HVAC Prescriptive Requirements

Project Name:	
Contact Person:	Telephone:

Prescriptive Checklist

Prescriptive Economizers (§ 6.5.1)

- ☐ Systems employ airside economizers (§ 6.5.1.1).
- ☐ Economizer provides up to 100% design airflow in outdoor air (§ 6.5.1.1.1).
- ☐ Economizer is integrated with the mechanical cooling system (§ 6.5.1.1.2 and § 6.5.1.3).
- ☐ Economizer high limit shutoff complies with § 6.5.1.1.3.
- ☐ Economizer dampers meet or exceed leakage requirements (§ 6.5.1.1.4).
- ☐ System provides relief for up to 100% design airflow in outdoor air (§ 6.5.1.1.5).
- ☐ Economizer complies with the heating system impact requirements (§ 6.5.1.4).
- ☐ Systems employ waterside economizers.
- ☐ Economizer can provide 100% of the load at either the outdoor conditions of 50°F db/45°F wb or 45°F db/40°F wb where required for dehumidification purposes (§ 6.5.1.2.1).
- ☐ Precooling coils and heat exchangers have either a ≤ 15 ft of WC pressure drop or are bypassed when economizer is not in use (§ 6.5.1.2.2).
- ☐ Economizer is integrated with the mechanical cooling system (§ 6.5.1.3).
- ☐ Economizer complies with the heating system impact requirements (§ 6.5.1.4).
- ☐ Systems are exempt from the economizer requirements.

Specify economizer exemptions:_____

_____

_____

_____

_____

Prescriptive Air-System Requirements

- ☐ Simultaneous Heating and Cooling (§ 6.5.2.3).
- ☐ Zone minimums were set to meet the requirements of *Standard 62*.
- ☐ Zone minimums were set to ≤0.4 cfm/ft^2 of zone conditioned floor area.
- ☐ Zone minimums are less than 300 cfm.
- ☐ Other (requires special documentation and approval).
- ☐ Humidity controls (if any) comply with the requirements of § 6.5.2.3.
- ☐ Systems that employ hydronic cooling and have humidification (if any) use a waterside economizer that complies with § 6.5.1.
- ☐ Variable air volume fan controls comply with the requirements of § 6.5.3.2.

Prescriptive Water-System Requirements

- ☐ Three-pipe systems are not used (§ 6.5.2.2.1).
- ☐ Two-pipe changeover heating/cooling systems (if any) comply with the requirements of § 6.5.2.2.2.
- ☐ Hydronic (ground- or water-loop) heat pump systems that have equipment for both loop heat addition and loop heat rejection (if any) comply with the requirements of § 6.5.2.2.3.
- ☐ System pumps greater than 10 hp employ variable flow controls (§ 6.5.4.1), pump isolation (§ 6.5.4.2) and temperature reset (§ 6.5.4.3).

Prescriptive Special System Requirements

- ☐ All heat rejection equipment with motors ≥ 7.5 hp employ controls that comply with § 6.5.5.
- ☐ Exhaust Air Energy Recovery: all fan systems that have both a design supply capacity of ≥ 5,000 cfm and a minimum outdoor air supply of ≥ 70% of the design supply air employ an energy recovery system that complies with § 6.5.6.1.
- ☐ 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, and have a design service water heating load exceeding 1,000,000 btu/h. The heat recovery system (if any) complies with § 6.5.6.2.
- ☐ Kitchen hoods with exhaust flows > 5000 cfm comply with the requirements of § 6.5.7.1.
- ☐ Fume hoods with a total exhaust system flow > 15,000 cfm comply with the requirements of § 6.5.7.2.
- ☐ Radiant heaters complying with § 6.5.8.1 are used to heat unenclosed spaces (if any).
- ☐ The cooling equipment with hot-gas bypass controls (if any) meets the unloading requirements of § 6.5.9.

HVAC Prescriptive Requirements

Project Name:	
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Option 1 – Nameplate Horsepower

Installed Nameplate Horsepower

Tag	Description	Supply	Return	Exhaust	Series FPB	Other	Nameplate Horsepower
		○	○	○	○	○	
		○	○	○	○	○	
		○	○	○	○	○	
		○	○	○	○	○	
		○	○	○	○	○	

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 (PD)	η_{Fan}	η_{Drive}	η_{Motor}	Brake Horsepower
		○	○	○	○	○						
		○	○	○	○	○						
		○	○	○	○	○						
		○	○	○	○	○						
		○	○	○	○	○						