

PLUMBING FIXTURE CALCULATIONS

LEGEND

PLUMBING FIXTURE SCHEDULE

PLUMBING GENERAL NOTES

Table with columns for WASTE and WATER. Rows include GREASE DRAINAGE, 2 1/4" COMP SINK, (1) 1/2" COMP. PREP SINK, HAND SINK, MOP SINK, AREA FLOOR DRAIN, AREA TRENCH DRAIN, INDIRECT RECEPTOR, SANITARY SEWER, WATER CLOSET, 1.6 GPF, URINAL, LAVATORY, HANDSINK, AREA FLOOR DRAIN, AREA TRENCH DRAIN, INDIRECT RECEPTOR, SUBTOTAL S.S., TOTALS.

LEGEND SYMBOLS table. Includes symbols for WASTE PIPING, VENT PIPING, COLD WATER PIPING, HOT WATER PIPING (140°), HOT WATER PIPING (110°), GAS PIPING, FLOOR CLEAN-OUT, EXTERIOR CLEANOUT, WALL CLEANOUT, HUB DRAIN, FLOOR DRAIN, FLOOR SINK, GATE VALVE, CHECK VALVE, MIXING VALVE, BACKFLOW PREVENTER, GAS COCK AND UNION, PLUG CLEAN OUT, TRAP PRIMER, GAS VALVE W/ 6" DIRT LEG, VENT THRU ROOF, DRAINAGE FIXTURE UNIT ABOVE FINISH GRADE, EQUIPMENT CALLOUT, REFER TO SHEET K-1 FOR DESCRIPTION.

