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Date: 8/28/2026

Return Request: 9/3/2026

Project: Hot Springs National Park – Rehabilitate Bathhouses – Libbey Bathhouse

Supplier: Trane

Manufacturer: Trane

Submittal: Indoor Modular Air-HandlingUnits (AHU-1L and AHU-2L) - Re-Submittal #4**Submittal Number:** 237313.001

Spec Section: 237313

Drawing # and Installation Location: M1.1

ARCHITECT

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MECHANICAL SUBCONTRACTOR

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Comments:

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CSUSA PROJECT NO.

25-7070

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AHU Submittal

Prepared For:
IMEG Corp.

Revision #3 Date: August 28, 2026

Sold To:
Comfort Systems USA

Job Name:
Rehabilitate Bathhouses Hot Springs AR - Libbey

Trane U.S. Inc. is pleased to provide the following submittal for your review and approval.

Product Summary

Qty Product

2 Size 14 Performance Climate Changer (UCCA)

(Tags: AHU-1L and AHU-2L)

Submittal per plans dated "10.27.2023", specification section 23 73 33 and submittal review dated 2026.20.07"

Submittal notes on next page.

Trane U.S. Inc.
10303 Colonel Glenn Rd, Suite 1-O
Little Rock, AR 72204

The attached information describes the equipment we propose to furnish for this project and is submitted for your approval.

Submittal acceptance and return is a critical step, so please ensure submittals are returned with approval to release to production within 14 days of submittal date.

Product performance and submittal data is valid for a period of 6 months from the date of submittal generation. If six months or more has elapsed between submittal generation and equipment release, the product performance and submittal data will need to be verified. It is the customer's responsibility to obtain such verification.

Revision #3 notes:

- Inlet of the fan shall be access through the 10" door located in section #2 of each AHU. This door is unable to accommodate any additional length.
- OA temperature sensor shall be a probe type. Specification section 23 09 00; 2.19; K "Outdoor Weather Station" does not state any verbiage regarding an "averaging" type of sensor. In addition, specification section 23 09 00; 2.19; B "Temperature Sensors" does not state any verbiage regarding an "averaging type" of sensor.
- Dirty filter switch shall be a factory installed Dwyer Minihelic 25002-npt sensor. Sensor information provided below.
- Unit shall be provided with a manual reset low limit switch meeting specification section 23 09 00; 2.19; A; 2 "Low Limit Switch". Any auto reset low limit switch shall be provided by others.
- Trane shall provide the below humidity and temperatures sensors as detailed below:
 - (2) combination temperature and humidity duct sensors (Return Air) for each AHU shall be provided by Trane. Combination sensors shall have combined sensing for relative humidity and temperature. +/- 3% RH accuracy over 20% to 95% RH at 77 degrees F.
 - (2) humidity duct sensors (Outside Air) for each AHU shall be provided by Trane. The 3% Duct Relative Humidity and Temperature Sensor is an analog humidity sensor and transmitter that monitors duct humidity. It has an accuracy of +/- 3% from 20% to 95% relative humidity. The sensor element extended 8" (203 mm) into the duct. This high accuracy sensor requires a 24 VDC power supply, provides a 2-wire 4 to 20 mA output, and is suitable for DDC control applications.

Revision #2 Notes:Addressing Approved with Notations Remarks

- Factory Mounted Mixing Box Actuator Submitted as NC. Only Back OA Opening Currently Provided with Dampers/Actuator, per Air Handling Schedule Note 5.
 - RA Top Opening Can Be Provided with Dampers/Actuator, if Requested. Actuator will be NO or NC to match OA Actuator. **RA damper not required.**
- Larger Door is Not Available. BOD Unit does not have Custom Door Sizing Options.
- AHU-2L Coil and Door Connections changed to Left Hand
 - Engineer and Installing Contractor to Verify Handages
- OA Temperature Sensor is Averaging Type and is Equal to OA Temperature Sensor on Air Handling Schedule Note 3.
- Dirty Filter Switch is Magnahelic and is Equal to Dirty Filter Switch on Air Handling Schedule Note 3.
- VFDs are Equal to BOD UCCA Factory Mounted VFDs and can only be provided with submitted VFDs from the Factory.
 - Factory Installed TR150s Have Individual 100 kA SCCR Rating
 - Not Available with Force Ventilation
 - VFD Submittal Data Provided on Page 44
- Electric Heater has Right Hand Orientation. Heaters to be Wired to Unit Controller by Others.

How is inlet of fan accessed?

Addressing Revise and Resubmit Remarks

There shall be both manual and automatic reset LL Switches.

- Manual Reset Low Limit Switch ~~Currently~~ Provided is Equal to Low Limit Switch on Air Handling Schedule Note 3. BOD UCCA Unit can only be provided with submitted Low Limit Switch from the Factory.
 - Additional or Alternate Low Limit Switches to be Provided by Others.
- Fan Status Switch is Differential Pressure Switch Style to Indicate Fan Status and is Equal to Fan Status Switch on Air Handling Schedule Note 3.
 - Fan Status Switch is Factory Wired to Unit Options Module. Programming Can be Done by Others to Show Value When Fan Status Switch is Energized.
- Humidity Sensors Not Shown to Be Provided with Air Handlers on Schedule or Specifications. Humidity Sensors to be Provided by Others, if Necessary.

Humidity sensors are required for dehumidification
- Harmonic Analysis not Available for Factory Provided VFDs. Any Harmonic Data is Provided on VFD Submittal on Page 44

Tag Data - Performance Climate Changer (UCCA) (Qty: 2)

Item	Tag(s)	Qty	Description	Model Number
A1	AHU-1L	1	Performance Climate Changer (UCCA)	UCCAH14A0J0FZ014000003FD868BA1DC0020A0B
A2	AHU-2L	1	Performance Climate Changer (UCCA)	UCCAH14A0J0FZ014000003FD872BA1DC0020A0B

Product Data - Performance Climate Changer (UCCA)**All Units**

Performance Climate Changer (UCCA)

Horizontal DDP fan with top front discharge

Unit Size 14 Square Feet of Coil

200-208/60/3

Indoor unit

Stainless Steel Drain Pan

LH Coil / LH Motor & Drive Location

6 row DX coil 12 fins per inch

Aluminum fins, galvanized coil casing, 1/2" coils

Intertwined circuit with 2 DX 1/4" distributors

Access section with coil

Top RA opening – no damper

Back OA opening – w/ damper

2" flat filter mixing section

2" MERV 8

Top SA opening – no damper

1 supply fan w/ VFD

7- 1/2 horsepower motor per fan (supply)

Symbio500 controller

Low limit switch

Condensate overflow switch

Dirty filter switch

Fan status switch

Discharge & mixed air sensors with normally closed factory mounted mixing box actuators

Outside air temperature factory-provided, ships loose (Field Installed)

Duct static press sensor, factory-provided, ships loose (Field Installed)

Duct Combo RH & temperature sensor, factory-provided, ships loose (Field Installed)

Duct RH sensor, factory-provided, ships loose (Field Installed)

1-year whole unit parts warranty

1-year whole unit labor warranty

Performance Data - Performance Climate Changer (UCCA)

Tags	AHU-1L	AHU-2L
Suction superheat (F)	8.00	8.00
Design airflow (cfm)	6500	7000
Total cooling capacity (MBh)	251.30	302.19
Sensible capacity (MBh)	186.78	213.57
Main coil system type	DX - R454B	DX - R454B
Cooling EDB (F)	82.00	82.00
Cooling EWB (F)	67.20	67.20
Cooling LDB (F)	55.82	54.18
Cooling LWB (F)	54.74	53.07
Cooling face velocity (ft/min)	453	488
Preheat coil system type	None	None
Reheat coil type	None	None
Elevation (ft)	0.00	0.00
Supply fan ESP (in H2O)	0.800	0.800
Supply fan TSP (in H2O)	3.040	3.206
Supply fan quantity (Each)	1.00	1.00
Supply total brake hp per fan (hp)	5.725	6.691
Supply fan speed (rpm)	2026	2143
Cooling APD (in H2O)	0.828	0.928
Filter/Mixing section APD (in H2O)	1.171	1.198
Outlet velocity (ft/min)	1391	1498
Unit full load amps (A)	28.50	28.50
Unit max fuse size (A)	60.00	60.00
Unit min circuit ampacity (A)	35.50	35.50
Supply VFD panel amps (A)	28.00	28.00
Run acoustics?	No	No
Unit length (in)	127.160	127.160
Unit width (in)	71.000	71.000
Unit height (in)	45.568	45.568
Installed weight (lb)	1589.5	1589.5
Rigging weight (lb)	1589.5	1589.5
Internal coil volume (cu in)	1905.52	1905.52

Product Report - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L

Air Handler Model UCCA

Unit Overview - UCCA14A0J0FZ014000003FD868BA1DC0020A0B0									
Application	Unit Size	Supply Fan		External Dimensions (in.)			Weight		Elevation
Indoor unit	14	Airflow	Total Static Pressure	Height	Width	Length	Installed	Rigging	0.00 ft
		6500 cfm	3.040 in H2O	45.568 in	71.000 in	127.160 in	1589.5 lb	1589.5 lb	

Unit Features	
Panel	2 in. Foam Injected R-13
Panel Material	Galvanized
Configuration	Horizontal DDP fan with top front discharge
Coil, Drain and Motor side	Stainless Steel Drain Pan, LH Coil / LH Motor & Drive Location

Unit Electrical	
Unit Voltage	Supply Motor(s) + HV + CONT
Unit Voltage 200-208/60/3	FLA 28.50 A
	MCA 35.50 A
	Max fuse size 60.00 A

Controls	
Controller Type	Symbio500
Controls Options 1	Low limit sw, condensate overflow sw, dirty filter sw and fan status sw
Controls Options 2	Discharge & mixed air sensors with normally closed factory mounted mix/econ act
Controls Options 3	Outside air temperature and duct static press sensor, fact-provided, ships loose

Air Mixing Section			
Openings			
Face	Type	Airflow	Hood
Back damper or opening	Damper	6500 cfm	No
Top damper or opening	Opening	6500 cfm	No

Filter	
Type	Flat
Merv Rating	2" MERV 8
16 in. x 20 in. Quantity	2
16 in. x 25 in. Quantity	1
20 in. x 20 in. Quantity	2
20 in. x 25 in. Quantity	1
Pressure Drop	1.171 in H2O
Condition	Dirty
Airflow	6500 cfm

Product Report - Performance Climate Changer (UCCA)

Item: A1 Qty: 1 Tag(s): AHU-1L

Cooling Coil Performance

Coil Construction and Options		Coil Performance	
Main Coil System Type DX - R454B		Capacity	
Rows/Fin Spacing 6 row DX coil 12 fins per inch		Total Capacity 251.30 MBh	
Tube Diameter 1/2in. tube diameter (12.7mm)		Sensible Capacity 186.78 MBh	
Coil Options Aluminum fins, galvanized coil casing, 1/2" coils		Air	
Refrigerant Circuit Options Intertwined circuit with 2 DX 1/4" distributors		Cooling Airflow 6500 cfm	
Rigging Weight 213.1 lb		Entering Dry Bulb Temp 82.00 F	
Installed Weight 213.1 lb		Entering Wet Bulb Temp 67.20 F	
		Leaving Dry Bulb Temp 55.82 F	
		Leaving Wet Bulb Temp 54.74 F	
		Pressure Drop 0.828 in H2O	
		Face Velocity 453 ft/min	
		Fluid	
		Refrigerant Charge Coil Only 8.6 lb	
		Liquid Temp Entering TXV 115.00 F	
		Saturated Suction Temp 45.00 F	
		Suction Superheat 8.00 F	
		AHRI Classification	
		Classification Outside Scope of AHRI 410	

Supply Fan Section

Fan Data		Motor Data	
Fan Type Horizontal DDP fan with top front discharge		Power / Fan 7- 1/2 horsepower motor per fan (supply)	
Fan Quantity 1.00 Each		Voltage 208.0 V	
Fan Performance		Fan electrical power (FEP) 4.91 kW	
Airflow 6500 cfm		Wire to air static efficiency 47.20 %	
Total Static Pressure 3.040 in H2O		Note: VFD driven motor fan electrical power calculated in accordance with AHRI 430.	
Total Brake Power / Fan 5.725 hp		Fan Discharge	
Operating Speed 2026 rpm		Airflow 6500 cfm	
AMCA FEG 80.00		Face Velocity 1391 ft/min	
Motor Interface			
Type VFD			
Voltage 208.0 V			
VFD Frequency/DDP Fan Speed 68 Hz / 2020 RPM			



Note: Certified by the AHRI Central Station Air-Handling Unit (AHU) Certification Program, based on AHRI Standard 430/431. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third party verified. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

**Static Pressure Section**

Filter/Mixing Air Pressure Drop	1.171 in H2O
Cooling Coil Pressure Drop	0.828 in H2O
External Static Pressure	0.800 in H2O
Discharge Pressure Drop	0.241 in H2O
Supply Fan Total Static Pressure	3.040 in H2O

AHRI Certification

Data generation date	7/9/2026
Trane Select Assist update number	26060

Coil 1 Note: Coil is NOT certified by AHRI. Coil is outside the scope of AHRI Standard 410.

Warranty

Labor warranty - first year	1st year Labor warranty whole unit
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Product Report - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L

Air Handler Model UCCA

Unit Overview - UCCA14A0J0FZ014000003FD872BA1DC0020A0B0									
Application	Unit Size	Supply Fan		External Dimensions (in.)			Weight		Elevation
Indoor unit	14	Airflow	Total Static Pressure	Height	Width	Length	Installed	Rigging	0.00 ft
		7000 cfm	3.206 in H2O	45.568 in	71.000 in	127.160 in	1589.5 lb	1589.5 lb	

Unit Features	
Panel	2 in. Foam Injected R-13
Panel Material	Galvanized
Configuration	Horizontal DDP fan with top front discharge
Coil, Drain and Motor side	Stainless Steel Drain Pan, LH Coil / LH Motor & Drive Location

Unit Electrical	
Unit Voltage	Supply Motor(s) + HV + CONT
Unit Voltage 200-208/60/3	FLA 28.50 A
	MCA 35.50 A
	Max fuse size 60.00 A

Controls	
Controller Type	Symbio500
Controls Options 1	Low limit sw, condensate overflow sw, dirty filter sw and fan status sw
Controls Options 2	Discharge & mixed air sensors with normally closed factory mounted mix/econ act
Controls Options 3	Outside air temperature and duct static press sensor, fact-provided, ships loose

Air Mixing Section			
Openings			
Face	Type	Airflow	Hood
Back damper or opening	Damper	7000 cfm	No
Top damper or opening	Opening	7000 cfm	No

Filter	
Type	Flat
Merv Rating	2" MERV 8
16 in. x 20 in. Quantity	2
16 in. x 25 in. Quantity	1
20 in. x 20 in. Quantity	2
20 in. x 25 in. Quantity	1
Pressure Drop	1.198 in H2O
Condition	Dirty
Airflow	7000 cfm

Product Report - Performance Climate Changer (UCCA)

Item: A2 Qty: 1 Tag(s): AHU-2L

Cooling Coil Performance

Coil Construction and Options		Coil Performance	
Main Coil System Type DX - R454B		Capacity	
Rows/Fin Spacing 6 row DX coil 12 fins per inch		Total Capacity 302.19 MBh	
Tube Diameter 1/2in. tube diameter (12.7mm)		Sensible Capacity 213.57 MBh	
Coil Options Aluminum fins, galvanized coil casing, 1/2" coils		Air	
Refrigerant Circuit Options Intertwined circuit with 2 DX 1/4" distributors		Cooling Airflow 7000 cfm	
Rigging Weight 213.1 lb		Entering Dry Bulb Temp 82.00 F	
Installed Weight 213.1 lb		Entering Wet Bulb Temp 67.20 F	
		Leaving Dry Bulb Temp 54.18 F	
		Leaving Wet Bulb Temp 53.07 F	
		Pressure Drop 0.928 in H2O	
		Face Velocity 488 ft/min	
		Fluid	
		Refrigerant Charge Coil Only 8.6 lb	
		Liquid Temp Entering TXV 115.00 F	
		Saturated Suction Temp 41.00 F	
		Suction Superheat 8.00 F	
		AHRI Classification	
		Classification Outside Scope of AHRI 410	

Supply Fan Section

Fan Data		Motor Data	
Fan Type Horizontal DDP fan with top front discharge		Power / Fan 7- 1/2 horsepower motor per fan (supply)	
Fan Quantity 1.00 Each		Voltage 208.0 V	
Fan Performance		Fan electrical power (FEP) 5.73 kW	
Airflow 7000 cfm		Wire to air static efficiency 45.93 %	
Total Static Pressure 3.206 in H2O		Note: VFD driven motor fan electrical power calculated in accordance with AHRI 430.	
Total Brake Power / Fan 6.691 hp		Fan Discharge	
Operating Speed 2143 rpm		Airflow 7000 cfm	
AMCA FEG 80.00		Face Velocity 1498 ft/min	
Motor Interface			
Type VFD			
Voltage 208.0 V			
VFD Frequency/DDP Fan Speed 72 Hz / 2138 RPM			



Note: Certified by the AHRI Central Station Air-Handling Unit (AHU) Certification Program, based on AHRI Standard 430/431. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third party verified. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

**Static Pressure Section**

Filter/Mixing Air Pressure Drop	1.198 in H2O
Cooling Coil Pressure Drop	0.928 in H2O
External Static Pressure	0.800 in H2O
Discharge Pressure Drop	0.280 in H2O
Supply Fan Total Static Pressure	3.206 in H2O

AHRI Certification

Data generation date	7/9/2026
Trane Select Assist update number	26060

Coil 1 Note: Coil is NOT certified by AHRI. Coil is outside the scope of AHRI Standard 410.

