE Solvent	Chlorinated polyethylene. A melting agent to form seams in shower pan liners
CPVC (Chlorinated Polyvinyl Chloride):	Rigid plastic pipe used in water supply systems, where code permits.
Crocus Cloth	Finer than sandpaper grit on a cloth backing
Cross-connection	Any connection or situation that may allow wastewater to enter the supply system.
Cross-linkage	Binding of the linear polymer chains in the matrix of an ion exchange resin with a cross-linking agent that produces a three-dimensional, insoluble polymer.
Crown Weir	The interior projection in the outlet side of a P-trap to aid in maintaining the water seal in the trap.
Crown-vented Trap	An air admittance valve attached to a drainpipe, protected by a check valve, designed to equalize pressure in the drain line and to protect the trap seal.
Crow's Foot	A PVC tee with twin outlets at right angles off the main.
CSST	Corrugated Stainless Steel Tubing. Also known as TracPipe, it has a ployethylene jacket.
CTS	Copper Tube Size. Refers to outside diameter; Used to size certain fittings and hangers
Cubic Foot of Gas	The amount of gas that will occupy one cubic foot at a temperature of 60 degrees F, and under a pressure equivalent to that of 30 inches of mercury.
Culvert	A pipe-like construction of concrete that passes under a road to allow drainage.
Cup washer	A washer designed with a cup shape to fill space along a valve body shank. The cup washer might be required, for example, when installing a faucet to a stainless steel lavatory. Standard valve washers are available for installations where there is not enough valve shank protruding to use cup washers.
Curb	A raised edge or border of a shower usually made of tile, marble, or

Terms	Description
	fiberglass.
Curb Cock	Shutoff valve normally used with water meters set between the meter and the building.
Current	The movement of electrons through a conductor, measured in amperes
Curtain Drain	A ditch sometimes filled with gravel or drainage tile which diverts storm water away from a structure
Cut Lengths	Pipe cut to a specific length as ordered
CW	Continuous Weld. A method of producing a small diameter pipe.
CWT	Copper Water Tube
Cycle	The number of times per second that a conductor of alternating current reverses polarity (e.g. 60 cps A.C.)
Cycle Time	The time beginning at the instant a toilet flush lever is activated, until the instant the water supply shuts off, completing the flush cycle.
Cylinder	A tank for hot water.
Dam	The barrier built into a trapway of a toilet that controls the water level in the toilet bowl.
Darcy-Weisbach equation	The Darcy-Weisbach equation is an important and widely used equation in hydraulics. It enables calculation of the head loss due to friction within a given length of pipe. $h_f = f \cdot \frac{L}{D} \cdot \frac{V^2}{2g}$ where the head loss due to friction h_f is a function of • a Fanning friction factor, f • the ratio of the length to diameter of the pipe, L/D • the velocity of the flow, V • the standard constant for acceleration due to gravity g The equation can also be written in terms of pressure loss: $\Delta p = \lambda \cdot \frac{L}{D} \cdot \frac{\rho V^2}{2}$ where the pressure loss due to friction Δp is a function of: • the coefficient of laminar or turbulent flow, λ • the ratio of the length to diameter of the pipe, L/D
DC	Direct Current. Electrical supply in which the polarity of the two wires does not change.
Deck-Mount	Term used to describe a faucet that is mounted on the deck of the bathtub enclosure, rather than on the rim of the bathtub or on the wall. Also referred to as a Roman spout faucet.
Deep Well	A well more than 25ft deep

Terms	Description
Degree Rise	Difference between the starting water temperature and the ending temperature after heating is complete.
Deionization	Process of reducing water to a non-mineral state by passing it over a bed of resins
Deionized Water	Water free of inorganic materials.
Desanco Fitting	A type of compression adapter that connects tubular brass fittings to pvc pipe
Dew Point	Temperature at which water vapor condenses to a liquid
DI	Abbreviation for "deionization"
Dial Plate	Trim piece found behind a single-control wall-mount faucet handle. Also known as a face plate.
Diaphragm	Flexible membrane in a valve that deflects down onto a rigid area of the valve body to regulate water flow from the supply lines. This eliminates the possibility of debris build-up within the valve.
Die	Cutting device used to thread pipe. A set of these attach to dieheads, and mounted on a threader
Dielectric	A nonconductor of direct electric current.
Diffuser	Device for reducing the velocity and increasing the static pressure of a fluid passing through a system
Dilution Air	Air that enters a draft hood or draft regulator and mixes with the flue gasses.
Dip Tube	Tube inside the water heater that sends cold water to the bottom of the tank.
Direct Tap	Clamping device that allows a branch line to be drilled and tapped off a main line.
Direct Vent	A system that pulls outside air for combustion and vents combustion gases directly outside without using a chimney.
Directional Jet	Whirlpool air discharge unit with pivot allowing discharge path to be adjusted by the user.
Directional Tee	Tee fitting that allows direct flow in one direction by use of an internal baffle.
Discharge Head	Difference in elevation between the liquid level of the discharge tank and the centerline of the pump. Also includes any additional pressure head that may be present at the discharge tank fluid surface.
Discharge Tube	Outlet tube that connects a disposer or sump pump to the drain line.
Dishwasher Tailpiece	A flanged adapter connecting a basket strainer to the drainpipe with a dishwasher inlet.
Dishwasher Tailpiece:	A flanged adapter connecting a basket strainer to the drainpipe with a dishwasher inlet.
Disposal basin	Basin of sink which contains drain to garbage disposal.
Disposal Field	A series of trenches conveying the effluent from the septic tank laid in such a manner that the flow will be distributed with reasonable uniformity into natural soil.
Distributor	The piping inside an ion exchange vessel which evenly distributes flow across the resin bed.

Terms	Description
Diverter	Valves which have one inlet and direct water to one of two outlets. Diverters are normally used with shower risers, handshowers, and kitchen faucet sprayers.
Domestic Hot Water	Water heated for residential washing, bathing, etc.
Dope	Pasty lubricant used on seal pipe threads prior to making a threaded pipe connection.
Double Basin or Sink	Sink which offers two separate basins.
Double Extra Strong	Standard pipe weight designation (XXS). Sometimes described as XXH (double extra heavy).
Double Horizontal Tee	A PVC tee with twin outlets of a smaller diameter than the inlet.
Double suction pump	A pump where the rotor is suspended between two bearings with the fluid entering on either side of the impeller. Used at higher capacities
Double Threshold	A shower base used in a corner application where one threshold is used as an entrance and the other has a glass wall.
Double Wye Fixture	A fitting that has branches coming in at an angle from each side of the main to join the main run.
Draft Diverter	A device fitted in the flue way of a gas appliance to prevent updraft, downdraft, or the secondary flue blockage from obstructing the escape of combustion gases.
Drain	Any pipe which carries off water or water-born wastes in a plumbing drainage system.
Drain Body	The portion of a drain fitting which receives the stopper.
Drain Hub	Floor drain used with hubbed soil pipe. The bell (hub) section is countersunk vertically in the floor and is covered by a flush-mounted grill.
Drain Lever	A lever assembly secured to a drain body to lift a stopper and allow water to leave a basin. Also known as ball lever.
Drain Linkage	An adjustable strap or bar forming a connection between the lift rod of a faucet and the ball lever assembly of the drain. Also known as connecting link.
Drain Seal Gasket	Gasket used to seal a drain to a sink to prevent leaks.
Drain Valve	Device designed to allow drainage of stored contents from a water heater.
Drainage	A system that channels away water or sewage.
Drainage Tile	Historically, pipe shaped clay tiles installed in below-grade trenches for gravity-rated drainage. PVC pipe is now commonly used for this purpose.
Drawdown	The distance the water level drops below the standing water level while the pump is operating.
Drinking fountain	Fixture that delivers a stream or jet of drinking water through a nozzle. ADA-compliant drinking fountains are installed at a maximum height of 36" from the floor.
Drip Channel	A metal channel that is designed to prevent water running down a shower door from dripping onto the floor when the door is opened.
Drip Leg	A stub end pipe placed at a low point in the gas piping to collect condensate and permit its removal.

Terms	Description
Drop-in	Style of bathtub or whirlpool bath which includes an integral mounting rim as part of the overall structure. Installed in a custom bath surround, the
Drop-in Sink	Style of bathtub or whirlpool bath which includes an integral mounting rim as part of the overall structure.
Drum Trap	An obsolete, non-vented drain lead or cast iron canister trap formerly used in sewer lines.
Dual Element Heater	An electric water heater with an upper and lower element for heating water.
Dual Flush	Toilet trip lever feature which offers user choice of 1.1 or 1.6 gallon flush.
Duct Tape	Heavy duty cloth-based repair tape for temporary emergency repair of piping or tubing. Does not provide effective water seal and may dry out and lose its adhesion over time.
Ductility	Capable of being drawn out or hammered thin.
Duo Valve	A twin valve (hot & cold) with a single on/off lever used for washing machine boxes.
Duostrainer	Sink drain fitting consisting of a strainer body attached to the drain opening and a removable basket. Also called a strainer
Duplex Basin	An ejector pump container, usually 30" x 36" or 36" x 36" large enough for two pumps, used in multi-family buildings
DWV	Drainage, Waste & Vent. Pipes in a plumbing system that remove waste water.
Dynamic Pressure	The pressure when the water is flowing.
E Coli	The common abbreviation of Escherichia Coli. One of the members of the coliform groups of bacteria indicating fecal contamination.
Earthquake Strap	A metal strap used to secure a water heater to the house frame or foundation.
Eccentric Shank	A shank or the fitting with a shank in which the centerline is offset to allow minor compensation for supply lines that would be difficult to precisely position.
ECO	Energy Cut Off. A safety device designed to shut power off to the water heater and prevent high temperature.
Eductor	A device that, by flow of water through it creating a vacuum, draws a solution into the water stream.
EF	Energy Factor. A measure of the overall efficiency rating of the water heater based on the model's recovery, efficiency, stand-by loss and energy input.
Efficiency	A product's ability to utilize input energy, expressed as a percentage.
Effluent	Septic system liquid waste
Ejector	A mechanical device for pumping sewage from below the sewer line.
Elbow	A pipe fitting with two openings that change the direction of the line. Also called an ell. It comes in a variety of angles, from 22 1/2° to 90°.
Electric Resistance Weld Pipe (ERW)	Cold finished pipe made by a series of operations in which the flat rolled material is cold shaped into tubular form and welded at the seam. The heat for the weld is generated at the seam by the

Terms	Description
	resistance to the flow of electric current applied through electrical contacts or an induction coil.
Electrodialysys	A process which uses an electrical current and an arrangement of permeable membranes to separate soluble minerals from water. It is often used to desalinate salt or brackish water.
Electrolysis	The producing of chemical changes by passage of an electric current through an electrolyte
Electrolyte	A nonmetallic substance that carries an electric current, or a substance which, when dissolved in water, separates into ions which can carry an electric current.
Element	Heating unit in an electric water heater
Elevation	The vertical distance between the levels where fluid enters a pipe and the lever where it leaves. Its must be added to the Total Discharge Head, if the inlet is lower than the outlet and subtracted if the inlet is higher.
Ell	Short for elbow. A plumbing fitting used to change the direction of rigid pipe or tubing.
Elongated Bowl	Toilet bowl having dimensions of 14" wide by 18 1/2" long (from center of seat hinge holes to front outside rim edge).
Elongated Front	Toilet bowl having dimensions of 14" wide by 18-1/2" long (from center of seat hinge holes to the front outside rim edge).
ЕМТ	Electrical Metal Tubing; a thin wall galvanized steel pipe used to carry electrical or other types of conductors
Enamel	An opaque vitreous composition applied to the surface of metal fixtures such as cast iron tubs and sinks.
Enclosure	Glass panels, either framed or frameless, used to enclose bathtubs, shower modules, shower receptors, and custom tiled showering spaces.
End Body	A faucet valve body configuration in which both the inlet and outlet are at the end of the valve body.
End Drain	The side of a tub where the drain is found. When facing a tub, if the drain is on the right, this is a Right-Hand tub (RH). If on the left, it is a Left Hand tub (LH). On whirlpools, the pump is located opposite the drain.
Endpoint	The point at which a process is stopped because a predetermined condition is met.
Energy Guide Label	Label required by the FTC on water heaters that show 1) an estimated annual cost of operation and 2) how that unit's efficiency compares to all other comparable models.
EPA	Environmental Protection Agency
EPDM	Ethylene Propylene Diamine Monomer is a high density rubber that is very durable.Has some characteristics that make it especially suitable for gaskets, electrical insulation and lamination. EPDM can be finished to an extremely smooth surface. It has great resistance to abrasives, tearing, solvents and high temperatures. EPDM has excellent flexibility at high and low temperatures.
ERW	Electric Resistance Weld. Most common form of manufacture for pipes 2 3/8" to 22" in diameter.

