

# Calibration and Maintenance Checks for Recommissioning

- Cold-deck Air Handler Calibration Points

Point	Acceptable Range	Frequency
Duct static pressure	± 0.3 in. wc.	Annually
Discharge air temperature	± 0,5°C (± 1°F)	Annually
Return air temperature	± 0,5°C (± 1°F)	Annually
Outdoor air temperature	± 0,5°C (± 1°F)	Annually
Mixed air temperature	± 0,5°C (± 1°F)	Every 2 years

- Cold-deck Air Handler Calibration Points

Point	Acceptable Range	Frequency
Duct static pressure	±0.3 in. wc.	Annually
Discharge air temperature	± 0,5°C (± 1°F)	Annually

- Chilled Water Plant Calibration Points

Point	Acceptable Range	Frequency
Supply water temperature (for each chiller)	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Annually
Differential pressure sensor (across secondary pump headers)	$\pm 10\%$	Annually
Differential pressure sensor (across supply/return lines to AHU1)	$\pm 10\%$	Annually
Primary chilled water flow	$\pm 10\%$	Every 2 years
Secondary chilled water flow	$\pm 10\%$	Every 2 years
Secondary loop supply water temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Secondary loop return water temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Primary loop supply water temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years

- Cooling Tower Calibration Points

Point	Acceptable Range	Frequency
Condenser water supply temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Annually
Condenser water return temperature (to cooling towers)	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Condenser water supply temperature to heat exchanger	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Condenser water return temperature from heat exchanger to tower	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Computer cooling water supply temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Computer cooling water return temperature	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years
Cooling tower sump temperature (each cooling tower)	$\pm 0,5^{\circ}\text{C}$ ( $\pm 1^{\circ}\text{F}$ )	Every 2 years

- Heating Hot Water Plant Calibration Points

Point	Acceptable Range	Frequency
Hot water temperature sensor T2 (used to control Aerco boilers)	$\pm 1^{\circ}\text{C}$ ( $\pm 2^{\circ}\text{F}$ )	Annually
Secondary loop supply water temperature (2-point calibration)	$\pm 1^{\circ}\text{C}$ ( $\pm 2^{\circ}\text{F}$ )	Annually
Differential pressure sensor (across secondary pump headers)	$\pm 10\%$	Annually
Differential pressure sensor (across supply/return lines located on B1)	$\pm 10\%$	Annually
Secondary loop water flow measurement	$\pm 10\%$	Every 2 years
Secondary loop return water temperature	$\pm 1^{\circ}\text{C}$ ( $\pm 2^{\circ}\text{F}$ )	Every 2 years

- Miscellaneous Calibration Points

Point	Acceptable Range	Frequency
Carbon monoxide sensors	$\pm 3$ ppm	Annually

- Calibration Form

Point Name	Date Calibrated	Sensor condition ok? (Y/N)	Measured Value	EMS value	As-found EMS offset	New EMS offset	Final EMS value