Submittal

Prepared For:
Action Mechanical

Date: January 10, 2024

Job Name:
Bethany ES Cafe HVAC Replacement

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

Product Summary

Qty	Product
1	3-10Ton R-410 Packaged Heat Pump (W4C)

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Trane U.S. Inc.
4501 South Tryon Street
Charlotte, NC 28217
Office Phone: (704) 525-9600

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.

Table of Contents

Tag Data - 3-10Ton R-410 Packaged Heat Pump (W4C) (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
A1	RTU-39	1	10-Ton Heat Pump Precedent	WSC120H4RGB**B0A1A1B60000000000000000000

DX cooling
Standard efficiency
Convertible
10 Ton
460/60/3
Microprocessor controls 3ph
18 kW@240,480,600 derate to unit voltage
Motorized OA damper 0-50% 3 ph
Hinged panels/standard filters
Std cond coil w/hail guard 3 ph
Through the base electrical
Non-fused disconnect 3 ph
Powered convenience outlet
BACnet Communications Interface 3 ph
Seismic Adapter Curb to fit Existing Curb
Room sensor with temperature adjustment with override (Field Installed)

Performance Data - 3-10Ton R-410 Packaged Heat Pump (W4C)

Tags	RTU-39
Airflow application	Downflow
Design Airflow (cfm)	3200
Elevation (ft)	0.00
Cooling EDB (F)	80.00
Cooling EWB (F)	67.00
Ambient Temperature (F)	95.00
Cooling LDB (F)	56.33
Cooling LWB (F)	55.65
Gross Total Capacity (MBh)	114.60
Gross Sensible Capacity (MBh)	85.35
Gross Latent Capacity (MBh)	29.21
Net total capacity (MBh)	112.80
Net sensible capacity (MBh)	83.55
Output htg capacity (MBh)	101.74
Output htg capacity w/fan (MBh)	102.43
Electric heat output (MBh)	61.47
Heating EAT (F)	70.00
Heating ambient temp (F)	47.00
Heating ambient WB (F)	42.60
Heating ambient relative humidity (%)	70.00
Heating delta T (F)	29.44
Electric heat air temp rise (F)	17.69
Design ESP (in H2O)	0.100
Electric heat static pressure add (in H2O)	0.020
Component S.P. (in H2O)	0.170
Feild supplied drive kit required	None
Indoor mtr operating power (bhp)	0.62
Indoor srpm (rpm)	1013
Compressor power (kW)	8.70
System power (kW)	10.02
IPLV @ AHRI (IPLV)	14.1
MCA (A)	51.00
MOP (A)	60.00
MCA for 230v w/elec heat (A)	0.00
MOP for 230v w/ elec heat (A)	0.00
Compressor 1 RLA (A)	14.40
Compressor 2 RLA (A)	0.00
Evaporator fan FLA (A)	3.60
Condenser fan FLA (A)	1.60
Electric Heat FLA (A)	21.70
Evaporator face area (sq ft)	12.36
Evaporator face velocity (ft/min)	259
Evaporator fin spacing (Per Foot)	192
Evaporator rows (Each)	4.00
Min. unit operating weight (lb)	850.0
Max unit operating weight (lb)	1239.0
Fan motor heat (MBh)	0.70
Evap Coil Leaving Air Temp (DB) (F)	55.32
Evap Coil Leaving Air Temp (WB) (F)	55.25

Tags	RTU-39
Rated capacity (AHRI) (MBh)	115.00
Refrig charge (HFC-410A) - ckt 1 (lb)	16.3
ASHRAE 90.1	Yes
Saturated Suction Temp 1 (F)	48.43
Saturated Discharge Temp 1 (F)	121.68
SEER/IEER @ AHRI conditions	14.10
EER @ AHRI Conditions (EER)	11.0
Total Static Pressure (in H2O)	0.290
Ducted Discharge - 63 Hz (dB)	82
Ducted Discharge - 125 Hz (dB)	77
Ducted Discharge - 250 Hz (dB)	73
Ducted Discharge - 500 Hz (dB)	69
Ducted Discharge - 1 kHz (dB)	65
Ducted Discharge - 2 kHz (dB)	63
Ducted Discharge - 4 kHz (dB)	54
Ducted Discharge - 8 kHz (dB)	52
Ducted Inlet - 63 Hz (dB)	83
Ducted Inlet - 125 Hz (dB)	71
Ducted Inlet - 250 Hz (dB)	65
Ducted Inlet - 500 Hz (dB)	58
Ducted Inlet - 1 kHz (dB)	56
Ducted Inlet - 2 kHz (dB)	55
Ducted Inlet - 4 kHz (dB)	47
Ducted Inlet - 8 kHz (dB)	41
Outdoor Noise - 63 Hz (dB)	86
Outdoor Noise - 125 Hz (dB)	90
Outdoor Noise - 250 Hz (dB)	86
Outdoor Noise - 500 Hz (dB)	84
Outdoor Noise - 1 kHz (dB)	81
Outdoor Noise - 2 kHz (dB)	76
Outdoor Noise - 4 kHz (dB)	72
Outdoor Noise - 8 kHz (dB)	67
Length (ft)	7.39
Width (ft)	4.44
Height (ft)	3.91
Indoor Fan Type	BC Plenum
Indoor Fan Drive Type	Direct
Outdoor Fan Type	Propeller
Outdoor Fan Drive Type	Direct
Outdoor Fan Quantity	1
Heating Type	Electric
EER2 @ AHRI Conditions	0.00
SEER2 @ AHRI Conditions	0.00

Mechanical Specifications - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39

General
The units shall be convertible airflow. The operating range shall be between 115°F and 0°F in cooling as standard from the factory for units with microprocessor controls. Cooling performance shall be rated in accordance with ARI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-410A, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be cULus listed and labeled, classified in accordance for Central Cooling Air Conditioners.

Case
Unit casing shall be constructed of zinc coated, heavy gauge, and galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 672 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. All exposed vertical panels and top covers in the indoor air section shall be insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material. All insulation edges shall be either captured or sealed. The unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 1 1/8" high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up. The base of the unit shall have provisions for forklift and crane lifting, with forklift capabilities on three sides of the unit.

Unit Top
The top cover shall be one piece construction or, where seams exist, it shall be double-hemmed and gasket-sealed. The ribbed top adds extra strength and enhances water removal from unit top.

Filters
Throwaway filters shall be standard on all units. Optional 2" MERV 8 and MERV 13 filters shall also be available.

Compressors
All units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors.

Refrigerant Circuits
Service pressure ports, and refrigerant line filter driers are factory-installed as standard. An area shall be provided for replacement suction line driers.

Evaporator and Condenser Coils
Internally finned, 5/16"copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. Coils shall be leak tested at the factory to ensure the pressure integrity. The evaporator coil and condenser coil shall be leak tested to 650 psig and pressure tested to 450 psig. The condenser coil shall have a patent pending 1+1+1 hybrid coil designed with slight gaps for ease of cleaning. A removable, reversible, double-sloped condensate drain pan with through the base condensate drain is standard.

Tool-less Hail Guards
Tool-less, hail protection quality coil guards are available for condenser coil protection.

Outdoor Fans
The outdoor fan shall be direct-drive, statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor shall be permanently lubricated and shall have built-in thermal overload protection.

Indoor Fan
Standard efficiency 6 to 8.5 ton units come standard with belt drive motors with an adjustable idlerarm assembly for quick-adjustment to fan belts and motor sheaves. All high efficiency and 10 ton standard efficiency shall have variable speed direct drive motors. All motors shall be thermally protected. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).

Plenum Fan

The following unit shall be equipped with a direct drive plenum fan design (WSC120E). Plenum fan design shall include a backward-curved fan wheel along with an external rotor direct drive variable speed indoor motor. All plenum fan designs will have a variable speed adjustment potentiometer located in the control box.

Controls
Unit shall be completely factory-wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Unit shall provide an external location for mounting a fused disconnect device. A choice of microprocessor or electromechanical controls shall be available. Microprocessor controls provide for volt control functions. The resident control algorithms shall make all heating, cooling, and/or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control algorithm maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized Microprocessor shall provide anti-short cycle timing and time delay between compressors to provide a higher level of machine protection.

