

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 DISTRIBUTION 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 IMPERVIOUS SURFACES AND SHALL BE FREE FROM DEFECTS AND CONGOLEATED 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 FBPC, PROVIDE PIPE FITTING ACCORDING WITH PVC FITTING LISTED IN TABLE 702.4 FBPC.
- 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.

PLUMBING FIXTURE SCHEDULE (RESIDENTIAL/PRIVATE)						
MARK	DESCRIPTION	FIXTURE UNITS	HOT WATER	COLD WATER	TRAP	REMARKS
WC	WATER CLOSET	3	---	1/2"	3"	3"DRAIN
L	LAVATORY	1	1/2"	1/2"	1 1/4"	
SH	SHOWER	2	1/2"	3/4"	3"	W/ANTI-SCALD VALVE
SK	KITCHEN SINK	2	1/2"	1/2"		
DW	DISHWASHER	2	1/2"	---	1 1/2"	PROVIDE INDIRECT WASTE W/ AN AIR BREAK
REF	REFRIGERATOR	-	-	1/2"	-	PROVIDE BACKFLOW DEVICE & FILTER IN LINE
WM	WASHER MACHINE	2	1/2"	1/2"	3"	PROVIDE WM BOX W/(2) 1/2" HB & 2" DRAIN
NOTE: ALL FIXTURE SHALL COMPLY WITH MIAMI DADE COUNTY ORDINANCE 8-31						

- 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) RESIDENTIAL 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, THERMOSTATIC 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.

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)