Terms	Description
Escutcheon	A decorative metal flange or trim shield beneath a faucet handle that covers the faucet stem and the hole in the fixture or wall.
Expand	Enlarge, get bigger. Plastic pipes expand when hot.
Expansion Tank	A tank designed to absorb excess pressure due to thermal expansion. (e.g. closed system)
Expansion Valve	Thermostatically controlled valve that controls liquid refrigerant.
Extension Tube	A straight section of tubing used to extend a drainage run.
Extinction Pop	A flashback occurring when a burner is turned off
Extra Strong	A standard pipe weight designation (XS). Sometimes called XH (Extra Heavy)
Extrusion	Refers to the result of forcing molten metal or plastic through a die or mold to form a specific shape. Commonly refers to shower door components such as jambs and headers that were created by extrusion.
Eye of the impeller	The center of the impeller, where the fluid enters.
F Rating	A rating of effectiveness of firestop material, measuring its resistance to flames and water.
Face plate	Trim piece found behind a single-control wall-mount faucet handle. Also known as a dial plate.
Facultative Bacteria	Bacteria that can live under Aerobic or Anaerobic conditions
Fall/Flow	The proper slope or pitch of a pipe for adequate drainage.
Fascia	A decorative apron or front face. A wooden holding cage for the main pump assembly for whirlpool and master baths.
Faucet	An exposed plumbing fitting used as a method of personal expression and to control the flow of water into a basin.
Faucet Punching	Refers to the number of holes punched in a stainless steel fixture to accommodate a faucet and accessories.
Faucet Seat	The portion of a compression faucet against which the valve presses to stop the flow of water.
Faucet Threads	Special thread size for fittings that connect to faucets. A cone seal or gasket is usually included because straight threads will not have a complete seal without a gasket.
Faucet Trim	All of the decorative parts to your faucet.
Fecal Material	Solid waste produced by humans and other animals and discharged from the gastrointestinal tract.
Feed Pump	A pump that supplies water to a boiler.
Feedwater	Water introduced into a boiler during operation. It includes make-up and return condensate.
Female	A part designed to receive into another (male) part. Internal threads are female.
Female Fitting	A fitting that receives a pipe or fitting. A fitting into which another fitting is inserted.
Female IPS	Pipe connection where the threads are on the inside of the fitting.
Female Threads	Faucet threads that are in place on the inside of a fitting.

Terms	Description
Ferrous	Material containing or derived from iron.
Ferrule	Metal cover piece for the lavatory overflow opening.
FHT	Female Hose Thread. (e.g. end of garden garden hose)
Fiberglass	Glass in a fiberous form used in making the body of bathtubs.
Fill Rate	Time required to fill a gallon container, used to measure flow rate. A fill rate in excess of 35 seconds for a gallon container is considered "low water flow".
Fill Valve	Refills toilet tank to the waterline and sends water to the bowl to establish proper trap seal depth after each flush.
Filter Element	A device within a filter tank designed to trap suspended solids as water flows through it.
Filteration Rate	The rate at which the water is traveling through the filter, measured as GPM (gallons per minute) per sq. ft
Filtrate	Liquid that has been passed through a filter
Finish Plumbing	Installation of plumbing fixtures to make the system usable.
Finished Water	Water that has completed a purification or treatment process
Finishes	See BC, BN, CP, PB, SN, WH
FIP	Female Iron Pipe connection. Standard internal threads on pipe fittings.
FIP	Female Iron Pipe Connection.
Fire Hose Closet	Usually a compartment built into an interior wall, covered by a glass door, holding a coiled fire hose connected to a water line, ready for immediate use in case of fire.
Fire Stand Pipe	A main water line that feels water sprinkling system or fire hose connections. This is separate from the lines feeding restrooms or other fixtures.
Fireclay	A variation of vitreous china having greater amounts of quartz and feldspar in the clay material beneath the vitreous surface. Fireclay is heavier (30%), denser, and thicker than regular clay. These properties insure smooth, flat surfaces on large fixtures which is not achievable with standard vitreous china.
Firestop	Materials that fill the opening around penetrating items such as cables, cable trays, conduits, ducts, and pipes and their means of support through the wall or floor to prevent spread of fire.
First Draw	Water that has been sitting in pipes or plumbing fixtures overnight and is first drawn when taps are opened in the morning. For instance, where lead is present in plumbing, this water would have the highest levels of lead contamination.
First Hour Delivery	Rating based on the combination of the usable stored volume of hot water in a tank plus the recovery capacity for the first hour of operations.
Fitting	A general term that usually refers to faucets, shower valves, tub fillers, or various piping parts such as tees or elbows.
Fixed Cone Valve	A cylinder gate mounted with the axis horizontal. Also known as Howell Bunger valve.
Fixture	A product which holds water for the point of use. Fixtures include

Terms	Description
	baths, whirlpools, shower modules, shower enclosures, toilets, bidets, lavatories, and sinks.
Fixture Unit	An arbitrary unit assigned to different types of plumbing fixtures, and used to estimate flow rate requirements and drain capacity requirements.
Flame Stability	Flames on a burner tend to stabilize at a point where flow velocity and burning back are equal. It changes when primary air or gas rate is adjusted.
Flange	Extending rim or edge at one end of a pipe shaft for guiding or for attachment to another object.
Flapper	Disc-like rubber composite that retains water in the tank. Upon flushing cycle lifts to release water out of tank to the bowl for a complete flushing cycle. Also known as flush ball, the flapper is the moving part of the flush valve that seals the water into the tank or allows water to exit the tank for the flush cycle. This is the predominant replacement part used on conventional toilets.
Flapper Valve	The part on the bottom of the toilet tank that opens to allow water to flow from the tank into the bowl.
Flare Fitting	A fitting used to connect flex copper pipe, usually gas pipe
Flaring Tool	Tool used to create a cone-shaped enlargement at the end of a piece of tubing to accept a flare fitting.
Flex Coupling	Rubber coupling used to join DWV Pipe. Can be used to connect PVC to Clay or Cast Iron above or below ground. Also used for repairs, and attach by used of steel band clamps.
Flex Hose	A flexible pipe usually made of braided stainless steel.
Flexible Connections	Connection between a valve body and "T" or supply stop that is bendable and makes installation easier. The opposite of a rigid connection.
Flexible Connector	A braided hose that connect a faucet or toilet to the water supply stop valve. Serves as a riser but is much more flexible and easier to install. Usually stainless steel or PVC/Polyester reinforced hose.
Flexjet	Adjustable spout or nozzle for propelling a stream of water into a whirlpool basin.
Float	A ball or doughnut shape connected to the fill valve or water supply valve. It rises or falls with changing water level in the tank, and actuates or shuts off the fill as needed.
Float	A ball or doughnut shape connected to the fill valve or water supply valve. It rises or falls with changing water level in the tank, and actuates or shuts off the fill as needed.
Float Ball	The floating ball connected to the ballcock inside the tank that rises or falls with changing water levels in the tank, and actuates or shuts off the ballcock as needed.
Float Rod	The rod between the float ball and the ballcock.
Float Valve	A toilet component. Also known as a fill valve, supply valve, or ballcock. It provides the appropriate amount of new water to complete a toilet flush cycle.
Floating Flames	(Lifting Flames) - An undesirable burner operating condition, usually indicating incomplete combustion in which flames leave the burner

Terms	Description
	port to "reach" for combustion air.
Flocculant	A chemical substance that promotes the aggregation or coagulation of suspended particles in the water
Flood Level Rim	The top edge of a receptacle from which water overflows.
Floor Drain	Discharge drain installed in either an above-the-floor or through-the-floor configuration.
Floor flange	Cast iron, PVC (poly vinyl chloride), ABS or metal ring located flush to floor and is connected to drain pipe which toilet is fastened to. (Offset floor flange allows waste pipe to remain at existing rough but will move flange out approximately 2".)
Floor Sink	Receptacle usually made of enameled cast iron located at floor level and connected to a trap to receive the discharge from indirect waste and floor drainage. Cleaner and more sanitary than regular floor drains. Usually used in hospitals & restaurants.
Floor-Mount Toilet	Type of installation which the base of the toilet is mounted directly over a floor drain.
Flow control	Water discharge assembly consisting of a screen/washer and a three- holed orifice which control the water flow rate.
Flow Control Valve	Device designed to reduce water flow to a plumbing fixture. Often used to improve efficiency and reduce operating costs. Also a check valve that prevents flow reversal when heater is turned off.
Flow Rate	The rate which water is discharged from an outlet. Rated in gallons per minute (GPM) or in gallons per hour (GPH).
Flow restrictor	A device usually required by code to limit the maximum flow of water from an outlet. On devices with aerators, the aerator may perform the flow restriction function. Other flow restriction devices typically are not intended to be accessible and serviceable.
Flue	A passageway for combustion by-products.
Flue Baffle	A device to deflect, check or regulate flow through a pipe.
Flue Damper	A device to minimize heat loss through a venting system
Flue Exhauster	A fan installed in the vent pipe which will provide a positive induced draft. Sometimes called a draft inducer.
Flume Spout	An open spout design that is also referred to as a waterfall spout.
Flush Ball	Flapper
Flush Bushing	For whirlpools, a variable valve regulating the amount of water delivered to the jets. For faucets, a valve connector device controlling water flow rate.
Flush Joint	A Connection with both male and female threads cut into the pipe
Flush Tube	Overflow tube or device on a flush valve.
Flush Valve (tank type)	Toilet flushing system that uses supply water pressure to compress water to provide a pressurized flush as opposed to gravity flush.
Flush Valve Seat	Sealing surface of brass or plastic below the flapper in a toilet flush valve.
Flushing Surface	The interior surface of the bowl and all other surfaces which may come into contact with water during flushing.

Terms	Description
Flushometer	Toilet valve that automatically shuts off after it meters a certain amount of water flow.
Flushometer Tank System	Toilet flushing system that uses supply water pressure to compress water to provide a pressurized flush as opposed to a gravity flush.
Flushometer Valve	The valve located at the bottom of a gravity-operated toilet flush tank, which opens when the trip lever is actuated, and closes when the tank has drained to the desired level. Usually also contains an overflow tube.
Flust Valve (tankless type)	Toilet valve that automatically shuts off after it meters a certain amount of water flow. Also known as a "flushometer".
Flux	Paste applied to copper pipes and fittings before soldering to help the fusion process and prevent oxidation.
FMA	Abbreviation for free mineral acidity.
FMPX	Female pipe swivel connection
FNPT	This refers to the female pipe thread, in which the threads are on the inner side of the connection fitting
Foam Insulation	Insulation surrounding the surface of a water heater tank.
Foot Valve	A special type of check valve located at the bottom end of the suction pipe on a pump; it opens when the pump operates to allow water to enter the suction pipe but closes when the pump shuts off to prevent water from flowing out.
Footprint	The area of floor space taken up by a water heater or other appliance.
Force Cup	A rubber suction cup on a handle used to free plumbing traps and waste outlets of obstructions. Also known as a plunger, closet plunger, or plumber's helper.
Fountain	Drinking device. Also known as a bubbler, water fountain, or drinking fountain.
Framed	A bath enclosure system that mounts all glass or plastic panels in a metal frame.
Frameless	A bath enclosure system that minimizes the amount of metal used to hold the system panels and door in place.
Free Available Chlorine	The concentration of residual chlorine present as dissolved gas, hypochlorous acid or hypochlorite, not combined with ammonia or in other less readily available form.
Free Standing	Term used to describe a bathtub that is free of walls on all sides.
Free Board	The vertical distance between a bed of filter media or ion exchange material and the overflow or collector for backwash water; the height above the bed of granular media available for bed expansion during backwashing; may be expressed either as a linear distance or a percentage of bed depth.
French Drain	A covered ditch containing a layer of fitted or loose stone or other pervious material.
Friction head difference	The difference in head required to move a mass of fluid from one position to another at a certain flow rate within a piping system. It is also the specific energy required to overcome friction in the system.
Friction Loss	The loss of pressure caused by the turbulence created in water while traveling through the pipe.

Terms	Description
Frost Line	The depth to which frost penetrates the earth
Full Finished	Refers to tubular products in which the weld has been processed to produce uniform strength and dimensions, and subsequently annealed to obtain proper corrosion resistance
Full Hydraulic Capacity	The designed capacity of a pipe or conduit
FVI	Flammable Vapor Ignition
Ga	Abbreviation for gauge, the wall thickness of tubing
Galvanic Action	The phenomenon of corrosion of an anode (positive terminal - like on a battery). When two dissimilar metals are immersed in an electrolyte, an electrical potential will exist between them. If the two are in an electrical contact, a current will flow. The metal that becomes the anode (negative) of this cell will corrode and dissolve while the cathode (positive) will be protected from corrosion.
Galvanic Series	A list of metals with those on the top of the list being attacked by those lower down in the list. The father apart on the list, the faster the attack.
Galvanic	Of, relating to, or producing a direct current of electricity.
Galvanizing	The process of applying a coating of zinc to the finished product to provide corrosion protection. The coating can be applied by hot dipping or electrolytic deposition.
Galvanometer	Laboratory instrument that detects and measures small electric current.
GAMA	Gas Appliance Manufacturers Association
Gas Cock	Plug valve installed the main gas line and an appliance.
Gas Control	Device used to regulate gas pressure on a water heater.
Gasket	
Gate	A device that controls the flow in a conduit, pipe, or tunnel.
Gate Diverter	The pop-up lever on a tub faucet that activates the diverter valve.
Gauge (gage)	A number that defines the thickness of the sheet used to make steel pipe. The larger the number, the thinner the pipe wall
Gel/Grease Cap	Waterproof wire connector
Gelcoat	Material used to form the surface of some fiberglass bathubs or showers; it is a colored, polyester resin.
GFCI	Ground fault circuit interrupter. A device to cut off the flow of electricity if a short circuit is detected.
Gland	In a pump, the part that holds one half of the mechanical seal and attaches to the stuffing box.
Glaze	Glossy water-resistant, colored finish on vitreous china fixtures
Globe Valve	A gate valve with a curved chamber
Gooseneck	Spout style characterized by a high arching spout.
Gound joint	A joint which consists of pressing two smooth mating surfaces together without a gasket or supplemental sealant.
GPF	Gallons per flush used in toilets. Current law requires maximum of 1.6 gpf. Older styles were usually 3.5 gpf.

