

50TC*D

50Hz Single Package Rooftop, Cooling Only

Two Stage Cooling Capacity Control

with NOVATION™ Coil

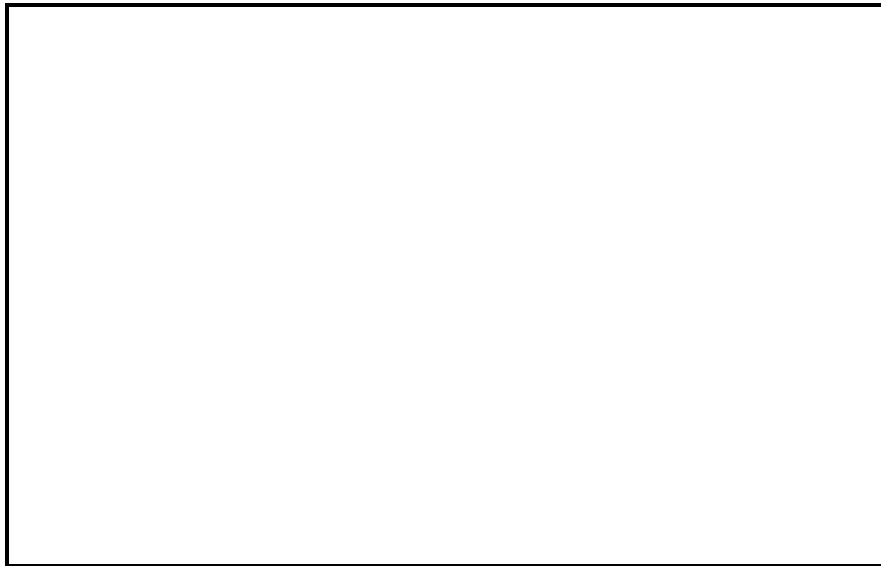
Sizes 17, 20, 24, 28 with Puron® (R-410A) Refrigerant



Turn to the Experts.™

Submittal Data

- **PERFORMANCE DATA**
- **CERTIFIED DIMENSION PRINTS**
- **CERTIFIED ROOF CURB
DIMENSION PRINTS**
- **SERVICE OPTION DIMENSION
PRINTS**



Job Data: _____ Location: _____
Buyer: _____ Buyer P.O.#: _____ Carrier: _____
Unit Number: _____ Model Number: _____
Unit Designation: _____
Performance Data Certified By: _____



Certified to ISO 9001:2000

DESCRIPTION

50TC*D 50Hz units are high-efficiency, single-packaged electric cooling only units that are pre-wired and pre-charged with environmentally sound Puron® (R-410A) HFC refrigerant. Units utilize an all aluminum flat micro-channel tube with louvered fins condenser coil—NOVATION™. Electric heat is available as a field-installed accessory. The units are factory tested in the cooling mode.

STANDARD FEATURES

Base Unit

- Puron (R-410A) HFC refrigerant
- EER's up to 11.0
- IPLV's up to 12.0
- Designed in accordance with Underwriters' Laboratories Std 1995 and listed by UL and UL, Canada
- Two-stage cooling capacity control
- Non-corrosive composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Standard cooling operating range from -1°C up to 52°C (30°F up to 125°F).
- Dedicated vertical and horizontal airflow models available as factory option. No special field kits required.
- Two-inch disposable return air filters
- Provisions for thru-the-bottom power entry capability as standard in an environmentally protected area.
- Single point electric connections
- 24-volt control circuit protected with resettable circuit breaker and 75-VA transformer
- Belt drive, constant torque, permanently lubricated evaporator-fan motor
- Totally enclosed condenser motors with permanently lubricated bearings
- Low-pressure and high-pressure switch protection
- Full perimeter base rail with built-in rigging adapters and fork truck slots

- New terminal board facilitating simple safety circuit troubleshooting and simplified control box arrangement.
- High performance belt drive motor with variable pitch pulleys, quick adjust belt system and fan belt protection

Cabinet

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

Refrigerant System

- Acutrol™ refrigerant metering system
- Liquid line filter drier on each circuit
- Scroll compressors with internal line-break overload protection
- Copper tube, aluminum fin evaporator coil
- Novation Heat Exchanger Technology condenser coils that utilize an all aluminum tube and fin design.