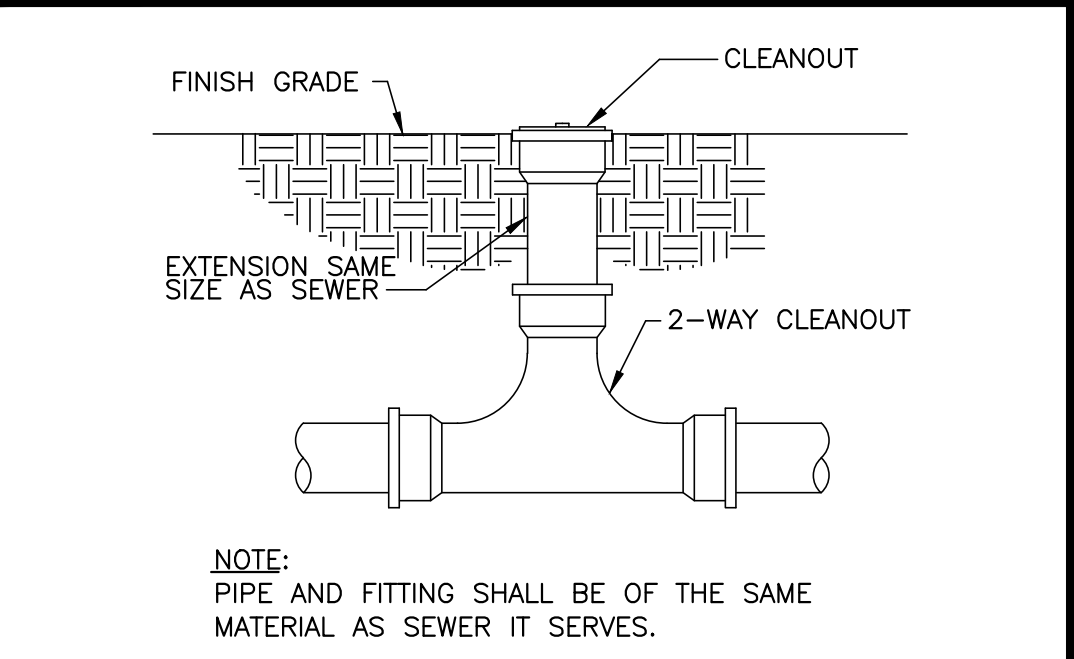
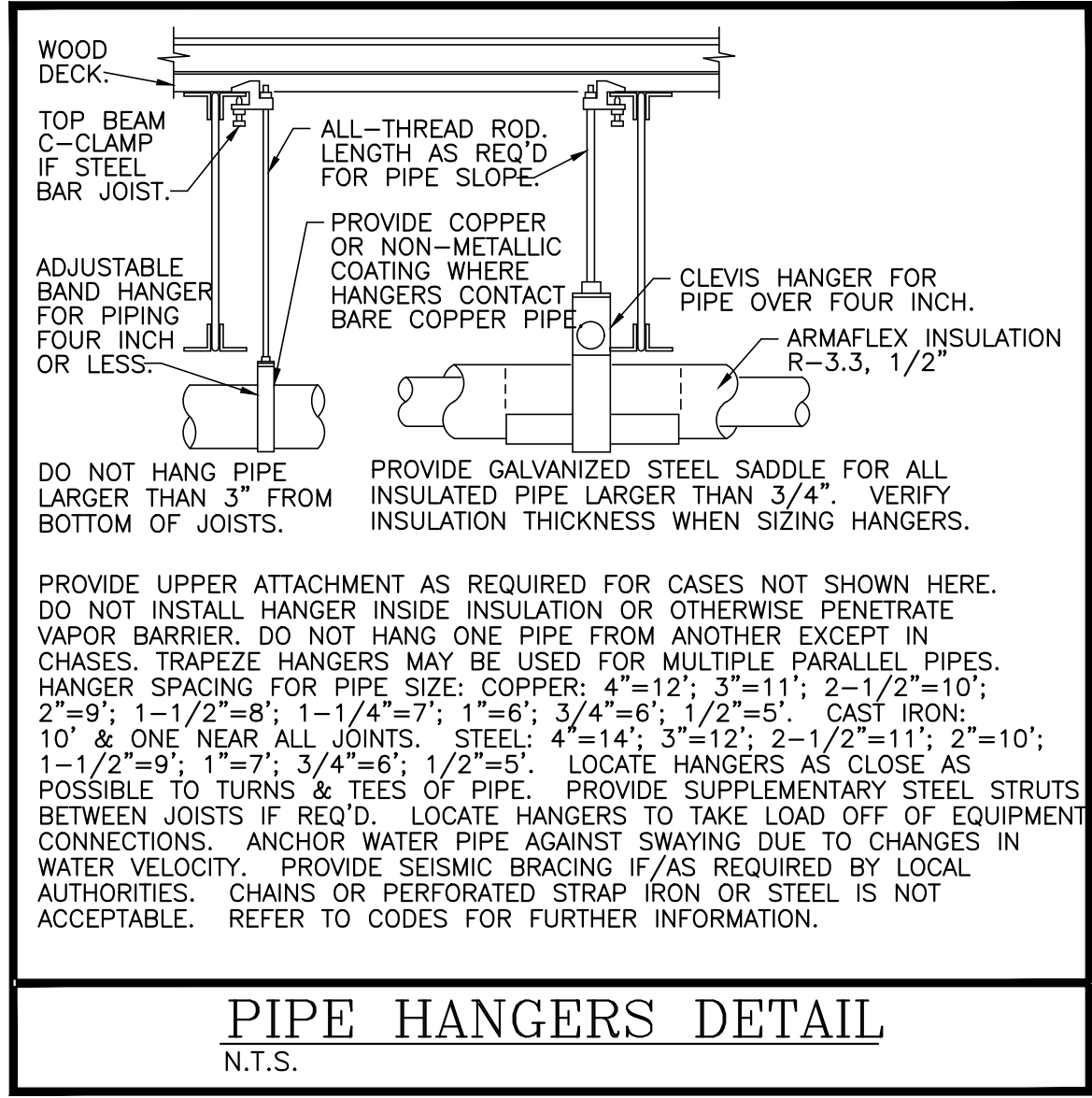
NOTE

IN BIDET, BATHTUB AND WHIRLPOOL, HOT WATER TEMPERATURE SHALL BE DELIVERED THROUGH AND 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 AN 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

PLUMBING LEGEND SYMBOLS AND ABBREVIATIONS

---	V	VENT	TRAP
---	G	GAS	HOSE BIBB 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	
---	SV	SOLENOID VALVE	
---	+	ARROW INDICATES DIRECTION OF FLOW	
---	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	

LEGEND:
N - NEW
EX - EXISTING
RP - REPLACE
RL - RELOCATE



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BACKFLOW PREVENTER

DUAL CHECK BACK FLOW PREVENTERS MANUFACTURE_WATT MODEL SERIES 7 OR SIMILAR COMPLY REQUIREMENTS OF ANSI/ASSE STANDARD 1024, 100% LEAD FREE. LOCATION MAIN LINE DISHWASHER, WASHER MACHINE.