Terms	Description
GPG	Grains per Gallon. A measurement of the amount of dissolved material in water. One grain per gallon equals 17.1 ppm
GPH	Gallons Per Hour.
GPM	Gallons per minute. The rate of flow by which faucets and showerheads are measured and regulated.
Grab bar	Safety bar installed in a bathtub or shower for use when bathing.
Grab Bar	Safety bar installed in a bathtub or shower for use when bathing.
Grain (gr)	A unit of weight equal to 1/7000th of a pound, or 0.0648 gram.
Grain Per Gallon (gpg)	A common basis for reporting water analyses in the United States and Canada; one grain per U.S. gallon equals 17.12 milligrams per liter (mg/1) or parts per million (ppm). One grain per British (Imperial) gallon equals 14.3 milligrams per liter or parts per million.
Gravity Operated Toilet	A toilet that relies on the natural downward pressure of water in a toilet tank to flush the toilet effectively.
Gray Water	Waste water from sinks, showers, and bathtubs, but not toilets.
Grease Trap	A device that captures grease entering a system before it reaches the sewer lines. Usually used in commercial applications such as restaurants or cafeterias.
Green Sand	A natural mineral, primarily composed of complex silicates, which possesses ion exchange properties.
Grip Fitting	A compression-type fitting used on PB pipe
Grit	Heavy, inorganic matter, such as sand or pebbles.
Grooved Fitting	A gasketed mechanical pipe fitting made of ductile iron that is clamped onto a groove in a pipe rather than screwed onto threads. It is mostly used in commercial applications on pipes larger than 1 1/2" in diameter.
Ground Joint	A joint which consists of pressing two smooth mating surfaces together without a gasket or supplemental sealant
Ground Joint Union	Pipe union that has a brass grounding section between the two halves.
Ground Water	Naturally occurring water rising from the water table of the surrounding land.
Grounding	Connecting a piece of electrical equipment to a "ground wire" which is connected to the electrical system ground at the circuit breaker box. This helps to ensure that the circuit breaker will trip and cut off power in the event of a short circuit or damage to insulation.
Guide Arm	Valve which controls water flow into the toilet tank.
Hacksaw	A hacksaw is used to cut metal.
Handles	Faucet handles typically come in 3 styles: knob, lever, and cross. Some manufacturers allow a customer to mix and match components to create a custom handle consisting of handle bases and handle inserts.
Handshower	A showerhead designed with a handle that's connected to a water supply and a flexible hose.
Hanger	A device used to support pipes.

Terms	Description
Hard Water	Natural water containing impurities in various proportions. Traditional hardness is a measure of calcium or dissolved solids in a solution, measured in parts per million. Hard water generally ranges from 100 to 250 ppm.
Hardness	The amount of dissolved minerals in water measured in grains per gallon (GPG). The most common minerals are calcium and magnesium
Hardness Leakage	The presence of a consistent concentration of hardness in the effluent from an ion exchange water softener, often due to high concentrations of hardness or sodium in the water being treated (see Leakage).
	The Hazen-Williams formula can be used to calculate the pressure loss in a length of pipe due to friction dependent on the flow. This equation is commonly used for pressure drop calculations in fire sprinkler systems, water distribution systems, and irrigation systems
	$P_d = \frac{4.52 Q^{1.85}}{C^{1.85} d^{4.87}}$
	Where
	P_d =pressure drop in pounds per square inch / foot
	Q = Gallons per minute
	d = inside diameter in inches
Hazen-Williams formula	C = factor (friction loss coefficient) - the higher the C factor, the smoother the pipe. Typical C factors used in design, which take into account some increase in roughness as pipe ages are as follows:
	Asbestos cement – 140
	Cast iron – 100
	Concrete – 100
	Copper – 130
	Steel - 120
	Galvanized steel – 120
	Polyethylene – 140
	PVC - 150
	FRP - 150
НВА	Home Builders Association
НС	Handicapped
Head	The pressure of water (or steam) in a closed system (see Pressure Head). It represents the differential in the gravitational force exerted by a liquid at two different depths.
Head Loss	The pressure of water as measured at a stated point, either in feet or in pounds per square inch (PSI).
Header	Metal frame at top of shower enclosure panel.
Heat Exchanger	A heat transfer system.
Heat Sensors	Heat-triggered devices on sprinkler systems that release the flow of

Terms	Description
	water.
Heat Trap	Restriction of heat loss through water connections to a tank.
Heater	A component of the motor/pump assembly whose function is to maintain the water temperature within the BodySpa or whirlpool up to 104 degrees F. For safety purposes, the heater is not a serviceable part.
Hermetic	Completely sealed, especially against the escape or entry of air.
Hertz	A measure of frequency; one Hertz equals one cycle per second.
Hex key	A more generic version of Allen wrench, a size-specific "L"-shaped tool for loosening and tightening.
High temperature limit stop	Valve mechanism that provides added safety by allowing you to pre- set a maximum hot water temperature.
High-flow tub filler	A 1/2" or 3/4" valve which allows a bathtub or whirlpool to be filled faster than the normal fill rate.
Hold Down	A type of pipe anchor consisting of a U-strap bolted at either end onto a horizontal plate.
Hole Saw	A small, cylindrical attachment for a power drill consisting of a circular saw blade for cutting holes.
Hollow-jet Valve	A valve having a closing member that moves upstream to shut off the flow. The hollow-jet valve discharges a hollow or annular jet dispersed over a wide area.
Homogenous	Same in composition throughout as opposed to laminate.
Horizontal Branch	Lateral drain pipes that run from plumbing fixtures to the waste stack in a building or in the soil.
Horizontal Run	The horizontal distance between the point where fluid enters a pipe and the point at which it leaves.
Horizontal spray	Bidet feature that provides user with a cleansing spray from a nozzle in the bidet rim.
Horsepower	A unit of power equal in the United States to 746 watts and nearly equal to the English gravitational unit of the same name that equals 550 foot-pounds of work per second.
Hose Bibb	An outdoor faucet with hose threads on the spout. Also commonly used to supply washing machines and wash basins.
Hot Water Dispenser	Product which maintains a quantity of near-boiling water for instant use at any time.
House Trap	U-shaped fitting with two adjacent cleanout plugs visible at floor level if main drain runs under floor.
HP	Abbreviation for horsepower.
HSE	Health and Safety Executive (abbreviation). HSE inspectors have wide powers to assist them enforce safety legislation.
НТ	Hose threads. Note: Garden hose threads are different from standard pipe threads.
Hub	An opening for insertion of pipe. On fittings, the hub is a widened end that allows insertion of the pipe or tubing for making a joint.
Hubless	Same as no-hub. Cast iron drainage pipe with neoprene gaskets and

Terms	Description
	clamps
Hubless (No-Hub)	Cast iron drainage pipe with neoprene gaskets and clamps.
HVAC	Heating, ventilation, and air conditioning.
Hydration	The chemical combination of water into a substance.
Hydraulic Pressure	Pressure that exists in a system containing non-compressible liquid.
Hydrojet	Cold inlet tube designed to reduce sediment build-up and increase efficiency in a water heater.
HydroLoc Seal	The inflatable seal that makes the door in the Precedence models watertight.
Hydrolysis	The reaction of a salt with water to form an acid and a base.
Hydronic	System of forced hot water.
Hydrostatic Pressure	Pressure exerted by or existing within a liquid at rest with respect to adjacent bodies
Hydrostatic Test	Test using noncompressible liquid under pressure at a level equal to or greater than the maximum pressure that will be utilized when in use, such as in steam boilers.
Hydrous	Containing water, water of crystallization or hydration, as certain minerals or chemical compounds.
Hydroxyl	The chemical group or ion (OH) which is neutral or positively charged.
Hygroscopic	Attracting or absorbing moisture from the air; changed or altered by this absorption.
Hypochlorite	Compound commonly used as bleaches and disinfecting agents.
I.D.	Abbreviation for inside diameter. All pipes are sized according to their inside diameter.
Imflammable	Easily set on fire.
Immersion	A term referring to something submerged in water.
Impeller	Rotating wheel with vanes found inside a centrifugal pump. As it spins at high speed it draws fluids in and thrusts them under pressure to the discharge outlet.
Incoming Inlet Temp.	Temperature of water entering the tank.
Incomplete Combustion	A product of inadequate ventilation which restricts the flow of air into an appliance. This may lower oxygen content in the surrounding air.
Indirect Wastes	Waste pipe used to convey gray water by discharging it into a plumbing fixture such as a floor drain.
Induction motor	The most common type used in industry. Has a slippage of 2 to 5 percent compared to synchronous motors.
Inert	Deficient in active properties; especially: lacking a usual or anticipated chemical or biological action.
Influent	The stream entering a unit, stream or process, such as the hard water entering an ion exchange water softener.
Injection	The drawing of primary air into a gas burner by means of a flow of fuel gas.
Inlet	Opening providing an entrance or intake.

Terms	Description
In-line Pump	Small pump which pumps fluid through a line on which it is supported and mounted.
Input	The amount of fuel used by a water heater in a given period of time, usually 1 hr.
Input Rate	The quantity of heat or fuel supplied to an appliance, expressed in volume of heat units per volume of time (BTUs/hour).
Input Rating	The gas burning capacity of an appliance in BTU's per hour as specified by the manufacturer.
Insanitary	So unclean as to be a likely cause of disease; Contrary to sanitary principles injurious to health.
Insert Fittings	Fittings equipped with external, annular rings fir gripping, which are inserted into flexible rubber or plastic tubing as a connection.
Inserts	Faucet handles
Instantaneous water heater	Type of water heater which heats supply as it passes through; no storage tank necessary. Also known as a "tankless heater".
Insular	Kohler's registered trade name for factory-installed insulation, which minimizes condensation on the outside of the tank when exposed to high humidity.
Integral	A cast or formed part of a fixture, such as bubbler, trap, seat or tank.
Integral Apron	Exposed external wall of a bathtub or whirlpool bath. It may be integral to the overall structure of the fixture or may be removable for access to whirlpool pump and motor.
Integral Stops	Stops that allow the owner to shut off water supply at the faucet for maintenance without shutting off the water supply to the entire house.
Integral Vacuum Breaker	A device typically used in a sink or shower sprayer to keep water from backflowing into the fresh water supply.
Interceptor	Device for separating grease and oil from drainage system. See grease trap.
Inter-Connector	Piece of plastic used to connect the product water tube of various membrane elements within the same pressure vessel.
lon	An atom or group of atoms which function as a unit, and have a positive (cation) or negative (anion) electrical charge, due to the gain or loss of one or more electrons.
Ion Exchange	A reversible process in which ions are released from an insoluble permanent material in exchange for other ions in a surrounding solution; the direction of the exchange depends upon the affinities of the ion exchanger for the ions present, and the concentrations of the ions in the solution.
Ionization	The process in which atoms gain or lose electrons; sometimes used as synonymous with dissociation, the separation of molecules into charged ions in solution.
IPS	Now refered to as NPT in most applications. IPS stand for Iron Pipe Size, although most pipe is no longer iron. Both NPT and IPS refer to a typical standard measure for threaded pipe with a tapered thread.
Island Vent	An air admittance valve
ISO	International\ Organization for Standardization based in Geneva Switzerland. Among the many standards it issues are pump and seal

Terms	Description
	standards for the metric community
ISO 9000	A series of five standards for developing a total quality management system. Developed by the International\ Organization for Standardization.
Isolation Mount	The four small rubber feet located beneath a whirlpool's pump base, or attached to the pulse cannister assemblies, designed to reduce noise and vibration when the whirlpool is running.
Isothermal	Action that takes place with no change in temperature.
J- Bend	The trap section, with a 180-degree bend, or a multi-piece P-trap. Also called a return bend.
J-Hook	A pipe hanger in the shape of a J
Jacket	Usually refers to the heating/ cooling jacket surrounding the stuffing box on some pumps; The outer casing (shell) of a water heater.
Jackson Turbidity Unit (JTU)	A quantitative unit of turbidity originally based on the comparison of a liquid (such as water) with a suspension of a specify type of silica, using the turbidity measure in a Jackson Candle Turbidimeter.
Jacuzzi	Often misused to mean any whirlpool tub.
Jamb	Side piece of a framed opening like a shower, door or window. In shower enclosures, the side supports or studs.
Jet	An orifice or other feature of a toilet that is designed to direct water into the trapway quickly to start the siphon action.
Jetport	Hydrojet dip tube, which creates turbulence in the tank.
Johnni Bolts	Closet bolts, used to mount toilet bowls to the closet flange.
Joint	One length of pipe
Joint Runner	Collar like device that keeps molten lead in place while sealing a joint in cast iron pipe.
Junction Box	Utility area where incoming current is connected in an electrical appliance.
Kafer Fitting	Cast iron drainage pipe fitting with threaded-on hub used to attach to existing cast iron lines
Kilowatt	One thousand watts.
Knee Control	Faucet control device often found on surgery scrub sinks that is operated with knee to prevent contamination or spread of germs and bacteria.
Knob	Type of faucet handle with a round, cylindrical, or triangular shape.
Knockout Plug	PVC test plug.
Kollar Kap	Styrofoam forms used to protect floor drains while concrete is being poured around them.
kPa	A metric unit for pressure. 100 kPa = one atmosphere.
KW	Kilowatt. A measure of the rate of supply of energy or power, equal to 1000 watts or 3412 BTU per hour.
Laminar Flow	Streamline flow in a fluid near a solid boundary
Langelier's Index	A calculated number used to predict whether or not water will precipitate, be in equilibrium with, or dissolve calcium carbonate.

