

PLUMBING GENERAL NOTES

- ALL WORK AND MATERIAL SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITIES. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE APPLICABLE CODES. IN THE EVENT OF CONFLICT BETWEEN THE CODE REQUIREMENTS AND THE DRAWINGS OR SPECIFICATIONS THE MOST STRINGENT SHALL PREVAIL.
- THESE DRAWINGS HAVE BEEN DEVELOPED FROM THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS, DIMENSIONS, CLEARANCES, LOCATION OF EXISTING UTILITIES, ETC. PRIOR TO BEGINNING FABRICATION OR INSTALLATION. DO NOT SCALE FROM THESE DRAWINGS. COORDINATE ALL STUB-UPS AND CONNECTIONS WITH MANUFACTURER INSTALLATION DATA.
- COORDINATE PLUMBING INSTALLATION AMONG TRADES TO AVOID INTERFERENCES.
- UNDERGROUND PIPING SYSTEMS: INSTALL BACKFILL MATERIAL IN 12" LAYERS, COMPACT TO 95% STANDARD PROCTOR. IF MORE STRINGENT, COMPACT BACKFILL TO DRY DENSITY EQUAL TO THAT REQUIRED BY CONTRACTOR FOR THE LOCATION. AFTER UNDERGROUND WORK HAS BEEN TESTED AND APPROVED, THE CONTRACTOR SHALL BACKFILL ALL TRENCHES. BACKFILL SHALL CONSIST OF A LAYER OF WASHED GRAVEL TO 12" ABOVE THE PIPE AND DRYTALL FREE FROM ROCKS, DEBRIS, AND CONDIMERS. TURN EROSION PROTECTIVE MATS OR SPECIFIED BACKFILL SHALL BE DRY ONLY AS DESCRIBED ABOVE.
- CONTRACTOR SHALL NOT PASS SANITARY, DOMESTIC WATER, VENT PIPING OR ANY OTHER TYPE OF PLUMBING DIRECTLY OVER ANY ELECTRICAL EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR TO MAINTAIN ANY REQUIRED CLEARANCES.
- INSULATE ALL ABOVE GROUND DOMESTIC WATER PER SPECIFICATIONS SECTION 15030.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, INSTALL ALL MATERIAL AND EQUIPMENT AND INCLUDE SERVICE AND NOC DIALS TO THE INSTALLATION OF WORK INVOLVED FOR A COMPLETE AND OPERATING FACILITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ASSEMBLING ANY EQUIPMENT SHIPPED IN SECTIONS, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS, INSPECTIONS, AND PAY ALL FEES REQUIRED FOR THIS JOB.
- THE PIPING SYSTEM SHALL BE ARRANGED SO AS TO PREVENT WATER HAMMER. EACH ISOLATED FIXTURE SHALL HAVE A WATER HAMMER ARRESTOR ON THE WATER CONNECTION. ALL GROUPS OF FIXTURES SHALL CONNECT TO A WATER BRANCH WHICH SHALL END WITH A FULL SIZE WATER HAMMER ARRESTOR.
- THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL STANDARD 1/2" X 3/8" COMPRESSION ANGLE STOPS ON ALL WATER LINES UNLESS ANOTHER TYPE OF VALVE IS SPECIFIED.
- ALL WASTE PIPING ABOVE GRADE SHALL BE APPROVED CAST IRON SOIL PIPE, AND ALL VENT PIPING ABOVE GRADE SHALL BE PVC OR ABS.
- ALL VENTS THROUGH ROOF (VTR) SHALL EXTEND A MINIMUM OF 12" ABOVE ROOF AND SHALL TERMINATE A MINIMUM OF 10' FROM ALL OUTSIDE AIR INTAKES.
- ALL ROOF PENETRATIONS FOR PLUMBING PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER GUIDELINES. COORDINATE WITH ARCHITECTURAL.
- COPPER PIPING JOINTS SHALL BE SOLDERED USING SOLDER FILLER METAL (ASTM B-32) 95.5 TIN ANTIMONY.
- ALL PENETRATIONS THROUGH MASONRY WALLS WILL BE CORE DILLED AND SLEEVED.
 - A. SLEEVES ARE REQUIRED WHERE A PIPE PASSES THROUGH A WALL OR FLOOR. PIPES PASSING THROUGH A WALL OR FLOOR MUST BE INDIVIDUALLY SLEEVED UNLESS APPROVED BY ARCHITECT.
 - B. SLEEVES SHALL FINISH FLUSH WITH THE WALL FINISH AND SHALL FINISH 1/4" ABOVE FINISH FLOOR.
 - C. SLEEVES SHALL BE AS FOLLOWS:
 - THROUGH MASONRY WALLS - GALVANIZED STEEL PIPE, CUT ENDS PAINTED.
 - THROUGH PARTITIONS AND FLOOR - SCHEDULE 40 PVC.
- ALL FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS SHALL BE INSTALLED WITH A TRAP PRIMER CONNECTION AND PROVIDED WITH A TRAP PRIMER TO BE PROVIDED PLUMBING PRODUCTS (PRIMERS PR-200) OR EQUIVALENT. USE DISTRIBUTION BLOCKS AS REQUIRED. TRAP PRIMERS SHALL BE LOCATED AS TO FACILITATE EASE OF MAINTENANCE. TRAP GUARD FLOOR DRAIN INSETS BY PROVIDER AND AN APPROVED SUBSTITUTION IF APPROVED BY LOCAL JURISDICTION AND OWNER.
- GAS SERVICE CONNECTION LOCATION(S) SHOWN ON ENGINEER'S DRAWINGS IS BASED ON THE BEST INFORMATION AVAILABLE FROM THE CIVIL ENGINEER. GAS CONTRACTOR IS TO CONFIRM THE GAS SERVICE CONNECTION LOCATION(S) WITH THE GAS COMPANY PROVIDING SERVICE PRIOR TO CONSTRUCTION. GAS CONTRACTOR SHALL COORDINATE THE GAS PIPING SERVICE LOCATION WITH THE SITE CONTRACTOR.
- PORTIONS OF FUEL GAS PIPING INSTALLED IN CONCEALED LOCATIONS SHALL NOT HAVE UNIONS, TUBING FITTINGS, RIGHT AND LEFT COUPLINGS, BUSINESS COMPRESSION COUPLERS AND SWING JOINTS MADE BY COMBINATIONS OF FITTINGS OR OTHERWISE THE FUEL GAS PIPING MUST BE SLEEVED AND THE SLEEVE MUST VENT TO ATMOSPHERE. VENTING OF THE SLEEVES SHALL BE ACCOMPISHED AS TO PREVENT THE ENTRANCE OF WATER OR INSECTS.
- ALL GAS PIPING INSTALLED OUTDOORS SHALL BE ELEVATED NOT LESS THAN 3/4" ABOVE GROUND AND WHERE INSTALL ACROSS ROOF SURFACES SHALL BE ELEVATED NOT LESS THAN 3/4" ABOVE THE ROOF SURFACE.
- ALL HOT AND COLD WATER PIPING DRIPPING OR RISING TO SERVE PLUMBING FIXTURES SHALL BE SUPPLIED WITH SHOCK STOPS TO PREVENT WATER HAMMER IN PIPING.
- PIPING SYSTEMS WITH SOUND-RATED PARTITIONS AND/OR SOUND-RATED FLOOR-CELING SYSTEMS SHALL BE ISOLATED FROM BUILDING CONSTRUCTION AT POINTS OF CONTACT WITH ACUSTO-PLUMBS SYSTEM. SUCH PIPING PASSING THROUGH JOIST SPACES SHALL BE SURROUNDED BY APPROVED INSULATION. PENETRATIONS SHALL BE SEALED WITH APPROVED PERMANENTLY RESILIENT SEALANTS.
- ALL COLD, HOT AND RECIRCULATING WATER PIPINGS SHALL BE INSULATED WITH FIBERGLASS INSULATION.
- PLUMBING CONTRACTOR TO PROVIDE AND HOOK-UP COLD WATER TO ALL ICE MAKERS WITH SHUT-OFF VALVE LOCATED UNDER KITCHEN SINK.
- PLUMBING CONTRACTOR TO PROVIDE AND HOOK-UP HOT WATER TO ALL DISHWASHERS WITH SHUT-OFF VALVE LOCATED UNDER KITCHEN SINK.
- FIRE PROTECTION SYSTEMS DESIGN/BUILD SHALL BE SUBMITTED TO FIRE DEPT. FOR REVIEW AND APPROVAL.
- EQUIPMENT AND APPLIANCE INSTALLATION SHALL BE PERFORMED WITH AN APPROVED BACKFILL EVEN IF THE EQUIPMENT IS TO BE INSTALLED WITH AN APPROVED SUBSTITUTION.
- PROVIDE ALL TUBS AND SHOWER BASKETS WITH THERMOSTATIC MIXING VALVES. SEE SPECIFICATIONS.
- LABEL ALL PIPING PER STANDARD PRACTICES. SERVICE AND TENANT SPACE LABS TO BE BELIEVED TO BE FINISHED FLOOR WITH CEILING REMOVED.
- CONTRACTOR TO INSPECT ALL DRAWINGS CAREFULLY FOR LOCATIONS SUBJECT TO VIBRATION CONDITIONS. DO NOT INSTALL PIPING IN AREAS SUBJECT TO VIBRATION CONDITIONS UNLESS ABSOLUTELY PROTECTED. PIPING SUBJECT TO VIBRATION CONDITIONS SHALL BE PROTECTED FROM VIBRATION GENERALLY BY INSTALLING PIPES ON THE SIDE OF VIBRATION ISOLATION PIPING ADJACENT TO EXTERIOR WALLS SHALL BE CALLED IN FURRED SPACES WITH BUILDING INSULATION BETWEEN THE PIPING AND THE EXTERIOR WALL.

