

COMcheck Software Version 4.1.5.1
Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
 Project Title: Arizona Avenue Animal Clinic
 Location: Chandler, Arizona
 Climate Zone: 2b
 Project Type: Alteration

Construction Site:
 7 W. Knox Rd.
 Chandler, AZ 85225

Owner/Agent:

Designer/Contractor:
 MAVEN ENGINEERING
 8011 S. AVENIDA DEL YAQUI
 GUADALUPE, AZ 85283
 480-303-0180

Mechanical Systems List

Quantity System Type & Description

2 RTU-A1-2 (Single Zone):
 Single Package Heat Pump
 Heating Mode: Capacity = 94 kBtu/h,
 Proposed Efficiency = 8.10 HSPF, Required Efficiency = 8.00 HSPF
 Cooling Mode: Capacity = 20 kBtu/h,
 Proposed Efficiency = 14.30 SEER, Required Efficiency = 14.00 SEER
 Fan System: Unspecified

1 RTU-B1-2 (Single Zone):
 Single Package Heat Pump
 Heating Mode: Capacity = 19 kBtu/h,
 Proposed Efficiency = 8.10 HSPF, Required Efficiency = 8.00 HSPF
 Cooling Mode: Capacity = 42 kBtu/h,
 Proposed Efficiency = 15.00 SEER, Required Efficiency = 14.00 SEER
 Fan System: Unspecified

1 RTU-C1 (Single Zone):
 Single Package Heat Pump
 Heating Mode: Capacity = 15 kBtu/h,
 Proposed Efficiency = 8.10 HSPF, Required Efficiency = 8.00 HSPF
 Cooling Mode: Capacity = 16 kBtu/h,
 Proposed Efficiency = 15.00 SEER, Required Efficiency = 14.00 SEER
 Fan System: Unspecified

Water Heater 1:
 Electric Storage Water Heater, Capacity: 52 gallons w/ Circulation Pump
 Proposed Efficiency: 0.82 SL, %/h (> 12 kW), Required Efficiency: 0.82 SL, %/h (> 12 kW)

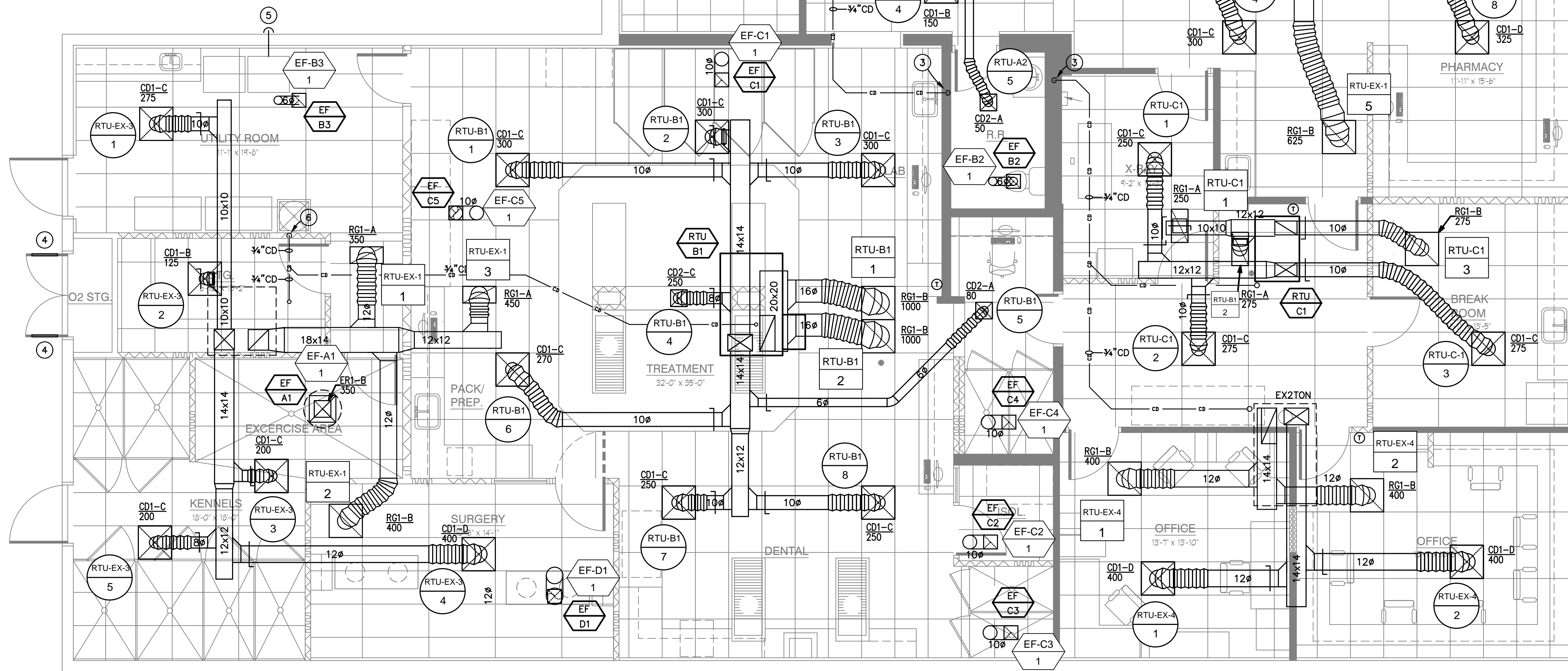
Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project 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.