PLUMBING FIXTURE SCHEDULE table. Includes items P-1A through P-19. Details include ZURN 25855, WHITE VITREOUS CHINA WITH ELONGATED BOWL, ZURN 26000AV-WSI-DF DUAL FLOW MANUAL FLUSH VALVE, HERCULES 90241 JUMBO WAX RING, JONES CO2-993 ANCHOR BOLT PACKAGE, ZURN 26665, 1.28 GPF WHITE VITREOUS CHINA WITH ELONGATED BOWL, ZURN 25955SS-EL OPEN FRONT SEAT, ZURN 26000AV-WSI-DF DUAL FLOW MANUAL FLUSH VALVE, HERCULES 10191 WAX RING (90241), JONES CO2-993 ANCHOR BOLT PACKAGE, ZURN MODEL #Z5798.207.00 WHITE VITREOUS CHINA WALL MOUNTED, (LOW FLOW 1/8 GALLON PER FLUSH) MANUAL FLUSH VALVE, ZURN 21221 PLATE TYPE URINAL CARRIER AND JONES G13-002 WAX GASKET WITH HORN - URINAL, ZURN 25344 20x18 WHITE CHINA LAVATORY W/ 4" CENTERS, ZURN 21231 LAV CARRIER, ZURN 286500-XL-G-PT METERING CENTERSET FAUCET, ZURN 21021-1-1/2" WATER SAVER TRAP PRIMER, TRUEBRO 102-EZ (82193) LAV GUARD TRAP AND SUPPLY COVER F/ TUBULAR P-TRAP, 2 ANGLE STOPS & 2 SUPPLIES, ZURN MODEL #Z415-58-3NH, WASTE DRAIN, 5" RD., NICKEL BRONZE. PROVIDE ZURN FUNNEL MODEL: Z329-7 AT HEAT WELL FLOOR DRAIN, ZURN MODEL #Z415-58-3NH, WASTE DRAIN, 5" RD., NICKEL BRONZE, UNIVERSAL STAINLESS MODEL #EHS-TRL WITH 6" DEEP BOWL. FURNISHED WITH BASKET DRAIN, WALL BRACKET, AND FAUCET. STAINLESS STEEL 300 SERIES. ZURN #Z-81281-XL-TWM FAUCET, CHICAGO # K91-010 QUICK-WASH HAND WASH FAUCET CONTROL. FURNISHED BY OWNER (FROM HED), ZURN FD2375-NH3-H, DRAIN GRATE, 3" FLOOR SINK, ZURN 219001 1/2 GRATE, ZURN 21315-3/4x10 SERIES, FREEZELESS, AUTOMATIC DRAIN, VACUUM BREAKER, BRASS FINISH, AND STAINLESS STEEL TUB. MOUNT AT 18" A.F.G., ZURN ZS-1468 INTERIOR WALL CLEANOUTS SHALL HAVE CLEANOUT BODY PLASTERED OR TILED IN THE WALL TO THE FACE OF THE BODY FLUSH WITH THE FINISHED WALL. 3" IPS, BRONZE PLUG W/ 7" SS COVER & SCREW, INTERIOR SHALL BE ZURN ZN1400-4NH-HD-T, 4" NO HUB CONNECTION CAST IRON FLOOR CLEANOUT W/ HEAVY DUTY VENEER POLISHED NICKEL BRONZE SQUARE TOP, EXTERIOR CLEANOUTS SHALL BE ZURN ZN1400-4NH-8-T, 4" NO HUB CONNECTION CAST IRON CLEANOUT W/ POLISHED NICKEL BRONZE SQUARE TOP AND VANDAL RESIST. SCREW, A.D. SMITH MODEL #81X 100 OR STATE MODEL #S15-8-100 90° CON. 100,000 BTU INPUT WITH 90% EFFICIENCY FOR A RECOMMENDED 15 GPM AT TEMPERATURE RISE OF 100°F. P.C. SHALL PROVIDE CONCENTRIC JOINT KIT AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. ZURN HX130, 56 1/2 W.P. EXPANSION TANK, UNIVERSAL STAINLESS MODEL #N1824-2024 STAINLESS STEEL SINK, ZURN ZB4201-4 PREP W/ WALL MTD FAUCET, 6" CTRS, POLISHED CHROME PLATED PRERINSE, 3/8" SHORT SWIVEL NICKEL CHROME STOPS, VANDAL RESISTANT COLOR CODED METAL LEVER HANDLES, 24" RISER, 36" SS SPRING HOSE, 1" DIA. SIF. CLOSING - RINSE LEAD FREE, ZURN #Z-63-101 SWIVEL SWING 8" LEAD FREE POLISHED CHROME PLATED SINK FAUCET W/ SHORT SWIVEL INLETS, 8" CAST BRASS SINK SPOUT, 2.2 GPM PRESSURE COMPENSATING AERATOR AND VANDAL RESISTANT COLOR CODED METAL LEVER, ZURN #Z28600 POT AND VEGETABLE SINK LEVER WASTE CHROME PLATED TWM DRAIN W/ SLP NUT AND BLIND CAT. 1 1/4" OVERFLOW, FOR 3 1/2" SINK OPENING, STANDARD 2" NPT MALE OUTLET. FURNISHED BY OWNER (FROM HED), ZURN Z1996-24-BV MOLDED STONE SINK W/ VINYL GRID, BRASS DOME. ZURN (36"x36"x12") OR AORN TSH-36 TERRAZZO MOP BASIN. ZURN ZB43M1-RC SERVICE SINK FAUCET CHROME PLATED WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAL HOOK AND 3/4" HOSE THREAD ON SPOUT; ZURN HOSE AND HOSE BRACKET, 30" LONG FLEXIBLE, HEAVY DUTY 5/8" RUBBER HOSE, CLOTH REINFORCED WITH 3/4" BRASS COUPLING AT ONE END, ZURN CAST IRON BODY FLUSHING FLANGE WITH ADJUSTABLE NICKEL BRONZE HUB, UNIVERSAL STAINLESS MODEL #N1824-RD24 WITH FAUCET ZURN Z-80012-AF-11F ADD ON FAUCET, 14" SPOUT. FURNISHED BY OWNER (FROM HED), SEE DETAIL 10/P7, DARLING INTERNATIONAL CLEANSTAR 1500-D DIRECT PUMP GREASE TANK WITH 120 VOLT, 20 AMP DEDICATED CIRCUIT AND A CAPACITY OF 200 GALLONS OF USED COOKING OIL, ZURN Z1385-2-3/4-1B-WH FLOOR/GROUND POST HYDRANT WITH 3/4" NPT INLET WITH OPTIONAL REMOVABLE LOOSE TEE KEY, NON FREEZE, ZURN 1-ZW1070-XLC, 1" LEAD FREE THERMOSTATIC MIXING VALVE, WILKINS NR3XLDU 1 1/2" DIP 25-75 PSI DOUBLE UNION PRESSURE REDUCING VALVE AS REQUIRED.

PLUMBING PACKAGE FURNISHED BY OWNER. EQUIPMENT FIXTURE CONNECTIONS table with columns: MARK, DESCRIPTION, WASTE, FW*, CW, NOTES. Includes COFFEE/TEA BREWER, 12 HD. BEV/ICE DISP., 10 HD. BEV/ICE DISP., DOUBLE CARBONATOR, HOT WATER DISPENSER, ICE MAKER.

