

Project Name:	
Contact Person:	Telephone:

Prescriptive Checklist

Prescriptive Air-System Requirements

- All systems comply with simultaneous heating and cooling limitations (6.5.2).

Prescriptive Hydronic System Requirements

- Hydronic systems meet the variable flow requirements of 6.5.4.1
- Chillers and boilers in parallel have isolation controls per 6.5.4.2
- Chilled and hot water systems meet the temperature reset requirements of 6.5.4.3

- Hydronic heat pump systems and water cooled AC units comply with the requirements of 6.5.4.4.

- Chilled and condenser water piping systems are sized in compliance with 6.5.4.5

Prescriptive Special System Requirements

- Heat rejection systems comply with section 6.5.5
- Kitchen exhaust systems comply with 6.5.7.1
- Laboratory exhaust systems comply with 6.5.7.2

- Radiant heating systems comply with 6.5.8

- Heat recovery for service water heating is provided for facilities that operate continuously, have a total water-cooled heat rejection capacity exceeding 6,000,000 Btu/h (1,758 kW), and have a design service water heating load exceeding 1,000,000 Btu/h (293 kW). The heat recovery system (if any) complies with 6.5.6.2.

- The cooling equipment with hot-gas bypass controls (if any) meets the unloading requirements of 6.5.9.

Project Name:	
Contact Person:	Telephone:

Systems Worksheet (6.5)

System Tag					
Supply CFM					
Cooling Capacity					
Heating Capacity					
OA CFM (i.e. Outdoor Air CFM)					
Economizer (6.5.1)					
Dehumidification (6.5.2.3)					
Humidification (6.5.2.4)					
VAV Fan Control (6.5.3.2.1)					
VAV Fan Static Pressure Control (6.5.3.2.2 and 6.5.3.2.3)					
Multiple Zone VAV System Ventilation Control (6.5.3.3)					
Supply air temperature reset control (6.5.3.4)					
Exhaust air energy recovery (6.5.6.1)					

In the table above, enter the appropriate codes from this list:

Economizer (6.5.1)

- C1 System employs air-economizer complying with 6.5.1.1, 6.5.1.3 and 6.5.1.4
- C2 System employs water economizer complying with 6.5.1.2, 6.5.1.3 and 6.5.1.4
- N1 N/A size exception from Table 6.5.1A or 6.5.1B
- N2 N/A non-particulate air treatment per 6.2.1 of Standard 62.1
- N3 N/A per exception c to 6.5.1
- N4 N/A system employs heat recovery complying with 6.5.6.2
- N5 N/A system serves residential spaces with a system capacity less than 5 times that in Table 6.5.1A
- N6 N/A per exception f to 6.5.1
- N7 N/A system expected to operate < 20 hrs/wk
- N8 N/A system serves space with open refrigerated casework systems
- N9 N/A cooling efficiency exceeds the requirements of Table 6.3.2
- N10 N/A serves computer rooms and meets exception j to 6.5.1
- N11 N/A serves computer rooms and meets exception k to 6.5.1

Dehumidification (6.5.2.3)

- C1 System dehumidifies without employing reheating or recooling
- N1 N/A system does not have humidistatic controls
- N2 N/A system meets exception a to 6.5.2.3
- N3 N/A system meets exception b to 6.5.2.3
- N4 N/A system meets exception c to 6.5.2.3

- N5 N/A system meets exception d to 6.5.2.3
- N6 N/A system meets exception e to 6.5.2.3
- N7 N/A system meets exception f to 6.5.2.3

Humidification (6.5.2.4)

- C1 System humidifies to a dew point < 35F
- C2 System humidifies and does not have an economizer
- C3 System humidifies has a water-side economizer
- N1 N/A system does not have a humidifier controls

VAV Fan Control (6.5.3.2.1)

- C1 System has a variable speed drive
- C2 System has a vane-axial fan with variable pitch blades
- C3 System uses a control that complies with 6.5.3.2.1 c.
- N1 N/A system is constant volume
- N2 N/A system serves a single zone and complies with 6.4.3.10

VAV Fan Static Pressure Control (6.5.3.2.2 and 6.5.3.2.3)

- C1 Static pressure setpoint is < 1/3 of the fan design static
- C2 Static pressure setpoint is reset by zone demand per 6.5.3.2.3.
- N1 N/A system is constant volume
- N2 N/A system serves a single zone and complies with 6.4.3.10

Multiple Zone VAV System Ventilation Control (6.5.3.3)

- C1 System complies with 6.5.3.3
- N1 N/A system is constant volume
- N2 N/A system serves a single zone and complies with 6.4.3.10
- N3 N/A system is does not have DDC to the zone

Supply air temperature reset control (6.5.3.4)

- C1 System employs supply air temperature reset per 6.5.3.4
- N1 N/A system serves a single zone and complies with 6.4.3.10
- N2 N/A system is located in climate zone 1a, 2a or 3a
- N3 N/A system has no re-heating, re-cooling or mixing of heated and cooled supply air
- N4 N/A system has >75% of the energy for reheat from site recovered or site solar energy sources

Exhaust air energy recovery (6.5.6.1)

- C1 System employs an exhaust air energy recovery device that exceeds 50% energy recover effectiveness
- N1 N/A system is exempt per Table 6.5.6.1
- N2 N/A system serves a laboratory meeting 6.5.7.2
- N3 N/A system is heating only and the spaces are heated to <60F
- N4 N/A exhaust is toxic, flammable or corrosive
- N5 N/A system serves an area with commercial kitchen hoods
- N6 N/A >60% of the heating energy is from site-recovered or site-solar energy
- N7 N/A system meets exception f to 6.5.6.1
- N8 N/A system meets exception g to 6.5.6.1
- N9 N/A system meets exception h to 6.5.6.1
- N10 N/A system meets exception i to 6.5.6.1
- N11 N/A system meets exception j to 6.5.6.1

Option 1 – Nameplate Horsepower

Installed Nameplate Horsepower

Tag	Description	Supply	Return	Exhaust	Series FPB	Other	Nameplate Horsepower
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Allowed Nameplate Horsepower

Design Supply Airflow Rate (CFM _s)	
Fan Nameplate Horsepower Allowance from Table 6.5.3.1.1A	
Total Allowed Nameplate Horsepower	

Option 2 – Brake Horsepower

Allowed Fan Brake Horsepower

Design Supply Airflow Rate (CFM _s)	
Fan Brake Horsepower Allowance from Table 6.5.3.1.1A	
Base Allowance (Line1 x Line 2)	
Additional Brake Horsepower Allowance	
Total Allowed Brake Horsepower	

Pressure Drop Adjustments for Qualifying Devices

Tag	Device Description	Pressure Drop from Table 6.5.3.1.1B	CFM through Device	Additional Brake Horsepower Allowance

Installed Brake Horsepower

Tag	Description	Supply	Return	Exhaust	Series FPB	Other	CFM	Pressure Drop (P/D)	η_{Fan}	η_{Drive}	η_{Motor}	Brake Horsepower
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						