















PLUMBING LEGEND
AND ABBREVIATIONS

ABBREVIATION	DEFINITION	LINE/TYPE DESCRIPTION
AFF	ABOVE FINISHED FLOOR	IPS IRON PIPE SIZE
AG	ABOVE GROUND	PRV PRESSURE REDUCING VALVE
AGA	AMERICAN GAS ASSOCIATION	N C NORMALLY CLOSED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	N O NORMALLY OPEN
AMP	AMPERE	N/A NOT APPLICABLE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	NFPA NATIONAL FIRE PROTECTION ASSOCIATION
APPROX	APPROXIMATE	NIC NOT IN CONTACT
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	NTS NOT TO SCALE
ATM	ATMOSPHERE	NO NUMBER
BTU	BRITISH THERMAL UNIT	NO OUNCE
CONT	CONTINUED	PC PLUMBING CONTRACTOR
CW	COLD WATER SUPPLY	PSI POUNDS PER SQUARE INCH
DA	DIAMETER	R THERMAL RESISTANCE
DEC	DEGREE	RDL ROOF DRAIN LEADER
EC	ELECTRICAL CONTRACTOR	RPZ REDUCED PRESSURE ZONE
EL	ELEVATION	SPEC SPECIFICATION
FF	FINISHED FLOOR	SQ SQUARE
FL	FLOOR	SS STAINLESS STEEL
FT	FEET	S/S SANITARY SEWER
FU	FIXTURE UNIT	STD STANDARD
GAL	GALLON	SPLY SUPPLY
GC	GENERAL CONTRACTOR	TEMP TEMPERATURE
GPH	GALLONS PER HOUR	TD TEMPERATURE DIFFERENCE
HD	HEAD	UG UNDERGROUND
HGT	HEIGHT	UL UNDERWRITERS LABORATORIES
HP	HORSEPOWER	VERT VERTICAL
HWS	HOT WATER SUPPLY	VTR VENT THROUGH ROOF
HWR	HOT WATER RETURN	VT VENT
INV	INVERT	WHA WATER HAMMER ARRESTOR
	AQUASTAT	AG S/S
	BALL VALVE	CW
	CHECK VALVE	AS
	CLEANOUT (WALL)	GAS
	CLEANOUT (FLOOR)	HWS/HWR
	EQUIPMENT DESIGNATION	UG S/S
	FLOOR DRAIN	VENT
	GATE VALVE	
	POINT OF CONNECTION TO EXIST. SYSTEMS	
	PRESSURE REDUCING VALVE	
	RPZ BACKFLOW PREVENTER	
	T&P VALVE	
	TRAP PRIMER DEVICE	
	WATER HAMMER ARRESTOR	

*WATER HEATER SYSTEM SUMMARY

FIXTURE DESCRIPTION	QUANTITY	GALLONS PER FIXTURE PER HOUR	TOTAL GALLONS PER FIXTURE PER HOUR	
LAVATORY	7	8.0	56.0	EWH-1
BREAK ROOM SINK	1	20.0	20.0	
JANITOR SINK	1	20.0	20.0	
SUB-TOTAL				82.0
DEMAND FACTOR				24.6
TOTAL GALLONS PER HOUR				106.6
2.5 GPM X 12 MIN. = 30 GAL./SHOWER				24.6
30 GAL./SHOWER X 4 SHOWERS = 120 GALLONS				106.6
120 GALLONS X .875 = 105 GAL./HR @ 120° F				129.6
STORAGE CAPACITY FACTOR				1.00
TOTAL GALLONS OF STORAGE CAPACITY				129.6
SELECTED WATER HEATER SHALL BE CAPABLE OF SUPPLYING APPROXIMATELY 129.6 GPH, TOTAL SYSTEM SHALL HAVE A STORAGE CAPACITY OF APPROXIMATELY 129.6 GALLONS (MINIMUM).				

