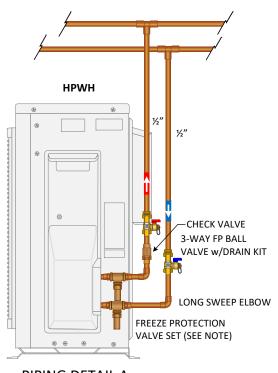
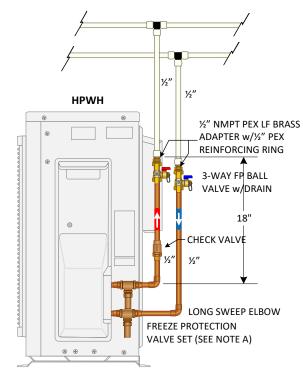
## **HEAT PUMP WATER HEATER PIPING DETAIL (HPWH)**



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 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: 12 HPWH STACKED OPPOSING (2) STORAGE TANKS (1) 505, (1) 455 SWING TANK FOR RECIRC 80

PROJECT:

Date: 10/05/25 Time:10:47 PM REV-

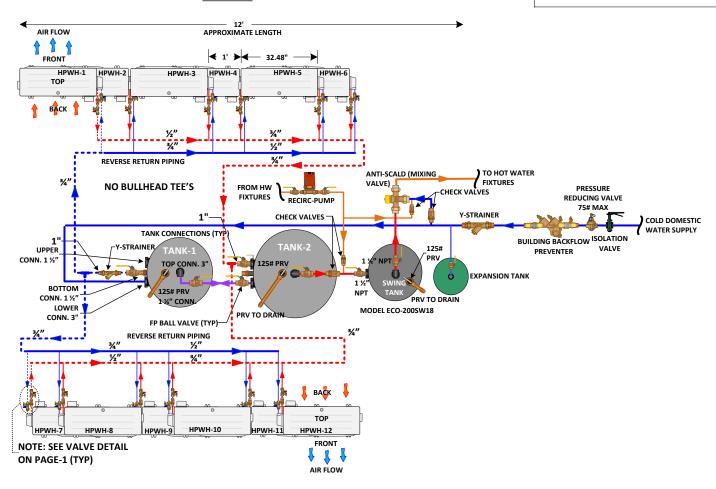
NOTE:

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.

## **PLAN VIEW**



MODEL ECO-505GLNST		
STORAGE TANK CONNECTIONS		
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	

MODEL ECO-455GLNST		
STORAGE TANK CONNECTIONS		
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	

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

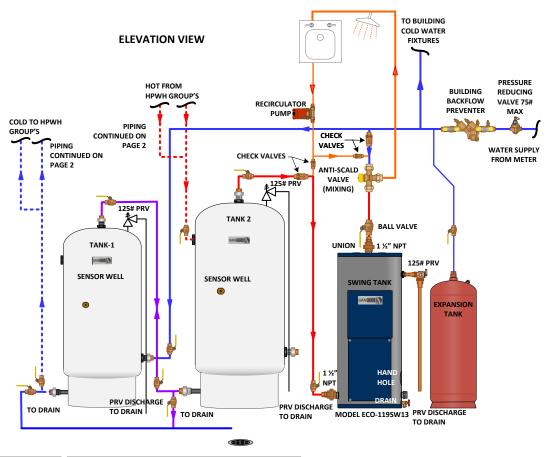
PROJECT:

Date: 10/05/25 Time:10:47 PM

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 ECO2 SYSTEMS TECHNICAL SUPPORT OR REFER TO OUR ECO2 APPLICATION AND DESIGN MANUAL.



MODEL ECO-505GLNST	
STORAGE TANK CONNECTI	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

р3

	MODEL ECO-455GLNST		
	STORAGE TANK CONNECTIONS		
	COLD WATER INLET	3" FEMALE NPT	
	HOT WATER OUTLET	3" MALE NPT	
	COLD WATER TO HP	1 ½" FEMALE NPT	
1	HOT WATER FROM HP	1 ½" FEMALE NPT	
٦			

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	