Standard Warranty

- 5-year compressor parts
- 5-year electric heater parts
- 1-year parts
- 3-year NOVATION condenser coil parts

50TC*D

PERFORMANCE DATA

Unit Operating Weight _____ kg

Cooling

Gross Total Capacity: _____ Btuh

at Condenser Air Temperature _____ °C

Gross Sensible Capacity: _____ Btuh

Compressor Power Input: _____ kW

Indoor Entering db _____ °C wb _____ °C

Airflow _____ External Static Pressure _____ Pa

Indoor Fan Motor Size _____ Hp

Exhaust Fan Motor Size _____ Hp

Curb Weight _____ kg

Heating

Heating Capacity:

Stage 1 _____ Btuh

Stage 2 _____ Btuh

Heating Capacity Total _____ Btuh

Stage 1 _____ kW

Stage 2 _____ kW

Heating Capacity Total _____ kW

50TC*D

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz

Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

SUBMITTAL DATA

Job Name _____

Architect _____

Engineer _____

Contractor _____

Unit Designation _____

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS (FIOPs)

- ☐ Vertical air flow duct configuration models
- ☐ Horizontal air flow duct configuration models
- ☐ Open protocol RTU-MP controller communicates to LON, MODBUS, BACNET and Johnson N2 protocols.
- ☐ CCN Direct Digital Control (DDC) - PremierLink
- ☐ Through the base connectors electric conduit/piping
- ☐ Economizer with dry bulb sensing and barometric relief
- ☐ Economizer with enthalpy sensing and barometric relief
- ☐ 2 position motorized outdoor air damper
- ☐ 25% Manual outdoor air damper
- ☐ Non-fused disconnect
- ☐ Medium and High static motor options
- ☐ CO₂ sensor
- ☐ Condenser hail guard - louvered style
- ☐ Special coating protection for evaporator and condenser coils

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.

