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Appendix A – Building Services ID Labeling

Chapter 5 – Technical Construction and
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Chapter 5 - Appendix A - Building Services ID Labeling

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Building Systems Name	Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
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PLUMBING SYSTEMS (Equipment to be labeled in similar colors to system equipment is in.)

Sanitary Piping	→→	SANITARY WASTE	→→	
Storm Piping	→→	STORM DRAIN	→→	
Sanitary Waste Vent Piping	→→	SANITARY VENT	→→	
Campus Domestic Water Piping	→→	CAMPUS DOMESTIC WATER	→→	* LIGHT BLUE BANDS
Domestic Cold Water Piping	→→	DOMESTIC COLD WATER SUPPLY	→→	* LIGHT BLUE BANDS
Domestic Hot Water Piping	→→	DOMESTIC HOT WATER	→→	* LIGHT BLUE BANDS
Domestic Hot Water Recirculating Piping	→→	DOMESTIC HOT WATER RETURN	→→	* LIGHT BLUE BANDS
Tepid Water Piping (60 - 70 DEGREES)	→→	60 -70 degrees F Eyewash/Shower Safety Water a.k.a Tempered/Tepid Water	→→	
Tepid Water Piping (70 - 85 DEGREES)	→→	70 -85 degrees F Eyewash/Shower Safety Water a.k.a Tempered/Tepid Water	→→	
PCW Drain	→→	PROCESSED CHILLED WATER EMERGENCY PANEL DRAIN	→→	
Backflow Drain	→→	BACKFLOW PREVENTER DRAIN - PCW	→→	
Natural Gas Piping	→→	NATURAL GAS	→→	* GRAY BANDS
	→→	2 lb NATURAL GAS	→→	* GRAY BANDS
Natural Gas Vent Piping	→→	NATURAL GAS VENT	→→	
Natural Gas PRV Vent	→→	NATURAL GAS PRV VENT	→→	
Non-Potable Cold Water Piping	→→	NON-POTABLE COLD WATER	→→	
Non-Potable Hot Water Piping	→→	NON-POTABLE HOT WATER	→→	
Non-Potable Hot Water Return Piping	→→	NON-POTABLE HOT WATER RETURN	→→	
Reverse Osmosis Water Piping	→→	REVERSE OSMOSIS/DEIONIZED WATER	→→	
Low Pressure Nitrogen System Piping (set @ 35 PSI)	→→	LOW PRESSURE NITROGEN SET @ 35 PSI	→→	* Point of use labeling
Med. Pressure Nitrogen System Piping (35-80 PSI)	→→	MED. PRESSURE NITROGEN 35-80 PSI	→→	
High Pressure Nitrogen System Piping (81-200 PSI)	→→	HIGH PRESSURE NITROGEN 81 - 200 PSI	→→	
Nitrogen Vent	→→	NITROGEN RELIEF VENT	→→	
Specialty Gas	→→	SPECIALTY GASES	→→	Such As: Helium, Hydrogen, Oxygen & Argon
Emergency Shower	→→	EMERGENCY SHOWER	→→	
Carbon Dioxide	→→	CARBON DIOXIDE	→→	
Blowdown Valves	→→	LAB AIR BLOWDOWN VALVE	→→	
Laboratory Air System Piping	→→	COMPRESSED AIR	→→	* BLACK/WHITE CHECKERBOARD BACKGROUND
Laboratory Compressed Air Intake Piping	→→	COMPRESSED AIR INTAKE	→→	* BLACK/WHITE CHECKERBOARD BACKGROUND
Laboratory Vacuum System Piping	→→	VACUUM	→→	* BLACK/WHITE CHECKERBOARD BACKGROUND with
Laboratory Vacuum Exhaust Piping	→→	VACUUM EXHAUST	→→	* BLACK/WHITE CHECKERBOARD BACKGROUND with
Solar Pre-heat Water Piping	→→	SOLAR PRE-HEAT WATER	→→	* TEAL BANDS

FIRE PROTECTION SYSTEMS

Campus Sprinkler Piping	→→	CAMPUS SPRINKLER	→→	
Wet Sprinkler Piping	→→	SPRINKLER	→→	
Sprinkler Standpipe Piping	→→	SPRINKLER	→→	
Sprinkler Drain Piping	→→	SPRINKLER DRAIN	→→	* BROWN BANDS
Fire Department Connection Piping	→→	FIRE DEPARTMENT CONNECTION	→→	
Fire Dry Standpipe	→→	FIRE DRY STANDPIPE	→→	
Duct Smoke Test Switch	→→	DUCT SMOKE TEST SWITCH	→→	
Fire Command Center	→→	FIRE COMMAND CENTER	→→	

