



50FCQ 04-07 WEATHERMAKER® SERIES SINGLE PACKAGE ROOFTOP HEAT PUMP, WITH FIELD-INSTALLED ELECTRIC HEAT, PURON® (R-410A) REFRIGERANT

- PERFORMANCE DATA**
- CERTIFIED DIMENSION PRINTS**
- CERTIFIED ROOF CURB DETAILS**



JOB NAME:	LOCATION:	
BUYER:	BUYER PO #:	CARRIER #:
UNIT NUMBER:	MODEL NUMBER:	
PERFORMANCE DATA CERTIFIED BY:		

DESCRIPTION

50FCQ units are standard-efficiency, single-packaged heat pump units with Ecoblue™ Technology that are pre-wired and pre-charged with Puron® refrigerant. Electric heat is available as a field-installed accessory. The units are fully factory tested and agency certified. These units have field convertible supply and return openings and are intended for installation on a roof curb accessory (ordered separately), or for slab mounting (for horizontal duct connections). Units may be ordered with various factory-installed options. Field-installed accessories are also available.

FEATURES

Standard Base Unit

- Puron (R-410A) HFC refrigerant
- SEERs up to 14.3 and SEER2s up to 13.4
- IEERs up to 15.0 and heating HSPFs up to 8.2
- HSPFs up to 8.2 (COPs to 3.8)
- ASHRAE 90.1 compliant and Energy Star qualified
- Rated in accordance with AHRI Standards 210/240 (3-5 ton sizes) and 340/360 (6 ton sizes)
- Designed in accordance with Underwriters Laboratories Std 1995
- Listed by UL and UL-Canada
- Non-corrosive composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Single-stage cooling capacity control on 3-5 ton while 6 ton models have two-stage cooling capacity control
- Standard cooling operating range up to 115°F (46°C) and down to 40°F (4°C). Low Ambient allows cooling operation down to -20°F (-29°C)
- Convertible from vertical to horizontal airflow for slab mounting
- 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
- Direct Drive - EcoBlue™ Technology indoor fan system uses Vane Axial fan design and electronically commutated motor.
- 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
- New Unit Control Board with intuitive quick fan adjustment
- 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 and replaceable no-strip screw collar
- 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

- Acutrol™ refrigerant metering system on 04-06 models, TXV on 07 size models
- 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 Limited Parts Warranty

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

PERFORMANCE DATA

Unit Operating Weight _____ lb

Curb Weight _____ lb

COOLING

Net Total Capacity _____ Btuh

Net Sensible Capacity _____ Btuh

Compressor Power Input _____ kW

at Outdoor Air Temperature _____ °F

Indoor Entering: db _____ °F / wb _____ °F

Airflow _____ CFM External Static Pressure _____ in. wg

HEATING (ELECTRIC)

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

Maximum Circuit Amps _____

Maximum Overcurrent Protection (Fuse Only) _____

SUBMITTAL DATA

Job Name _____

Architect _____

Engineer _____

Contractor _____

Unit Designation _____



FACTORY-INSTALLED OPTIONS

☐ Economizer with DRY BULB Sensing and Barometric Relief ¹

Standard Leak Air Dampers —

- ☐ Models with W7212 controller provide standard non-diagnostic control (EconoMiSer® IV system).
- ☐ Models with W7220 controller meet California Title 24 (Section 120.2) for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- ☐ Models with RTU Open controller meet California Title 24 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

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ULTRA LOW LEAK Air Dampers —

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

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☐ SystemVu Controls

- ☐ Large full text - multi line display
- ☐ USB Flash Port for data transfer
- ☐ Built in i-Vu®, CCN and BACnet
- ☐ Refrigerant pressure from display
- ☐ Quick LED Status - Run, Alert, Fault
- ☐ Conventional stat or sensor capabilities
- ☐ Historical component runtime and starts
- ☐ Supply Air Tempering
- ☐ Equipment / System Touch Compatibility
- ☐ Demand Limiting and ZS Sensor Compatibility

☐ RTU Open multi-protocol controller communicates to LonWorks®², MODBUS®², BACnet™², and Johnson N2 protocols

- ☐ Through-the-base connectors for electric conduit
- ☐ Non-fused disconnect (80A max)
- ☐ Powered 115-volt convenience outlet
- ☐ Non-powered 115-volt convenience outlet
- ☐ High static evaporator fan motor
- ☐ Return air smoke detector
- ☐ Supply air smoke detector
- ☐ Smoke detectors — return and supply air
- ☐ 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 style¹
- ☐ CO₂ sensor
- ☐ Hinged access doors
- ☐ Condensate overflow switch

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* pages for further information.