BACKFLOW PREVENTION SCHEDULE table with columns: EQUIPMENT, MEDIUM HAZARD APPLICATIONS (SEE NOTE 1), HIGH HAZARD APPLICATIONS (SEE NOTE 1 & 2). Includes ICE MACHINE, TEA/COFFEE BREWER, DRINK SYSTEM (CARBONATOR), HOSE BIBB, WATER FILTER, WATER HEATER, MOP SINK, COLD WATER MAIN.

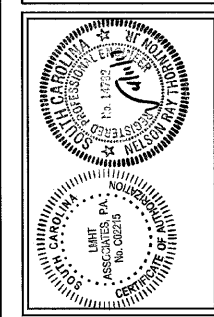
WATER HAMMER ARRESTOR SCHEDULE table with columns: I.P.S., F.U. RATING, SIOUX CHIEF ITEM, REMARKS. Includes rows for 3/4", 1", and 1 1/2" ratings with item numbers like 652-A, 653-B, 654-C, 655-D, 656-E, 657-F.

UTILITY SUMMARY table with columns: WASTE, WATER, DOMESTIC WATER (FU), DEMAND (GPM), MAX. WATER DEMAND (MBH), KITCHEN, HEATING, WATER HEATER, TOTAL. Includes sub-table for PLUMBING PACKAGE FURNISHED BY OWNER with columns: WASTE, WATER, DOMESTIC WATER (FU), DEMAND (GPM).

ABBREVIATIONS table with columns: ABBREVIATION, DESCRIPTION. Includes BFP, CP, CO, DFU, EF, EX, FD, FS, GC, GI, HS, ID, LAV, MS, NC, NO, ON, OD, O/S, OF/S, PRV, RIU, TP, TYP, UR, WC, WH, WHA.

