

Code section: PECI doc	Original code section	Measure	Source	Comment/Change from orig
1312.2.3	new	Refrigerated Warehouse	T-24 2008	
1315.1	same	Storage water heaters > 140 gal exempt from standby loss requirements if R-24 (was R-12.5)		
1315.5.1	1315.4.1	DHW recirc pump: demand control or temp modulation required except hospital, medical	T-24 2011	Exception added for hospital/med/retirement
1315.5.2	1315.4.2	pipe heat tapes; exception: installed for freeze protection...new: provided they have temp controls	Expert Panel	
1315.6.3	1315.5.3	Heat recovery for indoor swimming pools	ASHRAE 189	
1315.6.4	new	Heat recovery for service water heating if > 840 kBtu/hr refrigeration or chiller capacity or > 6,000,000 Btu/hr heat rejection	Common Practice	Add DHW capacity exception limit (500,000) instead of building type
1317.2	1317.13	Additions & alterations: economizer exception for Optional Compliance Efficiency	coordination	
1317.2	new	Additions & alterations: exception for temp & pump speed reset control if no DDC, no new pumps > 1.5 hp, etc	T-24 2008	
1317.2	new	Additions & alterations: exception for temp & fan speed reset control if no DDC, no new fans > 1.5 hp, etc	T-24 2008	
1317.3.1	1317.2	Design ventilation and exhaust rates limited to 15% above OMSC	Expert panel	page 10: Reduce outside air intake "in proportion to occupancy"
1317.3.2	1317.2.2	DCV: Ventilation controls for high occupancy areas	Expert panel; reduction in exception matches cost reduction in technology	
1317.3.3	new	DCV: Ventilation controls for high occupancy zones	Expert panel - may match original intent; focus on conference rooms standard as technology has improved	
1317.3.4	1317.2.3	Parking garage ventilation controls: exhaust rates > 15,000 cfm require CO sensor & modulated ventilation	IECC	
1317.3.5	1317.2.1	Laboratory exhaust systems > 5,000 cfm require heat recovery	ASHRAE 90.1 - 2007; Lab 21	
1317.3.6	1318	Exhaust air heat recovery: moved from Complex section to General (everything) section.	Error from original intent; expert panel	
1317.3.6	1318.3	Exhaust air heat recovery: same as above but improved efficiency requirements		
1317.4	1317.3	Economizer cooling: remove most exceptions		
1317.4.1	new	Optional economizer compliance		
1317.4.2	1317.3.2	Economizer integration: delete exception for indirect/direct DX 15 tons and less		
1317.4.3	new	Economizer control signal: sequence economizer dampers w/AC; control by MAT only not allowed for MZ	T-24 2008	

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1317.4.4	new	High limit shutoff: description and table with high limit controller types	T-24 2008; ASHRAE 90.1	
1317.5.2	1317.4.2	Zone temp controls: interlock t-stats for zones with separate heating and cooling equip	Clarify 90.1 for rare system in Oregon	
1317.5.2.2	new	Hot water pump control: lock it out at 70F or higher outside	std comm practice	
1317.5.3.2	1317.4.3.2	Optimum start controls: currently > 10,000 cfm, propose for all cfm	std comm practice	
1317.5.3.3.1	1317.4.3.3.1	Shutoff damper controls: allow one hour ventilation pre-purge; occupancy control for classrooms, gyms, etc	ASHRAE 90.1 addendum	
1317.5.3.3.2	1317.4.3.3.2	Motorized damper leakage: Max leakage rate for return air dampers in economizers	ASHRAE 90.1 addendum	Improve clarity and align with ASHRAE addendum
1317.5.4	1317.4.4	Heat pump controls: heat pump compressor + supplemental heat until outside temp < 10F	Expert Panel	
1317.6.1.1	new	Pkg electric heating/cooling equipment > 20kBtu/h shall use heat pump for primary heating	WA code 1411.4; NWBest 803.2.2.1	
1317.6.1.2	new	CHW plants > 300 tons are limited to 100 tons provided by air-cooled chillers	T-24	
1317.6.1.3	new	Limitation on centrifugal fan cooling towers for > 1100 gpm capacity	T-24 sec 144; 90.1 '07 Add u	
1317.6.3	new	Pkg terminal AC and HP: non-standard size units require installation label	ASHRAE 90.1 addendum s	Missed this addendum the first round.
1317.6.1(1)	Table 13-L	Table: Unitary AC	ASHRAE 90.1 for base requirements; High efficiency option: CEE; 189; FEMP; NBI Core Performance; CEC appliance eff database; market	
1317.6.1(2)	Table 13-M	Table: Unitary HP		Updated with mfr data
1317.6.1(3)	Table 13-O	Table: Chillers		Updated with mfr data
1317.6.1(4)	Table 13-N	Table: PTAC, PTHP, SPVAC, SPVHP		
1317.6.1(5)	Table 13-P	Table: Warm air furnaces, unit heaters		Updated with CEC appliance eff database
1317.6.1(6)	Table 13-Q	Table: Boilers		Updated with CEC appliance eff database
1317.6.1(7)	Table 13-R	Table: Heat rejection equipment		Delete SI units
1317.6.4	1317.5	Hot gas bypass limitation: DX > 65 kBtu/h needs minimum 2 stages or 50% capacity modulation	ASHRAE 189; NWBest	
1317.6.6	new	Cooling tower flow turndown: all cells can run in parallel with turndown	T-24 sec 144	
1317.9	1317.8	Duct sealing and testing	ASHRAE 90.1 sec 6.4.4.2.2	
1317.10	1317.9	Simple HVAC systems: expand definition as single zone, no humidification, no simultaneous heat/cool	Expert Panel	
1317.11.3.1	1317.10.3.1	Variable speed drives: fan and pump motors 5 HP and greater (was 10 HP); CV fans turn down to 60%	Expert Panel	Added note on advanced ventilation controls
1317.11.3.2	1318.4.2.4	Require variable flow control where aggregate is over 7500 cfm; manages multiple units serving big box.	Expert Panel	
1317.12	1317.11	Kitchen hood makeup air required based on aggregate cfm; variable flow.	Expert Panel; common practice	Increase threshold to 5,000 cfm for DCV, modulate airflow

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1317.14	new	Vestibule & air curtain conditioning prohibited	Expert panel	
1317.15	new	Pipe minimum sizing based on velocity.	ASHRAE 90.1 adapted to Oregon	
1318.2.1	same	Simultaneous heating/cooling clarified; 90.1 language adapted to Oregon language; economizer cooling included; 3-deck multizone exception added.	ASHRAE 90.1; Expert Panel; common practice	Add exception for some areas of hospitals, vivariums, and laboratories
1318.2.3	same	VAV Static pressure reset "no DDC" exception removed; zone level controls.	CA title 24; common practice	
1318.2.4	same	Hydronic temperature reset required except small systems	Common Practice	Strike "comfort conditioning systems"
1318.2.5	same	VAV temperature pressure reset; zone level controls; optimize interior zones.	Expert Panel; good practice	
1318.2.7	same	Exception simplified to area	Expert panel	
1318.2.9	1318.2.8.4	Hydronic system required to be variable flow with isolation on chiller, boiler.	CA title 24; common practice	Total pump system power should be nameplate horsepower
1318.2.10	new	Testing ports on coils enhances troubleshooting; commissioning	Common practice	
1318.2.11	new	DDC includes trending and demand adjustment.	Common practice	
1318.4.2	same	Fan power limitation updated	90.1 addendum p	
1318.4.3	new	ECM motors or higher efficiency for fan powered boxes.	CA title 24; good practice	