1. Not available for single phase (-3 voltage) models.

2. Third-party trademarks and logos are the property of their respective owners.

FIELD-INSTALLED ACCESSORIES

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- ☐ 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%
- ☐ Roof curb - 14 inch (356 mm) tall
- ☐ Roof curb - 24 inch (610 mm) tall
- ☐ Thru-the-bottom utility connection kit
- ☐ Time Guard II compressor anti-cycle control
- ☐ Outdoor coil hail guard - louvered style
- ☐ Programmable setback thermostat
- ☐ Phase monitor (loss of phase/phase reversal)
- ☐ Condensate overflow switch

Economizer Sensors

- ☐ Single dry bulb control
- ☐ Differential dry bulb control
- ☐ Single enthalpy control
- ☐ Differential enthalpy control
- ☐ CO₂ — wall mounted
- ☐ CO₂ — duct mounted

1. Not available for single phase (-3 voltage) models.

CERTIFIED DIMENSION PRINT

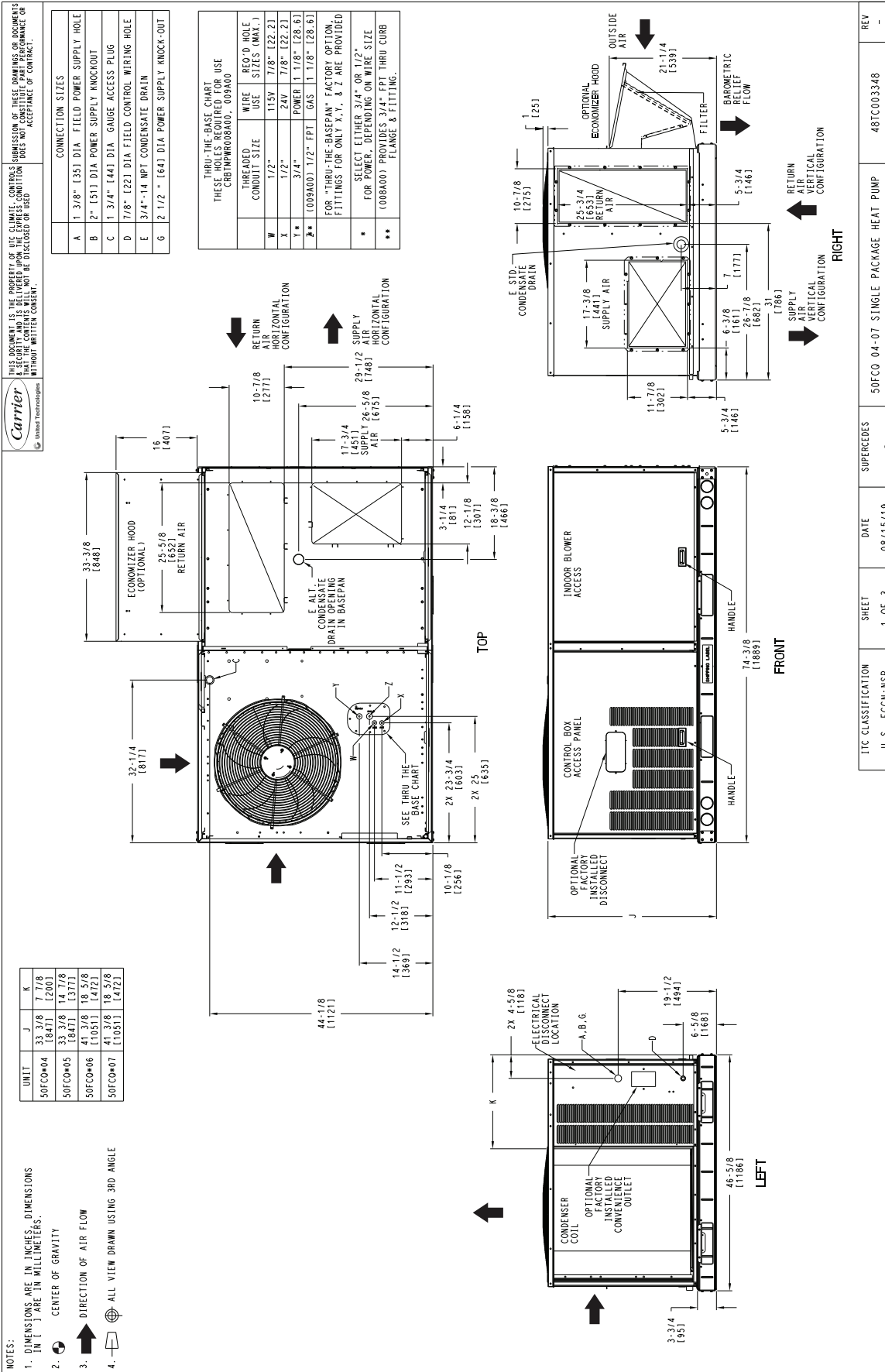


Fig. 1 — 50FCQ*04-07 Dimensional Drawing

CERTIFIED DIMENSION PRINT

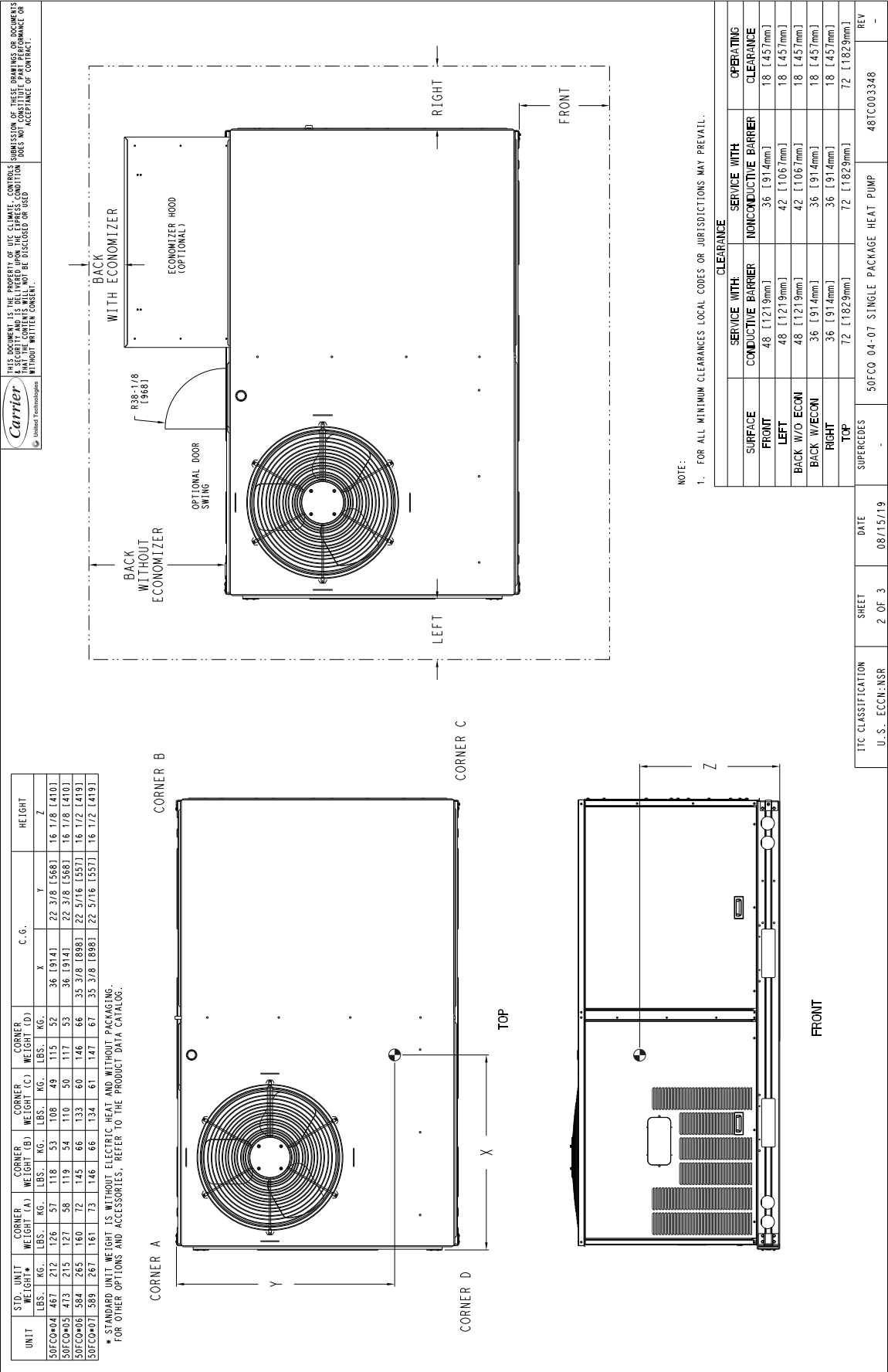


Fig. 1 — 50FCQ*04-07 Dimensional Drawing (cont)