Phase monitor
Phase monitor shall provide 100% protection for motors and compressors against problems caused by phase loss, phase imbalance, and phase reversal. Phase monitor is equipped with an LED that provides an ON or FAULT indicator. There are no field adjustments. The module will automatically reset from a fault condition.

BACnet Communications
The BACnet communications interface allows the unit to communicate directly with a generic open protocol BACnet MS/TP Network Building Automation System Controls.

Powered or Unpowered Convenience Outlet
This is a GFCI, 120v/15amp, 2 plug, convenience outlet, either powered or unpowered. When the convenience outlet is powered, a service receptacle disconnect will be available. The convenience outlet is powered from the line side of the disconnect or circuit breaker, and therefore will not be affected by the position of the disconnect or circuit breaker. This option can only be ordered when the Through the Base Electrical with either the Disconnect Switch or Circuit Breaker option is ordered.

Hinged Access Doors
Sheet metal hinges are available on the Filter/Evaporator, Supply Fan/Heat, and the Compressor/Control Access Doors.

Electric Heaters
Electric heat modules shall be available for installation within basic unit. Electric heater elements shall be constructed of heavy-duty nickel chromium elements internally delta connected for 240 volt, wye connected for 480 and 600 volt. Staging shall be achieved through ReliaTel. Each heater package shall have automatically reset high limit control operating through heating element contactors. All heaters shall be individually fused from the factory, where required, and shall meet all NEC and CEC requirements when properly installed. Power assemblies shall provide single point connection. Electric heat modules shall be UL listed or CSA certified.

Motorized Outside Air Dampers
Manually set outdoor air dampers shall provide up to 50 percent outside air. Once set, outdoor air dampers shall open to set position when indoor fan starts. The damper shall close to the full closed position when indoor fan shuts down.

Through the Base Electrical Access
An electrical service entrance shall be provided allowing electrical access for both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field-installed disconnect switch.

Through the Base Electrical with Disconnect Switch
This 3-pole, molded case, disconnect switch with provisions for through the base electrical connections are available. The disconnect switch will be installed in the unit in a water tight enclosure with access through a swinging door. Wiring will be provided from the switch to the unit high voltage terminal block. The switch will be UL/CSA agency recognized.

Note: The disconnect switch will be sized per NEC and UL guidelines but will not be used in place of unit overcurrent protection.

Control Specification (if applied in a system with a system-level controller)

A. CONTROL SYSTEM OVERVIEW:
Control System shall include a System Controller, all controllers for HVAC equipment and ancillary devices (such as lights and exhaust fans), wireless communication between the System Controller, equipment controllers, and space sensors, and all wiring and end devices required. Control System to be fully programmed and commissioned by the installing contractor.

B. TOUCH SCREEN DISPLAY:
Control System shall include a 10" color Touch Screen Display for use by building occupants to adjust zone temperature setpoints, override lighting and HVAC equipment for after-hours use, modify schedules, and view service notifications. This display shall have PIN access for users and provide setpoint adjustment limits.

C. MOBILE APP:
Control System manufacturer shall provide a Mobile App for iOS and Android devices to allow occupants to perform the same functions (listed above) as the Touch Screen Display.

D. WEB BROWSER INTERFACE:
System Controller shall have an embedded Web Browser Interface to allow the installer and service providers to make adjustments to system control parameters and view trend logs and other service information.

E. SYSTEM CONTROLLER:
System Controller shall provide scheduling and coordination of all HVAC equipment, exhaust fans, and controlled lighting devices. The System Controller shall include a software application that coordinates the operation of rooftop units and VAV terminals. The System Controller shall support multiple system types, including Single-Zone Constant Volume, Single-Zone VAV, Changeover Bypass, Changeover VAV, and Multiple-Zone VAV with Terminal Heat (electric or hot water). The System Controller shall provide energy optimization strategies including Night Setback, Optimal Start, Fan Pressure Optimization, Discharge Air Temperature Reset, and Demand-Controlled Ventilation.

F. REMOTE ACCESS/NETWORK SECURITY:
Installer shall provide secure remote access to the Control System to enable the owner or service provider to access the system remotely using the Mobile App or Web Browser Interface. The Control System must be secured behind a firewall and not allow any inbound ports to be open or exposed to the internet. Control System manufacturer shall provide a remote access portal accessible by the owner and/or a service provider (as authorized by the owner).

Sequence of Operation (if applied in a SINGLE-ZONE CONSTANT-VOLUME SYSTEM or a CHANGEOVER BYPASS SYSTEM)

A. SYSTEM OPERATING MODES:
The System Controller shall send the equipment controllers Occupied/Unoccupied, Morning Warm-up/Pre-cool, and Heat/Cool modes. If communication is lost, the equipment controllers shall operate using default modes and setpoints.

1. NIGHT SETBACK:
During unoccupied mode, the system shall shut off. If the zone temperature drifts to the unoccupied heating or cooling setpoint, the system shall start up to heat or cool the zone, while the OA damper remains closed (unless economizing).

2. OPTIMAL START:
The System Controller shall automatically determine the optimal start time, such that each zone reaches its occupied setpoint just in time for scheduled occupancy.

3. DEMAND-CONTROLLED VENTILATION:
For those zones equipped with an occupancy sensor or CO2 sensor, outdoor airflow shall be reset based on occupancy status and/or measured CO2 concentration.

B. SINGLE-ZONE CONSTANT-VOLUME SYSTEM

1. OCCUPIED HEAT/COOL:
The RTU shall operate the supply fan continuously and modulate (or cycle) compressors, modulate (or stage) heat, and/or enable airside economizing to maintain zone temperature at setpoint. The OA damper shall open to bring in the required amount of ventilation.

2. MORNING WARM-UP/PRE-COOL:

The RTU shall operate the supply fan and modulate (or cycle) compressors or modulate (or stage) heat to raise/lower zone temperature to its occupied setpoint. The OA damper shall remain closed, unless economizing.

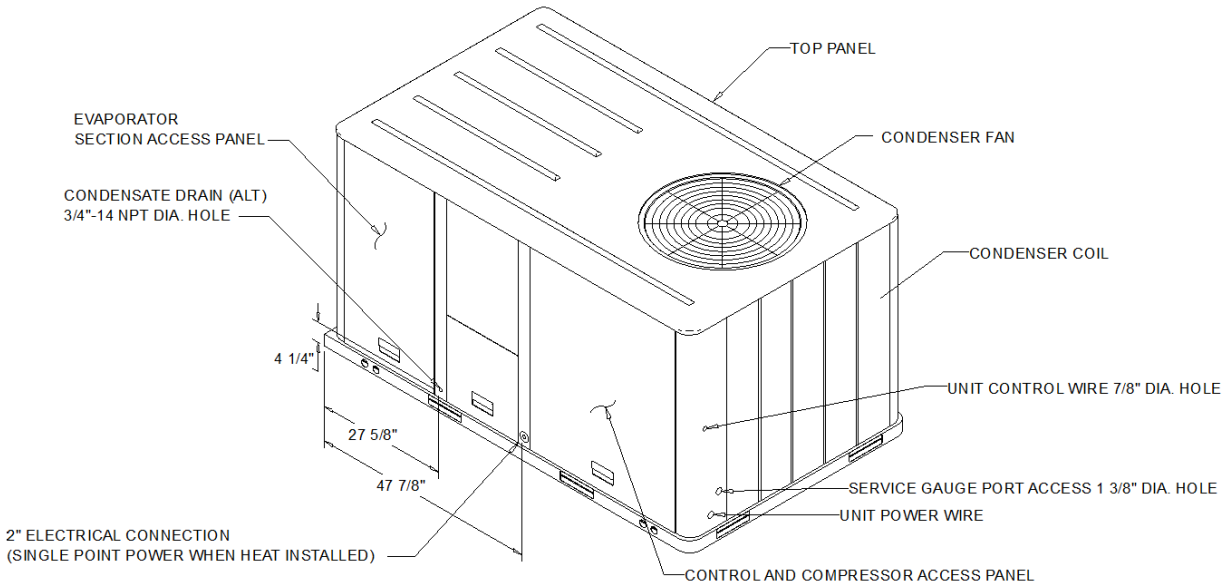
D. CHANGEOVER BYPASS SYSTEM

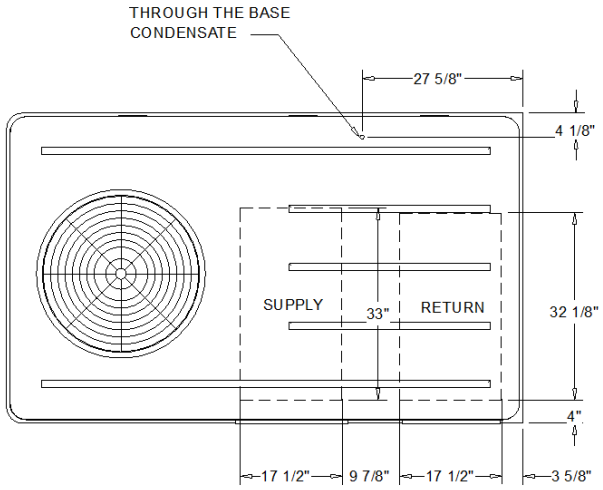
1. OCCUPIED HEAT/COOL:
Each VAV terminal shall use pressure-independent control, with airflow measurement, to vary primary airflow to maintain zone temperature at its occupied setpoint. The RTU shall modulate the bypass damper to maintain duct static pressure at setpoint and modulate (or cycle) compressors, modulate (or stage) heat, and/or enable airside economizing based on current zone cooling/heating demands. The OA damper shall open to bring in the required amount of ventilation.