DOMESTIC WATER SYSTEM SUMMARY

FIXTURE DESCRIPTION	QUANTITY	FIXTURE UNIT VALUE	FIXTURE UNIT SUB-TOTAL	
LAVATORY	7	2.0	14.0	TOTAL FIXTURE UNITS
BREAK ROOM SINK	1	1.4	1.4	
JANITOR SINK	1	3.0	3.0	
ICE MACHINE	1	1	1.0	
WATER CLOSET	7	10.0	70.0	
URINAL	2	5.0	10.0	
SHOWER	4	4.0	16.0	
WATER COOLER	1	25	25	
120.0 FU = 73.0 GPM			115.55	
- 100.0 FU = 67.5 GPM				
20.0 FU = 5.5 GPM				
5.5 GPM = .275 GPM FU				
115.55 FU				
- 100.00 FU				
15.55 FU X .275 GPM FU = 4.30 GPM				
67.5 GPM				
+ 4.30 GPM				
71.8 GPM				
USE $\frac{1}{2}$ " CWS LINE SIZE @ 7.75 FPS @ $\frac{8}{100}$ PSI ΔP (APPROXIMATE)				

FIXTURE/EQUIPMENT SCHEDULE

ITEM	FIXTURE DESCRIPTION	EQUIPMENT SPECIFICATION	ADA (Y/N)	POTABLE WATER CONNECTIONS COLD	HOT	WASTE AND VENT CONNECTIONS WASTE	VENT
CO-1	4" FLOOR CLEANOUT	MIFAB C1000-R-C-P LACQUERED CAST IRON CLEANOUT WITH ANCHOR FLANGE, SECONDARY "O" RING, HEAVY DUTY STAINLESS STEEL COMBINED ACCESS COVER AND PLUG ASSEMBLY WITH PRIMARY GASKET SEAL.	-	-	-	4"	-
CO-2	3" EXTERIOR CLEANOUT	MIFAB C1220 LACQUERED CAST IRON CLEANOUT, GAS AND WATERTIGHT THREADED BRONZE PLUG, SATIN FINISH NICKEL BRONZE ADJUSTABLE TOP ASSEMBLY.	-	-	-	3"	-
CO-3	4" EXTERIOR CLEANOUT	18"x18"x6" THICK 3000 PSI CONCRETE SLAB OVER COMPACTED GRAVEL BED. MIFAB C1220 LACQUERED CAST IRON CLEANOUT, GAS AND WATERTIGHT THREADED BRONZE PLUG, SATIN FINISH NICKEL BRONZE ADJUSTABLE TOP ASSEMBLY.	-	-	-	4"	-
EW-1	ELECTRIC WATER COOLER	HAMS BARRIER FREE ELECTRIC WATER COOLER MODEL NO. HWB48L WITH SK2 SKIRT, BI-LEVEL, WALL MOUNTED, SELF CONTAINED, 500T TOUCH PUSH BAR ACTIVATED, 7.7 GPH AT 50°F, DELIVERED WATER TEMPERATURE, 115V, 60HZ, WITH AN ENVIRONMENTALLY FRIENDLY R134A REFRIGERANT SYSTEM.	Y	1/2"	-	1 1/4"	1 1/4"
EW-1	ELECTRIC WATER HEATER	STATE INDUSTRIES INC. SANDBLASTER COMMERCIAL ELECTRIC MODEL S96 82 30 IFE, 82 GALLON STORAGE CAPACITY, ELECTRIC INPUT OF 30 KW, 480 VAC, 3 #, 123 GPH @ 100°F, RISE, PORCELAINIZED GLASS LINED TANK, MAGNESIUM ANODE ROD, FACTORY INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE, SURFACE MOUNTED THERMOSTAT, 150 PSI MAXIMUM WORKING PRESSURE, UL LISTED	-	1-1/4"	1-1/4"	-	-
	THERMAL EXPANSION TANK	STATE INDUSTRIES INC. WATERGUARD MODEL ETC-SK, 4.55 GALLON CAPACITY, FIELD ADJUSTABLE 40 PSI AIR CHARGE, DRAIN STEEL TANK WITH 2-COAT BONDED POLYMER INNER LINING, BUTYL DIAPHRAGM, MAXIMUM WORKING PRESSURE, 150 PSI, MAXIMUM TEMPERATURE OF 200°F, IAPMO APPROVED, 5 YEAR WARRANTY.	-	3/4"	-	-	-
FD-1	3" FLOOR DRAIN	MIFAB F1000 LACQUERED CAST IRON WITH ANCHOR FLANGE, WEEPHOLES, HEAVY DUTY STAINLESS STEEL STRAINER, TRAP PRIMER CONNECTION, AND MEMBRANE CLAMP.	-	1/2"	-	3"	2"
FD-2	4" FLOOR DRAIN	MIFAB F1000-7-C LACQUERED CAST IRON WITH ANCHOR FLANGE, WEEPHOLES, HEAVY DUTY STAINLESS STEEL STRAINER, TRAP PRIMER CONNECTION, AND MEMBRANE CLAMP, 5" DIAMETER STAINLESS STEEL STRAINER.	-	1/2"	-	4"	2"
ICE-1	REFRIGERATOR ICE MAKER CONNECTION	GUY GRAY MANUFACTURING COMPANY, INC. MODEL BMR75, 1/2" FIP INLET X 1/4" OD OUTLET COMPRESSION ANGLE VALVE, 10"W X 8 3/4" H X 3 1/2" D, 20 GAUGE BOX, 18 GAUGE FACEPLATE, MINIMUM SPANGLER 680 HOT DIPPED GALVANIZED STEEL, UNPAINTED.	-	1/2"	-	-	-
LAV-1	LAVATORY	KOHLER MODEL K-2196-4 PENNINGTON COUNTERTOP LAVATORY, VITREOUS CHINA, FRONT OVERFLOW, 20 1/4" X 17 1/2" OVERALL DIMENSIONS, 16" X 11" BASIN.	Y	-	-	1 1/4"	1 1/4"
	FAUCET	KOHLER CORALAIS SINGLE HANDLE FAUCET MODEL K-15597, CHROME PLATED METAL CONSTRUCTION, GRID DRAIN, 4 5/8" SPOUT, VANDAL RESISTANT 3 1/4" LEVER, PULL-ON/PUSH-OFF OPERATION, .5 GPM AERATOR, 4" CENTERS, CHROME FINISH.	Y	1/2"	1/2"	-	-
	P-TRAP ASSEMBLY	McGUIRE MANUFACTURING CO., INC. MODEL B8872 HEAVY CAST BRASS BODY P-TRAP WITH 17 GAUGE TUBULAR BRASS WALL BEND WITH CLEANOUT PLUG, SHALLOW STEEL FLANGE, 1 1/4" X 1 1/4" X 17 GAUGE.	-	-	-	1 1/4"	-
	LAVATORY SUPPLIES (2 REQUIRED)	McGUIRE MANUFACTURING CO., INC. MODEL 177, 1/2" COPPER SWEAT X 1/2" OD, CHROME PLATED BRASS ANGLE STOP, ROUND WHEEL HANDLES, 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISER, CHROME PLATED STEEL FLANGE.	-	1/2"	1/2"	-	-
	UNDER LAVATORY PIPING INSULATORS	McGUIRE MANUFACTURING CO., INC. MODEL PW 2000 PRO WRAP SEAMLESS INSULATOR, MOLDED CLOSED CELL VINYL, 3/16" THICK, WHITE, WITH COVERS FOR TRAP, TAIL PIECE, WALL BEND AND 2 SUPPLY COVERS. (NOTE TO PC: INSULATORS ARE NOT REQUIRED IF BELOW COUNTER SPACE IS ENCLOSED.)	-	-	-	-	-
LAV-2	LAVATORY	KOHLER MODEL K-1728 CHESAPEAKE WALL HUNG LAVATORY, VITREOUS CHINA, FRONT OVERFLOW, 19 1/4" X 17 1/4" OVERALL DIMENSIONS, 14" X 11" BASIN, SELF-DRAINING DECK AREA, LEDGE, 15" X 10" X 6 3/4" BOWL, SET UP FOR WALL HANGER OR CONCEALED SUPPORT ARMS.	Y	-	-	1 1/4"	1 1/4"
