



48GCG 04-06 WEATHERMASTER® SERIES WITH ECOBLUE™ TECHNOLOGY SINGLE PACKAGE ROOFTOP WITH ULTRA LOW NOX GAS HEAT/ELECTRIC COOLING UNITS

- 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

48GCG single package, ULTRA LOW NOx units are high-efficiency single-packaged electric cooling, gas heating units that are pre-wired and pre-charged with Puron® (R-410A) HFC refrigerant. The units are factory tested in both heating and cooling modes. All size 04-06 models use two stage cooling capacity control.

FEATURES

Standard Base Unit

- Puron (R-410A) HFC refrigerant
- SEERs up to 16.1
- Direct Drive - EcoBlue™ Technology indoor fan system uses Vane Axial fan design and electronically commutated motor
 - Shall have inherent automatic-reset thermal overload protection
 - Shall require no fan/motor belts for operation, adjustments, and/or initial fan speed setup.
 - Shall be internally protected from electrical phase reversal and loss
 - Shall have slow ramp up to speed control capabilities to help reduce sound and comfort issues
 - Shall be a slide-out design with two screw removal
 - All sizes have two stage cooling capacity control. The indoor fan speed is automatically controlled to meet the AHRI performance requirement
- Rated in accordance with AHRI Standards 210/240
- Designed in accordance with Underwriters Laboratories Std 1995
- Listed by UL and UL-Canada
- Two-stage cooling capacity control
- Corrosive resistant composite sloping design; side or center drain condensate pan. Meets ASHRAE Standard 62
- Standard cooling operating range from 40°F (4°C) up to 125°F (52°C), and down to -20°F (-29°C) with low ambient kit.
- Field convertible from vertical to horizontal airflow for slab mounting, no special kits required
- Two-inch disposable return air filters
- Thru-the-bottom power and gas entry capability
- Single point gas and electric connections
- 24-volt control circuit protected with resettable circuit breaker
- Permanently lubricated evaporator-fan motor
- Totally enclosed condenser motors with permanently lubricated bearings
- Low-pressure and high-pressure switches
- Full perimeter base rail with built-in rigging adapters and fork truck slots
- New unit control board with intuitive quick fan speed adjustment
- ASHRAE 90.1-2016, IECC-2015 energy compliant

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
- Tool-less filter access door

Refrigerant System

- TXV refrigerant metering device
- Liquid line filter drier
- Scroll compressors with internal line-break overload protection
- Copper tube, aluminum fin coils with optional corrosion resistant coils. Corrosion resistant coils are not available for single phase (-3 voltage) models.
- Removable gage line plugs for reading refrigerant pressure with unit panels in place

Gas Heat

- IGC solid-state gas heat exchanger control for on-board diagnostics, anti-cycle protection, LED error code designation, burner control logic and energy saving indoor fan motor delay
- Gas efficiencies up to 81%
- Induced draft combustion
- Redundant gas valve, with up to 2 stages of heating
- Flame roll-out safety protector
- Solid-state electronic direct spark ignition system
- Ultra Low NOx 3 to 5 ton models that meet California Air Quality Management NOx requirement of 14 nano-grams/joule. Ultra Low NOx models include stainless steel heat exchangers.

Standard Limited Parts Warranty

- 10-year gas heat exchanger parts
- 5-year compressor parts
- 5-year Ultra Low Leak Economizer parts
- 3-year SystemVu™ controls
- 1-year parts

PERFORMANCE DATA

Unit Operating Weight _____ lb Exhaust Fan Motor Size _____ HP
COOLING Curb Weight _____ lb
Gross Total Capacity _____ Btuh **HEATING (GAS)**
 at Condenser Air Temperature _____ °F Heating Capacity:
Gross Sensible Capacity _____ Btuh Stage 1 _____ Btuh
Compressor Power Input _____ kW Stage 2 _____ Btuh
Indoor Entering: db _____ °F / wb _____ °F Heating Capacity Total _____ Btuh
Airflow _____ CFM External Static Pressure _____ in. wg Stage 1 _____ kW
Indoor Fan Motor Size _____ HP Stage 2 _____ kW
Indoor Fan Motor Setting _____ Vdc Heating Capacity Total _____ kW

ELECTRICAL DATA

Power Supply to Unit _____
Volts _____
Phase _____ Hz
Maximum Circuit Amps _____
Maximum Overcurrent Protection _____

SUBMITTAL DATA

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



FACTORY-INSTALLED OPTIONS

☐ Economizer with DRY BULB Sensing and Barometric Relief*

Low Leak Air Dampers —

- Models with W7220 controller meet California Title 24-2016 (Section 120.2) for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer® X system).
- Models with SystemVu™ and RTU Open controller meet California Title 24-2016 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

☐ Economizer with ENTHALPY Sensing and Barometric Relief*

Low Leak Air Dampers —

- Models with W7220 controller meet California Title 24-2016 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with SystemVu™ and RTU Open controller meet California Title 24-2016 (Section 120.2) Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

☐ Economizer with DRY BULB Sensing and Barometric Relief*

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. For outside air, return, and relief air damper leakage requirements economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer X system).
- Models with SystemVu™ and RTU Open meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet

IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air and return air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer 2 system).

