

P28915 REQUIRED PAN

WHERE A STORAGE TANK-TYPE WATER HEATER OR A HOT STORAGE TANK IS INSTALLED IN A LOCATION WHERE WATER LEAKAGE FROM THE TANK WILL CAUSE DAMAGE, THE TANK SHALL BE INSTALLED IN A GALVANIZED STEEL PAN HAVING A MATERIAL THICKNESS OF NOT LESS THAN 0.0236 INCH (0.6000 mm) (NO. 24 GAGE) OR OTHER PLANS APPROVED FOR SUCH USE. LISTED PANS SHALL COMPLY WITH CSA LC3.

P289151 PAN SIZE AND DRAIN

THE PAN SHALL NOT BE LESS THAN 1/2" (38 mm) DEEP AND SHALL BE OF SUFFICIENT SIZE AND SHAPE TO RECEIVE ALL DRIPPING OR CONDENSATE FROM THE TANK OF WATER HEATER. THE PAN SHALL BE DRAINED BY AN INDIRECT WASTE PIPE OF NOT LESS THAN 3/4" (19 mm) DIAMETER PIPING FOR SAFETY. PAN DRAINING SHALL BE OF THOSE MATERIALS LISTED IN TABLE P28935.

P289152 PAN DRAIN TERMINATION

THE PAN DRAIN SHALL EXTEND FULL-SIZE AND TERMINATE OVER A SUITABLY LOCATED INDIRECT WASTE RECEPTOR OR SHALL EXTEND TO THE EXTERIOR OF THE BUILDING AND TERMINATE NOT LESS THAN 6" (152 mm) AND NOT MORE THAN 24" (610 mm) ABOVE THE ADJACENT GROUND SURFACE.

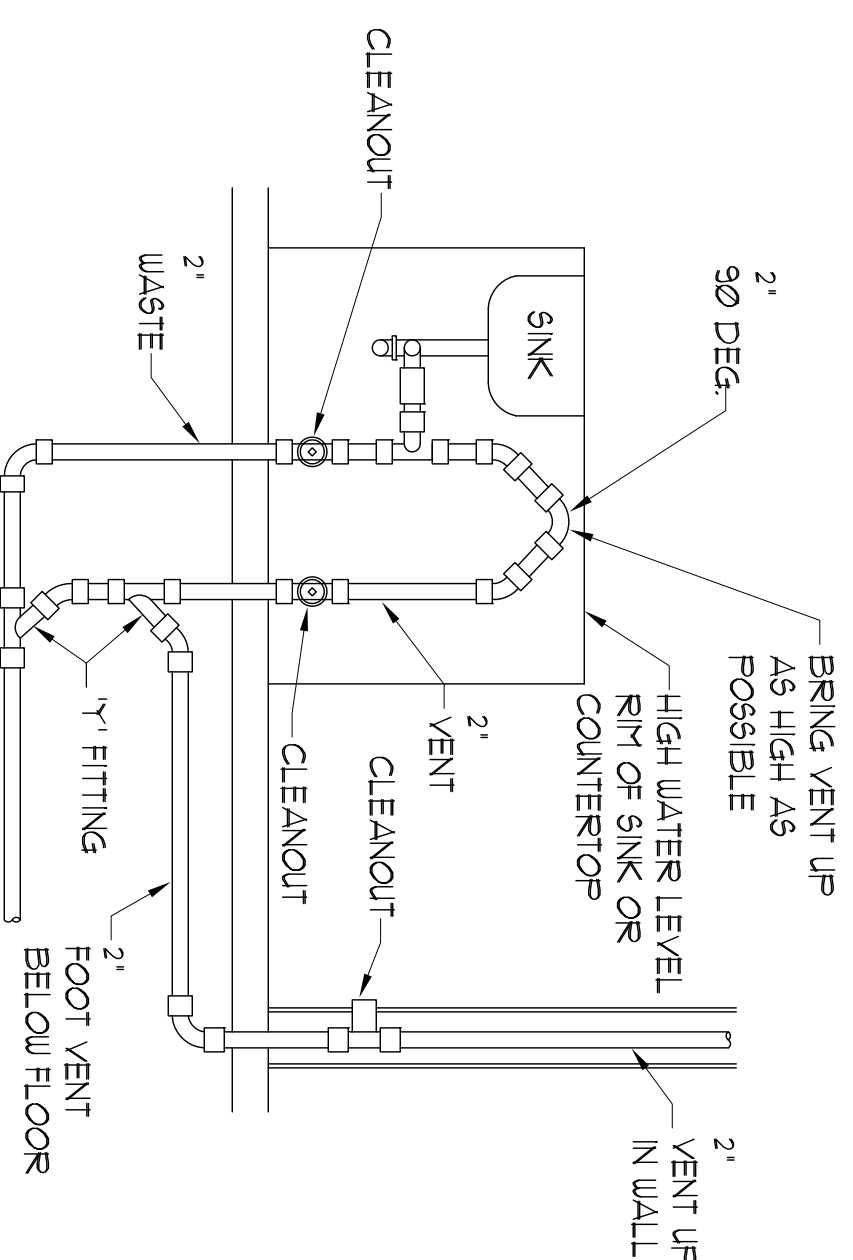
P290342 BACKFLOW PREVENTION DEVICE OR CHECK VALVE

