



# MATRIX HVAC, LLC

21357 Marion Lane, Suite 100  
Mandeville, LA 70471

Leif C. Wismar, P.E. C.E.M.  
Mechanical Engineer

## P253 AIR TRAFFIC CONTROL TOWER (NORTH FIELD)

NAVAL AIR STATION WHITING FIELD, FL



### PRE-FUNCTIONING TEST SHEETS

*SECTION 01 91 00.15 25*



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-01 / SSCU-01

PRE-FUNCTIONAL CHECKLIST – SSHP-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (SSHP-01)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST – SSHP-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	AC SYSTEM STATUS AND ALARM POINTS ARE INTERFACED WITH BAS.								
11.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED AND IS PASSWORD PROTECTED.								
OUTDOOR UNIT (SSCU-01)									
1.	UNIT DOES NOT HAVE PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
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5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	REFRIGERANT PIPING & VALVES INSTALLED.								
8.	REFRIGERANT PIPING HAS BEEN LEAK TESTED & CHARGED WITH R410A.								
9.	REFRIGERANT PIPING IS INSULATED								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-02 / SSCU-02

PRE-FUNCTIONAL CHECKLIST – SSHP-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (SSHP-02)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	AC SYSTEM STATUS AND ALARM POINTS ARE INTERFACED WITH BAS.								
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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-03 / SSCU-03

PRE-FUNCTIONAL CHECKLIST – SSHP-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (SSHP-03)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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PRE-FUNCTIONAL CHECKLIST – SSHP-03									
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SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-04 / SSCU-04

PRE-FUNCTIONAL CHECKLIST – SSHP-04									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INDOOR UNIT (SSHP-04)</b>									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-05 / SSCU-05

PRE-FUNCTIONAL CHECKLIST – SSHP-05									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (SSHP-05)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	AC SYSTEM STATUS AND ALARM POINTS ARE INTERFACED WITH BAS.								
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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SPLIT DX HEAT PUMP AND AIR CONDITIONING
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SSHP-06 / SSCU-06

PRE-FUNCTIONAL CHECKLIST – SSHP-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (SSHP-06)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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PRE-FUNCTIONAL CHECKLIST – SSHP-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	AC SYSTEM STATUS AND ALARM POINTS ARE INTERFACED WITH BAS.								
11.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED AND IS PASSWORD PROTECTED.								
OUTDOOR UNIT (SSCU-06)									
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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-01

PRE-FUNCTIONAL CHECKLIST – CRAC-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	HUMIDIFIER INSTALLED.								





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PRE-FUNCTIONAL CHECKLIST – CRAC-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-02

PRE-FUNCTIONAL CHECKLIST – CRAC-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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PRE-FUNCTIONAL CHECKLIST – CRAC-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-03

PRE-FUNCTIONAL CHECKLIST – CRAC-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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PRE-FUNCTIONAL CHECKLIST – CRAC-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-04

PRE-FUNCTIONAL CHECKLIST – CRAC-04									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-05

PRE-FUNCTIONAL CHECKLIST – CRAC-05									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	COMPUTER ROOM AIR CONDITIONER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CRAC-06

PRE-FUNCTIONAL CHECKLIST – CRAC-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	HUMIDIFIER INSTALLED.								



# MATRIX HVAC, LLC

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PRE-FUNCTIONAL CHECKLIST – CRAC-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	DOAS -01
EQUIPMENT MODEL NUMBER(S)	N/A
EQUIPMENT TAG NUMBER(S)	N/A

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – DOAS-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	CASING CONDITION GOOD: NO DENTS, LEAKS, ETC.								
3.	ACCESS DOORS ARE OPERABLE AND SEALED – NO LEAKS.								
4.	VIBRATION ISOLATION DEVICES INSTALLED.								
5.	MAINTENANCE ACCESS ACCEPTABLE FOR UNIT AND COMPONENTS.								
6.	FILTERS ARE INSTALLED IN THE UNIT. FILTER SECTION EQUIPED WITH DIFFERENTIAL PRESSURE SWITCHES.								
7.	CONDENSATE DRAIN LINE PROPERLY INSTALLED AND CONNECTED TO THE AIR HANDLING UNIT.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – DOAS-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
8.	DRAIN PAN HIGH LIMIT WATER LEVEL MONITORING DEVICE INSTALLED IN DRAIN PAN AND IS OPERATIONAL.								
9.	CLEAN UP OF EQUIPMENT COMPLETED PER CONTRACT DOCUMENTS.								
COILS									
1.	COILS ARE CLEAN AND FINS ARE IN GOOD CONDITION.								
2.	NO VISIBLE LEAKS.								
3.	ERV MEDIA AND COMPONENTS ARE INSTALLED PER MANUFACTURER REQUIREMENTS..								
4.	UV LIGHTS INSTALLED PROPERLLY WITH SINGLE POINT 120V CONNECTION.								
CHILLED WATER SYSTEM (VALVES & PIPING)									
1.	CHILLED WATER COILS AND HOT WATER COILS ARE INSTALLED PER MANUFACTURER REQUIREMENTS.								
2.	ALL PIPING IS CONNECTED PROPERLY AND PROPERLY INSULATED.								
3.	ALL PIPING IS SUPPORTED ADEQUATELY.								
4.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – DOAS-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>DUCT</b>									
1.	DUCTWORK HAS BEEN ROUTED PER DRAWINGS.								
2.	DUCTWORK PROPERLY SEALED AT EVERY CONNECTION.								
3.	ALL NECESSARY DAMPER INSTALLED IN PROPER LOCATIONS.								
4.	DUCTWORK LEAK TEST COMPLETED.								
5.	DUCT TEST HOLES ARE PROPERLY INSTALLED IN CORRECT LOCATIONS.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	RELATED THERMOSTATS IN PLACE.								
8.	RELATED BUILDING AUTOMATION SYSTEM POINTS INSTALLED.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – DOAS-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
9.	AIRFLOW MANAGEMENT DAMPERS INSTALLED IN AIR HANDLER UNIT								
10.	CONTROL VALVES / ACTUATORS PROPERLY INSTALLED AND OPERABLE.								
11.	DAMPERS / ACTUATORS PROPERLY INSTALLED AND OPERABLE.								
MOTOR & VFD									
1.	DRIVE SIZE MATCHES MOTOR SIZE.								
2.	DRIVE LOCATION NOT SUBJECT TO EXCESSIVE TEMPERATURES, MOISTURE, OR DIRT.								
3.	VFD INTERLOCKED TO CONTROL SYSTEM.								
4.	VFD POWERED AND INTERLOCKED TO CONTROL SYSTEM.								
5.	STATIC PRESSURE OR OTHER CONTROLLING SENSOR PROPERLY INSTALLED AND CALIBRATED.								
6.	MOTOR FLA SETTING REPRESENTS 100% TO 105% OF MOTOR FLA RATING.								
7.	APPROPRIATE VOLTS VS HZ CURVE IS BEING USED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	FAN COILED UNITS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FCU-01