Warranty

Labor warranty - first year	1st year Labor warranty whole unit
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Mechanical Specifications - Performance Climate Changer (UCCA)**Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L****GENERAL****Lifting Instructions**

Performance Climate Changer air handlers must be rigged, lifted, and installed in strict accordance with the Installation, Operation, and Maintenance manual (CLCH-SVX009*-EN) for UCCA air handlers. The units are also to be installed in strict accordance with the specifications.

Per ASHRAE 62.1 recommendation, indoor air handling units will be shipped stretch-wrapped to protect unit from in-transit rain and debris.

Installing contractor is responsible for long term storage in accordance with the Installation, Operation, and Maintenance manual (CLCH-SVX009*-EN).

Unit shall be UL and C-UL Listed.

Where applicable air-handling performance data shall be certified in accordance with AHRI Standard 430. This standard applies to Supply Fan ratings for Central Station Air-handling Units with Plenum Fans in a cabinet, Fan Arrays, Housed Centrifugal Fans, Axial Fans and includes direct drive plenum fans incorporated with ECM style motors.

Refer to product data for AHRI certification status. Propylene glycol and calcium chloride, or mixtures thereof, are outside the scope of AHRI Standard 410 and, therefore, do not require AHRI rating or certification. For coils within the scope of AHRI Standard 410 cooling coil performance is certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at ***.ahridirectory.org. Heating performance for heat pump or condenser mode is not certified.

Unit Construction**Casing Construction**

All unit panels shall be 2-inch solid, double-wall construction to facilitate cleaning of unit interior. All exterior and interior AHU panels will be made of galvanized steel. Motor and drive locations can be on the same side as the unit coil connections or on the opposite side. The casing shall be able to withstand up to 6" w.g. positive or negative static pressure. The unit panels shall not exceed .005 inch deflection per inch of panel span at 6" w.g. positive or negative static pressure. Casing construction will comply with NFPA 90A.

Floor Construction

The unit floor shall be of sufficient strength to support a 300.0 lb load during maintenance activities and shall deflect no more than .005 inch per inch of panel span when sitting on a support structure.

Insulation

Panel insulation shall provide a minimum thermal resistance (R) value of 13 ft²*h*°F/Btu throughout the entire unit. Insulation shall completely fill the panel cavities in all directions so that no voids exist and settling of insulation is prevented.

Drain Pan

All units shall be provided with an insulated assembly of either polymer material or stainless steel. Refer to the Product Data section of the submittal for the drain pan material. To address indoor air quality (IAQ), the drain pan shall be designed in accordance with ASHRAE 62.1 being of sufficient size to collect all condensation produced from the coil and sloped in two planes promoting positive drainage to eliminate stagnant water conditions. The outlet shall be located at the lowest point of the pan and shall be sufficient diameter to preclude drain pan overflow under any normally expected operating condition. All drain pan connections shall be visible external to the unit.

Access Door Construction

Access doors shall be 2-inch double-wall construction. Interior and exterior door panels shall be of the same construction as the interior and exterior wall panels, respectively. Surface-mounted handles shall be provided to allow quick access to the interior of the unit. Handle hardware shall be designed to prevent unintended closure. Outswing

doors shall have easily removable hinges and handles that can be relocated the change the door swing if needed. Door hinges shall be made of galvanized steel.

MIXING SECTION

A mixing section shall be provided capable of supporting the damper assembly for outside air, return air, or both air paths. See plans for required damper(s).

Dampers

Factory supplied damper(s) shall be fully modulating. The damper(s) shall be of double-skin airfoil design with metal, compressible jamb seals and flexible blade-edge seals on all blades. The blades shall rotate on stainless-steel sleeve bearings. The damper(s) shall be rated for a maximum leakage rate of 3 cfm/ft² at 1 in. w.g. complying with ASHRAE 90.1 maximum damper leakage. All leakage testing and pressure ratings shall be based on AMCA Standard 500-D. Dampers may be arranged in a parallel blade configuration.

The following specifications apply only to units with outside air and return air dampers, with actuators. The 5 year warranty applies only to these items.

This unit contains Economizer that meets or exceeds all mandatory requirements prescribed by Title 24, including but not limited to:

- 5 yr parts only warranty
- Successfully tested to 60,000 Actuations

Filters

Mixing sections shall be provided with a filter rack as indicated in the Product Data and As-Built sections of the submittal.

2-inch pleated media filters made with 100% synthetic fibers that are continuously laminated to a supported steel-wire grid with water repellent adhesive shall be provided. Filters shall be capable of operating up to 625 fpm face velocity without loss of filter efficiency and holding capacity. The filters shall have a MERV 8 rating when tested in accordance with the ANSI/ASHRAE Standard 52.2.

Averaging Temperature Sensor

An averaging temperature sensor shall be serpentine across the module. All capillaries bends shall be radiused and fastened with capillary clips to prevent crimping and minimize wear.

Mixing Section Damper Actuators

Spring return actuators shall be mounted with the back air damper normally closed and the top air damper normally open.

Dirty Filter Switch

A differential pressure switch piped to both sides of the filter shall indicate filter status.

COIL SECTION

The coil section shall be provided complete with coil and coil holding frame. The coils shall be installed such that headers and return bends are enclosed by unit casings. The drainpan outlet shall be located at the lowest point of the pan and shall be sufficient diameter to preclude drain pan overflow under any normally expected operating condition.

No casing penetrations supplied for hydronic drain and vents. If required, piping contractor will need to drill drain and vent penetrations using factory located features provided in coil panel.

Refrigerant Cooling Coils

The coils shall have aluminum fins and seamless copper tubes. The fins shall have collars drawn, belled, and firmly bonded to tubes by mechanical expansion of the tubes. Suction and liquid line connections shall extend to the unit exterior. The coil casing may be galvanized or stainless steel. Refer to the Product Data section of the submittal for the coil casing material.

The coils shall be proof-tested to 715 psig and leak-tested to 650 psig air pressure under water or equivalent tracer gas leak test. After testing, the inside of the coils shall be dried, all connections shall be sealed, and the coil shall be shipped with a charge of dry air or nitrogen.

Suction headers and liquid connections shall be constructed of copper tubing with connections penetrating unit casings to permit sweat connections to refrigerant lines. The coils shall have equalizing vertical distributors sized according to the capacities of the coils. Refer to the product data section of the submittals for AHRI certification status.

Tubes are 1/2" [13 mm] OD 0.016" [0.406 mm] thick copper.

R454B/R32 Leak Detection Sensors

Factory-installed A2L class gas sensors designed for R454B and R32 refrigerant dual detection will be installed in the DX coil sections selected with R454B or R32 refrigerant. It utilizes thermal conductivity technology for quick and accurate leak detection and features automated self-calibration, self-diagnostics, immunity to poisoning and a 15 year life. The sensor comes set with a 15% LFL alarm threshold with +/-2.5% accuracy at 68F (20C) and +/-5% accuracy across the rest of the operating range of -40F - 175F (-40C - 80C).

Condensate Overflow Switch

A float switch conforming to UL 508 shall be factory-installed in the drain pan that will detect a high condensate water level and be used to shut off the air handler in the event that the primary drain is blocked to comply with IMC 2006. The float switch shall be located at a point higher than the primary drain line connection and below the overflow rim of the drain pan.

Access Section with Coil

Unit(s) shall include a separate section housing a coil section and access section as one assembly. Refer to drawings to determine which unit(s) include the additional section. Section shall include either a polymer or stainless steel drainpan, refer to the Product Data section of the submittal for the drain pan material, and an access door of sufficient size to allow for visual inspection of the leaving face of the first coil in the airstream (if ordered) and entering face of the second coil in the airstream (if ordered). Access door shall be of the same construction as all other doors on the unit.

Low Limit

A single-pole single throw low limit switch shall be serpentine across the leaving side of the coil with routing Trane designed to maximize coil coverage and cover critical top and bottom 3 inches of the coil for any given capillary and coil area configuration (Trane designed and historically proven capillary routing does not necessarily match device manufacturer's generic installation recommendations). The bends of the capillaries shall be curved and fastened with capillary clips to prevent crimping and minimize wear. Low limit switch shall include a manual reset button. Contacts open on temperature decrease below set point. Set point is default set to 35F at factory, but is adjustable if increased setpoint is needed due to installation site ducting to coil causing cold spot in a unique location of the coil.

Fans selected with shaft grounding shall have a maintenance free grounding assembly installed on the fan motor to discharge both static and induced shaft currents to ground.

DIRECT-DRIVE PLENUM FAN SECTION

The fan shall be a single-width, single-inlet, 10-bladed direct-drive plenum fan. The fan shall consist of a backward-curved, welded steel wheel. Motor bearing life of the direct-drive plenum fan shall be not less than L-10 250,000 hrs. Units containing multiple fans shall be controlled using a common control signal, such as the duct static control signal, to modulate the fan speed.

Motor Frame

The motor shall be mounted integral to the isolated fan assembly and furnished by the unit manufacturer. The motor is mounted inside the unit casing on an adjustable base to permit adjustment of drive belt tension (not applicable for direct drive plenum fans). The motor shall meet or exceed all NEMA Standards Publication MG 1 requirements and comply with NEMA Premium efficiency levels when applicable except for fractional horsepower motors which are not covered by the NEMA classification. The motor shall be T-frame, squirrel cage with size, type, and electrical characteristics as shown on the equipment schedule. *Refer to the Product Data section for selected fan motors within each unit.*

Fan Isolation

Belt driven housed fans and direct drive plenum fans with integral frame motors shall be internally isolated to inhibit noise and vibration through the ductwork and building structure. A flexible connection shall be installed between the fan and unit casing to ensure complete isolation. Flexible connection shall comply with NFPA 90A and UL 181 requirements.

Fan Discharge Temperature Sensor

A button or probe temperature sensor shall be mounted in the fan discharge.

Airflow Switch

A differential pressure switch piped to the discharge and suction sides of the fan shall indicate fan status.

VFD

A Variable Frequency Drive (VFD) shall be provided when variable air volume control is required for fan operation. Whether for single fan, or dual fan applications, a single VFD shall be provide to ensure proper operation and to optimize operating life. Each VFD shall be properly sized, factory mounted, wired to the fan motor, and commissioned to facilitate temporary heating, cooling, ventilation, and/or timely completion of the project. The VFD package shall also include:

- a) Electronic manual speed control
- b) Inlet fuses to provide maximum protection against inlet short circuit
- c) Current limited stall prevention
- d) Auto restart after momentary power loss
- e) Speed search for starting into rotating motor
- f) Anti-windmill w/DC injection before start
- g) Phase-to-phase short circuit protection
- h) Ground fault protection

Units with factory-mounted controls shall include power wiring from the VFD panel to the control system, binary output on/off wiring, analog output-speed-signal wiring, binary fault signal wiring and all interfacing wiring between the VFD and the direct control interface.

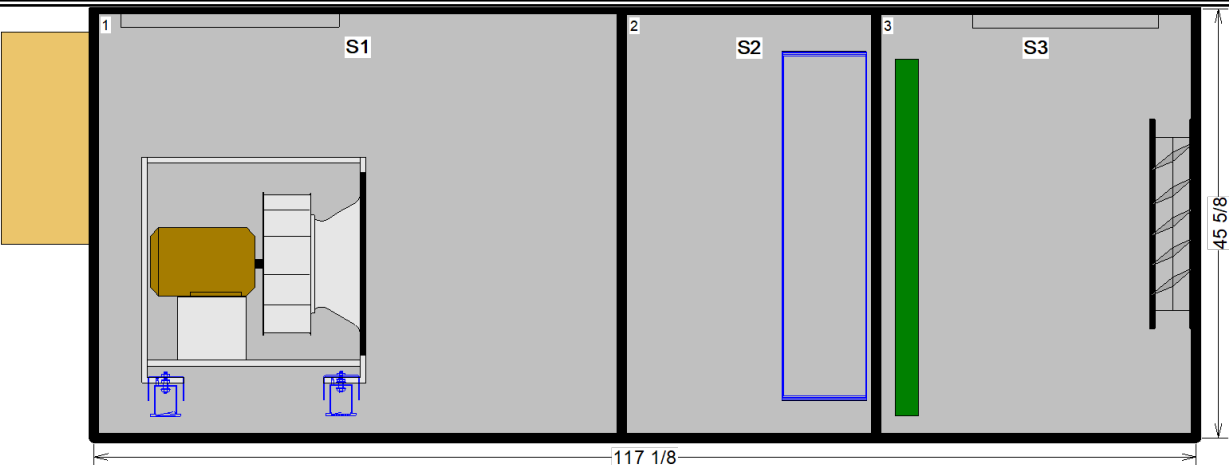
The VFD shall be covered by UL1995/60335 Standards.

Field Programmable Symbio Controller

Factory-mounted Symbio Controller shall be engineered, mounted, wired, tested, and programmed by the Air Handler Manufacturer to reduce installed costs, improve reliability, and save time at the unit startup. The controller will utilize the latest graphical programming methods that are easy to learn, powerful, self-documenting. Each control system shall be fully functional in a stand-alone mode or may be tied to a building automation system with a single pair of twisted wires using BACnet Protocol. The Unit controller has USB Service Tool Port, two 100M Ethernet Ports, and optional features such as secure remote connectivity, wireless building communications, and custom programming with expandable I/O. All factory-mounted controls shall be covered by the air handler manufacturer's standard warranty.

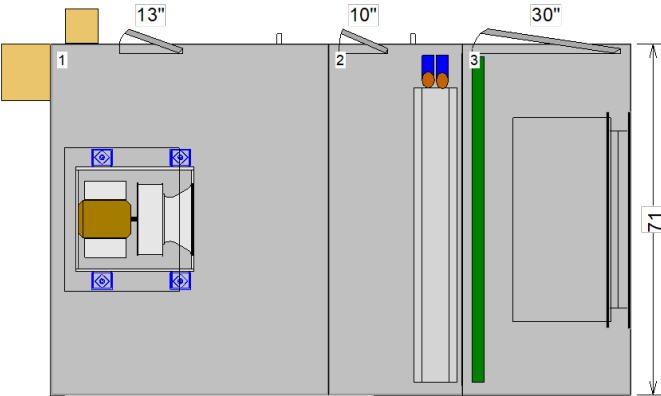
Control panel to include a, motor current overload protection (if applicable), fused line voltage to 24 VAC transformer, and three pole fan motor contactor. The panel disconnect will be factory installed for indoor units, and must be field supplied for outdoor units. If a factory mounted VFD is provided on the supply fan, power wiring for the VFD shall come from the control distribution panel. Speed reference/signal control for the VFD shall be wired to the unit controller.

Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L



Pos #	Module	Length	Weight
1	Base Unit	56 1/8	768.90
2	Coil Access Section	27	455.10
3	Filter / mixing / econ section	34	365.50
Installed Unit Weight 1589.50 lbs			

Shipping splits are indicated by thick black lines



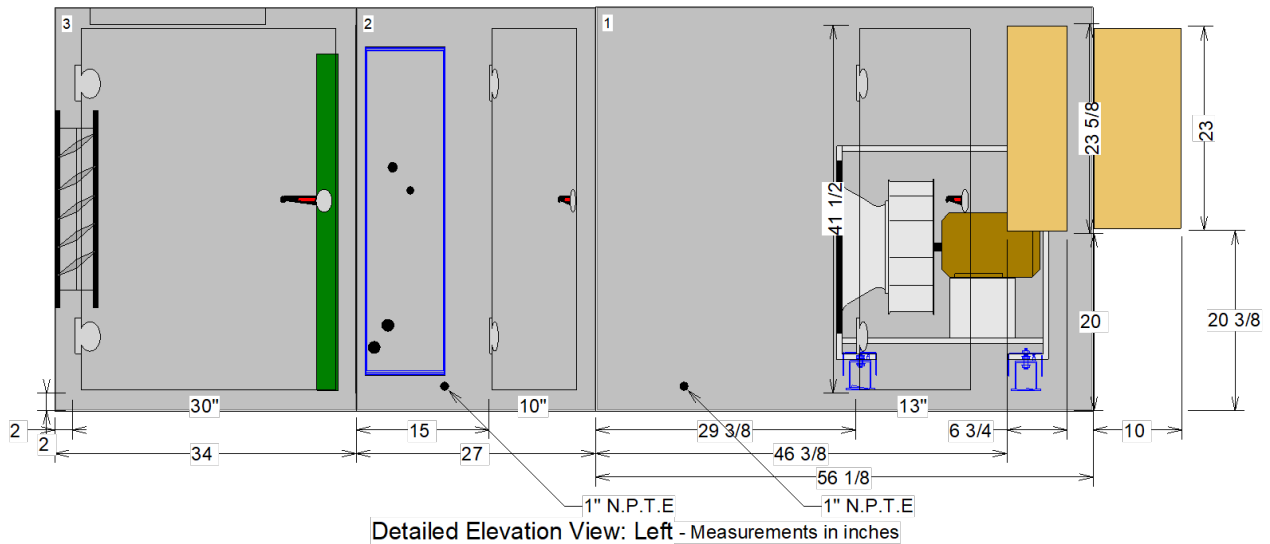
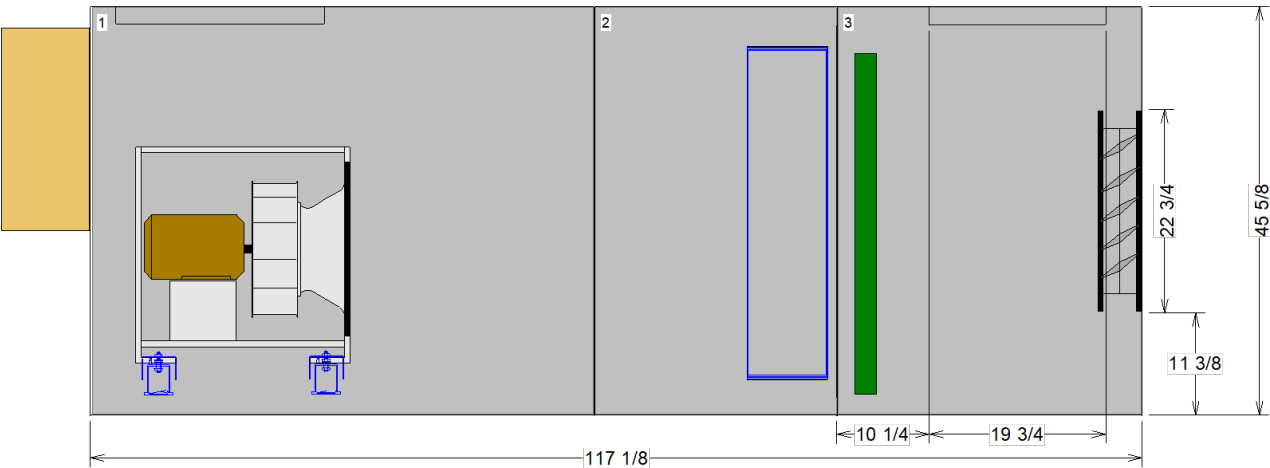
Basic Overall Plan View: Top - Measurements in inches

OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE

Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 6500 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-1L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L



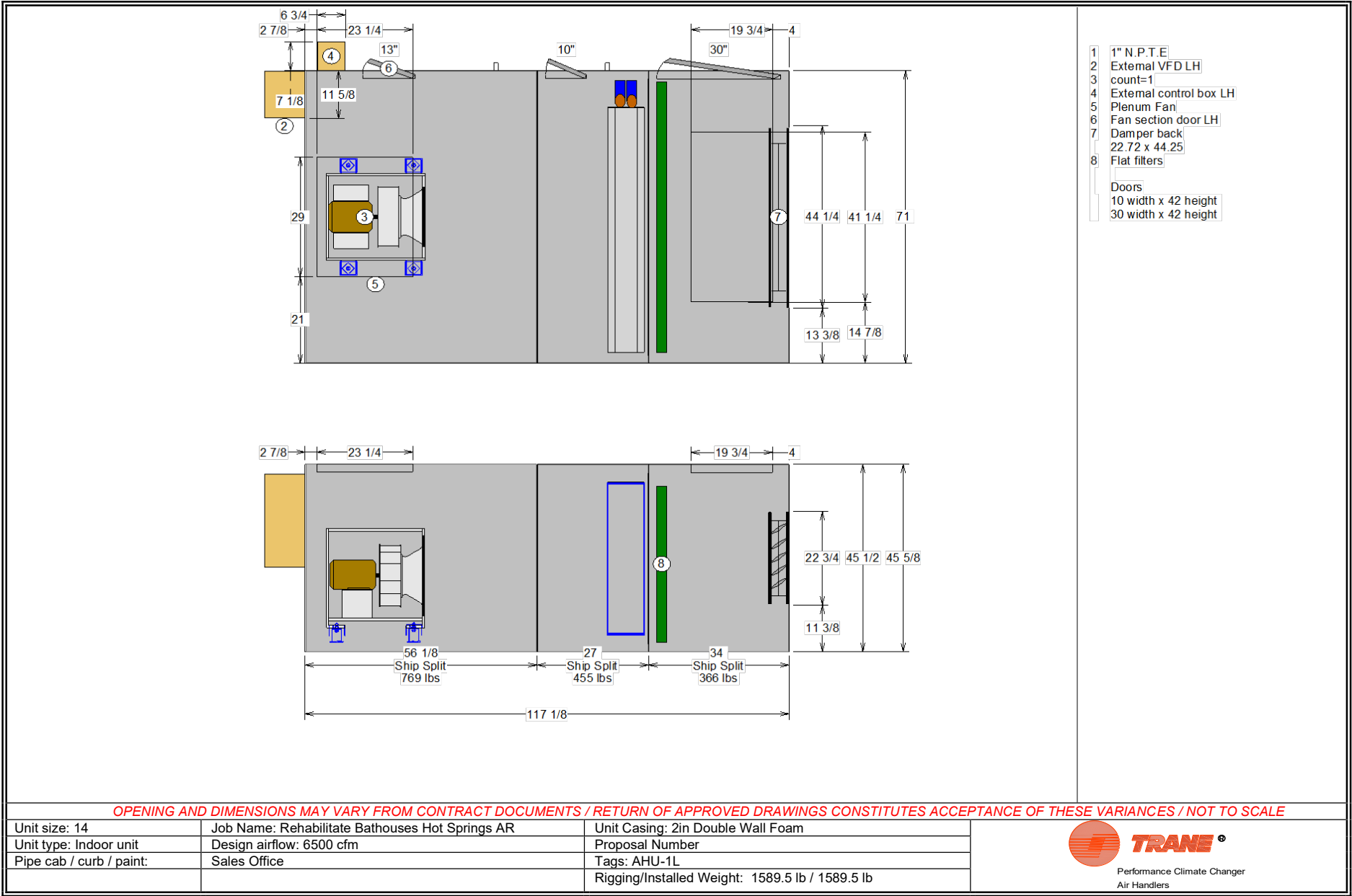
OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE

Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
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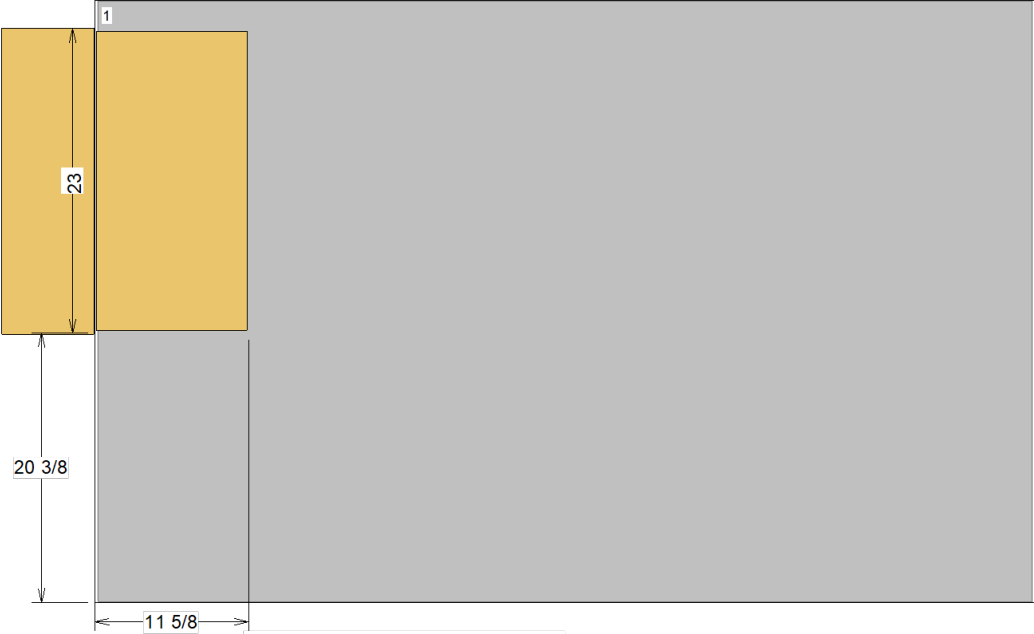


Dimensional Drawings - Performance Climate Changer (UCCA)

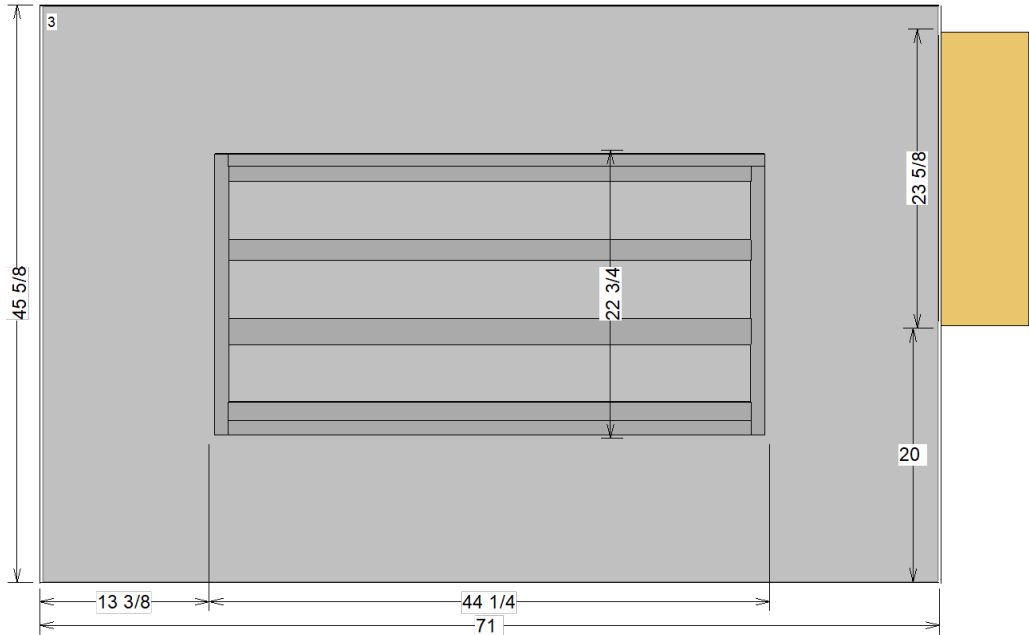
Item: A1 Qty: 1 Tag(s): AHU-1L



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L



Detailed Elevation View: Front - Measurements in inches



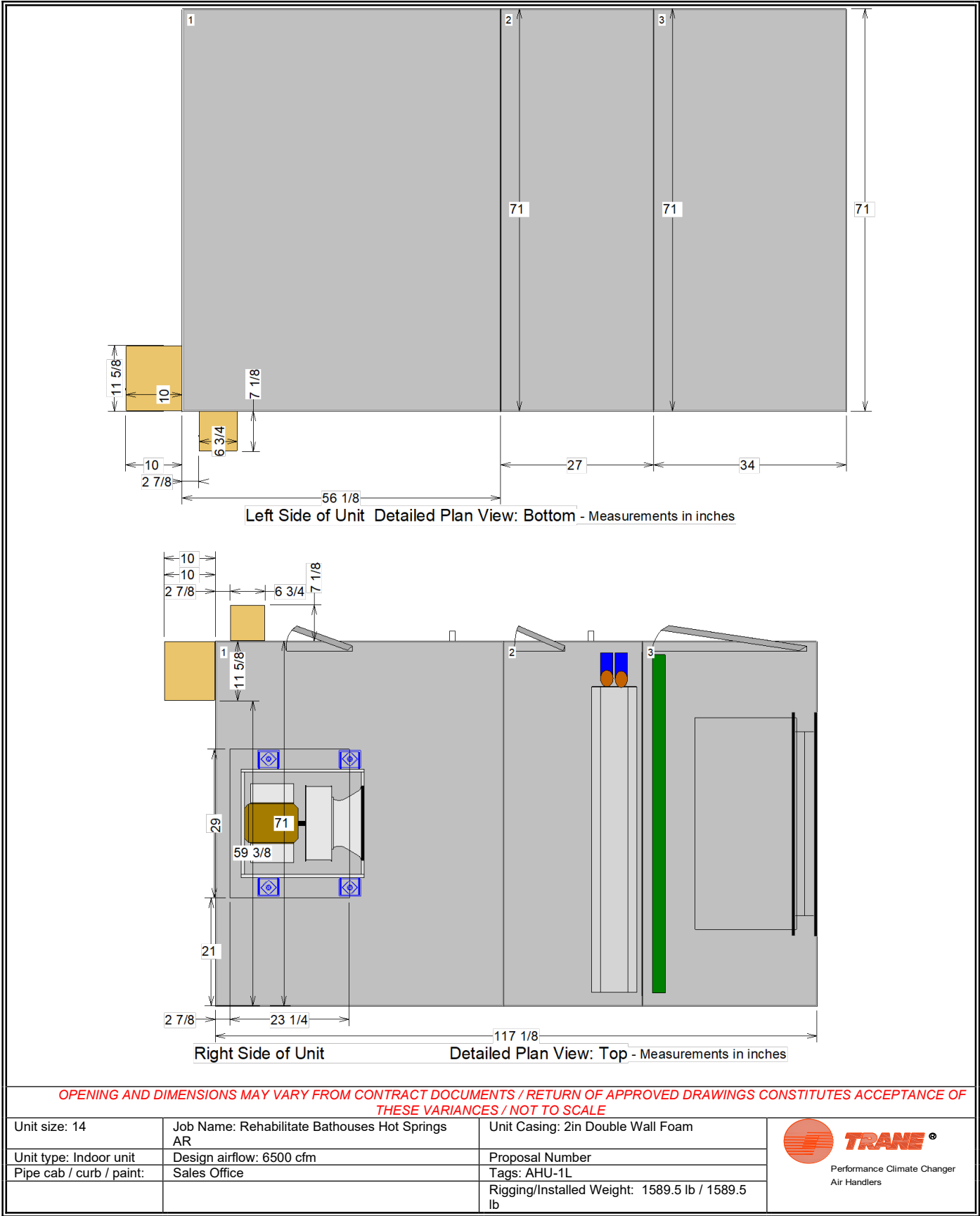
Detailed Elevation View: Back - Measurements in inches

OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE

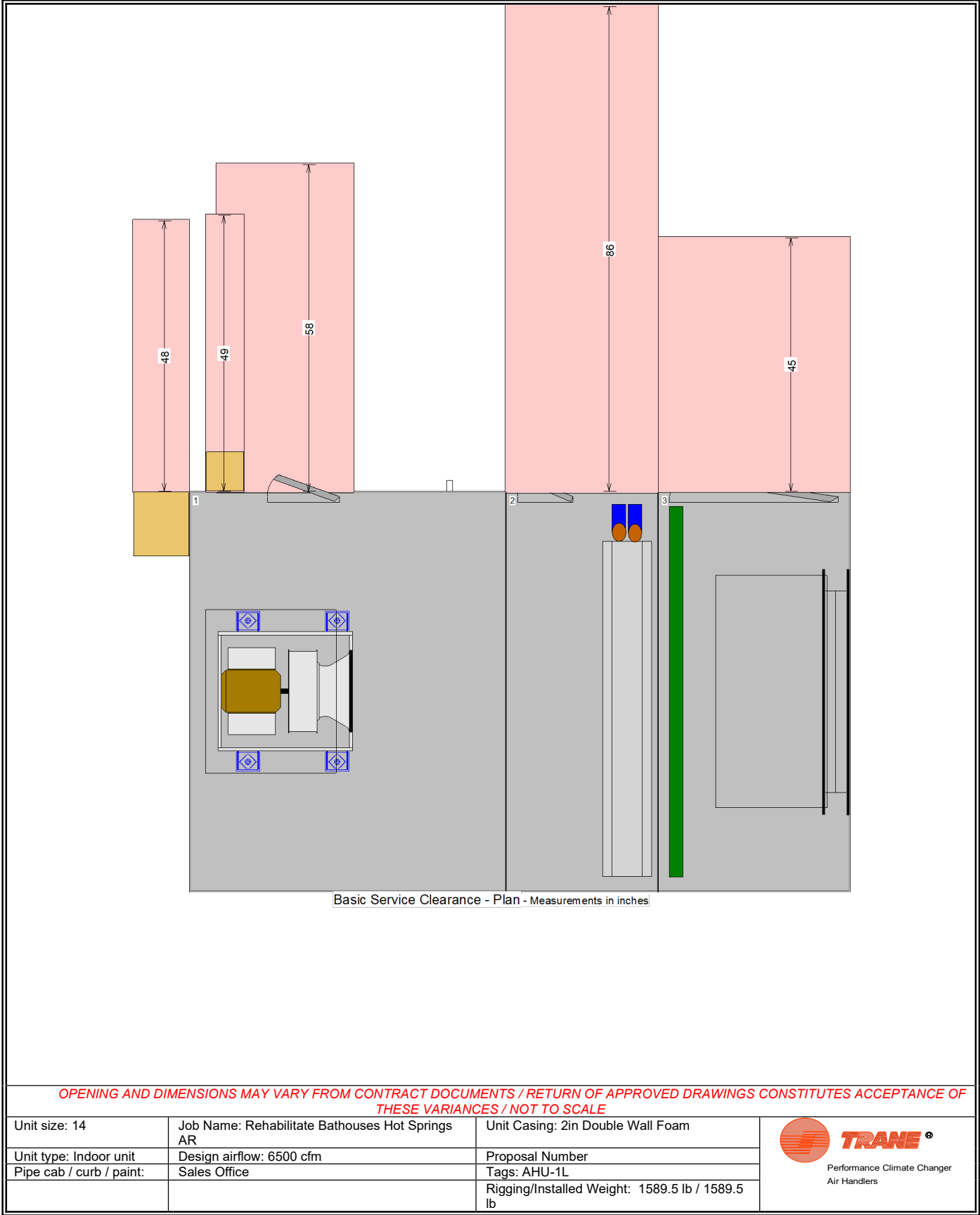
Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 6500 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-1L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



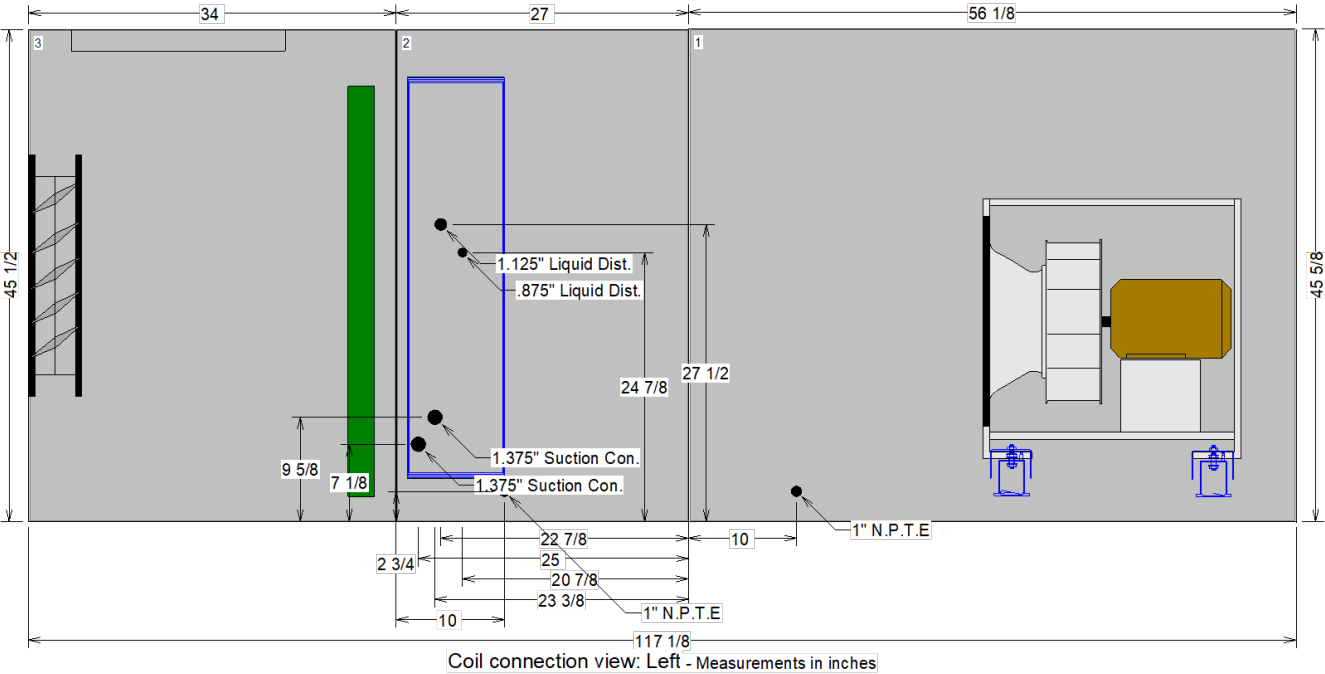
Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L

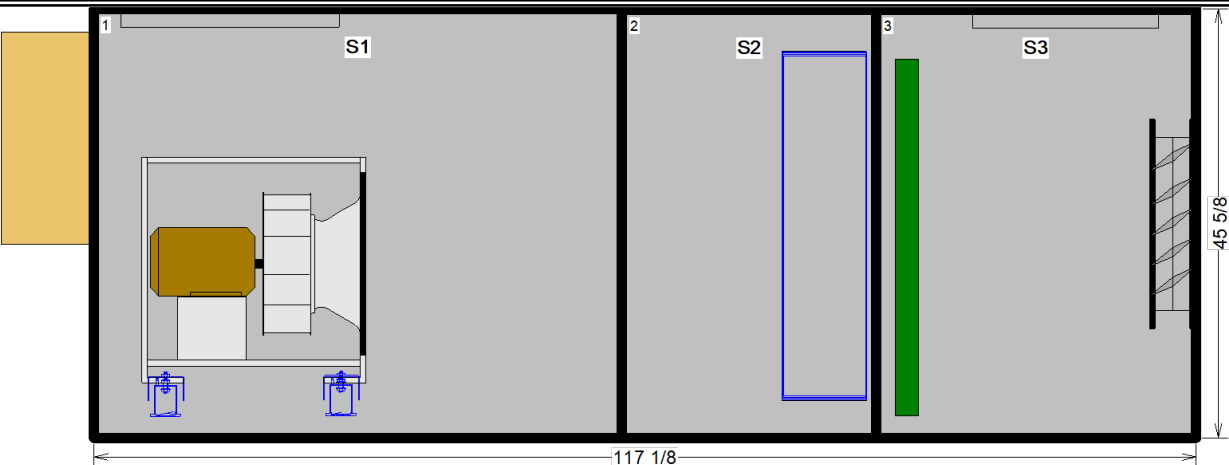


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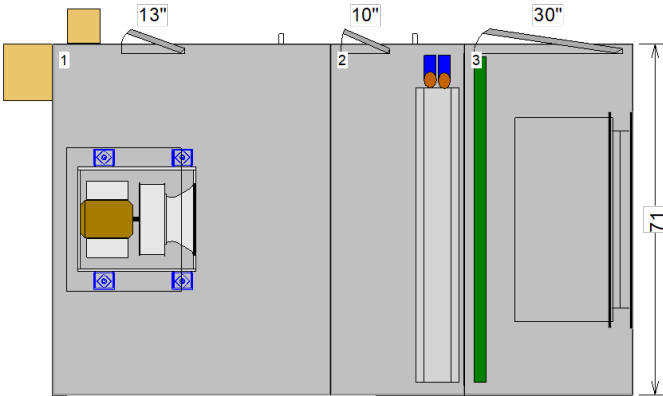


Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L



Pos #	Module	Length	Weight
1	Base Unit	56 1/8	768.90
2	Coil Access Section	27	455.10
3	Filter / mixing / econ section	34	365.50
Installed Unit Weight 1589.50 lbs			

Shipping splits are indicated by thick black lines



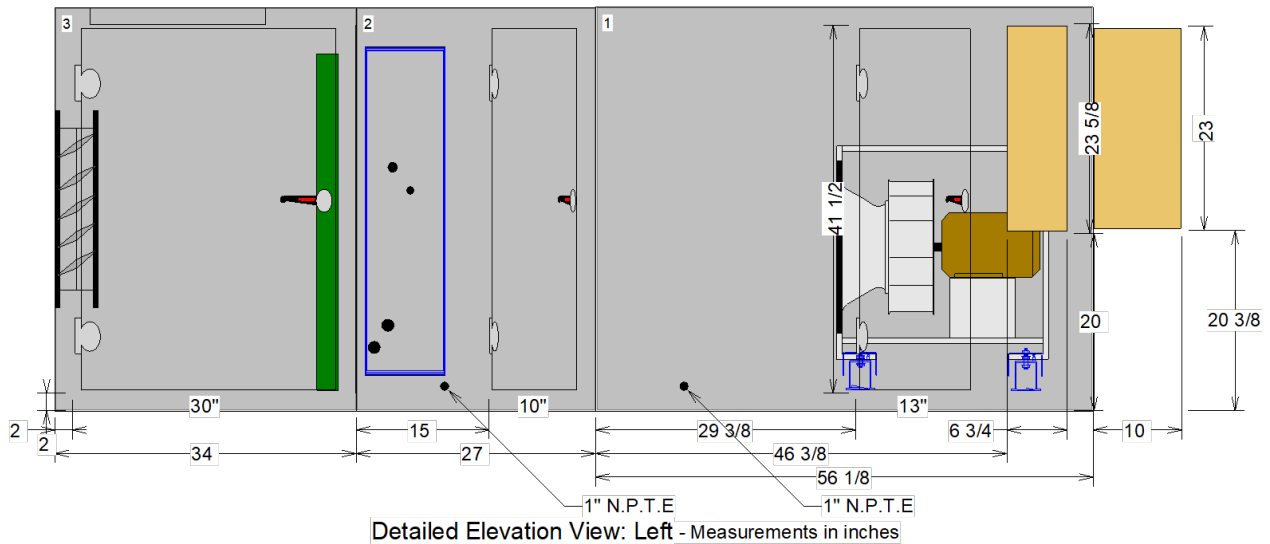
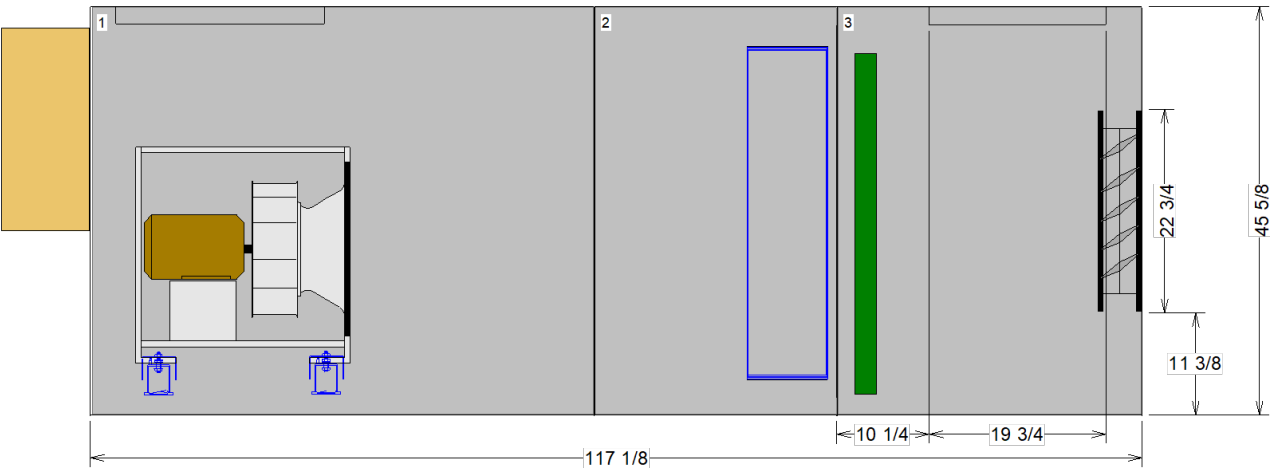
Basic Overall Plan View: Top - Measurements in inches

OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE

Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 7000 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-2L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L

