



**48TJD/TJF/TJM/TJN016, 020, 024, 028
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED GAS HEAT**

**50TJ016, 020, 024, 028
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED OPTIONAL ELECTRIC HEAT**

- PERFORMANCE DATA
- CERTIFIED DIMENSION PRINT
- CERTIFIED ROOF CURB
DIMENSION PRINT
- HORIZONTAL SUPPLY/RETURN
ADAPTER ROOF CURB DIMENSION
PRINT
- SERVICE OPTION DIMENSION PRINT



Date:	Supersedes:	48/50TJ016, 020, 024, 028 SINGLE-PACKAGE COOLING UNITS WITH GAS HEAT (48TJ) OR OPTIONAL ELECTRIC HEAT (50TJ)	48TJ 50TJ	Rev.: -2SB
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:				DATE:



ARI STANDARD
360



ALL 208/230,
460-V UNITS



DESCRIPTION

The 48TJ units are one-piece electric cooling/gas heating units and the 50TJ units are one-piece electric cooling/optional electric heating units, prewired and precharged. The 48/50TJ units have bottom air openings for separate supply and return ductwork. The 48TJD units are low heat units and the 48TJF units are high heat units. The 48TJM units are low heat, stainless steel heat exchanger units and the 48TJN units are high heat, stainless steel heat exchanger units. The unit is intended for installation on an accessory curb (ordered separately). Horizontal supply and return connections are also possible with a factory-preassembled horizontal conversion adapter roof curb accessory (ordered separately). Bottom discharge on concentric applications requires a transition duct (field-supplied) external to the unit.

STANDARD UNIT FEATURES

All units meet ASHRAE Standard 90.1.

Standard one-year product warranty.

Five-year warranty on the compressor (48/50TJ016). One year warranty on the compressor (48/50TJ020-028).

Units are rated in accordance with ARI standard 360. Standard unit is certified and listed by ETL and ETL, Canada.

Low outdoor temperature cooling operation to 40 F (4 C) as standard.

Dual freeze-stat protection is provided as standard.

Dual scroll compressors with internal linebreak protection.

Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless internally grooved copper tubes.

Dual TXVs (thermostatic expansion valves) metering devices.

Liquid line filter driers provided in each refrigeration circuit.

Optional gear-driven EconoMi\$er IV equipped with solid-state controller that includes CO₂ ventilation control capability.

Manually adjustable outside air intake for up to 25% outside air.

Automatic changeover (when used with an auto-changeover thermostat).

Single-point gas and electric connections. Disconnect in accordance with NEC must be field-supplied and installed.

All units utilize 2-stage cooling.

Belt drive adjustable evaporator fan.

Choice of low-medium or high-static indoor fan drive capability.

Cabinet made of pre-painted, galvanized steel with baked enamel finish.

Cooling systems have low and high-pressure switches. Two-inch disposable type return-air filters are factory installed.

Provision for alternate end return in base unit. Horizontal supply available by using accessory curb. EconoMi\$er IV may be used with horizontal supply and return.

Direct drive propeller condenser fans with vertical discharge.

48TJ UNITS ONLY

Five-year non-prorated warranty on Alumagard™ coated Turbo-tubular™ gas heat exchanger.

2-stage gas heat in a single 2-stage gas valve.

Induced draft combustion system with Hall effect sensor to detect proper operation of induced-draft motor.

Heavy Alumagard coated heat exchangers with aluminized steel burners.

Optional stainless steel heat exchangers.

Heating controls with solid-state direct spark ignition system (pilotless system) and redundant gas valve. High temperature limit switches and auto-reset flame rollout switch are standard.

Reliable IGC (integrated gas unit controller) with built in diagnostics to determine error codes and control fan on/off delays for energy savings and maximum comfort control.

Integrated gas unit controller provides anti-cycle protection for gas heat operation.

