



**PLUMBING  
MATERIALS**



# COMMON PLUMBING MATERIALS

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# PEX *(cross-linked polyethylene)*

USE = SUPPLY\*

- Varieties and Qualities
  - PEX A
    - more flexible
    - requires a special tool for fitting pipes
  - PEX B
    - is more commonly used
    - requires a crimping tool
    - it is what we use
  - Common Colors
    - White, Blue, Red
  - Common Sizes
    - 1/2", 3/4", 1"



\*Notes

- SUPPLY definition: "Pipes that bring water into the house and connect to fixtures"
- DRAIN definition: "Pipes that are used for taking waste water away from the house"
- SCHEDULE definition: "Referring to the thickness of PVC pipes"

# PVC *(polyvinyl chloride)*

USE = DRAIN and SUPPLY\*

- Varieties and Qualities
  - Thin-wall or Schedule\* 30
    - often used for drain-fields, septic systems, and gutter applications
    - used only for drain
  - Schedule\* 40
    - most common variety
    - used for drain and supply
  - Schedule\* 80
    - typically only used for water supply
    - it is a dark gray color
    - used only for supply
  - Common Sizes
    - 3/4", 1", 1.5", 2", 3", 4"



# COPPER

USE = DRAIN\* and SUPPLY\*

- Varieties and Qualities
  - Type K
    - used for supply
    - used for main waterlines and underground lines
  - Type L
    - interior branch water supply lines
    - used for new construction
  - Type M
    - interior branch water supply lines
    - used for repairs
    - thinner than L and K
  - DWV (drain waste vent) Copper
    - used for drain waste and venting
    - often has yellow markings to distinguish it
  - Common Sizes
    - 1/2", 3/4", 1"





# GALVANIZED

USE = DRAIN\* and SUPPLY\*

- Varieties and Qualities
  - This pipe can be used for water supply line underground and as interior branch lines
  - This pipe can be used for drain applications as well
  - It can be bought in the form of a nipple\* or long sections that would require a threader to connect pipes
  - We try not to use galvanized pipe because of its corrosive properties
  - Common Sizes
    - 3/4", 1", 1.5", 2"



\*Notes

- NIPPLE definition: "a nipple is a fitting, consisting of a short piece of pipe, usually provided with a male pipe thread at each end, for connecting two other fittings"

# CPVC *(chlorinated poly (vinyl chloride))*

USE = SUPPLY\*

- Varieties and Qualities
  - There is just one type of CPVC. It is a variety of PVC but is typically put into a separate category since it is only used for water supply applications.
  - It requires yellow one step glue to connect fittings
  - It is generally used in high end homes and does not function well for repairs or replacements
  - Common Sizes
    - 1/2", 3/4", 1"



# CAST IRON

USE = DRAIN\*

- Varieties and Qualities
  - This pipe is used only for drain applications
  - Joining methods include lead, cement and sand, 'Philplug', red lead putty or rust cement
  - We do not install cast iron
  - Common Sizes
    - 2", 3", 4"



# CLAY

USE = DRAIN\*

- Varieties and Qualities
  - This pipe is used only for drain applications
  - Clay can only be used as underground drain pipe
  - We do not install clay
  - Common Sizes
    - 3", 4"



# STAINLESS STEEL

USE = SUPPLY\*

- Varieties and Qualities
  - Stainless Steel is a higher end water supply material that is typically used for pipe fittings (refer to fittings booklet)
  - Stainless Steel is very resistant to corrosion so is great for people that have acidic water.



# BRASS

USE = SUPPLY\*

- Varieties and Qualities
  - The Primary use for Brass is for fittings (refer to fittings booklet)
  - Brass is not as resistant to corrosion but is still a very quality plumbing material



# BLACK IRON

USE = SUPPLY\*

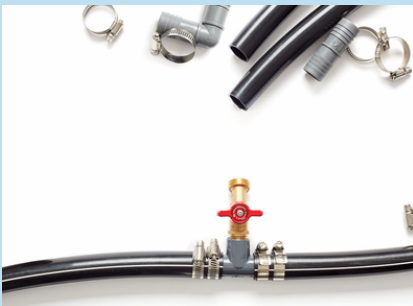
- Varieties and Qualities
  - It is used in building sprinkler systems
  - It is also used as gas line so working around it should be done carefully
  - Common sizes: 1/2", 3/4", 1", 1.5", 2"



# BLACK POLY

USE = SUPPLY\*

- Varieties and Qualities
  - Black poly can be most commonly found being used for main waterlines going from the water meter to the house
  - It is also used for well pipe
  - The two most common varieties are 100PSI, 150PSI, and 200PSI
  - Common sizes: 3/4", 1"





# BLUE POLY

USE = SUPPLY\*

- Varieties and Qualities
  - Blue poly can be most commonly found being used for main waterlines going from the water meter to someones house
  - Connection types include Sharkbite and compression style fittings compatible with CTS (copper tube size) pipe
  - Common sizes: 3/4", 1"
  - We don't Install blue Poly



compression fitting for blue poly



# QUEST

USE = SUPPLY\*

- Varieties and Qualities
  - Quest pipe was recalled years ago and is typically good to remove from houses
  - Connection types are crimp rings and compression fittings
  - Common sizes: 1/2", 3/4"



# TUBULAR PIPE

USE = DRAIN\*

- Varieties and Qualities
  - Tubular pipe is typically seen under sinks where there are P-traps
  - It uses rubber washer compression style connections
  - Common sizes: 1 1/4", 1 1/2"



# **STREAMLINE PLUMBING**

GUIDE 1