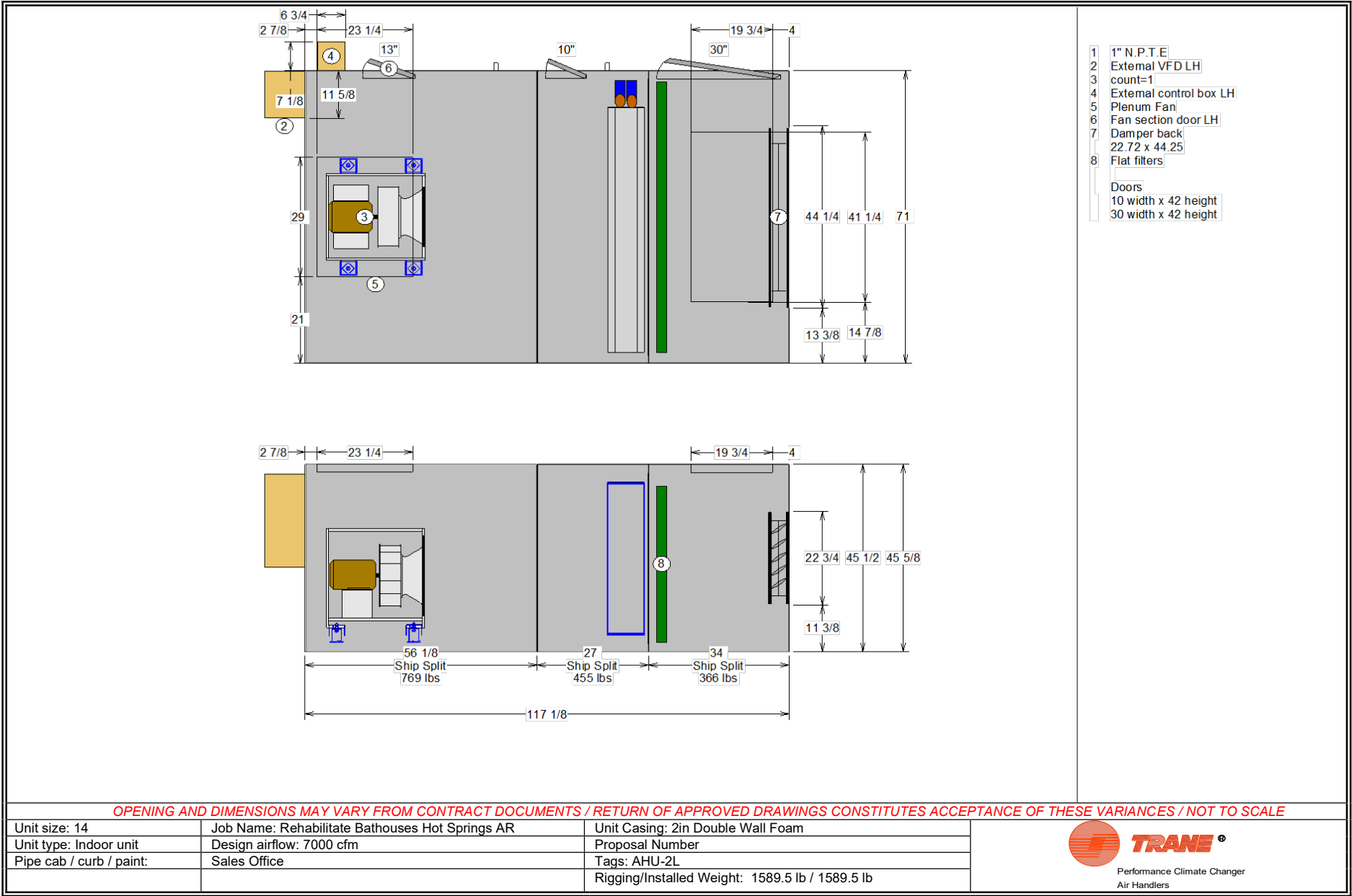


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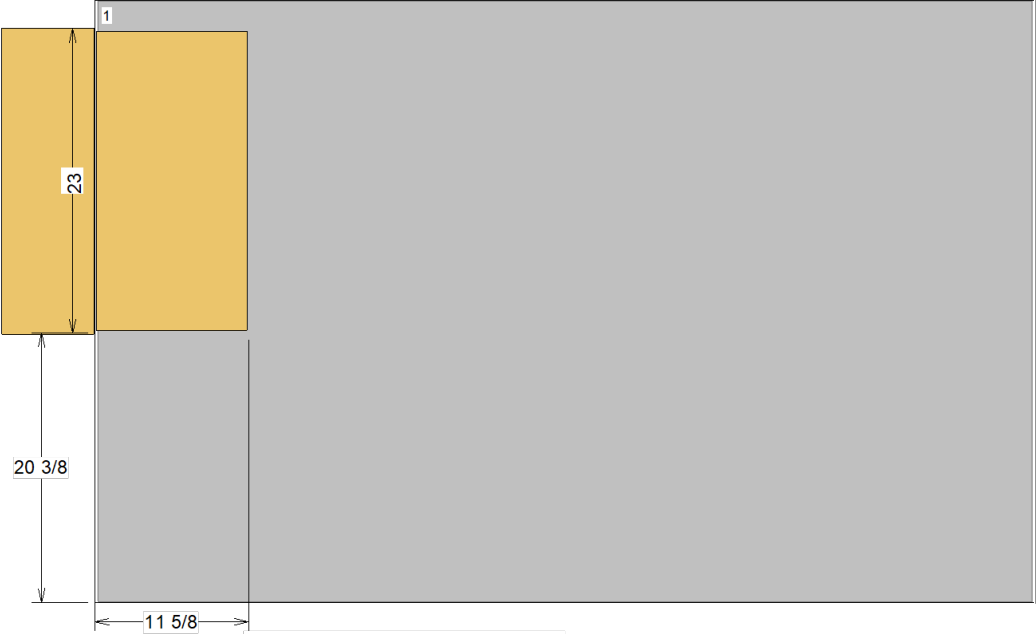
Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 7000 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-2L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



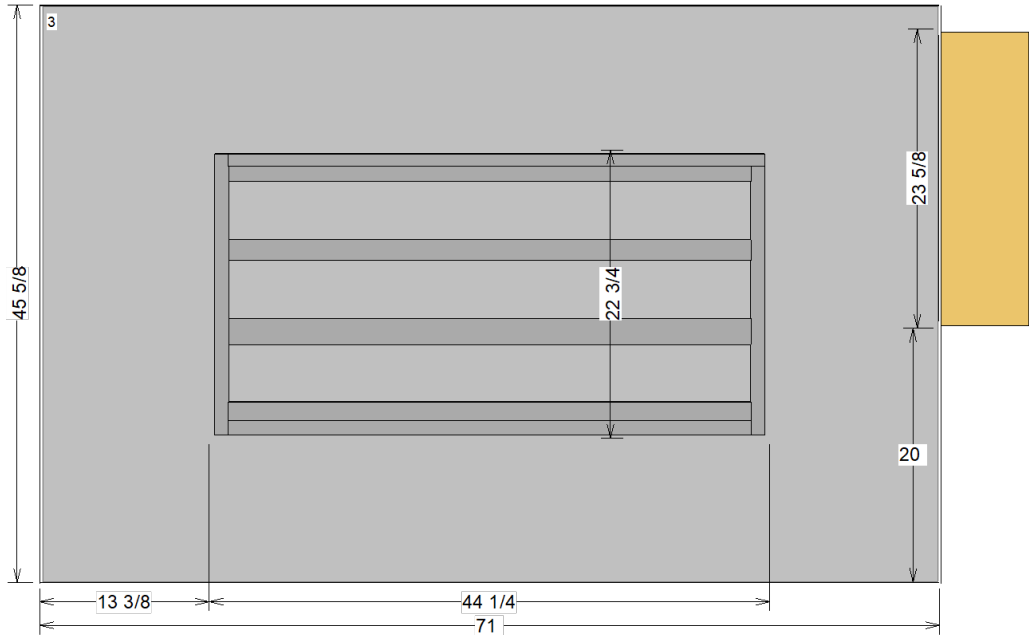
Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L



Detailed Elevation View: Front - Measurements in inches



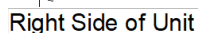
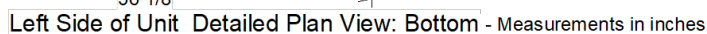
Detailed Elevation View: Back - Measurements in inches

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Pipe cab / curb / paint:	Sales Office	Tags: AHU-2L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



Item: A2 Qty: 1 Tag(s): AHU-2L



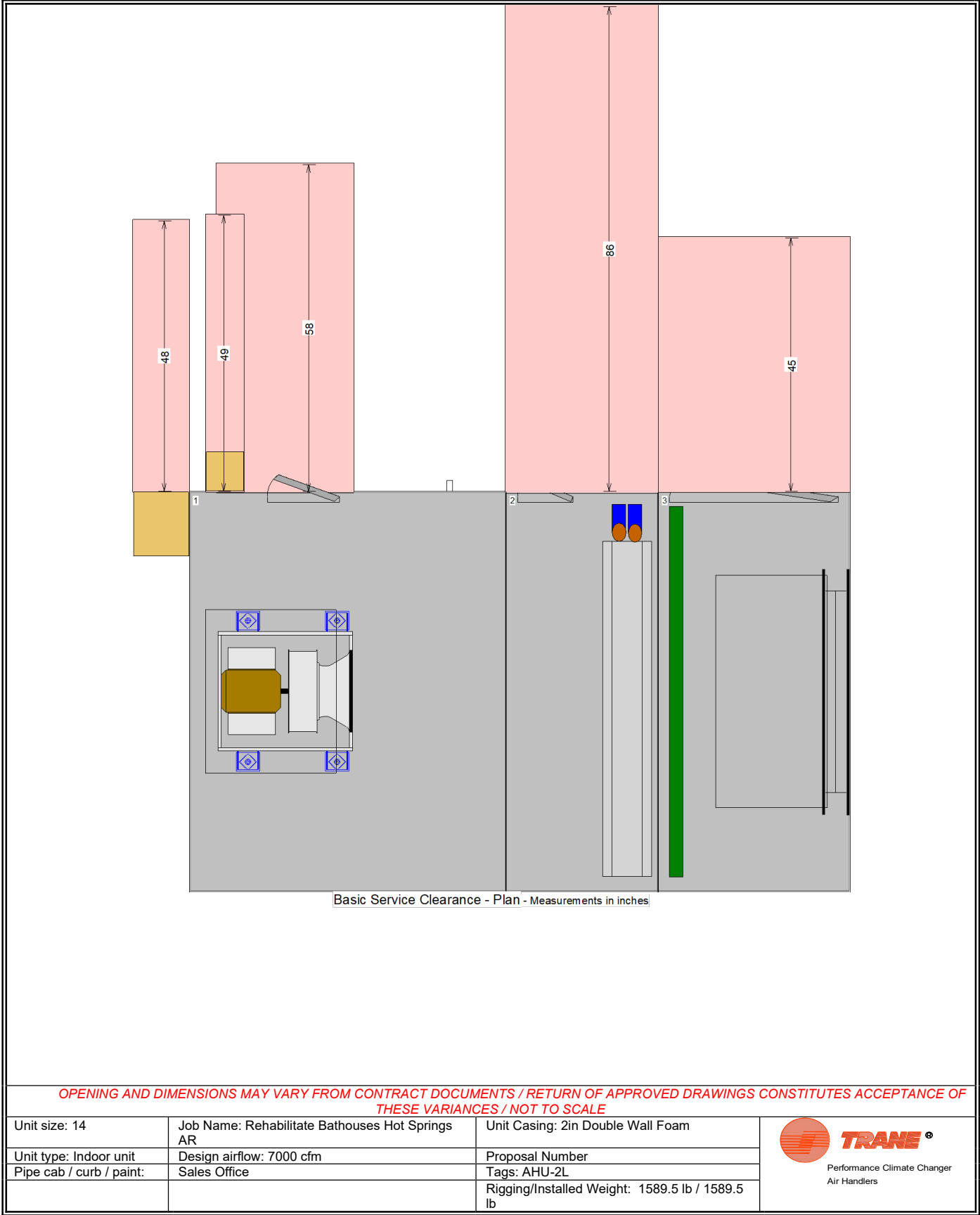
Detailed Plan View: Top - Measurements in inches

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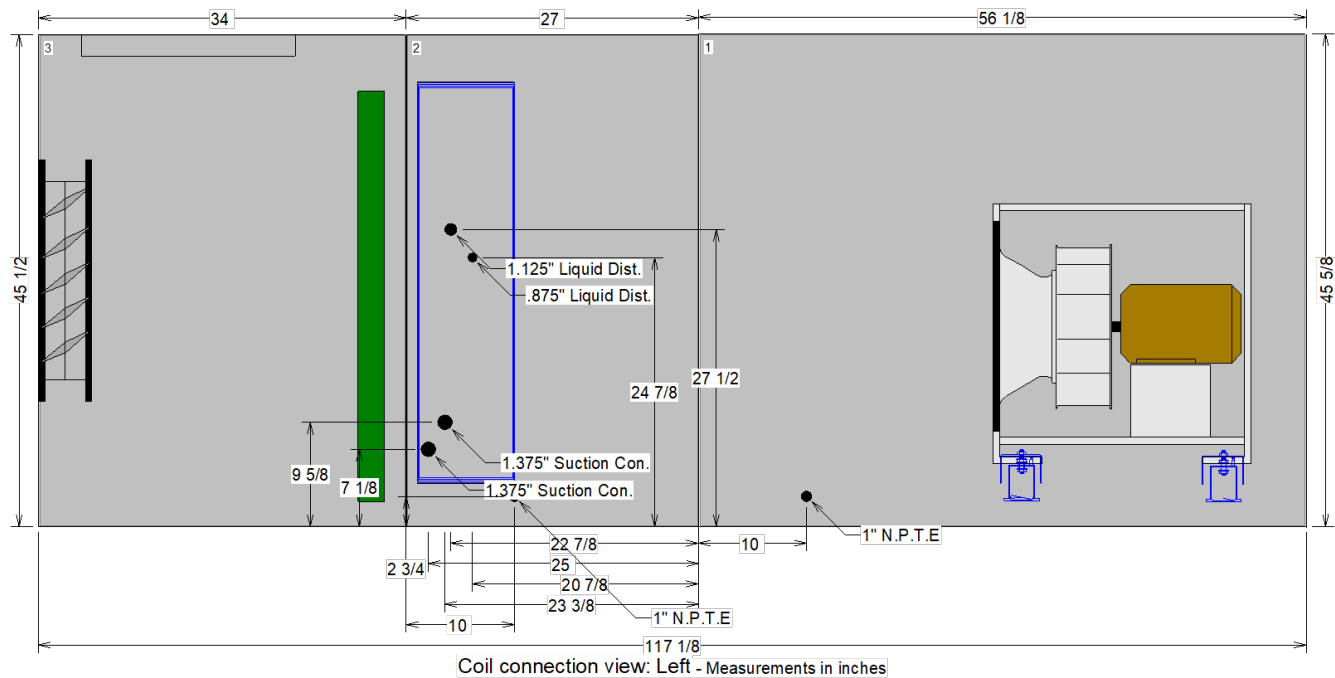
Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 7000 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-2L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A2 Qty: 1 Tag(s): AHU-2L



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Unit size: 14	Job Name: Rehabilitate Bathouses Hot Springs AR	Unit Casing: 2in Double Wall Foam
Unit type: Indoor unit	Design airflow: 7000 cfm	Proposal Number
Pipe cab / curb / paint:	Sales Office	Tags: AHU-2L
		Rigging/Installed Weight: 1589.5 lb / 1589.5 lb



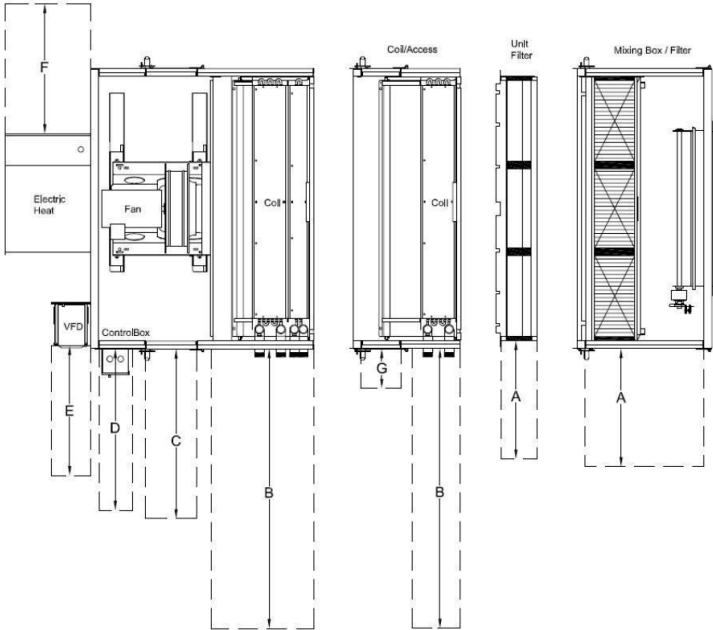
Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

