Prefunctional Checklist

Pr	oject							
PC	CHILLED \	CHILLED WATER PIPING						
Components Inc	luded: All valves, exc	ept coil valves						
Associated chec	klists: Chiller, Coolin	g Tower, CDW Piping, CHW & C	DW Pumps					
1. Submittal / Approva	ls							
checklist items are complete as marked below, respective to ea subject to an attached list of ou	nd have been checked of ach responsible contractor atstanding items yet to be anding areas. None of the	to them are complete and ready for fonly by parties having direct known. This prefunctional checklist is subsectional checklist is subsectional checklist is subsectional checklist in the completed. A Statement of Correct coutstanding items preclude safe and	ledge of the event, as bmitted for approval, tion will be submitted					
Mechanical Contractor	Date	Controls Contractor	Date					
Electrical Contractor	Date	Sheet Metal Contractor	Date					
TAB Contractor	Date	General Contractor	Date					
Prefunctional checklist items are	to be completed as part of	startup & initial checkout, preparatory to	o functional testing.					
 Items that do not apply shall If this form is not used for do Contractors assigned respons subcontractors are completed "Contr." column or abbreviat completion of this item. A/E contractor, EC = electrical contractor, TAB = test and based on the contractor. 	be noted with the reasons of cumenting, one of similar ibility for sections of the cand checked off. ions in brackets to the right = architect/engineer, All contractor, GC = general contractor, GC = general contractor, =	t of an item refer to the contractor responsible to see that of an item refer to the contractor responsible contractors, CA = commissioning ntractor, MC = mechanical contractor,	e by others). Checklist items by their checklist items by their					
Approvals. This filled-out chec	cklist has been reviewed.	Its completion is approved with the ex	xceptions noted below.					
Commissioning Agent	Date	Owner's Representative	Date					
2. Requested docume	ntation submitted							
Notes:								

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Check if Okay. Enter comment or note number if deficient.

Check	Y/N	Contr.
Manufacturer's cut sheets		
Performance data		
Flushing and cleaning plan, including staging of multiple floors		
O&M manuals		

 Documentation complete as per contract documents for given trade 	YES	NC
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3. Physical Installation Checks

Check if Okay. Enter comment or note number if deficient.

Check	Y/N	Contr.	Note
Piping			
Pipe fittings complete and pipes properly supported			
Required seismic anchoring installed			
Pipes properly labeled			
Pipes properly insulated			
Strainers in place and clean			
Isolation valves and balancing valves installed			
Test ports (P/T) installed near all control sensors and as per spec			
Flushing and cleaning plan submitted and approved (Minimum flushing velocity in all pipe sections is the greater of 4 ft. per second, or 1.5 times the velocity at design flow)			
Piping system properly flushed and cleaned and temporary piping removed (report attached)			
10% of strainers and Owner-selected low-point drains opened and witnessed by Owner to be clean. (List points checked below).			
Piping pressure tested according to contract documents (report attached)			
Chemical treatment system or plan installed			
Water treatment report submitted according to contract documents			
No leaking apparent around fittings			
ASME pressue vessel data sheet or certification tag posted and inspection complete for each expansion tank			
Expansion tanks verified to not be air bound and system completely full of water. System purged of all air.			
Air vents and bleeds at high points of systems functional			
Valves (except coil valve checklists are with the unit checklist)			
Valve labels permanently affixed			
Valves installed in proper direction			

Notes:

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					Check					Y/N	Contr.	Note	
	No leaks												
	Valves stroke fully and easily and spanning is calibrated (see calibration section below)								ection				
	Valves that require a positive shut-off are verified to not be leaking when closed at normal operating pressure per "Calibration and Leak-by Test Procedures" document. List:												
	Senso	rs and	Gages						<u> </u>	<u> </u>			
	Tempe	erature,	pressure a	and flow ga	ges and se	ensors in	stal	led					
	Piping gages, BAS and chiller panel temperature and pressure readouts match (see calibration section below)							natch					
	ТАВ												
	Installa							ncing to be comp ct documents	oleted				
					-								
All fie valves Test P	eld-insta s) on thi Procedur	lled ten s piece es docu	nperature, of equipm iment. All	ent shall be test instru	midity, CO calibrated ments shal	O, CO ₂ and using the last of	he r ad a	oressure sensors nethods and tole certified calibra cation provided	rances g	iven in t hin the la	he Calibrat ast 12 mon	tion and Leaths: Y/N	ık-by
Benso	is mstar	100 111 11		ne ractory		1	1	cution provided	1				1
Senso Actuat Locat	or &	Loc- ation OK	1st Gage or BAS Value	Instr. Meas'd Value	Final Gage or BAS Value	Pass Y/N?		Sensor & Location	Loc- ation OK	1st Gage or BAS Value	Instr. Meas'd Value	Final Gage or BAS Value	Pass Y/N?
Local		OK	value	value	value	1/14:		Location	OK	value	Value	value	1/10:
instru	ment. V	isual =	actual obs	ervation. T	he Contra	ctor's ow	n s	. BAS = building ensor check-out lures are followe	sheets n				e, if
		_			hin requ	ired to	ler	ances ECKLIST			YE	s N	0
						10 01	.						
Note:	<u>s:</u>												

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