DXAIR INDOOR POOL DESIGN GUIDELINES
DEWPOINT TEMPERATURE TABLE

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CONDITIONS AT WHICH CONDENSATION WILL FORM ON SURFACES:

RELATIVE HUMIDITY (%RH)	40%	50%	60%	70%	80%
Air Temperature 74 Degrees F	48	54	59	63	67
Air Temperature 76 Degrees F	50	56	61	65	69
Air Temperature 78 Degrees F	52	58	63	67	71
Air Temperature 80 Degress F	54	60	65	69	73
Air Temperature 82 Degrees F	55	61	67	71	75
Air Temperature 84 Degrees F	57	63	68	73	77
Air Temperature 86 Degrees F	59	66	71	75	79

SINGLE PANE GLASS IS NOT RECOMMENDED FOR INDOOR POOLS DUE TO IT'S LOW R OR U VALUES THERE IS NO INSULATIVE QUALITY TO SINGLE PANE GLASS AND MOVING AIR FLOW ACROSS THIS GLASS DOES NOT GUARANTY IT WILL REMAIN FREE OF CONDENSATION WHEN THE OUTDOOR TEMPERATURE IS BELOW INDOOR POOL ROOM TEMPERATURE.

Condensation will form in and on any surface that reaches "Dew Point Temperature". The design objective for designing dehumidification for an indoor pool 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 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.