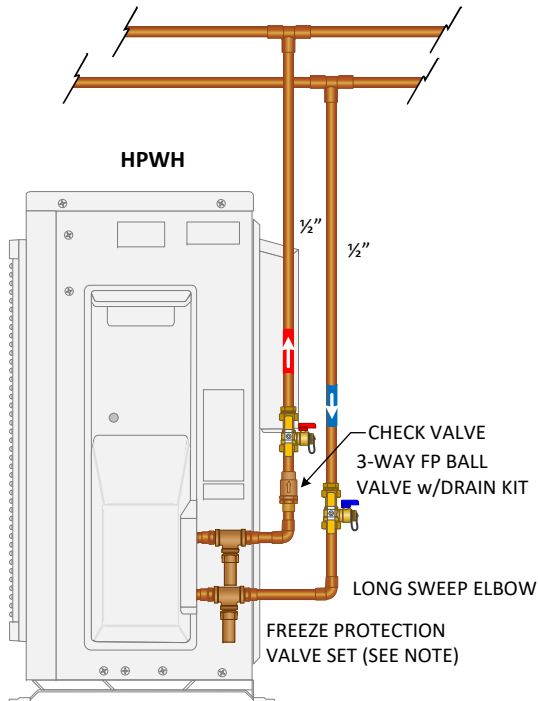
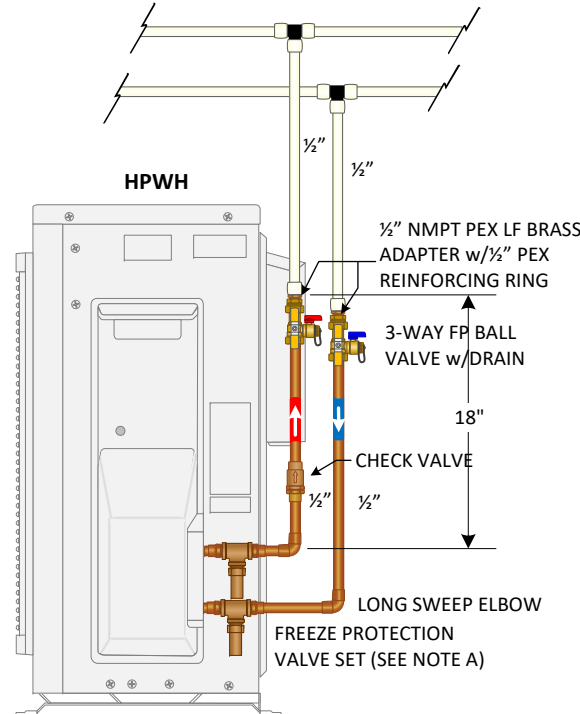


## HEAT PUMP WATER HEATER PIPING DETAIL (HPWH)



PIPING DETAIL A  
WITH COPPER PIPE



PIPING DETAIL B  
WITH PEX PIPE

### NOTES

**NOTE A:** TO PREVENT DAMAGE TO THE HPWH, WHERE TEMPERATURES ROUTINELY DROP BELOW FREEZING, WE RECOMMEND A FREEZE PROTECTION VALVE SET.

**NOTE B:** AREAS WHERE WATER HARDNESS IS GREATER THAN > 200 PPM, IT MAY BE NECESSARY TO PERIODICALLY SERVICE THE HPWH HEAT EXCHANGER. WE RECOMMEND INSTALLING A SERVICE VALVE FLUSH KIT TO THE HPWH. INSTRUCTIONS ON HOW TO DO THE PROCEDURE IS EXPLAINED IN OUR SANCO<sub>2</sub> TECHNICAL MANUAL.

**NOTE C:** INSULATE ALL PIPING PER CODE.

**NOTE D:** CHECK WITH LOCAL JURISDICTIONS FOR CODE REQUIREMENTS. SOME AREAS REQUIRE 18 INCHES OF COPPER PIPE AT THE HOT WATER HEATER OUTLET CONNECTION BEFORE TRANSITIONING TO PEX.

**NOTE B:** MAXIMUM DISTANCE OF SEPARATION FROM THE FURTHEST HPWH TO THE FURTHEST STORAGE TANK IS 66 FEET. THE DESIGNER/ENGINEER MUST ACCOUNT FOR TOTAL EQUIVALENT LENGTH OF PIPE & FITTING PLUS STRAIGHT PIPE ALONG THE CRITICAL PIPING PATH. CONSULT WITH ECO2 SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECO2 APPLICATION AND DESIGN MANUAL.

**NOTE: SEE VALVE  
DETAIL ON PAGE-1 (TYP)**

| HPWH MODEL's G55-45HPC & G55-45HPC-D                             |         |
|------------------------------------------------------------------|---------|
| HOT WATER OUTLET CONN.                                           | ½" NMPT |
| COLD WATER INLET CON.                                            | ½" NMPT |
| ALL PIPING & CONNECTIONS TO MAIN HEADERS CAN BE ½" COPPER OR PEX |         |