PRE-FUNCTIONAL CHECKLIST – FCU-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (FCU-01)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								





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PRE-FUNCTIONAL CHECKLIST – FCU-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								
11.	CHILLED WATER AND HOT WATER COILS INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	FAN COILED UNITS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FCU-02

PRE-FUNCTIONAL CHECKLIST – FCU-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (FCU-02)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST – FCU-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								
11.	CHILLED WATER AND HOT WATER COILS INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	FAN COILED UNITS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FCU-03

PRE-FUNCTIONAL CHECKLIST – FCU-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (FCU-03)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST – FCU-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								
11.	CHILLED WATER AND HOT WATER COILS INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	FAN COILED UNITS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FCU-05

PRE-FUNCTIONAL CHECKLIST – FCU-05									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (FCU-05)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST – FCU-05									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								
11.	CHILLED WATER AND HOT WATER COILS INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	FAN COILED UNITS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FCU-06

PRE-FUNCTIONAL CHECKLIST – FCU-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR UNIT (FCU-06)									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE AND IS PROVIDED WITH NEW CLEAN FILTER.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	FILTERS ARE INSTALLED IN THE UNIT.								
8.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								
9.	CONDENSATE PUMP PROPERLY INSTALLED.								





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PRE-FUNCTIONAL CHECKLIST – FCU-06									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
10.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED.								
11.	CHILLED WATER AND HOT WATER COILS INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	EXHAUST FAN
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	EF-01

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – EF-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	FAN DOES NOT HAVE VISIBLE DAMAGE								
3.	SOUND ATTENUATOR INSTALLED CORRECTLY. (IF APPLICABLE)								
4.	EXHAUST HOOD / PENTHOUSE INSTALLED CORRECTLY. (IF APPLICABLE)								
ELECTRICAL AND CONTROLS									
1.	POWER AVAILABLE TO FAN DISCONNECT.								
2.	POWER DISCONNECT LOCATED WITHIN SIGHT OF UNIT IT CONTROLS.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – EF-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	CONTROL INTERLOCKS PROPERLY INSTALLED AND ARE OPERABLE.								
8.	DAMPERS / ACTUATORS PROPERLY INSTALLED AND ARE OPERABLE.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	SUPPLY FAN
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SF-02

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – SF-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	FAN DOES NOT HAVE VISIBLE DAMAGE								
3.	FAN BELT ADJUSTED.								
4.	SOUND ATTENUATOR INSTALLED CORRECTLY. (IF APPLICABLE)								
5.	EXHAUST HOOD / PENTHOUSE INSTALLED CORRECTLY. (IF APPLICABLE)								
ELECTRICAL AND CONTROLS									
1.	POWER AVAILABLE TO FAN DISCONNECT.								
2.	POWER DISCONNECT LOCATED WITHIN SIGHT OF UNIT IT CONTROLS.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – SF-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	CONTROL INTERLOCKS PROPERLY INSTALLED AND ARE OPERABLE.								
8.	DAMPERS / ACTUATORS PROPERLY INSTALLED AND ARE OPERABLE.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	HYDRONIC UNIT HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CUH-01

PRE-FUNCTIONAL CHECKLIST – CUH-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
HYDRONIC UNIT HEATER									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED								
8.	HOT WATER COIL INSTALLED AND CONNECTED PROPERLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	HYDRONIC UNIT HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CUH-02

PRE-FUNCTIONAL CHECKLIST – CUH-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
HYDRONIC UNIT HEATER									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED								
8.	HOT WATER COIL INSTALLED AND CONNECTED PROPERLY.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	HYDRONIC DUCT HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	HDH-01