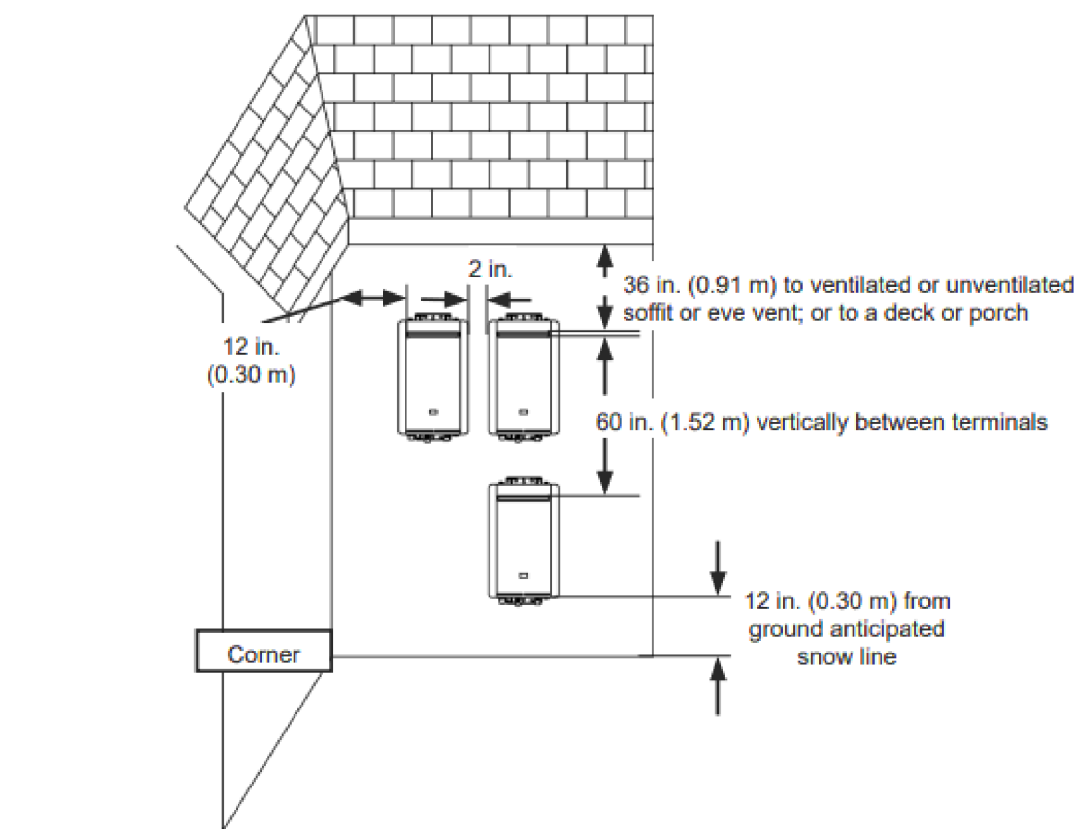
HOSE BIB

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"