2. MORNING WARM-UP/PRE-COOL:
Each VAV terminal unit shall vary primary airflow to raise/lower zone temperature to its occupied setpoint. The RTU shall modulate the bypass damper to maintain duct static pressure at setpoint and modulate (or cycle) compressors or modulate (or stage) heat based on current zone cooling/heating demands. The OA damper shall remain closed, unless economizing.

3. COOLING/HEATING CHANGEOVER LOGIC:
The System Controller shall determine the overall system cooling/heating mode based on "voting" from each zone. When the majority of zones require cooling, the RTU shall operate in cooling mode and any zone that requires heating shall reduce primary airflow to minimum. When the majority of zones require heating, the RTU shall operate in heating mode and any zone that requires cooling shall reduce primary airflow to minimum.

Dimensional Drawings - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39

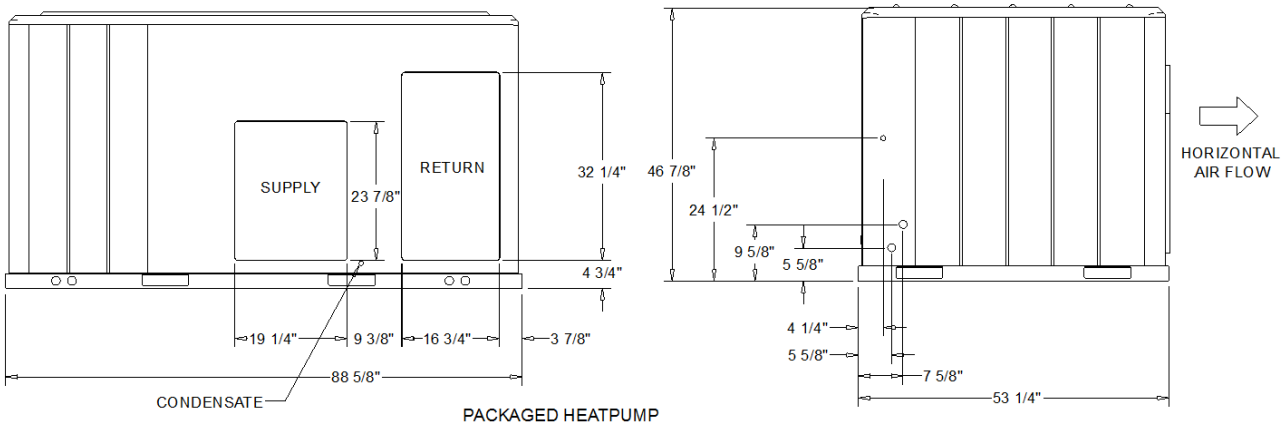




PLAN VIEW UNIT

DIMENSION DRAWING

NOTES:
1. THRU -THE -BASE ELECTRICAL IS NOT STANDARD ON ALL UNITS.
2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION



PACKAGED HEATPUMP

DIMENSION DRAWING

Dimensional Drawings - 3-10Ton R-410 Packaged Heat Pump
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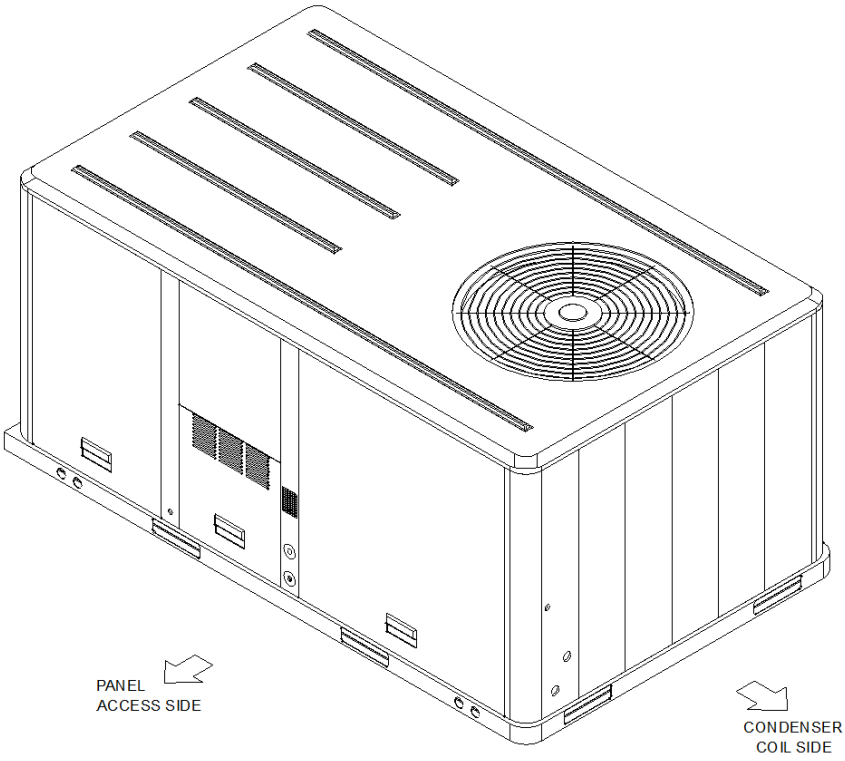
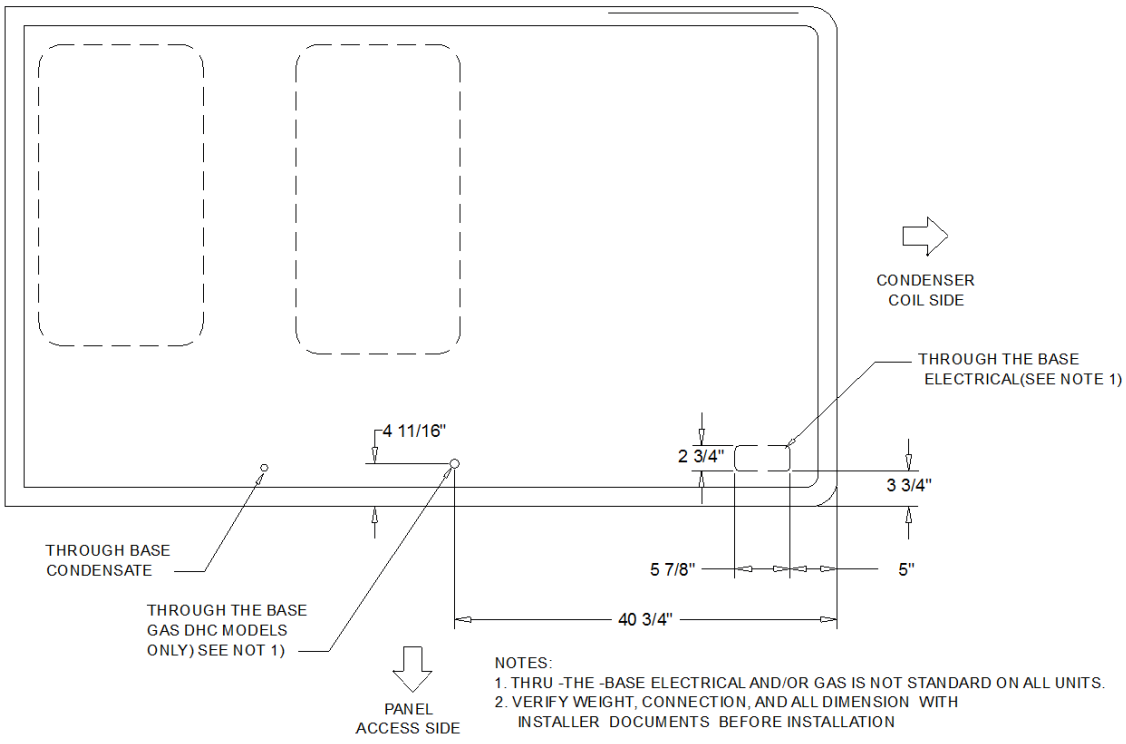