AIR SYSTEMS

Outside Air Ductwork	→→	OUTSIDE AIR	→→	
Supply Ductwork	→→	SUPPLY AIR	→→	
Return Air	→→	RETURN AIR	→→	
Supply Valve	→→	Supply Valve-X	→→	
Boiler Air	→→	BOILER INTAKE AIR	→→	
Fan Coil Units	→→	FCU-X	→→	
Air Handling Units		AHU-X-X		
Humidifiers		H-X-X		
Low Pressure Steam Piping < 80 PSI	→→	STEAM	→→	
Steam Condensate	→→	STEAM CONDENSATE	→→	
Fume Hood Exhaust Ductwork	→→	HOOD EXHAUST	→→	
Snorkel Exhaust	→→	SNORKEL EXHAUST	→→	
Dedicated Q Fogger Exhaust	→→	DEDICATED Q FOGGER EXHAUST	→→	

Building Systems Name	Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
Fume Hood Exhaust Air Valves	→→	HOOD VALVE-X	→→	* P touch label Uses FAMIS EQ# * No BANDs and P touch label
Fume Hood Actuator & Control Numbering		HOOD EQUIPMENT - XXXXXXXX		
Fume Hoods		WASTE & PREP HOOD		
Energy Recovery Units		ERU-X-X		
Fume Hood Exhaust Fans	→→	HOOD EXHAUST FAN-X	→→	
General Exhaust Ductwork	→→	EXHAUST	→→	
General Exhaust Valve		EV-X		
Exhaust Fans		EF-X		
Generator Exhaust	→→	GENERATOR EXHAUST	→→	
Boiler Exhaust	→→	BOILER EXHAUST	→→	

MECHANICAL PIPING SYSTEMS

Boiler Water	→→	BOILER WATER	→→	
Campus Chilled Water Supply Piping	→→	CAMPUS CHILLED WATER SUPPLY	→→	
Campus Chilled Water Return Piping	→→	CAMPUS CHILLED WATER RETURN	→→	
Future Campus Chilled Water Supply Connection	→→	FUTURE CHILLED WATER SUPPLY	→→	
Future Campus Chilled Water Return Connection	→→	FUTURE CHILLED WATER RETURN	→→	
Chilled Water Pumps		CHILLED WATER PUMP		
Chilled Water Supply Piping	→→	BUILDING CHILLED WATER SUPPLY	→→	
Chilled Water Return Piping	→→	BUILDING CHILLED WATER RETURN	→→	
Condensate Drain	→→	CONDENSATE DRAIN	→→	
Plate & Frame Heat Exchangers		PLATE HEAT EX-X		
Sump Pump Drain	→→	SUMP PUMP DRAIN	→→	
Campus Medium Hot Water Supply Piping	→→	CAMPUS HEATING WATER SUPPLY	→→	
Campus Medium Water Return Piping	→→	CAMPUS HEATING WATER RETURN	→→	
Hot Water Supply Piping	→→	BUILDING HEATING WATER SUPPLY	→→	
Hot Water Return Piping	→→	BUILDING HEATING WATER RETURN	→→	
Heating Water Pumps		HEATING WATER PUMP		
Boiler		BOILER - X		+
Hot Water Pumps		HOT WATER PUMP -X		
Campus Steam Supply	→→	CAMPUS STEAM SUPPLY	→→	
Campus Steam Return	→→	CAMPUS STEAM RETURN	→→	
Campus Steam Condensate	→→	CAMPUS STEAM CONDENSATE	→→	
Steam Supply Piping	→→	BUILDING STEAM SUPPLY	→→	
Steam Return Piping	→→	BUILDING STEAM RETURN	→→	
Steam Condensate Piping	→→	BUILDING STEAM CONDENSATE	→→	
Glycol Solution Supply Piping	→→	GLYCOL SUPPLY	→→	*
Glycol Solution Return Piping	→→	GLYCOL RETURN	→→	*
Glycol Solution Pumps		GLYCOL PUMP-X		
Process Chilled Water Supply Piping	→→	PROCESS CHILLED WATER SUPPLY	→→	
Process Chilled Water Return Piping	→→	PROCESS CHILLED WATER RETURN	→→	
Hot Water Heater		DOMESTIC HOT WATER HEATER		
Process Chiller		PCH-1		
Air Cooled Condenser		ACC-1		
Split System Air Conditioning Unit		SPLIT SYSTEM AC-X		
Refrigerant Piping	→→	REFRIGERANT LIQUID TYPE	→→	
pipe serves FCU by room ID		FCU - XXXX		
pipe serves Safety Valve by room ID		SV - XXXX		
pipe serves Expansion Valve by room ID		EV - XXXX		
pipe serves AHU ID per Unit (wing - Unit #)		AHU X - X		