UCCA Indoor Service Clearances

Component		UNIT SIZE									
		3	6	8	10	12	14	17	21	25	30
Filter	A	40.0	44.0	42.0	42.0	40.0	45.0	45.0	45.0	51.0	51.0
Coil Pull	B	49.0	62.0	66.0	78.0	86.0	86.0	94.0	94.0	96.0	109.0
Fan Access, horizontal unit (motor side)	C	48.0	48.0	48.0	51.0	54.0	58.0	61.0	61.0	66.0	66.0
Fan Access, vertical unit (motor side)	C	48.0	48.0	48.0	51.0	54.0	58.0	61.0	61.0		
Fan Access, vert unit with MI fan (motor side)	C	48.0	48.0	48.0	51.0	54.0	58.0	61.0	61.0	66.0	66.0
Fan Access, return section (motor side)	C	48.0	48.0	48.0	51.0	54.0	58.0	61.0	61.0	66.0	66.0
Control Box	D	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
VFD	E	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
EH	F	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
Access Door - Access Section	G	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0

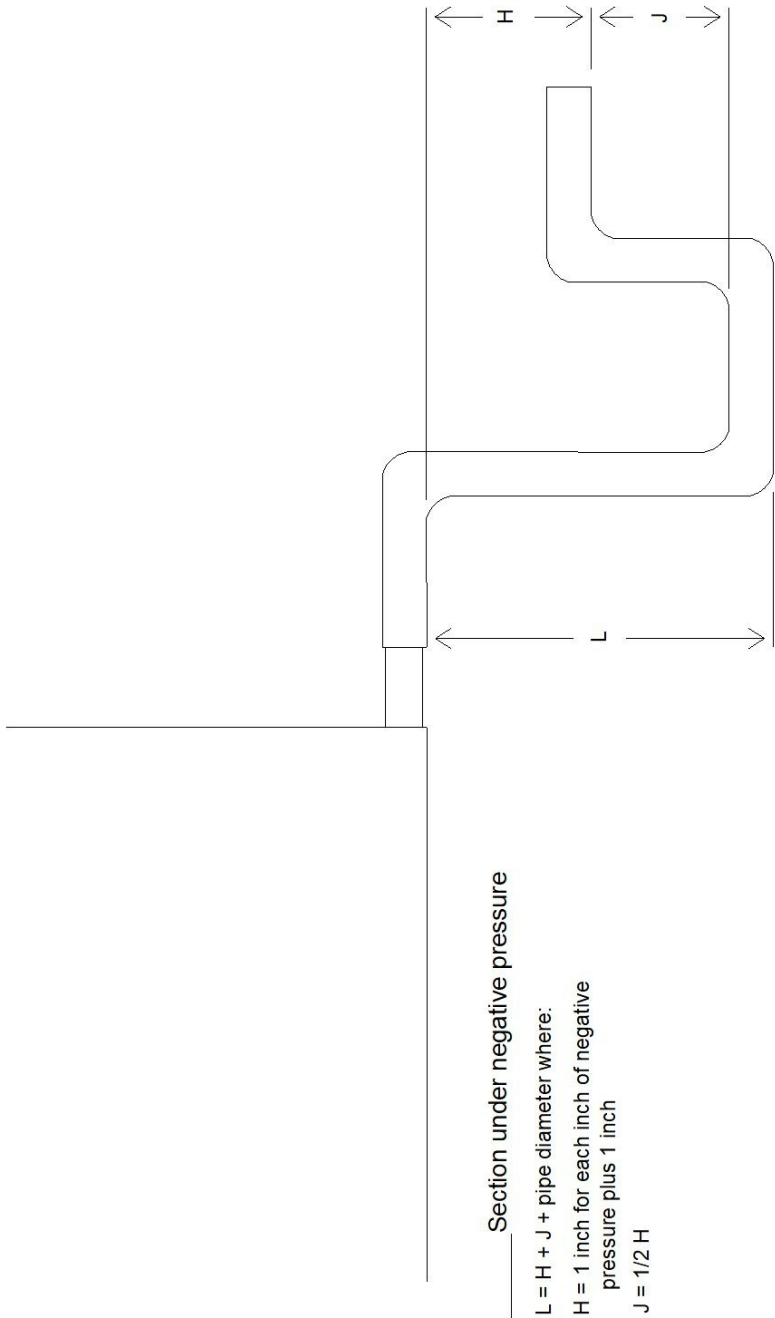
Note(s):
At a minimum, the above clearance dimensions are recommended on one side of the unit for regular service and maintenance.
Clearances are mirrored to other side for units with doors both sides.
Refer to as-built submittal for locations of items such as filter access doors, coil, piping connections, motor locations, etc.
Sufficient clearance must be provided on all sides of unit for removal of access panels, plug panels, or section-to-section attachment brackets
Clearance for starters, VFDs, or other high-voltage devices must be provided per NEC requirements.

Service Clearances



Dimensional Drawings - Performance Climate Changer (UCCA)
Item: A1 Qty: 1 Tag(s): AHU-1L

Drain pan trapping for negative pressure applications

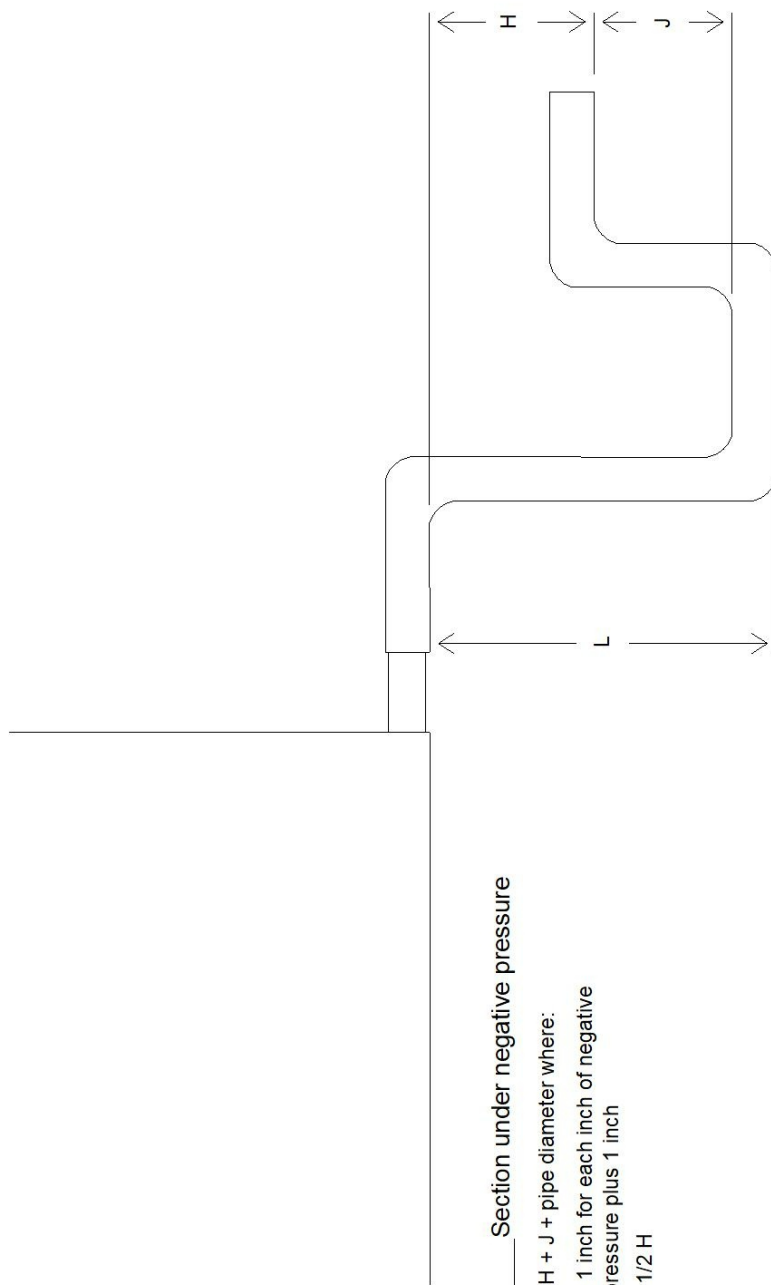


Recommended Trap Dimensions			Connection Size
H	J	L	
3.399 in	1.699 in	6.098 in	1"

To ensure proper condensate trapping the field installed housekeeping pad height is the responsibility of the contractor.
The external static pressure used for fan selection was assumed to be divided 50% to entering duct external static pressure and 50% discharge external static pressure.

Item: A2 Qty: 1 Tag(s): AHU-2L

Drain pan trapping for negative pressure applications



Section under negative pressure

$L = H + J$ + pipe diameter where:

H = 1 inch for each inch of negative pressure plus 1 inch

 $J = 1/2 \text{ H}$

Connection Size	Recommended Trap Dimensions		
	H	J	L
1"	3.526 in	1.763 in	6.290 in

To ensure proper condensate trapping the field installed housekeeping pad height is the responsibility of the contractor. The external static pressure used for fan selection was assumed to be divided 50% to entering duct external static pressure and 50% discharge external static pressure.

Fan Curve - Performance Climate Changer (UCCA)

Item: A1 Qty: 1 Tag(s): AHU-1L

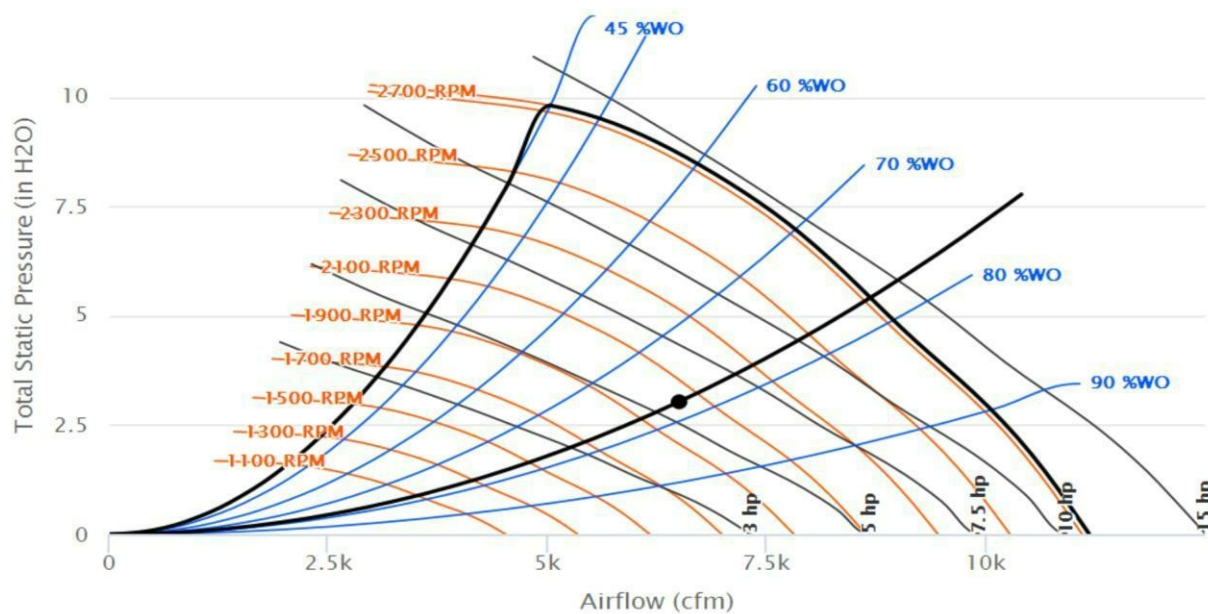
Fan Details

Unit Size	14	Operating Brake Power	5.725 hp
Operating Airflow	6,500 cfm	Altitude	0.00 ft
Operating Static Pressure	3.040 in H ₂ O	Design Temp.	82.00 F
Operating RPM	2,026 rpm		

5 % BHP margin applied for motor selection.

Size 14 DDP Top Front Discharge – Single Fan.

Size 14 DDP Top Front Discharge – Single Fan.



Fan Curve - Performance Climate Changer (UCCA)

Item: A2 Qty: 1 Tag(s): AHU-2L

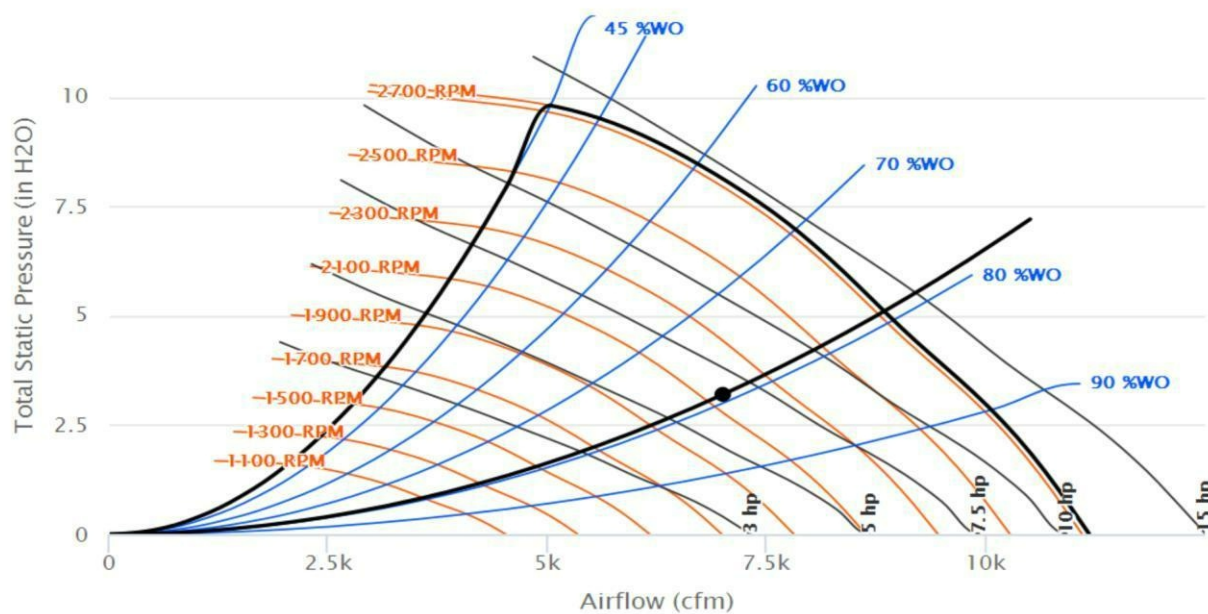
Fan Details

Unit Size	14	Operating Brake Power	6.691 hp
Operating Airflow	7,000 cfm	Altitude	0.00 ft
Operating Static Pressure	3.206 in H ₂ O	Design Temp.	82.00 F
Operating RPM	2,143 rpm		

5 % BHP margin applied for motor selection.

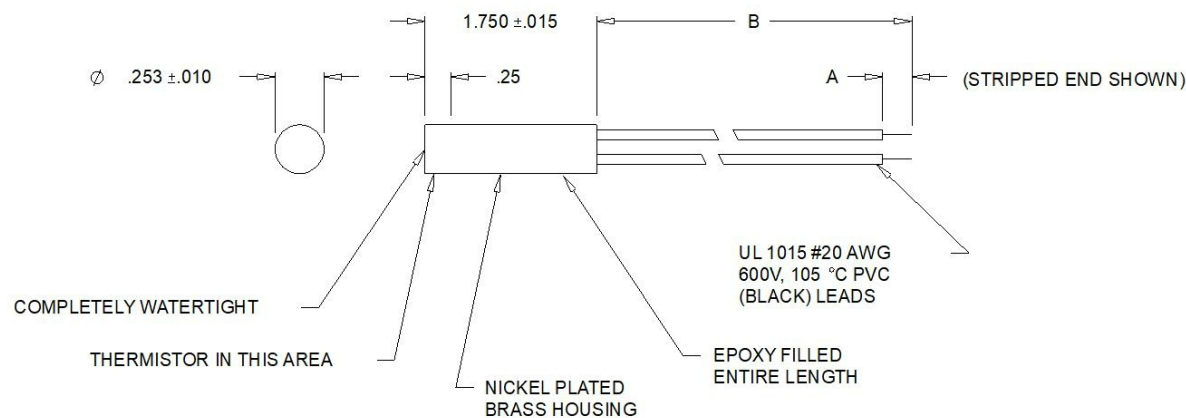
Size 14 DDP Top Front Discharge – Single Fan.

