

1. A. ALL WORK SHALL BE DONE in accordance with the Florida Building Code 2020, 7th Edition and with all applicable regulations.
- B. DRAWINGS: Refer to all drawings for coordination of the plumbing work.
- C. ARRANGE AND PAY for all permits, licenses, inspections and tests. Obtain the required certificates and present to owner.
- D. GUARANTEE: The completed installation shall be fully guaranteed against defective materials and/or improper workmanship for a minimum of one year for material and labor.
- E. ALL HORIZONTAL SANITARY PIPING 3" and larger shall slope at 1/8 inch per foot minimum. All piping 2" and smaller shall slope at 1/4" inch per foot minimum.
2. SHOP DRAWINGS: Contractor shall submit for approval, within 30 days of signing contract, a minimum of five copies of fully descriptive literature, including but not limited to: water heaters, and plumbing fixtures. No work shall proceed without the approval of these submittals.
3. PLUMBING FIXTURES: Fixtures shall be as specified and shall be furnished and installed by this contractor. Fixtures shall be complete with drains, traps, supplies and any other accessory required.
4. MATERIALS:
 - A. PIPING:
 - a. Soil, waste and vent, above ground: Cast-Iron Soil Pipe, no hub fittings with S.S clamps & rubber gaskets.
 - b. Domestic water: Copper pipe, Type L with sweat wrought copper fittings. Type "M" in concealed spaces is acceptable. Isolate piping from concrete with insulating material.
 - c. Condensate drain: DWV Copper pipe and fittings.
 - d. P & T Relief and Drain Pan lines: DWV Copper pipe and fgs.
 - e. Domestic water supply assembly: Chrome finish tubing with angle shut off valves.
 - B. Insulation:
 - a. Hot water & hot water return: Provide 1" thick fiberglass pipe insulation with jacket and self sealing flaps.
5. ALL AUTOMATIC ELECTRIC water heaters shall meet the standards of the latest state energy efficiency code.
6. PIPING TEST AND DISINFECTING:
 - A. Test: All sanitary and domestic water supply piping shall be tested for leaks before piping is concealed or connected to equipment and plumbing fixtures.
 - B. Disinfecting: All domestic water piping shall be disinfected by introducing a solution of calcium hypo chlorite of 50 parts per million of chloride and as per AWWA Standards.
7. VALVES: Domestic water valves shall be of bronze body, sweat ends.
8. HOSE BIBBS: Shall be 1/2 inch, rough brass construction with shut off valve and vacuum breaker.
9. ALL OUTDOORS FLOOR clean outs shall be terminated up to grade and shall be marked.
10. CONTRACTOR SHALL COORDINATE exact location of sanitary, storm and domestic water piping before starting any work. Notify Architect/Engineer of any deviations from design drawings.
11. PLUMBING CONTRACTOR SHALL review structural drawings prior to bidding to fully familiarize himself with project.
12. CLEAN OUTS:
 - A. Wall: Josam 58890-15
 - B. Finished Floor Josam 56020-88-15
13. CONTRACTOR to fire protect and seal all openings and pipe penetrations thru fire rated walls and ceiling. Materials and methods of fire rating shall be approved by the local product control approval department and shall be U.L. listed.
14. PROVIDE CEILING/WALL ACCESS DOORS where indicated on drawings and when required to access mechanical equipment. Doors shall be recessed type, fire rated if in fire rated wall or ceilings. As manufactured by Korp model RDW and KATR.
15. SAW OR CUT CORE DRILL slab as required to install plumbing work. Patch slab to match existing and seal all penetrations to maintain fire rating of floor.