KIRK HOFFMAN, PE
 Name - Title

Kirk Hoffman
 Signature

9/30/21
 Date



KEYED NOTES :

1. REMOVE EXISTING ROOFTOP UNIT. PROVIDE NEW UNIT PER EQUIPMENT SCHEDULE. REUSE EXISTING ROOF PENETRATION, PROVIDE NEW CURB FOR UNIT.
2. UNDERCUT DOOR BY 1".
3. 3/4" CD DOWN IN WALL TO CONNECT TO LAV TAIL PIECE.
4. PROVIDE HIGH & LOW LOUVERS WITHIN 6" OF FINISHED CEILING AND FLOOR. MINIMUM OF 36 SQ. INCHES FREE AREA EACH.
5. 4" DRYER VENT THRU WALL TO VENT CAP.
6. 3/4" CD DOWN IN WALL TO TERMINATE ABOVE MOP SINK WITH AIR GAP.

GENERAL NOTES :

1. MOUNT THERMOSTATS 48" ABOVE FINISH FLOOR TO CENTER.
2. DUCTWORK AND EQUIPMENT SHOWN IS DIAGRAMMATIC. COORDINATE AND ROUTE DUCTWORK TO MEET JOB REQUIREMENTS. LOCATION OF EQUIPMENT MUST BE COORDINATED WITH ALL DISCIPLINES BEFORE FINAL LOCATIONS ARE SELECTED. WEIGHTS OF EQUIPMENT MUST BE VERIFIED AND COORDINATED WITH STRUCTURAL SYSTEMS BEFORE EQUIPMENT CAN BE INSTALLED AT JOBSITE.
3. SPACE ALLOCATED FOR MECHANICAL AND OTHER WORK ABOVE THE SUSPENDED CEILING IS CRITICAL. LIGHT FIXTURES AND AIR DIFFUSERS HAVE BEEN LOCATED TO ACHIEVE A DEFINITE ARCHITECTURAL EFFECT AND MAY NOT BE CHANGED WITHOUT THE CONSENT OF THE ARCHITECT. BECOME FAMILIAR WITH THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS PRIOR TO FABRICATING AND INSTALLING ANY MATERIALS. HANG DUCTWORK AS CLOSE AS POSSIBLE TO THE STRUCTURE ABOVE, UNLESS INDICATED OTHERWISE.
4. COORDINATE THE LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS.
5. PASSAGES OF PIPES, CONDUITS, BUS DUCTS, CABLES, WIRES, AIRDUCTS, PNEUMATIC DUCTS, AND SIMILAR BUILDINGS SERVICE EQUIPMENT THROUGH FIRE BARRIERS SHALL BE PROTECTED AS FOLLOWS: THE SPACE BETWEEN THE PENETRATING ITEM AND FIRE BARRIER SHALL BE FILLED WITH A MATERIAL CAPABLE OF MAINTAINING THE FIRE RESISTANCE RATING OF THE FIRE BARRIER PRODUCT. PRODUCT USED MUST MEET TEST METHODS ASTM E814 OR NFPA 251 FOR FIRE RATING.
6. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DUCT & PIPING LOCATIONS IN FIELD AND INCLUDE IN BID EXTENDING TO EXISTING AS REQUIRED.
7. CONTRACTOR SHALL BALANCE ALL SYSTEMS TO CFM'S SHOWN. PROVIDE 3RD PARTY INSPECTION & PROVIDE COPY OF REPORT TO THE CITY OF CHANDLER INSPECTOR AT FINAL MECHANICAL INSPECTION
8. EXISTING CONDENSATE DRAINS SUPPLY & RETURN AIR DUCT DROPS ARE EXISTING AND SHALL BE REUSED WHEN EVER POSSIBLE.
9. PLANS SHALL CONFORM TO THE 2018 IMC, 2018 IECC AND ALL CITY OF CHANDLER ADOPTED CODES AND AMENDMENTS.
