

PLUMBING FIXTURE SCHEDULE

MARK	FUNCTION	MANUFACTURER & MODEL	MARK	FUNCTION	MANUFACTURER & MODEL
L-1	LAVATORY	ADM MODEL # DW-158 ADA-COMPLIANT WALL-HUNG LAVATORY, 24"x19": WHITE STONE RESIN COMPOSITE BOWL WITH 4" BACK FOR USE WITH CONCEALED ARM HANGER. SINGLE FAUCET HOLE. MOUNT TOP OF RIM AT 34" A.F.F. PROVIDE WITH NECESSARY WALL HANGER KIT. GROHE MODEL 328700A SINGLE HOLE FAUCET WITH SINGLE LEVER HANDLE WITH CERAMIC CARTRIDGE. 1/2" CONNECTIONS, WITH GRID DRAIN, NO POP-UP DRAIN, POLISHED CHROME FINISH. PROVIDE FLOW LIMITER TO 0.5 GPM.	DF	DRINKING FOUNTAIN	ELKAY MODEL EZS8WS ADA-COMPLIANT, BARRIER-FREE, ELECTRIC WATER COOLER. PROVIDES 8.0 GPM OF 50°F WATER AT 90°F AMBIENT. ADA-COMPLIANT FRONT AND SIDE PUSH-BARS. LEAD FREE INTEGRAL FILTER. MOUNT WITH MIN. 27" KNEE CLEARANCE AND SPOUT AT NO MORE THAN 36" A.F.F. BOTTLE FILLER SHALL INCLUDE ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION WITH AUTOMATIC 20-SECOND SHUT-OFF. SHALL PROVIDE 1.1 GPM LAMINAR FLOW, ANTI-MICROBIAL PROTECTED PLASTIC COMPONENTS. ELKAY LKAPREZL ADA COMPLIANT CANE APRON
WC-1	WATER CLOSET (ADA COMPLIANT)	TOTO MODEL # CST412MF ADA-COMPLIANT, 1.6/0.9 GPF, DUAL FLUSH TANK WATER CLOSET, WHITE VITREOUS CHINA ELONGATED BOWL AND TANK, 17" HIGH, TWO PIECE, 12" ROUGH-IN, FURNISH WITH POLISHED CHROME DUAL FLUSH PUSH BUTTON ON TOP OF TANK, WHITE, SOLID PLASTIC, OPEN-FRONT SEAT FOR ELONGATED BOWL, INTEGRAL BUMPERS, EXTERNAL CHECK HINGES WITH STAINLESS STEEL POSTS.	S-1	HAND SINK	MOEN MODEL #G18185 20"x16" SINGLE COMPARTMENT UNDERMOUNT SINK WITH 6" DEEP BOWL AND REAR DRAIN, SEAMLESS #16 GAUGE, TYPE 304 STAINLESS STEEL, UNDERSIDE FULLY SOUND DEADENED, PROVIDE WITH NECESSARY MOUNTING CLIPS IN-SINK-ERATOR MODEL: BADGER 5 GARBAGE DISPOSAL, CONTINUOUS FEED, 1/2 HP MOTOR, STAINLESS STEEL 360° SWIVEL LUGS, GALVANIZED STEEL CONSTRUCTION AND GRINDING ELEMENTS, PERMANENTLY LUBRICATED BEARINGS, PROVIDE WITH STAINLESS STEEL SINK FLANGE AND STOPPER. GROHE MODEL #S1378000 ADA-COMPLIANT, DECK-MOUNTED SINGLE HOLE SWIVEL SPOUT WITH 8" REACH AND PULL-DOWN SPRAY, SINGLE LEVER HANDLE WITH CERAMIC MIXING CARTRIDGE AND VOLUME CONTROL, POLISHED CHROME FINISH, 1.75 GPM, PROVIDE BASKET STRAINER.
SH-1	SHOWER FIXTURES	KOHLER MODEL #K-69242 ADA-COMPLIANT, HANDHELD SHOWER KIT WITH 24" SLIDE BAR AND 60" HOSE. KOHLER MODEL #K-T1448B ADA-COMPLIANT, SHOWER THERMOSTATIC MIXING VALVE WITH SINGLE METAL LEVER CONTROL AND VALVE CARTRIDGE. KOHLER MODEL #K-9132 BRASS FLOOR DRAIN INSTALLED FLUSH TO TILED FLOOR, ALL POLISHED CHROME FINISH.	BFP	BACKFLOW PREVENTER	WATTS SERIES 007, DOUBLE CHECK VALVE ASSEMBLY WITH BALL VALVES, TEST COCKS AND STRAINER
			JS-1	JANITOR SINK	FIAT TSB-100 24"x24"x12" PRECAST TERRAZO FLOOR SERVICE SINK, STAINLESS STEEL GAP AND 2 SIDE WALL TILING FLANGE, 3" STAINLESS STEEL CAST DRAIN, PROVIDE STAINLESS STEEL WALL GUARDS AND MOP BRACKET & HOSE RACK, PROVIDE CHICAGO FAUCET 897-CP FAUCET WITH VACUUM BREAKER, 3/4" THREADED HOSE ON SPOUT, ADJUSTABLE WALL BRACE, PAIL HOOK, AND 1/2" FLANGED FEMALE ADJUSTABLE ARM WITH INTEGRAL STOPS.