## PRE-FUNCTIONAL CHECKLIST – HDH-01

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
HYDRONIC UNIT HEATER									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	UNIT IS DUCTED.								
4.	COIL IS CONNECTED TO HOT WATER PIPING LOOP. MODULATING VALVE IS INSTALLED AND FUNCTIONAL.								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	ELECTRIC UNIT HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	EUH-01

PRE-FUNCTIONAL CHECKLIST – EUH-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
HYDRONIC UNIT HEATER									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	VIBRATION ISOLATION DEVICES INSTALLED.								
4.	POWER WIRING & DISCONNECT SWITCH ARE INSTALLED PROPERLY. DISCONNECT SWITCH IS WITHIN CODE REQUIRED DISTANCE.								
5.	UNIT IS PROPERLY GROUNDED.								
6.	ELECTRIC TERMINALS ARE ALL TIGHT.								
7.	WIRED WALL MOUNTED CONTROLLER IS INSTALLED								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	AIR COOLED CHILLER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CH-01

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	GENERAL APPEARANCE GOOD, NO APPARENT DAMAGE.								
3.	COIL ARE CLEAN AND FINS ARE IN GOOD CONDITION.								
4.	VIBRATION ISOLATION DEVICES INSTALLED.								
5.	CORRECT REFRIGERANT IS USED.								
6.	ALL THERMISTORS ARE INSTALLED.								
7.	COMPRESSOR OIL LEVEL IS CORRECT.								
8.	PRESSURE GAUGES INSTALLED.								
9.	FLOW METERS INSTALLED.								
10.	NO VISIBLE LEAKS REFRIGERATION LEAKS.								
11.	TEMPERATURE AND BALANCE PORTS HAVE BEEN PROVIDED.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>CHILLED WATER SYSTEM (VALVES &amp; PIPING)</b>									
1.	CHILLED WATER SYSTEM FLUSHING COMPLETE AND STRAINERS CLEANED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	HEAT TRACE INSTALLED ON ALL EXTERIOR PIPING.								
8.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
9.	VERIFY AIR SEPERATOR IS INSTALLED AND OPERABLE.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	POWER DISCONNECT LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
4.	ELECTRICAL TERMINALS ARE ALL TIGHT.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	CONTROL WIRING AND CONTROL SYSTEM HOOKED UP.								
7.	SENSORS ARE CALIBRATED.								
8.	SAFETIES INSTALLED AND SAFE OPERATING RANGES FOR EQUIPMENT PROVIDED TO COMMISSIONING AGENT.								
9.	CHILLED WATER FLOW SWITCH INSTALLED AND TESTED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	AIR COOLED CHILLER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CH-02

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	GENERAL APPEARANCE GOOD, NO APPARENT DAMAGE.								
3.	COIL ARE CLEAN AND FINS ARE IN GOOD CONDITION.								
4.	VIBRATION ISOLATION DEVICES INSTALLED.								
5.	CORRECT REFRIGERANT IS USED.								
6.	ALL THERMISTORS ARE INSTALLED.								
7.	COMPRESSOR OIL LEVEL IS CORRECT.								
8.	PRESSURE GAUGES INSTALLED.								
9.	FLOW METERS INSTALLED.								
10.	NO VISIBLE LEAKS REFRIGERATION LEAKS.								
11.	TEMPERATURE AND BALANCE PORTS HAVE BEEN PROVIDED.								



# MATRIX HVAC, LLC

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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>CHILLED WATER SYSTEM (VALVES &amp; PIPING)</b>									
1.	CHILLED WATER SYSTEM FLUSHING COMPLETE AND STRAINERS CLEANED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	HEAT TRACE INSTALLED ON ALL EXTERIOR PIPING.								
8.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
9.	VERIFY AIR SEPARATOR IS INSTALLED AND OPERABLE.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	POWER DISCONNECT LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
4.	ELECTRICAL TERMINALS ARE ALL TIGHT.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – CH-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	CONTROL WIRING AND CONTROL SYSTEM HOOKED UP.								
7.	SENSORS ARE CALIBRATED.								
8.	SAFETIES INSTALLED AND SAFE OPERATING RANGES FOR EQUIPMENT PROVIDED TO COMMISSIONING AGENT.								
9.	CHILLED WATER FLOW SWITCH INSTALLED AND TESTED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	BOILER UNIT
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	B-01

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	GENERAL APPEARANCE GOOD, NO APPARENT DAMAGE.								
3.	CONDENSATE NEUTRALIZER INSTALLED.								
4.	CONDENSATE LINE RUN TO FLOOR DRAIN.								
5.	HOT WATER RETURN STRAINER INSTALLED.								
6.	ALL THERMOMETERS ARE INSTALLED.								
7.	ALL PRESSURE GAUGES AND GAUGE COCKS ARE INSTALLED.								
8.	BALANCE VALVE INSTALLED.								
9.	NO VISIBLE LEAKS FROM PIPING.								
HOT WATER SYSTEM (VALVES & PIPING)									
1.	HOT WATER SYSTEM FLUSHING COMPLETE AND STRAINERS CLEANED.								