PERFORMANCE DATA

Unit Operating Weight _____ lb/kg

COOLING

Gross Total Capacity _____ Btuh/kW
at Condenser Air Temperature _____ °F/°C

Gross Sensible Capacity _____ Btuh/kW

Compressor Power Input _____ kW

Indoor Entering Air db _____ °F/°C wb _____ °F/°C

Cfm / L/s _____ External Static Pressure _____ in. wg/Pa

Indoor Fan Motor Size _____ Hp/kW

Exhaust Fan Motor Size _____ Hp/kW

Curb Weight _____ lb/kg

HEATING

Heating Capacity:

Gas Stage 1 _____ Btuh/kW

Gas Stage 2 _____ Btuh/kW

Gas Heating Capacity Total _____ Btuh/kW

Electric Stage 1 _____ kW

Electric Stage 2 _____ kW

Electric Heating Capacity Total _____ kW

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz
Minimum Circuit Amps _____ Maximum Fuse Amps _____

SUBMITTAL DATA

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

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS

- ☐ Fully Integrated Gear Driven EconoMi\$er IV
- ☐ Additional 5-Year (6th-10th Year) Extended Protection Plan on the Heat Exchanger (48TJ)
- ☐ Service Option Package (Hinged Access Panels, Non-Fused Disconnect, 115-v Convenience Outlet)
- ☐ Low/High Gas Heat (48TJ)
- ☐ Electric Heat (50TJ)
- ☐ Pre-Coated Condenser Coils
- ☐ E-Coated Condenser Coils
- ☐ Stainless Steel Heat Exchangers (48TJ)
- ☐ High Static Fan Motor

FIELD-INSTALLED ACCESSORIES

- ☐ Fully Integrated Gear Driven EconoMi\$er IV
- ☐ PremierLink™ Control
- ☐ EconoMi\$er2
- ☐ Low Ambient Kit — Down to 10 F (016, 020, 028)
- ☐ Low Ambient Kit — Down to 25 F (024)
- ☐ Motormaster® Control — Down to -20 F
- ☐ Return Air Temperature Sensor (Differential Dry Bulb EconoMi\$er IV Control)
- ☐ Solid-State Enthalpy Control — Outside Air
- ☐ Solid-State Enthalpy Control with Harness — Return Air
- ☐ Winter Start Package
- ☐ Roof Curb (14-in.)
- ☐ Roof Curb (24-in.)
- ☐ Roof Curb (Horizontal Supply)
- ☐ Factory Preassembled, Horizontal Conversion Adapter Roof Curb
- ☐ Power Exhaust
- ☐ Barometric Relief
- ☐ Thermostat and Subbase
- ☐ Time Guard II Device
- ☐ Two-Position Damper Package
- ☐ Liquid Propane (LP) Gas Kit (48TJ only)
- ☐ Hail Guard
- ☐ Hydronic (Glycol) Coil
- ☐ Electric Heat
- ☐ CO₂ Sensor — Duct Mount
- ☐ CO₂ Sensor — Wall Mount

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

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DATE 07/28/05

1 3/8" DIA. DRAIN HOLE (2121)

6'-11 1/2" (2121)

TYP (4) PLCS 0'-3, 7/8" (99)

0'-8 1/8" (206)

1'-7 13/16" (504)

1'-4 5/16" (415)

1'-4 9/16" (421)

CORNER D

CORNER A

CORNER C

0'-5 15/16" (151)

