PLUMBING TERMS

- **WATER PRESSURE** – measured in pounds per square inch (psi) 60 PSI is standard, although many homes have up to 80 PSI. If clients have poor water pressure they should use ¾" piping. Flow through a valve is measured in GPM (gallons per minute) the legal maximum is 2.5 GPM per function

- **VOLUME CONTROL**- also known as shut offs and are used in multi-function plumbing systems. They are used as an on/off in conjunction with the mixing valve. Used when building Custom JACLO shower systems

- **ROUGH** – the part of the valve that goes inside the wall, on which the trim will sit.

- **STEM** – the piece of the valve over which the decorative trim sits on

- **CARTRIDGE**- the working mechanism of the valve. Most faucets will have a ¼ turn ceramic disc , thermostatic or pressure balance cartridge

- **ESCUTCHEON** – piece that covers wall and floor penetrations for supply lines, shower arms & drains

- **TRIM**- the decorative piece that goes on the rough (the part you see)

- **TUB SPOUT**- this can be wall mounted or deck mounted (commonly called roman tub set) When selling any tub spout make sure the reach and height will clear the tub deck. In the case of a roman tub set, be sure to check the placement of the set on the tub. It needs to be reachable. Wall spout and deck sets can come either with or without a diverter built-in. If you are using wall valves/volume controls never use a spout that has a diverter built-in. It is not necessary. When selling a roman tub spout, try to sell the set that includes a hand shower. This makes cleaning the tub much easier.

- **TUBS**- be careful when ordering tubs. Do not use steps when designing a tub. They make in uncomfortable to get into the tub and can be very slippery. Too wide of a tub is uncomfortable because there is nowhere to put your arms. A tub too large, in general, takes too long to fill and use too much water.

- **DIVERTER** – a valve that directs water from one place to another. With a diverter only ONE FUNCTION can operate at a time. There are 3, 4 and 5 port diverters, a three port diverter, which has one in from the mixing valve and two outs. The two outs are for two functions (such as a shower head and tub spout). A four port diverter has two INS and two outs and a five port diverter has 2 ins and 3 outs. Just remember, no matter how many outlets the diverter has only one function can operate at a time.

- **HANDSHOWER**- hand showers can come on a bracket and on a bar. The hand showers have several advantages:
  It makes shaving in the shower much easier
  It makes cleaning the tub/shower easier
  If a client is injured or in a cast it makes showering easier
  If someone wants to shower but not get their hair wet
  A hand shower on a bar acts as a secondary showerhead

- **LAV SET**- the proper name for a bathroom faucet. They come in single hole, 4" spread, 8" spread (most commonly displayed in showrooms) and 12" spread. The SPREAD is the distance from the center of left hole to the center of the right hole. Make sure you check to the height and projection of the faucet. If someone is putting a medicine cabinet in, you want to make sure the cabinet will clear the faucet. Some sinks come pre-drilled. When this is the case make sure you sell the correct spread. Be careful and ask questions.

- **ABOVE COUNTER SINK** – (also known as a "drop-in sink) a sink that has a lip on it. This type of sink can be used with virtually any countertop surface (corian/granite/tile/concrete/formica). If the sink has pre-drilled holes you must sell a faucet that will fit the spread on the sink. If it does not have pre-drilled holes makes sure that you leave 2 ½" in front of the sink and at least 2 ½" in back of the sink for the faucet. For example: if the sinks overall size is 15 x 19" then the countertop must be at least 20" deep.

- **UNDERCOUNTER SINK** – this sink is mounted under the countertop. This means there is no visible lip. In this type of sink you do not need to worry about which spread lave set to use but you still need to have at least 2 ½" in the back of the sink. With an under mount sink you can not use tile of Formica as a countertop. The hole that is cut out to accommodate the sink needs to be finished. Formica and tile (for the most part) do not have that capability.

- **VESSEL SINK** these popular sinks sit on top of the counter or are semi recessed common types are copper, glass, tiled and carved porcelain, hand painted porcelain, and crystal LINKASINK , LeBijou and ZOLI are excellent sources

- **PIPE SIZE**- ½" & ¾" are standard sizes for baths and kitchens, ¾ pipes are needed for large tubs, when more than one function is going to be operated simultaneously and when rain bars are being used.

PRESSURE BALANCE VALVE

- Regulates the ratio between the hot and cold water
- When something else is turned on/off or flushed the pressure balance valve will shut down the hot/cold water to maintain the ratio between the hot and cold. You will loose some pressure through this process.
- Anti-scald function
- Pressure balance valves should NOT be used in multi-outlet systems (using more than one function at a time)
- Pressure balance valves are good for shower only, shower/tub combo with use of a diverter and shower/tub/hand shower combo with use of a diverter. (the diverter will divert from one function to the next and only one function will occur at a time)
- Try not to sell the pressure balance valve with volume control built-in
- If a client wants the pressure balance with volume control built-in they can only use it for single function scenarios
- Be careful when specifying a pressure balance valve. High-rise buildings sometimes have the water supply on the roof. If this is the case, an end user that lives on the higher floors will have less pressure than that of the people on the lower floors. In these cases use a Thermostatic system.

THERMOSTATIC VALVE

- Regulates the temperature within a degree or two in either direction
- Stays at a constant temperature no matter what else is turned on/off or flushed
- Thermostatic valves with volume control can be used in 3 instances:
    1. shower only function
    2. tub/shower function (with diverter)
    3. tub/shower/hand shower function (with diverter)
- Central thermostatic valves are used with wall valves/volume controls
- When the end user wants more than one function to work at the same time(2 shower heads/showerhead and hand shower/showerhead/body sprays,etc.) this is the valve that should be specified
- When either of these thermostatic valves are used the plumber needs to calibrate the valve (this is very simple, They just need to read the directions)
- Not only does the thermostatic valve regulate the temperature but it allows you to regulate the pressure coming out of the function
- This is great for children's bathrooms. You can set the temperature and it will remain constant. The child does not have to keep adjusting the water.