Terms	Description
Lateral Sewage Line	A sewage line that connects one sewage pipe with another.
Laundry Tub	Very deep sink used in a laundry room for soaking or washing clothing.
Laundry/all-purpose	Type of sink with extra deep sink compartments for cleaning laundry or small equipment.
Lav	Lavatory
Lavatory	Industry term for bathroom or washroom sink.
Lavatory faucet	Type of faucet designed to deliver water into a lavatory.
Lavatory Riser	Flexible supply tube with bullet-shaped end, used to make the final supply connection with external threaded inlet shanks (MIP).
LDO	Lint, Dust, and Oil
Leach Field	Porous soil area, through which septic tank leach lines run, emptying the treated waste.
Leach Lines	Pipes that carry effluent from the septic system out to the leach field.
Leader	Pipe carrying rainwater to the ground or sewer.
Leak	Accidental escape of liquid.
Lean Mixture	An air-gas mixture that contains more air than needed for complete combustion of the gas.
Ledgeback	Style of sink or lavatory which includes a deck at the rear for mounting the faucet and other accessories.
Length	A unit of linear measure for pipes, such as 10 or 20 ft.
Level	True horizontal.
Lever	Type of faucet handle that extends outward from the stem for easy control.
LH	Left Hand
Lid	The removable top cover on a toilet's tank.
Lien	A legal right to hold another's property, or to have it sold, or applied for payment of a claim, especially to satiisfy a debt.
Life Cycle Labs	A place where water heaters are tested at an accelerated rate to simulate life expectancies.
Lift arm	A metal rod or bar inside a toilet that connects the trip lever or flush handle and raises the flapper to initiate the flush cycle.
Lift knob	Knob centered on top of toilet tank which, when lifted, initiates flush. Also the knob above a faucet drain lift rod.
Lift rod	Faucet component that opens the pop-up drain in a lavatory when the lift rod is depressed. When rod is lifted, the drain closes so the lavatory will retain water.
Light Duty	Small commercial applications
Limit Stop	Faucet control unit used to adjust maximum water temperature.
Lock Nut	Nut fitted into a piece of pipe and screwed onto another pipe to join the two pieces
Low Consumption Toilet	A class of toilet designed to flush using 1.6 gallons of water or less. Also known as "Water-saving" toilets.

Terms	Description
LP	Liquid propane. A fuel for gas water heaters.
Macerator	A device installed in a drain line between a toilet and the soil stack to reduce solids to liquid form.
Magnesium	One of the elements in the earth's crust, the compounds of which when dissolved in water make the water hard. The presence of magnesium in water is a factor contributing to the formation of scale and insoluble soap curds.
Main	The primary artery of supply of the water supply or drain system in which all the branches connect. In the case of drains, known as the Main Vent.
Male	A part designed to protrude into another (female) part. External threads are male.
Male Fitting	Fitting that is inserted into another fitting
Male IPS	Pipe connection where the threads are on the outside of the fitting.
Male Threads	The threads of the pipe are on the outside.
Malleable Fittings	Fittings made of metal which is soft and pliable.
Manganese	An element sometimes found dissolved in ground water, usually with dissolved iron but in lower concentration; causes black stains and other problems similar to iron. It can be removed by a water softener or it can be precipitated by chlorine at a pH of 9.5 or above.
Manganese Greensand	Greensand which has been processed to incorporate in its pores and on its surface the higher oxides of manganese. The product has a mild oxidizing power, and is often used in the oxidation and precipitation of iron, manganese and/or hydrogen sulfide, and in their removal from water.
Manhole	Access opening to a hole, usually with a cover, through which a person may enter a sewer, boiler, drain, etc. (usually round to prevent the cover from falling into the opening).
Manifold	A fitting that connects a number of branches to the main; serves as a distribution point.
Manifolded Installation	Paralleling of water heaters for large hot water demand applications.
Mapp Gas	A colorless, flammable gas made by combining liquified petroleum gas with Methylacetylene-Propadiene. It is a stable, non-toxic fuel used in brazing and soldering.
MC Tank	Acetylene tank holding 10 cu-ft of gas, used for plumbing, once used to fuel motorcycles.
MCL	Maximum Contaminant Level The maximum level of a contaminant allowed in water by federal law. Based on health effects and currently available treatment methods
Mechanical Controls	Dials, slides, switches, knobs, buttons, and so forth used to operate ranges, ovens and cooktops.
Mechanical Controls Mechanicals	Dials, slides, switches, knobs, buttons, and so forth used to operate
	Dials, slides, switches, knobs, buttons, and so forth used to operate ranges, ovens and cooktops. The wiring, plumbing and heating and cooling systems in a building; also the components with moving parts such as furnaces, plumbing

Terms	Description
	mounting and finishing off the appearance of the sink.
Meter Tailpiece	An adapter connecting a water meter to the water supply line.
Meter Tile	The cylindrically shaped casing that forms the pit to hold a water meter. It's usually made of plastic.
Metering Faucet	Faucet which delivers a predetermined volume of water and then automatically shuts off.
МНТ	Male Hose Threads (threads on outside of connection)
Micron	A unit of measure, one thousandth of a meter. Used to describe the pore size of filters
Millivolt	One thousandth of a volt.
Minimum Rough-in	Refers to the measurement from the wall to the center of the drain opening. Useful when replacing a toilet utilizing the existing drain rough-in.
Minimum Run Time	The minimum length of time that the pump should run while refilling the pressure tank
Mini Spread	A special style of bathroom lavatory faucet having separate spout and handles, but designed small enough that it will fit 4" center-to-center faucet holes.
MIP	Male Iron Pipe Connection. Standard external threads on pipe and fittings.
Mission Coupling	A neoprene flex coupling, connecting pvc to pvc or clay to pvc
Mixed Liquor	The combination of primary effluent and active biological solids (return sludge) in the activated sludge process that is fed into the aeration tank.
Mixed Media Gravity Filter	A filter using more than one filtering media @ such as coal and sand).
Mixer	The portion of a burner where air and gas are mixed before delivery to the burner ports.
Mixing valve	Valve in which hot and cold water are channeled through a common outlet. The valve turns on in the cold position and moves through a range of water temperatures into the hot position.
MNPT	This refers to the male pipe thread, in which the threads are on the outer side on the connection fitting
Moenstone	A blend of ceramic-like quartz (70%) and acrylic polymer (30%) that is impervious to chips or water spots.
Monitor Cover	The cast iron lid that fits over a flange casting which is mounted on meter tile in a water meter pit. It consists of an outer lid, an inner lid, and the flange casting in one or two pieces.
Monobloc Faucet	A single-handle faucet, usually a lever.
Most Probable Number (MPN)	The term used to indicate the number of organisms which, according to statistical theory, would be most likely to produce the results observed in certain bacteriological tests; usually expressed as a number in 100 ml of water
Mounting Frame	External mounting means used to install sinks which have no integral provision.
MPN	Most Probable Number

Terms	Description
МРХ	Male Pipe Swivel Connection
Multi-Piece	Two-piece or three-piece showers designed for stability and ease of installation. Individual pieces fit together with back hinges for a watertight seal. Easy to maneuver through doorways and up staircases, multi-piece showers make bath remodeling more convenient.
Multiport Valve	Rotary type backwash valve. Can replace up to 6 regular gate valves. Serves various functions.
Multi-Stage Pump	A pump that has more than one impeller.
Municipal Water	Water supplied by a city for public use; tap water. Usually held in a reservoir
NPSHA	Net positive suction head available to prevent cavitation of the pump.
NPSHR	Net positive suction head required to stop a pump from cavitating. This number is provided by the pump manufacturer.
Natural Gas	A colorless, odorless fuel derived from the earth, consisting primarily of Methane (CH4). Odors are added to aid in leak detection.
Neck jet pulse cannister	A serviceable water-controlling device responsible for the neck jet pulsing action.
Negative pressure	Less than atmospheric pressure.
NEMA	National Electrical Manufacturers Association
Neo-Angle	Term used to describe shower receptor or bathtub that fits into a corner. Two corner walls butt up against the fixture.
Net Usable BTU	That portion of a fuel's heat energy actually transferred into the water by a heater.
NH	No Hub
Nickel-plate	Base coating applied to faucets before final finish is applied. All KOHLER chrome and color finishes are enhanced by a nickel undercoating to protect against corrosion.
Nipple	A short length of pipe installed between couplings or other fittings.
Nipple Extractor	A tool used to unscrew sections of pipe
NKBA	National Kitchen and Bath Association
No-Hub Connector	A connector for no-hub iron pipe consisting of a rubber sleeve and a stainless steel band secured by hose clamps. A variation, a neoprene sleeve with two adjustable steel bands, is used for connecting dissimilar materials, as when connecting new plastic pipe to an existing cast-iron drainpipe.
NOM	Nominal. Usually refers to the Inside diameter of trade sizes of copper pipe and some CPVC pipes. Not for Iron Pipe connections. For example, a ½" NOM Comp. Fitting is actually 5/8" because ½" pipe has an OD of 5/8".
Nominal Compression	For example: 1/2" NOM Comp. fittings are actually standard 5/8" SAE compression fittings, because the 1/2" I.D. trade size copper pipe is 5/8" O.D. A 1/2" NOM Comp stop valve would attach directly to a 5/8" OD (1/2" trade size) copper pipe where it comes out of the wall.
Nominal Size	Size used for identification only; not literal dimensions.
Non-CFC	Foam insulation that minimizes the use of Chlorofluorocarbons

Terms	Description
Non-ferrous	Not containing iron
Nonpotable	Not suitable for drinking
NPS	National Pipe Thread Straight, a standard method of sizing straight threaded pipe.
NPS, IPS, Slip Joint,	For example: A 7/8" IPS straight thread fits Toilet connections. Same as 15/16" NPS and 7/8" Slip Joint or Ballcock.
NPT	National Pipe Tapered thread standard. The same as IPS
NSF	National Sanitation Foundation, a testing laboratory.
O ring:	A round rubber washer is compressed to make a watertight seal, used in compression fittings.
0.D.	Abbreviation for Outside Diameter.
Oakum	Loosely woven hemp rope that has been treated with oil or other waterproofing agent; it is used to caulk joints in a bell and spigot pipe and fittings.
Obscure	Patterned shower door glass with a clouded element lending more privacy to the bather. The irregular pattern of the glass conceals waterspots and fingerprints.
Obscure Glass	Glass that lets light through but is not totally transparent.
OD	Outside Diameter. Common method for sizing pipe, this is a measurement of the diameter of a pipe as taken from the outside edge.
OEM	Original Equipment Manufacturer
Offset	A tubular component which permits the offsetting of a drainage run in the same basic direction.
ОНМ	A unit of electrical resistance
Oil Powered	A water heater that uses oil as its fuel source
One Piece Toilet	A toilet in which the tank and bowl are manufactured as a single vitreous china fixture. Typically, one-piece toilets have a lower profile than two-piece toilets.
Open Front	A style of toilet seat where there is an open space at the front. Considered more sanitary in commercial applications.
Operating Cost	The cost of running a water heater for a given time period
Orbital Weld	A circumferential, full fusion weld used to join together two lengths of tubing. It is a GTAW welding process. Usually to join coiled lengths
Organic Matter	plant and animal residues, or substances made by living organisms
Orifice	An opening through which gas is discharged and whereby the flow of gas is limited and/or controlled.
Osmosis:	Phenomenon of solvent flow occurring between two cells containing solutions with different solute concentration separated by a membrane that is permeable to the solvent and impermeable to the solute.
Outlet Connection	Waste connection to the drain system.
Outlet Sewer	Pipe section in a septic system which runs between the septic tank and the drainage field.
Outlet/Discharge	The opening through which the water exits the pump

Terms	Description
Outside Diameter	The diameter of a pipe measured from the outside edge
Overflow	An outlet that allows water to escape
Overflow ell	On a bath drain, the elbow fitting that attaches to the bath wall to provide overflow protection.
Overflow hood	On a bath drain, the decorative hood concealing the overflow ell.
Overflow tube	The vertical tube inside a toilet tank (usually part of the flush valve), which directs water into the bowl in the case of ballcock malfunctions. If the ballcock does not shut off properly, water will drain through the overflow tube into the bowl, and flow down the waste drain lines. Also refers to the portion of a bath drain between the overflow and the drain tee.
Oxidation	The conversion of organic material to a more stable form using bacteria, chemicals, or oxygen.
Ozone	An unstable form of oxygen (O_3), which can be generated by an electrical discharge through air or regular oxygen. It is a strong oxidizing agent and has been used in water conditioning as a disinfectant.
P & T Relief Valve	Pressure and Temperature Relief Valve - Same as T & P
P O Plug	Lavatory drain with separate removable plug
P Trap	See trap
P.O. Plug	Plug Outlet. A style of drain outlet that is closed by a rubber stopper, or plug. Used for lavatories.
Packing	On some compression fittings, the relatively soft material used to provide a water seal when squeezed or compressed.
Packing nut	The nut which secures the packing material in place on some compression fittings.
Packing	Fibrous material that is used on faucets to prevent leaks.
Parallel System	Two or more identical size heaters piped with water connections, that is, cold water travels equal distance into the inlets of the heaters from a "T" connection and hot water travels equal distance from the outlet of the heaters to a "T" connection.
Passageway	Channel connecting bowl to waste outlet where siphoning action occurs. Also referred to as the trapway.
Passivation	To make inactive or less reactive. To protect (as a solid-state device) against contamination by coating or surface treatment.
PB (Polybutylene)	Flexible plastic tubing used in water supply systems where allowed by code.
PDI	Plumbing and Drainage Institute
PE	Polyethylene Plastic Material
Peak Hour Demand	Time when the largest demand for hot water is needed.
Peak Load Period	The period of the day in which the system has the greatest demand.
Pedestal Lavatory	A lavatory in which the bowl is supported by a single pedestal leg.
Penal Valve	A commercial flush valve, so-named because of its use in penal institutions

