



COMcheck Software Version 4.1.5.1
Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: VIP PRODUCTS
Location: Goodyear, Arizona
Climate Zone: 2b
Project Type: New Construction

Construction Site: GOODYEAR, AZ
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Mechanical Systems List

Quantity	System Type & Description
7	20 TON (Single Zone): Heating: 1 each - Other, Electric, Capacity = 78 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Single Package DX Unit, Capacity = 170 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: None Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER + 12.4 IEER Fan System: None
2	5 TON (Single Zone): Single Package Heat Pump Heating Mode: Capacity = 55 kBtu/h, Proposed Efficiency = 8.30 HSPF, Required Efficiency = 8.00 HSPF Cooling Mode: Capacity = 44 kBtu/h, Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER Fan System: None
2	Water Heater: Electric Storage Water Heater, Capacity: 20 gallons w/ Circulation Pump Proposed Efficiency: 1.65 SL, %/h (if > 12 kW), Required Efficiency: 1.65 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Robert Thompson, PE
Name - Title Signature Date 3/25/21

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Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6]¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6]¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6]¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P2.0
C404.6.1, C404.6.2 [PL3]¹	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P2.0
C404.6.3 [PL7]¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7]¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7]¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8]¹	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8]¹	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8]¹	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P2.0

Additional Comments/Assumptions:

1 | High Impact (Tier 1) 2 | Medium Impact (Tier 2) 3 | Low Impact (Tier 3)
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COMcheck Software Version 4.1.5.1
Inspection Checklist

Energy Code: 2018 IECC

Requirements: 82.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2]¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: M1.0, M2.0, M3.0
C103.2 [PR3]¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P1.0, P2.0, P3.0
C406 [PR9]¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

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Section # & Req.ID	Footings / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2 C403.12.3 [FO9]¹	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

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VIP PRODUCTS
GOODYEAR, ARIZONA
MECH AND PLBG COMCHECK

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