THRU THE BASE UTILITIES

PLAN / ISO VIEW DRAWING

Dimensional Drawings - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39

ELECTRICAL / GENERAL DATA

GENERAL (2)(4)(6)

Model:	WSC120H
Unit Operating Voltage:	414-506
Unit Primary Voltage:	460
Unit Secondary Voltage:	--
Unit Hertz:	60
Unit Phase:	3
EER	

Standard Motor

Minimum Circuit Ampacity:	24.0
Maximum Fuse Size:	35.0
Maximum (HACR) Circuit Breaker:	35.0

Oversized Motor
MCA:
MFS:
MCB:

Field Installed Oversized Motor
MCA:
MFS:
MCB:

WITH HEATER

Heater kW Rating :	18.0
Stage:	1
MCA:	51.0
MFS	60.0
MCB	60.0

Oversized Motor
MCA: N/A
MFS: N/A
MCB: N/A

Field Installed Oversized Motor
MCA: N/A
MFS: N/A
MCB: N/A

INDOOR MOTOR

Standard Motor

Number:	1
Horsepower:	2.75
Motor Speed (RPM):	--
Phase:	3
Full Load Amps:	3.6
Locked Rotor Amps:	--

Outsized Motor

Number:	N/A
Horsepower:	N/A
Motor Speed (RPM):	N/A
Phase:	N/A
Full Load Amps:	N/A
Locked Rotor Amps:	N/A

Field Installed Oversized Motor

Number:	N/A
Horsepower:	N/A
Motor Speed (RPM):	N/A
Phase:	N/A
Full Load Amps:	N/A
Locked Rotor Amps:	N/A

COMPRESSOR Circuit 1/2

Number:	1
Horsepower:	10.5
Phase:	3
Rated Load Amps:	14.4
Locked Rotor Amps:	-

OUTDOOR MOTOR

Number:	1
Horsepower:	0.70
Motor Speed (RPM):	1100
Phase:	3
Full Load Amps:	1.6
Locked Rotor Amps:	-

POWER EXHAUST ACCESSORY (3,7)

(Field Installed Power Exhaust)

Phase:	N/A
Horsepower:	N/A
Motor Speed (RPM):	N/A
Full Load Amps:	N/A
Locked Rotor Amps:	N/A

FILTERS

Type:	Throwaway
Furnished:	Yes
Number	4
Recommended	20"x25"x2"

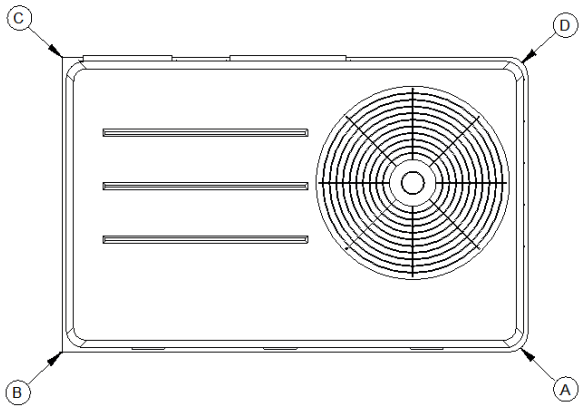
REFRIGERANT (2)

Type	R410
Factory Charge	
Circuit #1	16.3 lb
Circuit #2	

NOTES:

1. Maximum (HACR) Circuit Breaker sizing is for installations in the United States only.
2. Refrigerant charge is an approximate value. For a more precise value, see unit nameplate and service instructions.
3. Value does not include Power Exhaust Accessory.
4. Value includes oversized motor.
5. Value does not include Power Exhaust Accessory.
6. EER is rated at AHRI conditions and in accordance with DOE test procedures.
7. Installation of this power exhaust kit will affect unit level MCA and could affect MOP sizing having a direct impact on existing field wiring and unit protection devices. The change in MCA/MOP is the sole responsibility of the field installing party. Trane will not issue new nameplates as a result of this power exhaust accessory installation. FLA of the power exhaust kit option must be added to the MCA of the unit for building supply conductor sizing determination.

Weight, Clearance & Rigging - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39



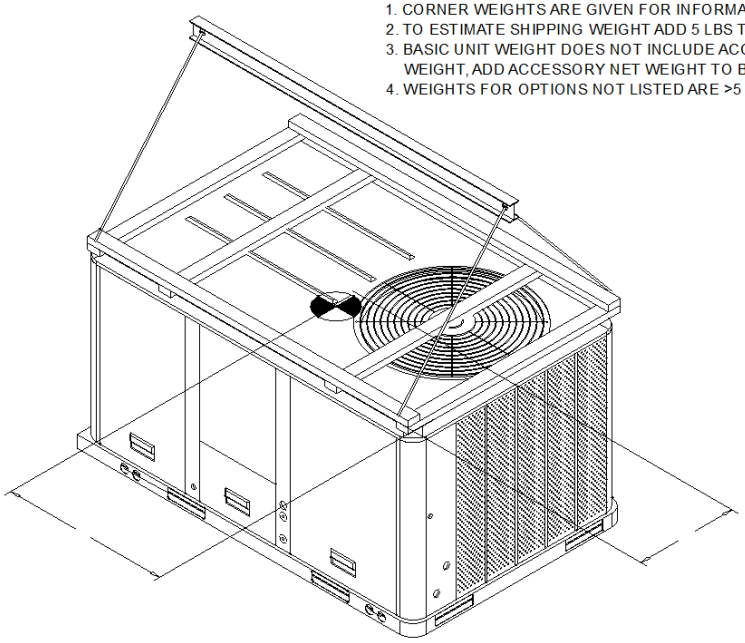
PACKAGED HEAT PUMP
CORNER WEIGHT

INSTALLED ACCESSORIES NET WEIGHT DATA

ACCESSORY	WEIGHTS
ECONOMIZER	
MOTORIZED OUTSIDE AIR DAMPER	30.0 lb
MANUAL OUTSIDE AIR DAMPER	
BAROMETRIC RELIEF	
OVERSIZED MOTOR	
BELT DRIVE MOTOR	
POWER EXHAUST	
HEATER	50.0 lb
THROUGHT THE BASE ELECTRICAL (FIOPS)	13.0 lb
UNIT MOUNTED CIRCUIT BREAKER (FIOPS)	
UNIT MOUNTED DISCONNECT (FIOPS)	5.0 lb
POWERED CONVENIENCE OUTLET (FIOPS)	50.0 lb
HINGED DOORS (FIOPS)	12.0 lb
HAIL GUARD	30.0 lb
SMOKE DETECTOR, SUPPLY / RETURN	
ROOF CURB	

