

548J*D**

**SINGLE PACKAGE ROOFTOP
HEAT PUMP UNITS**

WITH FIELD-INSTALLED ELECTRIC HEAT

SIZES 17 & 24 WITH PURON® (R-410A) REFRIGERANT



Submittal Data



Certified to ISO 9001



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



DESCRIPTION

548J***D units are one-piece, two-stage heat pump units that are low profile, prewired, tested and charged at the factory. These are intended for installation on a roof curb accessory (ordered separately), or for slab mounting (for horizontal duct connections). Units are designed to accept field-installed electric heaters. Units may be ordered with various factory-installed options. Field-installed accessories are also available.

STANDARD FEATURES

Base Unit

- Puron (R-410A) HFC refrigerant
- EER's up to 10.8
- IEER's:
 - up to 11.5 with single speed indoor fan motor
 - up to 12.0 with 2-speed/VFD indoor fan motor
- COP's up to 3.3
- ASHRAE 90.1 energy compliant
- Rated in accordance with AHRI Standard 340/360
- Designed in accordance with Underwriters' Laboratories Standard 1995
- Listed by ETL and ETL-Canada
- Two-stage cooling capacity control on all models
- Non-corrosive composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Cooling operating range from 30°F up to 115°F (-1°C up to 46°C).
- Dedicated vertical and horizontal airflow models available, ordered as factory option. No special kits required
- Two-inch disposable return air filters
- Thru-the-bottom power entry capability
- Single point electric connections on field-installed electric heat units
- 24-volt control circuit protected with resettable circuit breaker and 75-VA transformer
- Belt drive, constant torque, permanently lubricated evaporator-fan motor on all size units.
- Totally enclosed condenser motors with permanently lubricated bearings
- State-of-the-art defrost control board, easily configured

for defrost cycles of 30, 60, 90, or 120 minutes.

- Central Terminal Board for component and unit wiring connections.
- Loss of Charge, High-Pressure, and Freeze Protection switches
- Full perimeter base rail with built-in rigging adapters and fork truck slots.

Cabinet

- Access panels with easy grip handles
- Innovative, easy starting, no strip screw features on unit access panels.
- Pre-painted exterior panels and primer-coated interior panels tested to 500 hours salt spray protection
- Fully insulated cabinet
- Tool-less filter access door

Refrigerant System

- Precision sized TXV refrigerant metering devices
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection
- Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless copper tubes.
- Removable gauge line plugs for reading refrigerant pressure with unit panels in place
- Four-way reversing valve operation
- Suction Line Accumulator standard - prevents excessive liquid flood back of refrigerant to the compressor even during the start of the defrost cycle.

STANDARD FEATURES (cont.)

Standard Parts Warranty

- 5-year electric heater (field-installed)
- 5-year compressor
- 1-year parts

SUBMITTAL DATA

Job Name _____
Architect _____
Engineer _____
Contractor _____
Unit Designation _____

PERFORMANCE DATA

Unit Operating Weight _____ lb

Cooling

Net Total Capacity _____ Btuh
Net Sensible Capacity _____ Btuh
Compressor Power Input _____ kW
at Outdoor Air Temperature _____ °F
Indoor Entering Air db: _____ °F wb _____ °F
Airflow _____ CFM External Static Pressure _____ in.wg

Curb Weight _____ lb

Heating

Power Input to Unit _____ kw
Integrated Capacity _____ Btuh
Indoor Operating Air Temperature _____ °F
db
Outdoor Air Temperature _____ °F (Winter Design)
Rating at 70% R.H. Outdoors _____ kW Heater Selected
_____ Heat/Cool Ratio
Electrical Capacity Required _____ Btuh

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz
Minimum Circuit Amps _____ Maximum Overcurrent Protection (Fuse Only) _____

FACTORY-INSTALLED OPTIONS (FIOPs)

☐ **Economizer with DRY BULB sensing and barometric relief**

Standard Air Leak Dampers —

- ☐ Models with W7212 controller provides standard non-diagnostic control. EconoMi\$er IV.
- ☐ Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi\$er X.
- ☐ Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements. EconoMi\$er 2.