	FIXTURE CARRIER	MIFAB MC-41 CONCEALED ARM LAVATORY CARRIER, FLOOR MOUNTED, HEAVY GAUGE RECTANGULAR STEEL UPRIGHTS WITH INTEGRAL WELDED FEET, ADJUSTABLE DUCTILE IRON ARMS, LEVELING SCREWS WITH BASIN LOCKING DEVICE, CAST IRON SUPPORT, UPPER TIE ROD, PLATED HARDWARE.	-	-	-	-	-
	FAUCET	KOHLER CORALAIS SINGLE HANDLE FAUCET MODEL K-15597, CHROME PLATED METAL CONSTRUCTION, GRID DRAIN, 4 5/8" SPOUT, VANDAL RESISTANT 3 1/4" LEVER, PULL-ON/PUSH-OFF OPERATION, .5 GPM AERATOR, 4" CENTERS, CHROME FINISH.	Y	1/2"	1/2"	-	-
	P-TRAP ASSEMBLY	McGUIRE MANUFACTURING CO., INC. MODEL B8872 HEAVY CAST BRASS BODY P-TRAP WITH 17 GAUGE TUBULAR BRASS WALL BEND WITH CLEANOUT PLUG, SHALLOW STEEL FLANGE, 1 1/4" X 1 1/4" X 17 GAUGE.	-	-	-	1 1/4"	-
	LAVATORY SUPPLIES (2 REQUIRED)	McGUIRE MANUFACTURING CO., INC. MODEL 177, 1/2" COPPER SWEAT X 1/2" OD, CHROME PLATED BRASS ANGLE STOP, ROUND WHEEL HANDLES, 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISER, CHROME PLATED STEEL FLANGE.	-	1/2"	1/2"	-	-
	UNDER LAVATORY PIPING INSULATORS	McGUIRE MANUFACTURING CO., INC. MODEL PW 2000 PRO WRAP SEAMLESS INSULATOR, MOLDED CLOSED CELL VINYL, 3/16" THICK, WHITE, WITH COVERS FOR TRAP, TAIL PIECE, WALL BEND AND 2 SUPPLY COVERS.	-	-	-	-	-
MS-1	MOP SINK	FLORESTONE PRODUCTS CO., INC. MODEL B1 TERRAZZO MOP RECEPTOR, 24" X 24" X 12" HIGH, GALVANIZED STEEL FLANGE, STAINLESS STEEL PROTECTIVE CAP, AND 3" BRASS DRAIN BODY CAST IN PLACE.	-	-	-	3"	2"
	FAUCET	FLORESTONE PRODUCTS CO., INC. MODEL MR-371 FAUCET (SPEAKMAN) WITH INTEGRAL VACUUM BREAKER, DOUBLE STOPS AND BUCKET HOOK WITH WALL BRACE.	N	1/2"	1/2"	-	-
	HOSE CLAMP	FLORESTONE PRODUCTS CO., INC. MODEL MR-370 HOSE AND CLAMP, 3/8" DIAMETER X 5'-0" LONG.	-	-	-	-	-
	MOP HANGER	FLORESTONE PRODUCTS CO., INC. MODEL 372 MOP HANGER WITH 3 BRACKETS.	-	-	-	-	-
	STRAINER	FLORESTONE PRODUCTS CO., INC. MODEL MR-375 FLAT CHROME STRAINER.	-	-	-	-	-
PUMP-1	HOT WATER RECIRCULATING PUMP	ITT BELL & GOSSETT LITTLE RED IN-LINE BOOSTER PUMP MODEL LR-208F, BRONZE BODY, STAINLESS STEEL FACEPLATE, GLASS FILLED NORM. IMPELLER, CARBON STEEL SHAFT, MECHANICAL (CARBON OR CERAMIC) SEAL, OIL LUBRICATED BRONZE SLEEVE MOTOR BEARINGS, 1/20 HP, 115V, 60 HZ, 14, 2800 RPM, 1 1/4" NPT FLANGE SIZES, 6 GPM @ 10 FEET HEAD, 125 PSI WORKING PRESSURE, CONTROLLED BY AQUASTAT THAT ENERGIZES MOTOR WHEN WATER TEMPERATURE IS 100°F, OR LESS AND DE-ENERGIZES MOTOR WHEN WATER TEMPERATURE IS 120°F, OR MORE.	-	-	-	1 1/4"	-