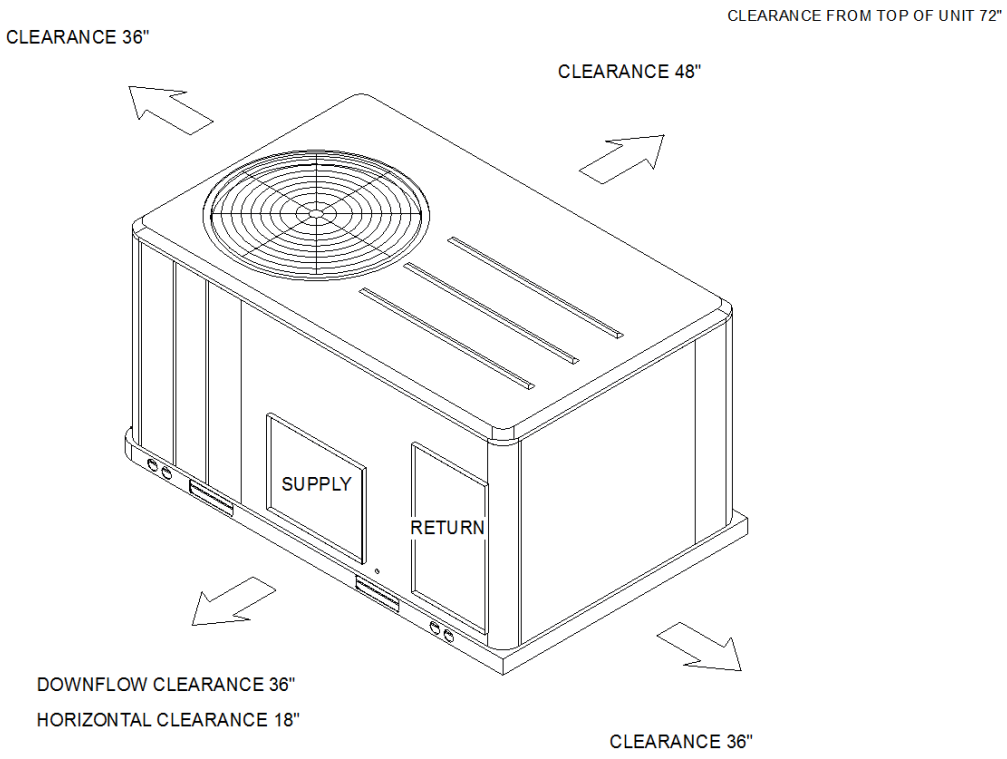
BASIC UNIT WEIGHTS		CORNER WEIGHTS				CENTER OF GRAVITIY	
SHIPPING	NET	(A)	303.0 lb	(C)	218.0 lb	(E) LENGHT	(F) WIDTH
948.0 lb	850.0 lb	(B)	170.0 lb	(D)	159.0 lb	40"	24"

NOTE:
1. CORNER WEIGHTS ARE GIVEN FOR INFORMATION ONLY.
2. TO ESTIMATE SHIPPING WEIGHT ADD 5 LBS TO NET WEIGHT.
3. BASIC UNIT WEIGHT DOES NOT INCLUDE ACCESSORY WEIGHT. TO OBTAIN TOTAL WEIGHT, ADD ACCESSORY NET WEIGHT TO BASIC UNIT WEIGHT.
4. WEIGHTS FOR OPTIONS NOT LISTED ARE >5 LBS.

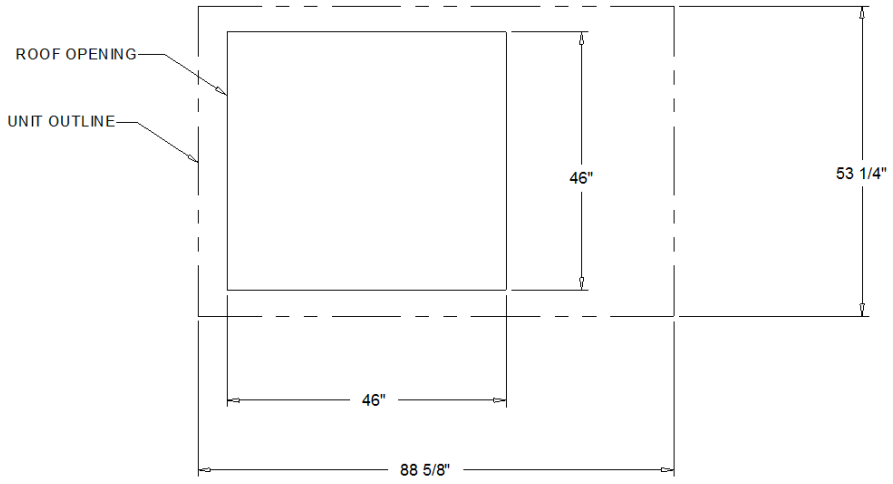


PACKAGED HEAT PUMP
RIGGING AND CENTER OF GRAVITY

Weight, Clearance & Rigging - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39

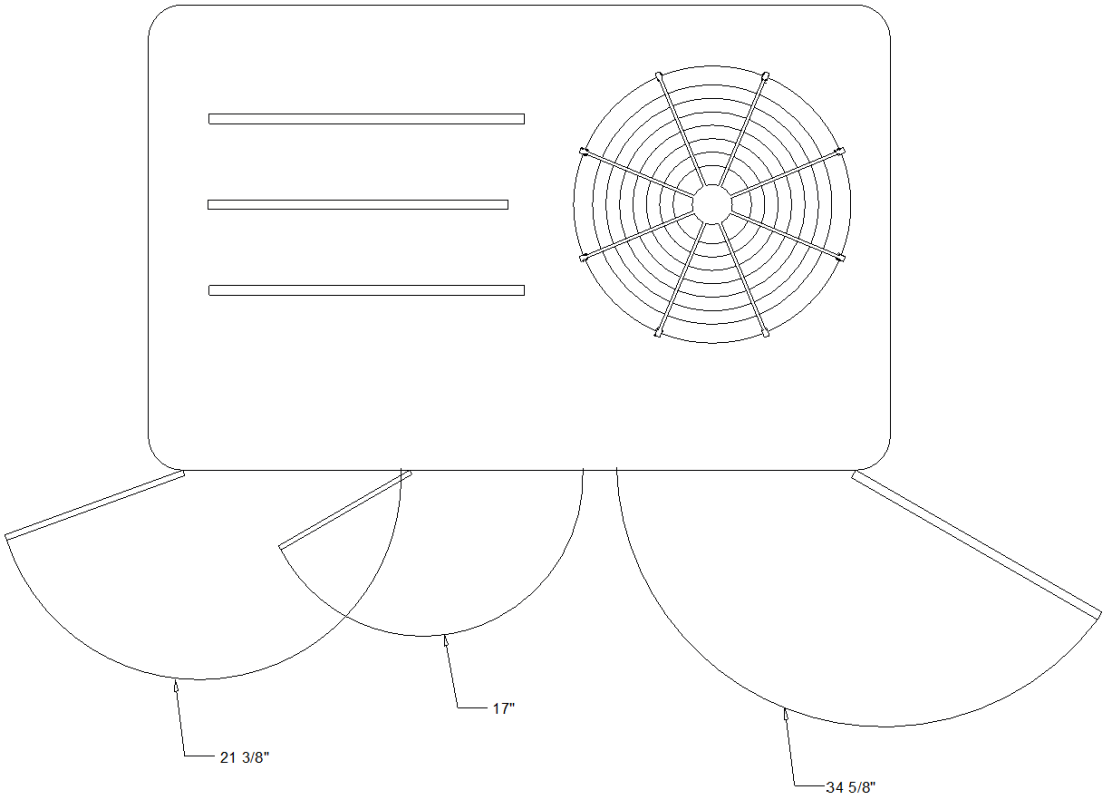


PACKAGED HEAT PUMP
CLEARANCE



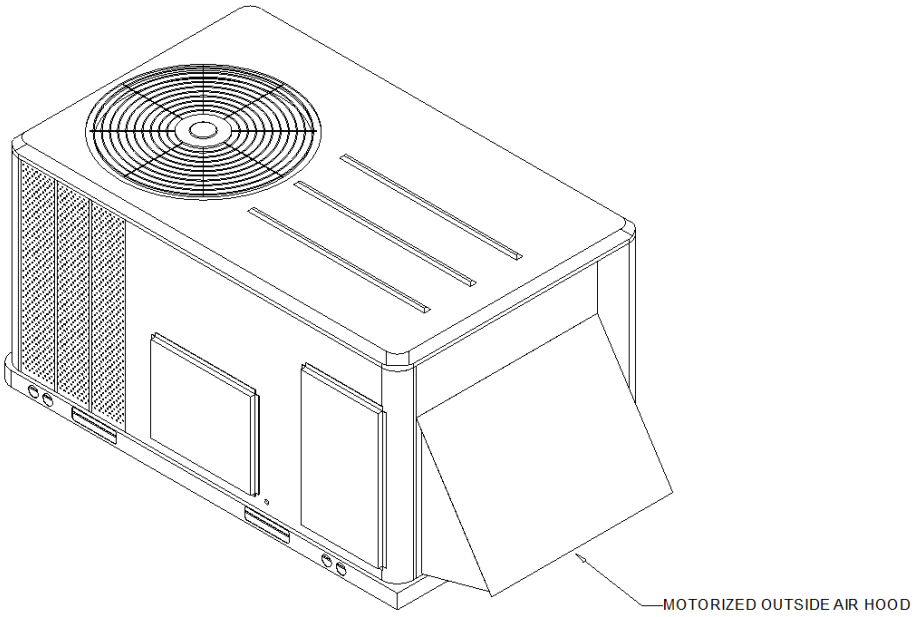
PACKAGED HEAT PUMP
DOWNFLOW TYPICAL ROOF OPENING