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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE HOT WATER WATER SYSTEM.								
8.	VERIFY PRESSURE RELIEF VALVE IS SET AS PER MANUFACTURER'S RECOMMENDATIONS.								
ELECTRICAL AND CONTROLS									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	POWER DISCONNECT LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
4.	ELECTRICAL TERMINALS ARE ALL TIGHT.								
5.	CONTROL WIRING AND CONTROL SYSTEM HOOKED UP.								
6.	SENSORS ARE CALIBRATED.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
7.	SAFETIES INSTALLED AND SAFE OPERATING RANGES FOR EQUIPMENT PROVIDED TO COMMISSIONING AGENT.								
8.	HOT WATER FLOW SWITCH INSTALLED AND TESTED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	BOILER UNIT
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	B-02

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	GENERAL APPEARANCE GOOD, NO APPARENT DAMAGE.								
3.	CONDENSATE NEUTRALIZER INSTALLED.								
4.	CONDENSATE LINE RUN TO FLOOR DRAIN.								
5.	HOT WATER RETURN STRAINER INSTALLED.								
6.	ALL THERMOMETERS ARE INSTALLED.								
7.	ALL PRESSURE GAUGES AND GAUGE COCKS ARE INSTALLED.								
8.	BALANCE VALVE INSTALLED.								
9.	NO VISIBLE LEAKS FROM PIPING.								
HOT WATER SYSTEM (VALVES & PIPING)									
1.	HOT WATER SYSTEM FLUSHING COMPLETE AND STRAINERS CLEANED.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE HOT WATER WATER SYSTEM.								
8.	VERIFY PRESSURE RELIEF VALVE IS SET AS PER MANUFACTURER'S RECOMMENDATIONS.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	POWER DISCONNECT LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
4.	ELECTRICAL TERMINALS ARE ALL TIGHT.								
5.	CONTROL WIRING AND CONTROL SYSTEM HOOKED UP.								
6.	SENSORS ARE CALIBRATED.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – B-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
7.	SAFETIES INSTALLED AND SAFE OPERATING RANGES FOR EQUIPMENT PROVIDED TO COMMISSIONING AGENT.								
8.	HOT WATER FLOW SWITCH INSTALLED AND TESTED.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	CHILLED WATER PUMPS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	P-01

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-01

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INSTALLATION</b>									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	PUMP IS MOUNTED PROPERLY WITH VIBRATION ISOLATION PADS..								
3.	PUMP/MOTOR COUPLING ALIGNMENT VERIFIED.								
4.	TEMPERATURE, PRESSURE AND FLOW GAUGES AND SENSORS INSTALLED.								
5.	MAINTENANCE ACCESS ACCEPTABLE FOR UNIT AND COMPONENTS.								
<b>CHILLED WATER SYSTEM (VALVES &amp; PIPING)</b>									
1.	CHILLED WATER SYSTEM PROPERLY CLEANED AND FILLED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
8.	SYSTEM PRESSURE DIFFERENTIAL SENSORS ARE INSTALLED DOWNSTREAM IN THE CHILLED WATER PIPING SYSTEM, INTERFACED WITH THE PUMP VFD AND THE BAS.								
9.	ALL CONTROL DEVICES, PNEUMATIC TUBING AND WIRING COMPLETE.								
<b>MOTOR &amp; VFD</b>									
1.	DRIVE SIZE MATCHES MOTOR SIZE.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	DRIVE LOCATION NOT SUBJECT TO EXCESSIVE TEMPERATURES, MOISTURE, OR DIRT.								
3.	VFD POWERED AND INTERLOCKED TO CONTROL SYSTEM.								
4.	ALL PUMP AND VFD ALARMS AND SAFETIES ARE INTERFACED WITH THE BAS.								
5.	PRESSURE OR OTHER CONTROLLING SENSOR PROPERLY INSTALLED AND CALIBRATED.								
6.	MOTOR FLA SETTING REPRESENTS 100% TO 105% OF MOTOR FLA RATING.								
7.	APPROPRIATE VOLTS VS HZ CURVE IS BEING USED.								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	CHILLED WATER PUMPS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	P-02

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INSTALLATION</b>									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	PUMP IS MOUNTED PROPERLY WITH VIBRATION ISOLATION PADS..								
3.	PUMP/MOTOR COUPLING ALIGNMENT VERIFIED.								
4.	TEMPERATURE, PRESSURE AND FLOW GAUGES AND SENSORS INSTALLED.								
5.	MAINTENANCE ACCESS ACCEPTABLE FOR UNIT AND COMPONENTS.								
<b>CHILLED WATER SYSTEM (VALVES &amp; PIPING)</b>									
1.	CHILLED WATER SYSTEM PROPERLY CLEANED AND FILLED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
8.	SYSTEM PRESSURE DIFFERENTIAL SENSORS ARE INSTALLED DOWNSTREAM IN THE CHILLED WATER PIPING SYSTEM, INTERFACED WITH THE PUMP VFD AND THE BAS.								
9.	ALL CONTROL DEVICES, PNEUMATIC TUBING AND WIRING COMPLETE.								
<b>MOTOR &amp; VFD</b>									
1.	DRIVE SIZE MATCHES MOTOR SIZE.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	DRIVE LOCATION NOT SUBJECT TO EXCESSIVE TEMPERATURES, MOISTURE, OR DIRT.								
3.	VFD POWERED AND INTERLOCKED TO CONTROL SYSTEM.								
4.	ALL PUMP AND VFD ALARMS AND SAFETIES ARE INTERFACED WITH THE BAS.								
5.	PRESSURE OR OTHER CONTROLLING SENSOR PROPERLY INSTALLED AND CALIBRATED.								
6.	MOTOR FLA SETTING REPRESENTS 100% TO 105% OF MOTOR FLA RATING.								
7.	APPROPRIATE VOLTS VS HZ CURVE IS BEING USED.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	HOT WATER PUMP
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	P-03