PLUMBING FIXTURE SCHEDULE

MARK	MODEL #	DESCRIPTION	CW	HW	SAN	VENT
W1	K397B	KOHLER "HIGHLIGHT" CLASSIC 15" x 16" ELONGATED FLUSH TANK TOILET WITH KOHLER K488 "CACHET" ELONGATED TOILET SEAT WITH LID. 03 ADVANTAGE AND ZURN ZB834C-8870-12PC BRASS QUARTER TURN ANGLE STOP, WHITE.	1/2"	-	3"	2"
W2 (ADA)	K397A	KOHLER "HIGHLIGHT" CLASSIC COMFORT 17" x 16" ELONGATED FLUSH TANK TOILET WITH KOHLER K488 "CACHET" ELONGATED TOILET SEAT WITH LID. 03 ADVANTAGE AND ZURN ZB834C-8870-12PC BRASS QUARTER TURN ANGLE STOP, WHITE.	1/2"	-	3"	2"
W3 (ADA)	K6057-C	KOHLER "HIGHLIGHT" ULTRA 17" (ADA) FLUSH VALVE TOILET WITH K78321-CP, 1.28GPF FLUSH VALVE AND K4731-C-O COMMERCIAL SEAT, NO LID, WHITE.	1"	-	3"	2"
U1	K-4891-ET	KOHLER "BARDON" URINAL (3/4") WITH KOHLER Z-10348-VY TRIPONT SBN50R FLUSH VALVE, BATTERY, 18 GPF FLUSH, WHITE.	3/4"	-	2"	2"
L1	K20000-0	KOHLER CAYTON RECTANGULAR UNDERCOUNTER SINK WITH OVERFLOW, K19274-CP SINGLE CONTROL DECK MOUNT FAUCET, 1.5 GPM OUTLET, POP-UP DRAIN, (2) BRASSORAFIT™ 1912A QUARTER TURN ANGLE STOPS, ZURN ZB700 P-TRAP, WHITE/POLISHED CHROME.	1/2"	1/2"	2"	2"
L2 (ADA)	K20000-0	KOHLER CAYTON RECTANGULAR UNDERCOUNTER SINK WITH OVERFLOW, K19274-CP SINGLE CONTROL DECK MOUNT FAUCET, 1.5 GPM OUTLET, ASSE 1070 LISTED MIXING VALVE, GRD DRAIN, (2) BRASSORAFIT™ 1912A QUARTER TURN ANGLE STOPS, ZURN ZB700 P-TRAP, WHITE/POLISHED CHROME.	1/2"	1/2"	2"	2"
L3 (ADA)	K20000-0	KOHLER CAYTON RECTANGULAR UNDERCOUNTER SINK WITH OVERFLOW, K19274-CP SINGLE CONTROL DECK MOUNT FAUCET, 1.5 GPM OUTLET, ASSE 1070 LISTED MIXING VALVE, GRD DRAIN, (2) BRASSORAFIT™ 1912A QUARTER TURN ANGLE STOPS, ZURN ZB700 P-TRAP, WHITE/POLISHED CHROME.	1/2"	1/2"	2"	2"
L4 (ADA)	K1999-4-0	KOHLER 20" X 18" WALL HUNG LAVATORY WITH OVERFLOW, CONCEALED CARRIER ARM, K1998-LAVATORY SHROUD, HALF PEDESTAL, (BRASSORAFIT™) CENTERSET K15198-ARA-CP SINGLE LEVER FAUCET AND THERMOSTATIC MIXING VALVE FOR SINGLE FAUCET, GRD DRAIN, 1-1/4" CAST BRASS P-TRAP WITH CLEANOUT, QUARTER TURN STOP BRASS LAVATORY SUPPLY KIT, WHITE PORCELAIN/POLISHED CHROME TRIM (PUBLIC SPACE).	1/2"	1/2"	2"	2"