NOTE: FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWINGS ON EACH OF THESE ITEMS, REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS. ALL WALL HUNG FIXTURES SHALL BE PROVIDED WITH CARRIER KIT MANUFACTURER RECOMMENDATIONS.

GENERAL NOTES

- REFERENCE SPECIFICATIONS FOR GENERAL MECHANICAL CONTRACT REQUIREMENTS.
- ALL SANITARY, VENT AND STORM PIPING SHALL HAVE A MINIMUM 1/8" PER FOOT SLOPE. ALL SANITARY AND STORM PIPING 3" AND SMALLER SHALL HAVE A MINIMUM 1/4" PER FOOT SLOPE.
- UNDERGROUND STORM, SANITARY AND VENT PIPING SHALL BE CAST IRON W/ HUB. STORM AND SANITARY PIPING SHALL HAVE HEAVY DUTY FITTINGS.
- ABOVEGROUND STORM, SANITARY AND VENT PIPING SHALL BE CAST IRON W/HUB. STORM AND SANITARY PIPING SHALL HAVE HEAVY DUTY CLAMPS.
- DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE L COPPER WITH LEAD FREE SOLDER, UNLESS NOTED OTHERWISE.
- PROVIDE INSULATION WITH ASJ FOR ALL DOMESTIC HOT AND COLD WATER PIPING INSIDE THE BUILDING. INSULATION THICKNESS VARIES SEE SPECIFICATION. GENERAL CONTRACTOR TO COORDINATE DETAILING ALL PENETRATIONS.
- IN THE PERIMETER/FOUNDATION WALLS FOR UTILITY CONNECTIONS, AS REQUIRED, COORDINATE EXACT DRAIN AND STUB UP LOCATIONS WITH OTHER TRADES.
- COORDINATE ALL DRAIN LOCATIONS WITH GENERAL CONTRACTOR.
- SUBMIT DIMENSIONED LOCATIONS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- PROVIDE JR SMITH SERIES 9200 P-TRAP WITH CONDENSATE DRAIN CONNECTION WITH LAVATORIES WHERE REQUIRED FOR CONDENSATE DRAIN CONNECTION FROM MECHANICAL EQUIPMENT.
- PROVIDE BACKFLOW PREVENTERS IN CW LINE INCLUDING BUT NOT LIMITED TO ICE MAKERS, BOILER MAKEUP, AND TERRACE IRRIGATION SYSTEMS PER CODE AS REQUIRED.
- PROVIDE MIXING VALVES AT ALL SINKS AND CAVA TO DELIVER TEMPERED WATER PER CODE.

FIXTURE CONNECTION SCHEDULE

FIXTURE	CW	HW	VENT	WASTE	NOTES
SH-1	1/2"	1/2"	1-1/2"	2"	
S-L-1	1/2"	1/2"	1-1/2"	1-1/2"	
WC-1	1/2"	-	2"	4"	
FD	-	-	2"	4"	
WB	1/2"	1/2"	1-1/2"	2"	
BB	-	-	-	-	
JS-1	1/2"	1/2"	2"	3"	

NOTE: PIPE SIZES SHOWN ARE MINIMUM.

FLOOR DRAIN SCHEDULE

MARK NO.	MANUFACTURER	MODEL NO.	BODY	TOP	GRD.	REMARKS
FD-1	WADE	W-1102-NH-S	C.I.	NB	FULL	

NOTES:
1. PROVIDE WITH NICKEL BRONZE TOP & TRAP SEAT.

