

PLUMBING GENERAL NOTES AND SPECIFICATIONS:

1. A. SCOPE OF WORK:
ALL WORK MUST COMPLY WITH FBC 2023 8TH EDITION.
THE WORK SHALL INCLUDE ALL PLUMBING NECESSARY SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND/OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO:
1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS
 2. SANITARY DRAIN AND VENT SYSTEMS
 3. PLUMBING FIXTURES AND TRIM
 4. PRESSURE & TEMPERATURE RELIEF AND PAN DRAIN FROM WATER HEATER.
 5. PIPING INSULATION
 6. SUPPORTS AND HANGERS
- B. ALL PLUMBING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE "FLORIDA BUILDING CODE" AND LOCAL ORDINANCES AND IN COMPLIANCE WITH THE "FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION", AND "HRS" REGULATIONS. IN THE EVENT OF CONFLICT BETWEEN ANY CODE OR REGULATIONS, THE MORE STRINGENT REQUIREMENTS WILL GOVERN. CONTRACTOR TO VERIFY AT SITE THE LOCATION, ELEVATION AND SIZE OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.
3. UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING
4. WATER-HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED, UNLESS OTHERWISE APPROVED. WATER-HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010. ACCESS SHALL BE PROVIDED TO WATER-HAMMER ARRESTORS.
5. ALL FLOOR DRAINS TO HAVE TRAP PRIMERS 1/2" LINE FROM THE NEAREST PLUMBING FIXTURE.
6. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH THE APPROVED MATERIALS. SHALL HAVE SMOOTH SURFACES AND SHALL BE FREE FROM DEFECTS AND CONCEALED FOULING SURFACES. ALL FIXTURE TRIM TO BE CHROME PLATED. FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.
7. WASTE LINES 3" OR MORE, SLOPE @ 1/8"/ FT. AND 2" AND UNDER, SLOPE @ 1/4"/FT.
8. PROVIDE FULLY ACCESSIBLE CLEAN OUTS ON SANITARY AND ANY WASTE PIPING AT EVERY CHANGE OF DIRECTION, AND AT BOTTOM OF STACKS. CLEAN OUT LOCATIONS AND SIZES ON HORIZONTAL LINES SHALL BE ACCORDING TO CODE. WALL CLEAN OUT SHALL NOT BE SEEN FROM ANY LIVING SPACE ROOMS, THEY MUST BE LOCATED UNDER SINKS, LAVATORIES & CABINETS. LOCATIONS MUST BE APPROVED BY ARCHITECT.
9. VENT LINES TO EXTEND 9" MIN. ABOVE ROOF AND FLASH WITH LEAD.
10. THE MAXIMUM WATER CONSUMPTION FLOW RATES AND QUANTITIES FOR ALL PLUMBING FIXTURES FITTINGS SHALL BE IN ACCORDANCE WITH TABLE 604.4 F.B.C.
11. CONTRACTOR SHALL COORDINATE WITH OWNER AMOUNT & LOCATION OF HOSE BIBBS PRIOR TO INSTALLATION.

- 12.PIPING
- A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE.
- B. PROVIDE SLEEVES FOR ALL PIPING PASSING THROUGH FOUNDATION SLABS OR MASONRY WALLS, CAULK OPENINGS BETWEEN PIPE AND SLEEVES.
- C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESCUTCHEONS FIRMLY SECURED TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE SLEEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESCUTCHEONS IN BATHROOMS.
- D. LOCATION OF FULL-OPEN VALVES. AS PER FPC 606.1
- F. LOCATION OF SHUTOFF VALVES. AS PER FPC 606.2
- G. SANITARY WASTE, VENTS & STORM DRAIN SHALL BE APPROVED PVC SCHEDULE 40 ACCORDING WITH STANDARD LISTED IN TABLE 702.2, 702.3 OF FBCP. PROVIDE PIPE FITTING ACCORDING WITH PVC FITTING LISTED IN TABLE 702.4 FBCP.
- H. CONDENSATE DRAINS FROM AIR CONDITIONING UNITS: "PVC" SCHEDULE 40 PIPE & FITTINGS.
- I. DOMESTIC WATER ABOVE GROUND: COPPER OR COPPER-ALLOY PIPE AS PER ASTM B75; ASTM B88; ASTM B251; ASTM B447. TYPE L COPPER PIPE ABOVE GROUND AND TYPE K COPPER BELOW GROUND PIPE (IN PVC SLEEVES).
- J. ALL CONTROL VALVES FOR DOMESTIC WATER SHALL BE CAST BRASS OR B-88 BRONZE GATE VALVES.
- K. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.
- L. PIPING TO THE INLET OF THE WATER HEATER AND PIPING CONVEYING WATER HEATED BY A WATER HEATER SHALL BE INSULATED. FPC 607.5, AND FECC C404.4. ADDITIONALLY, HEAT TRAPS ARE REQUIRED IN ACCORDANCE WITH FECC C404.3.

- 13.INSPECTIONS AND TESTS
- A. CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTIONS TO THE AUTHORITIES HAVING JURISDICTION, AS THE WORK PROGRESSES. ALL SYSTEMS SHALL BE TESTED BY CODE AND/OR LOCAL REGULATIONS.
- B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH THE WATER TO THE HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTION IS MADE BY AN OWNER REPRESENTATIVE.
- C. STERILIZE ALL WATER LINES WITH A MIXTURE OF TWO (2) POUNDS OF CHLORINATED LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE). RETAIN MIXTURE IN PIPES 48 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.
- D. COMPLETE SYSTEM, FIXTURES AND EQUIPMENT SHALL BE GIVEN AN IN-SERVICE TEST AFTER COMPLETION OF THE INSTALLATION.

TYPICAL PLUMBING FIXTURE CONNECTION SCHEDULE

TYPE	SOIL / WASTE	TRAP	CW	HW	REMARKS
DISHWASHER (RESIDENTIAL TYPE)	1-1/2"	-	-	1/2"	CONNECT WASTE TO KITCHEN SINK TAILPIECE. PROVIDE WITH VACUUM BREAKER AND WATER HAMMER ARRESTOR
WATER OUTLET BOX (ICE MAKER)	-	-	1/2"	-	PROVIDE OUTLET BOX W/ INTEGRAL WATER HAMMER ARRESTOR AND SHUT-OFF VALVE.
WASHING MACHINE OUTLET BOX	3"	2"	1/2"	1/2"	PROVIDE OUTLET BOX W/ INTEGRAL WATER HAMMER ARRESTORS AND SHUT-OFF VALVE. WATER FACTOR OF 8 OR LOWER (ENERGY STAR/WATER SENSE CERTIFIED)
SINK	2"	1-1/2"	1/2"	1/2"	1.5 GPM AT 60 PSI MAXIMUM.
LAVATORY	2"	1-1/4"	1/2"	1/2"	FAUCET, PROPOSED WATER EFFICIENCY (1.5 G.P.M.), I.A.P.M.O. AND WATER SENSE CERTIFIED.
WATER CLOSET (FLUSH TANK)	3"	INTEGRAL	1/2"	-	PROPOSED FLOW CONSUMPTION(1.1-1.28 GALLONS PER FLUSHING CYCLE), WATER SENSE CERTIFIED.
SHOWER/TUB	2"	2"	1/2"	1/2"	1.5 GPM AT 60 PSI MAXIMUM.

NOTE: PLUMBING FIXTURE CONNECTION SCHEDULE IS SHOWN FOR CONVENIENCE ONLY. PLUMBING CONTRACTOR TO CONFIRM FINAL PLUMBING FIXTURE CONNECTION SIZES WITH PLUMBING FIXTURE MANUFACTURER'S REQUIREMENTS. ALL FIXTURES SHALL COMPLY WITH REQUIREMENTS OF LOCAL WATER-USE EFFICIENCY ORDINANCES. PROVIDE STOP VALVES FOR ALL FIXTURES AS REQUIRED.