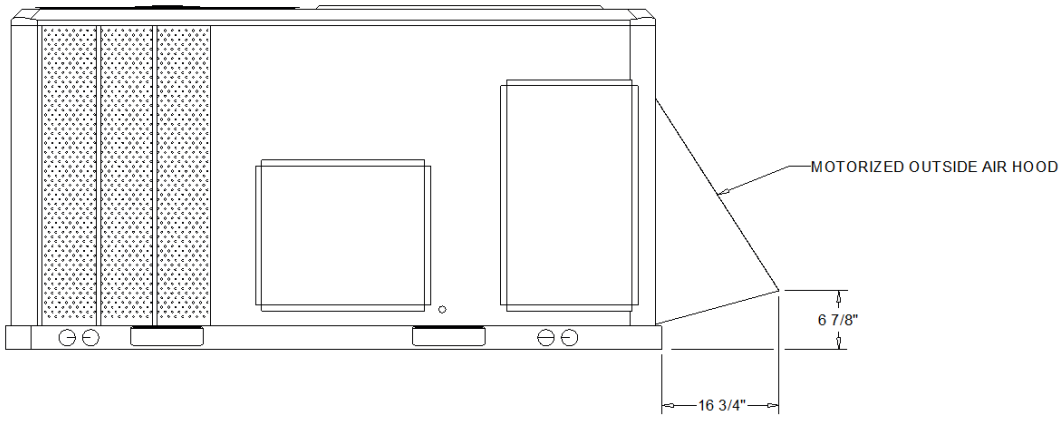
Accessory - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39



SWING DIAMETER - HINGED DOOR(S) OPTION

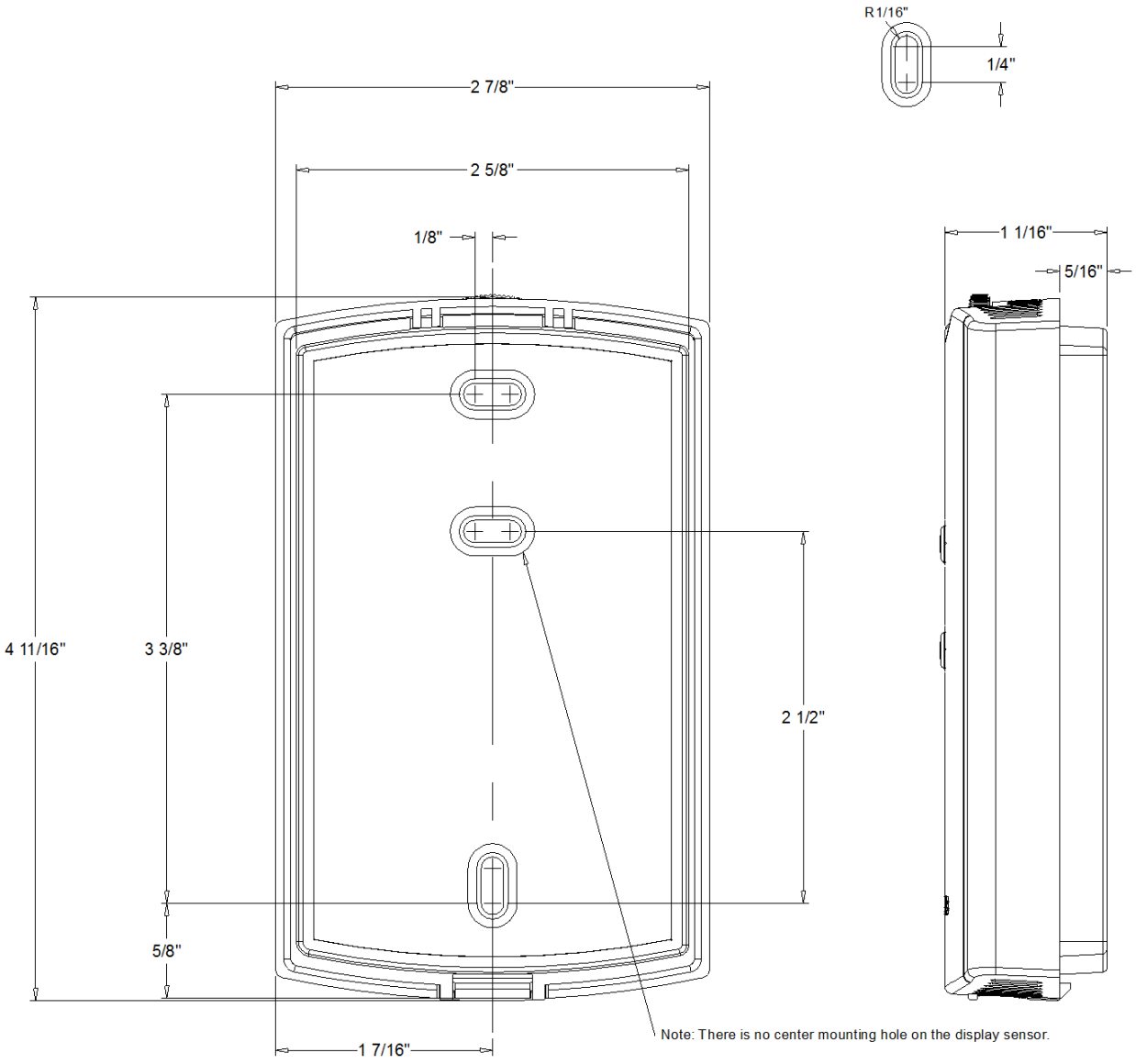
Accessory - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39





