

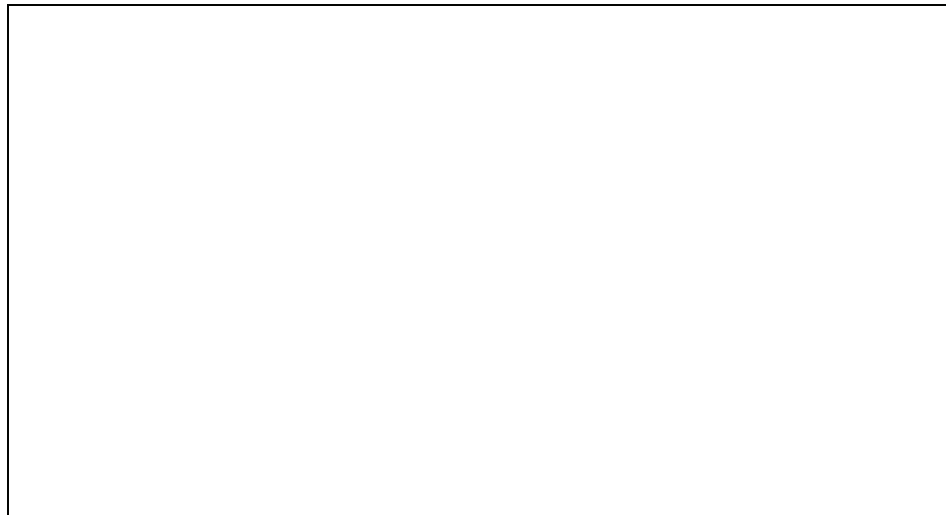


**48PGD/E/F/L/M/N16  
50PG16**

**SINGLE-PACKAGE COOLING UNITS WITH  
FACTORY-INSTALLED GAS HEAT**

**SINGLE-PACKAGE COOLING UNITS WITH  
OPTIONAL ELECTRIC HEAT**

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



Date:	Supersedes:	<b>48/50PG16</b> <b>SINGLE-PACKAGE COOLING UNIT</b> <b>WITH GAS HEAT AND COOLING UNIT</b> <b>WITH OPTIONAL ELECTRIC HEAT</b>	48/50PG	Rev.: -9SB
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:			DATE:	

### DESCRIPTION



All units are pre-wired, tested, and pre-charged with Puron<sup>®</sup> (R-410A) HFC refrigerant at the factory. The 48PG units are one-piece ultra-high efficiency rooftop cooling units with gas heat. The 50PG units are one-piece ultra-high efficiency cooling units with optional electric heat. Units are factory tested in both heating and cooling modes. The unit is rated in accordance with ARI Standard 360, tested in accordance with UL Standard 1995 and listed by UL and UL, Canada.

The 48PGD model is low heat. The 48PGE model is medium heat. The 48PGF model is high heat. The 48PGL model is low heat with stainless steel heat exchangers. The 48PGM model is medium heat with stainless steel heat exchangers. The 48PGN model is high heat with stainless steel heat exchangers. The 48/50PG16 unit is available in vertical and horizontal airflow models.

### STANDARD UNIT — FEATURES

Puron (R-410A) HFC refrigerant.  
EERs of 11.6 and IPLVs of 12.7.  
Sound levels as low as 84 dB.  
Scroll compressors internally protected and crankcase heaters.  
Independent two-stage cooling capacity control.  
Thermostatic expansion valve refrigerant control with removable power element.  
Hinged access doors with quarter-turn latches, tiebacks and handles.  
Slide-out blower/motor assembly.  
Slide-out and internally sloped condensate pan.  
Slide-out filter tracks with 2 or 4-in. filter capabilities.  
Power and condensate thru-the-bottom and thru-the-curb connections.  
Major access doors have double wall construction.  
Cleanable foil-faced insulation throughout the entire unit airstream.  
Totally enclosed, thermally protected, shaft down condenser motors.

Solid core liquid line filter drier.  
Isolated and insulated compressor compartment.  
Belt drive fan and motor assembly.  
Copper tube aluminum fin coils.  
Wiring is colored and labeled throughout the unit.  
Heavy gage full perimeter base rails with built-in rigging capabilities.  
Cooling operation up to 125 F (52 C) ambient temperature.  
Cleanable single slab evaporator and condenser coils.  
Refrigerant access valves that allow system readings without creating air bypass.  
Compressor protection includes high, low pressure cutouts and over temperature protection.  
24-volt control system with resettable circuit breaker.  
One-year product warranty.  
Five-year warranty on all compressors.