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-03

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INSTALLATION</b>									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	PUMP IS MOUNTED PROPERLY WITH VIBRATION ISOLATION PADS..								
3.	PUMP/MOTOR COUPLING ALIGNMENT VERIFIED.								
4.	TEMPERATURE, PRESSURE AND FLOW GAUGES AND SENSORS INSTALLED.								
5.	MAINTENANCE ACCESS ACCEPTABLE FOR UNIT AND COMPONENTS.								
<b>HOT WATER SYSTEM (VALVES &amp; PIPING)</b>									
1.	HOT WATER SYSTEM PROPERLY CLEANED AND FILLED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
<b>ELECTRICAL AND CONTROLS</b>									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
8.	SYSTEM PRESSURE DIFFERENTIAL SENSORS ARE INSTALLED DOWNSTREAM IN THE CHILLED WATER PIPING SYSTEM, INTERFACED WITH THE PUMP VFD AND THE BAS.								
9.	ALL CONTROL DEVICES, PNEUMATIC TUBING AND WIRING COMPLETE.								
<b>MOTOR &amp; VFD</b>									
1.	DRIVE SIZE MATCHES MOTOR SIZE.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-03									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	DRIVE LOCATION NOT SUBJECT TO EXCESSIVE TEMPERATURES, MOISTURE, OR DIRT.								
3.	VFD POWERED AND INTERLOCKED TO CONTROL SYSTEM.								
4.	ALL PUMP AND VFD ALARMS AND SAFETIES ARE INTERFACED WITH THE BAS.								
5.	PRESSURE OR OTHER CONTROLLING SENSOR PROPERLY INSTALLED AND CALIBRATED.								
6.	MOTOR FLA SETTING REPRESENTS 100% TO 105% OF MOTOR FLA RATING.								
7.	APPROPRIATE VOLTS VS HZ CURVE IS BEING USED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	HOT WATER PUMP
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	P-04

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-04									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	PERMANENT LABELS AFFIXED AND ARE CORRECT.								
2.	PUMP IS MOUNTED PROPERLY WITH VIBRATION ISOLATION PADS..								
3.	PUMP/MOTOR COUPLING ALIGNMENT VERIFIED.								
4.	TEMPERATURE, PRESSURE AND FLOW GAUGES AND SENSORS INSTALLED.								
5.	MAINTENANCE ACCESS ACCEPTABLE FOR UNIT AND COMPONENTS.								
HOT WATER SYSTEM (VALVES & PIPING)									
1.	HOT WATER SYSTEM PROPERLY CLEANED AND FILLED.								
2.	ALL VALVES ARE OPEN FOR DESIGNATED UNIT.								
3.	ALL PIPING IS CONNECTED PROPERLY.								
4.	ALL PIPING IS SUPPORTED ADEQUATELY.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-04									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
5.	ALL AIR HAS BEEN PURGED FROM THE SYSTEM.								
6.	PIPING IS PROPERLY INSULATED.								
7.	ENSURE THAT SUITABLE LEAK TESTING HAS BEEN CONDUCTED FOR THE CHILLED WATER SYSTEM.								
ELECTRICAL AND CONTROLS									
1.	POWER AVAILABLE TO UNIT DISCONNECT.								
2.	POWER AVAILABLE TO UNIT CONTROL PANEL.								
3.	PROPER MOTOR ROTATION VERIFIED.								
4.	SAFETIES INSTALLED AND OPERATIONAL.								
5.	UNIT AND COMPONENTS ARE PROPERLY GROUNDED.								
6.	TERMINALS ARE ALL TIGHT.								
7.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
8.	SYSTEM PRESSURE DIFFERENTIAL SENSORS ARE INSTALLED DOWNSTREAM IN THE CHILLED WATER PIPING SYSTEM, INTERFACED WITH THE PUMP VFD AND THE BAS.								
9.	ALL CONTROL DEVICES, PNEUMATIC TUBING AND WIRING COMPLETE.								
MOTOR & VFD									
1.	DRIVE SIZE MATCHES MOTOR SIZE.								





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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – P-04									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
2.	DRIVE LOCATION NOT SUBJECT TO EXCESSIVE TEMPERATURES, MOISTURE, OR DIRT.								
3.	VFD POWERED AND INTERLOCKED TO CONTROL SYSTEM.								
4.	ALL PUMP AND VFD ALARMS AND SAFETIES ARE INTERFACED WITH THE BAS.								
5.	PRESSURE OR OTHER CONTROLLING SENSOR PROPERLY INSTALLED AND CALIBRATED.								
6.	MOTOR FLA SETTING REPRESENTS 100% TO 105% OF MOTOR FLA RATING.								
7.	APPROPRIATE VOLTS VS HZ CURVE IS BEING USED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	EXPANSION TANK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	ET-01

PRE-FUNCTIONAL CHECKLIST – ET-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
EXPANSION TANK									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	ALL PRESSURE GAUGES INSTALLED.								
4.	ALL AIR VENTS INSTALLED.								
5.	QUICK FILL BYPASS INSTALLED WITH SERVICE VALVES, UNIONS, PRESSURE REDUCING VALVES, AND CHECK VALVES.								
6.	ALL SERVICING VALVES INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	EXPANSION TANK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	ET-02