PUMP-2	SUMP PUMP	ZOELLER PUMP CO. MODEL M98 SUBMERSIBLE DEWATERING PUMP, NON-CLOGGING PLASTIC VORTEX IMPELLER, CAST IRON SWITCH CASE, MOTOR AND PUMP HOUSING, AND BASE, OIL FED CAST IRON BEARINGS, STAINLESS STEEL SCREWS, GUARD, HANDLE, AND ARM AND SEAL ASSEMBLY. NEMA 6-2 POLE MECHANICAL SWITCH, OIL FILLED MOTOR - HERMETICALLY SEALED, AUTOMATIC RESET THERMAL OVERLOAD PROTECTION, CARBON AND CERAMIC SHAFT SEAL, NEOPRENE "O" RING BETWEEN MOTOR AND PUMP HOUSING, 1725 RPM, 15'-0" ELECTRICAL CORD, 1/2 HP, 1 #, 115 V, 1 1/2" NPT DISCHARGE. CAPABLE OF PASSING 1/2" SOLIDS. 25 GPM @ 20 FEET OF HEAD.	-	-	-	1 1/2"	-
	ALARM	ZOELLER PUMP CO. MODEL 10-0053 "A-PAK" ALARM SYSTEM, NEMA 1 METAL ENCLOSURE, WARNING LIGHT AND HORN, MANUAL SHUTOFF SWITCH, FLOAT SWITCH WITH 15'-0" CABLE, 115V, 1#, UL LISTED.	-	-	-	-	-
RD-1,2	ROOF DRAIN	MIFAB R1200 14" DIAMETER ROOF DRAIN, LACQUERED CAST IRON BODY WITH ANCHOR FLANGE, MEMBRANE CLAMP RING, AND SELF-LOCKING POLY-DOME STRAINER, 3" BOTTOM OUTLET.	-	-	-	3"	-
RPZ-1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER	WATTS REDUCATOR MODEL D09M20T-S, SERIES 009 REDUCED PRESSURE ZONE BACKFLOW PREVENTER WITH QUARTER TURN FULL PORT RESILIENT SEATED BRONZE BALL SHUTOFF VALVES WITH LEVER HANDLES, 175 PSI MAXIMUM WORKING PRESSURE.	-	2"	-	-	-
SC-A	ROOF SCUPPER	PROVIDED BY GENERAL CONTRACTOR, INSTALLED BY PLUMBING CONTRACTOR	-	-	-	3"	-
SH-1	SHOWER STALL	BUILT-IN-PLACE BY OTHERS. PC SHALL COORDINATE PLUMBING CONNECTIONS WITH OTHERS PRIOR TO START OF CONSTRUCTION, SHOWER HEAD AND VALVE ON RIGHT HAND SIDE.	Y	-	-	-	-
	FAUCET	MOEN SANI-STREAM SINGLE HANDLE SHOWER FAUCET MODEL 8346, CHROME PLATED METAL CONSTRUCTION, PRESSURE BALANCING CYCLE VALVE DESIGN, VANDAL RESISTANT SCREWS, LEVER STYLE HANDLE WITH TEMPERATURE INDICATOR ON THE ESCUTCHEON, ADJUSTABLE TEMPERATURE LIMIT STOP TO LIMIT HANDLE TRAVEL IN THE HOT DIRECTION, PRESSURE BALANCING MECHANISM MAINTAINS SELECTED DISCHARGE TEMPERATURE TO +/- 2°F, SUPPLIED WITH HAND HELD SHOWER HEAD WITH HOSE.	Y	1/2"	1/2"	-	-
	DRAIN	McGUIRE MANUFACTURING CO., INC. SHOWER STRAINER MODEL 1266A, 2" FIP, HEAVY CAST BRASS BODY, STAINLESS STEEL GRID, VANDAL RESISTANT SCREWS.	-	-	-	2"	2"