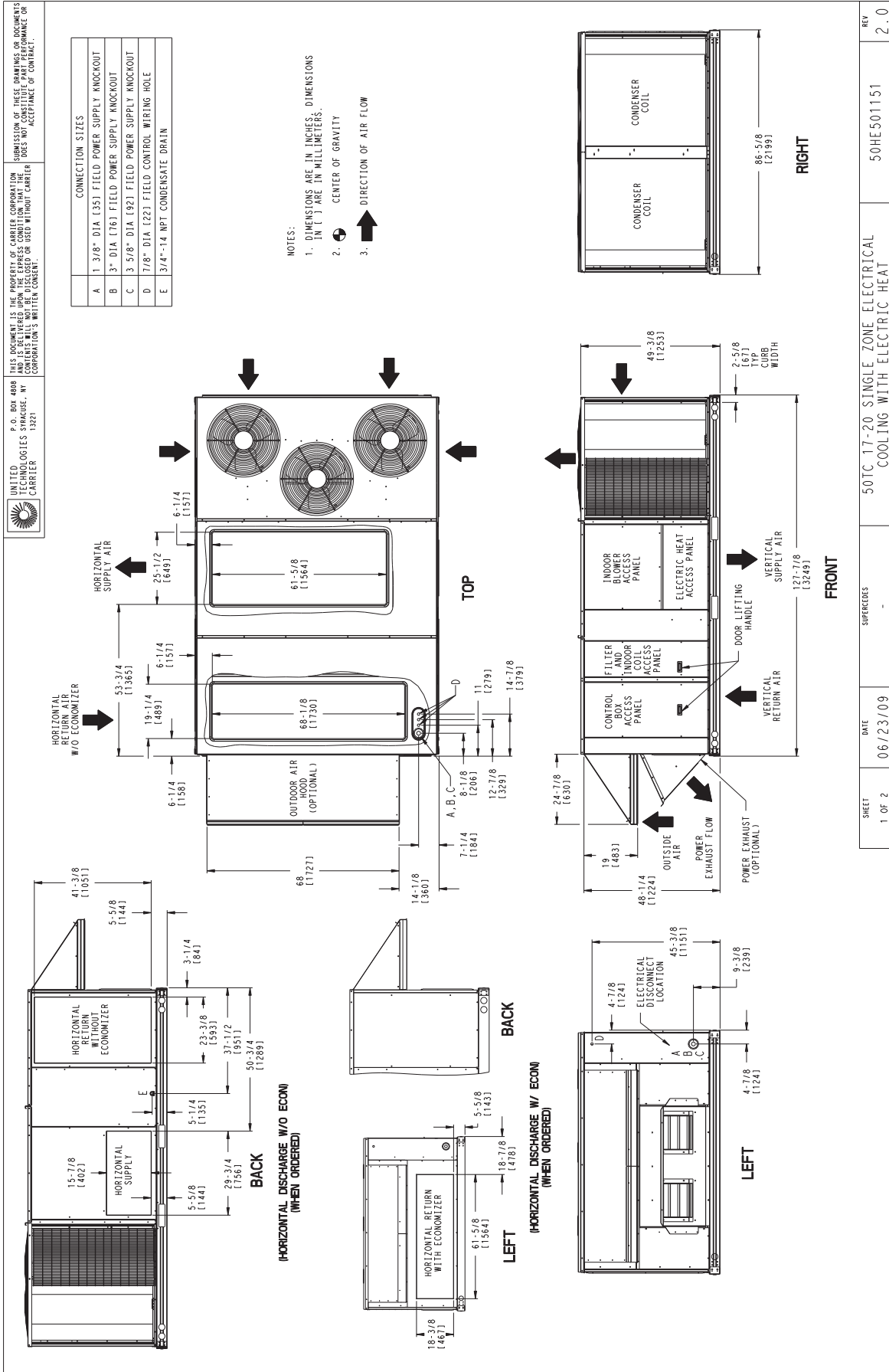
FIELD INSTALLED ACCESSORIES

- ☐ EconomiSer™ IV-electromechanical, gear driven with Belimo actuator (2-10v DC signal) and controller
- ☐ EconomiSer™ 2-compatible with DDC controls; gear driven with Belimo actuator (4-20mA) signal and no controller
- ☐ Electric heater(s)
- ☐ Single point kit
- ☐ Power exhaust - centrifugal fan design
- ☐ Two-position motorized outdoor air damper
- ☐ 25% Manual outdoor air damper
- ☐ Roofcurb - 356mm (14 inch) tall
- ☐ Roofcurb - 610mm (24 inch) tall
- ☐ Adapter Curb - Adapts to Carrier DP/DR, TJ, HJ, TM, roofcurbs
- ☐ Condenser hail guard - louvered style
- ☐ Phase monitor (loss of phase/phase reversal)
- ☐ Winter start kit, down to -4°C (25°F)
- ☐ Low ambient head pressure controller, down to -29°C (-20°F)
- ☐ Time Guard II compressor anti-cycle protection
- ☐ Four inch filter tracks
- ☐ Thermostats and Sensors

Economizer Sensors

- ☐ Single Dry bulb control
- ☐ Differential Dry bulb control
- ☐ Single enthalpy control
- ☐ Differential enthalpy control
- ☐ CO₂ - wall mounted
- ☐ CO₂ - duct mounted
- ☐ CO₂ - unit mounted