PRE-FUNCTIONAL CHECKLIST – ET-02									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
EXPANSION TANK									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	ALL PRESSURE GAUGES INSTALLED.								
4.	ALL AIR VENTS INSTALLED.								
5.	QUICK FILL BYPASS INSTALLED WITH SERVICE VALVES, UNIONS, PRESSURE REDUCING VALVES, AND CHECK VALVES.								
6.	ALL SERVICING VALVES INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	BUFFER TANK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	CWBT-01

PRE-FUNCTIONAL CHECKLIST – CWBT-01									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
BUFFER TANK									
1.	UNIT DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	UNIT INSTALLED AS PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDES SUITABLE ACCESS.								
3.	ALL PRESSURE GAUGES INSTALLED.								
4.	ALL AIR VENTS INSTALLED.								
5.	QUICK FILL BYPASS INSTALLED WITH SERVICE VALVES, UNIONS, PRESSURE REDUCING VALVES, AND CHECK VALVES.								
6.	ALL SERVICING VALVES INSTALLED.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	AIR DISTRIBUTION AND DUCT SYSTEMS
EQUIPMENT MODEL NUMBER(S)	NA
EQUIPMENT TAG NUMBER(S)	NA

PRE-FUNCTIONAL CHECKLIST –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INDOOR DUCT SYSTEMS									
1.	INSTALLED DUCTWORK DOES NOT HAVE ANY PHYSICAL DAMAGE.								
2.	ALL SHEETMETAL DUCTWORK IS FABRICATED AND INSTALLED AS PER THE MECHANICAL DRAWINGS.								
3.	DUCTWORK CONSTRUCTION IS PER DRAWING M-602.								
4.	ALL DUCTWORK SUPPORTS AND SUPPORT SPANS ARE INSTALLED AS PER DRAWING M-502								
5.	ALL DUCTWORK IS INSTALLED AND ROUTED AS PER THE MECHANICAL DRAWINGS.								
6.	ALL SHEETMETAL DUCTWORK HAS BEEN SEALED AT THE DUCT CONNECTIONS. ALL HORIZONTAL SEAMS HAVE BEEN SEAL.								
7.	ALL VOLUME DAMPERS, BRANCH DUCTS, SUPPLY GRILLES, AND LOUVERS ARE INSTALLED AS PER THE MECHANICAL DRAWINGS.								



# MATRIX HVAC, LLC

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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	HVAC SYSTEMS
EQUIPMENT COMMISSIONED	CONDENSATE SYSTEMS, PIPING, AND TRAPS
EQUIPMENT MODEL NUMBER(S)	NA
EQUIPMENT TAG NUMBER(S)	NA

PRE-FUNCTIONAL CHECKLIST –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
CONDENSATE SYSTEMS, PIPING, AND TRAPS									
1.	CONDENSATE DRAIN LINES ARE INSTALLED ON EACH AC SYSTEM.								
2.	CONDENSATE TRAPS ARE INSTALLED AS PER THE MECHANICAL DRAWINGS.								
3.	DRAIN LINES CONNECT TO INSULATED DRAIN PANS								
4.	DRAIN LINE SIZES MATCH DRAWINGS.								
5.	INSTALLED CONDENSATE DRAIN LINE PIPE INSULATION THICKNESS MEETS THE SPECIFIED VALUES AS PER MECHANICAL DRAWING M-604								
6.	CONDENSATE DRAIN LINE PROPERLY INSTALLED.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	BUILDING AUTOMATION SYSTEM
EQUIPMENT COMMISSIONED	BAS SYSTEM
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BUILDING AUTOMATION SYSTEM

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INSTALLATION</b>									
1.	COMPONENTS ARE LABELED CORRECTLY INSIDE AND OUTSIDE OF PANEL.								
2.	HVAC SYSTEMS & CONTROLS, PLUMBING, BTU METERING, AND ELECTRICAL SYSTEMS ARE INTERFACED WITH THE BAS INCLUDING PROGRAMMING, GRAPHICS, OPERATING SCHEDULES, SETPOINTS, TRENDING, ALARMS ETC., COMPLETE AND FUNCTIONING AT THE BAS.								
3.	ALL SYSTEM CONTROL POINTS, STATUS, ALARMS, ETC. ARE FULLY INTERFACED WITH THE BAS AS PER THE MECHANICAL DRAWINGS M-801 THRU M-807								
4.	SPACE THERMOSTATS AND HVAC SYSTEM SENSORS ARE INSTALLED, CALIBRATED AND INTERFACED WITH THE BAS.								
5.	PLUMBING HOT WATER SYSTEM CONTROLLERS ARE INTERFACED WITH THE BAS FOR TEMPERATURE AND PUMP STATUS AND ALARMS, AND FLOW AT THE BAS.								