APPLICABLE CODE FBC 8TH EDITION- 2023 & FFPC 8TH EDITION

- 1) FIXTURES TO COMPLY WITH REFERENCE STANDARDS AS PER FBC 2023, 8TH EDITION, PLUMBING SEC. 406 THROUGH 421.
- 2) RESIDENCIAL FIXTURES SHALL COMPLY WITH 2023 FBC, 8TH EDITION Section P2701.
- 3) ANTI-SCALD VALVE: ALL SHOWERS & BATH/SHOWER COMBINATIONS SHALL BE PROTECTED WITH A CONTROL VALVE OF THE PRESSURE BALANCE,THERMOSTOSTIC MIXING OR COMBINATION TYPE .SET. HANDLE POSITION STOPS PER MANUFACTURERS INSTRUCTIONS AT TIME OF INSTALLATION TO A MAXIMUM MIXED WATER OUTLET TEMPERATURE OF 110° F.
- 4) ALL DRAINS 3"ø OR ABOVE SHOULD HAVE 1/8" SLOPE & BELOW 3"ø SHOULD HAVE 1/4" SLOPE.
- 5) ICE MAKERS, REFRIGERATORS & DRINKING FOUNTAINS TO BE IN LINE BACKFLOW DEVICE & FILTER.
- 6) DISHWASHING MACHINES SHALL CONFORM TO ASSE 1004 AND NSF3. WATER SUPPLY SHALL BE PROTECTED WITH AN BACKFLOW DEVICE AND PROVIDE INDIRECT WASTE W/AN AIR BREAK.

PLUMBING LEGEND SYMBOLS AND ABBREVIATIONS

-----	V	VENT	TRAP
-----	G	GAS	HOSE HIBB ISO.
-----	SD	STORM DRAIN	CW RESEAL ISO.
-----	CW	COLD WATER	ROUND FD ISO.
-----	S	WASTE	SQUARE FD ISO.
-----	HW	HOT WATER	TOILET ISO.
-----	HWR	HOT WATER RECIRCULATION	VTR ISO.
-----	CO	CLEANOUT PLUG	CAP
-----	WCO	WALL CLEANOUT	CLEANOUT
-----	WHA	WATER HAMMER ARRESTOR	FLOOR CLEANOUT
-----	CV	CHECK VALVE	GATE VALVE ISO.
-----	BV	BALANCING VALVE	CHECK VALVE ISO.
-----	PRV	PRESSURE REDUCING VALVE	GAS COCK ISO.
-----	VIV	VALVE IN VERTICAL	CAP ISO.
-----	BWV	BACKWATER VALVE	WATER FIXTURE SUPPLY
-----	SV	SOLENOID VALVE	
-----	HB	HOSE BIBB AND TYPE	
-----	RPBP	BACKFLOW PREVENTOR	
-----	GM	GAS METER	
-----	GR	GAS REGULATOR	
-----	FD	FLOOR DRAIN	
-----	FSK	FLOOR SINK	
-----	TD	TRENCH DRAIN	
-----	T & P	TEMPERATURE AND PRESSURE RELIEF VALVE	
-----	DN	PIPE DOWN	
-----	UP	PIPE UP	
-----	DP	PIPE DROP	
-----	RWL	RAIN WATER LEADER	

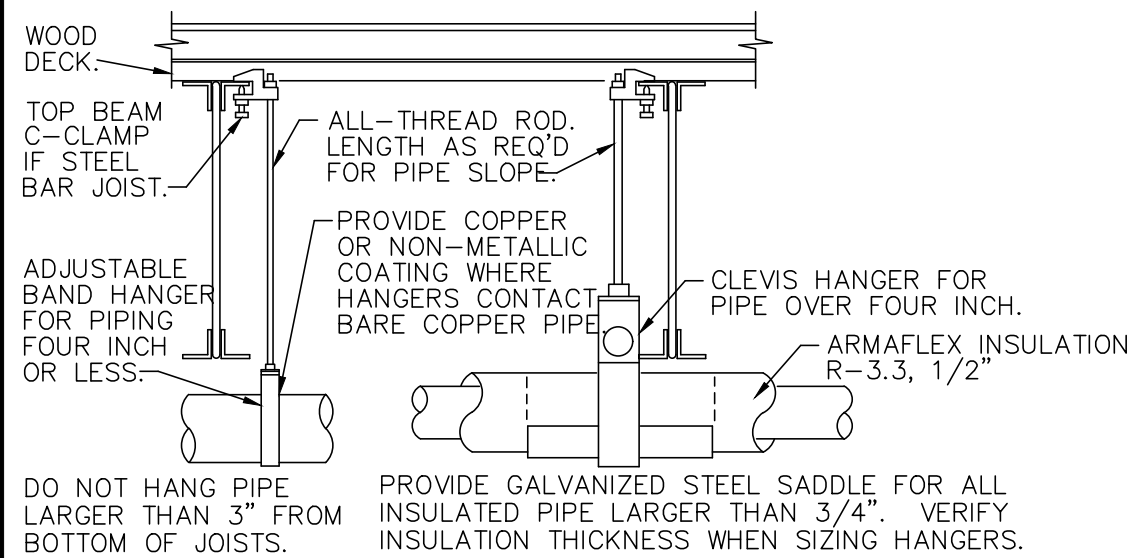
NOTE
IN BIDET, BATHTUB AND WHIRLPOOL, HOT WATER TEMPERATURE SHALL BE DELIVERED THROUGH APPROVED WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B125.3. MAXIMUM TEMPERATURE_A VALVE WILL BE REJECT, IF AT ANY TIME DURING TEMPERATURE VARIATION TIME EXCEEDS 120 F. EACH VALVE MUST HAVE AND ADJUSTABLE AND LOCKABLE MEANS TO LIMIT THE SETTING OF THE DEVICE TO THE HOT POSITION.
ALL HW WATER PIPES(HW & HWR) SHALL BE INSULATED ACCORDING SECTION 607.5.
ALL HOT WATER SUPPLY PIPES SHALL BE IN COMPLIANCE WITH SECTION 607, MAXIMUM TEMPERATURE SUPPLY 120F