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ULTRA LOW LEAK Air Dampers —

- ☐ Models with W7220 controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi\$er X.
- ☐ Models with RTU Open controller meets California Title 24 (section 120.2) Fault Detection and Diagnostic (FDD) requirements, has return, outside air and relief damper leakage that meets Title 24 (section 140.4 and ASHRAE 90.1) requirements - plus 5 year limited parts warranty. EconoMi\$er 2.

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☐ 2-Speed Indoor Fan Motor system utilizes a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor for 2 speed indoor fan motor control. Conforms to ASHRAE 90.1 2010 Standard – section 6.4.3.10.b.

☐ RTU Open multi-protocol controller communicates to LON, MODBUS, BACNET and Johnson N2 protocols.

☐ Dedicated vertical discharge and return air units

☐ Dedicated horizontal discharge and return air units

☐ Two-position motorized outdoor air damper

☐ Non-fused disconnect switch (80 A Max)

☐ Powered 115-volt convenience outlet

☐ Non-powered 115-volt convenience outlet

☐ High static indoor fan motor and drive

☐ Return Air smoke detector

☐ Supply Air smoke detector

☐ Pre-coated Al/Cu condenser coil

☐ E-coated Al/Cu condenser coil

☐ E-coated Al/Cu condenser and evaporator coil

☐ Cu/Cu condenser coil

☐ Cu/Cu condenser coil and evaporator coil

☐ Condenser hail guard — louvered style

☐ CO₂ sensor

OPTIONAL WARRANTIES

☐ Complete Unit Parts only up to 5 years

☐ Complete Unit Parts and Labor up to 5 years

Many other optional warranties are available.

See the *Commercial Start-Up and Optional Extended Warranty Price* price pages for further information.

548J***D

FIELD INSTALLED ACCESSORIES

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- ☐ Display Kit for Variable Frequency Drive (VFD), 2-Speed Indoor Fan Motor System. Allows additional set up and diagnostics of the unit VFD controller. Can be unit mounted or used with any other compatible VFD model as a reusable device

- ☐ Power Exhaust — vertical or horizontal

- ☐ Electric heat

- ☐ Single point kit

- ☐ Two-position motorized outdoor air damper

- ☐ Manual outdoor air damper 25%

- ☐ Manual outdoor air damper 50%

- ☐ Roofcurb — 14 inch (356mm) tall

- ☐ Roofcurb — 24 inch (610mm) tall

- ☐ Time Guard II compressor anti-cycle control

- ☐ Outdoor coil hail guard — louvered style

- ☐ Low ambient head pressure controller, down to -20°F (-29°C)

- ☐ Thermostats and Sensors

- ☐ Phase Monitor

- ☐ Barometric Relief hood (for horizontal economizers)