Terms	Description
Perfect Vacuum	Theoretically, space without matter in it. A perfect vacuum has never been obtained.
Perforated Pipe	Pipe designed to discharge water through small, multiple, closely spaced orifices or nozzles, placed in a segment of its circumference for irrigation purposes
Personal Hydro-Massage Systems	Type of BodySpa featuring a 10-jet or 8-jet tower and luxury amenities such as a waterfall and a slide-out seat. The user can select the pairs of jets that are on or off for a truly personalized massage. Personal Hydro-massage systems are a perfect addition to homes that already have a bath or whirlpool installation.
Petcock	A small faucet for draining liquids or relieving air pressure
PEX	Cross-linked polyethylene. PEX tubing is commonly used for hydronic radiant floor heat, but increasingly also used for water supply lines. Stronger than PE.
pH Value	A convenient method of expressing small differences in the acidity or alkalinity of solutions. Neutrality = pH 7; lower values indicate increasing acidity; higher values indicate increasing alkalinity.
Phase	For ease of production and distribution, A.C. is distributed in what is known as a 3 phase supply using three active wires and one neutral wire.
РНСС	Plumbing Heating Cooling Contractors Association
Phenol	A poisonous and carcinogenic chemical often found in municipal water supplies. Also known as carbolic acid, phenol is a benzene derivative
Pickling	Pipe immersed into acid bath for removal of scale, oil, dirt, etc
Piezo Switch	The electronic switch the bather uses to control the whirlpool and optional heater. This switch, based upon the piezo-electric effect, generates a voltage when pressure is applied to it.
Pillow	A molded cushion head rest. Pillows for neck jet models include a built-in magnet that needs to be detected by the reed switch in order for the neck jets to run.
Pilot	A small burner used to ignite the main burner
Pin	External (male) threaded end.
Pipe Dope	Slang for pipe-joint compound. Substance applied to thread fittings to create a watertight seal.
Pipe joint compound	A compound designed to provide a water seal in threaded connections. Also called pipe dope. Plumbers putty should not be used as a thread sealant.
Pipe Wrench	An expansion wrench with gripping teeth suitable for tightening or loosening non-exposed piping and fittings only.
Piping Hot Water Dispenser	Kitchen sink accessory that delivers as many as 60 cups of 190* F water per hour, putting items like instant coffee, tea, oatmeal and soups seconds away.
Pitch	Downward slope of a drain pipe in the direction of the water flow.
Pivot	Installation where the glass enclosure panel pivots on a hinge to provide access to the showering space. Focal shower enclosures from Kohler offer an adjustable bottom pivot block to ensure a

Terms	Description
	watertight seal even when walls are not parallel.
Pivot Door	A shower door that rotates on metal pivots located at the top and bottom of the door.
Pliers	Pliers are used for holding small objects and bending wire.
Plug	Male threaded fitting which seals the end run of a pipe when fitted into a female threaded fitting.
Plumb	To prepare the pumbing lines for a faucet or fixture. Also a reference to true vertical.
Plumb Bob	A metal weight attached to a string. Used to determine plumb.
Plumber	A person who installs and repairs water supply apparatus
Plumbers Putty	A non-hardening compound used to provide a seepage seal in non- pressurized applications, such as sealing a faucet to a lavatory deck.
Plumbing Tree	Prefabricated set of drain waste, vent, and supply lines
Plunger	A rubber suction cup on a handle used to free plumbing traps and waste outlets of obstructions. Also known as a force cup or plumber's helper.
Pneumatic	Pertains to devices using compressed air.
Point of Use	Small water heater used for remote locations
Poppet	Valve that rises perpendicularly to or from its seat.
Pop-Up Assembly	The drain mechanism of a faucet installed on a lavatory. The drain stopper "pops" up and down.
Pop-up Drain	Type of drain assembly for lavatory and bath. When a lavatory lift rod or bath overflow plate lever is lifted, the pop-up drain closes so the lavatory or tub retains water
Porcelain	A ceramic ware that consists of kalin, quartz and feldspar, and is white. Fired at high temperatures on steel to make the surface of bathtubs and kitchen sinks.
Porcelain Enamel	Vitreous enamel. Often refers to pressed steel products with a porcelain glaze.
Porosity	A measure of the volume of internal pores, or voids, in ion exchangers and filters media; sometimes expressed as a ratio to the total volume of the medium.
Port	An opening in a burner head through which gas or an air-gas mixture is discharged for ignition.
POS	Porcelain on steel. A finish commonly used on sinks and tubs.
Positive Displacement Pump	Called a PD pump. Gear, sliding vane, progressive cavity, lobe etc. the capacity determined by the pump speed. The maximum head is determined by the horsepower available and the casing strength.
Potable	Water which is safe to drink.
Potentiometer	An adjustable resistor used to vary the sensing distance of the touchless faucet.
Powder Coat	A technique for applying paint to metal surfaces. The metal is covered with a powder of dry paint particles and is baked in an oven. This causes the powder to melt and harden into a tough, colorful finish.

Terms	Description
Power Venting	Mechanical draft exhaust to outside, usually utilizing room air to support combustion.
PP	Polypropylene pipe
PPE	Personal Protective Equipment (abbreviation) Equipment designed to protect you. PPE includes items such as helmets or safety goggles.
РРМ	Parts per million. A unit of measure for impurities in water.
PR	Pressure regulator. Usually required if water pressure ever exceeds 80 PSI on potable water supplies inside a structure.
Pre-Charged Tank	A water storage tank pre-charged with air at factory featuring a vinyl bag to separate water from air which prevents waterlogging. This tank design provides greater drawdown than standard tanks. Pre-charged tanks do not require air volume control.
Preheated Water	Water that has been tempered (heated) for inlet supply.
Pressure Assisted Toilet	Utilizes the power of the flushometer valve to create a powerful siphonic flushing action. Water fills a sealed tank inside the chinaware tank creating pressure by displacing air within this sealed tank. When the push button or trip lever is activated, the water under pressure, rapidly thrusts or pushes waste and water through the bowl. The entire flushing process occurs very quickly (about 4 seconds).
Pressure Balancing Valve	A shower mixing valve that automatically maintains balance between incoming hot and cold water supplies by immediately regulating fluctuations in pressure. As a result the outlet temperature remains constant, though the outlet pressure may drop. Also known as an "anti-scald valve".
Pressure Balancing Valve	Maintains a constant water temperature by using a mixing valve that balances incoming hot and cold water supplies.
Pressure Clean	Another name for the Pressure Lite system which uses incoming water supply line pressure to compress air in a reservoir within the tank of one-or two-piece toilets. When the toilet is flushed, the compressed air within the reservoir propels water to the siphon jet bowl for effective flushing action.
Pressure Head	Pressure in a plumbing system. The unit of measure which is the vertical force exerted by water at a depth of one foot.
Pressure Lite	Operating system which uses incoming water supply line pressure to compress air in a reservoir within the tank of one-or two-piece toilets. When the toilet is flushed, the compressed air within the reservoir propels water to the siphon jet bowl for effective flushing action.
Pressure Loss	The term given for the loss of pressure that occurs whenever water moves through a pipe or when water moves uphill against the force of gravity. If the total pressure loss in a piping system exceeds the available static water pressure the water will not flow.
Pressure Reducing Valve	A valve that automatically reduces inlet water pressure to a specified value at its outlet under static cold water conditions.
Pressure Regulator	A device for controlling and maintaining a uniform outlet gas pressure.
Pressure Tank	Device used to pump water from a well.
Pressure Tubing	Tubing used to conduct fluids under pressure or at elevated temperatures or both, and produced to stricter tolerances than pipe.
Pressure/Temperature	A valve which opens upon rising inlet pressure.

Terms	Description
Relief Valve	
Primary Air	Air which is mixed with gas before the gas leaves a burner port to burn. Ideal burning condition generally is 10 cubic feet of air per one cubic foot of gas.
Priming Jet	Opening in bowl through which tank-supplied water flows, designed to propel waste up into the trapway.
PSI	Refers to the unit of measure of pressure Pounds per Square Inch.
PSIG	Pounds per square inch gauge
P-Trap	P-shaped section of drain pipe that water is trapped in, blocking gases from escaping through the drain. Prevents sewer odors from escaping into your home.
Public Sewer	A common sewer directly controlled by public authority.
Pull-Out Spray	Single-control kitchen faucet which offers a retractable hose and sprayhead to be used for food preparation and cleaning.
Pump	A serviceable component containing the heater, and responsible for pushing the water through the BodySpa or whirlpool harness system. The pump also includes a circuit board mounted in the control box beneath the motor. The circuit board interprets and processes electronic signals from switches, the auxiliary control, and the variable flow valve.
Pumping Level	The lowest water level reached during pumping operation.
Purged Line	A plumbing line in which the faucet has been opened and allowed to run for a specified length of time, usually1-5 minutes
PVC	Polyvinyl chloride. A rigid white or cream-colored plastic pipe used in non-pressure systems, such as drainage, waste, and vent systems.
PVD	Physical Vapor Deposition, a modern plating process used mostly with polished brass or gold finishes on faucets. Vaporized zirconium reacts with nitrogen and other gases to form a very durable surface, which will not tarnish or discolor.
R & D	Reamed and Drifted. Pipe commonly used in water wells having a special, heavy-duty coupling and a guaranteed I.D. clearance
Radiator	A room heating device. It will be always hot but it can be cold if it had an airlock.
Radius	A line segment extending from the center of a circle or sphere to the circumference or bounding surface.
Rail Fittings	Fittings with setscrews rather than threads, which hold pipes used for hand railings. Available in various sizes and configurations to suit a number of applications. Not used for plumbing or conduit.
Rated Storage Volume	Quantity of water stored in a tank.
Raw water:	Untreated water from wells, surface sources or the sea.
Reamer	A grinding tool used to level or remove burrs from valve seats in faucets so that the valve stem will fit properly.
Receptor	Shallow basin used to catch and contain water in the bottom of a showering space.
Recirculating Harness	PVC tubing setup that circulates water throughout a whirlpool system, delivering water to the jets

Terms	Description
Recovery	The amount of water in gallons that can be heated in one hour. (gph)
Recovery Capacity	The amount of water in gallons per hour raised 100 degrees F at a given thermal efficiency and BTU per hour input.
Red Water	Water which has a reddish or brownish appearance due to the presence of precipitated iron and/or iron bacteria
Reducer	A fitting that connects pipes of different sizes together.
Reed switch	A serviceable, magnetic sensing switch that triggers the water flow to stop when the neck jet pillow (with magnet) is removed from the whirlpool.
Refill Tube	The tube that directs water from a ballcock into the overflow tube to refill the bowl after a siphon break
Relief Valve	A valve that opens to relieve excess temperature.
Repair Clamp	Sleeve type clamp used to repair a split pipe, held in place by bolts
Residual Chlorine	Chlorine Chlorine remaining in treated water after a specified period of contact time to provide continuing protection throughout a distribution system; the difference between the total chlorine added, and that consumed by oxidizable matter.
Return Circulation System	Tempered water from or near the point of usage which eliminates waste of hot water used for long runs and adds storage to the system.
Revent	Pipe installed specifically to vent a fixture trap. Connects with the vent system above the fixture.
Reverse Osmosis	A water treatment method whereby water is forced through a semi permeable membrane which filters out impurities.
Reverse Trap Flushing	Flushing design in which trap is located at rear, assisted by jet in trapway.
Reverse Trap Water Closet	A water closet having a siphonic trapway at the rear of the bowl, and integral flushing rim and jet. Min. dimensions are $9" \times 8"$ water spot and 1 ½" ball pass.
RF	Recovery Factor - Rating based on the efficiency of the product which is input required to raise 1 gallon of water 1 degree Fahrenheit
RH	Right Hand
Rich Mixture	A mixture of gas and air containing too much fuel or too little air for complete combustion of the gas.
Rigid Connections	Refers to a rigid tube or pipe connection between the valve body and/or supply stop to ease installation. The opposite of flexible connections.
Rigid Pipe	Pipe designed to transmit the backfill load to the foundation beneath the pipe. Rigid pipe must be supported on the bottom portion of the pipe.
Rim	The inside edge of the perimeter of a toilet bowl. The lower portion of a toilet seat. The edge of a sink or lavatory.
Rim Holes	A series of small holes in the underside of a toilet rim, around the circumference of the bowl. Incoming water flows down into the bowl through these holes, creating a rinse effect or wash over the entire inner surface of the bowl.
Riser	A vertical metal or plastic tube or assembly that connects a faucet to the water supply stop valve. Usually made of copper. Metal Flex

Terms	Description
	Risers are corrugated to facilitate bending. Also a supply line that rises from one story to the next.
Roller Hanger	A pipe hanger similar to a clevis hanger except that the yoke bolts to a roller rod instead of a metal strap. This roller rod supports the pipe and permits horizontal movement.
Roman Spout	Term used to describe a faucet that is mounted on the deck of the bathtub enclosure, rather than on the rim of the bathtub or on the wall. Also referred to as a deck-mount faucet.
Roman Tub Set	A roman tub set is a tub set that is mounted on the deck of a tub not on the wall.
Roof Drain	A drain installed at the low spot in a roof that channels water into a drainpipe to prevent pooling
Roof Flashing	Sheet metal installed at any break in a shingled roofline to prevent leaks. Also around sewer vents, fluepipes.
Root Valve	A multi-port valve commonly used on gauges or switches in high pressure, high temperature, or under otherwise severe process conditions. Typically built with non-rotating and non-threaded stems.
Rough-In	Installation of the drain, waste, vent, and supply lines in a structure to the proposed location of each fixture.
Rough-In Dimensions	The distance from a finished wall or floor to the center of the waste or supply opening or mounting holes on a plumbing fixture.
Round Front	Toilet bowl measuring 14" wide by 16 1/2" long (from center of seat hinge holes to front outside rim edge).
Round Front Bowl	Toilet bowl having dimensions of 14" wide by 16 1/2" long (from center of seat hinge holes to front outside rim edge).
Round Front Bowl	Standard shape of the front of a toilet bow, having dimensions of 14" wide by 16 $\frac{1}{2}$ " long from center of seat hinge holes to front outside rim edge.
RTV	A vulcanizing sealant which has a fast cure time, provides an effective seal, and resists color change. Other silicone sealants can be used where RTV is called for, but require the appropriate cure time indicated on the packaging.
Run	A complete or secondary section of pipe that extends from supply to fixture or drain to stack.
Running Trap	An in-line trap mounted in a horizontal drainpipe, where the inlet and outlet are parallel.
Saddle Tee	Fitting that taps into the side of a pipe, used to make quick connection to an existing line
Saddle Valve	A valve mounted on a pipe run by a clamping device, or fitting that taps into the side of a pipe, used to make quick connection to an existing line to provide a water supply for a low-demand device.
SAE	Society of Automotive Engineers Standard
Safe Drinking Water Act	An amendment to the <i>Public Health Service Act</i> , which was passed in 1976 to protect public health by establishing uniform drinking water standards for the nation. In 1986 SDWA Amendments were passed that mandated the EPA establish standards for 83 drinking water contaminants by 1992 and identify an additional 25 contaminants for regulation every 3 years thereafter.

