# **MECHANICAL COMPLIANCE SUMMARY**

2018 WSEC Compliance Forms for Commercial Buildings including Group R2, R3 & R4 over 3 stories and all R1 Administered by: ©2021 NEEA, All rights reserved Costco - Puvallup (#660), WA - HVAC All - 2018 WSEC For Building Department Use: Project Title Date: Oct 01, 2021 1201 39th Ave SW Project Address Puvallup, WA 98373 Project & Applicant Information Applicant Name Chester Pasag Applicant Phone 425-970-3753 Annlicant Email cpasag@tei-engineering.com For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergvcodes.com General Occupancy General Building Use Type Retail, Wholesale Club/Superstore **Building Cond. Floor Area** 146.242 All Commercial **Project Cond. Floor Area** 146.242 New Building Alteration Floors Above Grade **General Project Types** Alteration or Addition Single Zone Systems & Equipment Mechanical Scone Mechanical Scone Compliance Method 1 - General **Compliance Method** Mechanical Project Description Replacement of all main sales units and ancillary areas besides food service. Equipment Efficiency Economizer Project DOAS Ventilation Higher Equipment Mechanical Scope Compliance Exception(s) Efficiency Option Applied? Provided? Mechanical Compliance Type Verification Applied? Scope and Method Single Zone Systems & No COMPLIES Alteration Yes NA Equipment Additional Efficiency Higher equipment efficiency and fan FEG Credits Included (AEC) Does building include occupancy classifications requiring No Does project include DOAS equipment? No DOAS? Do all systems comply with Appendix D standard reference design or qualify for an exception to Based on project scope do TSPR requirements apply? No No TSPR? **ALTERATION - SINGLE ZONE SYSTEMS & EOUIPMENT** Scope & Space Conditioning **Compliance Verification COMPLIES** Single Zone Air Systems Category - Furnace, warm air Air Systems Summary Information Ventilation CFM Supply Airflow Ventilation Energy Recovery Quantity System/Equip ID Ventilation Standard Paired with DOAS Ventilation energy recovery of Items Control (Total if Multiple Items) Air Source Efficiency (%) AC-4 Variable air volume IMC Ventilation 2,400 Integral Not provided, not required AC-7~11 18,500 Variable air volume IMC Ventilation Integral Not provided, not required Air Systems & Equipment - Cooling System/ Cooling AEC Econo Exception **Combined Efficiency** Proposed **Proposed Part** Efficiency CE PL Capacity Équip **Cooling System/Equip Type** Specific Type Efficiency Multiplier (FL & Multiplier (AEC & Cooling Load Compliance Units Units ÎD per item (Btu/h) Multiplier PL) Econo) Efficiency Efficiency Verification Air conditioner, terminal Packaged terminal DX, 0 1 EER AC-4 67.000 COMPLIES 1

Air Systems & Equipment - Heating									
System /Equip ID	Heating System/Equip Type	Specific Type Heating Capacity HC Units Proposed He		Proposed Heating Efficiency	HE Units	Efficiency Compliance Verification			
AC-7~11	Furnace	Warm air, gas fired (AFUE)	540,000	Btu/h	81.0		COMPLIES		
AC-4	Furnace	Warm air, gas fired (AFUE)	90,000	Btu/h	81.0	AFUE	COMPLIES		

1

0

1

COMPLIES

#### Air Systems & Equipment Details

AC-7~1

(PTAC)

Air conditioner, terminal

(PTAC)

replacement

Packaged terminal DX,

replacement

531,000

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System/Equip ID	Area(s) Served	Location In Project Documents - Plan/Detail #	
AC-4	Tire Sales	ME-1, ME-3	
	Economizer Compliance	e Method: Air-side economizer provided	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency	Reference Table - Heating: Table C403.3.2(4) Warm Air Furnaces	
AC-7~11	Main Sales	ME-1, ME-3	
	Economizer Compliance	e Method: Air-side economizer provided	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency	Reference Table - Heating: Table C403.3.2(4) Warm Air Furnaces	

#### Single Zone Air Systems Category - Heat pump, packaged (PTHP, SPVHP, room)

Air Systems Summary I	ir Systems Summary Information									
System/Equip ID	Quantity of Items	Supply Airflow Control	Ventilation Standard	Ventilation CFM (Total if Multiple Items)	Ventilation Air Source	Paired with DOAS	Ventilation energy recovery	Energy Recovery Efficiency (%)		
AH-6		Constant volume	IMC Ventilation	600	Integral					
AH-2		Constant volume	IMC Ventilation	1,000	Integral					
AH-1		Constant volume	IMC Ventilation	1,000	Integral					
AH-5		Constant volume	IMC Ventilation	710	Integral					