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ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. For outside air, return, and relief air damper leakage requirements economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer X system).
- Models with SystemVu and RTU Open meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air and return air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer 2 system).

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

FACTORY-INSTALLED OPTIONS (CONT)

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> SystemVu™ controls that include: <ul style="list-style-type: none"> • 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 Touch™/ System Touch™ compatibility • Demand limiting and ZS sensor compatibility <input type="checkbox"/> RTU Open multi-protocol controller communicates to BACnet*, Modbus†, LonWorks**, and Johnson N2 protocols <input type="checkbox"/> Through the base connectors for gas and electric conduit/piping <input type="checkbox"/> Stainless steel gas heat exchanger (includes tubes, vestibule plate and collector box) <input type="checkbox"/> Humidi-MiZer® adaptive dehumidification system (This option also includes low ambient controls) <input type="checkbox"/> Low ambient head pressure controller, down to -20°F (-29°C) | <ul style="list-style-type: none"> <input type="checkbox"/> HACR circuit breaker†† <input type="checkbox"/> Non-fused disconnect†† <input type="checkbox"/> Powered 115-volt convenience outlet*** <input type="checkbox"/> Non-powered 115-volt convenience outlet <input type="checkbox"/> High static evaporator fan motor <input type="checkbox"/> Return air smoke detector <input type="checkbox"/> Supply air smoke detector <input type="checkbox"/> CO₂ sensor <input type="checkbox"/> Condenser hail guard-louvered style <input type="checkbox"/> Special coating protection for evaporator and condenser coils*** <input type="checkbox"/> Hinged panels for easy unit access <input type="checkbox"/> Foil faced insulation throughout entire cabinet <input type="checkbox"/> MERV-8 return air filters <input type="checkbox"/> Phase monitor protection (3-Phase models only) <input type="checkbox"/> Condensate overflow switch <input type="checkbox"/> Cu/Cu (indoor) 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 pages for further information.

* BACnet is a trademark of ASHRAE.
† Modbus is a registered trademark of Schneider Electric.
** LonWorks is a registered trademark of Echelon Corporation.
†† Not available on 460 volt models
*** Not available on single-phase models.

FIELD-INSTALLED ACCESSORIES

NOTE: 48GCG models use two-speed indoor fan logic, the W7212 controller is designed for single-speed motor control. See Application Tip “ROOFTOP-18-01” for further guidance when using this unit.

☐ Economizer with DRY BULB Sensing and Barometric Relief*

Low Leak Air Dampers —

- Models with W7212 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with W7220 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with SystemVu™ and RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

☐ Economizer with ENTHALPY Sensing and Barometric Relief*

Low Leak Air Dampers —

- Models with W7212 controller meet California Title 24-2016 Section 120.2.i for Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with W7220 controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer X system).
- Models with SystemVu and RTU Open controller meet California Title 24-2016 Section 120.2.i Fault Detection and Diagnostic (FDD) requirements (EconoMiSer 2 system).

☐ Economizer with DRY BULB Sensing and Barometric Relief*

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. For outside air, return, and relief air damper leakage requirements economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer X system).
- Models with SystemVu and RTU Open meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016

damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.

NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.

Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer 2 system).

☐ Economizer with ENTHALPY Sensing and Barometric Relief* (cont)

ULTRA LOW LEAK Air Dampers —

- Models with W7220 controller meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.), and mandatory section 120.2.i for Fault Detection and Diagnostic controls. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. For outside air, return, and relief air damper leakage requirements economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty (EconoMiSer X system).
- Models with SystemVu and RTU Open meet California Energy Commission Title 24-2016 prescriptive section 140.4 (damper leakage etc.) and mandatory section 120.2.i for Fault Detection and Diagnostic requirements. Economizers meet ASHRAE 90.1-2016 damper leakage requirements as stated in section 6.5.1.1.4 and Table 6.4.3.4.3, and meet 2016 Fault Detection and Diagnosis requirements in section 6.4.3.12. Economizers meet IECC-2012 section C402.4.5.2 and IECC-2015 sections C403.2.4.3 and C403.3.3.5 for outside air, return air, and relief air damper leakage requirements and IECC-2015 section C403.2.4.7 for Fault Detection and Diagnostic requirements.
NOTE: IECC-2015 section C403.2.4.7.1 requires differential return air sensor, which must be ordered separately.
Outside air, return air, and relief air (volume) dampers are AMCA rated — plus 5 year limited parts warranty. (EconoMiSer 2 system).