### STANDARD UNIT — FEATURES (48PG)

Up to 81% efficiency.  
Induced draft combustion system used for reliability and safety.  
Reliable IGC (integrated gas unit controller) provides system evaluation and troubleshooting via onboard LED indicator.  
Direct spark ignition.  
Alumagard<sup>™</sup> coated Turbo-tubular<sup>™</sup> heat exchangers.

Two-stage capacity control.  
Single point gas connection.  
Ten-year warranty on Alumagard coated Turbo-tubular gas heat exchanger.  
Fifteen-year warranty on optional stainless steel heat exchanger.

### STANDARD UNIT — FEATURES (50PG)

Five-year warranty on electric heaters.  
Electric heaters available as factory-installed option or field-installed accessory.

Heavy-duty nickel chromium element with high limit reset.  
Single point wiring kits are available.

### COMFORTLINK™ CONTROLS — FEATURES

Features with optional *ComfortLink*™ controls:

- Communications (via stand-alone thermostat or CCN [Carrier Comfort Network®]).
- Scrolling Marquee display.
- Time schedule.
- Reverse rotation protection for compressors.
- Space temperature sensor capability.

- Humidi-MiZer™ dehumidification system
- Service diagnostics, alarms, and alarm history.
- Service run test capability.
- Unit run time and compressor cycles history.
- CO<sub>2</sub> sensor capability.
- 0° F (-18 C) ambient cooling operation.
- 3V™ (VVT®) Zoning Linkage.

### ELECTRO-MECHANICAL CONTROLS — FEATURES

Features with optional electro-mechanical controls:

- 40 F (4 C) ambient cooling operation.
- Low pressure protection.

- Freeze protection.
- Cycle-LOC™ compressor lockout logic.
- High pressure protection.

### PERFORMANCE DATA

#### COOLING

Efficiency \_\_\_\_\_ SEER/EER  
Net Total Capacity \_\_\_\_\_ Btuh  
Net Sensible Capacity \_\_\_\_\_ Btuh  
Compressor Power Input \_\_\_\_\_ kW  
Outdoor Air Temperature \_\_\_\_\_ F  
Indoor Entering Air \_\_\_\_\_ db F \_\_\_\_\_ wb F  
Airflow CFM \_\_\_\_\_ External Static Pressure \_\_\_\_\_ in. wg  
Indoor Fan RPM \_\_\_\_\_  
Indoor Fan Bhp \_\_\_\_\_  
Unit Operating Weight \_\_\_\_\_ lb  
Curb Weight \_\_\_\_\_ lb

#### HEATING (GAS)

Total Heating Capacity:

INPUT

Stage 1 \_\_\_\_\_ Btuh

Stage 2 \_\_\_\_\_ Btuh

OUTPUT

Stage 1 \_\_\_\_\_ kW

Stage 2 \_\_\_\_\_ kW

AFUE \_\_\_\_\_ %

Steady State \_\_\_\_\_ %

#### HEATING (ELECTRIC)

Total Heating Capacity:

Stage 1 \_\_\_\_\_ Btuh

Stage 2 \_\_\_\_\_ Btuh

### ELECTRICAL DATA

Power Supply to Unit \_\_\_\_\_ Volts \_\_\_\_\_ Phase \_\_\_\_\_ Hz

Minimum Circuit Amps \_\_\_\_\_ Maximum Overcurrent Protection \_\_\_\_\_

### SUBMITTAL DATA

Job Name \_\_\_\_\_

Architect \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor \_\_\_\_\_

Unit Designation \_\_\_\_\_



CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT

UNIT WEIGHT TABLE

UNIT	STD. WEIGHT (LBS.)	UNIT WEIGHT (LBS.)	CORNER WEIGHT (A) (LBS.)	CORNER WEIGHT (B) (LBS.)	CORNER WEIGHT (C) (LBS.)	CORNER WEIGHT (D) (LBS.)
48PG16	1895	861	646.5	294	537.2	244
	322.8	148	388.5	177		

UNIT WEIGHT (LBS.)

