

CODE COMPLIANCE

- TO THE BEST OF MY KNOWLEDGE, THESE PLANS AND SPECIFICATIONS ARE COMPLETE AND COMPLY WITH THE FOLLOWING CODES.
 - 2017 FLORIDA BUILDING CODE
 - 2017 FLORIDA PLUMBING CODE
 - 2017 FLORIDA ENERGY CODE
 - 2017 FLORIDA ACCESSIBILITY CODE
 - NFPA 101 - 2015
 - ALL ADDITIONAL REFERENCES PER FBC 2017 6TH EDITION, BUILDING CODE CHAPTER 35

PLUMBING ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE
AFF	ABOVE FINISH FLOOR
AW	ACID WASTE
AV	ACID VENT
CA	COMPRESSED AIR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CO	CLEAN OUT
CONT	CONTINUATION
CW	COLD WATER
DCW	DOMESTIC COLD WATER
DN	DOWN
DS	DOWNSPOUT
DWG	DRAWING
EXIST	EXISTING
ESH	EMERGENCY SHOWER / EYEWASH
EWH	ELECTRIC WATER HEATER
EWC	ELECTRIC WATER COOLER
F	DEGREE FAHRENHEIT
FOO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
G	GAS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	KITCHEN WASTE (GREASE)
HB	HOSE BIBB
HD	HUB DRAIN
HW	DOMESTIC HOT WATER
HWIR	DOMESTIC HOT WATER REDIRCULATING
IE	INVERT ELEVATION
IW	INDIRECT WASTE
KW	KILOWATT
LBS	POUNDS
MH	MANHOLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PEMB	PRE-ENGINEERED METAL BUILDING
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE PIPE
RD	ROOF DRAIN
RFP	REDUCED PRESSURE BACKFLOW PREVENTER
SAN	SANITARY
SD	STORM DRAIN
SF	SQUARE FEET
SH	SHEET
SS	SERVICE SINK
STD	OVERFLOW STORM DRAIN
V	VENT
VAC	VACUUM
VTR	VENT THRU ROOF
WCO	WALL CLEAN OUT
WM	WASHING MACHINE SUPPLY AND DRAIN BOX
WTR	WATER

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
---	DOMESTIC COLD WATER
---	DOMESTIC HOT WATER
---	DOMESTIC HOT WATER REDIRCULATING
G	GAS
GR	KITCHEN WASTE (GREASE)
S	SANITARY PIPING
---	SANITARY VENT
ST	ABOVE GROUND STORM
STO	OVERFLOW STORM DRAIN
CD	CONDENSATE DRAIN
CA	COMPRESSED AIR
M	WATER METER
H	HOSE BIBB OR WALL HYDRANT WITH VALVE IN USE
H	HOSE BIBB OR WALL HYDRANT WITH VALVE
II	CLEAN OUT PLUG
II	WALL CLEAN OUT
II	FLOOR CLEAN OUT
II	FLOOR
RD	ROOF DRAIN (ABOVE)
FS	FLOOR SINK
M	SHUT-OFF VALVE IN VALVE BOX
M	SHUT-OFF VALVE
O	BALL VALVE
M	CALIBRATED BALANCING VALVE
V	CHECK VALVE (SWING)
M	PRESSURE REDUCING VALVE
M	SOLENOID OPERATED VALVE
M	REDUCED PRESSURE BACKFLOW PREVENTER
M	RELIEF OF SAFETY VALVE
M	GAS COOK
M	GAS PRESSURE REGULATOR
CP	CONNECTION, TOP
CB	CONNECTION, BOTTOM
C	ELBOW, TURNED DOWN
C	ELBOW, TURNED UP
C	TEE, TURNED UP
C	TEE, TURNED DOWN
E	CAP
▶	DIRECTION OF FLOW
▶	COMPRESSED AIR PRESSURE REGULATOR
TP	1/2" LINE TO PRIMER
○	CODED OR KEY NOTES
⚠	REVISION NUMBER
Ⓟ	DETAIL REFERENCE: TOP DETAIL NUMBER, BOTTOM DRAWING NUMBER SHOWN ON