DRYER GAS AND RANGE OUTLET BOX.

DRYER GAS AND RANGE OUTLET BOX, OATEY MODA /GAS SUPPLY BOX SHALL BE USED IN GAS SUPPLY SYSTEMS FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS. BOX SHALL ALLOW FOR MOUNTING DIRECT-TO-STUD OR BETWEEN STUDS WITH SUPPLY LINE FROM TOP OR BOTTOM.

WASHING MACHINE BOX

WASHING MACHINE OUTLET BOX WITH WATER HAMMER ARRESTOR AND SHUT OFF VALVE COMPATIBLE WITH CPVC AND COOPER. OATEY MODA SERIES WASHING MACHINE MODULAR SUPPLY BOX. VALVES SHALL BE A TWO-PIECES DESIGN, PERMITTING FIELD REPLACEMENT, AND SHALL BE SECURE WITH STAINLESS STEEL LOC PIN RETENTION CLIP.



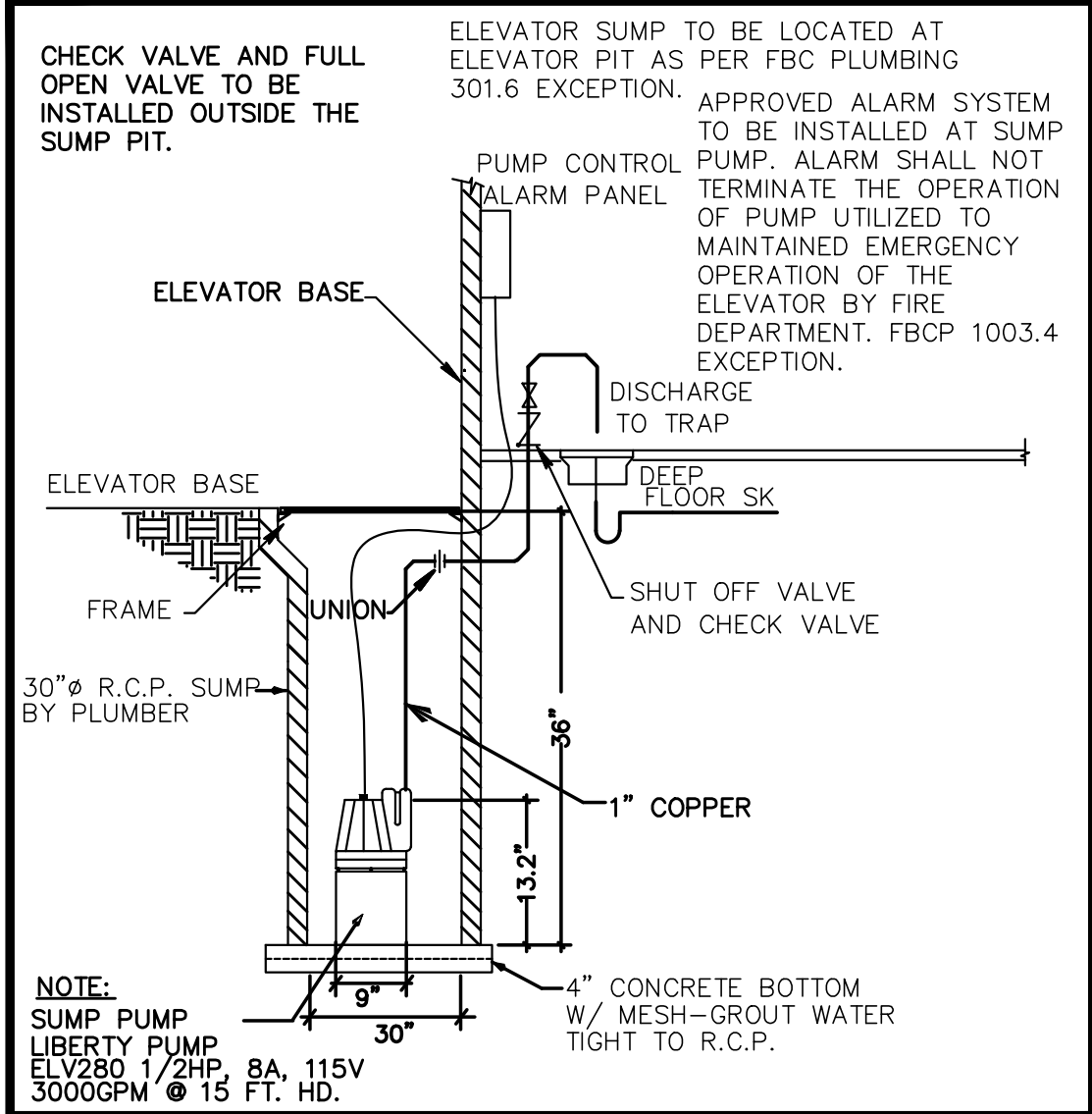
DO NOT HANG PIPE LARGER THAN 3" FROM BOTTOM OF JOISTS.