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PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BUILDING AUTOMATION SYSTEM									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
6.	MASTER CHILLED WATER BTU METER IS INTERFACED AND MONITORING CONSUMPTION THROUGH THE BAS.								
7.	SPS PRESSURE DIFFERENTIAL MONITORING SYSTEM ARE INTERFACE FOR STATUS AND ALARM THROUGH THE BAS.								
8.	LAYOUT OF CONTROL PANEL MATCHES DRAWINGS.								
9.	FRAMED INSTRUCTIONS MOUNTED IN OR NEAR PANEL.								
10.	CONTROL COMPONENTS PIPE AND/OR WIRED TO EACH LABELED TERMINAL STRIP.								
11.	EMCS CONNECTION MADE TO EACH LABELED TERMINAL STRIP AS SHOWN.								
12.	CONTROL WIRING AND TUBING LABELED AT ALL TERMINATIONS, SPLICES AND JUNCTIONS.								
13.	SHIELDED WIRING USED ON ELECTRONIC SENSORS.								
14.	AFTP SHUTDOWN SWITCHES ARE IN STALLED ON EACH FLOOR.								
15.	BAS CONNECTIONS MADE TO LABELED TERMINALS AS SHOWN ON DRAWINGS.								
MAIN POWER									
1.	110 VOLT AC POWER AVAILABLE TO PANEL.								
2.	PANELS GROUNDED PROPERLY.								





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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	WATER METER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – WM-1

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
<b>INSTALLATION</b>									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	PIPING CONNECTIONS WERE CHECKED								
5.	SHUT OFF VALVES INSTALLED								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	GAS METER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – GM-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	PIPING CONNECTIONS WERE CHECKED								
5.	SHUT OFF VALVES INSTALLED								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	WATER CLOSET
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	WC-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – WATER CLOSET									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	DRAIN PIPED AND WORKING CORRECTLY.								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	WATER CLOSET
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	WC-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – WATER CLOSET									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	DRAIN PIPED AND WORKING CORRECTLY.								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	LAVATORY
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	L-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	HOT WATER PIPED AND HAS ADEQUATE FLOW.								
6.	DRAIN PIPED AND WORKING CORRECTLY.								
7.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	LAVATORY
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	L-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	HOT WATER PIPED AND HAS ADEQUATE FLOW.								
6.	DRAIN PIPED AND WORKING CORRECTLY.								
7.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	SINK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	S-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	HOT WATER PIPED AND HAS ADEQUATE FLOW.								
6.	DRAIN PIPED AND WORKING CORRECTLY.								
7.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	SINK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	S-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	HOT WATER PIPED AND HAS ADEQUATE FLOW.								
6.	DRAIN PIPED AND WORKING CORRECTLY.								
7.	NO APPARENT LEAKS.								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	MOP RECEPTOR
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	MR-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – MR-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	HOT WATER PIPED AND HAS ADEQUATE FLOW.								
6.	DRAIN PIPED AND WORKING CORRECTLY.								
7.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	ELECTRIC WATER COOLER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	EWC-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – EWC-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	DRAIN PIPED AND WORKING CORRECTLY.								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	INTERIOR HOSE BIBB
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	HB-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – HB-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	HOSE BIBB IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	WALL HYDRANT
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	WH-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – WH-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	WALL HYDRANT IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	TRAP PRIMER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	TP-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – TP-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	TRAP PRIMER IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	ICE MAKER OUTLET BOX
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	OB-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – OB-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	FLOOR DRAIN
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FD-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – FD-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	DRAIN PIPED AND WORKING CORRECTLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	FLOOR DRAIN
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FD-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – FD-2									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	DRAIN PIPED AND WORKING CORRECTLY.								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	FLOOR DRAIN
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	FS-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – FS-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	DRAIN PIPED AND WORKING CORRECTLY.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	WATER HAMMER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	WHA-1 THRU WHA-6

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – WHA-1 THRU WHA-6									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	ALL WATER HAMMERS ARE INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	EXPANSION TANK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	ET-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – ET-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	PRESSURE RELIEF VALVE INSTALLED ON HEATER.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	EXPANSION TANK
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	HT-1

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – HT-1

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	PRESSURE RELIEF VALVE INSTALLED ON HEATER.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	BACKFLOW PREVENTER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	BFP-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BFP-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	BACKFLOW PREVENTER IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	BACKFLOW PREVENTER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	BFP-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BFP-2									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	BACKFLOW PREVENTER IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	BACKFLOW PREVENTER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	BFP-3

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BFP-3									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	BACKFLOW PREVENTER IS INSTALLED AND SECURED PROPERLY AS PER MANUFACTURER RECOMMENDATIONS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING SYSTEM
EQUIPMENT COMMISSIONED	THERMOSTATIC MIXING VALVE
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	MV-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – MV - 1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	THERMOSTATIC MIXING VALVE IS INSTALLED AND SECURED TO WALL PROPERLY AT EMERGENCY EYE WASH STATION.								
2.	COLD AND HOT WATER PIPING IS CONNECTED TO THE INLETS AND TEMPERED WATER IS CONNECTING TO THE OUTLETOF THE VALVE TO THE EYE WASH.								
3.	THERE IS NO DAMAGE TO THE VALVE OR PIPING.								
4.	VALVE IS MIXING WATER TO ACHIEVEREQUIRED OUTLET TEMPERATURE (VERIFY WITH USERS).								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	BOOSTER PUMP
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	BP-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – BP-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
3.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
4.	VIBRATION ISOLATION DEVICES INSTALLED.								
5.	CONTROL PANEL WIRES AND CONNECTIONS SECURE.								
6.	PIPING IS CONNECTED PROPERLY.								
7.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	PLUMBING
EQUIPMENT COMMISSIONED	ELECTRIC WATER COOLER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	EWC-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – EWC-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	COLD WATER PIPED AND HAS ADEQUATE FLOW.								
5.	DRAIN PIPED AND WORKING CORRECTLY.								
6.	NO APPARENT LEAKS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	ELECTRIC WATER HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	EWB-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – EWB-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	HEATING ELEMENTS WIRED THAT ONLY ON ELEMENT CAN OPERATE AT A TIME.								
5.	WATER HEATER AND PIPING HAS BEEN FLUSHED, CHEMICALLY CLEANED, PRESSURE TESTED, AND PIPING INSULATED.								
6.	EXPANSION TANK IS INSTALLED, PIPED AND FUNCTIONING.								
7.	DRAIN VALVE IS PIPED TO NEAREST FLOOR DRAIN.								
8.	WATER HEATER CONTROLLER ARE INTERFACED FOR MONITORING/STATUS/ALARM THROUGH THE BAS.								