Terms	Description
Safety Shutoff Valve	A device on a gas appliance that shuts off the gas supply to prevent a hazardous situation. A flame safety shutoff operates when the actuating flame becomes extinguished.
Sag Pipe	A section of a sewer line that is placed deeper in the ground than normal in order to pass under utility piping, waterways, rail lines, highways, or other obstacles. The sewer line is raised again after passing under the obstacle.
Sanitary Fitting	Fitting that joins the assorted pipes in a drain, waste, and vent system, designed to allow solid material to pass through without clogging.
Sanitary Sewer	House drain that carries wastewater away from the house to a sewer system or septic tank.
Sanitary Sewer	House drain that carries wastewater away from the house to a sewer system or septic tank.
Saponification	The process in which a fatty acid is neutralized with an alkali or base to form a soap.
Scale	A thin coating or layer, usually calcium on the bottom of a tank or interior parts that may prevent heat transfer.
Schedule	Numbers assigned to different wall thicknesses of pipe (e.g. sch 40)
Screwdriver	A tool used to turn screws
Screwdriver Stop	Used with tub/shower faucets.
Scullery Sink	Type of sink used in commercial or institutional kitchens.
Scupper	Drain, normally located on a roof or deck that allows rain water to drain off.
Sealant	Substance used to seal something.
Sealed Combustion	Sealing of combustion chamber to prevent spillage of combustion products.
Seal-Off Fitting	Fitting which prevents gas leakage from moving from one section of pipe to another.
Seamless Pipe	Pipe with no weld in the circumference
Seat	The stem will move against the seat to open and close the valve. The fixed part of a valve.
Seat wrench	Tool to resurface a worn valve seat. Stops leaks by providing a smooth sealing surface. Applies only to older compression style faucets.
Secondary Air	The remaining air needed for complete combustion besides primary air. This is the air surrounding the flames outside the burner ports.
Sediment	The substance that settles on the bottom of a water tank. Also known as lime.
Self Closing Faucet	Commercial lavatory faucet that flows water for a set time after the handle is pushed or turned.
Self Rimming	A style of bathroom lavatory or kitchen sink with a finished lip or rim that installs on top of a counter without requiring a metal sink rim.
Self-Rimming	A style of bathroom sink with a rolled and finished edge
Self-Rimming Sink	Sink with no metal ring that has a built-in lip of the same material

Terms	Description
	which supports it in the vanity top.
Semi-Encastre	A unique, space-saving, self-rimming lavatory installation in which the back of the lavatory is installed into the countertop while the front, or apron, of the lavatory projects from the countertop.
Sensor field	The operating range of the touchless faucet. The sensor detects the presence of objects within this range.
Sequestering Agent	A chemical compound sometimes fed into water to tie up undesirable ions, keep them in solution, and reduce their effects. For example, polyphosphate can sequester hardness and prevent reactions with soap.
Serial/Model/Rating Plate	A permanent information plate attached to major home appliances. The plate includes product model and serial numbers, plus information about wattage or BTU requirements.
Series System	System where a primary heater preheats water to a given desired general purpose temperature and feeds into another heater.
Service Entrance	Pipe connecting the water company piping to the water meter.
Service Pressure	The range of pressure in the pressure tank during the pumping cycle, usually expressed in pounds per square inch gauge (P.S.I.G.).
Service Procedure	Component assembly and disassembly instructions. Generally intended for repairing a damaged or defective component.
Service Sink	Deep fixed basin, usually supplied with hot and cold water, which is used for rinsing of mops, disposal of cleaning water, or washing clothes and other household items.
Service Sink Faucet	Commercial grade faucet used on a service or utility sink.
Service Tee	Tee fitting with male threads on one run opening and female threads on the other two.
Setting	Pumps' vertical distance in feet from the top of the well to the top of the pump.
Sewer Ejector	See ejector.
Sewer Gas	Gases, esp. methane, which may be combustible and poisonous from the decay of organic materials in the sewer system
Shallow Well	A well with a pumping head of 25 feet or less, permitting use of a suction pump
Shower Arm	Shower trim component that delivers water to the showerhead. Usually 1/2" NPT, the shower arm connects showerhead and water supply line behind a finished wall of the shower enclosure.
Shower Ell	Plumbing elbow into which threads the shower arm. It is secured to the wall framing. The vertical water supply pipe from the bath/shower valve connects to the shower ell inlet.
Shower Fill	Plumbing elbow into which threads the shower arm. It is secured to the wall framing. The vertical water supply pipe from the bath/shower valve connects to the shower ell inlet.
Shower Panel	shower panel is a separate panel that mounts on a shower wall that includes a valve, showerhead, handshower, and body sprays. This is a quick and easy way to add these functions to your shower without tearing out the wall.
Shower Receptor	A one-piece base (floor) unit used as a shower, for example, to catch

Terms	Description
	water and direct it to a center drain.
Shower Supply Elbow	Plumbing elbow into which threads the shower arm. It is secured to the wall framing. The vertical water supply pipe from the bath/shower valve connects to the shower ell inlet.
Showerhead	Device that delivers water in a showering space. It may have an adjustable spray feature and a valve for regulating the flow of water from the shower.
Showerhead	Device that delivers water in a showering space. It may have an adjustable spray feature and a valve for regulating the flow of water from the shower.
Shroud	Color-matched component beneath a wall-mount lavatory which covers the drain outlet.
Shut-off valve	A device to provide local cut-off of water supply to a plumbing faucet or fixture during replacement or service. Also referred to as a stop valve. May also refer to the main shut-off valve of a building or floor.
Side Cutter	A heavy duty auger tip for large diameter pipes
Side Outlet	A faucet valve body configuration in which the outlet is on the side of the valve body and the inlet is at an end of the valve body.
Sight Hole	Generally a window on oil-fired products that allows the viewing of burner and flame patterns.
Sillcock	An outdoor faucet furnished with hose threads on the spout. Also used to supply washing machines. Also known as a "hose bibb".
Simplex Basin	An ejector pump container usually 18" x 30" for single family homes.
Single Control Faucet	Type of faucet that has one handle to control both water temperature and water volume.
Single Threshold	Type of shower base used in a three wall installation with the threshold being the side with the door.
Single-control	Type of faucet that has one handle to control both water temperature and water volume.
Sink	A stationary basin connected with a drain and water supply for washing and drainage.
Sink Compartment	Flat bottom fixture used in the kitchen for cleaning dishes and in connection with food preparation.
Siphon	A pipe connecting two canals. A tube or pipe through which water flows over a high point by gravity. An effective siphon is critical to an efficient flush.
Siphon break	The point in a toilet flush when air is re-introduced into the trapway, "breaking" the siphonic action. The siphon break is usually heard as a deep gurgling at the end of the flush.
Siphon Wash Closet	A toilet having a trapway at the rear of the bowl and integral flushing rim, and minimum dimensions of 5" x 4" water spot and 1 $\frac{1}{2}$ " ball pass.
Siphoning	The suction or pulling effect that takes place in the trapway of a toilet as it is filled with outgoing water and waste.
Siphon-Jet Water Closet	A toilet having a siphonic trapway at the rear of the bowl and an integral flushing rim and jet.

Terms	Description
Siphon-Vorex Water Closet	A toilet having a trapway at the rear of the bowl, integral flushing rim, and a water supply system with or without a jet, which does not feed directly into the trap.
Siphon-Vortex Water Closet	A toilet having a trapway at the rear of the bowl integral flushing rim and a water supply system with or without a jet, which does not feed directly into the trap.
SJ	Slip Joint
Sleeve	Pipe which is passed through a wall for the purpose of inserting another pipe through it.
Slide Bar	Type of shower component designed for the attachment of a handshower. The mounting bracket can be adjusted at different heights to accommodate individual preference.
Sliding Inner Door	A door that slides along the combustion chamber radius for easy access to the burner and pilot.
Sliding Panels	the moving panels in a bypass door. (as in shower doors)
Slip Gasket	Elastomer (natural occuring elastic substance) gasket, usable with a hub and spigot pipe because it has a tapered cross section
Slip Joint	A connection made with compression fittings.
SMLS	Seamless pipe
SN	Satin nickel finish
Snaking	Using an auger or snake to clear a drain or trap.
Soap/lotion dispenser	Accessory that holds liquid soap or lotion. May be installed in a predrilled sink hole or through a 1" max. thickness countertop.
Soda Ash	the common name for sodium carbonate, Na ₂ CO ₃ a chemical compound used sometimes used in soap and detergents to neutralize acid water.
Soft Flame	A flame partially deprived of primary air such that the combustion zone is extended and the inner cone of the flame is ill-defined.
Soft Water	Water that has a low calcium and magnesium content
Soil Cutter	A device used to cut No Hub pipe, consisting of a handle and a cutting chain, similar to a chain wrench in appearance
Soil pipe	Large diameter pipe to carry waste from drains and toilets.
Soil Stack	A vertical pipe through which toilet waste and other plumbing system discharge flows.
Solder	A metal alloy that is melted to create a fused joint between metal pieces. Also the act of melting solder into the joint.
Solenoid	A coil of wire in the form of a cylinder that, when carrying a current, resembles a bar magnet.
Solenoid valve	An electrically-activated mechanical valve that opens and closes when electric power is applied to it. The solenoid valve turns the Touchless faucet water flow on and off.
Solute	The substance which is dissolved in and by a solvent. Dissolved solids, such as the minerals found in water, are solutes.
Solvent Weld	Any of the types of PVC pipe and fittings that are fastened together with solvent-based cement

Terms	Description
Soot	A black substance, mostly consisting of small particles of carbon, which can result from incomplete combustion and appear as smoke.
Spanner	A spanner is used to turn nuts on bolts
Spark Ignition	Intermittent ignition devices that utilizes a spark to light a flame.
Spark Test	A test procedure to evaluate the integrity of the glass lining.
Specific Gravity	The ratio of the weight of a specific volume of a substance compared to the weight of the same volume of pure water at 4°C.
Specific Heat	Amount of heat required to raise the temperature of a kilogram of a substance one degree Celsius.
Specifications	Written instructions telling you what material to use.
Spigot	The plain end of a cast-iron pipe. The spigot is inserted into the bell end of the next pipe to make a water tight joint.
Spigot Soil Adapter	Hub adapter to connect PVC with soil pipe.
Spline Adapter	Device sometimes required to form a mating connection between the splines of a valve stem and the splines inside a faucet handle.
Spore	Specialized reproductive bodies or resting cells that resist adverse conditions which would readily destroy the parent organism.
Spout	Delivers water from the faucet valve to the sink, lavatory or bath.
Spout Height	Vertical measurement from the base of the faucet to the tallest point of the spout reach.
Spout Length	Horizontal measurement from the center of the spout/shank to the center of the aerator.
Spout Reach	Horizontal measurement from the center of the spout/shank to the center of the aerator.
Spud	A threaded opening on the water heater tank. Also a tool for digging having characteristics of a shade and chisel.
SS	Stainless Steel
Stack	The vertical main in the drain, waste, and vent system, extending one or more stories.
Stacking	The ability of hot water to form layers of different temperatures in the tank stratification.
Stainless Steel:	Any of various steels alloyed with at least 10 percent chromium and sometimes containing other elements and that are resistant to corrosion or rusting associated with exposure to water and moist air.
Stand Pipe	Open vertical pipe that receives water from a washing machine. Also the vertical pipe run supplying water to a fire sprinkler system; also large vertical pipe into which water is pumped in order to produce a desired pressure; a high vertical pipe or reservoir that is used to secure a uniform pressure in a water-supply system
Standard faucet	Type of commercial faucet that is operated similar to a residential faucet. The user is in complete control of volume and temperature adjustment.
Static Discharge Head	The vertical distance from the pump to the highest outlet in the water system Stand By Loss. The amount of heat lost while a unit is in stand by mode.

Terms	Description
Static Lift	The vertical distance between source and discharge water levels in a pump installation.
Static Pressure	The pressure at the valve inlet that is exerted under a "no flow" condition.
Static Pressure	The pressure when no water is flowing.
Static Water Level	The undisturbed level of water in the well before pumping.
STD	Standard
Stem	A rod or pipe that connects the float to the valve arm.
Stiffener	A galvanized bushing used to strengthen tubing to fit in a leadpak coupling
Stillson Wrench	Pipe wrench
Stop Valve	The valve that allows water supply to be cut off to one fixture without affecting the water supply to the entire house or building. Common for use with clawfoot tubs, sinks, and toilets.
Stop and Drain Fitting	Plug-type valve used to tap into a water main to control the flow to a branch line, which has a side opening to shut off the water and allow it to drain out so the pipe won't freeze.
Stopper	Refers to a part which stops the flow of water in a fixture. Usually refers to a bath, lavatory, or sink stopper. Also used to refer to the flapper in a toilet. A bath, lavatory, or sink stopper usually contains an O-ring or gasket which must be clean and in good condition to provide an effective seal. Vandal-resistant stoppers are removable only by partially disconnecting the lift linkage in the drain line.
Stopper linkage	Lift linkage. Faucet component that opens the pop-up drain in a lavatory when the lift rod is depressed. When rod is lifted, the drain closes so the lavatory will retain water.
Stopper seal	A bath, lavatory, or sink stopper usually contains an O-ring or gasket which must be clean and in good condition to provide an effective seal.
Storage Tank	A tank used to hold a specific volume of water
Storm Drain	Drain used to receive and convey rain water, surface water, and ground water away from buildings.
Straight Cross	Fitting that connects four pipes of the same diameter.
Straight Pipe Threads	A special kind of straight thread used only on iron pipe, toilet, and faucet fittings. A cone seal or gasket is usually included because straight threads will not form a complete seal without a gasket of some kind.
Straigth Cross	Fitting that connects four pipes of the same diameter.
Strainer	Sink drain fitting consisting of a strainer body attached to the drain opening and a removable basket. Also called a duostrainer .
S-Trap	Trap design which routes drainage vertically down through the floor to connect with the Drainage Waste Vent (DWV).
Strap Wrench	A wrench which uses a tightenable strap instead of jaws. Typically used to secure threaded parts which are irregularly shaped and plated, such as a shower arm or a spout. It must be clean for scratching to be avoided.

Terms	Description
Street Ell	An 90 degree elbow joint with a hub on one end and male threads on the other. Used to make an angled connection between pipe or tubing and a fitting with a hub.
Stub-Out	Short lengths of pipe installed during rough-in to which fixtures and drains will eventually be installed.
Stud Guard	Short band of metal attached to wall studs to prevent nails from penetrating and damaging pipes
Stuffing box	That portion of the pump that held the packing and now holds the mechanical seal.
Submergence	The distance the ejector, foot valve or submersible pump is installed below the pumping level
Suction	Process of exerting a force upon a solid, liquid or gas by reason of reduced air pressure over part of its surface.
Suction head	The head on the suction side of the pump. This is subtracted from the discharge head to determine the head being produced by the pump. It is a sum of the static, pressure and friction heads.
Suction Static Lift	Same as Suction Static head. This term is only used when the pump centerline is above the suction tank fluid surface
Sulfate	A chemical compound that can cause laxative effects and give off a medicinal taste in concentrations around 30 gpg. In high concentration with high calcium hardness, it forms a white insoluble compound that is difficult to remove.
Sump	A pit or pool for draining, collecting, or storing water. A chamber which provides water to the pump
Supplies	The pipes and valves which supply water to a faucet. Also refers to short connecting tubing or hoses between the faucet and the shut-off valve.
Supply Kit	Usually a kit of all parts needed to connect a faucet or toilet to the pipes coming out of the wall. Usually includes stop valves, water connectors, and escutcheons.
Supply Stop	The valve providing on/off toilet water supply control.
Surface Mount	Typically refers to thermostats mounted on the outside of the tank that senses temperature through the steel tank.
Surface Pump	A mechanism for removing water or wastewater from a sump or wet well.
Suspended Solids	Solid particles in water which are not in solution.
SV	Service Victory. A designation for service weight cast iron drainage pipe.
Sweat fitting	A plumbing fitting for soldered connection to copper pipe or tubing.
Sweating	Slang term for soldering. Also formation of condensation on the outside of pipes or toilet tanks.
Sweep	A drain ell fitting with a long radius that allows for smooth passage of waste. Fittings with abrupt changes of direction, such as a vent tee, may only be used for vents.
Swing Joint	A flexible sprinkler connection made by connecting three threaded elbows fittings together

Terms	Description
T & C	Threaded and Coupled. Some cast iron pipe is sold threaded with a coupling attached.
T & P Valve	Temperature & pressure relief valve. A safety device used to expel excess pressure or heat from inside a tank.
T & S	Tub and Shower
Tail Peace	The portion of a drain fitting which protrudes into the trap.
Tail Pipe	The pipe added below the jet assembly, in a weak well application.
Tank	The fixture reservoir for flush water. On a conventional toilet, the ballcock, flush valve, and trip lever are installed in the tank. A tank lid closes the top tank opening.
Tank ball	Also known as flapper, flush ball, stopper, or seal disk. This is the moving part of the flush valve that seals the water into the tank or allows water to exit the tank for the flush cycle. This is the predominant replacement part used on conventional toilets. Never use in-tank cleaners, as they can cause serious damage to this part.
Tank bolts	Three bolts which secure the toilet tank, gasket, and bowl together in a close-coupled toilet.
Tank Cross	A double-tee-shaped fitting installed between a shallow well pump and the bladder tank with integrated valve and gauge fittings, and an outlet for a pressure-relief valve.
Tank Fixture	Reservoir for flush water. On a conventional toilet, the ballcock, flush valve, and trip lever are installed in the tank. A tank lid closes the top tank opening.
Tankless Water Heater	Type of water heater which heats water as it passes through – no storage tank necessary. Also known as "in-line, on-demand or instantaneous heater".
Tannin (Tannic acid)	A substance occurring naturally in well water. It is produced by decaying vegetation, and causes the water to have a yellow of light brown color and can provide a bitter taste. There is currently no EPA regulatory level for tannin in water.
Тар	Anther term for faucets. Also refers to the process of diverting the flow of water to another fitting.
Tap Adapter	Fitting with one plain end and one threaded female end
Тар Тее	Cast iron tee with a threaded female side inlet.
Tap Water	Water provided by a water company by way of the home's plumbing system.
Tapered Pipe	A standard kind of thread used only on Iron pipe and pipe fittings.
TBE	Threaded both ends
T-bolt	Two main anchor bolts that attach a toilet to the floor. Also known as toilet or closet bolts. They slide into a channel on a toilet closet flange. After a toilet is moved into position, a nut threaded onto the T-bolt helps pull the toilet toward the closet flange and seat it into final position.
TDS	Total dissolved solids
Тее	A T-shaped fitting with three openings used to create branch lines.
Teflon tape	Thread sealing tape with Teflon. Teflon is a trademark of DuPont.

Terms	Description
Temperature Rise	The number of degrees Fahrenheit that incoming water must be raised to reach the desired water temperature.
Tempered	Process which strengthens and hardens glass for added safety. Also refers to water which has been mixed to avoid a temperature extreme.
Tempering Valve	A in-line hot/cold mixing valve.
Tensile strength	The greatest longitudinal stress a substance can bear without tearing apart.
Test Plug	A rubber plug that is used to seal off sections of pipe to allow testing for leakage.
Test Tee	A tee with a removable plug for permitting access to a drainage line
Therm	Measurement of 100,000 BTU's.
Thermal Efficiency	Ability to transfer and absorb heat from fuel sources into the water.
Thermal Expansion	The effect of water expanding when heated.
Thermocouple	Small electric generator. Electron flow between the hot junction of 1200 degrees F and cold junction of 600 degrees F creates millivoltage.
Thermopile	Apparatus that consists of a number of thermocouples combined so as to multiply the effect and is used for generating electrical current.
Thermostat	Temperature regulator
Thermostatic Valve	A mixing valve that automatically maintains the temperature setting by regulating fluctuations in water temperature at the water inlets and immediately adjusting the ratio of hot and cold water that is discharged by the valve.
Thread Sealant Tape	A dry ribbon of sealant sold on spools. It offers the advantage of not getting into the supply lines and blocking water flow as can happen with liquid sealants. It also does not adhere to fingers. The tape provides an effective seal since its mass is redistributed to fill voids as the threaded connection is tightened.
Threads	A helical or spiral ridge on a screw, nut, or bolt. For example: A 1/2" FIP thread fits standard 1/2" trade size Iron pipe (1/2" ID-7/8" OD). Same as 7/8"-14 NPT.
Three-Handle Faucet	Use separate handles for hot and cold water, but have an additional handle to divert the water from bath spout to showerhead.
Throatplate	The underside portion of some faucet spouts which also use a top shroud to cover an assembled faucet waterway. The throatplate is only visible when viewed from a very low angle. Current Kohler faucets offer a metal throatplate for improved aesthetics and durability.
Throatplate	The underside portion of some faucet spouts which also use a top shroud to cover an assembled faucet waterway. The throatplate is only visible when viewed from a very low angle.
Through-the-floor	Bidet installation where incoming water lines to bidet are installed below the floor, concealing them from view. Bath drain installation where the drain tee outlet points down rather than horizontally.
Thumb Nut	Nut designed to ease installation and avoid over-tightening by allowing tightening without the use of tools.
Thumb Screw	Screw designed to ease installation and avoid over-tightening by

Terms	Description
	allowing tightening without the use of tools.
Tile Rise	The raised portion of a shower curb that is on more than one level.
Tile-in	Installation where lavatory is fit flush with countertop. Kohler's offering of tile-in kitchen sinks make clean-up a breeze—simply wipe debris directly into the basin.
Tile-In Sink Installation	Installation where lavatory is fit flush with countertop.
Tip Mount	The whole faucet fits through the holes on the top of the sink with a plate covering the body of the faucet.
ТО	Threads Only
Toilet	The device which receives and flushes bodily waste.
Toilet Bowl	Water receptor which receives liquid and solid waste.
Toilet Seat	Seat on which individual rests when using toilet.
Toilet Seat Cover	Toilet cover that fits over seat and covers seat and bowl.
Toilet Sseat Ring	Standard toilet seat shape.
Toilet Setting Compound	A specialty compound which provides a non-hardening water-tight seal between the outer circumference of a toilet base and the floor. It is an aid to cleaning and is not an integral part of the toilet installation. Silicone sealant is also used but may complicate any later removal of the toilet.
Toilet Threads.	Also used with a gasket or nosecone seal for 1/2" IPS Faucet and angle stop connections, 1/2" Iron Pipe Connections, 7/8" IPS Toilet connections, etc. Same as Slip Joint.
Torque Wrench	Device to measure the amount of torque or force applied to a threaded connection.
Total Bathing Systems	Type of BodySpa system that offers the convenience of having all bathing options in a single unit. These centers allow enjoyment of a BodySpa hydro-massage from six angled bodyjets, a soothing bath or an invigorating shower. Selected models offer a six-jet whirlpool in the base.
Total Discharge Head	The total pressure or head the pump must develop. It is the sum of the depth to pumping level, elevation, service pressure, and friction loss.
Total Dissolved Solids	A measure of the total amount of dissolved matter in water
Total Head	The difference between the head at the discharge and suction flange of the pump (syn Total Dynamic Head, pump head, system head).
Touchless Faucet	Commercially installed faucet or urinal valve that function using infrared sensor system.
Tower	Component of 10- and 8-jet BodySpa models which houses bodyjets. The overhead waterfall and jets in the 10-jet BodySpa deliver up to 80 gallons of recirculated water per minute for a rejuvenating hydro- massage. The tower is constructed of either extruded aluminum (8-Jet and 10-Jet models) or vitreous china (6-Jet model).
Toxicity Test	Test to determine the toxicity of a chemical or an effluent using living organisms. It measures the degree of response of an exposed test organism to a specified chemical or effluent
TPI	Threads Per Inch

Terms	Description
Transfer Valve	The portion of a bidet or bath fitting which changes the flow of water from one outlet to another.
Transite Pipe	Pipe manufactured from asbestos and concrete, commonly found in water mains.
Transom Panel	a panel usually located above the door of an enclosure. It can be used to keep steam inside of a steam-shower unit. Some open to vent steam.
Тгар	Curved section of drain line that prevents sewer odors from escaping into the atmosphere. All fixtures that have drains must have a "P" trap installed. A toilet is the only plumbing fixture with an "S" trap.
Trap Arm	The waste arm portion of a drainage trap.
Trap Dip	The U-bend portion of a drainage trap.
Trap Drain	A flex adapter to connect 1-1/4" to 1-1/2" drain pipe.
Trap Drain	A flex adapter to connect 1 1/4" to 1 1/2" drain pipe
Trap Primer	A small feeder line connecting the cold water line directly to the drainage trap, which releases a small amount of water to the trap should it run dry to maintain the water seal.
Trap Seal	The height of water in a toilet bowl "at rest, it provides a water seal which prevents sewer gases from entering the home. Trap seal is measured from the top of the dam, down to the inlet of the trapway. Also referred to as deep seal.
Trapway	Channel connecting bowl to waste outlet where siphoning action occurs. Also referred to as passageway .
Trim	May refer to the faucet handles, all exposed portions of faucets, or to all faucets. To trim a room may mean to install all fittings. KOHLER faucets sold as base plus trim are typically configured where the trim is the exposed portions of the faucet. Whirlpool trim may consist of the removable jets and the suction cover.
Trim Kit	The outside decorative parts that hide a faucet rough-in.
Trip chain	The chain connection between a toilet trip arm and the flapper on the flush valve.
Trip Lever	Flush handle and actuating arm on a toilet tank. Also the lever that opens and closes the drain on the bathtub waste and overflow.
Triple Basin	Term used to describe a sink comprised of three compartments.
Tub Spout	Faucet component which delivers water from the faucet valve to the bath.
Tube Talon	Plastic hanger for mounting copper pipe
Tube Valve	A valve which is opened or closed by mechanically moving a tube upstream or downstream by an actuating screw
Tube Washer	Replacement washer for one end of a closet tube
Tuberculation	The process in which blister-like growths of metal oxides develop in pipes as a result of the corrosion of the pipe metal. Iron oxide tubercles often develop over pits in iron or steel pipe, and can seriously restrict the flow of water.
Tubing	Refers to a plumbing supply line which is either capable of being bent or is not capable of being threaded like pipe. In popular use, tubing