10. MECHANICAL DESIGN IS INTENDED SO THAT THE AIR CONDITIONING SYSTEM WILL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS TO MAINTAIN CURRENT VENTILATION REQUIREMENTS.
11. ALL DIFFUSERS AND GRILLES ARE LESS THAN 20LBS. CONTRACTOR SHALL POSITIVELY ATTACH TO CEILING MAIN RUNNERS
12. VENTS SHALL BE TERMINATED A MINIMUM OF 1'-0" ABOVE ROOF AND 2'-0" ABOVE OR 8'-0" AWAY FROM PARAPETS OR WALLS.
13. SEE ARCHITECTURAL PLANS FOR LOCATION OF PERMANENT ACCESS TO ROOF.
14. ALL NEW UNITS SHALL BE LOCATED AND INSTALLED BELOW THE PARAPET OR A SCREEN WALL PROVIDED.(SEE ARCHITECTURE DRAWINGS FOR SCREENING DETAILS).
15. THERMOSTATS ARE LOW VOLTAGE PROGRAMMABLE THERMOSTATS AND ARE TO BE LOCATED AS SHOWN.
16. REFER TO ARCHITECTURAL LOCATION OF DRAWINGS FOR EXACT REGISTERS, GRILLES & DIFFUSERS.
17. CALL FOR INSPECTION OF ALL MECHANICAL SYSTEM PRIOR TO COVER AND CONCEALMENT.

FIELD VERIFICATION NOTES :

1. THE HVAC CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS BID. THE FOLLOWING ITEMS SHALL BE VERIFIED.
 - 1.A. EXACT PLACEMENT SIZE CAPACITY MANUFACTURER AND CONDITION OF ALL EXISTING HVAC EQUIPMENT WITHIN SCOPE OF WORK, WHETHER SPECIFICALLY SHOWN OR NOT.
 - 1.B. SIZE AND LOCATION OF ALL EXISTING DUCTWORK.
 - 1.C. SIZE AND LOCATION OF ALL EXISTING GRILLES REGISTERS AND DIFFUSERS
 - 1.D. LOCATION OF ALL EXISTING THERMOSTATIC CONTROLS
2. ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT DUCTWORK, DIFFUSERS, THERMOSTATS AND PIPING ARE FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN HIS BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
3. NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS.
4. ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTORS BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION

MECHANICAL FLOOR PLAN
 1/4" = 1'-0" NORTH

MAVEN ENGINEERING Job #21VTC272
 Tel: (480) 303-0180 Fax: (480) 302-7927
 8011 S Avenida del Yaqui
 Guadalupe, Arizona 85283

Note: Any changes made to final bid documents due to field changes will be billed hourly to the contractor.

AN INTERIOR REMODEL FOR
ARIZONA AVENUE ANIMAL CLINIC
 7 W. KNOX RD. CHANDLER, ARIZONA, 85225

associated architects .inc.
 architecture · construction management · planning
 www.associated-architects.com
 p 480-964-8451 1356 East McKellips Road, Suite 101 · Mesa · Arizona · 85203

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MECHANICAL FLOOR PLAN

EXPIRES 03/31/24

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