PLUMBING GENERAL NOTES. 1. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR. CONTRACTOR SHALL INSTALL SYSTEMS, EQUIPMENT & COMPONENTS IN ACCORDANCE WITH MINIMUM REQUIREMENTS SHOWN IN THESE PLANS... 2. IT WILL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO INSURE THAT ITEMS TO BE FURNISHED UNDER PLUMBING CONTRACT WILL FIT THE SPACE AVAILABLE... 3. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR WATER, VENT, AND WASTE SYSTEM TESTS... 4. INSTALL ALL PLUMBING FIXTURES TO BE FULLY ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990... 5. THE SCHEDULED AND/OR SPECIFIED PLUMBING FIXTURES AND EQUIPMENT REPRESENT THE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR THE CONTRACTOR'S BASE BID... 6. GENERAL CONTRACTOR SHALL PROVIDE ALL OPENINGS IN WALLS, FLOORS, AND ROOF WITH EACH CONTRACTOR BE RESPONSIBLE FOR VERIFYING LOCATION AND SIZES... 7. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO KITCHEN EQUIPMENT THAT REQUIRES WATER AND/OR WASTE CONNECTIONS... 8. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR APPROVED FLOOR PLAN AND DIMENSIONS... 9. ANY DEVIATIONS FROM SPECIFIED PLUMBING FIXTURES AND LISTED IN FIXTURE SCHEDULE SHALL OBTAIN PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE... 10. EXISTING WASTE/VENT AND WATER SUPPLY LINES AND FIXTURES ARE SHOWN IN APPROXIMATE LOCATION... 11. IT WILL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER PLUMBING CONTRACT WILL FIT THE SPACE AVAILABLE... 12. PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL PRIME CONTRACTORS PRIOR TO INSTALLATION... 13. MECHANICAL DUCTWORK SHALL HAVE RIGHT-OF-WAY OVER ALL PLUMBING PIPES AND ELECTRICAL CONDUITS... 14. PLUMBING CONTRACTOR SHALL COORDINATE WITH EQUIPMENT SHEETS... 15. ALL PLUMBING LINES ARE TO BE RECESSED WITHIN THE WALL CAVITIES UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS... 16. ALL PLUMBING FIXTURES SHALL BE NEATLY CAULKED WITH SILICONE COMPOUND WHERE FIXTURE MEETS WALL... 17. ALL PIPES PASSING THROUGH FLOOR SLAB OR WALLS SHALL BE INSTALLED WITH FOAM RUBBER INSULATION... 18. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL A BACKFLOW PREVENTER OR VACUUM BREAKER AT ALL FIXTURE CONNECTIONS AND AS REQUIRED BY LOCAL CODES... 19. WHERE THERE IS DANGER OF NON-POTABLE WATER COMING IN CONTACT WITH THE POTABLE WATER SYSTEM OR ANY DANGER OF BACK-FLOW, COORDINATE WITH LOCAL INSPECTOR... 20. WHERE TUBING PASSES BEHIND STUCCO, PLASTER OR AREAS WHERE STAPLES ARE USED, IT SHALL BE PROTECTED BY CONTINUOUS SLEEVE OR APPROVED SHEILD THAT IS TWICE THE DIAMETER OF THE TUBING BEING PROTECTED... 21. PLUMBING CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR APPROVED FLOOR PLAN AND DIMENSIONS. DO NOT SCALE PLUMBING DRAWINGS... 22. INSTALL ALL THREADED CLEANOUT PLUGS WITH PIPE DOPE TO ALLOW EASY REMOVAL IN THE FUTURE... 23. ALL INDIRECT WASTE LINES SHALL HAVE A MINIMUM OF 2" AIR GAP OR TWICE THE EFFECTIVE DRAIN DIAMETER (WHICH EVER IS LARGER) WHERE IT TERMINATES AT THE RECEPTOR... 24. ALL HUB/FLOOR/TRENCH DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH DEEP SEAL TRAPS... 25. SET TOP RIM OF ALL IN-FLOOR FIXTURES (DRAINS, FLOOR SINKS, CLEAN-OUTS, ETC.) FLUSH WITH FINISHED FLOOR SURFACE DRAWINGS EXPLICITLY SPECIFY OTHERWISE... 26. CLEANOUTS LOCATED IN TRAFFIC-BEARING AREAS SHALL BE INSTALLED WITH A VEHICLE TRAFFIC BEARING BOX. THE BOX SHALL BE SET IN CONCRETE SLAB, EXTENDING AT LEAST 12" FROM THE PERIMETER OF THE CLEANOUT. THE SLAB SHALL BE NOT LESS THAN 6" THICK. THE CONCRETE SHALL BE NOT LESS THAN 2,500 PSI... 27. PLUMBING CONTRACTOR SHALL INSTALL SHOCK ABSORBERS/WATER HAMMER ARRESTORS TO MEET ALL STATE AND LOCAL CODE REQUIREMENTS... 28. PLUMBING CONTRACTOR SHALL INSTALL WATER SUPPLY PIPES SO THAT NO PIPE JOINTS ARE UNDER FLOOR SLAB-ALL JOINTS WILL BE ABOVE THE FLOOR IN ACCESSIBLE WALLS... 29. ALL NEW HOT AND COLD WATER PIPING IN WALLS, ABOVE CEILINGS, AND EXPOSED SHALL BE INSULATED WITH AN INSULATION HAVING A MAXIMUM K FACTOR OF 0.28 @ 75° MEAN TEMPERATURE FOR 2" WALL FLEXIBLE ELASTOMERIC THERMAL TYPE, CLOSED CELL INSULATION SIMILAR TO AP ARMAFLEX TUBE INSULATION (ARMACELL). INSULATE FITTINGS CONTINUOUSLY, BUT DO NOT INSULATE VALVE BODIES, NOR FIXTURE SUPPLIES... 30. HOT AND COLD WATER PIPING ABOVE GROUND SHALL BE TYPE "M" HARD DRAWN COPPER TUBING ASSEMBLED WITH WROUGHT SWEAT FITTINGS. BRANCH PIPING MAY BE CROSS-LINKED POLYETHYLENE (PEX-c) TUBING AND ASTM F-1980 COLD EXPANSION FITTINGS... 31. ALL VALVES SHALL BE SAME SIZE AS PIPING SERVED (MIN)... 32. PLUMBING CONTRACTOR SHALL SUPPLY AND INSTALL GAS PIPING AS SHOWN ON PLANS. ALL GAS PIPING SHALL COMPLY WITH LOCAL CODES. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL GAS EQUIPMENT. INSTALL REGULATORS AT EQUIPMENT WHERE REQUIRED BY MANUFACTURER OR CUTS SUPPLIED BY FURNISHING CONTRACTOR.

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REVISIONS table with columns: NO, DESCRIPTION, DATE. Includes one revision entry.

PLUMBING NOTES AND SCHEDULES table with columns: CHECKED, DRAWN, BY, DATE. Includes a PLUMBING NOTES AND SCHEDULES section with columns: NO, DATE, DESCRIPTION, and a SHEET NUMBER: P1.