Economizer Sensors

- ☐ Single Dry bulb control

- ☐ Differential Dry bulb control

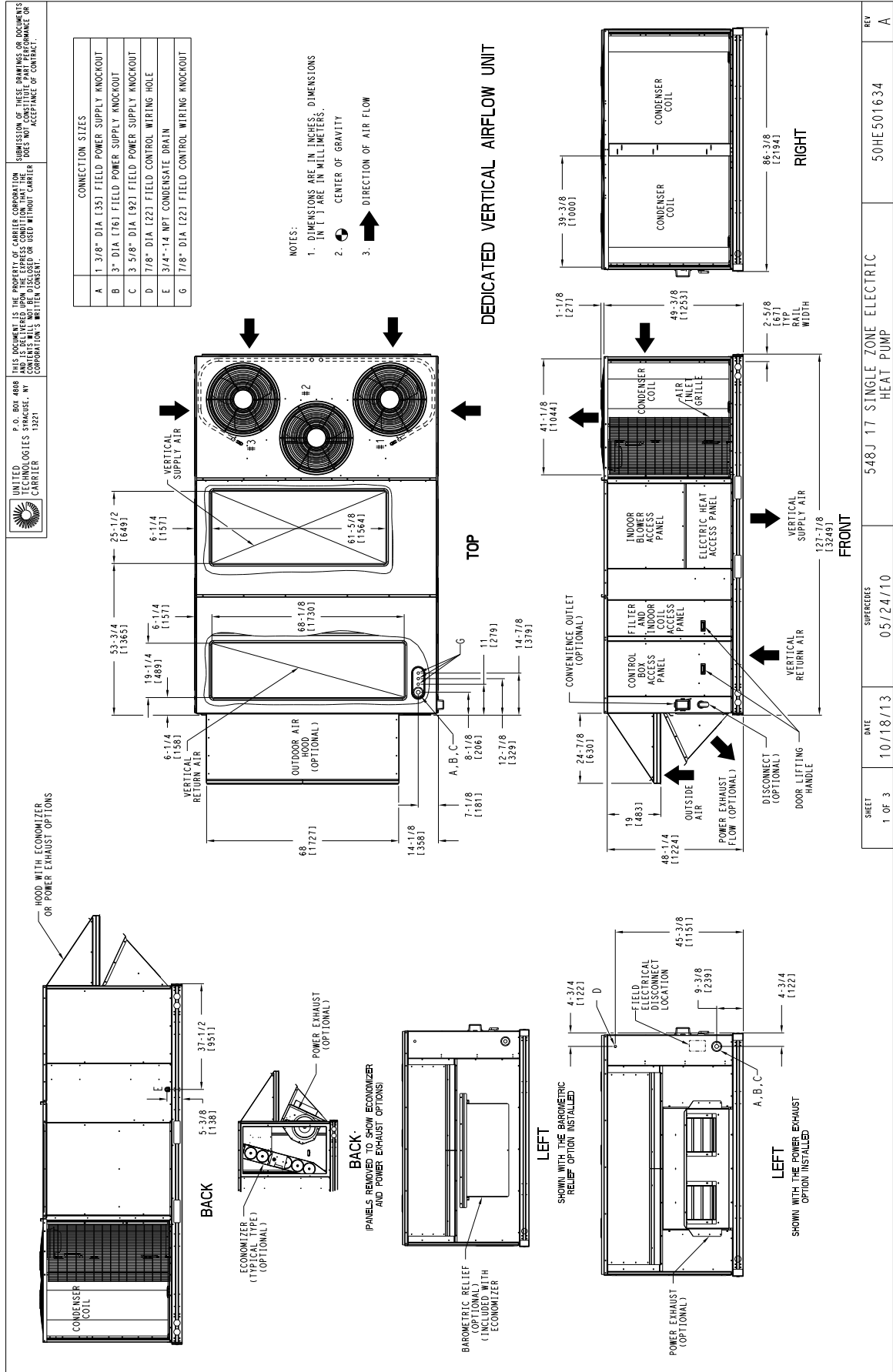
- ☐ Single enthalpy control

- ☐ Differential enthalpy control

- ☐ CO₂ - wall mounted

- ☐ CO₂ - duct mounted

CERTIFIED DIMENSION 548J*17D



548J***D





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CERTIFIED DIMENSION 548J*24D



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UNIT	STD UNIT WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.				
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z		
548J-24	2100	955	534	243	517	235	516	235	533	242	43 [1092]	69 1/2 [1765]	16.5 [419]

* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

CORNER A

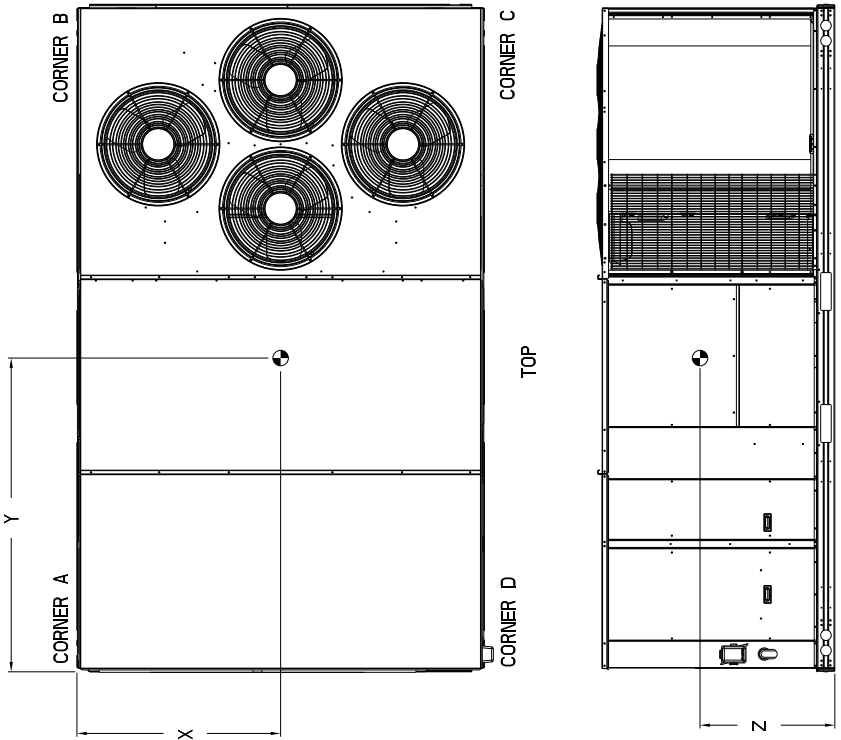
CORNER B

CORNER C

CORNER D

TOP

FRONT



SHEET
3 OF 3

DATE
10/18/13

SUPERSEDES
11/09/10

548J 24 SINGLE ZONE ELECTRIC
HEAT PUMP

50HE501637

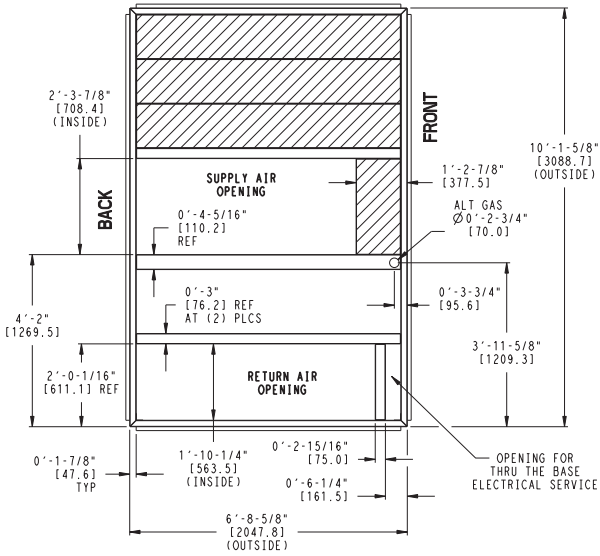
REV
B

C14074

10

ROOF CURB DETAILS - SIZE 17 UNITS

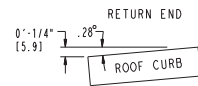
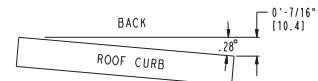
UNIT SIZE	"A"	ROOF CURB ACCESSORY
17	1'-2" [356.0] 2'-0" [610.0]	CRRFCURB045A00 CRRFCURB046A00



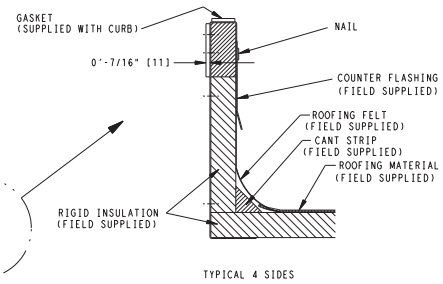
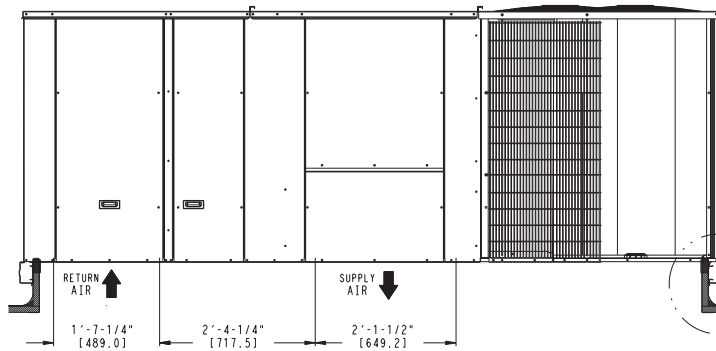
NOTES:

- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
- 2 DIMENSIONS IN [] ARE IN MILLIMETERS.
- 3 ROOF CURB GALVANIZED STEEL.
- 4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
- 5 SERVICE CLEARANCE 4 FT ON EACH SIDE

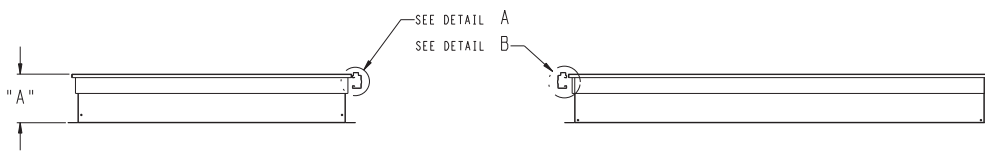
➔ DIRECTION OF AIR FLOW



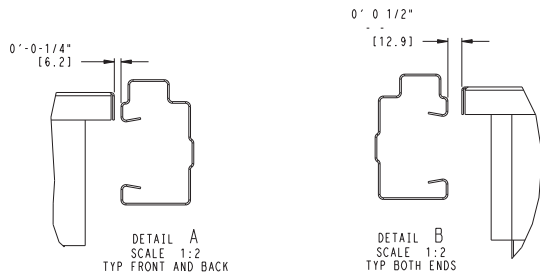
MAX CURB LEVELING TOLERANCES



TYPICAL 4 SIDES

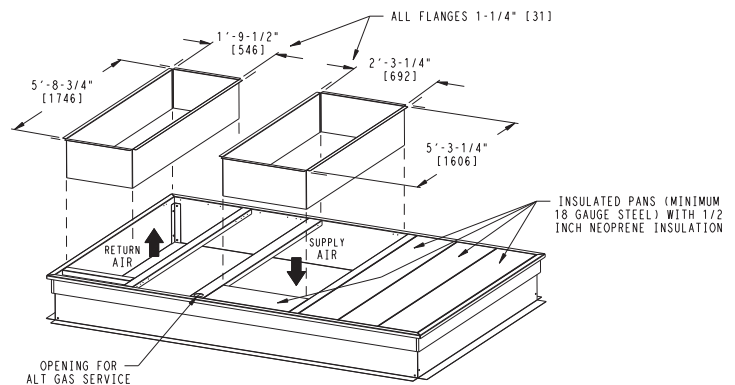


SEE DETAIL A
SEE DETAIL B



DETAIL A
SCALE 1:2
TYP FRONT AND BACK

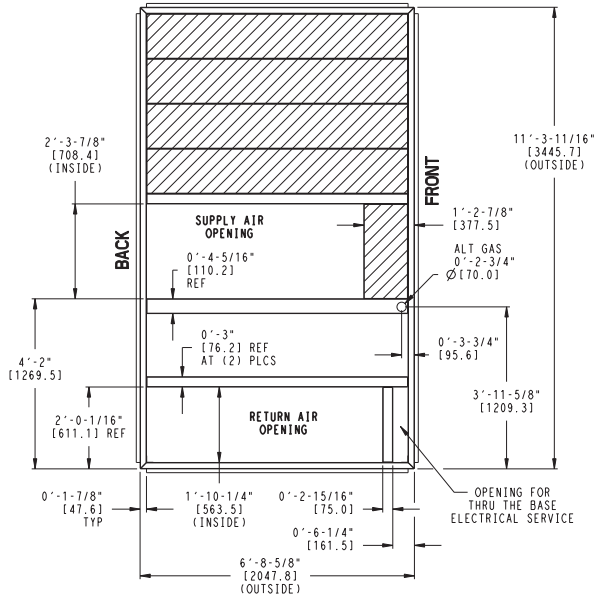
DETAIL B
SCALE 1:2
TYP BOTH ENDS