PROVIDE GALVANIZED STEEL SADDLE FOR ALL INSULATED PIPE LARGER THAN 3/4". VERIFY INSULATION THICKNESS WHEN SIZING HANGERS.

PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. HANGER SPACING FOR PIPE SIZE: COPPER: 4"=12"; 3"=11"; 2-1/2"=10"; 2"=9"; 1-1/2"=8"; 1-1/4"=7"; 1"=6"; 3/4"=6"; 1/2"=5". CAST IRON: 10" & ONE NEAR ALL JOISTS. STEEL: 4"=14"; 3"=12"; 2-1/2"=11"; 2"=10"; 1-1/2"=9"; 1"=7"; 3/4"=6"; 1/2"=5". LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS & TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQ'D. LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. REFER TO CODES FOR FURTHER INFORMATION.

PIPE HANGERS DETAIL

8387-080288



ELEVATOR SUMP PUMP & PIT DETAIL

SUMP PUMP SPECIFICATIONS

ELEVATOR SUMP PUMP & PIT
ELV SERIES SUBMERSIBLE SUMP PUMP WITH OILTECTOR CONTROL. ELV280 1/2HP, 115 VOLTS, 1ø, 8.5 FUL LOAD AMP. DISCHARGE-1-1/2" WITH AUTOMATIC CONTROL. 50 GPH W/15 HEAD IN FEET. MIN. SUMP SIZE 18øx 30" CONTRACTOR SHALL BE INSTALLS PER MANUFACTURER MANUAL INSTALLATION

POTABLE WATER EXPANSION TANK

MODEL WATTS DET-20M1 OR SIMILAR(2)
MAX. PRESSURE_PSI_150
MAX. TEMP. F_200F
TANK VOLUME_GAL_8.5
AIR PRE-CHARGE_PSI_20
DIAMETER_12.5"
LENGHT_19.2"
WEIGHT_15 LBS

WATER HAMMER ARRESTOR

MANUFACTURER: WATTS
FOR RESIDENTIAL/DOMESTIC WATER SYSTEM ONLY
MODEL:150A OR SIMILAR
SIZE_1/2"
MAXIMUM WORKING PRESSUR_150 PSI
MAXIMUM TEMPERATURE_180 F
MAXIMUM VELOCITY_10FT/SEC
MAXIMUM SHOCK PRESSURE_200 PSI

ICE MAKER (REFRIGERATOR)