T1	R71841150	STERLING BY KOHLER "PERFORMA" TUB WITH BOTTOM OUTLET AT LEFT OR RIGHT AS REQUIRED, WITH KOHLER K97815-0 CHORD END WALL KIT, 97815-0P CHORD FLOATING SHELF, K1986-CORNER SHELF, PROFLO PFS40 SHOWER ARM, CHROME, PROFLO PFS108 DIECAST TUB SPOUT DIVERTER, KOHLER K8334-NA UNIVERSAL VALVE KIT, KTS1921-4-CP "CORALAS" VALVE TRIM, LIFT AND TURN ALL METAL TUB DRAIN, TUB FINISH, WHITE FAUCET FINISH, POLISHED CHROME. SEE NOTES AT RIGHT FOR WATERPK SHOWER HEAD.	1/2"	1/2"	2"	2"
T2	R71841120	STERLING BY KOHLER "PERFORMA" TUB WITH BOTTOM OUTLET AT LEFT OR RIGHT AS REQUIRED, WITH KOHLER K97815-0 CHORD END WALL KIT, 97815-0P CHORD FLOATING SHELF, K1986-CORNER SHELF, PROFLO PFS40 SHOWER ARM, CHROME, PROFLO PFS108 DIECAST TUB SPOUT DIVERTER, KOHLER K8334-NA UNIVERSAL VALVE KIT, KTS1921-4-CP "CORALAS" VALVE TRIM, LIFT AND TURN ALL METAL TUB DRAIN, TUB FINISH, WHITE FAUCET FINISH, POLISHED CHROME. SEE NOTES AT RIGHT FOR WATERPK SHOWER HEAD.	1/2"	1/2"	2"	2"
SH1	S721311100	STERLING 60" ENSEMBLE SHOWER BASE, KOHLER K8304-NA VALVE, KOHLER KTS1921-4-CP VALVE TRIM, KOHLER K97815-0 "CHORD" END WALL KIT, K1986-CORNER SHOWER BASKET, K9782-SHP FLOATING SHELF, K9782-SHP SHOWER BASE, PROFLO PFS40 SHOWER ARM, PFS108 CHORD FAUCET, POLISHED CHROME. SEE NOTES AT RIGHT FOR WATER PK SHOWER HEAD.	1/2"	1/2"	2"	2"
SH2	AMP84008 8F876C	PRAXIS 60X60 BARRIER FREE BASE, KOHLER K8304-NA VALVE, KTS1921-4-CP VALVE TRIM, K7374-NA OPEN RIGHT 3-WAY DIVERTER VALVE, K79831-4-CP TRANSPO VALVE TRIM, K9782-SHP SHOWER BASKET, PROFLO PFS40 SHOWER ARM, PFS108 CHORD FAUCET, KOHLER K8304-NA VALVE, KTS1921-4-CP VALVE TRIM, LIFT AND TURN ALL METAL TUB DRAIN, TUB FINISH, WHITE FAUCET FINISH, POLISHED CHROME. SEE NOTES AT RIGHT FOR WATER PK SHOWER HEAD.	1/2"	1/2"	2"	2"