FIXTURE/EQUIPMENT SCHEDULE (CONTINUED)

ITEM	FIXTURE DESCRIPTION	EQUIPMENT SPECIFICATION	ADA (Y/N)	POTABLE WATER CONNECTIONS COLD	HOT	WASTE AND VENT CONNECTIONS WASTE	VENT
SH-2	SHOWER STALL	BUILT-IN-PLACE BY OTHERS. PC SHALL COORDINATE PLUMBING CONNECTIONS WITH OTHERS PRIOR TO START OF CONSTRUCTION, SHOWER HEAD AND VALVE ON RIGHT HAND SIDE.	N	-	-	-	-
	FAUCET	MOEN SANI-STREAM SINGLE HANDLE SHOWER FAUCET MODEL 8325, CHROME PLATED METAL CONSTRUCTION, PRESSURE BALANCING CYCLE VALVE DESIGN, VANDAL RESISTANT SCREWS, LEVER STYLE HANDLE WITH TEMPERATURE INDICATOR ON THE ESCUTCHEON, ADJUSTABLE TEMPERATURE LIMIT STOP TO LIMIT HANDLE TRAVEL IN THE HOT DIRECTION, PRESSURE BALANCING MECHANISM MAINTAINS SELECTED DISCHARGE TEMPERATURE TO +/- 2°F, SUPPLIED WITH SHOWER HEAD.	Y	1/2"	1/2"	-	-
	DRAIN	McGUIRE MANUFACTURING CO., INC. SHOWER STRAINER MODEL 1266A, 2" FIP, HEAVY CAST BRASS BODY, STAINLESS STEEL GRID, VANDAL RESISTANT SCREWS.	-	-	-	2"	2"
SK-1	BREAK ROOM SINK	MOEN SANI-SINK DOUBLE BOWL SINK MODEL 22128, 20 GAUGE TYPE 301 NICKEL BEARING STAINLESS STEEL, (2) 14" X 16" X 5 1/2" BOWLS, SINK LEDGE WITH (6) HOLES ON 4" CENTERS, 3 1/2" RECESSED DRAIN OPENING, FULLY UNDERCOATED FOR SOUND AND TEMPERATURE INSULATION, LUSTROUS SATIN TONE POLISHED FINISH, CSA AND IAPMO CERTIFIED TO MEET ASME A112.19.3M, 5 YEAR WARRANTY.	Y	-	-	1 1/2"	1 1/4"
	FAUCET	MOEN SANI-SINK SINGLE HANDLE FAUCET MODEL 8720, CHROME PLATED METAL CONSTRUCTION, VANDAL RESISTANT SCREWS, 12" SPOUT, LEVER STYLE HANDLE WITH HOT AND COLD COLOR INDICATORS, PULL-ON/PUSH-OFF OPERATION, 2.0 MAXIMUM GPM, SPRAY WITH FLEXIBLE HOSE, CSA AND IAPMO CERTIFIED TO MEET ASME A112.18.1M, 5 YEAR WARRANTY.	Y	1/2"	1/2"	-	-
	BASKET STRAINER DRAIN ASSEMBLY	MOEN SANI-SINK MODEL 52688, CAST BRASS BODY, STAINLESS STEEL BASKET WITH BRASS SLIDE POST, CAST BRASS STOPPER, BRASS LOCKNUT, 17 GAUGE TALPIECE.	-	-	-	1 1/2"	-
	END OUTLET CONTINUOUS WASTE	McGUIRE MANUFACTURING CO., INC. MODEL B8912 HEAVY CAST BRASS BODY P-TRAP WITH 17 GAUGE TUBULAR BRASS WALL BEND WITH CLEANOUT PLUG, SHALLOW STEEL FLANGE, 1 1/2" X 1 1/2" X 17 GAUGE.	-	-	-	1 1/2"	-
	P-TRAP ASSEMBLY	McGUIRE MANUFACTURING CO., INC. MODEL 177, 1/2" COPPER SWEAT X 1/2" OD, CHROME PLATED BRASS ANGLE STOP, ROUND WHEEL HANDLES, 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISER, CHROME PLATED STEEL FLANGE.	-	-	-	1 1/2"	-
