



Cooling Tower Pre-Functional Checklist

Equipment ID	8CT1
Building	Chiller Plant
Location	Roof

Statement of Readiness

The above equipment and/or systems integral to them are complete and ready for functional testing, except as noted. None of the outstanding items preclude safe and reliable functional tests being performed. This checklist does not take the place of the manufacturer's recommended checkout and startup procedures or report.

Responsible Contractor Sign Here

CONTRACTOR	PRINTED NAME	SIGNATURE	DATE
General Contractor (GC)			
Mechanical Contractor (MC)			
Electrical Contractor (EC)			
TAB Contractor (TAB)			
Controls Contractor (CC)			

This statement of readiness has been received by the Commissioning Agent on _____ and will be incorporated as part of the final commissioning report.

Equipment Information

Manufacturer		Model Number	
Serial Number		Cooling Capacity BTUH/GPM	Fan Speed / Power (rpm/hp)
Volts/Phase		Motor Power and Speed (hp /rpm)	
Notes:			



System Readiness Checklist

Yes = Checked and Completed, N/A = Not Applicable

General Installation					
Description	Yes	N/A	Initials	Date	Comments
General appearance good, no apparent damage	<input type="checkbox"/>	<input type="checkbox"/>			
All components present (fans, pumps, fill, etc)	<input type="checkbox"/>	<input type="checkbox"/>			
All access doors are operable	<input type="checkbox"/>	<input type="checkbox"/>			
Installation and startup manual provided	<input type="checkbox"/>	<input type="checkbox"/>			
Unit tags affixed	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Cooling Tower Installation					
Description	Yes	N/A	Initials	Date	Comments
Unit is secured as required by manufacturer and specification	<input type="checkbox"/>	<input type="checkbox"/>			
Adequate clearance around unit for service	<input type="checkbox"/>	<input type="checkbox"/>			
All components accessible for maintenance	<input type="checkbox"/>	<input type="checkbox"/>			
Unit is clear of trees, rubbish, dust, etc. to prevent fouling	<input type="checkbox"/>	<input type="checkbox"/>			
Vibration isolators installed and in good condition	<input type="checkbox"/>	<input type="checkbox"/>			
Ladder reaches grade/roof level	<input type="checkbox"/>	<input type="checkbox"/>			
Unit is labeled and easy to see	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					



Piping					
Description	Yes	N/A	Initials	Date	Comments
All piping components have been installed (in the correct order) as required by detail drawings	<input type="checkbox"/>	<input type="checkbox"/>			
Piping arranged for ease of unit removal	<input type="checkbox"/>	<input type="checkbox"/>			
Piping supported as required by specifications	<input type="checkbox"/>	<input type="checkbox"/>			
Piping is clean	<input type="checkbox"/>	<input type="checkbox"/>			
Makeup water supply is provided	<input type="checkbox"/>	<input type="checkbox"/>			
All valve tags and test ports are easily accessible	<input type="checkbox"/>	<input type="checkbox"/>			
Piping insulation complete and installed as per specifications	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Electrical Installation					
Description	Yes	N/A	Initials	Date	Comments
Power disconnect is located within site of the unit it controls and labeled	<input type="checkbox"/>	<input type="checkbox"/>			
All electric connections tight and installed properly	<input type="checkbox"/>	<input type="checkbox"/>			
Grounding installed for components and unit	<input type="checkbox"/>	<input type="checkbox"/>			
Fan motor rotation in the proper direction	<input type="checkbox"/>	<input type="checkbox"/>			
VFD installed	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Controls Installation					
Description	Yes	N/A	Initials	Date	Comments
Control panel accessible and labeled properly	<input type="checkbox"/>	<input type="checkbox"/>			
All sensors (temperature, pressure, etc.) are installed and calibration verified	<input type="checkbox"/>	<input type="checkbox"/>			
Valve actuators installed and calibration verified	<input type="checkbox"/>	<input type="checkbox"/>			
Safety items installed and verified (low water, high water, etc.)	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					



Mechanical Startup					
Description	Yes	N/A	Initials	Date	Comments
Tower basis filled	<input type="checkbox"/>	<input type="checkbox"/>			
Sump strainers and nozzles are clean	<input type="checkbox"/>	<input type="checkbox"/>			
Motors and gear box lubricated	<input type="checkbox"/>	<input type="checkbox"/>			
Fan pitch adjusted	<input type="checkbox"/>	<input type="checkbox"/>			
Critical frequencies identified, recorded and programmed out of VFD	<input type="checkbox"/>	<input type="checkbox"/>			
System starts and runs without any unusual noise or vibration	<input type="checkbox"/>	<input type="checkbox"/>			
Manufacturers startup checklist completed and attached	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Controls Startup					
Description	Yes	N/A	Initials	Date	Comments
Sequence of control verified	<input type="checkbox"/>	<input type="checkbox"/>			
High/low water alarms operational	<input type="checkbox"/>	<input type="checkbox"/>			
VFD operational	<input type="checkbox"/>	<input type="checkbox"/>			
Float switch, motorized valves, makeup water are operational	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Water Treatment Startup					
Description	Yes	N/A	Initials	Date	Comments
Galvanized surfaces passivated (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>			
Conductivity and pH controls operational	<input type="checkbox"/>	<input type="checkbox"/>			
Make up flow meter signal operational	<input type="checkbox"/>	<input type="checkbox"/>			
Blow down control operational	<input type="checkbox"/>	<input type="checkbox"/>			
No-flow injection interlock operational	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					



TAB					
Description	Yes	N/A	Initials	Date	Comments
Unit is free of unusual noise or vibration	<input type="checkbox"/>	<input type="checkbox"/>			
Motor overloads verified	<input type="checkbox"/>	<input type="checkbox"/>			
Motor rotation verified – each motor	<input type="checkbox"/>	<input type="checkbox"/>			
Motor voltage, amps verified – each phase of each motor	<input type="checkbox"/>	<input type="checkbox"/>			
Flow rate through tower verified	<input type="checkbox"/>	<input type="checkbox"/>			
Water distributed evenly in hot water basin with flow at 50% - no dumping	<input type="checkbox"/>	<input type="checkbox"/>			
Water distributed evenly in hot water basin with flow at 100%	<input type="checkbox"/>	<input type="checkbox"/>			
Notes:					

Additional Comments: