



Mixed Hot Water Fraction - GS3-45HPA

SANCO2 systems are designed to use a Mixing or Anti Scald valve installed on the Storage Tank Hot Water outlet to the home to control the delivered water temperature at the faucets

The SANCO2 storage tank can be kept at a higher temperature than the mixed water temperature. The Storage Tank temperature is determined by the Heat Pump Setpoint. Having a higher tank water temperature reduces the volume of water drawn from the tank when the faucet is open.

The following tables show for various Mixed Water Temperatures at the faucet and various Cold Water Temperatures to the Mixing Valve, exactly the proportion of stored water drawn from the tank that is used to make up the desired water temperature at the faucet. Simply multiply the volume of water used x the proportion to determine the water volume drawn from the tank.

		SANCO2 Tank/Heat Pump Setpoint (°F)						140
Cold Water Temp (°F)	Mixed Water Temperature (°F)							
	130	125	120	115	110	105	100	
40	0.9	0.85	0.8	0.75	0.7	0.65	0.6	
45	0.89	0.84	0.79	0.74	0.68	0.63	0.58	
50	0.89	0.83	0.78	0.72	0.67	0.61	0.56	
55	0.88	0.82	0.76	0.71	0.65	0.59	0.53	
60	0.88	0.81	0.75	0.69	0.63	0.56	0.50	
65	0.87	0.80	0.73	0.67	0.60	0.53	0.47	
70	0.86	0.79	0.71	0.64	0.57	0.50	0.43	

		SANCO2 Tank/Heat Pump Setpoint (°F)						150
Cold Water Temp (°F)	Mixed Water Temperature (°F)							
	130	125	120	115	110	105	100	
40	0.82	0.77	0.73	0.68	0.64	0.59	0.55	
45	0.81	0.76	0.71	0.67	0.62	0.57	0.52	
50	0.80	0.75	0.70	0.65	0.60	0.55	0.50	
55	0.79	0.74	0.68	0.63	0.58	0.53	0.47	
60	0.78	0.72	0.67	0.61	0.56	0.50	0.44	
65	0.76	0.71	0.65	0.59	0.53	0.47	0.41	
70	0.75	0.69	0.63	0.56	0.50	0.44	0.38	



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Cold Water Temp (°F)	SANCO2 Tank/Heat Pump Setpoint (°F)						160
	Mixed Water Temperature (°F)						
	130	125	120	115	110	105	100
40	0.75	0.71	0.67	0.63	0.58	0.54	0.50
45	0.74	0.70	0.65	0.61	0.57	0.52	0.48
50	0.73	0.68	0.64	0.59	0.55	0.50	0.45
55	0.71	0.67	0.62	0.57	0.52	0.48	0.43
60	0.70	0.65	0.60	0.55	0.50	0.45	0.40
65	0.68	0.63	0.58	0.53	0.47	0.42	0.37
70	0.67	0.61	0.56	0.50	0.44	0.39	0.33

Cold Water Temp (°F)	SANCO2 Tank/Heat Pump Setpoint (°F)						165
	Mixed Water Temperature (°F)						
	130	125	120	115	110	105	100
40	0.72	0.68	0.64	0.60	0.56	0.52	0.48
45	0.71	0.67	0.63	0.58	0.54	0.50	0.46
50	0.70	0.65	0.61	0.57	0.52	0.48	0.43
55	0.68	0.64	0.59	0.55	0.50	0.45	0.41
60	0.67	0.62	0.57	0.52	0.48	0.43	0.38
65	0.65	0.60	0.55	0.50	0.45	0.40	0.35
70	0.63	0.58	0.53	0.47	0.42	0.37	0.32

Cold Water Temp (°F)	SANCO2 Tank/Heat Pump Setpoint (°F)						175
	Mixed Water Temperature (°F)						
	130	125	120	115	110	105	100
40	0.67	0.63	0.59	0.56	0.52	0.48	0.44
45	0.65	0.62	0.58	0.54	0.50	0.46	0.42
50	0.64	0.60	0.56	0.52	0.48	0.44	0.40
55	0.63	0.58	0.54	0.50	0.46	0.42	0.38
60	0.61	0.57	0.52	0.48	0.43	0.39	0.35
65	0.59	0.55	0.50	0.45	0.41	0.36	0.32
70	0.57	0.52	0.48	0.43	0.38	0.33	0.29