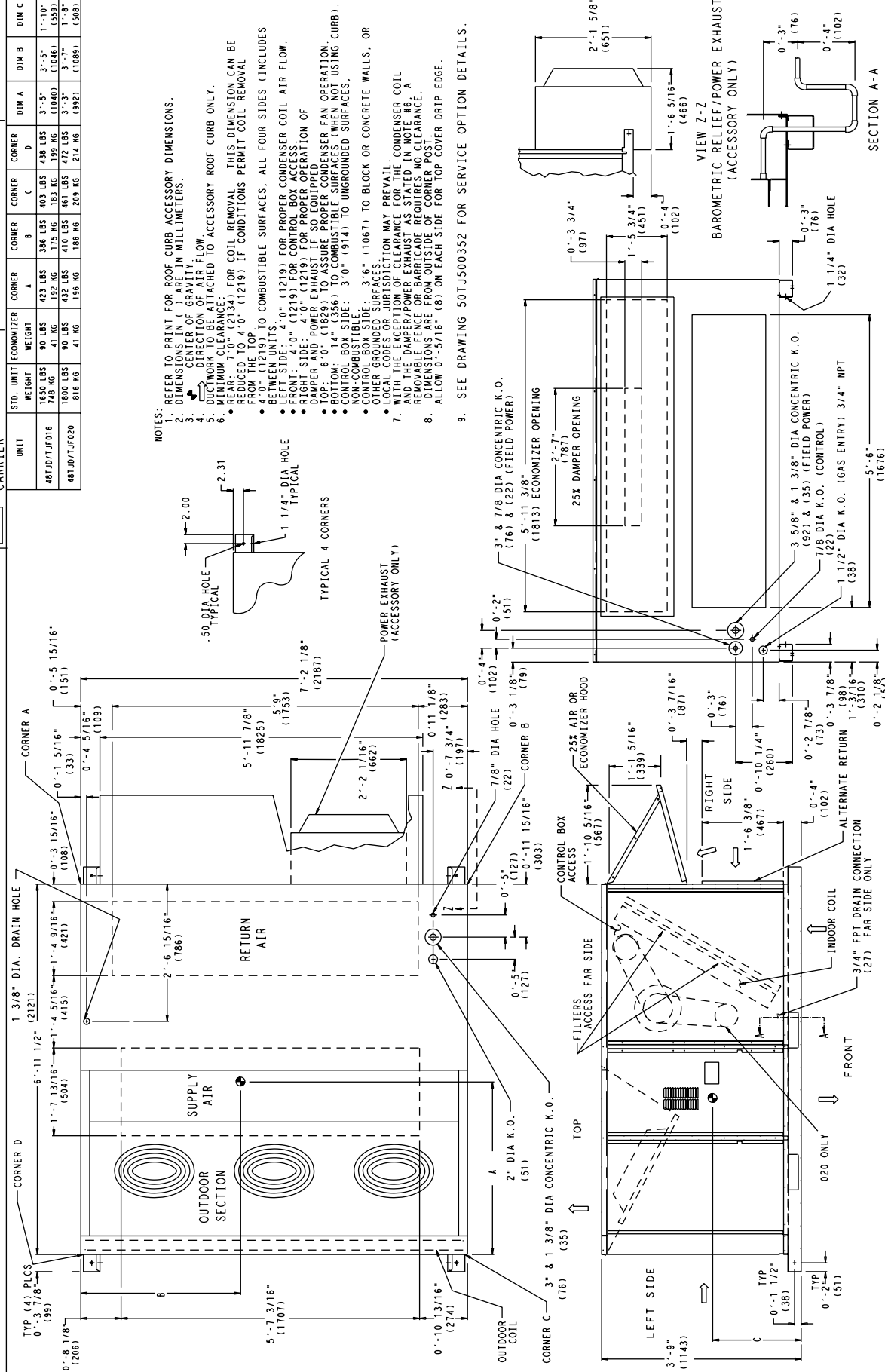
0'-1 5/16" (33)

CABLE		CORNER D		CORNER A		CORNER C		CORNER B		CORNER D		CORNER C		CORNER B		CORNER D	
UNIT	STD. UNIT WEIGHT	ECONOMIZER WEIGHT	CORNER A	CORNER C	CORNER B	CORNER D	CORNER C	CORNER B	CORNER D	UNIT	STD. UNIT WEIGHT	ECONOMIZER WEIGHT	CORNER A	CORNER C	CORNER B	CORNER D	DIM C
48TJ07/JF016	1550 LBS	423 LBS	386 LBS	403 LBS	438 LBS	438 LBS	403 LBS	386 LBS	438 LBS	1'-10"	1550 LBS	423 LBS	386 LBS	403 LBS	438 LBS	438 LBS	1'-10"
48TJ07/JF016	748 KG	41 KG	192 KG	175 KG	183 KG	183 KG	175 KG	192 KG	183 KG	(559)	748 KG	41 KG	192 KG	175 KG	183 KG	183 KG	(559)
48TJ07/JF020	1800 LBS	90 LBS	432 LBS	432 LBS	472 LBS	472 LBS	432 LBS	432 LBS	472 LBS	1'-8"	1800 LBS	90 LBS	432 LBS	432 LBS	472 LBS	472 LBS	1'-8"
48TJ07/JF020	816 KG	41 KG	196 KG	196 KG	209 KG	209 KG	196 KG	196 KG	209 KG	(508)	816 KG	41 KG	196 KG	196 KG	209 KG	209 KG	(508)

NOTES:

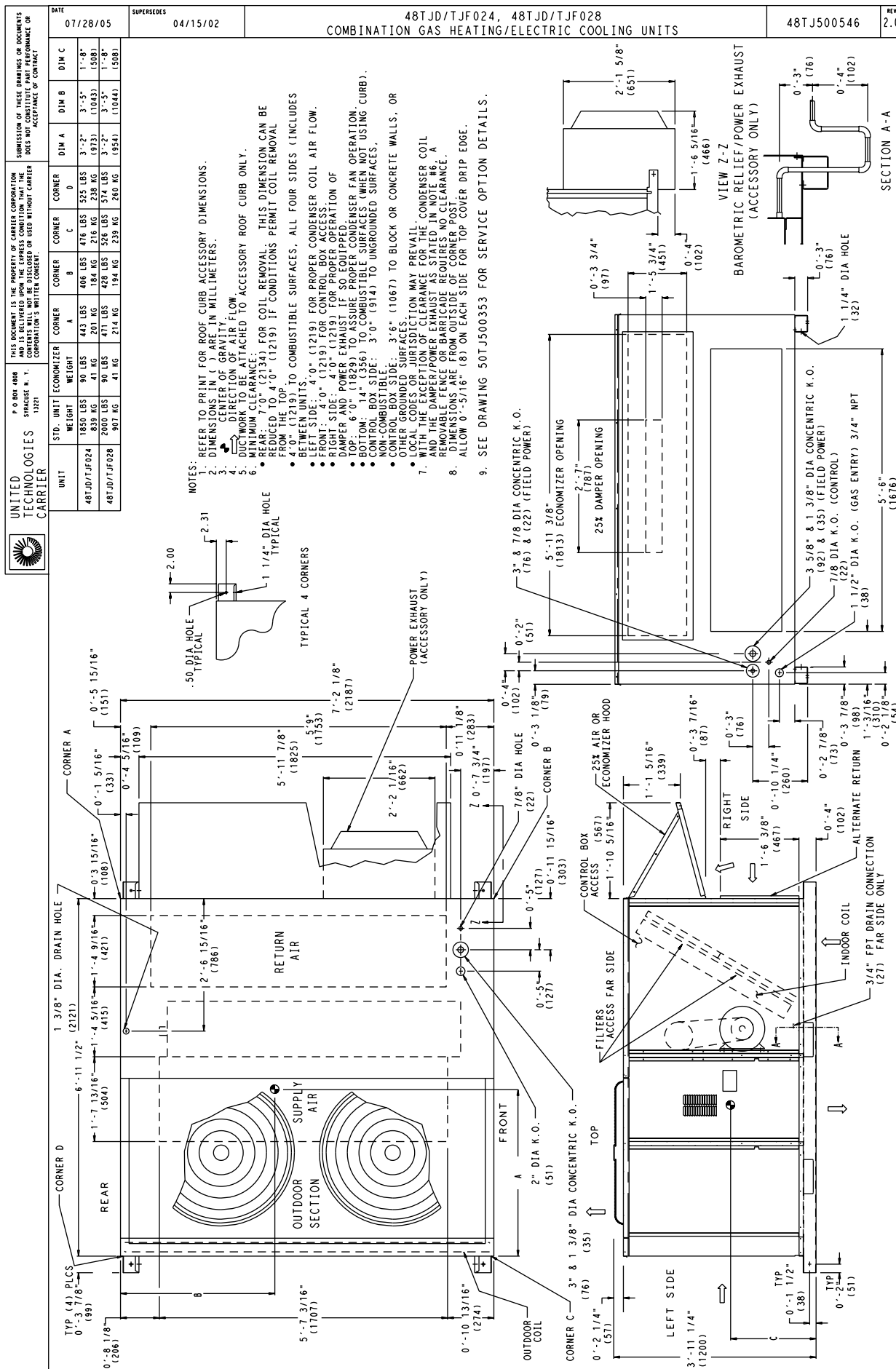
1. REFER TO PRINT FOR ROOF CURB ACCESSORY DIMENSIONS.
2. DIMENSIONS IN () ARE IN MILLIMETERS.