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

FIELD-INSTALLED ACCESSORIES (CONT)

NOTE: 48GCG models use two-speed indoor fan logic, the two-position damper and manual dampers are designed for single-speed motor control. See Application Tip “ROOFTOP-18-01” for further guidance when using this unit.

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| <ul style="list-style-type: none"><input type="checkbox"/> Power exhaust — prop fan design<input type="checkbox"/> Two-position motorized outdoor air damper<input type="checkbox"/> Manual outside air damper 25%<input type="checkbox"/> Manual outside air damper 50%<input type="checkbox"/> Roof curb — 14 inch (356 mm) tall<input type="checkbox"/> Roof curb — 24 inch (610 mm) tall<input type="checkbox"/> Horizontal roof curb adapts to standard base unit and directs airflow horizontally<input type="checkbox"/> Thru-the-bottom connections, electrical only<input type="checkbox"/> Thru-the-bottom connections, electrical and gas<input type="checkbox"/> Thru-the-bottom electrical, control, and gas connection kit<input type="checkbox"/> Thru-the-bottom electrical and thru-the-curb gas connection kit<input type="checkbox"/> Condenser hail guard, louvered style<input type="checkbox"/> Flue shield<input type="checkbox"/> Flue discharge deflector<input type="checkbox"/> Liquid propane (LP) conversion kit<input type="checkbox"/> High altitude conversion kit<input type="checkbox"/> Phase monitor (loss of phase/phase reversal)<input type="checkbox"/> Winter start kit, down to 25°F (−4°C) | <ul style="list-style-type: none"><input type="checkbox"/> Low ambient head pressure controller, down to 0°F (−18°C)<input type="checkbox"/> Low ambient head pressure controller, down to −20°F (−29°C)<input type="checkbox"/> Time Guard II compressor anti-cycle protection<input type="checkbox"/> Condensate overflow switch<input type="checkbox"/> Non-powered 115-volt (20 amp) convenience outlet<input type="checkbox"/> Condensate overflow switch<input type="checkbox"/> Motor status indicator switch<input type="checkbox"/> Fan/Filter status indicator switch<input type="checkbox"/> Thermostats and sensors <p>NOTE: These models have two stage cooling capability, use appropriate thermostat.</p> <p><u>Economizer Sensors</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Single dry bulb control<input type="checkbox"/> Differential dry bulb control<input type="checkbox"/> Single enthalpy control<input type="checkbox"/> Differential enthalpy control<input type="checkbox"/> CO₂ — wall mounted<input type="checkbox"/> CO₂ — duct mounted<input type="checkbox"/> CO₂ — unit mounted |
|--|--|

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CARRIER

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UNIT WEIGHT **
LBS. KG.

UNIT	STD. UNIT WEIGHT ** LBS. KG.	CORNER WEIGHT (A) LBS. KG.	CORNER WEIGHT (B) LBS. KG.	CORNER WEIGHT (C) LBS. KG.	CORNER WEIGHT (D) LBS. KG.	X	Y	Z
48GCG-04	543 [247]	63 [28]	63 [28]	63 [28]	63 [28]	36 3/8 [924]	23 3/8 [594]	18 [457]
48GCG-05	585 [266]	68 [30]	68 [30]	68 [30]	68 [30]	36 3/8 [924]	23 3/8 [594]	18 [457]
48GCG-06	630 [286]	76 [34]	76 [34]	76 [34]	76 [34]	35 7/8 [911]	22 5/8 [575]	19 1/2 [489]

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

TOP VIEW

CORNER A CORNER B
CORNER C CORNER D

X Y Z

FRONT VIEW

CONDENSER COILS FAN

RIGHT SIDE VIEW

ECONOMIZER HOOD (OPTIONAL)
OPTIONAL DOOR SWING

R12 1/2 [318]
BACK WITH ECONOMIZER
BACK WITHOUT ECONOMIZER

LEFT RIGHT FRONT

74-5/8 [1896]