Size 14 DDP Top Front Discharge – Single Fan.



Accessory - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

Discharge Air Sensor

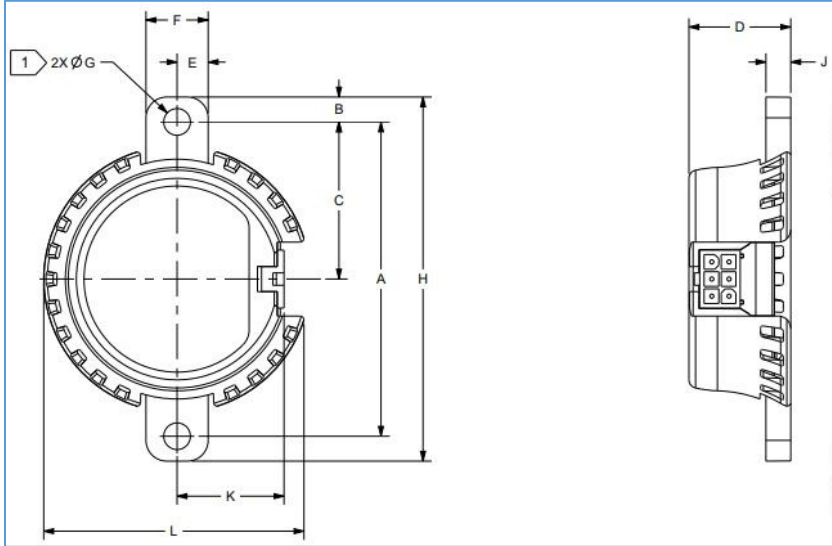


RESISTANCE TEMPERATURE CHARACTERISTICS			
TEMPERATURE	RESISTANCE		TEMP COEFF
	MIN	MAX	
-40 °C	320.9K	369.0K	-6.61%/ °C
-25 °C	125.6K	142.3K	-6.04%/ °C
0 °C	31.17K	34.6K	-5.16%/ °C
25 °C	9.56K	10.44K	-4.40%/ °C
65 °C	2.012K	2.158K	-3.50%/ °C

EXT	A	B
01	PLUG; AMP #172165-1 TERMINAL; PIN AMP #171638-1 (2 REQD)	16 ±.25

Accessory - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

R454B Leak Detection Sensor



A	B	C	D	E	F	G	H	J	K	L
2.99	0.24	1.5	0.97	0.3	0.59	0.25	3.47	0.24	1.02	2.48

1. Mounting: #10-32 x 1/2" Phillips head screw, Max Torque 6.2 in-lbs

Output Mode	Relay Specification	MODBus Specification
Supply Voltage	24 VAC +/- 10% and 24VDC (8-32VDC)	5VDC +/-10% 24 VAC +/- 10% and 24VDC (8-32VDC)
Current Requirements	300mA max	300mA max
Digital Output	-	RS485, 120 Ohm Termination included in sensor

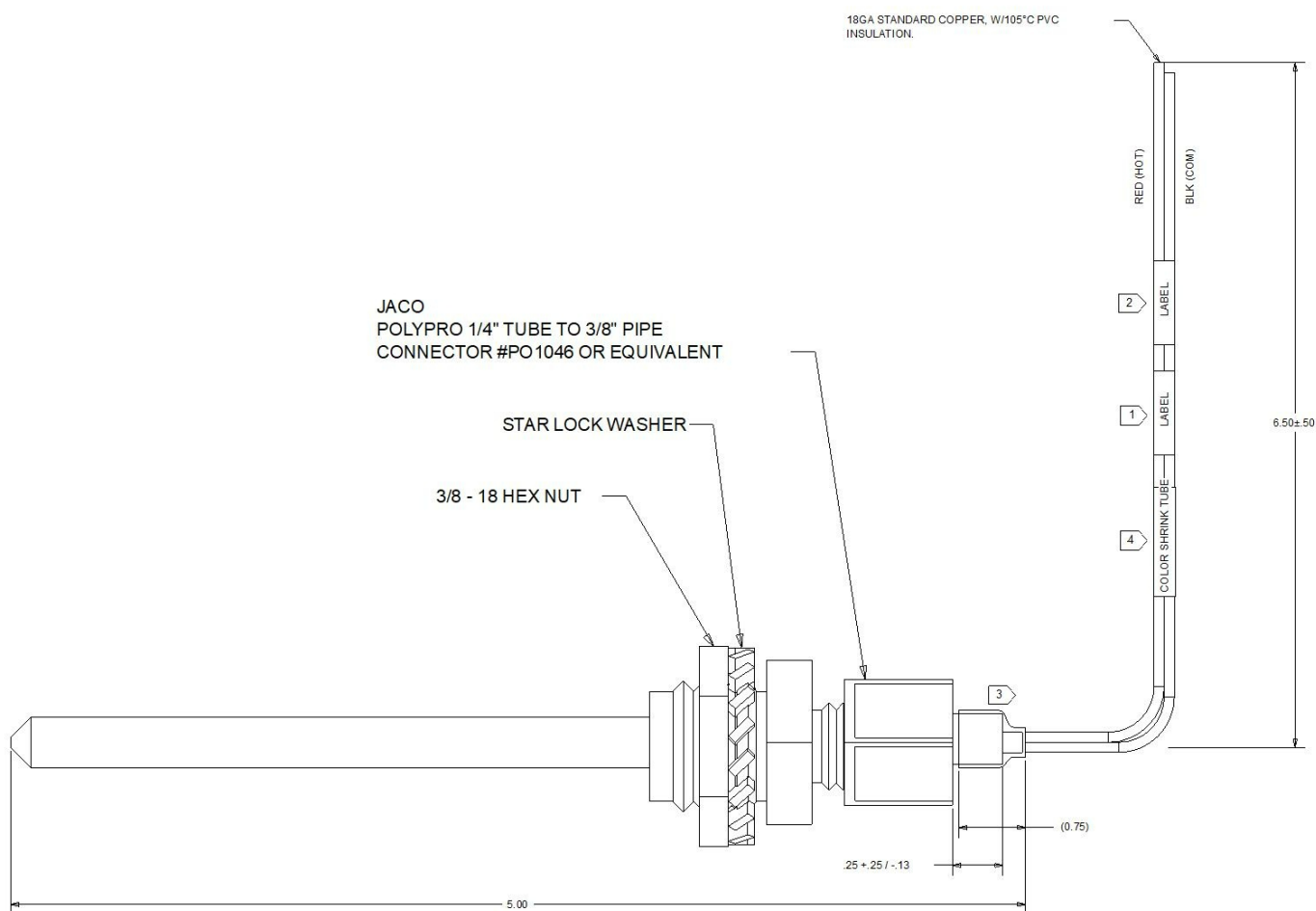
Measuring Range	0 - 25% LFL
Detection Threshold Limit	15% LFL
Operating Temperature	-40F to 175F (-40C to 80C)
Intermittent Temperature	-40F to 203F (-40C to 95C)
Storage Temperature	-67F to 203F (-55C to 95C)
Operating Pressure	700 to 1200 mbar
Operating Humidity	0-100% RH with Condensation
Enclosure Protection (EN 60529)	IP54
Connector Protection (EN 60529)	IP56 and IP57
Flame Rating	UL 94 V-0

Accuracy at Ambient 15C to 25C, 30-70%	±2.5% LFL
Accuracy across Operating Range	±5.0% LFL
Response Time	< 15 s
Sensor Recovery Time	< 5 min in clean air
Lifetime	Min 15-yr Lifetime
Mitigation Recovery Timer	0-6000s
Alarm Response	Relay Open - LED Red - Alarm Flag
Alarm Reset	2.5% LFL Hysteresis

Materials - Enclosure	PA66 25%GF
Materials - Electrical Connection	Nylon
Net Weight	0.04-0.06kg

Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

OA Temp Sensor

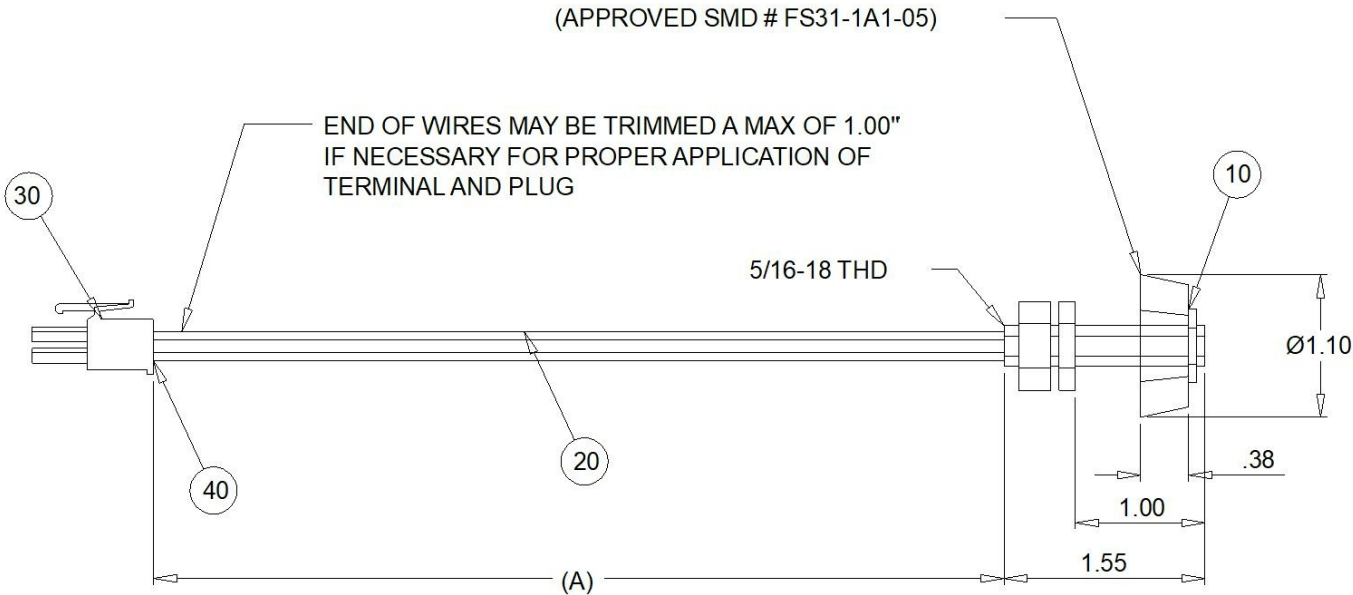


EXT	SENSOR RATING	BETA (0°C TO 50°C)	SHRINK TUBE COLOR	SENSOR
01	10,000 Ω TYPE II	3892K	YELLOW	THERMISTOR
02	10,000 Ω TYPE III	3575K	GREEN	
03	20,000 Ω TYPE IV	4140K	BLUE	
04	100,000 Ω TYPE II	3892K	GRAY	

EXT	SENSOR RATING	TCR	SHRINK TUBE COLOR	SENSOR
05	1,000 Ω PT 385	3850 PPM/K	WHITE	RTD
06	1,000 Ω NI-FE-JCI	6370 PPM/K	RED	
07	1,000 Ω NI-SIEMENS	5000 PPM/K	ORANGE	

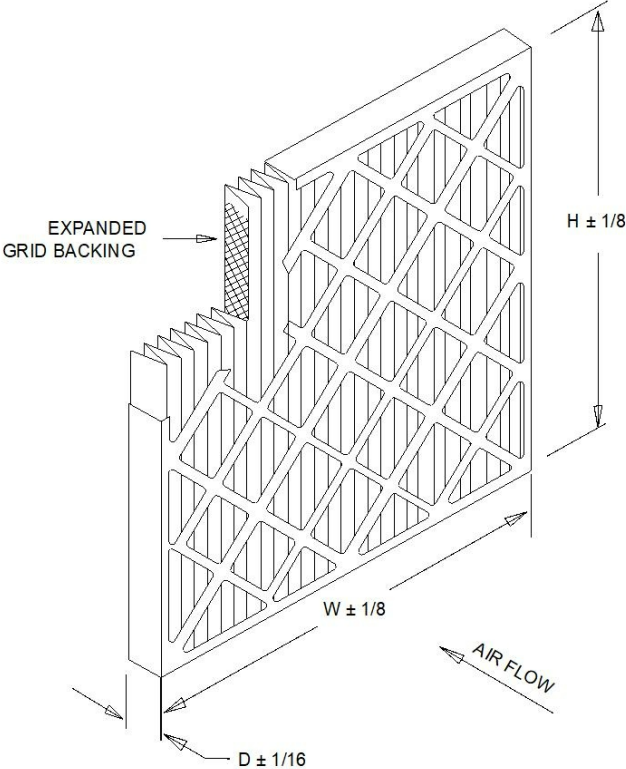
Accessory - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

Condensate Over Flow



EXT	A (IN)	ITEM			
		10	20	30	40
		FLOAT SWITCH	WIRE	PLUG(GREEN)	TERMINAL,PIN
X13470527010	9.0	X13470484010	AWM (20 AWG)	AMP #1-172165-5	AMP #171638-1
X13470527020	50.0	X13470484010	AWM (20 AWG)	AMP #1-172165-5	AMP #171638-1

Accessory - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L



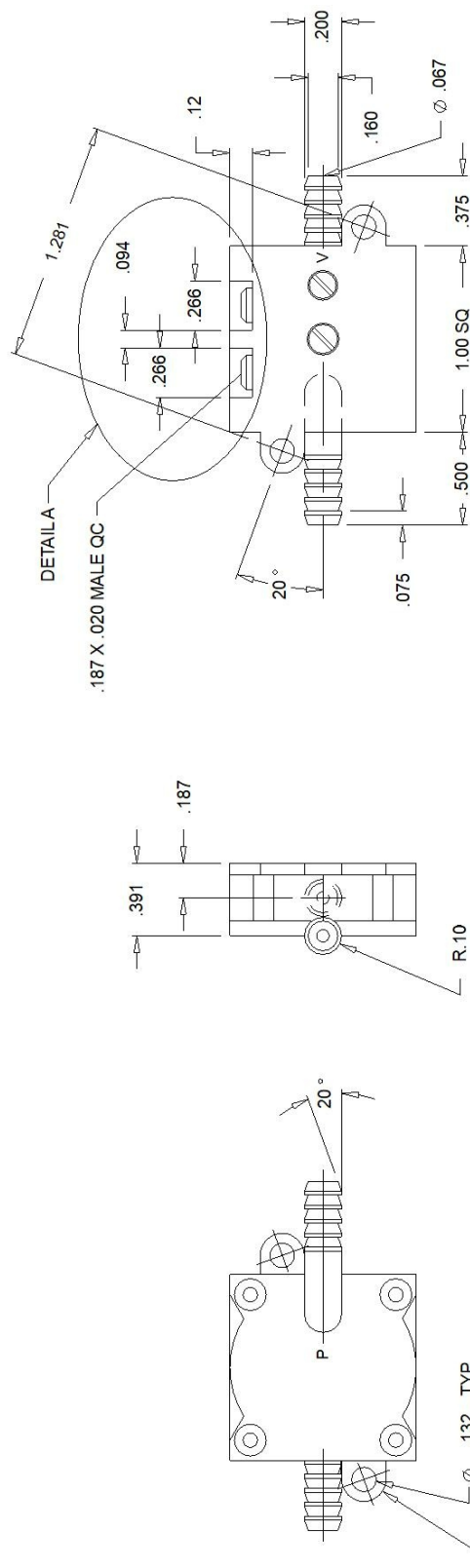
- STANDARD CONSTRUCTION
- 1. 100 % Synthetic White Un-Dyed Media
 - 2. 10.0 Pleats Per Foot
 - 3. Expanded Metal Pleat Supports
 - 4. Moisture Resistant Beverage Board Frame
 - 5. Double Wall Frame