S1 (ADA)	S114043NA	STERLING 20X22 1/2" SINK, KOHLER K1917-1R-CP LOOP, SINGLE HANDLE, 1.8 GPM FAUCET, PROFLO PFS40 BASKET STRAINER, PROFLO PFS40 CAST TRAP, WOOD QUARTER TURN VALVE, ADA PPE INSULATION.	1/2"	1/2"	2"	2"
K51	A9328098L	ADVANCE TABCO 3 COMPARTMENT SINK WITH 3 DRAIN BOARDS, PREP FOR TWO FAUCETS, (2) PROFLO PFS40 WIDESPREAD FAUCETS, PROFLO PFS40 BASKET STRAINERS, PROFLO PFS40 CAST TRAP, WOOD QUARTER TURN VALVE, ADA PPE INSULATION.	1/2"	1/2"	2"	2"
K52	D18 171818C	ELKAY STAINLESS STEEL HAND WASH SINK, WALL MOUNT, WITH SIDE SPLASHER, K9460-04L FAUCET, GRD DRAIN, TALL PILE, TRAP & CLEANOUT.	3/4"	3/4"	1"	2"
K53	D-11915	ADVANCE TABCO 2 COMPARTMENT DROP IN HAND WASH STAINLESS STEEL COMMERCIAL SINK WITH DECK MOUNTED GOOSENECK FAUCET.	3/4"	3/4"	2" P-TRAP	-
S1	Z1192	ZURN FLOOR MOUNT, SIDE ACCESS SOLOID IN TERRAZZO 20" X 24" AND OUTLET.	-	-	2"	-
YH1	Z1336	ZURN EXPOSED NON-FREEZE YARD HYDRANT COMPLETE WITH DURACOATED CAST IRON HEAD AND LIFT HANDLE.	-	-	-	-
YH2	Z131R	HDEPTNER PERFECTED PRODUCTS "FREEZE-FLOW" ROOF HYDRANT, 408" X 3/4" CONNECTIONS. ANCHOR TO ROOF. FINISH WITH VALVES AND CONDITIONED SPACE.	3/4"	-	-	-
MSB	M89-2424	FIAT TERRAZZO 20" X 24" HOP SERVICE FAUCET, BUMPER GROUND, MOUNT.	3/4"	3/4"	2" P-TRAP	2"
L1	FL TO II	FIAT FLOOR MOUNTED SERVICE TUB WITH 2 COMPARTMENT LAUNDRY TUBS, WITH 2 FAUCETS, (2) DEARBORN™ 1912A PLASTIC P-TRAP.	3/4"	3/4"	2" P-TRAP	2"
T2	D18 171818C	ELKAY "PERFORMA" 20" X 24" HOP SERVICE FAUCET, BUMPER GROUND, MOUNT, COMPLETE WITH LK4000-04LZ FAUCET, GRD DRAIN, TRAP & CLEANOUT.	3/4"	3/4"	1/2" P-TRAP	2"
W	S192 DCP	ELKAY THERMOSTATIC MIXING VALVE UNIT, WALL BRACKET, STAINLESS BOWL & DUST COVER, AND S19-200 NAVIGATOR EFX 8 THERMOSTATIC MIXING VALVE.	3/4"	-	2"	-
G1	444	INSINKERATOR 3-1/4" FOOD WASTE DISPOSER WITH STAINLESS STEEL GRINDING COMPONENTS.	-	-	1-1/2"	-
W1	1600 GALLON	"BRADY PRECAST CONCRETE" TRAFFIC RATED 3-COMPARTMENT GREASE INTERCEPTOR, SIZE PER LOCAL AUTHORITY.	-	-	-	SEE DRAWING FOR SIZE