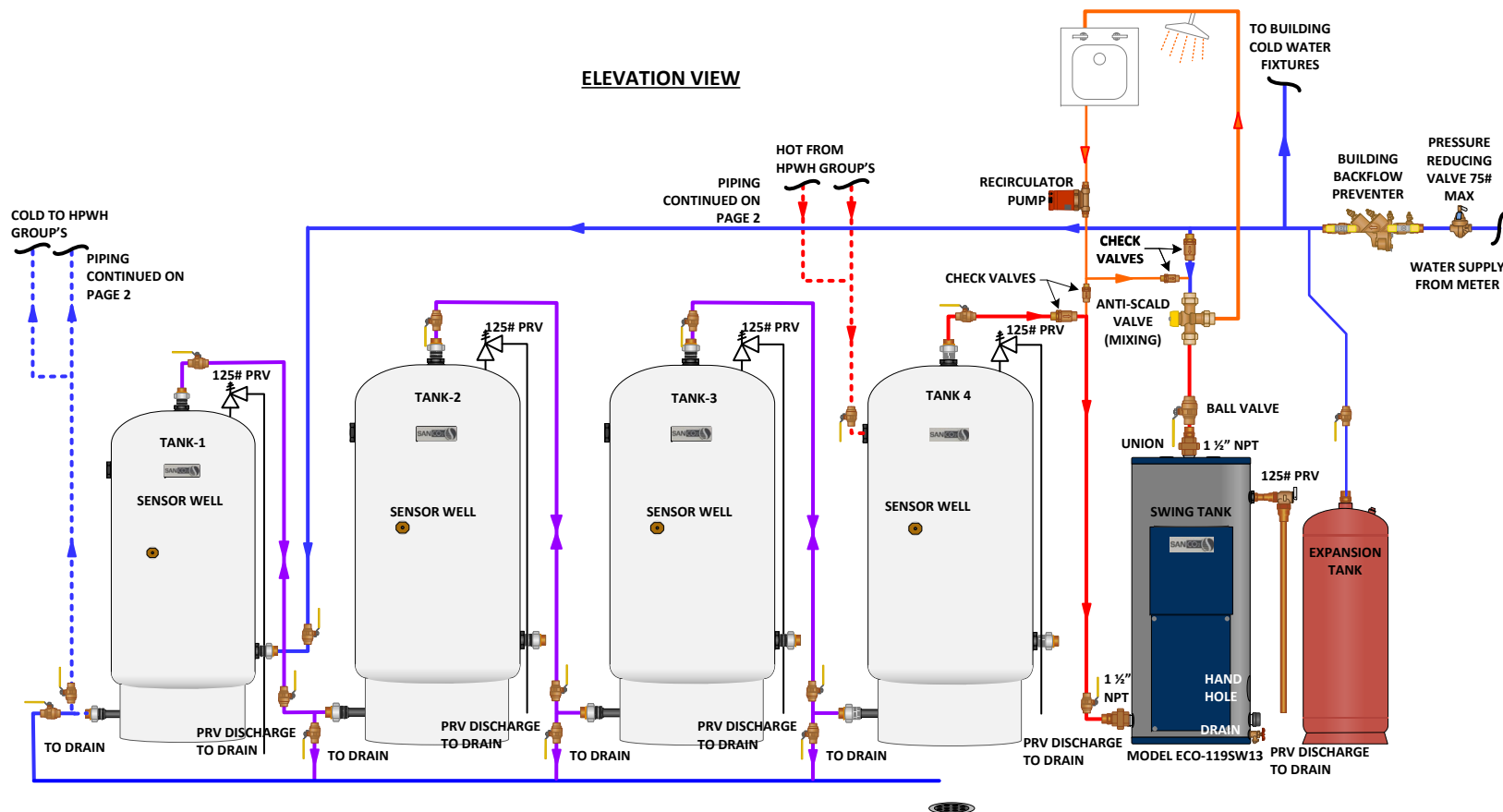
**NOTE:**  
DASHED LINES REPRESENT CRITICAL  
PIPING PATH. REFER TO ECO2  
APPLICATION AND DESIGN MANUAL ON  
HOW TO DETERMINE TOTAL  
EQUIVALENT LENGTH (T.E.L.) DO NOT  
EXCEED 66 FEET OF T.E.L.



**NOTE A:** TO PREVENT DAMAGE TO HPWH'S INTERNAL COMPONENTS, WE MUST LIMIT THE INCOMING BUILDING WATER PRESSURE TO A MAXIMUM OF 75 PSI. THIS INCLUDES CALCULATING STATIC PRESSURE PLUS INCOMING WATER PRESSURE. THIS CAN BE CONTROLLED BY SELECTING A PROPERLY SIZED PRESSURE REDUCING VALVE.

**NOTE B:** MAXIMUM DISTANCE OF SEPARATION FROM THE FURTHEST HPWH TO THE FURTHEST STORAGE TANK IS 66 FEET. THE DESIGNER/ENGINEER MUST ACCOUNT FOR TOTAL EQUIVALENT LENGTH OF PIPE & FITTING PLUS STRAIGHT PIPE ALONG THE CRITICAL PIPING PATH. CONSULT WITH ECO2 SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECO2 APPLICATION AND DESIGN MANUAL.

### ELEVATION VIEW



| MODEL ECO-505GLNST       |                   | MODEL ECO-455GLNST       |                   |
|--------------------------|-------------------|--------------------------|-------------------|
| STORAGE TANK CONNECTIONS |                   | STORAGE TANK CONNECTIONS |                   |
| COLD WATER INLET         | 3" FEMALE NPT     | COLD WATER INLET         | 3" FEMALE NPT     |
| HOT WATER OUTLET         | 3" MALE NPT       | HOT WATER OUTLET         | 3" MALE NPT       |
| COLD WATER TO HP         | 1 1/2" FEMALE NPT | COLD WATER TO HP         | 1 1/2" FEMALE NPT |
| HOT WATER FROM HP        | 1 1/2" FEMALE NPT | HOT WATER FROM HP        | 1 1/2" FEMALE NPT |

| HPWH MODEL's G55-45HPC & G55-45HPC-D                               |           |
|--------------------------------------------------------------------|-----------|
| HOT WATER OUTLET CONN.                                             | 1/2" NMPT |
| COLD WATER INLET CON.                                              | 1/2" NMPT |
| ALL PIPING & CONNECTIONS TO MAIN HEADERS CAN BE 1/2" COPPER OR PEX |           |