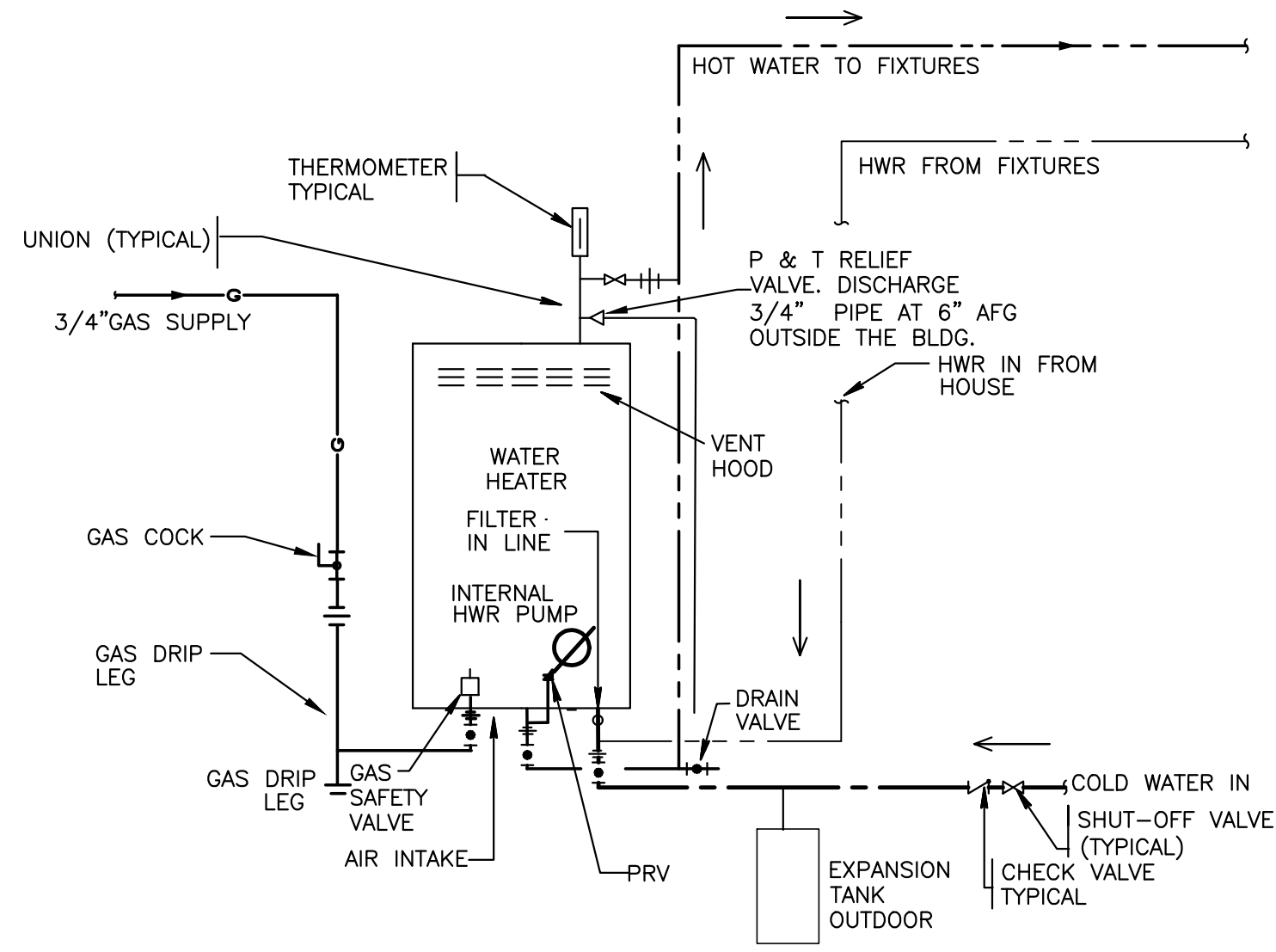