GENERAL NOTES

- REFERENCE THE SPECIFICATIONS FOR MATERIAL AND EQUIPMENT INSTALLATION STANDARDS.
- THE PLUMBING INSTALLATION SHALL COMPLY WITH ALL STATE AND LOCAL CODES.
- PLANS ARE NOT COMPLETELY TO SCALE. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
- PROVIDE ALL OFFSETS AND FITTINGS AND MAKE CONNECTION TO SITE UTILITIES.
- CONCEAL PIPING ABOVE CEILINGS, WITHIN WALLS OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
- PROVIDE ACCESS PANEL FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS.
- SLEEVE ALL PENETRATIONS THROUGH WALLS, CEILINGS AND FLOORS. SLEEVES FOR STOP PENETRATIONS THROUGH RATED WALLS, CEILINGS AND FLOORS WITH UL LISTED ASSEMBLIES. FIRE STOP ASSEMBLIES SHALL BE EQUAL OR EXCEED THE RATING OF THE WALL, FLOOR OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL DETAILS.
- FLASH AND COUNTER-FLASH ROOF PENETRATIONS. WHEN BEAM SLEEVE PENETRATIONS ARE NECESSARY, COORDINATE PENETRATIONS WITH ALL TRADES. THE ARCHITECT AND THE STRUCTURAL ENGINEER. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE STRUCTURAL ENGINEER BEFORE ANY PENETRATIONS ARE MADE.
- PROVIDE FOUNDATION PAD PENETRATION SLEEVES. ALLOW 1" MINIMUM CLEARANCE BETWEEN SLEEVE INSIDE SURFACE AND PIPE EXTERIOR.
- SEE ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
- PROVIDE AUTOMATIC TRAP PRIMERS FOR ALL FLOOR DRAINS.
- PROVIDE AN AIR GAP, WHEN REQUIRED BY CODE, SERVING INDIVIDUAL FIXTURES, DEVICES, APPLIANCES AND APPARATUS.
- ALL EXPOSED PIPE AND FITTINGS IN FINISHED AREA'S SHALL BE CHROME PLATED.
- MOUNT HOSE BIBBS 24" ABOVE FINISHED GRADE. PROVIDE EACH HOSE BIBBS WITH ISOLATION VALVE.
- PROVIDE CLEANOUTS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. INSTALL CLEANOUTS WITH COVER FLUSH TO FINISH SURFACE.
- COORDINATE EXACT FLOOR DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS. SET FLOOR DRAINS BELOW FINISHED FLOOR TO ALLOW FOR FLOOR SLOPING TO THE DRAIN.
- COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING RUN OVER PANELS SHALL BE RE-ROUTED AT NO ADDITIONAL COST.
- ALL WALL MOUNTED LAVATORIES, WATER COOLERS AND OTHER WALL MOUNTED FIXTURES SHALL BE ATTACHED TO FLOOR MOUNTED CARRIER DESIGNED TO WITHSTAND A VERTICAL LOAD OF 250 POUNDS ON THE FRONT OF THE FIXTURE.
- PROVIDE SANITARY WASTE, VENT, DOMESTIC WATER, ETC. ROUGH-IN AND MAKE FINAL CONNECTIONS (TO INCLUDE PROVIDING ALL NECESSARY RELATED STOPS, VALVES, TRAPS, ETC. AND MAKE READY FOR USE TO ALL EQUIPMENT, WHETHER FURNISHED BY THIS CONTRACTOR OR FURNISHED BY OTHERS.
- INSTALL ISOLATION / SHUT-OFF VALVES AT ALL MAIN RISERS AND MAIN BRANCH TAKEOFFS. TO PERMIT ISOLATION OF PIPING SECTIONS OR ENTIRE SYSTEM.
- PROVIDE RIGID SUPPORT SWAY BRACING AT ALL CHANGES IN DIRECTION GREATER THAN 45 DEGREE ON PIPING 4" AND LARGER.
- PROVIDE WATER HAMMER ARRESTOR ON ALL COLD AND HOT WATER LINES SERVING FIXTURES USING FLUSH VALVES, SOLENOID VALVES OR QUICK CLOSING DEVICES. ARRESTORS SHALL BE SIZED IN ACCORDANCE WITH P.D.I. STANDARDS FOR THE TOTAL NUMBER OF FIXTURES SERVED.
- ALL PIPING SHALL BE PROTECTED FROM THE INTRUSION OF WATER, DUST, DIRT, DEBRIS, ETC. WHILE STORED ON SITE AND DURING CONSTRUCTION.
- ALL EXTERIOR HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.