C10139

ROOF CURB DETAILS - SIZE 24 UNITS

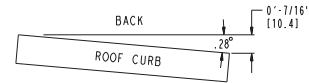
UNIT SIZE	"A"	ROOF CURB ACCESSORY
24	1'-2" [356.0] 2'-0" [610.0]	CRRFCURB047A00 CRRFCURB048A00



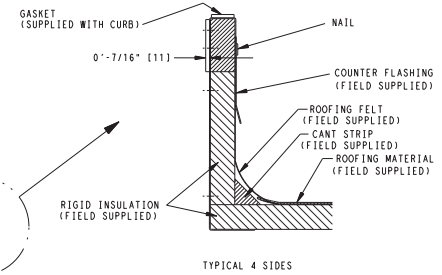
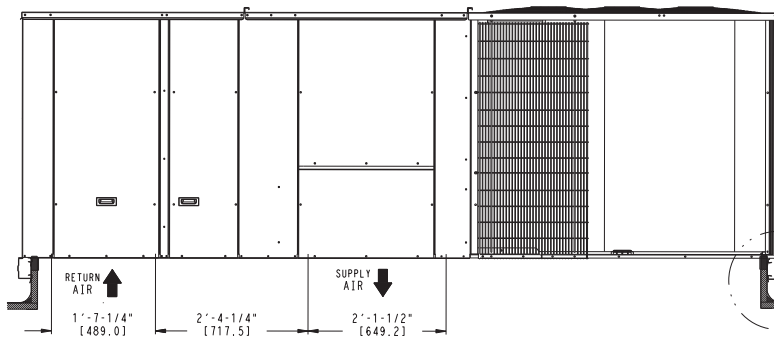
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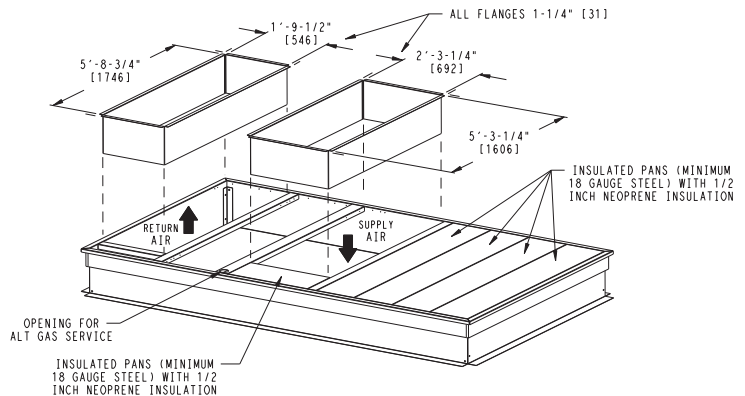
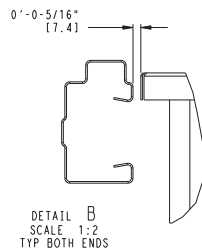
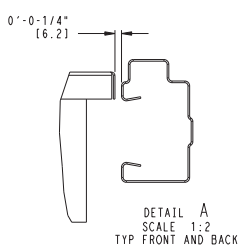
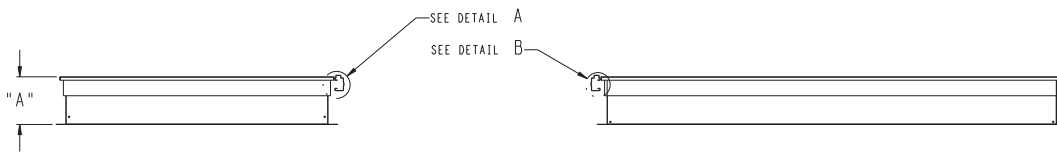
➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES



TYPICAL 4 SIDES



C10140