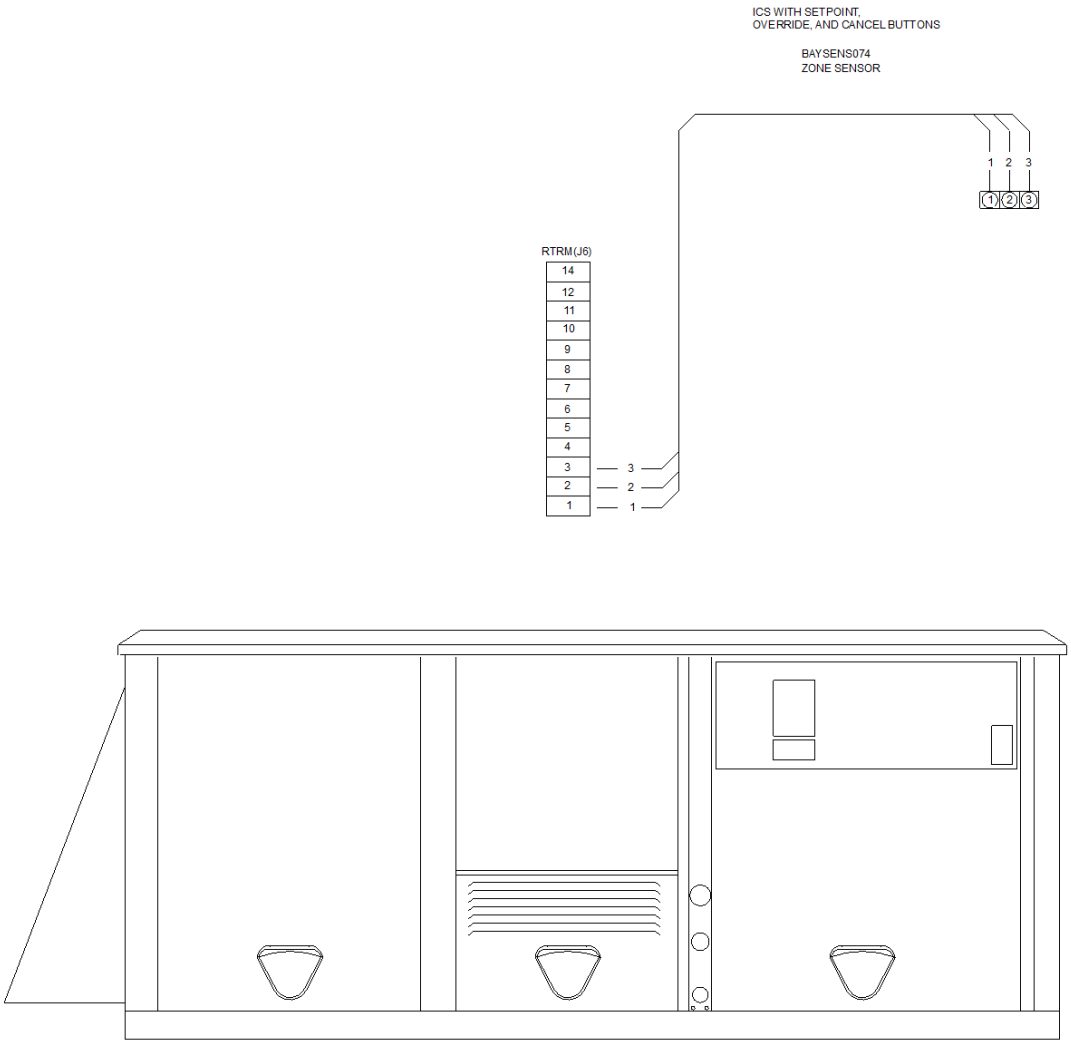
MOTORIZED OUTSIDE AIR HOOD
ACCESSORY

Accessory - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39



BAYSEN074 - ZONE SENSOR
ROOM SENSOR WITH TEMP ADJ AND OVERRIDE

Field Wiring - 3-10Ton R-410 Packaged Heat Pump
Item: A1 Qty: 1 Tag(s): RTU-39



ZONE SENSOR WIRE TABLE

WIRE SIZE	MAXIMUM WIRE LENGTH
22 GAUGE	1800"
20 GAUGE	3000"
18 GAUGE	4500"
16 GAUGE	7200"
14 GAUGE	11700"

NOTE:

1. All wiring and devices shown dashed to be supplied and installed by the customer in accordance with national and local electrical codes.
2. Low voltage control wiring must not be run in conduit with power wiring.

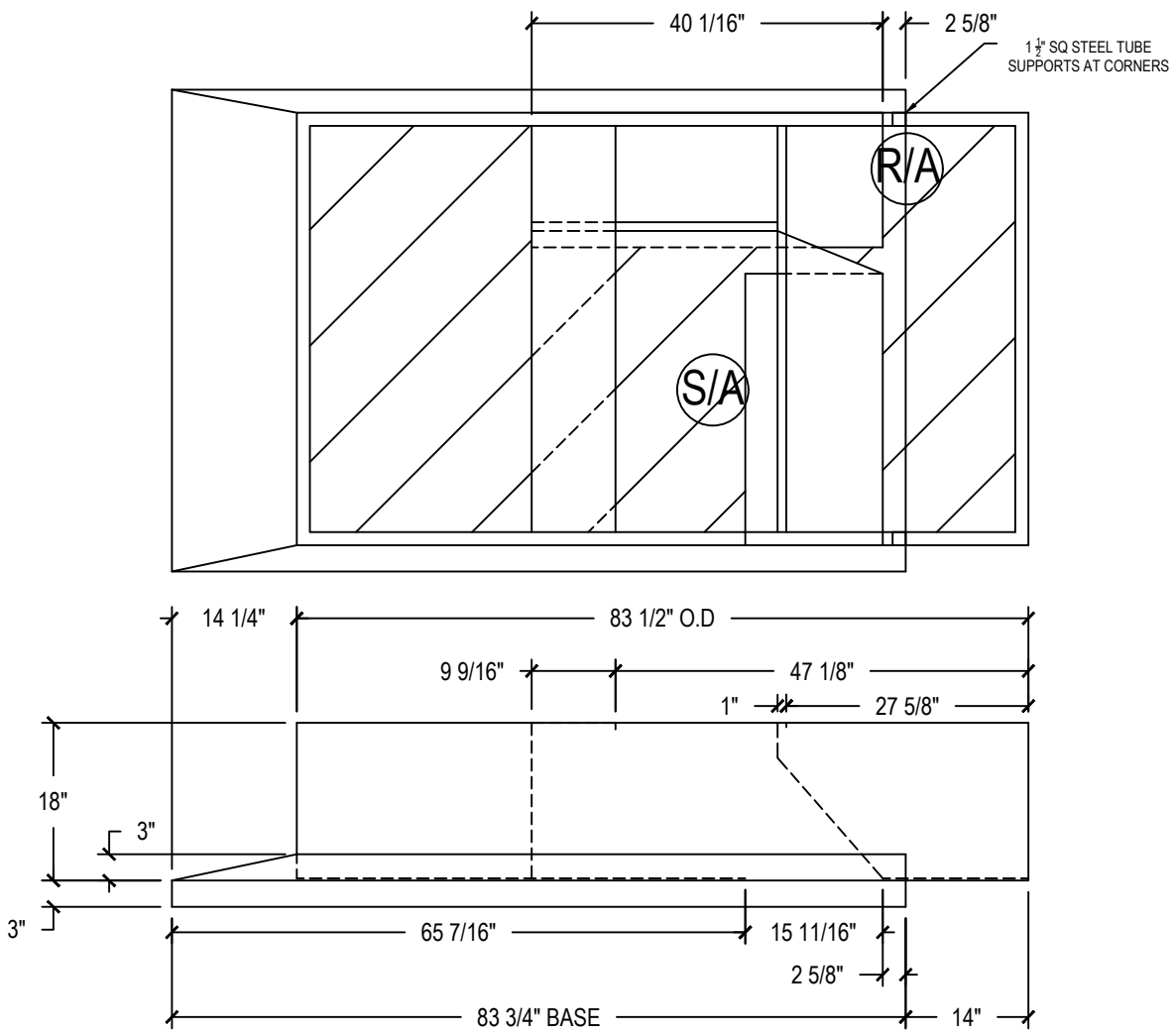
Field Installed Options - Part/Order Number Summary
This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material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

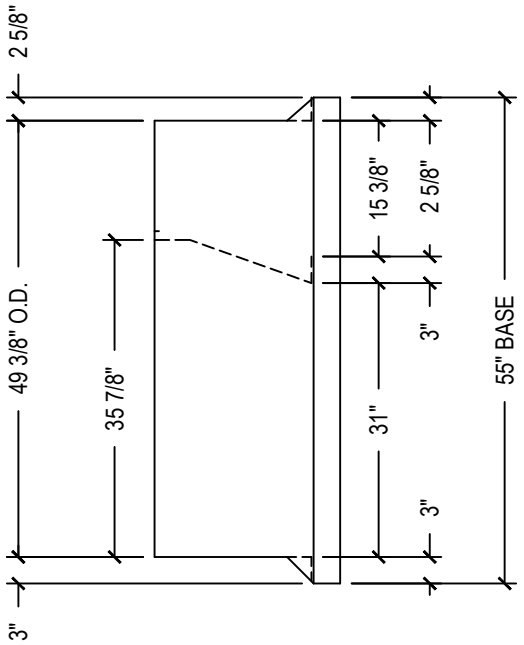
Product Family - 3-10Ton R-410 Packaged Heat Pump

Item	Tag(s)	Qty	Description	Model Number
A1	RTU-39	1	10-Ton Heat Pump Precedent	WSC120H4RGB**B0A1A1 B600000000000000000

Field Installed Option Description	Part/Ordering Number
Room sensor with temperature adjustment with override	BAYSENS074A

Drawing Date: 6-19-08	REV: 001	Approved By:	Approved Date:
SHELL: 14 GA.	PANS: 18 GA.	CHANNELS: 14 GA.	CLOSURES: 12 GA.	TOP FLANGE DIM: 1 1/2"





NOTE: WELD IN BULK-HEADS TO CURB WALL ON 24" CENTERS ALL SIDES (MIN 3 BULK-HEADS)

DESIGNED TO MEET GENERAL SEISMIC AND WIND CRITERIA

QTY.: 1	DRAWN BY.: SLW
NEW UNIT: TRANE	
WSC120H	
OLD UNIT: CARRIER	
50LJ008	
ROLLS OF GASKET: 2	
TAG:	

CURBS PLUS, INC.
8767 Alabama Hwy
Ringgold, GA 30736
Phone:(706) 858-1188 / Fax: (706) 866-2339
website: www.curbs-plus.com

TRANSITION-CURB SYSTEM

TAG PLATE: TR16CR37-SEISMIC

APPROXIMATE WEIGHT: 265 LBS.