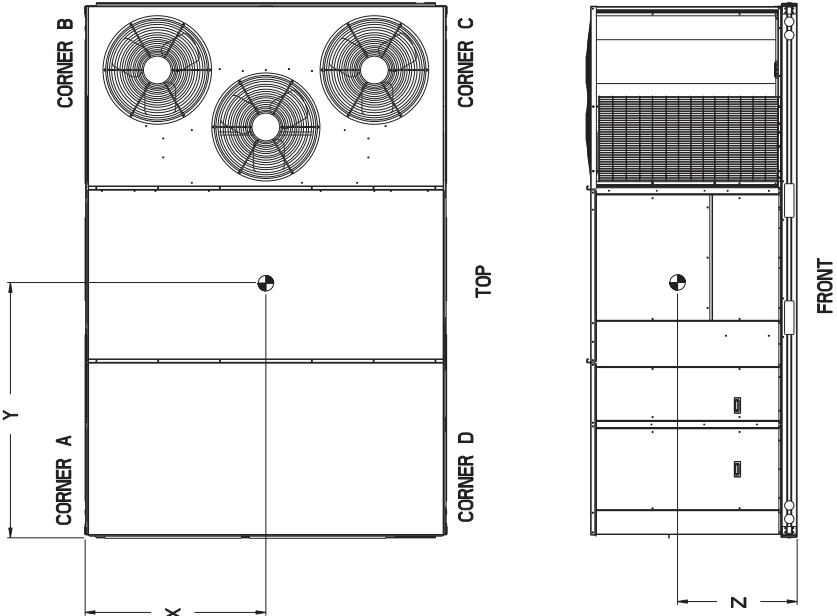
CERTIFIED DIMENSION 50TC*D17, 20



50TC*D

CERTIFIED DIMENSION 50TC*D17, 20

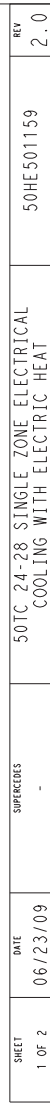
UNIT	MAX UNIT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.								
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z						
50TC17	2035	923	483	219	494	224	534	242	522	237	44	3/4	11337	64	3/4	11645	16	1/2	1419
50TC20	2050	930	487	221	498	239	538	244	526	239	44	3/4	11337	64	3/4	11645	16	1/2	1419



SHEET	DATE	SUPERFICES	REV
2 OF 2	06/23/09	-	50HE501151
50TC 17-20 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT			2.0

C09169

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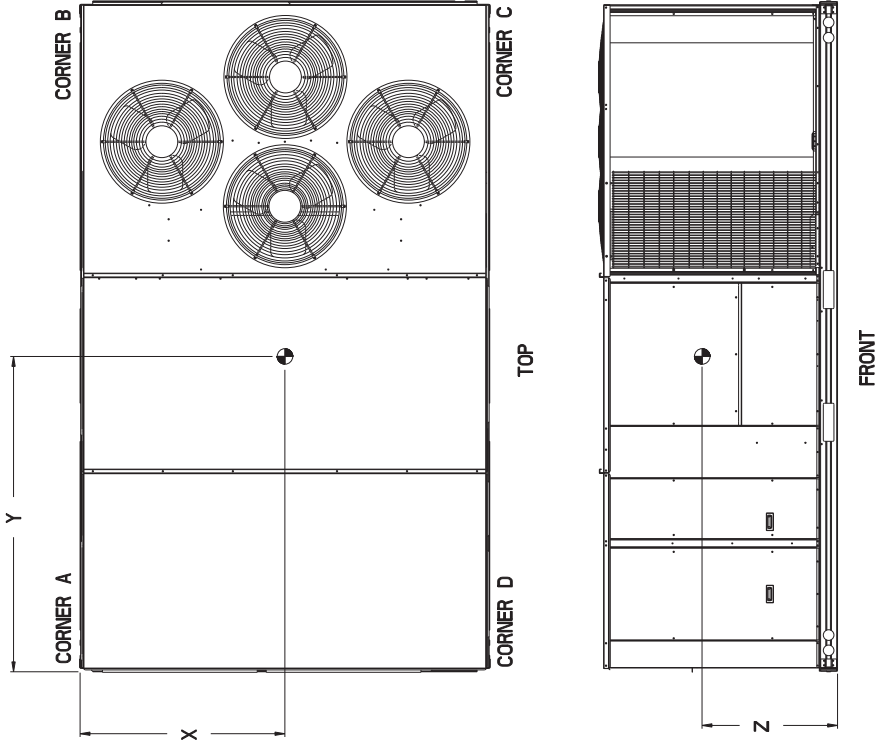
50TC*D

