

# Measuring instruments for substrate humidity



Measuring of the substrate moisture:  
Moisture content < 4% by weight  
e.g. Sika Tramex moisture meter

# Measuring instruments for substrate humidity



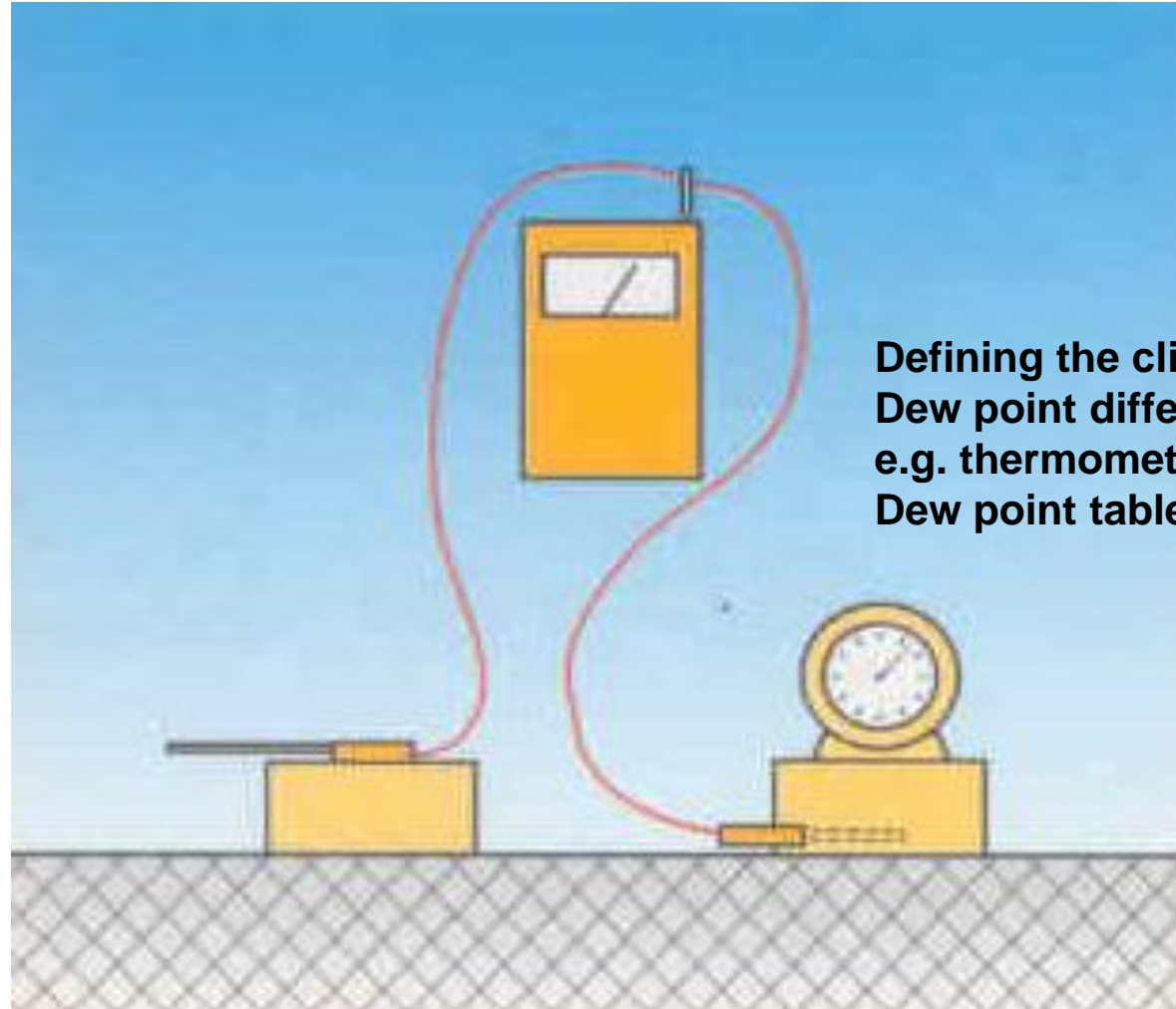
# Measuring instruments for substrate humidity



# Temperature and Moisture



# Measuring instruments for temperatures and air humidity



Defining the climatic conditions:  
Dew point difference  $> 3^{\circ}\text{C}$   
e.g. thermometer, hygrometer,  
Dew point table.

# Dew point table

Table for the determination of the dew point

Air temperature	Dew point temperatures in °C at a relative air moisture of					
+ °C	40 %	50 %	60 %	70 %	80 %	90 %
20	6,0	9,3	12,0	14,4	16,4	18,3
19	5,1	8,3	11,1	13,4	15,5	17,3
18	4,2	7,4	10,1	12,5	14,5	16,3
17	3,3	6,5	9,2	11,5	13,5	15,3
16	2,4	5,6	8,2	10,5	12,6	14,4
15	1,5	4,7	7,3	9,6	11,6	13,4
14	0,6	3,7	6,4	8,6	10,6	12,4
13	- 0,1	2,8	5,5	7,7	9,6	11,4
12	- 1,0	1,9	4,5	6,7	8,7	10,4
11	- 1,8	1,0	3,5	5,8	7,7	9,4
10	- 2,6	0,1	2,6	4,8	6,7	8,4
9	- 3,4	- 1,0	1,6	3,8	5,8	7,5
8	- 4,1	- 1,5	0,7	3,0	4,9	6,5
7	- 4,8	- 2,0	- 0,2	2,2	4,1	5,5
6	- 5,4	- 2,5	- 0,7	1,4	3,3	4,5
5	- 6,0	- 3,0	- 1,2	0,6	2,5	3,5

**Example:**

at **+10°C** air temperature and **80 %** relative air moisture is the dew point at substrate temperatures of **+ 6,7°C**.

At substrate temperatures of less then **6,7 + 3,0 = 9,7°C**, it is not possible to apply coating systems.



## Measuring instruments for temperatures and air humidity



Combination of a **Hygrometer** and **Thermometer** with mit integrated dew point table.

# Measuring instruments for temperatures and air humidity



*„Hygrothermograph“*

Writes as well  
\* *Temperatures*

as

\* *relative air  
moisture*



## Measuring instruments for temperatures and air humidity



***„Hygrothermometer“***

To measure:

- relative air moisture,
- air temperature
- temperature of the substrate