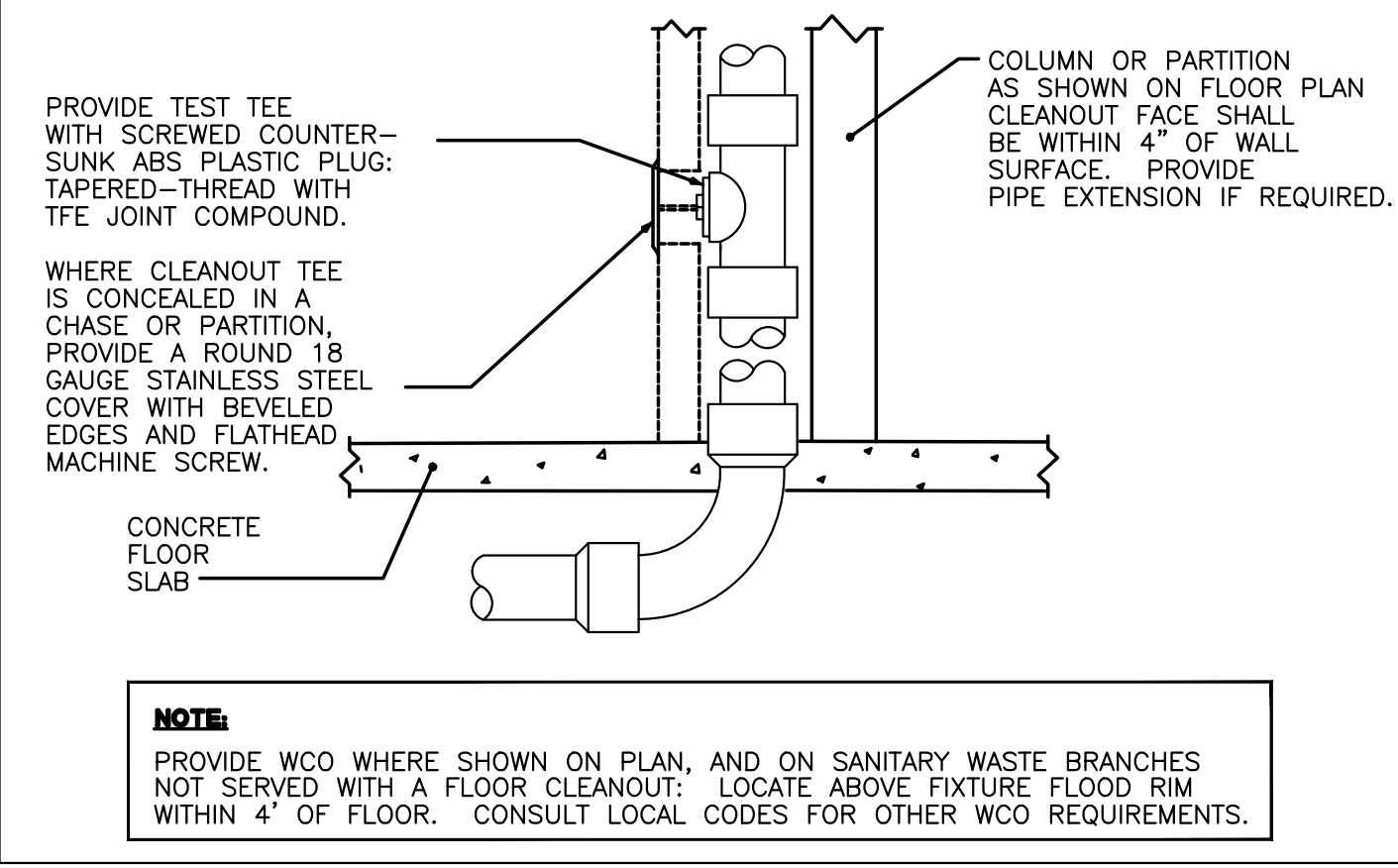
WASHING MACHINE BOX

