# COMcheck Software Version 4.1.5.5 Mechanical Compliance Certificate

### **Project Information**

Energy Code: 2018 IECC

Project Title: Ehrhart HS 2nd Flr Location: Beaumont, Texas

Climate Zone: 2a

Project Type: Alteration

Construction Site: 3240 Fannin St. Beaumont, TX 77701 Owner/Agent:

Designer/Contractor: M&E Consulting 1304 Bertrand Dr. Lafayette, LA 70506

# **Mechanical Systems List**

### **Quantity System Type & Description**

1 HR-4 (Single Zone):

VRF Condensing Unit, Air Cooled w/ Heat Recovery Heat Pump

Heating Mode: Capacity = 188 kBtu/h,

No minimum efficiency requirement applies

Cooling Mode: Capacity = 168 kBtu/h,

No minimum efficiency requirement applies

Fan System: None

1 HR-4/1,2 (Single Zone):

Cooling: 2 each - VRF Zone Fan Unit, Capacity = 18 kBtu/h, No Economizer, Economizer exception: Humidity Requirements

No minimum efficiency requirement applies

Fan System: HR-4/1,2 -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 1 Supply, Constant Volume, 460 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 HR-4/3 (Single Zone):

Cooling: 1 each - VRF Zone Fan Unit, Capacity = 5 kBtu/h, No Economizer, Economizer exception: Humidity Requirements

No minimum efficiency requirement applies

Fan System: HR-4/3 -- Compliance (Motor nameplate HP method): Passes

Fans

FAN 2 Supply, Constant Volume, 280 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 HR-4/4,15 (Single Zone):

Cooling: 2 each - VRF Zone Fan Unit, Capacity = 6 kBtu/h, No Economizer, Economizer exception: Humidity Requirements

No minimum efficiency requirement applies

Fan System: HR-4/4,15 -- Compliance (Motor nameplate HP method): Passes

Fans

FAN 3 Supply, Constant Volume, 210 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 HR-4/5,6,7,8,9,10,11,12,13,14 (Single Zone):

Cooling: 10 each - VRF Zone Fan Unit, Capacity = 15 kBtu/h, No Economizer, Economizer exception: Humidity Requirements

No minimum efficiency requirement applies

Fan System: HR-4/5,6,7,8,9,10,11,12,13,14 -- Compliance (Motor nameplate HP method): Passes

Fans

FAN 4 Supply, Constant Volume, 390 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

Project Title: Ehrhart HS 2nd Flr Report date: 08/26/22

Data filename: H:\22\22113.00 (Ehrhart High School 2nd Floor Build-Out)\Design\Energy Compliance\22113.00 Page 1 of 18

Energy Compliance.cck

### **Quantity System Type & Description**

1 HR-5 (Single Zone):

VRF Condensing Unit, Air Cooled w/ Heat Recovery Heat Pump

Heating Mode: Capacity = 188 kBtu/h, No minimum efficiency requirement applies Cooling Mode: Capacity = 168 kBtu/h,

No minimum efficiency requirement applies

Fan System: None

1 HR-5/1,2,3,4,5,6,7,8 (Single Zone):

Cooling: 8 each - VRF Zone Fan Unit, Capacity = 15 kBtu/h, No Economizer, Economizer exception: Humidity Requirements No minimum efficiency requirement applies

Fan System: HR-5/1,2,3,4,5,6,7,8 -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 5 Supply, Constant Volume, 390 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 HR-5/9,10,11 (Single Zone):

Cooling: 3 each - VRF Zone Fan Unit, Capacity = 8 kBtu/h, No Economizer, Economizer exception: Humidity Requirements No minimum efficiency requirement applies

Fan System: HR-5/9,10,11 -- Compliance (Motor nameplate HP method): Passes

Fans

FAN 6 Supply, Constant Volume, 350 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 HR-5/12,13 (Single Zone):

Cooling: 2 each - VRF Zone Fan Unit, Capacity = 18 kBtu/h, No Economizer, Economizer exception: Humidity Requirements No minimum efficiency requirement applies

Fan System: HR-5/12,13 -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 7 Supply, Constant Volume, 460 CFM, 0.1 motor nameplate hp, 70.0 fan efficiency grade

1 Water Heater 1:

Electric Storage Water Heater, Capacity: 0 gallons w/ Circulation Pump Proposed Efficiency: 1.00 SL, %/h (if > 12 kW), Required Efficiency: 1.00 SL, %/h (if > 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 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Carson Blanchard - Mechanical Design Assist.
Name - Title

Signature

08-26-2022

Date

Project Title: Ehrhart HS 2nd Flr Report date: 08/26/22

Data filename: H:\22\22113.00 (Ehrhart High School 2nd Floor Build-Out)\Design\Energy Compliance\22113.00 Page 2 of 18

Energy Compliance.cck