WHERE A BACKFLOW PREVENTION DEVICE, CHECK VALVE OR OTHER DEVICE IS INSTALLED ON A WATER SUPPLY SYSTEM USING STORAGE WATER HEATING EQUIPMENT SUCH THAT THERMAL EXPANSION CAUSES AN INCREASE IN PRESSURE, A DEVICE FOR CONTROLLING PRESSURE SHALL BE INSTALLED.

PLUMBING NOTES

- SOLDER FLUX HAVING A LEAD CONTENT IN EXCESS OF 2.10% OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF ANY PLUMBING IN RESIDENTIAL OR NONRESIDENTIAL FACILITIES PROVIDING WATER FOR HUMAN CONSUMPTION WHICH ARE CONNECTED TO THE PUBLIC WATER SYSTEMS.
- PLUMBING FIXTURES SHALL BE AS FOLLOWS:
WATER CLOSETS - 16 GALLONS PER FLUSH MAXIMUM.
SHOWER HEAD - 2.5 GALLONS PER MINUTE MAXIMUM.
LAVATORY/SINK FAUCETS - 2.2 GALLONS PER MINUTE MAXIMUM.
HOT WATER SHALL BE LEFT FITTING AT ALL FAUCETS.
- WASTE PIPING TO BE SCHEDULE 40 ABS
- PEX TUBING FOR WATER INSTALLATION CONTRACTOR TO FOLLOW MANUFACTURERS RECOMMENDATIONS.
- 1/4" P RELIEF LINE TO BE FULL SIZE STEEL PIPE OR HARD DRAIN COPPER TUBING EXTENDING TO THE EXTERIOR OF THE BUILDING AND TERMINATING IN A DOWNWARD POSITION NOT MORE THAN 2" NOR LESS THAN 5" ABOVE GRADE. THE 1/4" P RELIEF LINE SHALL NOT TERMINATE OVER WALKWAYS, PATIOS, CARPORTS OR OTHER SIMILAR AREAS.
- PROVIDE A BACKFLOW PREVENTER ON THE DISCHARGE SIDE OF EACH HOSE BIB. (HOSE THREADED)
- AN APPROVED DIELECTRIC INSULATOR SHALL BE PROVIDED ON ALL DISSIMILAR METAL WATER PIPING CONNECTIONS OF WATER HEATERS AND RELATED WATER HEATING.
- PLUMBING VENTS SHALL BE A MINIMUM OF 10' AWAY FROM ALL AIR INTAKES.
- SHOWERS AND TUB / SHOWER COMBINATIONS THAT HAVE INDIVIDUAL CONTROL VALVES SHALL BE OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE.
- DRAINAGE PIPING SERVING FIXTURES WHICH HAVE FLOOD LEVEL RIM LOCATED BELOW THE ELEVATION OF THE NEXT UPSTAIR MAHOLE COVER OF THE PUBLIC SEWER SHALL BE PROTECTED FROM BACKFLOW OF SEWAGE BY A BACKWATER VALVE.
- HOT WATER RECIRCULATION PUMPS, PROVIDE A HOT WATER CONTROLLED RECIRCULATION PUMP FOR WATER HEATERS LOCATED MORE THAN 20 FEET FROM THE FURTHEST FIXTURE SERVED. A MANUAL CONTROL OR OCCUPANT SENSOR SWITCH SHALL OPERATE THE PUMP WITH AN AUTOMATIC TEMPERATURE SENSOR SHUT-OFF (P220055 AMENDED)
- PROVIDE THER AT CIRCULATION PUMP.

