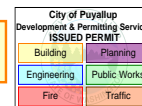


MECHANICAL COMPLIANCE SUMMARY

2021 WSEC Compliance Forms for Commercial Buildings including Group R2, R3 & R4 over 3 stories and all R1

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Project & Applicant Information	Project Title	Cascade Christian School - Portable Unit Replacements - 2021 WSEC	For Building Department Use: PRMH20241661	Date: Aug 30, 2024
	Project Address	811 21st St. SE Puyallup, WA 98372		
	Applicant Name	Jerry Williams		
	Applicant Phone	253-572-9484		
	Applicant Email	jerryw@asei.ws		



For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com

General Occupancy	All Commercial		General Building Use Type	Education, Primary (Elem/Mid)		Building Cond. Floor Area	870
General Project Types	Alteration	New Building or Addition Mechanical Scope		Alteration Mechanical Scope	Single Zone Systems & Equipment	Project Cond. Floor Area	870
						Floors Above Grade	1
						Compliance Method	General Prescriptive
Mechanical Project Description	Remove (2) ea Bard units. One from each of the two portables and replace with similar units w/ self-contained ERV's in each heat pump Bard Unit						

Mechanical Compliance Scope and Method	Project Type	Mechanical Scope	Economizer Exception(s) Applied?	DOAS Ventilation Provided?	Higher Equipment Efficiency Option Applied?	Equipment Efficiency Compliance Verification
	Alteration	Single Zone Systems & Equipment	Based on Energy Efficiency being higher efficiency C503.4.3 - 10 Yes See attached Letter	Yes integral to the unit	NA	COMPLIES
Additional Energy Efficiency (AEC) Measures Included	No mechanical additional energy efficiency measures included in project		Load Management (LDM) Measures Included		No mechanical load management measures included in project	
Additional Efficiency Credits Included (AEC)						
Does building include occupancy classifications requiring DOAS?	Yes		Does project include DOAS equipment?			Yes
Based on project scope do TSPR requirements apply?	No		Do all systems comply with Appendix D standard reference design or qualify for an exception to TSPR?			No

Scope & Space Conditioning	ALTERATION - SINGLE ZONE SYSTEMS & EQUIPMENT	Compliance Verification	COMPLIES
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Single Zone Air Systems Category - Heat pump, packaged (PTHP, SPVHP, Room)

Air 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 (%)
HP-1		Constant volume	ASHRAE Standard 62.1	400	Integral	integral to the unit		
HP-2		Constant volume	ASHRAE Standard 62.1	400	Integral	integral to the unit		

Air Systems & Equipment - Cooling

System/Equip ID	Cooling System/Equip Type	Specific Type	Cooling Capacity per item (Btu/h)	Econo Full Load Multiplier (Full/IPLV)	Required Cooling Efficiency (Code Min & Econo)	Proposed Cooling Efficiency	CE Units	Efficiency Compliance Verification
HP-2	Heat pump, vertical (SPVHP)	Single package, vertical	28,000	0	11.0	11.0	EER	COMPLIES
HP-1	Heat pump, vertical (SPVHP)	Single package, vertical	28,000	0	11.0	11.0	EER	COMPLIES

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
HP-2	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	24,400	28,000	1	3.3	COP			COMPLIES
HP-1	Heat pump, vertical (SPVHP), heating	Single package, vertical heat pump	24,400	28,000	1	3.3	COP			COMPLIES

Air Systems & Equipment Details

System/Equip ID	Discrete Area(s) Served	Location In Project Documents - Plan/Detail #	System/Equip Compliance Path

HP-1	Classroom	M1	General Prescriptive
	System/Equip ID for a single or multiple items?: Single item		
	Economizer Compliance Method: Economizer not required Based on Energy Efficiency being higher efficiency C503.4.3 - 10		WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(4) Packaged Terminal, Vertical AC & HP and Room AC Units
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(4) Packaged Terminal, Vertical AC & HP and Room AC Units		
HP-2	Classroom	M1	General Prescriptive
	System/Equip ID for a single or multiple items?: Single item		
	Economizer Compliance Method: Economizer not required Based on Energy Efficiency being higher efficiency C503.4.3 - 10		WSEC Equip Efficiency Reference Table - Cooling: Table C403.3.2(4) Packaged Terminal, Vertical AC & HP and Room AC Units
	WSEC Equip Efficiency Reference Table - Heating: Table C403.3.2(4) Packaged Terminal, Vertical AC & HP and Room AC Units		

Note: Existing unit EER =10.00