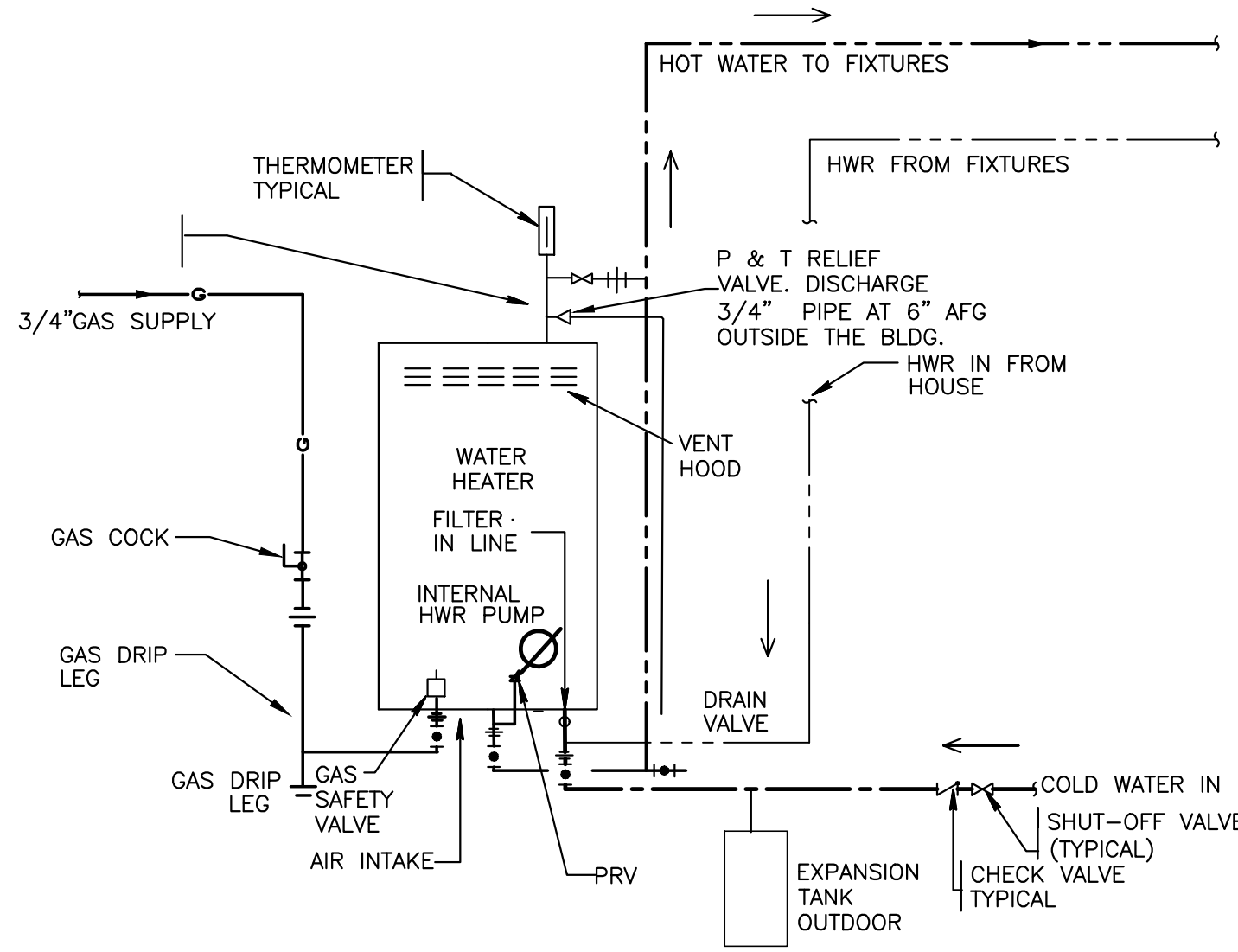
ICE MAKER (REFRIGERATOR) OUTLET BOX WITH WATER HAMMER ARRESTOR AND SHUT OFF VALVE COMPATIBLE WITH CPVC, PVC AND COOPER. OATEY MODA SERIES ICE MAKER SUPPLY BOX. VALVES SHALL BE A TWO-PIECES DESIGN, PERMITTING FIELD REPLACEMENT, AND SHALL BE SECURE WITH STAINLESS STEEL LOC PIN RETENTION CLIP. VALVES WITH WATER HAMMER ARRESTOR AND SHALL BE INSTALLED UPRIGHT OR INVERT OR AS NEEDED. PROVIDE FIRE RATED OPTION ASS NEEDED. MODEL No 37687(COOPER)/ MODELNo 37385 (COOPER FIRE RATED)/MODEL 37390 (CPVC FIRE RATED)

