CTE Frameworks - Plumbing Equipment List

September 2023

## Suggested Equipment List

### Safety & Compliance Gear

* First Aid Kit
* Safety Glasses / Goggles
* Aprons
* Ear Protection (Earplugs or Earmuffs)
* Hard Hats & Safety Vests
* Work Gloves (general, high dexterity, and insulated)
* Dust Masks / Respirators (basic level)
* Knee Pads
* Steel-Toe Boot Covers (if students do not wear their own boots)
* Lockout/Tagout Kits
* GFCI Outlets
* Welding Jackets
* Welding Hood
* Fire-Resistant Blankets
* Fire Extinguisher (ABC and electrical rated)
* Emergency Eyewash Station (portable or wall-mounted)
* Ventilation System
* Barricade Tape, Safety Cones, Hazard Signage

### Classroom Technology

* Student Laptops/Desktops – capable of running CAD/simulation programs
* External Monitors (optional)
* Smartboard or Projector
* Printer, 3D Printer (optional)
* Headphones or Headsets
* Document Camera
* Wireless Presentation Clicker
* Digital Polling Tools (e.g., Kahoot, Quizizz, Blooket)

### Software

* Microsoft 365 (Word, Excel, PowerPoint, Teams, Outlook)
* CAD Software

### Pipe Working Tools

* Pipe Cutters
* Pipe Benders
* Pipe Reamers / Deburring Tools
* Threaders (manual or powered)
* Pipe Dies and Die Heads (various sizes)
* Power Threading Machines
* Beveling Tools
* Pipe Vises (various)
* Pipe Welding Stands
* Pipe Sizing Guides (manual or digital)

### Cutting & Drilling Tools

* Metal Hand Saw
* PVC Cutters
* Shears
* Hole Saws
* Angle Grinders with Cutoff/Grinding Discs
* Pneumatic Grinders
* Power Saws (wood, metal, plastic, concrete)
* Electric and Battery-Operated Drills
* Power Flaring Tool

### Joining & Sealing Tools

* Soldering Kits
* Press Fitting Tools (e.g., ProPress)
* PEX Crimp/Expansion Tools
* Pipe Dope, Teflon Tape
* Wrenches & Pliers
* Adjustable Wrenches
* Pipe Wrenches
* Strap Wrenches
* Specialty Wrenches (chain, spud, strainer, element removal)
* Locking Pliers
* Widemouth Pliers

### Fastening & Hand Tools

* Screwdrivers
* Thread Repair File
* Wire or Cable Cutters
* Clamps
* Magnets
* Crowbar

### Measuring & Layout Tools

* Tape Measures
* Levels (torpedo, laser)
* Plumb Bobs
* Chalk Lines
* Squares & Combination Squares

### Inspection & Testing Tools

* Inspection Cameras
* Test Plugs and Inflatable Test Balls
* Flow Gauges
* Pressure Indicator Gauges
* Drain & Fixture Tools
* Plungers
* Drain Snakes
* Pullers (compression sleeve, faucet handle, faucet stem/cartridge, tub drain)

### Worksite Essentials

* Ladders
* Slings
* Air Compressor
* Potable Water Supply
* Gas Utilization Source (natural gas, propane)
* Access to Applicable Plumbing Code Books (state-specific)

### Welding Equipment & Accessories

* Stick Welder (SMAW)
* TIG Welder (GTAW)
* Welding Gauges (for tip sizes, gas pressures, etc.)
* Oxy-Acetylene Torch Kit
* Cutting Tips and Filler Rods
* Electrode Holders
* Ground Clamps & Leads
* Beveling Tools
* Pipe Welding Stands
* Positioners / Rollers
* Soapstone Markers
* Chipping Hammers
* Wire Brushes
* Angle Grinders
* Magnets