1. REFER TO PRINT FOR ROOF CURB ACCESSORY DIMENSIONS.
2. DIMENSIONS IN () ARE IN MILLIMETERS.
3. CENTER OF GRAVITY FLOW
4. DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY.
5. MINIMUM CLEARANCE:
 - REAR: 7'-0" (2134) FOR COIL REMOVAL. THIS DIMENSION CAN BE REDUCED TO 4'-0" (1219) IF CONDITIONS PERMIT COIL REMOVAL FROM THE REAR.
 - TOP: 12'-0" (3658) TO COMBUSTIBLE SURFACES, ALL FOUR SIDES (INCLUDES BETWEEN UNITS).
 - LEFT SIDE: 4'-0" (1219) FOR PROPER CONDENSER COIL AIR FLOW.
 - FRONT: 4'-0" (1219) FOR CONTROL BOX ACCESS.
 - RIGHT SIDE: POWER (1219) FOR PROPER OPERATION OF
 - TOP: 6'-0" (1829) TO ASSURE PROPER CONDENSER FAN OPERATION
 - BOTTOM: 14" (356) TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB).
 - TOP: 14" (356) TO ASSURE PROPER SURFACES (WHEN NOT USING CURB).
6. CONTROL BOX SIDE: 3'-0" (914) TO UNGROUNDED SURFACES.
7. NON-COMBUSTIBLE:
 - TOP: 3'-0" (914) TO UNGROUNDED SURFACES.
 - OTHER GROUNDED SURFACES: 3'-6" (1067) TO BLOCK OR CONCRETE WALLS, OR OTHER GROUNDED SURFACES.
8. LOCAL CODES OR JURISDICTION MAY PREVAIL.
9. WITH THE EXCEPTION OF CLEARANCE FOR THE CONDENSER COIL AND THE DAMPER/POWER EXHAUST AS STATED IN NOTE #6, A REMOVABLE SENSE OF BARRIER REQUIREMENTS AND CLEARANCE.
10. REMOVABLE SENSE OF BARRIER REQUIREMENTS AND CLEARANCE.
11. ALLOW 0'-57/16" (8) ON EACH SIDE FOR TOP COVER DRIP EDGE.
12. SEE DRAWING 50TJ500352 FOR SERVICE OPTION DETAILS.