NOTE: PLUMBING CONTRACTOR TO DETERMINE FINAL CONFIGURATION FOR SIZES AND CLEANOUTS



ISLAND VENT DETAIL

NOTE:
INDIVIDUAL SHOWER AND SHOWER/TUB COMBINATION VALVES SHALL BE EQUIPPED WITH CONTROL VALVES OF THE PRESSURE-BALANCE / THERMOSTATIC-MIXING OR COMBINATION PRESSURE-BALANCE / THERMOSTATIC-MIXING VALVE TYPES WITH A HIGH LIMIT STOP IN ACCORDANCE WITH ASSE 106 OR ASSE A112/11/CSA B125.1. THE HIGH LIMIT STOP SHALL BE SET TO LIMIT THE WATER TEMPERATURE TO NOT GREATER THAN 120 DEG. F (49 DEG. C). IN-LINE THERMOSTAT VALVES SHALL NOT BE USED FOR COMPLIANCE WITH THIS SECTION.

1. TOTAL NO. OF WATER SUPPLY / FIXTURE UNIT VALUES. (REC P29036)

TYPE OF FIXTURE OR GROUP OF FIXTURES	NO. OF FIXTURES	FIXTURE UNIT VALUE	TOTAL FIXTURE UNITS
BATHING (WITHOUT OVERHEAD SHOWER)	-	14	*
CLOTHES WASHER	-	14	*
DISHWASHER	-	14	*
FILL-BATH GROUP WITH BATHING (WITH OR WITHOUT SHOWER HEAD) OR SHOWER STILL	2	36	*
HALF BATH GROUP (WATER CLOSET AND LAVATORY)	-	16	*
HOSE BIBS (INCLUDE ONLY 1)	2	25	*
KITCHEN GROUP (DISHWASHER AND SINK WITH OR WITHOUT GARAGE DISPOSAL)	1	25	*
KITCHEN SINK	-	14	*
LAVATORY GROUP (CLOTHES WASHER STANDPIPE AND LAVATORY TUB)	1	25	*
LANDRY TUB	-	14	*
KIT. VEG. SINK	-	0.1	*
SHOWER STILL	-	14	*
WATER CLOSET (TANK TYPE)	-	22	*
OTHER (SPECIFY)	X	*	*
TOTAL	*	*	112

- * FOR FIXTURE UNIT VALUES NOT LISTED, CHOOSE A FIXTURE IN SIMILAR FLOW CHARACTERISTICS (REC P29036)
- TOTAL DEVELOPED LENGTH OF THE WATER SUPPLY LINE FROM THE WATER METERS TO THE MOST REMOTE WATER USING FROSE (THE CLOSET) AND COLD WATER BEHINDS) 27 FEET (MULTIPLIED BY 12) (COMPENSATION FOR THE PRESSURE LOSS THROUGH FITTINGS) = 324 FEET.
- BASE WATER PRESSURE = 62 PSI.
- THE HIGHEST WATER SUPPLY OUTLET IS 2 FEET BELOW THE ELEVATION OF THE WATER METER