CERTIFIED DIMENSION PRINT

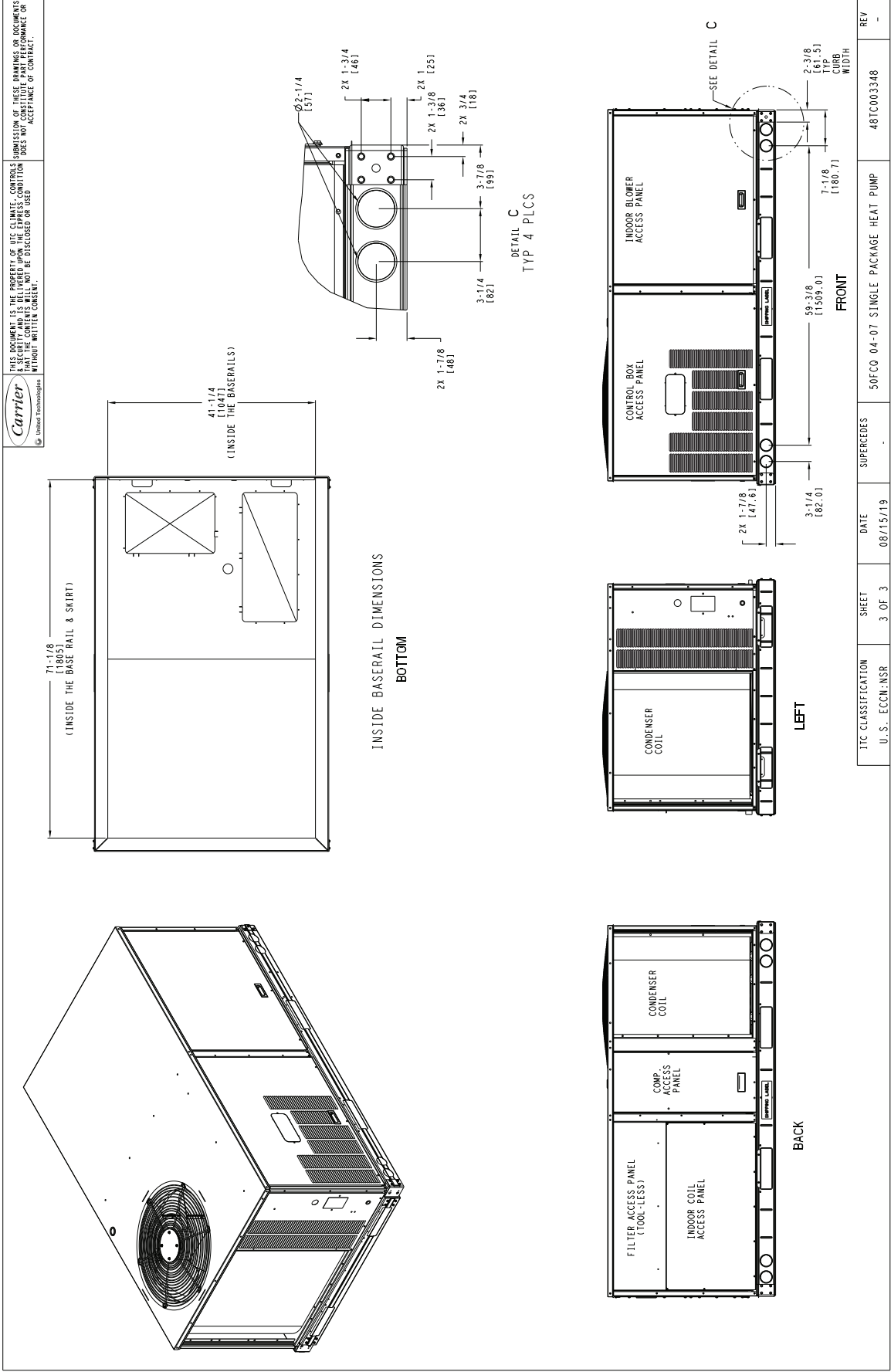


Fig. 1 — 50FCQ*04-07 Dimensional Drawing (cont)

