

DEW POINT TEMPERATURE TABLE Conditions at Which Condensation Will Form on Surfaces

Relative Humidity (%RH)	40%	50%	60%	70%	80%
	Dew Point Temperature (Degrees Fahrenheit)				
Air Temperature at 74° F.	48	54	59	63	67
Air Temperature at 76° F.	50	56	61	65	69
Air Temperature at 78° F.	52	58	63	67	71
Air Temperature at 80° F.	54	60	65	69	73
Air Temperature at 82° F.	55	61	67	71	75
Air Temperature at 84° F.	57	63	68	73	77
Air Temperature at 86° F.	59	66	71	75	79

Single pane glass is NOT recommended for indoor pools due to its low R or U values. There is no insulative quality to single pane glass and moving air flow across this glass does not guarantee it will remain free of condensation when the outdoor temperature is below indoor pool room temperature.

Condensation will form on any surface that reached dew point temperature. The objective for designing dehumidification for an indoor pool environment is to ensure that no surface within the pool enclosure or within the structural members of the building will reach dew point and cause moisture to condense. The most common place for condensation to form in a natatorium is on the inside surfaces of windows, door glass, and/or skylights. For these surfaces, the objective is to completely blanket the area with warm, dry air supplied by the dehumidification system, thereby increasing the surface temperature to a point above the temperature at which moisture will condense (preventing the condensation).