ELECTRICAL SYSTEMS

Electrical Conduits		ELECTRICAL PANEL X TO X		
Generator Conduits		GENERATOR TO PANEL X		
Duct Smokes Access Panel		DUCT SMAOKES ACCESS PANEL		
Electrical Feeder Markings				
120V/208				
Phase A		Black Tape		
Phase B		Red Tape		
Phase C		Blue Tape		
Neutral		White Tape		
Ground		Green Tape or Bare Wire		
120V/240				
Phase A		Black Tape		

Building Systems Name	Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
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Phase B		Red Tape		
Phase C		N/A		
Nuetral		White Tape		
Ground		Green Tape or Bare Wire		

480V / 277V LIFE SAFETY		480V/277V LIFE SAFETY		
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480V / 277V				
Phase A		Brown Tape		
Phase B		Orange Tape		
Phase C		Yellow Tape		
Nuetral		Gray Tape		
Ground		Green Tape or Bare Wire		

Medium Voltage 4160 or 34500				
Phase A		Red Tape		
Phase B		Blue Tape		
Phase C		Black Tape		
Neutral		White		
Ground		Green Tape or Bare Wire		

Note: These circuits are treated as they would be by a utility on campus. The nuetral conductor is grounded at all transformers, sector cabinets and utility structures.

Electrical caution signs		"CAUTION" ELECTRICAL JUNCTION BOX 120/240V, SINGLE PHASE, 3 WIRE - CONTAINS BRANCH CIRCUITS FED FROM PANEL L5 LOCATED IN ROOM NB09		
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Building Grounding System		BLACK TEXT ON GREEN TAPE		
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FIRE ALARM SYSTEMS

Fire Alarm Conduit		Silver Conduit with Red Couplings		
Fire Alarm Wiring				
Initiating Circuits		Red Wire		
2nd Initiating Circuit (If required)		Red Wire W/ Orange Stripe		
Horn/Strobe Circuits		Red Wire W/ White Stripe		
Speaker Circuit		Red Wire W/ Blue Stripe		
Power Circuit (24V)		Red Wire W/ Black Stripe		
Communication Line		Red Jacket W/ Yellow Stripe		
Audio Interconnect		Red Jacket W/ Green Stripe		
Booster Interconnect		Red Jacket W/ Purple Stripe		
Fire Alarm Fiber Optic Cabling		"FIRE ALARM - DO NOT REMOVE"		
Fire Alarm Panels		"FIRE ALARM CONTROL"		
Smoke Power, Door Holders, Etc.		Yellow Wire		

- * Label @ Terminations and Junction Boxes
- * Label @ Panels and post color code schedule @ ea

CONTROLS SYSTEMS

BAS Controls Panels		BAS PANEL X		
Lab Room Controller - Controls Panels		LAB ROOM CONTROLS PANEL X		
Lab Room Controller by room ID		LAB ROOM CONTROLLER XXXX		
Controls Conduits		BUILDING AUTOMATION		
Controls Wiring		BUILDING AUTOMATION		
BAS Remote Seneors		BAS REMOTE SENSORS		
BAS Boiler/CHW Controls		BAS BOILER/CHW CONTROLS		
BAS / Boiler Controls		BAS BOILER CONTROLS		
BAS/CHW Controls		BAS / CHW CONTROLS		
BAS Communications		BAS COMMUNICATIONS		
Fuse ID		USE 500 MA FUSE		
Power to fume hood controls		POWER TO FUME HOOD CONTROLS		
BAS - Exhaust DP Sensor		BAS - EXHAUST DP SENSOR		
BAS - Supply DP Sensor		BAS - SUPPLY DP SENSOR		
BAS / LAB CONTROLS		BAS / LAB CONTROL		
ERU'S		ERU XX / BAS		
AHU'S		AHU XX/BAS		

AUXILLARY ELECTRICAL SYSTEMS

Security Conduit		SECURITY		
Security Wiring		SECURITY		
Telecommunications Conduit		TELECOMMUNICATIONS		
Telecommunications Wiring		TELECOMMUNICATIONS		
Audio/Visual Conduit		AUDIO/VISUAL		
Audio/Visual Wiring		AUDIO/VISUAL		
Property of Telecom		PROPERTY OF TELECOM		
Property fo Fairpoint		PROPERTY OF FAIRPOINT		

SOLAR SYSTEM

Glycol Supply	→→	SOLAR HOT WATER HEATER GLYCOL SUPPLY	→→
Glycol Return	→→	SOLAR HOT WATER HEATER GLYCOL RETURN	→→
Solar heater Exhaust	→→	SOLAR HOT WATER HEATER EXHAUST	→→

Building Systems Name	Band Color/Flow	Background and Lettering Colors	Band Color/Flow	Notes
Solar Heater Intake	→→	SOLAR HOT WATER HEATER AIR INTAKE	→→	