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CERTIFIED DIMENSION PRINT





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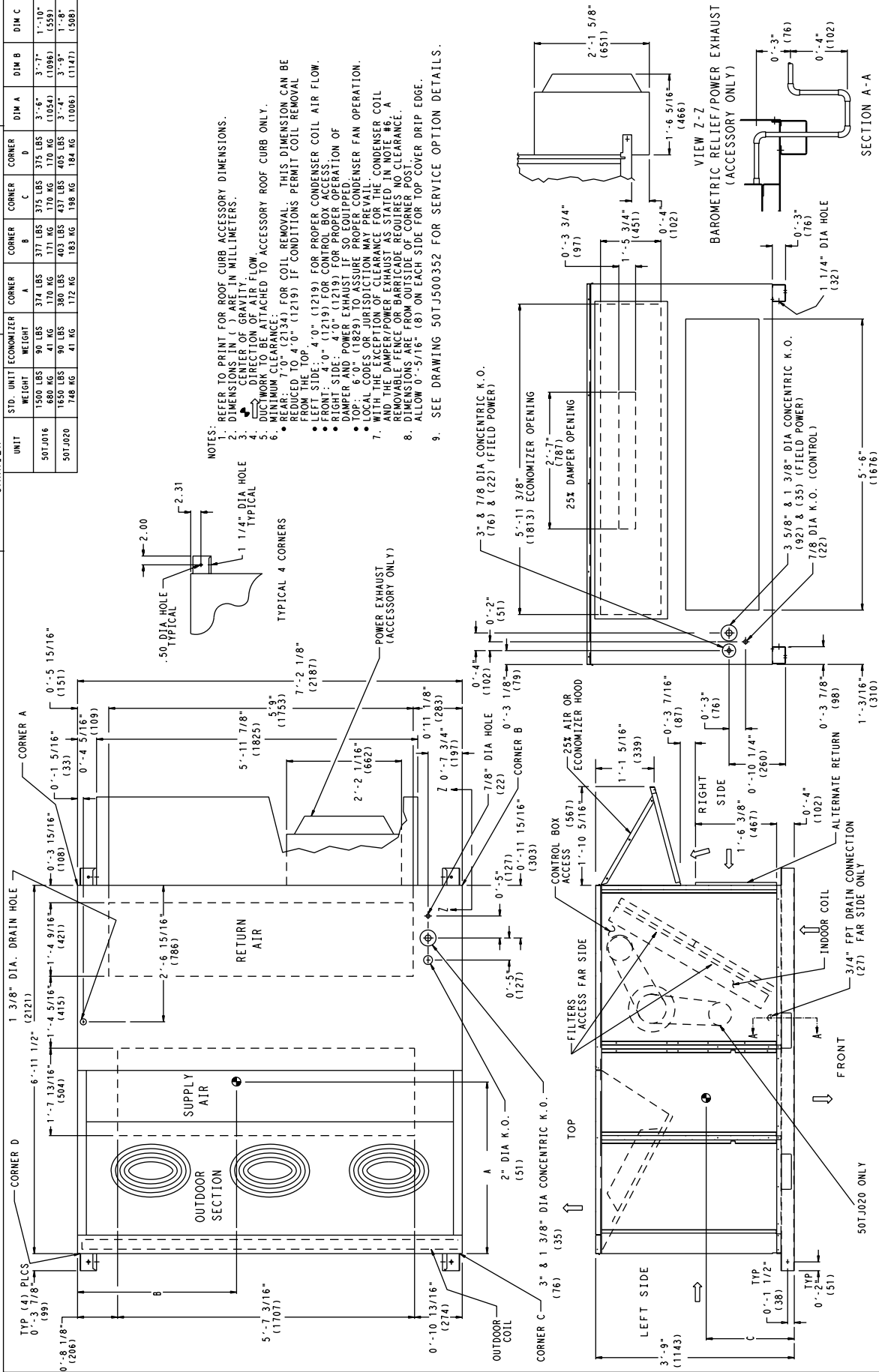
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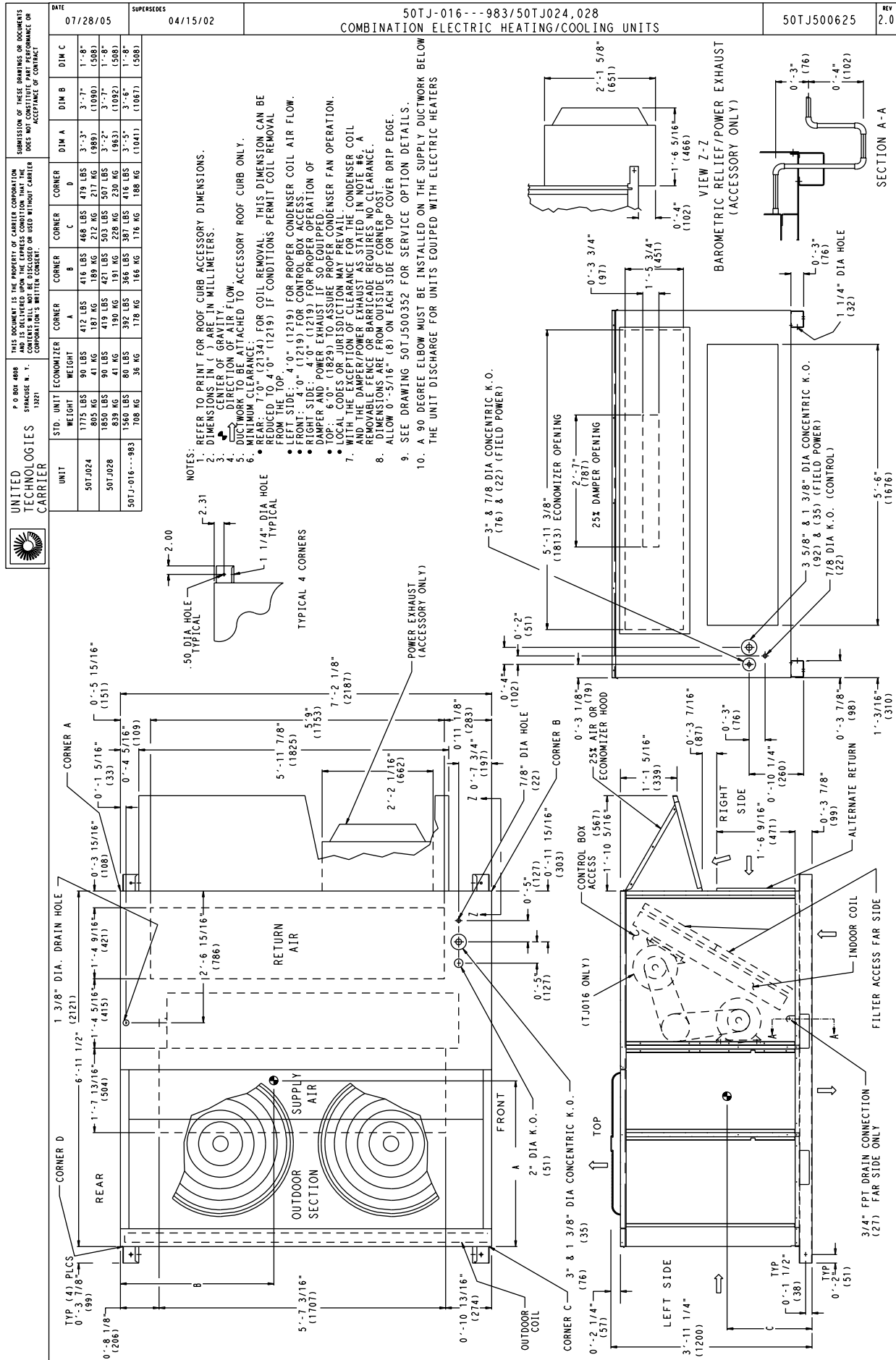
UNIT	STD. UNIT	ECONOMIZER	CORNER	CORNER	CORNER	CORNER	DIM A	DIM B	DIM C
WEIGHT	WEIGHT	WEIGHT	A	B	C	D			
50TJ016	1500 LBS 680 KG	90 LBS 41 KG	374 LBS 170 KG	375 LBS 170 KG	375 LBS 170 KG	375 LBS 170 KG	3'-6" (1054)	3'-7" (1096)	1'-10" (559)
50TJ020	1650 LBS 748 KG	90 LBS 41 KG	380 LBS 172 KG	403 LBS 183 KG	437 LBS 198 KG	405 LBS 184 KG	3'-4" (1006)	3'-9" (1147)	1'-8" (508)