- NOTES:**
- PROVIDE TRUEBRO INSULATION KIT #102 ON PUBLIC LAVATORIES AND SINKS WHERE SANITARY AND DOMESTIC WATER LINES ARE EXPOSED.
 - STUB-IN ALL TOILET SUPPLIES 1/2" ABOVE SUB-FLOOR SO ESCUTCHEON PLATES ARE ABOVE THE TILE BASE EXITS THE WALL AT TOILET SUPPLY.
 - PROVIDE A CHROME SLEEVE IF THE PLASTIC COPPER SUPPLY PIPE WOULD OTHERWISE BE EXPOSED WHERE IT EXITS THE WALL AT TOILET SUPPLY.
 - THE TUBS IN ACCESSIBLE BATHROOMS MUST BE EQUIPPED WITH TRIP LEVER TUB DRAINS. NO EXCEPTIONS.
 - ALL SHOWER HEADS ARE TO BE WATER PAK SMD24H OR SMD24H, NO SUBSTITUTIONS.
 - SUBSTITUTIONS WILL ONLY BE APPROVED WITH OWNER'S WRITTEN APPROVAL.

PLUMBING FIXTURE SCHEDULE (CONT.)

MARK	MODEL #	DESCRIPTION	CW	HW	SAN	VENT
HB	Z-1350	ZURN, NARROW WALL, ENCASED HYDRANT. SEE ARCHITECTURAL DRAWINGS FOR WALL THICKNESS.	3/4"	-	-	-
M8	9700	8" COPPERATION ICE MAKER OUTLET BOX WITH 1/4" TURN ADAPTOR BALL VALVE AND 1/2" SWEAT CONNECTION.	1/2"	-	-	-
M8B	W4707M	8" COPPERATION ICE MAKER OUTLET BOX WITH 1/4" TURN ADAPTOR BALL VALVE AND 1/2" SWEAT CONNECTION, TOP VALVE CONNECTION.	1/2"	1/2"	2"	-
FD1	Z415-8B-P	5" ZURN FLOOR DRAIN WITH "TYPE B" ROUND STRAINER AND 1/2" TRAP PRIMER CONNECTION.	-	-	2"	2"
FD2	Z415-8S-P	5" ZURN FLOOR DRAIN WITH "TYPE B" SQUARE STRAINER AND 1/2" TRAP PRIMER CONNECTION, CHROME COVER.	-	-	2"	2"
F3	F205/P2	5" ZURN SHOWER FLOOR DRAIN WITH ROUND S.S. STRAINER.	-	-	2"	2"
F4	Z641-4	12" ZURN HEAVY DUTY FLOOR DRAIN WITH ROUND STRAINER.	-	-	6"	2"
F5	Z415-60	5" ZURN FLOOR DRAIN WITH "TYPE B" DOMED STRAINER.	-	-	6"	2"
YCD	Z1400	ZURN "LEVEL-TROL" CAST IRON FLOOR CLEANOUT.	-	-	-	-
WDO	Z-1441	ZURN WALL CLEANOUT WITH ACCESS COVER.	-	-	-	-
PH9	Z-1320	ZURN NON-FREEZE ENCASED WALL HYDRANT. SEE ARCHITECTURAL DRAWINGS FOR WALL THICKNESS.	3/4"	-	-	-
F8	Z1910-3	5/8" ZURN FLOOR SINK WITH 3/4 GRATE(S).	-	-	SEE DRAWINGS FOR SIZE	2"
HD	-	HUB DRAIN, MOUNT 1" ABOVE FINISH FLOOR AT CEMAKERS.	-	-	2"	2"
RD1	Z184	ZURN 12" CAST IRON COMBINATION PRIMARY ROOF AND SECONDARY (OVERFLOW) DRAIN WITH CAST IRON DOME.	-	-	SEE DRAWINGS FOR SIZE	-
RD2	Z121	ZURN 12" CAST IRON ROOF DRAIN WITH CAST IRON DOME.	-	-	SEE DRAWINGS FOR SIZE	-
RD	Z186-H	ZURN 6" CORNICE DRAIN WITH 90° OUTLET, HIGH DOME.	-	-	SEE DRAWINGS FOR SIZE	-
DN	Z1995S	ZURN DOWNSPOUT NOZZLE (COW'S TONGUE) SIZE TO MATCH DOWNSPOUT. SEE DRAWINGS. STAINLESS SCREEN.	-	-	SEE DRAWING FOR SIZE	-

PUMP SCHEDULE

MARK	MOD. #	DESCRIPTION	CW	HW	SAN	VENT (M/N)
P1	UP26 969F	GRUNDFOS "MIRAPUR" 1-1/2" X 1-1/2" X 1-1/2" 1/2 HP, 115V, 1.12 HP, 115V.	-	3/4"	-	-
P2	-	3" MOTOR PUMP FOR ELEVATOR OVERFLOW CONTROL SYSTEM. PUMP PASSAGE IS TO INCLUDE ALL ENCLLOSING TANKLESS STEEL, 90° BEND, PRESS. ALARM LIGHT, 5/8" OIL SPILL PUMP, HIGH LOU O LEVEL, OVERLOAD, AND PUMP RUN. REMOTE MONITORING CIRCUIT. PROVIDE SYSTEM MONITORING IN ELEVATOR EQUIPMENT ROOM AND REMOTE MONITORING SYSTEM TEST FOR ALL ALARM CONDITIONS INCLUDING POWER AND PUMP RUN. 1/2" X 1/2" X 1/2" 1/2 HP, 115V, 1.12 HP, 115V, 1.12 HP, 115V.	-	-	3"	-