CONSTRUCTION NOTE:

CONTRACTOR SHALL VERIFY LOCATION & SIZE OF ALL EXISTING PIPE TO BE USED PRIOR TO BIDDING, ALSO SHALL MATCH THE SIZES AND SLOPES THAT WE PROVIDED TO COMPLY FBC PLUMBING 2023. CONTRACTOR SHALL PROVIDE LABOR AND MATERIAL TO COMPLETE INSTALLATION. COORDINATE MOUNTING WITH FIXTURE TYPE AND MANUFACTURE MANUAL INSTALLATION ALL NEW FIXTURES AND FAUCET SHALL COMPLY WITH THE NEW MAXIMUM WATER CONSUMPTION OF FLOW RATE AND QUANTITY APPROVED FOR PLUMBING FIXTURES. SANITARY AND WATER EXISTING PIPES SHALL BE VERIFY CONDITION AND SIZE TO REUSE ACCORDING THE NEW CONDITION AND COMPLY WITH FBC PLUMBING 2020. THE ENGINEERING ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF EVENTS IN THE FACILITIES SHOWN OR NOT SHOWN IN PLANS

HOSE BIB

JOSAM SERIES 71300, LOCKABLE BOX CHROME-PLATED HYDRANT/SILL-COCK, STAINLESS STEEL BOX, HINGED. 3/4" HPT OUTLET, INTEGRAL BACK FLOW PREVENTER, AND 3/4" INLET CONNECTION. RECOMMENDED MIN. WALL OPENING 5.5"x 7-3/4"