50TC*D

CERTIFIED DIMENSION 50TC*D24, 28

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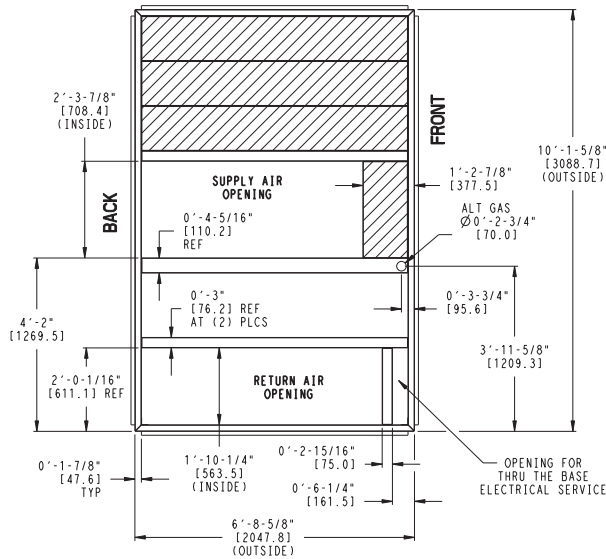


SHEET	DATE	SUPERCESSES	REV
2 OF 2	06/23/09	-	50HE501159 2.0

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ROOF CURB DETAILS - 17 & 20 SIZE UNITS

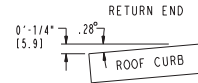
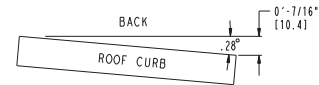
UNIT SIZE	"A"	ROOF CURB ACCESSORY
17,20	1'-2" [356.0] 2'-0" [610.0]	CRRFCURB045A00 CRRFCURB046A00



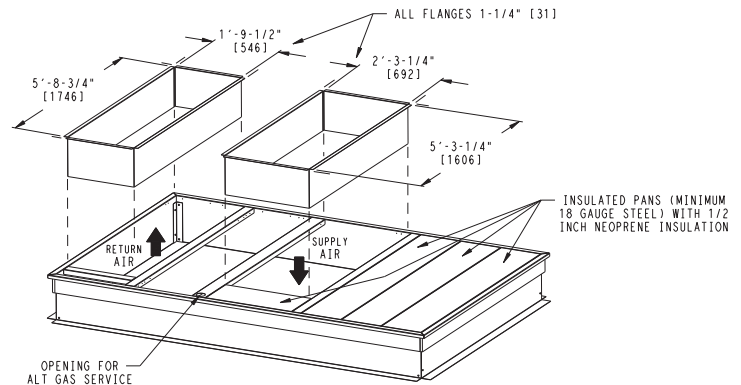
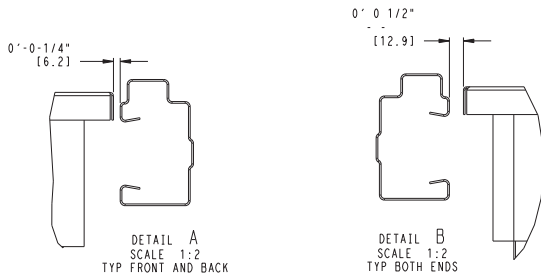
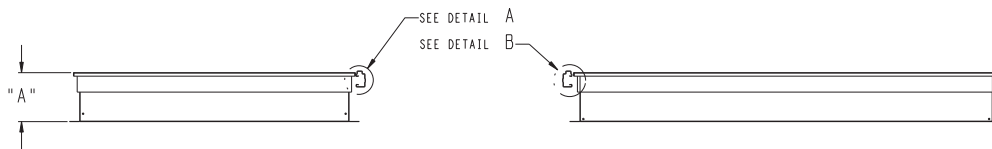
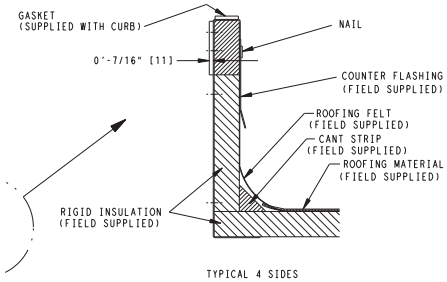
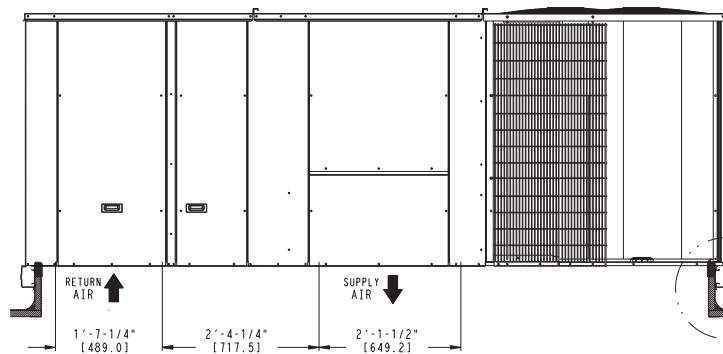
NOTES:

- 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



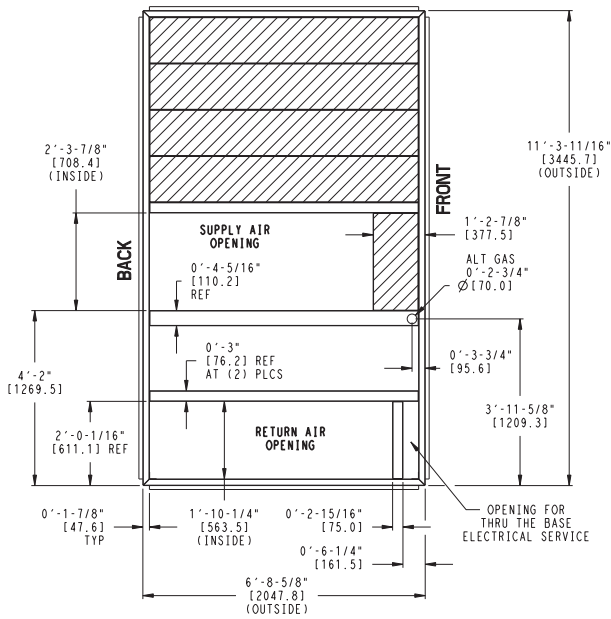
MAX CURB LEVELING TOLERANCES



C09139

ROOF CURB DETAILS - 24 & 28 SIZE UNITS

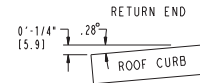
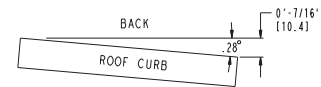
UNIT SIZE	"A"	ROOF CURB ACCESSORY
24, 28	1'-2" [356.0] 2'-0" [610.0]	CRRFCURB047A00 CRRFCURB048A00



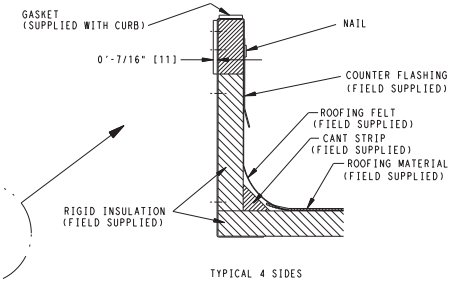
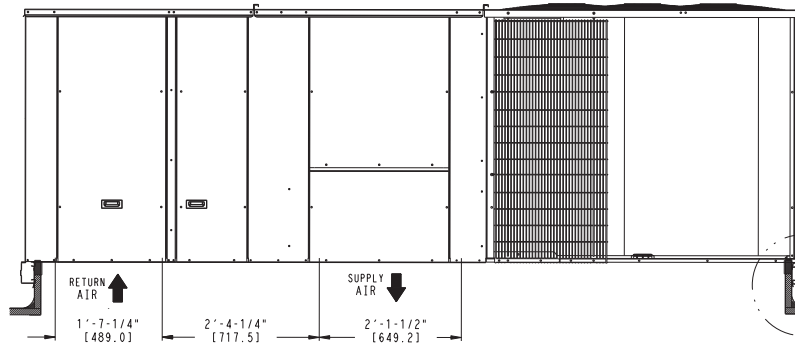
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➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES



TYPICAL 4 SIDES