	LAVATORY SUPPLIES (2 REQUIRED)	McGUIRE MANUFACTURING CO., INC. MODEL 177, 1/2" COPPER SWEAT X 1/2" OD, CHROME PLATED BRASS ANGLE STOP, ROUND WHEEL HANDLES, 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISER, CHROME PLATED STEEL FLANGE.	-	-	-	1 1/2"	-
TPV-1	TRAP PRIMER VALVE	MIFAB INC. MODEL MR-500, NON-ADJUSTABLE, 20 PSI TO 125 PSI OPERATING RANGE, -40°F TO 450°F OPERATING RANGE, CORROSION RESISTANT BRASS CONSTRUCTION, CONFORMING TO ASSE #1018, SUPPLIED WITH REMOVABLE IN-LINE STRAINER, SERVES UP TO (6) DRAINS.	-	1/2"	-	-	-
TPV-2	TRAP PRIMER VALVE	PRECISION PLUMBING PRODUCTS, INC. MODEL P-2, ADJUSTABLE FOR LINE PRESSURE, ADJUSTABLE DELIVERY AMOUNT, 35 TO 75 PSIG OPERATING RANGE, -65°F TO 135°F, MACHINED CORROSION RESISTANT BRASS, CONFORMING TO ASSE #1018, WARRANTED FOR LIFE OF SYSTEMS.	-	1/2"	-	-	-
TPV-3	TRAP PRIMER VALVE	PRECISION PLUMBING PRODUCTS, INC. MODEL P-2, ADJUSTABLE FOR LINE PRESSURE, ADJUSTABLE DELIVERY AMOUNT, 35 TO 75 PSIG OPERATING RANGE, -65°F TO 135°F, MACHINED CORROSION RESISTANT BRASS, WITH DU-2 DISTRIBUTION UNIT (2 DRAINS), CONFORMING TO ASSE #1018, WARRANTED FOR LIFE OF SYSTEMS.	-	1/2"	-	-	-
UR-1	URINAL	AMERICAN STANDARD MODEL 6581.017 TRIMBROOK URINAL, VITREOUS CHINA, 1.0 GPF, 17" RIM HEIGHT, FLUSHING RIM, SIPHON JET FLUSH ACTION, EXTENDED SIZES, COMPLETE WITH TWO WALL HANGERS.	Y	1/2"	-	4"	2"
	FLUSH VALVE	SLOAN ROYAL MODEL 186-1 FLUSH VALVE	-	1/2"	-	-	-
WC-1	WATER CLOSET	AMERICAN STANDARD MODEL 2305.100 MADERA 16 1/8" ELONGATED TOILET, VITREOUS CHINA, 1.6 GPF, 16 1/8" RIM HEIGHT, ELONGATED SIPHON ACTION BOWL, FULLY GLAZED TRAPWAY, 1 1/2" INLET SPUD, 2" BALLPASS TRAPWAY, 11" X 13" WATER SURFACE AREA.	Y	-	-	4"	2"
	FLUSH VALVE	SLOAN VALVE COMPANY MODEL 111-YO, DUAL FILTERED BYPASS, PERMEX DIAPHRAGM, HANDLE PACKING, STOP SEAT AND VACUUM BREAKER, ADA COMPLIANT METAL OSCILLATING NON-HOLD-OPEN HANDLE WITH TRIPLE SEAL HANDLE PACKING, 1" IPS SCREWDRIVER BAK-CHEK ANGLE STOP, FREE SPINNING VANDAL RESISTANT STOP CAP ADJUSTABLE TALPIECE, HIGH BACK PRESSURE VACUUM BREAKER FLUSH CONNECTION, ONE PIECE COUPLING NUT, SWEAT SOLDER ADAPTER WITH COVER TUBE AND CAST SET SCREW WALL FLANGE, CHROME PLATED FINISH, VALVE BODY COVER, TALPIECE AND CONTROL STOP SHALL BE SEMI-RED BRASS. BUMPER ON ANGLE STOP FOR OPEN FRONT SEAT WITHOUT COVER. VALVE SHALL CONFORM TO ASSE 1037, AND ANSI/ASME 112.19.6.	-	1"	-	-	-