- NOTES
- 1. MERV 8-A Per ASHRAE 52.2-2007 Appendix J.
 - 2. Final Resistance: 1/0" W.G.
 - 3. Rated Velocity: 500 FPM
 - 4. Class 2 Filter Per U.L. Standard 900
 - 5. Maximum Operating Temperature: 225 DEG. F

MODEL NUMBER	NOMINAL SIZE IN. W X H X D	ACTUAL SIZE IN. W X H X D	RATED AIR FLOW CFM	INITIAL RESISTANCE IN. W.G.	MEDIA AREA SQ. FT.
MX40-STD2-217	10 X 20 X 2	9-1/2 X 19-1/2 X 1-3/4	700	0.29	4.7
MX40-STD2-220	12 X 20 X 2	11-1/2 X 19-1/2 X 1-3/4	840	0.29	5.5
MX40-STD2-210	12 X 24 X 2	11-3/8 X 23-3/8 X 1-3/4	1000	0.29	6.2
MX40-STD2-239	14 X 20 X 2	13-1/2 X 19-1/2 X 1-3/4	980	0.29	5.7
MX40-2TD2-241	14 X 25 X 2	13-1/2 X 24-1/2 X 1-3/4	1220	0.29	7.1
MX40-STD2-245	15 X 20 X 2	14-1/2 X 19-1/2 X 1-3/4	1050	0.29	6.2
MX40-STD2-201	16 X 20 X 2	15-1/2 X 19-1/2 X 1-3/4	1120	0.29	6.7
MX40-STD2-216	16 X 24 X 2	15-3/8 X 23-3/8 X 1-3/4	1340	0.29	8.0
MX40-STD2-202	16 X 24 X 2	15-1/2 X 24-1/2 X 1-3/4	1400	0.29	8.0
MX40-STD2-280	15 X 20 X 2	17-1/2 X 19-1/2 X 1-3/4	1250	0.29	7.8
MX40-STD2-212	18 X 24 X 2	17-3/8 X 23-3/8 X 1-3/4	1500	0.29	9.3
MX40-STD2-285	18 X 25 X 2	17-1/2 X 24-1/2 X 1-3/4	1570	0.29	9.7
MX40-STD2-203	20 X 20 X 2	19-1/2 X 19-1/2 X 1-3/4	1400	0.29	8.3
MX40-STD2-211	20 X 24 X 2	19-3/8 X 23-3/8 X 1-3/4	1670	0.29	9.9
MX40-STD2-204	20 X 25 X 2	19-1/2 X 24-1/2 X 1-3/4	1750	0.29	10.3
MX40-STD2-205	24 X 24 X 2	23-3/8 X 23-3/8 X 1-3/4	2000	0.29	11.7
MX40-STD2-225	25 X 25 X 2	24-1/2 X 24-1/2 X 1-3/4	2170	0.29	13.6

Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

Dirty Filter Switch



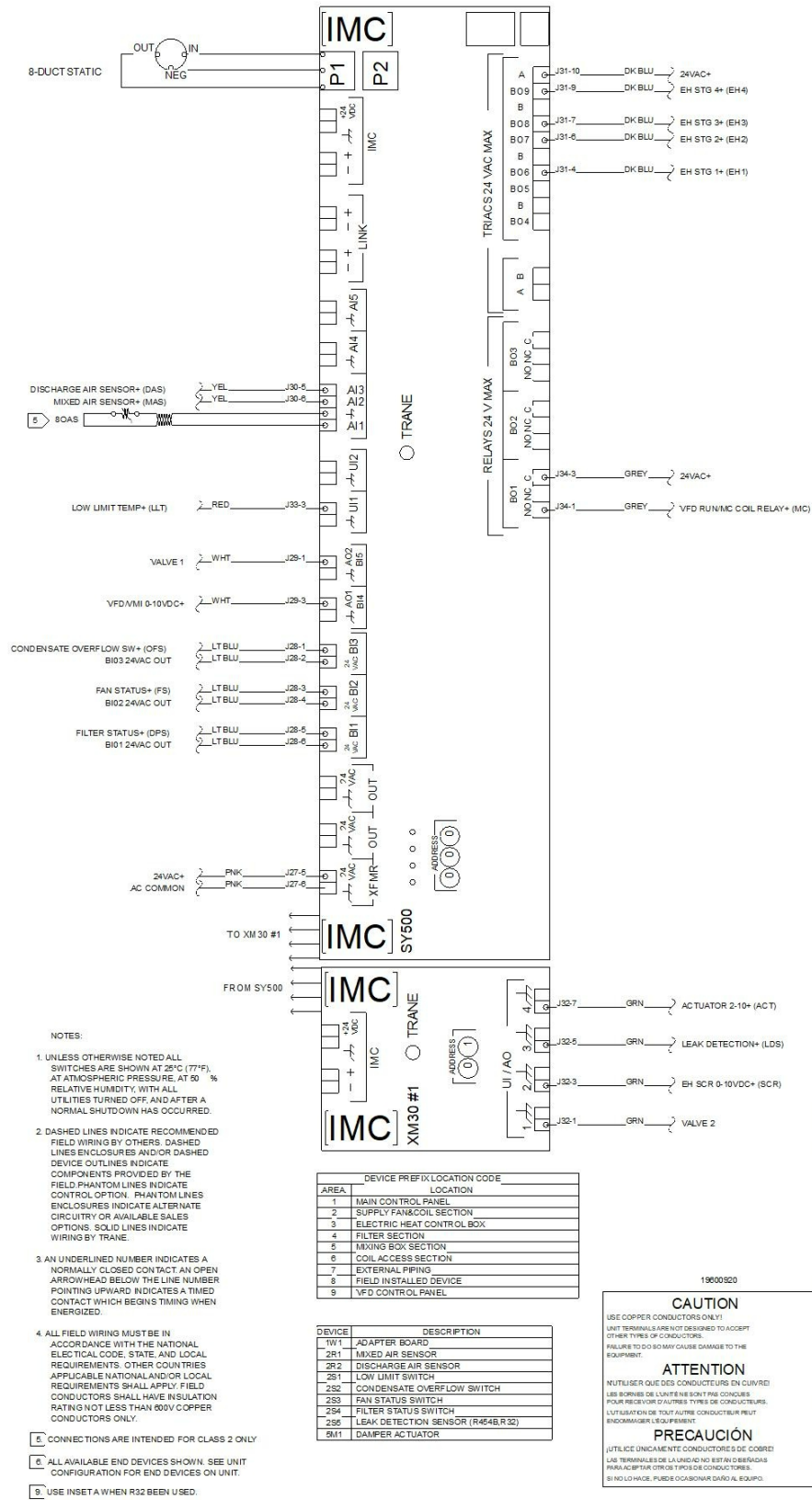
COVER HELD BY CENTER SCREW

EXT	DESCRIPTION
06	90 IN STATIC PRESSURE

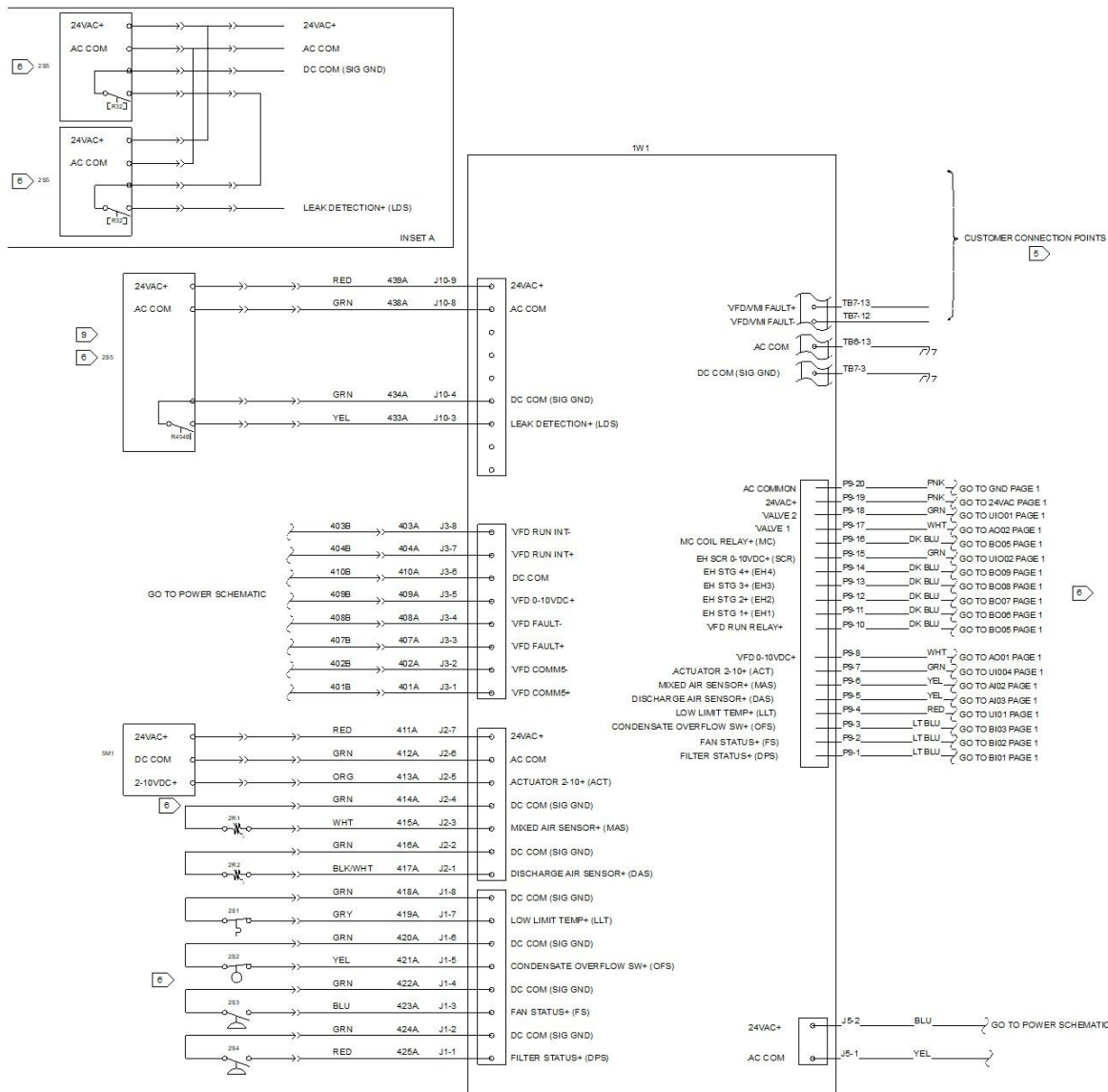
Accessory - Performance Climate Changer (UCCA)
Filter Schedule
Item: A1-A2 Qty: 2 Tag(s): AHU-1L, AHU-2L

Unit Tag(s)	Filter Arrangement	Filter Type	MERV Rating	Filter Quantity	Filter Size
AHU-1L, AHU-2L	2" flat filter mixing section	2"	MERV 8	2	16 x 20
				1	16 x 25
				2	20 x 20
				1	20 x 25

Field Wiring - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L



Field Wiring - Performance Climate Changer (UCCA)
Item: A1, A2 Qty: 2 Tag(s): AHU-1L, AHU-2L



- NOTES:
1. UNLESS OTHERWISE NOTED ALL SWITCHES ARE SHOWN AT 25°C (77°F), AT ATMOSPHERIC PRESSURE, AT 50 % RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
 2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINES ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINES INDICATE CONTROL OPTION. PHANTOM LINES ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINES INDICATE WIRING BY TRANE.
 3. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT. AN OPEN ARROWHEAD BELOW THE LINE NUMBER POINTING UPWARD INDICATES A TIMED CONTACT WHICH BEGINS TIMING WHEN ENERGIZED.
 4. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, STATE, AND LOCAL REQUIREMENTS. OTHER COUNTRIES APPLICABLE NATIONAL AND/OR LOCAL REQUIREMENTS SHALL APPLY. FIELD CONDUCTORS SHALL HAVE INSULATION RATING NOT LESS THAN 600V COPPER CONDUCTORS ONLY.

5. CONNECTIONS ARE INTENDED FOR CLASS 2 ONLY.
6. ALL AVAILABLE END DEVICES SHOWN. SEE UNIT CONFIGURATION FOR END DEVICES ON UNIT.
8. USE INSET A WHEN R32 BEBV USED.

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	MAIN CONTROL PANEL
2	SUPPLY FAN&COIL SECTION
3	ELECTRIC HEAT CONTROL BOX
4	FILTER SECTION
5	MIXING BOX SECTION
6	COIL ACCESS SECTION
7	EXTERNAL PIPING
8	FIELD INSTALLED DEVICE
9	VFD CONTROL PANEL

DEVICE	DESCRIPTION
1W1	ADAPTER BOARD
2R1	MIXED AIR SENSOR
2R2	DISCHARGE AIR SENSOR
2S1	LOW LIMIT SWITCH
2S2	CONDENSATE OVERFLOW SWITCH
2S3	FAN STATUS SWITCH
2S4	FILTER STATUS SWITCH
2S5	LEAK DETECTION SENSOR (R454B/R32)
5M1	DAMPER ACTUATOR

19000320

CAUTION

USE COPPER CONDUCTORS ONLY.
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

ATTENTION

N'UTILISER QUE DES CONDUCTEURS EN CUivre!
LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.
L'UTILISATION DE TOUT AUTRE CONDUCTEUR PEUT ENDOMMAGER L'ÉQUIPEMENT.

PRECAUCIÓN

UTILICE ÚNICAMENTE CONDUCTORES DE COBRE!
LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.
SI NO LO HACE, PUEDE OCASIONAR DAÑO AL EQUIPO.

WARNING

HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS AND FOLLOW LOCK OUT/TAG OUT PROCEDURES BEFORE SERVICING. INSURE THAT ALL MOTOR CAPACITORS HAVE DISCHARGED TO ZERO VOLTAGE. UNITS WITH VARIABLE SPEED DRIVE, REFER TO DRIVE INSTRUCTIONS FOR CAPACITOR DISCHARGE. FAILURE TO DO THE ABOVE BEFORE SERVICING COULD RESULT IN DEATH OR SERIOUS INJURY.

AVERTISSEMENT

TENSION DANGEREUSE!
COUPER TOUTES LES TENSIONS ET OUVRIER LES SECTIONNEMENTS À DISTANCE. PUIS SUIVRE LES PROCÉDURES DE VERROUILLAGE ET D'ÉTIQUETTES AVANT TOUTE INTERVENTION. VÉRIFIER QUE TOUTS LES CONDENSATEURS DES MOTEURS SONT DÉCHARGÉS. DANS LE CAS CONTRAIRE, CONSULTER LES INSTRUCTIONS D'ENTRETIEN POUR DÉCHARGER LES CONDENSATEURS.

ADVERTENCIA

VOLTAJE PELIGROSO!
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUIDO LAS DESCONEXIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CERRAR Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGURESE DE QUE TODOS LOS CONDENSADORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE AL CERO VOLTIO. PARA LAS UNIDADES CON VOLTAJE VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR. EL NO REALIZARLO ANTERIORMENTE INDICADO, PODRÁ OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.

Field Wiring - Performance Climate Changer (UCCA)**MCA MOP Schedule****Item: A1-A2 Qty: 2 Tag(s): AHU-1L, AHU-2L**

Unit Tag(s)	Circuit	Circuit Description	Voltage/Phase/Hz	FLA (A)	MCA (A)	MOP (A)
AHU-1L, AHU-2L	1	Supply fan motor(s)	200-208/3/60	28.50	35.50	60.00

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - Performance Climate Changer (UCCA)

Item	Tag(s)	Qty	Description	Model Number
A1	AHU-1L	1	Performance Climate Changer (UCCA)	UCCAH14A0J0FZ014000003FD868BA1DC0020A0B
A2	AHU-2L	1	Performance Climate Changer (UCCA)	UCCAH14A0J0FZ014000003FD872BA1DC0020A0B

Field Installed Option Description	Part/Ordering Number
Outside air temperature and duct static press sensor, fact-provided, ships loose	