Terms	Description
	and pipe are used somewhat interchangeably.
Tubing "L"	An industry standard for copper tubing defined by the tube wall thickness and identified by a "blue" strip. Type "L" copper tube wall is approximately 50% greater thickness than Type "M"
Tubing "M"	An industry standard for copper tubing defined by the tube wall thickness, identified by a "red" stripe
Tubing cutter	Device which cuts tubing by rotary compression of a cutting wheel rather than by a sawing action.
Turbidity	Water cloudiness caused by suspended particles
Turbulent Flow	Fluid flow in which the velocity at a given point varies erratically in magnitude and direction.
Two Handle Faucet	Faucet which features two separate handles to control water temperature—one controls cold, the other hot.
Two-Piece Toilet	Toilet with a separate tank and bowl. Also referred to as a close- coupled toilet.
Tyseal Gasket	Gasket for joining SV cast iron pipe into a hub
UL	Underwriters Laboratories
ULF	Ultra low flush. Widely used description of 1.6 gpf or less toilets.
Ultracoil	True double wall heat exchanger
Ultrafiltration	Pressure-driven membrane process used to retain macro solutes with a minimum molecular weight of 1000-1500 Dalton. Frequently used as a pretreatment to RO systems.
UNC	Unified National Coarse Thread. A standard kind of coarse straight thread used on fittings, nuts, and bolts. Not for pipes.
Under Cover	The underside portion of some faucets which also use a top shroud to cover an assembled faucet waterway.
Undercounter	Positioned under the cutout of the countertop is this style of lavatory.
Undercounter Sink	Type of installation in which a lavatory or sink is attached to the underside of a countertop.
Undercover	The underside portion of some faucets which also use a top shroud to cover an assembled faucet waterway. It seats against the faucet deck or lavatory, and is not typically visible from the normal level of use. The undercover is similar in application to a throatplate.
Undermount Lavatory	The body of the sink attaches to the underside of the countertop. Depending on the design of the sink, faucets can be mounted on the countertop or the sink itself.
UNF	Unified National Fine Thread. A standard kind of fine straight thread used on fittings, buts, and bolts. Not for pipes.
Uni-flex	One piece stop and riser combination. One-piece supply.
Uniformity Coefficient	A measure of the variation in particle sizes of ion exchange resins and filter media. It is defined as the ratio of the size of particle that has 60 percent of the material finer than itself, to the size of the particle that has 10 percent finer than itself.
Union	A fitting to join two pipes so they can be dismantled.
Union	

Terms	Description
	be disconnected without cutting the pipe.
Union	Three piece fitting that joins two sections of pipe, but allows them to be disconnected without cutting the pipe. Used primarily with steel pipe; never in a DWV system.
Union Ell	A fitting to join two pipes so they can be dismantled which also changes the direction of the pipe flow.
Union joint	The joining of two pipes so they can be dismantled with a union connection.
Union Nut	A relatively large nut which fits over all but the flanged sealing surface of a union fitting.
Universal Connection	Allows the installer to make a sweat connection or threaded connection to the tub/shower valve bodies.
Universal Plumbing Code	A system of procedures designed to provide consumers with safe and sanitary plumbing systems and used throughout the United States by local jurisdictions
Urinal	A plumbing fixture which receives only liquid body waste and conveys the waste through a trap seal into a gravity drainage system.
Urinal Strainers	Refers to a domed metal piece fastened to the bottom of an urinal to prevent debris from plugging the trapway of the unit.
Usable Storage	Percentage of hot water that can be drawn from a tank before the temperature drops to a point that it is no longer considered hot.
USEPA	The abbreviation for "United States Environmental Protection Agency"
USPHS	The abbreviation for "United States Public Health Service"
Utility Sink	A deep, fixed basin that is supplied with hot and cold water and is used for rinsing mops and disposing cleaning water.
VAC	Volts - Alternating Current
Vacuum Breaker	An anti-siphon device that prevents the backflow of contaminated water into the water supply system in the event of a negative pressure condition.
Valve	A device that regulates the flow of water. Also the rough-in part of a faucet that is concealed in the wall or undercounter.
Valve Dressing	Resurfacing a worn valve seat with a special tool. Stops leaks by providing a smooth sealing surface. Applies only to older compression style faucets.
Valve Seat	In a compression faucet, the surface against which the valve presses to provide a seal to stop the flow of water.
Valve Stem	The portion of a valve to which the handle attaches. Rotation of the valve stem turns the valve against a sealing surface to control the flow of water.
Vandal Resistant	Refers to special parts applied to a faucet making it difficult to remove. Uncommon tools are used for installation or disassembly to prevent possible vandalism. Vandal-resistant stoppers are removable only by partially disconnecting the lift linkage in the drain line.
Vanity	A storage cabinet beneath the counter usually found in bathrooms.
Variable flow	Term used to describe water flow which may be adjusted in intensity.
Variable flow valve	A serviceable component that controls the water flow rate to the Body

Terms	Description
	Jets (or Flexjets).
V-clip	A "V"-shaped clip used on the lavatory drain lift linkage to easily adjust the connection between the drain and the lift rod.
Velocity Head	The amount of energy required to accelerate water to a given velocity; expressed in feet per head
Vent	A pipe that allows air into a drain system to balance the air pressure, preventing water in the traps from being siphoned off.
Vent Header	A vent pipe into which several vents connect. The vent pipe leads to the vent stack and out of the building.
Vent stack	The portion of the drain-waste-vent system of a building's plumbing which provides an opening to the atmosphere. It helps maintain the trap seal against backflow of harmful gasses. Without venting, the water traveling down drains could siphon all the water out of a trap.
Venting Materials	Materials used for venting, i.e. PVC, CPVC, ABS, metal.
Venturi	A short tube with a tapered constriction in the middle that causes an increase in the velocity of flow of a fluid and a corresponding decrease in fluid pressure and that is used for creating a suction in a vacuum pump.
Vessel	A style of basin that installs partially into the counter rather than fully into the counter. The portion of the fixture rising above the counter has a finished exterior.
Vessel Sink	A lavatory, reminiscent of china washbasins with finished inside and outside walls, that is designed to sit on the countertop.
Vikrell	Advanced composite material that is pressure- and heat-molded from a mixture of polyester, resin and fiberglass.
Viscosity	The resistance of fluids to flow, due to internal forces and friction between molecules, which increases as its temperature decreases.
Vitreous	Surface material on some plumbing fixtures derived from or consisting of glass, translucent, and low on porosity.
Vitreous China	Ceramic materials fired at high temperature to form a non-porous body, having exposed surfaces coated with ceramic glaze fused to the body. This is used to form bathroom fixtures such as toilets, bidets, and lavs.
Volatile	Capable of vaporization at a relatively low temperature.
Volt	Unit of measure of electromotive force
Volumetric	Referring to measurement by volume rather than weight.
Volute casing	Derives is name from a spiral shaped casing surrounding the pump impeller. It converts velocity energy to pressure energy.
Voral Tube	Flexible steel hose used for hand-held shower sprays.
Wall Bracket	An adjustable bracket which attaches to a slide bar or hanger allowing the user to pivot and rotate the position of a handshower.
Wall Thickness	The thickness of the tubing wall.
Wash	Type of sink furnished with multiple wash stations.
Wash Fountain	Hand washing fixture providing lavatory function for two or more persons simultaneously.

Terms	Description
Washdown Water Closet	Water closet having a siphon trapway at the front of the bowl, and integral flushing rim.
Washer	A small disc that keeps a screw or bolt secure to prevent leakage
Waste & Overflow	The drain assembly for a bathtub. The drain at the top removes the overflow water during tub filling and the drain at the bottom removes waste water when the tub is drained.
Waste Arm	Drain extension pipe, usually to extend a sink drain into a wall.
Waste Plug	Drain stopper on a bathtub drain
Waste Shoe	Bathtub drain assembly
Waste Stack	See Soil Stack. The vertical main pipe in a drainage system, extending one or more stories.
Water Closet	Industry term for toilet.
Water Cooler	A fixture which includes a refrigeration system for chilling drinking water.
Water Hammer	A loud banging noise caused by the hydraulic shock of suddenly shutting off a water supply, where water moves against the side of containing pipe or vessel.
Water Hammer Arrestor	A device installed near a fixture to absorb the hydraulic shock caused by a sudden shutoff of water.
Water Pressure	The rate, measured in terms of pounds per square inch (psi), with which water flows into a house. Normal pressure is between 50 psi and 60 psi, and should not drop below 30 psi or rise higher than 80 psi.
Water Purifier	Purifying systems vary from the very basic (reducing water's bad taste and odor) to advanced (removing everything from the water and automatically shutting off with you need to change the filters). Cost, storage capacity, and water usage are all factors in which system you purchase.
Water Saving Toilet	A classification of toilet which uses no more than 3.5 gallons and no less than 1.6 gallons per flush.
Water Service Pipe	The pipe from the water main or other sources of potable water supply to the water-distributing system of the building served.
Water Softening	To exchange sodium for the hardness in water by ion exchange.
Water Spot	Water surface in the toilet bowl once the flush is completed.
Water Table	Level below the earth's surface at which the ground becomes saturated with water.
Water Hammer Suppressor	Typically a short vertical run of pipe or tubing designed to hold air and maintain a buffer from the water hammer that may occur when a high-flow faucet is turned off.
Waterway Fitting	A channel through which water can flow; connects water heater to inlet and outlet lines.
Watt	A unit of electrical energy or power. One ampere x one volt equals one watt.
Watt Density	Amount of watts concentrated per square inch of element blade surface area.
Wave Washer	A washer, common in drain linkages, which provides pressure against

Terms	Description
	a ball or other mechanism even when the opposing nut is not fully tightened
Wax Ring	A toilet bowl gasket designed to form a seal between the toilet base and the floor or closet flange. It typically fits over either a 3" or 4" outlet, is wide enough to fill modest gaps, and should maintain a seal despite bowl or building movement.
WC	Water Closet
Weak Well	Weak well application occurs when the pump lowers the water level in the well faster than the well can replenish itself.
Weir	A long notch with a horizontal edge, as in the top of a vertical plate or plank, through which water flows, used in measuring the quantity of flowing water.
Well Casing	A steel or plastic pipe inserted into a drilled well to prevent dirt and debris from contaminating the water
Wellpoint	A pipe fitted with a driving point and a fine mesh screen used to remove underground water. A complete set of equipment for drying up ground including wellpoints, connecting pipes and pumps.
Wet Vent	A wet vent is a vent that also serves as a drain.
WH	White finish on faucets
Whirlpool	Bathtub fitted with jets which propel a current of warm water in a swirling motion.
Widespread	A style of bathroom lavatory faucet having separate spout and handles, usually 8" from center of handle to handle.
Wing nut	A nut designed to be tightened by hand. The wings on the nut provide the gripping surface. Never use tools to tighten a wing nut, as it may cause damage to another part of the product.
Winterizing	The process of preparing plumbing fixtures and fittings to withstand freezing temperatures. For toilets, this involves draining the tank and, since water in the bowl provides a seal against sewer gas entering the residence, adding sufficient anti-freeze to the bowl to prevent freezing. For faucets, pay special attention to looped hoses containing water below the counter surface and to multi-function showerheads which typically retain water between uses.
With sidespray	Kitchen sink faucet included with a separate side handspray for added utility. Sidespray can be mounted through the faucet escutcheon plate or through a separate fixture drilling (hole).
Without sidespray	Kitchen sink faucet not included with a separate side handspray.
Working Pressure	Maximum pressure of the operating system permissible.
Working Water	Water used in a home for most general purposes including bathing and laundering
Wrench	A wrench is a spanner-like tool used for gripping and turning.
Wristblade Faucet Handle	ADA-compliant faucet style that can readily be used by physically challenged individuals and in hospital or commercial settings.
Wristblade Handle	ADA-compliant faucet style that can readily be used by physically challenged individuals and in hospital or commercial settings.
Wrought Copper Fittings	Plumbing fittings used to connect copper tubes made of mechanically worked and toughened copper as opposed to an as-cast brittle

Terms	Description
	copper.
Wye	A Y-shaped fitting with three openings used to create branch lines. Allows one pipe to be joined to another at a 45 degree angle.
ХН	Extra Heavy
XL	Extra Large
XLG	Extra Long
XS	Extra Small
Yellow Tipping	A flame condition caused by too severe a reduction in primary air. The yellow color is caused by glowing carbon particles in the flame. It can be corrected by the injection of more primary air.
Yoke	Usually a brass casting that holds both the hot and cold valves and the mixing chamber for the water. May also refer to an assembly of copper or other metal which serves the same function.
Zeolite	A group of hydrated sodium aluminosilicates, either natural or synthetic, with ion exchange properties.
Zero Soft	Water with a total hardness less than 1.0 grain per U.S. gallon, as calcium carbonate.
Zone of Aeration	The layer in the ground above the water table where the available voids are filled with air. Water falling on the ground percolates through this zone on its way to the aquifer.
Zone of Saturation	The layer in the ground in which all of the available voids are filled with water.