RESIDENTIAL WATER METER WORK SHEET

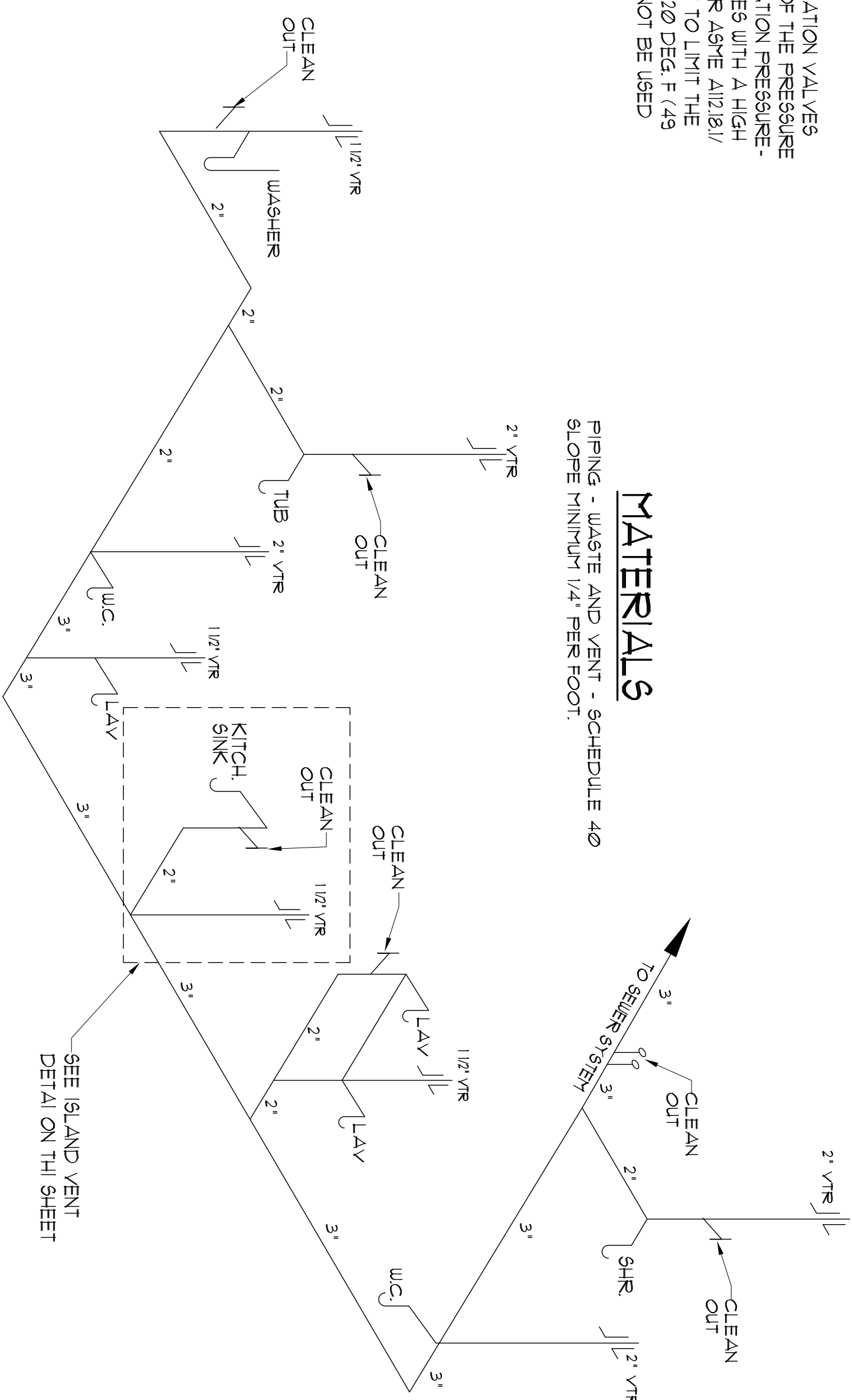
NOTE:
PROVIDE HOT WATER CIRCULATING SYSTEM.
ALL HOT WATER CIRCULATING SYSTEMS SHALL BE INSULATED TO A MINIMUM VALUE OF R-3.

NOTE:
PROVIDE 3/4" WATER METER

NOTE:
PROVIDE 1/4" WATER LINE FROM WATER METER

MATERIALS

PIPING - WASTE AND VENT - SCHEDULE 40 SLOPE MINIMUM 1/4" PER FOOT.



PLUMBING ISOMETRIC

PLUMBING:

EXCAVATIONS ARE NOT PERMITTED WITHIN A 45 DEGREE ANGLE FROM THE BOTTOM OF ANY FOUNDATION EITHER INTERIOR OR EXTERIOR. WATER HEATERS TO BE 40 MIN. GALLON CAPACITY. ALL WATER PIPES TO BE COPPER TYPE "L" UNDER FLOOR TYPE "M" ABOVE SLAB AND PVC SCHEDULE 40 FROM METERS TO HOUSE. WASTE AND VENT PIPING SHALL BE ABS, PLASTIC WATER SUPPLY SHALL BE TYPE "X" COPPER. ALL PLUMBING FIXTURES SHALL BE WATER CONSERVATION TYPE (PER UPC AMENDMENTS). A WATER HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING ARRESTOR SHALL CONFORM TO ASSE 100 (WASHING MACHINES).