ROOF CURB ACCESSORY #	A	NOTES: 1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED. 2. INSULATED PANELS: 25.4 (1") THK POLYURETHANE FOAM, 44.5 (1-3/4") DENSITY. 3. DIMENSIONS IN 1" ARE IN MILLIMETERS. 4. ROOFCURB, 18 GAGE STEEL. 5. ROOFCURB, 16 GAGE STEEL. 6. SERVICE CLEARANCE OF EFT REST ON CURB. 7. DIRECTION OF AIR FLOW.	CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRFRCB001A01	14" [356]		CRBTMPWR001A01	THRU THE CURB	3/4" [19] NPT			
CRFRCB002A01	24" [610]		CRBTMPWR003A01	THRU THE BOTTOM	1 1/2" [12.7] NPT	3/4" [19] NPT	1 1/2" [12.7] NPT	1 1/2" [12.7] NPT

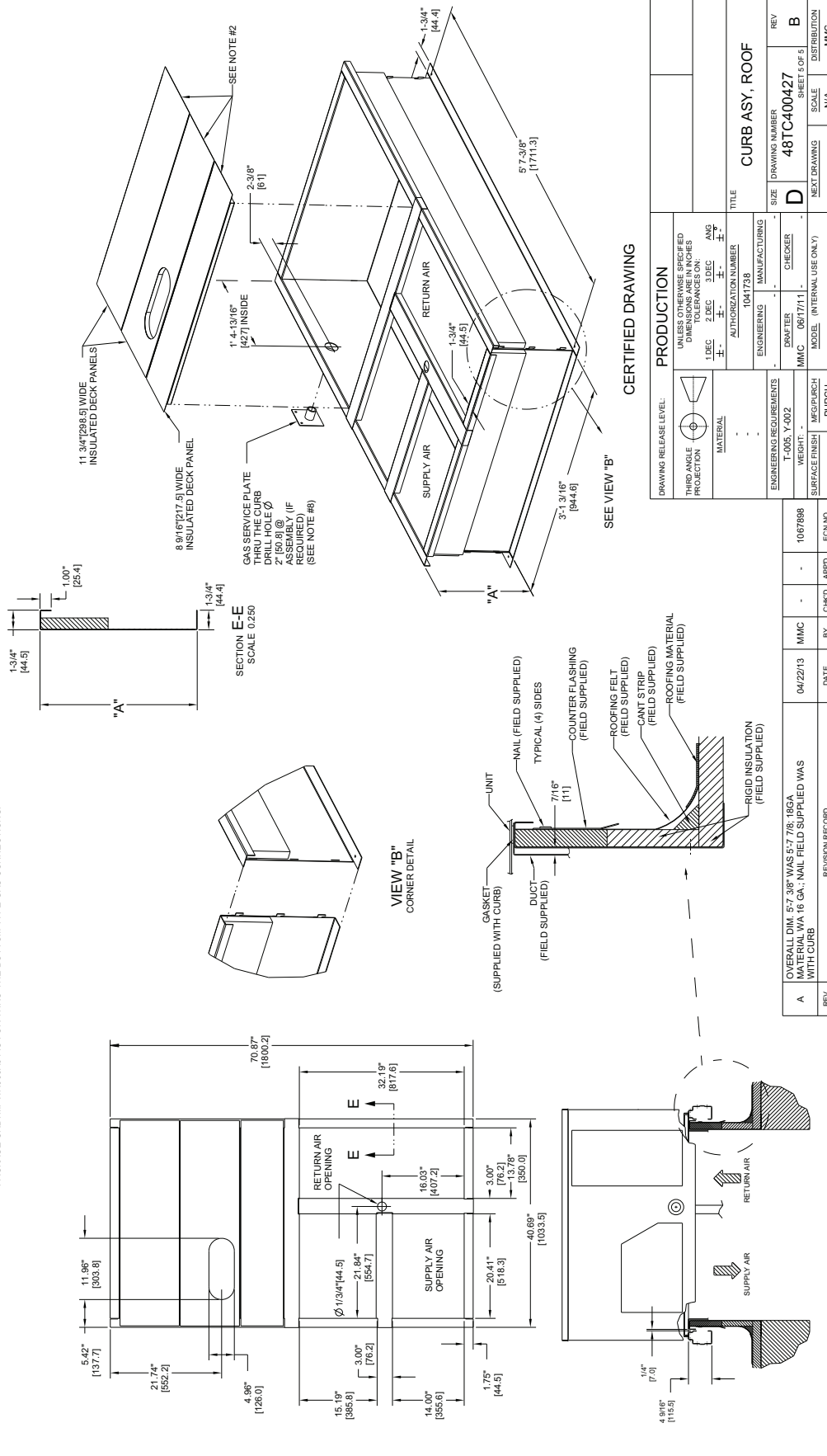


Fig. 2 — 50FCQ 04-07 Roof Curb Dimensions