WATER HEATER SCHEDULE

MARK	MOD. #	DESCRIPTION	CW	HW	SAN	VENT (M/N)
WH1	Q1001	INTELLIHOT GAS CONDENSING DIRECT VENT WATER HEATER WITH MULTIPLE HEAT EXCHANGERS, MAX. BTU: 1,000,000, EFF. 98%, PROVIDE CONDENSATE NEUTRALIZATION. (UNIT IS SIZED SO ONE ENGINE CAN BE OFF LINE AND THE REMAINING STILL HANDLE 100% OF DEMAND)	2"	2"	-	-
WH2	Q251	INTELLIHOT GAS CONDENSING TANKLESS DIRECT VENT WATER HEATER, MAX. BTU: 260,000, EFF. 98%, BU-FER TANK & RECIRC PUMP, MIN. FLOW: 0.6 GPM. PROVIDE CONDENSATE NEUTRALIZATION.	1/2"	1/2"	-	-

DRAINAGE FIXTURE UNITS

FIXTURE TYPE	FIXTURE UNIT VALUE	NO. OF FIXTURES	TOTAL VALUE
BATHROOM GROUP (1.5gpl/WATER CLOSET)	6	75	375
AUTOMATIC CLOTHES WASHER, COMMERCIAL	3	2	6
AUTOMATIC CLOTHES WASHER, RESIDENTIAL	2	4	8
LAVATORY	1	6	6
EMERGENCY EYEWASH	3	2	6
EMERGENCY FLOOR DRAIN	0	5	0
HUB DRAIN	2	7	14
FLOOR SINK (3" TRAP)	5	3	15
MOP SINK (3" TRAP)	6	1	6
LAUNDRY TUB	2	1	2
WATER CLOSET	4	7	28
URINAL	2	1	2

WATER SUPPLY FIXTURE UNITS

FIXTURE	COLD	HOT	TOTAL	NO. OF FIXTURES	TOTAL VALUE
BATHROOM GROUP (FLUSH TANK)	2.7	1.5	3.6	75	270
DRINKING FOUNTAIN	0.25	-	0.25	1	0.25
ICE MAKER BOX	0.25	-	0.25	3	1.25
KITCHEN SINK	1.0	1.0	1.4	2	2.8
LAUNDRY TUB	1.0	1.0	1.4	1	1.4
PUBLIC LAVATORY	1.5	1.5	2.0	6	12
MOP SINK	2.25	2.25	3.0	1	3.0
3-COMPARTMENT SINK	2.25	2.25	3.0	1	3.0
WASHING MACHINE (8th. PUBLIC)	2.25	2.25	3.0	2	6.0
(2) CLOTHES WASHER, 8th.6	-	-	-	2	40.0
WATER CLOSET (PUBLIC, FLUSH VALVE)	10.0	-	10.0	7	70
URINAL	5.0	-	5.0	1	5

WATER SUPPLY FIXTURE UNITS= 414.7
DOMESTIC WATER SUPPLY PIPE SIZE= 2 1/2"
GALLONS PER MINUTE= 105gpm

PIPE SCHEDULE

DWV	SCHEDULE 40 PVC
DOMESTIC WATER PIPING	ALL UNDERGROUND DOMESTIC WATER PIPING TO BE TYPE K COPPER P.P.E.
DOMESTIC WATER PIPING	ABOVE GROUND DOMESTIC WATER P.P.P.G 2" AND LARGER TO BE TYPE L COPPER PIPE.
DOMESTIC WATER PIPING	ABOVE GROUND DOMESTIC WATER P.P.P.G SMALLER THAN 2" TO BE TYPE L COPPER PIPE, OR PEKA. PEKA REQUIRES A 25 YEAR NON-PORATED WARRANTY ON MATERIALS AND WORKMANSHIP. PEK-A, PEK-B, PVC, AND CPVC WILL NOT BE ACCEPTED.
GREASE SYSTEM PIPING	CAST IRON
STORM WATER PIPING	SCHEDULE 40 PVC.

