

COOLING POWER OF AIR

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* Humidity, Air Movement & Temperature together expressed as cooling power

- Measured by Kata Thermometer

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* Alcohol thermometer . * Calculates the rate of Heat Loss

- Rate of Cooling = $\frac{\text{Kata factor}}{\text{Average cooling time}}$

- i. Dry Kata (single bulb) - reading of $\geq$

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- ii. Wet Kata (cloth on bulb) - reading of ≥ 20 - Both are warmed by immersing in Hot water (130°F) & than the dry one is wiped
- Now both are suspended in air
- Then the level of fall in temperature on both are recorded (which depends on the cooling power of air)
- Cooling Range - 100 to 90°F
- Currently - Kata Thermometer is used only to measure Low Air Velocity instead of Anemometer (previously used)