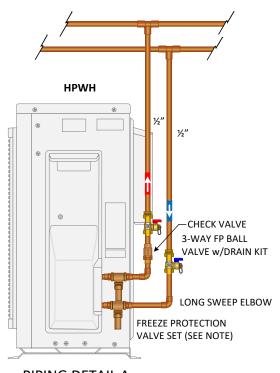
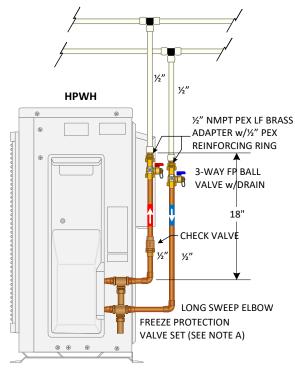
## **HEAT PUMP WATER HEATER PIPING DETAIL (HPWH)**



PIPING DETAIL A PIF
WITH COPPER PIPE W



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 SANCO₂ 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 TRANSISIONING TO PEX.





TITLE: 22 HPWH STACKED OPPOSING (4) STORAGE TANKS 455 SWING TANK FOR RECIRC 119

PROJECT:

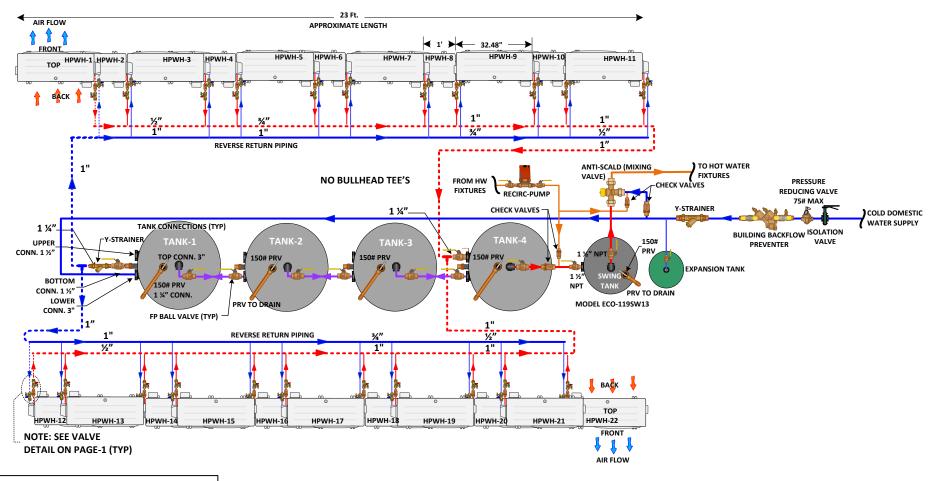
Date: 09/02/25 Time:9:10 PM REV-

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

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 STRAGHT PIPE ALONG THE CRITICAL PIPING PATH. CONSULT WITH ECO2 SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECO2 APPLICATION AND DESIGN MANUAL.

## **PLAN VIEW**



MODEL ECO-455GLNST		
STORAGE TANK CONNECTION	NECTIONS	
COLD WATER INLET	3" FEMALE NPT	
HOT WATER OUTLET	3" MALE NPT	
COLD WATER TO HP	1 ½" FEMALE NPT	
HOT WATER FROM HP	1 ½" FEMALE NPT	

⅃	HPWH MODEL's GS5-45HPC & GS5-45HPC-D		
1	HOT WATER OUTLET CONN. ½" NMPT		
1	COLD WATER INLET CON. ½" NMPT		
4	ALL PIPING & CONNECTIONS TO MAIN		
	HEADERS CAN BE ½" COPPER OR PEX		





TITLE: 22 HPWH STACKED OPPOSING (4) STORAGE TANKS 455 SWING TANK FOR RECIRC 119

PROJECT:

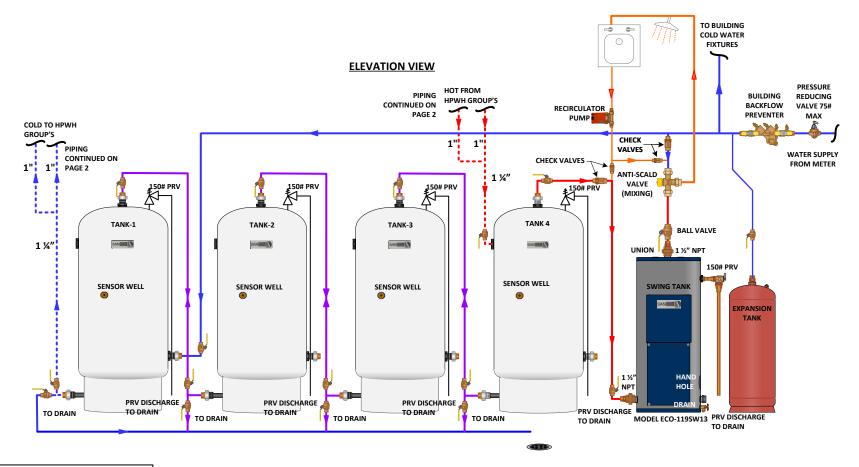
Date: 09/02/25 Time:9:10 PM REV-

NOTE:

DASHED LINES REPRESENT CRITICAL PIPING PATH. REFER TO ECO2 APPLICATION AN 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 HWHP'S INTERNAL COMPONETS. 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 STRAGHT PIPE ALONG THE CRITICAL PIPING PATH. CONSULT WITH ECOZ SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECOZ APPLICATION AND DESIGN MANUAL.



MODEL ECO-455GLNST	
STORAGE TANK CONNECTION	ONS
COLD WATER INLET	3" FEMALE NPT
HOT WATER OUTLET	3" MALE NPT
COLD WATER TO HP	1 ½" FEMALE NPT
HOT WATER FROM HP	1 ½" FEMALE NPT

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HPWH MODEL's GS5-45HPC & GS5-45HPC-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		