# Construction Design Standards | Facility Planning & Management



WSU Project: Alumni House Chiller

WSU Project Number: 042-322411

# Scope of Work:

- -New cement pad
- -Provide and install Modular air cooled 30 Ton chiller
- -Run chilled water lines through outside air louver and down through the air shaft to the existing AHU
- -Insulate and label all chilled water piping
- -Provide and install all temperature and pressure gauges needed
- -Tie the new piping to the existing pipe and install isolation valves (Ball valve)
- -Provide all materials and equipment to insure smooth chiller operation
- -Provide water balancing for the new chiller
- -Electrical work by others
- -Control work by others
- -Provide chiller cut sheet and explain materials used for piping and insulation
- -Provide One year warranty on products and labor

#### -Chiller Specs:

Factory assembled air cooled chiller with all necessary equipment

Refrigerant: 410A

Fluid type: Chilled water

Leaving temperature: 44 F° Entering temperature: 55 F°

Condenser Type: Air cooled Compressor type: Scroll

Entering air temperature: 95 F°

Integrated pump Voltage: 208/230 V Power: 3 Ph, 60Hz Total power: 30-40KW Evaporator heater Non-Fused disconnect Digital compressor

GFI outlet

Micro channel

Single point power connection Vibration isolation package

Operating weight: Not to exceed 2,000 Ib

Recommended dimensions: not to exceed 85' height, 45" width, 95" length

Factory installed hardware and software building automation system to enable WSU BAS

to monitor and control the chiller. BACnet communication

Control features and monitoring points shall be displayed locally at the chiller panel

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External inputs and outputs control and monitor points include but not limited to:

Remote Start/Stop

Owner alarm relay

Chilled water flow switch input.

Condenser water flow switch input.

Full load indicator relay.

Condenser pump relay.

Chiller safety controls system provided with the unit as a minimum include:

Low refrigerant pressure.

Loss of flow through evaporator.

Loss of flow through condenser.

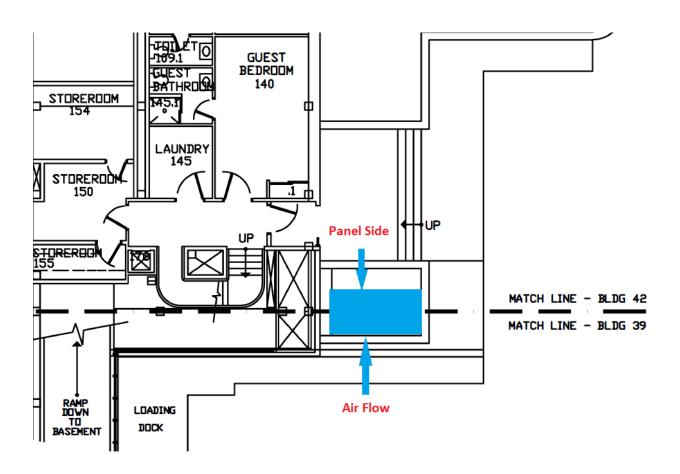
High condenser refrigerant pressure.

High compressor motor temperature.

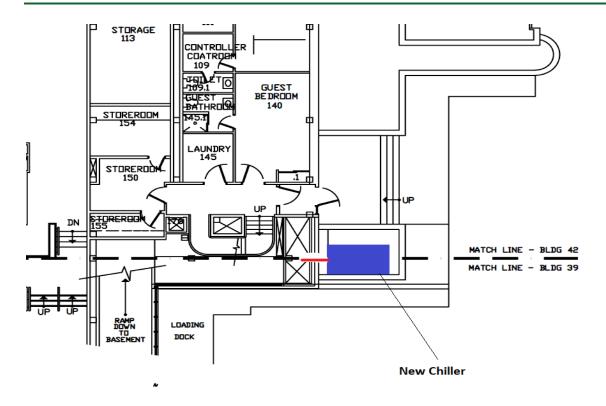
Low suction gas pressure.

Low leaving water temperature.

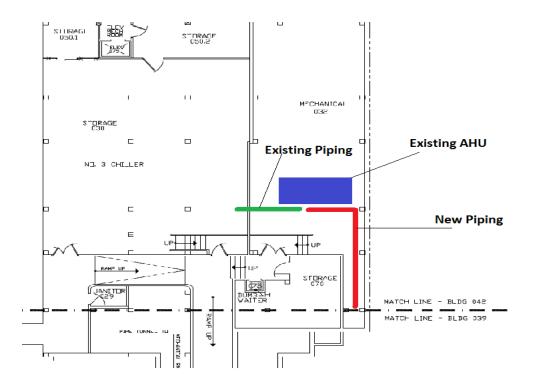
### Recommended installation:







# **First Floor**



**Basement**