# MATRIX HVAC, LLC

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Leif C. Wismar, P.E. C.E.M.  
Mechanical Engineer

PRE-FUNCTIONAL CHECKLIST	
SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	ELECTRIC WATER HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	IWH-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – IWH-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	HEATING ELEMENTS WIRED THAT ONLY ONE ELEMENT CAN OPERATE AT A TIME.								
5.	WATER HEATER AND PIPING HAS BEEN FLUSHED, CHEMICALLY CLEANED, PRESSURE TESTED, AND PIPING INSULATED.								
6.	DRAIN VALVE IS PIPED TO NEAREST FLOOR DRAIN.								
7.	WATER HEATER CONTROLLER ARE INTERFACED FOR MONITORING/STATUS/ALARM THROUGH THE BAS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	ELECTRIC WATER HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	IWH-2

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – IWH-2									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	HEATING ELEMENTS WIRED THAT ONLY ONE ELEMENT CAN OPERATE AT A TIME.								
5.	WATER HEATER AND PIPING HAS BEEN FLUSHED, CHEMICALLY CLEANED, PRESSURE TESTED, AND PIPING INSULATED.								
6.	DRAIN VALVE IS PIPED TO NEAREST FLOOR DRAIN.								
7.	WATER HEATER CONTROLLER ARE INTERFACED FOR MONITORING/STATUS/ALARM THROUGH THE BAS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	SERVICE WATER HEATING SYSTEM
EQUIPMENT COMMISSIONED	ELECTRIC WATER HEATER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	IWH-3

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – IWH-3									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SECS.								
3.	HEATER DOES NOT HAVE ANY PHYSICAL DAMAGE.								
4.	HEATING ELEMENTS WIRED THAT ONLY ONE ELEMENT CAN OPERATE AT A TIME.								
5.	WATER HEATER AND PIPING HAS BEEN FLUSHED, CHEMICALLY CLEANED, PRESSURE TESTED, AND PIPING INSULATED.								
6.	DRAIN VALVE IS PIPED TO NEAREST FLOOR DRAIN.								
7.	WATER HEATER CONTROLLER ARE INTERFACED FOR MONITORING/STATUS/ALARM THROUGH THE BAS.								



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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	ELECTRICAL
EQUIPMENT COMMISSIONED	ELECTRICAL LIGHTING CONTROLS
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD –									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	CEILING OCCUPANCY SENSORS, WALL OCCUPANCY SENSORS, LOW VOLTAGE SENSORS, AND LIGHTING CONTROLS INSTALLED PER PLANS AND SPECS.								
2.	ALL FIXTURES, CONTROLS, AND SENSORS PROPERLY WIRED AS PER PLANS AND SECS.								
3.	ALL LIGHTING CONTROLS INSTALLED IN THE PROPER LOCATIONS AS PER THE ELECTRICAL DRAWINGS.								
4.	PHOTOCELLS INSTALLED								
5.	MECHANICAL YARD LIGHTS ON TIMED ON/OFF.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	ELECTRICAL
EQUIPMENT COMMISSIONED	POWER METER
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – PM-1

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
3.	TRIM PROVIDED PER SPECS.								
4.	ELECTRICAL CONNECTIONS WERE CHECKED								





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PRE-FUNCTIONAL CHECKLIST	
SYSTEM	ELECTRICAL
EQUIPMENT COMMISSIONED	SUMP PUMP
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	SP-1

PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – SP-1									
ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	INSTALLED PER PLANS AND SPECS.								
2.	POWER DISCONNECT IS LOCATED WITHIN SIGHT OF THE UNIT IT CONTROLS.								
3.	PROPERLY SUPPORTED PER PLANS AND SEPCS.								
4.	VIBRATION ISOLATION DEVICES INSTALLED.								
5.	CONTROL PANEL WIRES AND CONNECTIONS SECURE.								
6.	PIPING IS CONNECTED PROPERLY.								
7.	NO APPARENT LEAKS.								



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## PRE-FUNCTIONAL CHECKLIST

SYSTEM	FENESTRATION CONTROL SYSTEMS
EQUIPMENT COMMISSIONED	DOORS, WINDOWS, INSULATION, ETC
EQUIPMENT MODEL NUMBER(S)	
EQUIPMENT TAG NUMBER(S)	

## PRE-FUNCTIONAL TESTING PROCEDURES AND RECORD – FENESTRATION

ITEM NO.	ITEM	QCR	CxA	MC	EC	CC	TABC	MD	ED
INSTALLATION									
1.	CONFORMS TO SPECIFICATIONS AND DRAWINGS. (CORRECT U-VALUES, R-VALUES, SHADING, ETC.)								