

## Water Evaporation Chart

Use the below chart as a guideline to determine the moisture load and the dehumidification requirement for your pool room. This chart is based on low activity and splash. During times of high activity, up to 2 times more moisture may be generated.

POUNDS OF WATER PER HOUR PER SQ FT OF WATER SURFACE														
AIR TEMP	RH	DEW PT	Pool Water Temperature											
			76	78	80	82	84	86	88	90	92	94	100	104
68°F	40%	47	0.031	0.034	0.035	0.041	0.045	0.049	0.053	0.057	0.062	0.067	0.083	0.095
	50%	49	0.028	0.031	0.037	0.038	0.041	0.045	0.049	0.054	0.058	0.063	0.079	0.092
	60%	54	0.024	0.027	0.031	0.034	0.038	0.042	0.046	0.050	0.055	0.060	0.076	0.088
70°F	40%	45	0.030	0.033	0.037	0.040	0.044	0.048	0.052	0.056	0.061	0.066	0.082	0.094
	50%	51	0.026	0.030	0.033	0.036	0.040	0.044	0.048	0.052	0.057	0.062	0.075	0.090
	60%	55	0.023	0.027	0.030	0.033	0.037	0.041	0.045	0.049	0.054	0.059	0.075	0.087
72°F	40%	47	0.029	0.032	0.035	0.039	0.043	0.046	0.051	0.055	0.060	0.064	0.081	0.093
	50%	53	0.025	0.058	0.031	0.035	0.039	0.042	0.047	0.051	0.055	0.060	0.076	0.089
	60%	57	0.022	0.025	0.028	0.032	0.035	0.039	0.043	0.048	0.052	0.057	0.073	0.086
74°F	50%	54	0.024	0.027	0.031	0.034	0.038	0.042	0.046	0.050	0.055	0.060	0.076	0.088
	60%	59	0.020	0.023	0.026	0.030	0.034	0.038	0.042	0.046	0.051	0.055	0.072	0.084
	76°F	50%	56	0.023	0.026	0.029	0.033	0.036	0.040	0.044	0.049	0.053	0.058	0.074
78°F	60%	62	0.017	0.020	0.024	0.027	0.031	0.035	0.039	0.043	0.048	0.053	0.067	0.081
	50%	53	0.025	0.028	0.031	0.035	0.039	0.042	0.047	0.051	0.055	0.060	0.076	0.089
	60%	63	0.016	0.019	0.023	0.026	0.030	0.034	0.038	0.042	0.047	0.052	0.068	0.080
80°F	50%	60	0.019	0.022	0.026	0.029	0.033	0.037	0.041	0.045	0.050	0.054	0.071	0.083
	60%	65	0.014	0.017	0.021	0.024	0.028	0.032	0.036	0.040	0.045	0.049	0.066	0.078
	82°F	50%	62	0.017	0.020	<b>0.024</b>	0.027	0.031	0.035	0.039	0.043	0.048	0.053	0.069
84°F	60%	67	0.012	0.015	<b>0.018</b>	0.022	0.025	0.029	0.033	0.038	0.042	0.047	0.063	0.076
	50%	64	0.015	0.018	0.022	0.025	0.029	0.033	0.037	0.041	0.046	0.051	0.067	0.079
	60%	68	0.011	0.014	0.017	0.021	0.024	0.028	0.032	0.037	0.041	0.046	0.062	0.074
86°F	50%	65	0.014	0.017	0.021	0.024	0.028	0.032	0.036	0.040	0.045	0.049	0.066	0.078
	60%	71	0.007	0.010	0.013	0.017	0.021	0.024	0.029	0.033	0.037	0.042	0.058	0.071

## Ventilation Chart

The following chart should be used as a guide to determine the ventilation impact in your pool room. This chart is based on an average 80% outside relative humidity.

Pool Room Air Temperature %  
Relative Humidity

POUNDS OF WATER REMOVED / HOUR / 100 CFM OF VENTILATION												
AIR TEMP	RH	Outside Air Temperature										
		-10	0	10	20	30	40	50	60	70	80	
68°F	50%	3.0	2.9	2.7	2.4	1.9	1.3	0.5	-0.6	-2.3	-4.6	
	60%	3.6	3.5	3.3	3.0	2.6	2.0	1.1	0.0	-1.6	-3.9	
70°F	50%	3.2	3.1	2.9	2.6	2.1	1.5	0.7	-0.4	-2.1	-4.4	
	60%	3.9	3.8	3.6	3.3	2.8	2.2	1.4	0.3	-1.4	-3.7	
72°F	50%	3.3	3.3	3.1	2.8	2.3	1.7	0.9	-0.3	-1.9	-4.2	
	60%	4.1	4.0	3.9	3.6	3.1	2.5	1.6	0.5	-1.1	-3.4	
74°F	50%	3.7	3.6	3.4	3.1	2.7	2.1	1.2	0.1	-1.5	-3.9	
	60%	4.5	4.4	4.2	3.9	3.4	2.8	2.0	0.9	-0.8	-3.1	
76°F	50%	4.1	4.0	3.9	3.6	3.1	2.5	1.6	0.5	-1.1	-3.4	
	60%	4.9	4.8	4.6	4.3	3.9	3.3	2.4	1.3	-0.3	-2.7	
78°F	50%	4.2	4.1	3.9	3.6	3.2	2.6	1.7	0.6	-1.0	-3.3	
	60%	5.1	5.1	4.9	4.6	4.1	3.5	2.7	1.5	-0.1	-2.4	
80°F	50%	4.5	4.5	4.3	4.0	3.5	2.9	2.1	0.9	-0.7	-3.0	
	60%	5.5	5.4	5.2	4.9	4.5	3.9	3.0	1.9	0.3	-2.1	
82°F	50%	<b>4.8</b>	<b>4.8</b>	<b>4.6</b>	<b>4.3</b>	<b>3.8</b>	<b>3.2</b>	<b>2.4</b>	<b>1.2</b>	<b>-0.4</b>	<b>-2.7</b>	
	60%	<b>5.8</b>	<b>5.7</b>	<b>5.6</b>	<b>5.3</b>	<b>4.8</b>	<b>4.2</b>	<b>3.3</b>	<b>2.2</b>	<b>0.6</b>	<b>-1.7</b>	
84°F	50%	5.2	5.1	4.9	4.6	4.2	3.6	2.7	1.6	0.0	-2.4	
	60%	5.8	5.7	5.6	5.3	4.8	4.2	3.3	2.2	0.6	-1.7	
86°F	50%	5.6	5.5	5.3	5.0	4.5	3.9	3.1	2.0	0.3	-2.0	
	60%	6.7	6.6	6.4	6.1	5.7	5.1	4.2	3.1	1.5	-0.9	
88°F	50%	5.9	5.8	5.7	5.4	4.9	4.3	3.4	2.3	0.7	-1.6	
	60%	7.2	7.1	6.9	6.6	6.2	5.6	4.7	3.6	2.0	-0.3	
90°F	50%	6.3	6.3	6.1	5.8	5.3	4.7	3.9	2.7	1.1	-1.2	
	60%	7.7	7.6	7.5	7.2	6.7	6.1	5.2	4.1	2.5	0.2	
92°F	50%	6.8	6.7	6.5	6.2	5.7	5.1	4.3	3.2	1.5	-0.8	
	60%	7.8	7.7	7.5	7.2	6.8	6.2	5.3	4.2	2.6	0.3	
94°F	50%	7.2	7.1	6.9	6.6	6.2	5.6	4.7	3.6	2.0	-0.3	
	60%	8.7	8.7	8.5	8.2	7.7	7.1	6.3	5.1	3.5	1.2	

ASHRAE Recommended Conditions