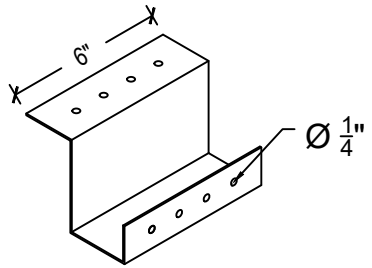
Note: Design subject to change without notice.

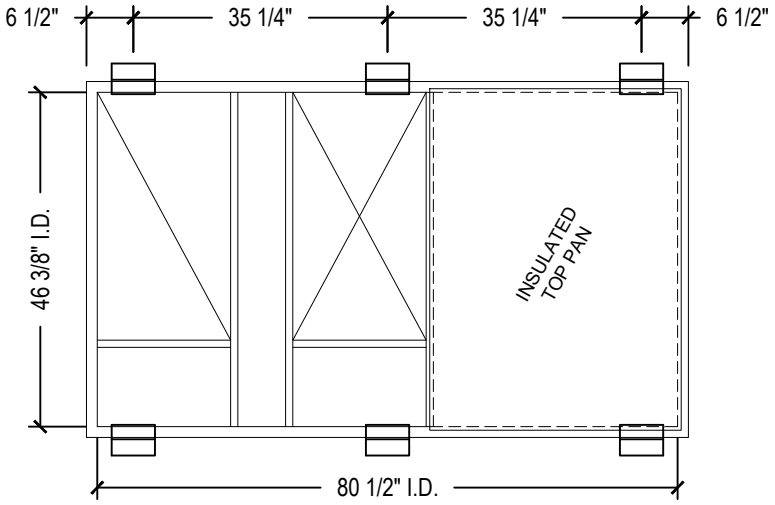
File Name: TR16CR37-1 SEISMIC NEW TRANE YSC YHC TSC THC WSC 072-120A EXISTING CARRIER 48/50LJ008 Curbs Plus

Drawing Date: 1-9-17	REV:	Approved By:	Approved Date:

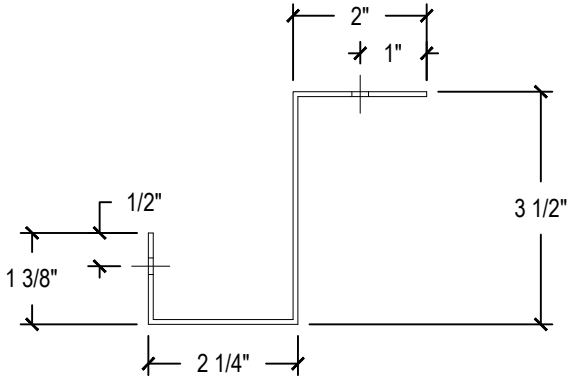
(1.) ON LONG SIDES, ATTACH HOLD DOWN CLIPS TO ROOF CURB OR ADAPTER USING 4 - #14 SELF TAPPING SCREWS PER EACH BRACKET, (2) 6 1/2" OFF CORNERS AND (1) APPROXIMATELY CENTERED.

(2.) AFTER UNIT HAS BEEN POSITIONED ON TOP OF ROOF CURB OR ADAPTER ATTACH HOLD DOWN CLIPS TO UNIT BASE RAIL USINGS 4 - #14 SELF TAPPING SCREWS PER EACH BRACKET.

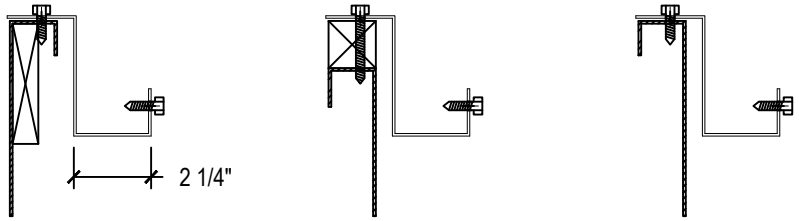




CLIP LOCATIONS



(6) CLIPS PER SET



SELECT HOLES THAT WILL ALLOW FOR ATTACHMENT TO SHEET METAL.
(**DO NOT ATTACH TO WOOD NAILER**)

CURBS PLUS, INC.
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Ringgold, GA 30736
Phone:(706) 858-1188 / Fax: (706) 866-2339
website: www.curbs-plus.com

HOLD DOWN CLIPS

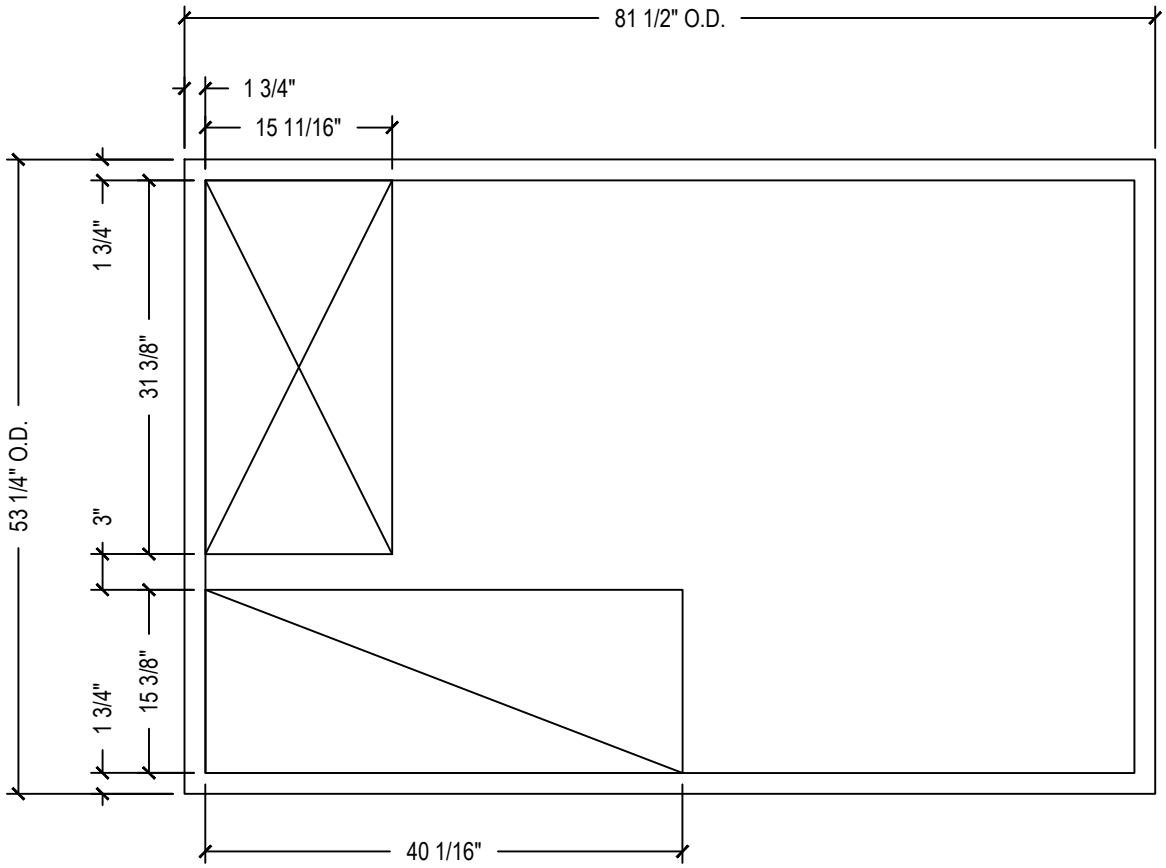
STORE NUMBER.:
QTY.: 1 SET(S) GA.:12 GA.
METAL TYPE: GALVANIZED
TAG:

Note: Design subject to change without notice. FILENAME: (TR-16) TRANE TSC,THC, YSC, YHC, WSC 072-120A

Job Name: Bethany Elem Caf HVAC Replacement - Clover, SC

CURBS PLUS, INC.
www.curbsplus.com

EXISTING CURB VERIFICATION SHEET



QTY: TAG(S): Qty: 1 Unit: CARRIER 50LJ008

Drawing #:CR37