1. THE BASIS OF DESIGN IS COPPER PIPE
2. PEKA (AS LISTED ABOVE) MAY BE SUBSTITUTED FOR COPPER IF APPROVED BY LOCAL JURISDICTION AND IN WRITING BY THE OWNER.
3. IF PEKA PIPE IS PROVIDED THE CONTRACTOR SHALL ENLIST THE DESIGN SERVICES OF THE MANUFACTURER TO REEVALUATE ALL PIPE TO EQUAL OR EXCEED THE FLOW VOLUME OF COPPER PIPE MAINTAINING FLUID VELOCITY IN COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.

NOTE: IF PEKA PIPING IS USED, IT IS TO BE USED ONLY FOR FINAL DISTRIBUTION IN GUEST ROOM BATHROOMS, INC. JOINTS BETWEEN THE MANIFOLD AND FIXTURE). COMPLY WITH ASTM F1960 (TYPE 304) FOR RESISTANCE RATING AND 60 DAY MIN. UV RATING.
PIPING MUST BE SECURELY ANCHORED TO PREVENT MOVEMENT AND ENSURE NO PIPE IS WITHIN 6" OF ANY HEAT SOURCE, LIKE LIGHT FIXTURES.
FINAL CONNECTIONS MUST BE ANCHORED SO THERE IS NO MOVE.

PIPE INSULATION

SERVICE	MATERIAL	THICKNESS	FIELD APPLIED JACKET	VAPOR BARRIER REQUIRED	FINISH
DOMESTIC COLD WATER, AND SENSITIVE DRAINS. INSULATION IS NOT REQUIRED FOR PEKA PIPING FROM MANIFOLD TO FIXTURE CUT OFF WITHIN 6 FEET WORKS.	ARMAFLEX OR EQUIVALENT CLOSED CELL ELASTOMERIC PIPE INSULATION	1/2"	NONE	NONE	NONE
DOMESTIC HOT AND RECIRCULATED HOT WATER OPERATING TEMPERATURE: 90 TO 140 DEGS. F.	ARMAFLEX OR EQUIVALENT CLOSED CELL ELASTOMERIC PIPE INSULATION	1"	NONE	NONE	NONE
SANITARY PIPE, EXCLUDING CAST IRON.	ARMAFLEX OR EQUIVALENT CLOSED CELL ELASTOMERIC PIPE INSULATION	1"	NONE	NONE	NONE
HORIZONTAL SANITARY CONDUCTOR	ARMAFLEX OR EQUIVALENT CLOSED CELL ELASTOMERIC PIPE INSULATION	1"	NONE	NONE	NONE
ROOF DRAIN BODIES	MINERAL FIBER OR CELLULAR GLASS, WITH JACKET	1"	NONE	NONE	NONE
EXPOSED SANITARY DRAINS AND DOMESTIC WATER SUPPLIES AND STOPS FOR FIXTURES FOR THE BATHS	1" ANGLAND™ AS MANUFACTURED BY TRUBRO	PVC P-TRAP AND SUPPLY COVERS	YES	WHITE	WHITE

** INSULATION CONDUCTIVITY (K) NOT TO EXCEED 0.2BTU X INHR X SQ FT. X F (EEC)
INSULATE DRAINS AND DRAIN BODIES ABOVE SLAB THAT RECEIVE CONDENSATE FROM MECHANICAL UNITS.

GAS DEMAND SCHEDULE

EQUIPMENT NOMENCLATURE	TAG	CONNECTION	BTU INPUT
WATER HEATER, Q1001	WH1	1-1/4"	1,000,000
WATER HEATER, Q251	WH	1-1/4"	260,000
(3) DRYER, COMMERCIAL	-	1"	720,000
MAKE UP AIR UNIT	MAU-1	SEE MANUFACTURER'S SPECS	405,000
MAKE UP AIR UNIT	MAU-2	SEE MANUFACTURER'S SPECS	405,000
POOL HEATER (EST.)	-	SEE MANUFACTURER'S SPECS	500,000
TOTAL BTU REQUIRED =			3,280,000
FUEL GAS SUPPLY PIPE SIZE =			2"

PLUMBING LEGEND

SYMBOL	DESCRIPTION