WATER HAMMER ARRESTOR SCHEDULE

MARK NO.	MANUFACTURER	MODEL NO.	PDI UNIT RATING	FIXTURE UNIT CAPACITY	REMARKS
ET-1	SIoux CHIEF	680 SERIES	AA	4(SINGLE FIXT)	

NOTES:
1. INSTALL IN AN ACCESSIBLE LOCATION IN ACCORDANCE WITH THE PLUMBING CODE.

ELECTRIC WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER MODEL NUMBER	STORAGE GALLONS	RECOVERY GPH 90° RISE	VOLTAGE	WATTS	REMARKS	NOTES
WH-1	STATE LOWBOY E88-40-DOLNS (OR HUBBELL EQUAL)	40	21	208V1	4,500/4,500	UNIT WITH 2 NON-SIMULTANEOUS ELEC. HEATING ELEMENTS	1, 2, 3

NOTES:
1. PROVIDE WATTS T&P RELIEF VALVE AND PIPE TO DRAIN AND PROVIDE FUSED DISCONNECT AND CONTROL TRANSFORMER.
2. ALL WATER HEATERS SHALL BE NSF LISTED.
3. ALL WATER HEATERS SHALL HAVE MAGNESIUM ANODE.

PUMP SCHEDULE

MARK NO.	MANUFACTURER	MODEL NO.	USE	EDR	GPM	HEAD FT.	RPM	ELECTRICAL				REMARKS
								VOLT	Ø	HZ	HP	
CP-1	BELL & GOSSETT	LR-158WR	HW RECIRC.	-	5	11	2850	120	1	60	1/12	NOTE: 1,2,3

NOTES:
1. PROVIDE DOMESTIC CIRCULATING PUMP WITH ALL BRONZE LEAD FREE CONSTRUCTION, PUMP STARTER, 3/4" NPT INLET/OUTLET, AQUASTAT & PUMP SUPPORT.
2. PROVIDE INLINE PUMPS WITH SPRING HANGER SUPPORT, STARTERS & DISCONNECTS, HOA SELECTOR SWITCH.
3. RE: ELECTRICAL FOR DISCONNECT SWITCHES.

PIPING MATERIAL & INSULATION SCHEDULE

SYSTEM	SIZE	TYPE/SCHED	MATERIAL	ACCEPTABLE FITTINGS			FIELD TEST PRESSURE/TEST	ALLOWABLE IN PLENUMS	INSULATION	
				SOLDER, PRO-PRES	CONTINUOUS WELDING, BRAZED	NO HUB / SERVICE WT.			TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRES		130 PSI - 12HR	NO	FIBERGLASS W/ASJ	1/2"	
DOMESTIC HOT WATER & HW RETURN	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRES		130 PSI - 12HR	YES	FIBERGLASS W/ASJ	1"	
DOM. HOT & COLD BELOW GRADE	1/2"-1-1/4"	K	COPPER	SOLDER, PRO-PRES		130 PSI - 12HR	YES	ELASTOMERIC	3/4" (HOT ONLY)	
SOIL & WASTE ABOVE GRADE	1-1/2"-6"	NO HUB / SERVICE WT.	CAST IRON	NO HUB / SERVICE WT.		10 FT - 12HR	YES			
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINT		10 FT - 12HR	NO			
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINT		10 FT - 12HR	NO			
DRINKING FOUNT. DRAIN	ALL						YES	ELASTOMERIC	1/2"	
CONDENSATE DRAIN ON ROOF	3/4"-2"		PVC	SOLVENT JOINED		10 FT - 12HR	NO			

NOTES:
1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE TEST OF 25%
2. ALL INSULATION THICKNESSES SHALL MEET ASHRAE 90.1 - 2007 REQUIREMENTS & MINIMUM
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.

KEMSTUDIO
1515 GENESSEE ST SUITE 11 KANSAS CITY MO 64102
916 756 1808 f 816 756 1828

kemstudio.com

ELEC
Engineering
MECH

S & S ENGINEERING, INC.
10531 Barkley, Suite 601
Overland Park, Kansas 66212
Ph: 913-754-3673
Fx: 913-754-3674
E-mail: corporate@ss-engr.com
Web: www.ss-engr.com

PORT KC OFFICES
1000 BERKLEY PARKWAY - SPACE E177
KANSAS CITY, MO 64108
PROJECT NUMBER: A1718

SEAL

ISSUED FOR: DATE:
95% CDS 12/22/2017
Permit Set 01/12/2018

PLUMBING SCHEDULES
P301