WATER HAMMER ARRESTOR SCH.

MARK	P.D.I. SIZE (2)	CONNECTION SIZE
A	A (1 - 11 F.U.)	1/2"
B	B (12 - 32 F.U.)	3/4"
C	C (33 - 60 F.U.)	1"

- NOTES:**
- PROVIDE HAMMER ARRESTERS PER ARRESTER SCHEDULE.
 - PROVIDE AND INSTALL PER (PDI) PLUMBING AND DRAINAGE INSTITUTE STANDARD WH-201.

FIXTURE CONNECTION SCHEDULE

MARK	DESCRIPTION	WASTE	TRAP	VENT	CW	HW
WC-x	WATER CLOSET, FLUSH VALVE	4"	INTES.	2"	1"	---
UR-x	URINAL	3"	INTES.	1-1/2"	3/4"	---
L-x	LAVATORY	2"	1-1/4"	1-1/2"	1/2"	1/2"
S-x	SINK	2"	1-1/2"	1-1/2"	1/2"	1/2"
MS-1	MOP SINK	3"	3"	2"	1/2"	1/2"
EWC-1	ELECTRIC WATER COOLER	2"	1-1/4"	1-1/2"	1/2"	---
SH-1	SHOWER	2"	2"	1-1/2"	1/2"	1/2"
HB-1	HOSE BIBB	---	---	---	3/4"	---
HB-2	HOSE BIBB	---	---	---	3/4"	3/4"
FD-1	FLOOR DRAIN	3"	2"	1-1/2"	---	---
FS-1	FLOOR SINK	3"	2"	1-1/2"	---	---

- NOTES:**
- MAKE FINAL PIPE CONNECTIONS FROM BRANCH OR MAIN TO EACH FIXTURE OR DEVICE USING PIPE SIZE(S) AS PER THIS CHART. IF PIPE SIZE IS NOT SHOWN ON PIPING DRAWINGS.

PLUMBING PIPING SCHEDULE

TYPE	COLD WATER	HOT WATER	DRAIN, WASTE & VENT	STORM WASTE	CONDENSATE WASTE
ABOVE GROUND	CPVC	CPVC	PVC	PVC	PVC
UNDERGROUND	CPVC	CPVC	PVC	PVC	PVC
EXPOSED (PUBLIC)	TYPE 'L' COPPER	TYPE 'L' COPPER	TYPE 'L' COPPER	CAST IRON	TYPE 'L' COPPER
AREA UNDERGROUND SUBJECT TO STRESS (THRU FOOTING)	STEEL	STEEL	DUCTILE IRON	DUCTILE IRON	STEEL

- NOTES:**
- INSULATE THE FOLLOWING PIPING SYSTEMS WITH 1" THICK INSULATION.
 - A. HOT WATER PIPING
 - B. CONDENSATE WASTE PIPING
 - C. HORIZONTAL STORM WATER PIPING

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CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THESE DRAWINGS COMPLY WITH ALL RELEVANT BUILDING CODES

PERMIT SET

05/06/2020

STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER
BRYAN R. ZEMINA, P.E.
LICENSE NO. 12345

FGA PROJECT NUMBER
19048

ISSUE DATE
04-15-2020

NO.	DATE	NOTES

SHEET NAME

LEGEND - PLUMBING

SHEET NUMBER
P0.0