NOTES:
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

CLEARANCE			
SURFACE	SERVICE WITH CONDUCTIVE BARRIER	SERVICE WITH NONCONDUCTIVE BARRIER	OPERATING CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION U.S. FCC-NR SHEET 2 OF 3 DATE 11/17/20
SUPERCEDES 48TC003099

Fig. 1 — 48GCG*04-06 Unit Dimensions (cont)

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IITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48TC003099
	3 OF 3	11/17/20	04/02/19	486CG 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT

ACCESSORY DIMENSION PRINT

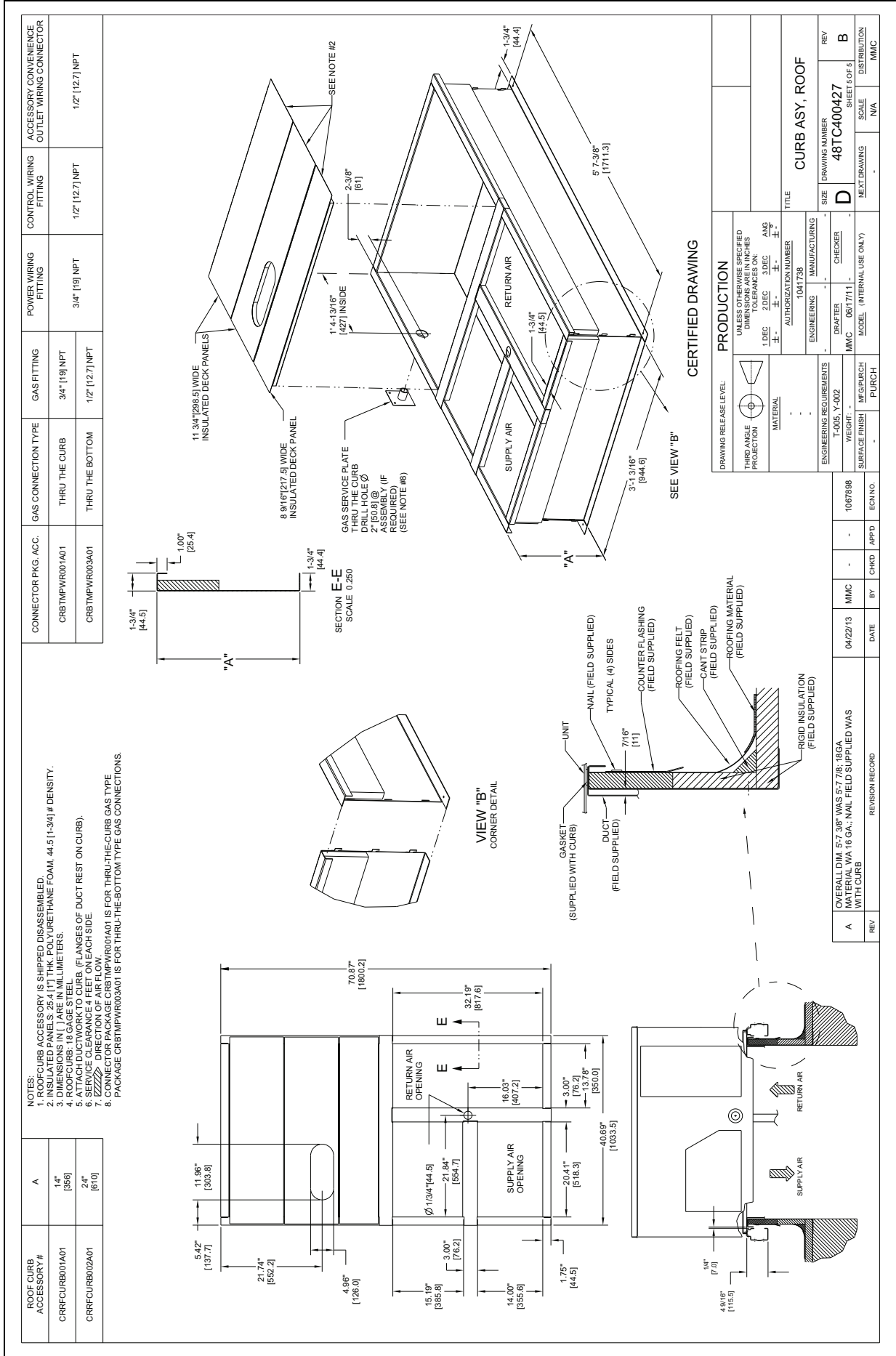


Fig. 2 — 48GCG*04-06 Roof Curb Dimensions