	SEAT	CHURCH SEATS MODEL 9500C ELONGATED OPEN FRONT SEAT LESS COVER, EXTRA HEAVY WEIGHT, INJECTION MOLDED OF SOLID PLASTIC, MOLDED IN BUMPERS, 300 STAINLESS STEEL CHECK HINGES, WHITE.	-	-	-	-	-
WC-2	WATER CLOSET	AMERICAN STANDARD MODEL 2234.015 MADERA ELONGATED TOILET, VITREOUS CHINA, 1.6 GPF, 14 1/8" RIM HEIGHT, ELONGATED SIPHON ACTION BOWL, FULLY GLAZED TRAPWAY, 1 1/2" INLET SPUD, 2" BALLPASS TRAPWAY, 11" X 13" WATER SURFACE AREA.	N	-	-	4"	2"
	FLUSH VALVE	SLOAN VALVE COMPANY MODEL 111-YO, DUAL FILTERED BYPASS, PERMEX DIAPHRAGM, HANDLE PACKING, STOP SEAT AND VACUUM BREAKER, ADA COMPLIANT METAL OSCILLATING NON-HOLD-OPEN HANDLE WITH TRIPLE SEAL HANDLE PACKING, 1" IPS SCREWDRIVER BAK-CHEK ANGLE STOP, FREE SPINNING VANDAL RESISTANT STOP CAP ADJUSTABLE TALPIECE, HIGH BACK PRESSURE VACUUM BREAKER FLUSH CONNECTION, ONE PIECE COUPLING NUT, SWEAT SOLDER ADAPTER WITH COVER TUBE AND CAST SET SCREW WALL FLANGE, CHROME PLATED FINISH, VALVE BODY COVER, TALPIECE AND CONTROL STOP SHALL BE SEMI-RED BRASS. BUMPER ON ANGLE STOP FOR OPEN FRONT SEAT WITHOUT COVER. VALVE SHALL CONFORM TO ASSE 1037, AND ANSI/ASME 112.19.6.	-	1"	-	-	-
	SEAT	CHURCH SEATS MODEL 9500C ELONGATED OPEN FRONT SEAT LESS COVER, EXTRA HEAVY WEIGHT, INJECTION MOLDED OF SOLID PLASTIC, MOLDED IN BUMPERS, 300 STAINLESS STEEL CHECK HINGES, WHITE.	-	-	-	-	-

ROOF DRAIN/SCUPPER CALCULATION SUMMARY						
ROOF DRAIN DESIGNATION	PRIMARY ROOF DRAIN SQ. FOOTAGE	MINIMUM VERTICAL LEADER SIZE	HORIZONTAL LEADER SIZE	SCUPPER DESIGNATION	SCUPPER SQ. FOOTAGE	SCUPPER DRAIN SIZE
RD-1	59	3"	3" @ 1% SLOPE	SC-A	384	3" @ 1% SLOPE
RD-2	59	3"	3" @ 1% SLOPE			

NOTE: ROOF DRAINS ARE SIZED ON A 100 YEAR, 60 MINUTE PRECIPITATION RATE OF 4.0 INCHES PER HOUR. SCUPPERS ARE SIZED ON A 100 YEAR, 15 MINUTE PRECIPITATION RATE OF 7.2 INCHES PER HOUR.

BUILDING WASTE SYSTEM SUMMARY

FIXTURE DESCRIPTION	QUANTITY	FIXTURE UNIT VALUE	FIXTURE UNIT SUB-TOTAL
LAVATORY	7	1	7
BREAK ROOM SINK	1	2	2
JANITOR SINK	1	2	2
WATER CLOSET	7	4	28
URINAL	2	2	4
SHOWER	4	2	8
FLOOR DRAIN 3"	1	2	2
FLOOR DRAIN 4"	1	5	5
WATER COOLER			
			67.5
			TOTAL FIXTURE UNITS
USE 4" BUILDING DRAIN LINE SIZE @ 1/8" PER FOOT SLOPE			