Air System	Air Systems & Equipment - Cooling										
System/ Equip ID	Cooling System/Equip Type	Specific Type	Cooling Capacity per item (Btu/h)			Combined Efficiency Multiplier (AEC & Econo)	Proposed Cooling Efficiency		Proposed Part Load Efficiency		Efficiency Compliance Verification
AH-1	Heat pump, vertical (SPVHP)	Single package, vertical	36,000	1	0	1	11.0	EER			COMPLIES
AH-5	Heat pump, vertical (SPVHP)	Single package, vertical	24,000	1	0	1	11.0	EER			COMPLIES
AH-6	Heat pump, vertical (SPVHP)	Single package, vertical	24,000	1	0	1	11.0	EER			COMPLIES
AH-2	Heat pump, vertical (SPVHP)	Single package, vertical	36,000	1	0	1	11.0	EER			COMPLIES

Air System	Air Systems & Equipment - Heating									
System /Equip ID	Heating System/Equip Type	Specific Type	Heat Pump Heating Capacity (Btu/h)	Cooling Capacity (Btu/h)	AEC Efficiency Multiplier	Proposed Heat Pump Heating Efficiency	HPH Units	Proposed Low OSA Temp Efficiency	LTH Units	Efficiency Compliance Verification
AH-2	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	40,000	36,000	1	3.3	COP			COMPLIES
AH-5	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	27,000	24,000	1	3.5	COP			COMPLIES
AH-6	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	27,000	24,000	1	3.5	COP			COMPLIES
AH-1	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	40,000	36,000	1	3.3	COP			COMPLIES

Air Systems & E	quipment Details		
System/Equip ID	Area(s) Served	Location In Project Documents - Plan/Detail #	
AH-6	EDP	ME-2, ME-3	
	System/Equip ID for a single	le or multiple items?: Single item	
	Economizer Compliance M	ethod: Economizer not required	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency Re and HP	ference Table - Heating: Table C403.3.2(3) - Packaged Terminal and Vertical AC	
AH-2	Office	ME-2, ME-3	
	System/Equip ID for a single	le or multiple items?: Single item	
	Economizer Compliance M	ethod: Economizer not required	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency Re and HP	ference Table - Heating: Table C403.3.2(3) - Packaged Terminal and Vertical AC	
AH-1	Pharmacy	ME-2, ME-3	
	System/Equip ID for a sing	e or multiple items?: Single item	

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	Economizer Compliance Me	ethod: Economizer not required	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency Re and HP	ference Table - Heating: Table C403.3.2(3) - Packaged Terminal and Vertical AC	
AH-5	Optical	ME-2, ME-3	
	System/Equip ID for a singl	e or multiple items?: Single item	
	Economizer Compliance Me	ethod: Economizer not required	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(3) - Packaged Terminal and Vertical AC and HP
	WSEC Equip Efficiency Re and HP	ference Table - Heating: Table C403.3.2(3) - Packaged Terminal and Vertical AC	

#### Single Zone Equipment Category - Condensing Unit

Equipment Summary Information							
System/Equip ID	Quantity of Items						
CU-1 & 2							
CU-5 & 6							

Air System	Air Systems & Equipment - Cooling										
System/ Equip ID	Cooling System/Equip Type	Specific Type	Cooling Capacity per item (Btu/h)	AEC Efficiency Multiplier	Econo Exception Multiplier (FL & PL)	Combined Efficiency Multiplier (AEC & Econo)	Proposed Cooling Efficiency		Proposed Part Load Efficiency	PL Units	Efficiency Compliance Verification
CU-1 & 2	Condensing unit, air cooled		36,000	1		0		NA		IEER	COMPLIES
CU-5 & 6	Condensing unit, air cooled		24,000	1		0		NA		IEER	COMPLIES

Equipment Details							
System/Equip ID	Area(s) Served	Location In Project Documents - Plan/Detail #					
CU-1 & 2	CU-1 & 2 Pharmacy, Office ME-1, ME-3						
	System/Equip ID for a single or multiple items?: Multiple items w/ identical heating & cooling capacity						
	WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(1)A - Unitary Air Conditioners & Condensing Units						
CU-5 & 6	Office, EDP	ME-1, ME-3					
	System/Equip ID for a single or multiple items?: Multiple items w/ identical heating & cooling capacity						
	WSEC Equip Efficiency Reference Table - Cooling: Ta	ble C403.3.2(1)A - Unitary Air Conditioners & Condensing Units					