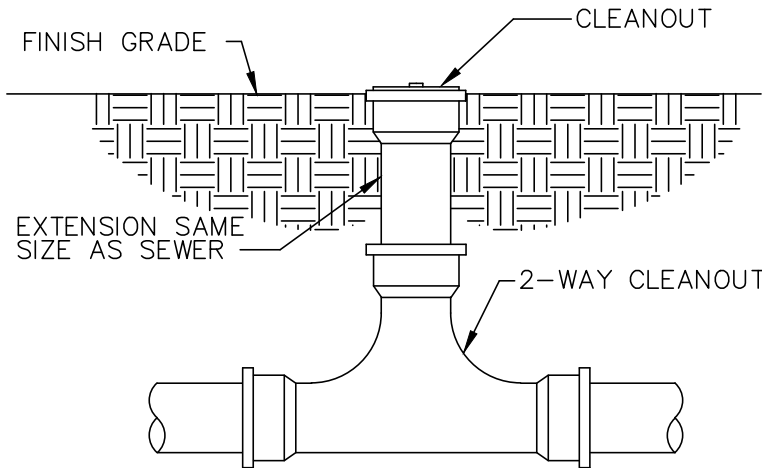


GAS TANKLESS WATER HEATER

NTS

GAS TANKLESS WATER HEATER

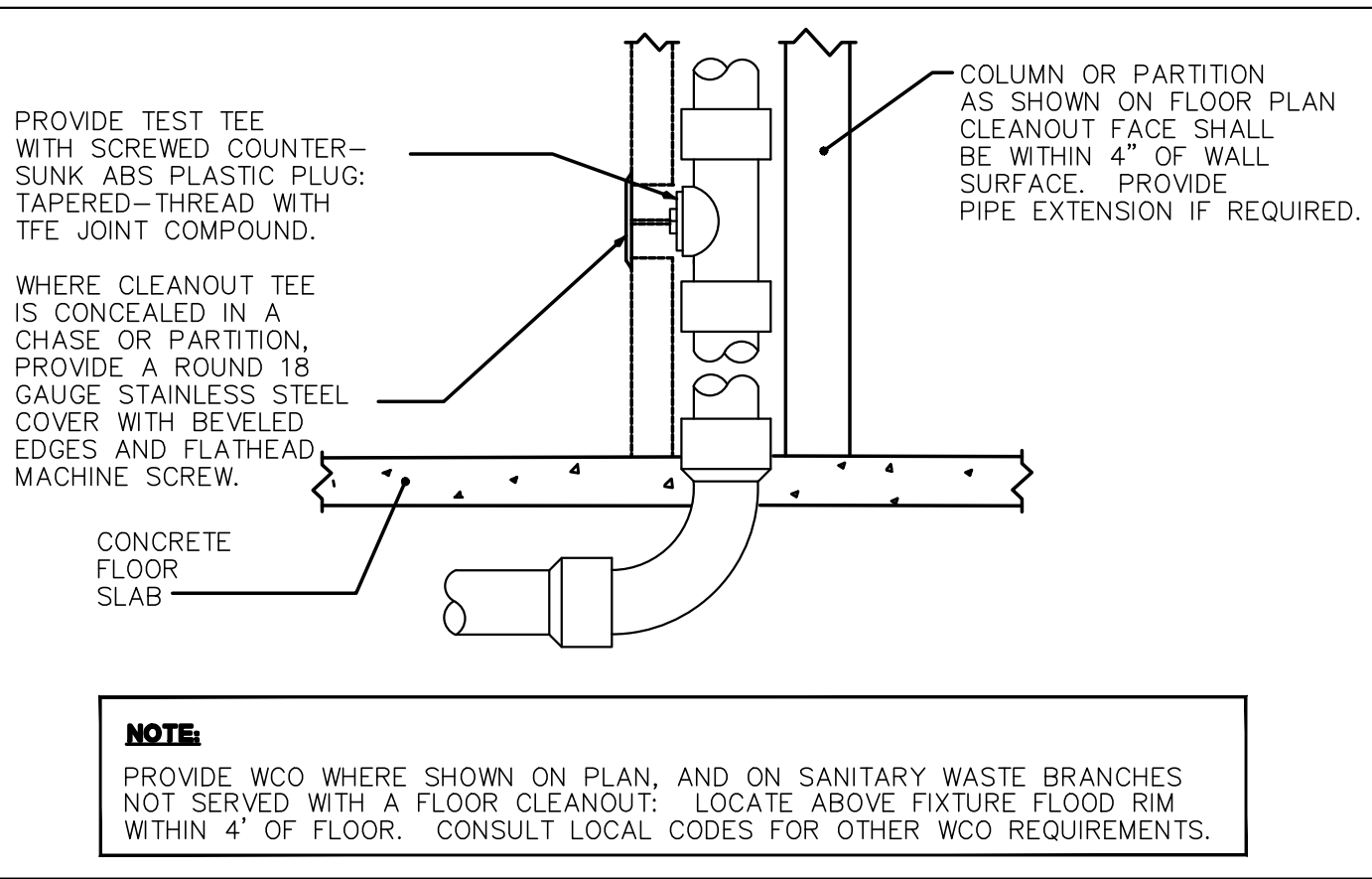
MODEL_RUR199ø
WORK OUTDOOR
11 GPM @ 45F
WATER CONNECTION_3/4"
GAS CONNECTION_3/4"
DIMENSIONS_26.4"x 18.5"x11.4"
SHIPPING WEIGHT_73 LBS
ENERGY FACTOR_0.95
INPUT_15000-199000 BTU/HR
CONTROLLERS_STANDARD MC-195T-US
INTERNAL RECIRCULATION PUMP



NOTE:
PIPE AND FITTING SHALL BE OF THE SAME MATERIAL AS SEWER IT SERVES.

EXTERIOR TWO-WAY CLEANOUT

N.T.S.



NOTE:
PROVIDE WCO WHERE SHOWN ON PLAN, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT: LOCATE ABOVE FIXTURE FLOOD RIM WITHIN 4" OF FLOOR. CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS.

WALL CLEANOUT DETAIL

N.T.S.

This item has been digitally signed and sealed by Amarilis Rodriguez, PE, on [Date]. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies. JOB# 24-0407

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Engineering Design:
> Mechanical > Electrical
> Plumbing > Fire Protection
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Signature _____
Date _____

NOTES

NO.	REVISION/SUBMISSION	DATE
	OWNER REVIEW	03-11-24
	PERMIT SUBMITAL	06-07-24

PROJECT

New 2-Story Residence:
6100 W Suburban Dr, Pinecrest, FL 33156

DRAWING

Plumbing Notes & Schedules

SEAL	SCALE
	As Shown
DRAWN	
REVIEWED	
Nelson de Leon AR 13937	PROJ. NO. 351
SHEET NO.	