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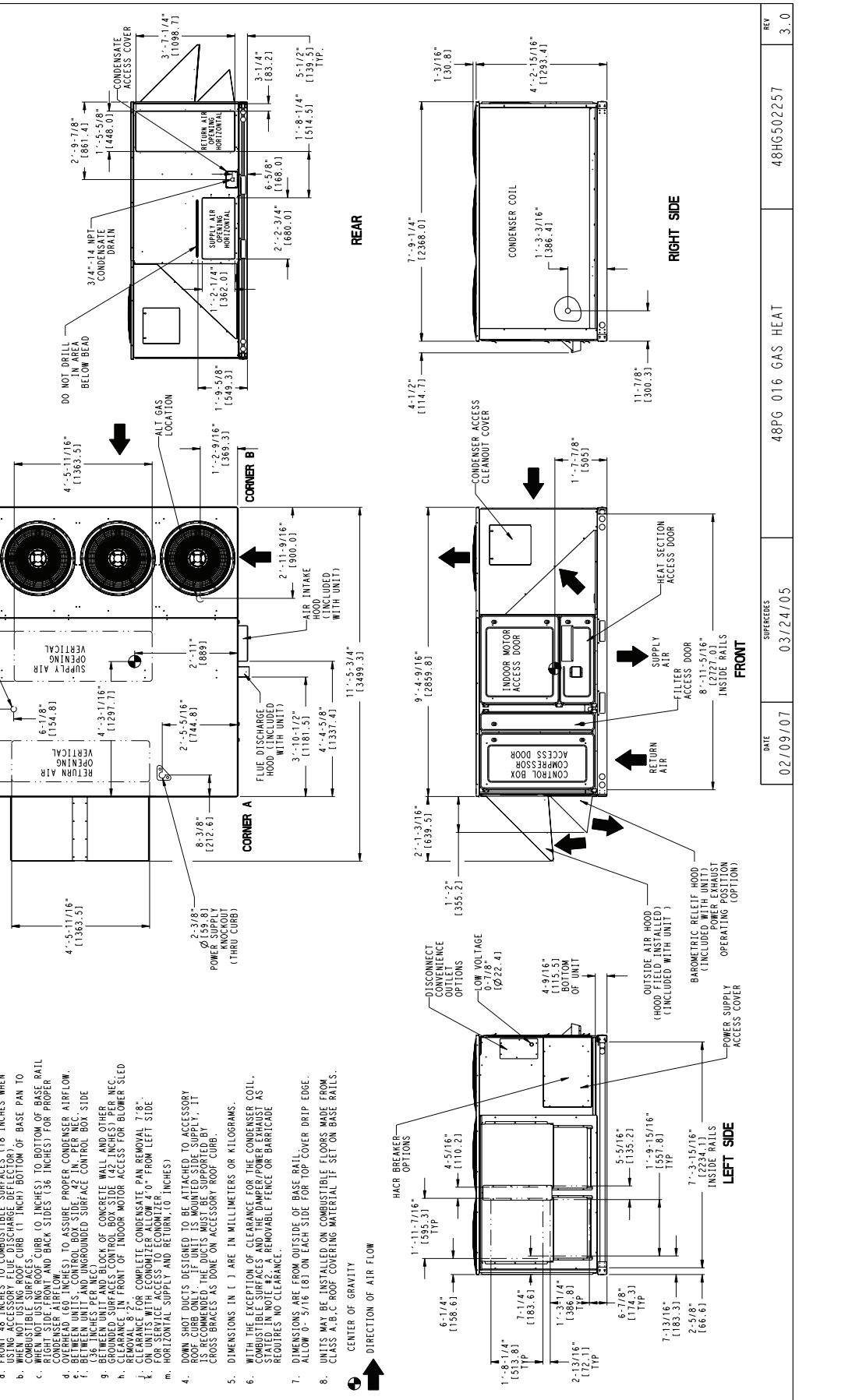
UNIT WEIGHT (LBS.)

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UNIT WEIGHT (LBS.)



NOTES:

- WEIGHTS SHOWN ARE FOR 48PG (HI HEAT) UNIT WITH ALUMINUM COILS AND STANDARD DRIVE. FOR WEIGHTS OF OPTIONAL EQUIPMENT CONSULT PRODUCT DATA BOOK.
- DO NOT LOCATE ADJACENT UNITS WITH FLUE DISCHARGE FACING ECONOMIZER INLET.
- MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTIONS MAY PREVAIL):
  - FRONT 48 INCHES TO COMBUSTIBLE SURFACES (18 INCHES WHEN USING ACCESSORY FLUE DISCHARGE DEFLECTOR).
  - COMBUSTIBLE SURFACES (1 INCH) BOTTOM OF BASE PAN TO COMBUSTIBLE SURFACES.
  - WHEN NOT USING ROOF CURB (0 INCHES) TO BOTTOM OF BASE RAIL FRONT SIDE, FRONT AND BACK SIDES (36 INCHES) FOR PROPER AIRFLOW.
  - OVERHEAD (60 INCHES) TO ASSURE PROPER CONDENSER AIRFLOW.
  - BETWEEN UNITS, CONTROL BOX SIDE, 42 IN. PER NEC.
  - BETWEEN UNIT AND UNGROUND SURFACE CONTROL BOX SIDE.
  - BETWEEN UNIT AND BLOCK OF CONCRETE WALL AND OTHER GROUNDED SURFACES CONTROL BOX SIDE (42 INCHES, PER NEC).
  - CLEARANCE IN FRONT OF INDOOR MOTOR ACCESS FOR BLOWER SLED.
  - CLEARANCE FOR COMPLETE CONDENSATE PAN REMOVAL 7'8".
  - ON UNITS WITH ECONOMIZER ALLOW 4'0" FROM LEFT SIDE.
  - HORIZONTAL SUPPLY AND RETURN (10 INCHES).
- DOWN SHOT DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY HOODS. DOWN SHOT DUCTS MUST BE SUPPORTED BY 1" X 1" CROSS BRACES AS DONE ON ACCESSORY ROOF CURB.
- DIMENSIONS IN ( ) ARE IN MILLIMETERS OR KILOGRAMS.
- WITH THE EXCEPTION OF CLEARANCE FOR THE CONDENSER COIL, COMBUSTIBLE SURFACES AND THE DAMPER/POWER EXHAUST AS NOTED, ALL CLEARANCES ARE TO BE MEASURED TO THE CENTER OF THE UNIT. NO CLEARANCE.
- DIMENSIONS ARE FROM OUTSIDE OF BASE RAIL. ALLOW 0' 5/16" (8) ON EACH SIDE FOR TOP COVER DRIP EDGE.
- UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM CLASS A, B, C ROOF COVERING MATERIAL IF SET ON BASE RAILS.

REAR

RIGHT SIDE

FRONT

LEFT SIDE

DIRECTION OF AIR FLOW

DATE: 02/09/07

SUPERSEDES: 03/24/05

48PG 016 GAS HEAT

REV: 3.0

# CERTIFIED DIMENSION PRINT

UNITED LOGIC P.O. BOX 4809  
 1400 N. 10TH ST. SUITE 200  
 CARLEER, NJ 07003

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UNIT	STD. UNIT	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.
50PG16	1771	805	1604.2	275	502.1	228	501.7
		137	303.1	165			

