

# HUMIDITY TEMPERATURE METER



Optimal environmental conditions are essential for surface preparation and application of lagging to maximize successful performance

Surface preparation and the application lagging should be performed under optimum environmental conditions to help prevent failures. A Dew point meter is used to measure the conditions that should be observed and tracked:

- Air temperature
- Surface temperature
- Dew point temperature
- The difference between the surface and dew point temperatures

When solvent evaporates from an adhesive there is a cooling effect that can cause condensation of moisture from the air onto the adhesive surface. If this occurs the bond strength will be greatly reduced. Trapped between a coating and a substrate, moisture will likely cause the applied system to fail prematurely. To prevent this problem application of the adhesive must occur on the substrate when the temperature is more than 5C above the Dew Point.

Light condensation on blasted surfaces can be difficult to observe. Rather than detect this moisture, the dew point meter is used to help assess the risk of moisture forming in the first place. Tests should be performed to calculate the dew-point temperature before, during and after the coating process. Dew-point temperature should be compared to the surface temperature to ensure the two are far enough apart that moisture formation is unlikely.

## Lagging Conditions

- Max humidity 80%
- Minimum Temperature 10 C
- Maximum Temperature 40 C
- Substrate temperature > +5 C above the Dew Point

## Humidity Temperature Meter

Humidity temperature meter with a humidity accuracy of 2.5%. The sensor is protected with a pull up sleeve which protects the unit whilst carrying it around. The backlit LCD helps the operator to obtain readings in dark environments

## Features:

- Dew Point and Wet Bulb
- Temperature Measurement.
- Fast response.
- Auto shut off for Battery Saving.
- MAX/MIN Function.
- Dual displays: Primary display for Humidity; Secondary displays for temperature.

## Specifications:

- Measurement Range (Temperature): -20 to 60 C
- Measurement Range (Humidity): 0 to 99 %RH
- Resolution: 0.1%/0.1%/0.1%RH
- Accuracy (Temperature): +- 0.8 C
- Accuracy (Humidity): +- 2.5 %RH
- Sampling Rate: 2.5 times/sec
- Humidity Sensor: Electronic capacitance polymer film sensor.
- Battery Type: 1.5V AA size battery x 4
- Operating Condition: 0 to 40 C (<80%RH)
- Dimensions: 210 x 65 x 43mm
- Accessories: Batteries, Instruction Manual

