



Dew Point

Definition: Dew Point is the temperature at which condensations forms.

To determine the Dew Point from the charts below, find the temperature of the air in question on the left side of the table. Next, locate the relative humidity of the air in question across the top of the table. The intersection of these two numbers in the matrix identifies the temperature at which Dew Point is reached.

When air comes in contact with a surface that is at or below its Dew Point temperature, condensation will form on that surface.

Example:

If the temperature in a facility is 75° F (24° C) and the relative humidity is 35%, the intersection of the two shows that the Dew Point is reached at a temperature of 45° F (7° C), or below. This means that moisture vapor in the 75° F / 35% RH air will condense on any surface that is at or below the Dew Point temperature of 45° F.

This example could represent the inside of a building that is 75° F and 35% RH during the day. At night the outside temperature drops. It is not likely that the inside air of the building will cool from 75° F to 45° F, but it is quite possible that the framing and any exposed exterior surfaces will reach the Dew Point temperatures, creating condensation.

Read the air temperature in the left hand column and the humidity at the top of the chart. The intersection of the two shows the dew point or the point at which water will condense on a surface with the corresponding temperature.

Air Temperature in Degrees Fahrenheit

Air Temp °F	% Relative Humidity																		
	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
110	110	108	106	104	102	100	98	95	93	90	87	84	80	76	72	65	60	51	41
105	105	103	101	99	97	95	93	91	88	85	83	80	76	72	67	62	55	47	37
100	100	99	97	95	93	91	89	86	84	81	78	75	71	67	63	58	52	44	32
95	95	93	92	90	88	86	84	81	79	76	73	70	67	63	59	54	48	40	32
90	90	88	87	85	83	81	79	76	74	71	68	65	62	59	54	49	43	36	32
85	85	83	81	80	78	76	74	72	69	67	64	61	58	54	50	45	38	32	23.5
80	80	78	77	75	73	71	69	67	65	62	59	56	53	50	45	40	35	32	20
75	75	73	72	70	68	66	64	62	60	58	55	52	49	45	41	36	32	25	16.5
70	70	68	67	65	63	61	59	57	55	53	50	47	44	40	37	32	28	22	13
65	65	63	62	60	59	57	55	53	50	48	45	42	40	36	32	29	24	18	10
60	60	58	57	55	53	52	50	48	45	43	41	38	35	32	29	25	20	14	6
55	55	53	52	50	49	47	45	43	40	38	36	33	32	28	25	21	16	11	3
50	50	48	46	45	44	42	40	38	36	34	32	30	27	24					
45	45	43	42	40	39	37	35	33	32	30	28	26	21						
40	40	39	37	35	34	32	31	30	27	26									
35	35	34	32																
32	32																		