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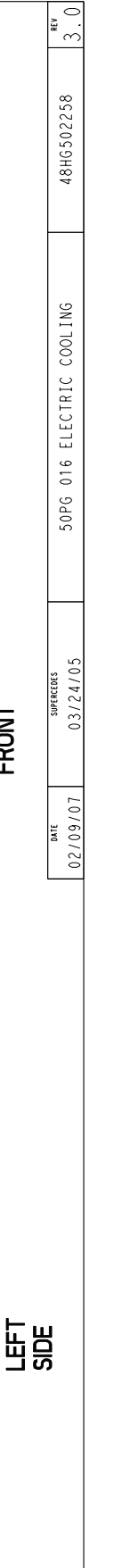
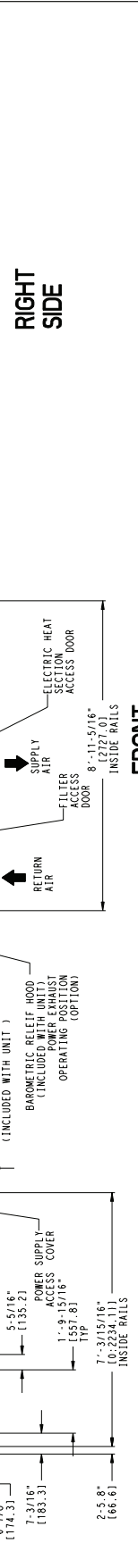
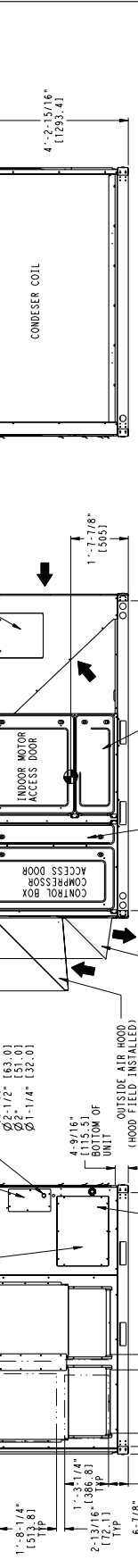
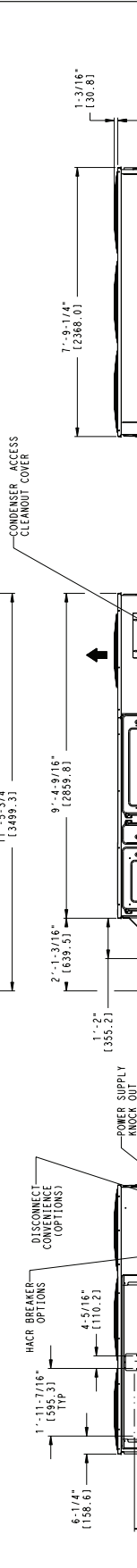
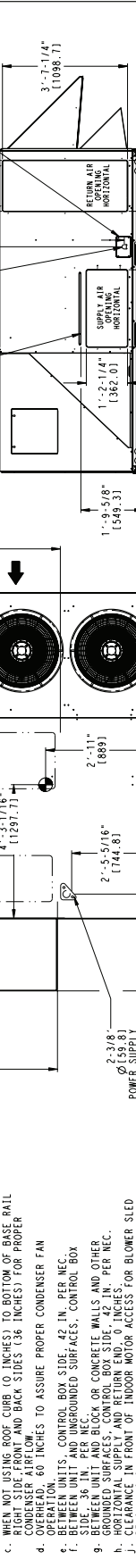
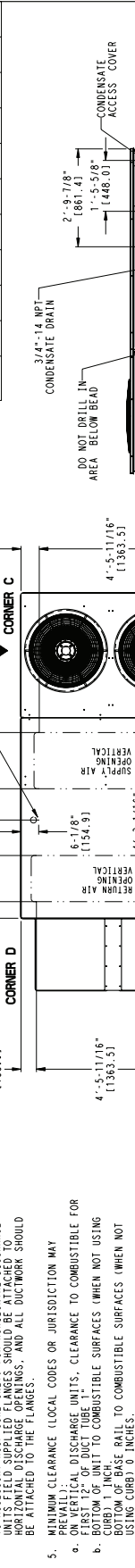
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		137	303.1	165			



DATE	SUPERVISOR	REV
02/09/07	03/24/05	3.0

NOTES:

- DIMENSIONS IN ( ) ARE IN MILLIMETERS.
- CENTER OF GRAVITY.
- DIRECTION OF AIR FLOW.
- ON VERTICAL DISCHARGE UNITS, DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. FOR HORIZONTAL DISCHARGE UNITS, DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. ALL DISCHARGE OPENINGS MUST BE ATTACHED TO THE FLANGES, AND ALL DUCTWORK SHOULD BE ATTACHED TO THE FLANGES.
- MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY VARY):
  - ON VERTICAL DISCHARGE UNITS, CLEARANCE TO COMBUSTIBLE OR FIRST 12" OF DUCT TUBE 1"
  - BOTTOM OF UNIT TO COMBUSTIBLE SURFACES WHEN NOT USING CURB 0 INCHES
  - TOP OF UNIT TO COMBUSTIBLE SURFACES WHEN NOT USING CURB 0 INCHES
  - WHEN NOT USING ROOF CURB (0 INCHES) TO BOTTOM OF BASE RAIL (TOP OF FRONT AND BACK SIDES 138 INCHES) FOR PROPER CONDENSATE DRAINAGE AND BACK SIDES 138 INCHES) FOR PROPER OPERATION. 60 INCHES TO ASSURE PROPER CONDENSATE FAN OPERATION.
  - BETWEEN UNITS, CONTROL BOX SIDE: 42 IN. PER NEC.
  - BETWEEN UNITS, UNROUND SURFACES, CONTROL BOX SIDE: 36 IN. PER NEC.
  - BETWEEN UNITS AND BLOCK OR CONCRETE WALLS AND OTHER GROUND SURFACES, CONTROL BOX SIDE: 42 IN. PER NEC.
  - CLEARANCE FROM FRONT AND REAR END: 42 IN. PER NEC.
  - CLEARANCE FROM FRONT AND REAR END: 42 IN. PER NEC.
  - REMOVAL 8"
  - REMOVAL 8"
  - REMOVAL 8"
- WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSATE ACCESS COVER, CLEARANCE FOR THE CONDENSATE ACCESS COVER IS 7'8".
- UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL IF SET ON BASE RAIL.