DATE	SUPPLIES	50TJ016,020	COMBINATION ELECTRIC HEATING/COOLING UNITS	50TJ500624	REV
07/28/05	04/15/02				2.0



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CERTIFIED DIMENSION PRINT



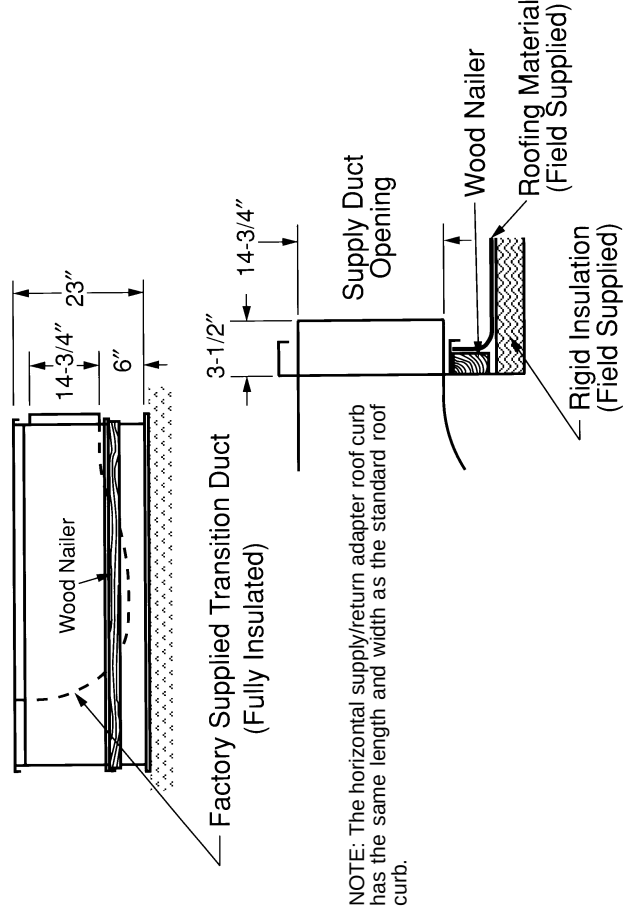
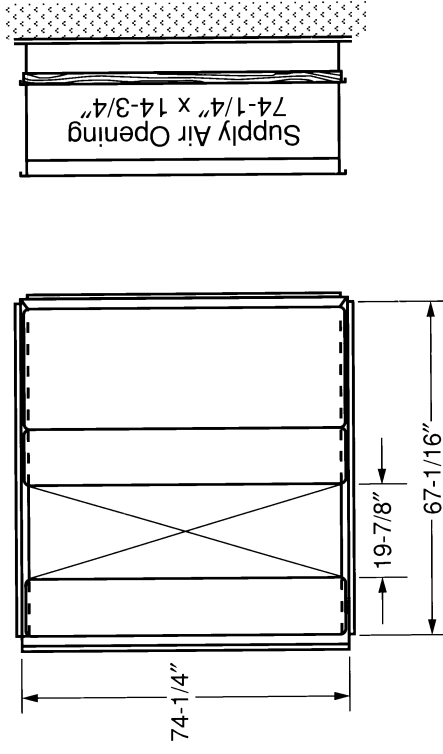
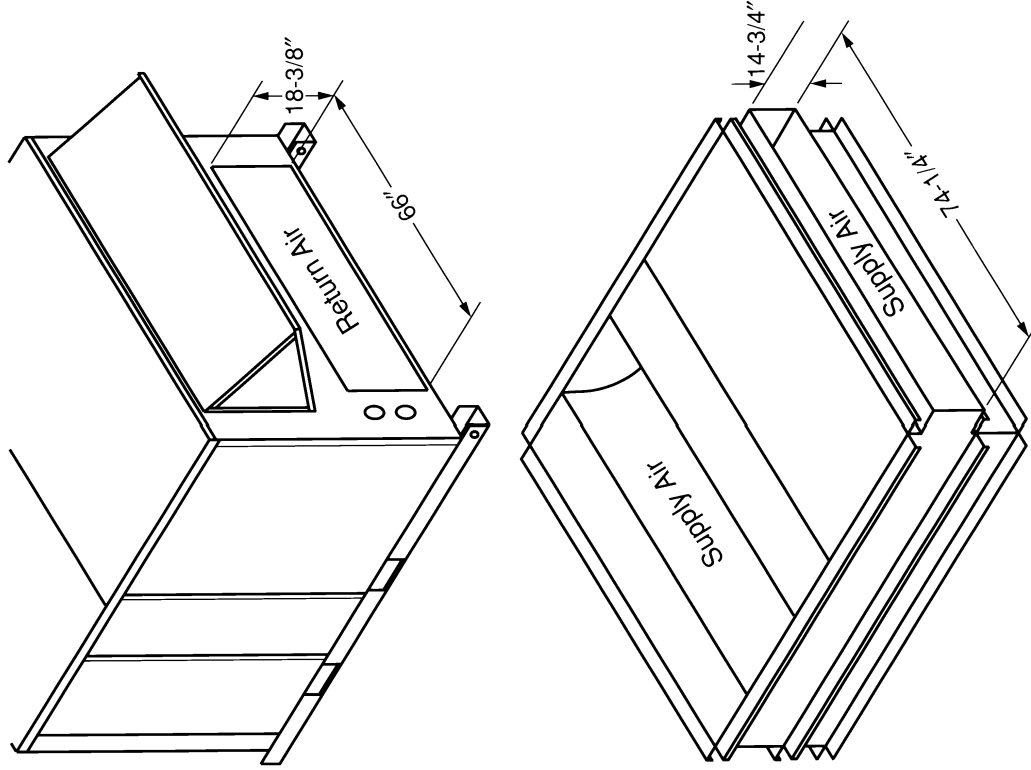
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CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

HORIZONTAL SUPPLY/RETURN ADAPTER DIMENSION DRAWING



NOTE: The horizontal supply/return adapter roof curb has the same length and width as the standard roof curb.

FACTORY PRE-ASSEMBLED HORIZONTAL
SUPPLY/RETURN ADAPTER ACCESSORY
CRRFCURB013A00

SERVICE OPTION DIMENSION PRINT



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