OATEY CENTRO OR SIMILAR.11-1/2"COPPER SWEAT WITH WATER HAMMER ARRESTOR VALVE AASME A112.18/CSA B 125.1, NSF/ANSI 61 & 372. WATER HAMMER ARRESTOR_ASSE 1010 BOX DIMENSION_10.3"Wx 6.38"Hx 3.0"D COMPATIBLE PIPE MATERIAL_COOPER.

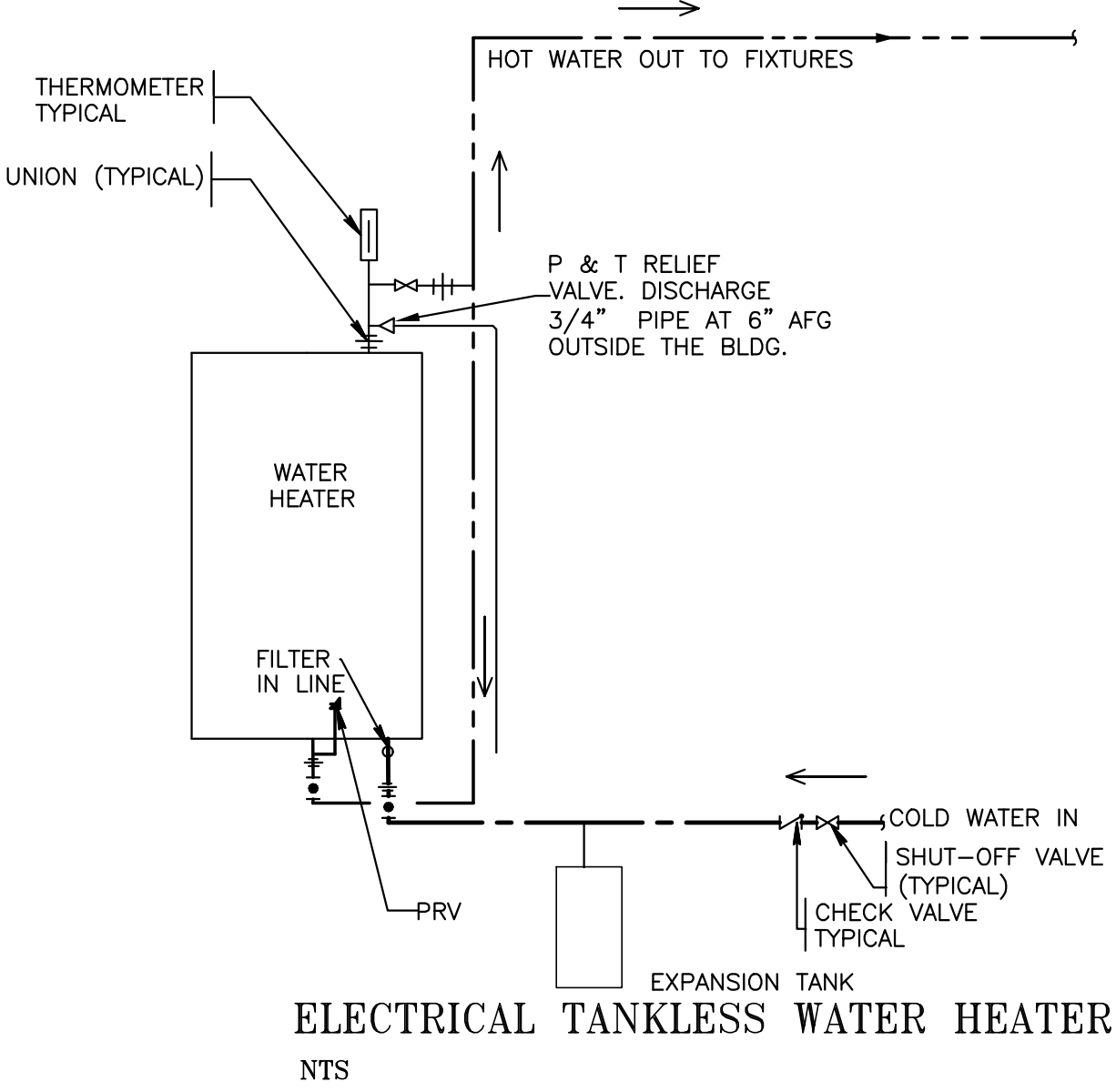
4.5.9 Termination Clearances for External (Outdoor) Water Heaters



TERMINATION CLEARANCES FOR EXTERNAL (OUTDOOR) WATER HEATERS NTS



GAS TANKLESS WATER HEATER NTS



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 2020. 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

RECIRCULATION PUMP SCHEDULE

MODEL: GRUNFOS UP-15-42BS/T RECIRCULATOR PUMP 1/25 HP RECIRCULATOR PUMP FLOW RANGE=0-17 U.S.GPM HEAD RANGE=0-15.5 FEET MOTOR 2 POLE, SINGLE PHASE, 115 VOLT MAX. FLUID TEMPERATURE_220°F MIN. FLUID TEMPERATURE_40°F MAX. WORKING PRESSURE_145 PSI 2 GASKET INCLUDED APPROVED FOR THE TRANSPORT OF POTABLE WATER NSF/ANSI 61. OPTIONAL GRUNFOS 599388 24 HR PROGRAMMABLE TIMER CLOCK, INDOOR WORK

POTABLE WATER EXPANSION TANK

MODEL WATTS DET-20M1 OR SIMILAR(2) MAX. PRESSURE_PSI_150 MAX. TEMP. F_200° TANK VOLUME_GAL_8.5 AIR PRE-CHARGE_PSI_20 DIAMETER_12.5" LENGTH_19.2" WEIGHT_15 LBS

GAS TANKLESS WATER HEATER_ GWH#1,2,3&4

MODEL_RUR199e 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

TANKLESS WATER HEATER SCHEDULE (2)

MANUFACTURER_ STEEBEL ELTRON MODEL_TEMPRA 12 16, 24V, 12KW, 40 AMP, RECOMMENDED WIRE SIZE_10 MIN. REQUIRED CIRCUIT BREAKER SIZE_10/2 AWG WATER CONNECTION_1/2" 99% EFFICIENCY

This item has been digitally signed and sealed by Amaris Rodriguez, P.E. on 2024.06.06. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies. JOB# 24-0307