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

**CERTIFIED ROOF CURB DIMENSION PRINT**

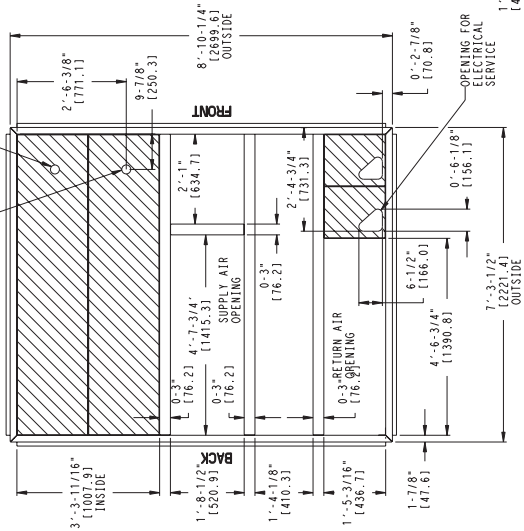
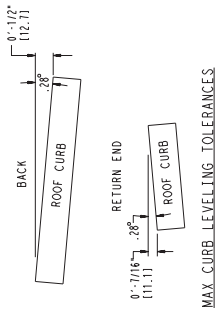
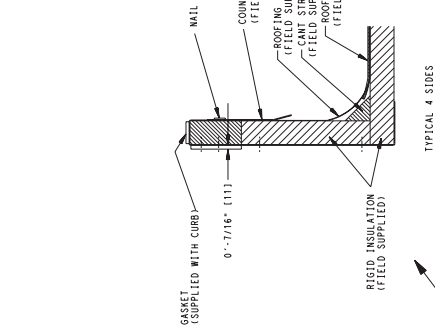
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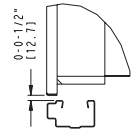
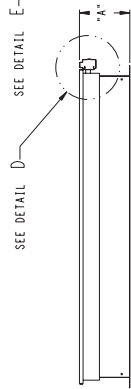
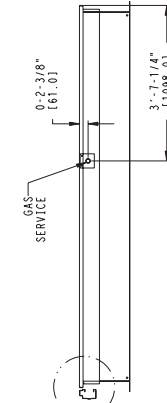
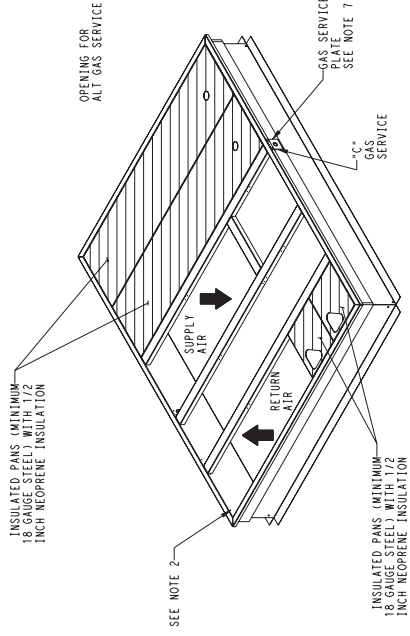
UNIT SIZE	"A"	ROOF CURB ACCESSORY
48PG/50PG	1'-2" [356]	CRRCURB03400
16	2'-0" [610]	CRRCURB035A00

UNIT SIZE	"C"	CONNECTOR ACCESSORY PACKAGE
48PG	"C"	CRGASER06A00
16	1" NPT	CRGASER06A00

- NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
  2. BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS (1) 0-0-7/16" TIP ALL CORNERS.
  3. DIMENSIONS IN ( ) ARE IN MILLIMETERS.
  4. ROOF CURB GALVANIZED STEEL.
  5. ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB).
  6. SERVICE CLEARANCE 4 1/16" ON EACH SIDE.
  7. GAS SERVICE PLATE IS PART OF A SEPARATELY SHIPPED ACCESSORY PACKAGE.
  8. GAS SERVICE PLATE CAN BE USED WITH EITHER ACCESSORY ROOF CURB.



↑ DIRECTION OF AIR FLOW



DETAIL E  
SCALE 1:5

DETAIL D  
SCALE 1:5

DATE	SUPPLIES	REV
03/24/05	48PG/50PG 16 ROOF CURB	48HG501914
		2.0

