



50R-2SB

50RTG ROOFTOP WATER SOURCE HEAT PUMPS

3 TO 20 NOMINAL TONS



- **PERFORMANCE DATA**
- **CERTIFIED DIMENSION PRINTS**



Date:	Supersedes:	50RTG WATER SOURCE HEAT PUMPS	50RTG	Rev:
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:			DATE:	

DESCRIPTION

The 50RTG Rooftop, Water Source Heat Pumps are typically installed on a roof either as a stand-alone unit, as part of a ground-loop system or as a part of a closed-loop system. Units are factory wired, piped, charged and tested, ready for installation. The unit operates at a broad range of input water temperatures 20 F to 110 F (-6.7 C to 43 C) reducing the use of coolers or boilers, particularly during changes of season.

STANDARD FEATURES

Standard safety features include: high-pressure switch, freeze protection switches, and loss-of-charge protection.

Each unit is run tested at the factory to ensure proper operation of all components and safety switches.

The blower and motor assembly shall be mounted on a slide-out base.

The water-to-refrigerant heat exchanger has copper inner and steel outer tubing to provide corrosion resistance protection.

Units are ARI (Air Conditioning & Refrigeration Institute) Standard 320-93 certified.

Filter racks permit easy filter replacement.

Convenient large service access panels to access the fan motor and controls and can be used for on-site testing or refrigerant recovery.

The standard CXM electronic controls provide short cycle protection, random start, remote alarm, and intelligent reset. Self-diagnostic capability includes fault-type indication and memory.

An optional DXM electronic controller offers advanced system control capabilities such as night setback and emergency shutdown.

PERFORMANCE DATA

UNIT

Operating Weight _____ lbs

Shipping Weight _____ lbs

COOLING

Total Capacity _____ Btuh

Sensible Capacity _____ Btuh

Unit CFM _____ at _____ in. wg ESP

Total Heat of Rejection _____ Btuh

Entering Air Temperature _____ °F db _____ °F wb

Entering Water Temperature _____ °F

Leaving Water Temperature _____ °F

GPM _____

Water Pressure Drop _____ ft

Unit Power Input _____ kW

EER (ARI) _____

HEATING

Total Capacity _____ Btuh

Unit CFM _____ at _____ in. wg ESP

Total Heat of Absorption _____ Btuh

Entering Air Temperature _____ °F

Entering Water Temperature _____ °F

Leaving Water Temperature _____ °F

GPM _____

Water Pressure Drop _____ ft

Unit Power Input _____

COP (ARI) _____

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hertz

Compressor RLA _____

Fan FLA _____

Unit Minimum Circuit Amps _____

Maximum Fuse Amps _____

FACTORY-INSTALLED OPTIONS

☐ Factory-Mounted Disconnect Switch

☐ Factory-Mounted Circuit Breaker

☐ CXM Controls

☐ DXM Controls

☐ Locking Control Panel

☐ Motorized Damper

☐ Motorized Water Valve

☐ 4-in. Filters

☐ Economizer

FIELD-INSTALLED ACCESSORIES

☐ 120V Non-powered GFI Service Outlet

☐ Two-inch Pleated 30% Efficient Filters

☐ Four-inch Pleated 30% Efficient Filters

☐ Cupronickel Inner Tube Refrigerant to Water Heat Exchanger

☐ 14-in. High Knockdown Roof Curb for Flat Roofs

☐ Additional Four-Year Compressor Warranty

CUT ALONG DOTTED LINE

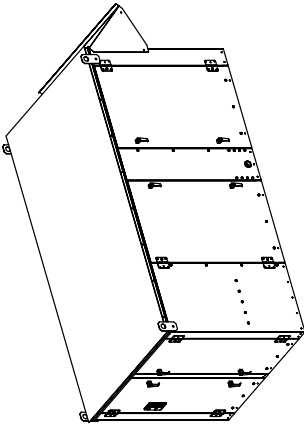
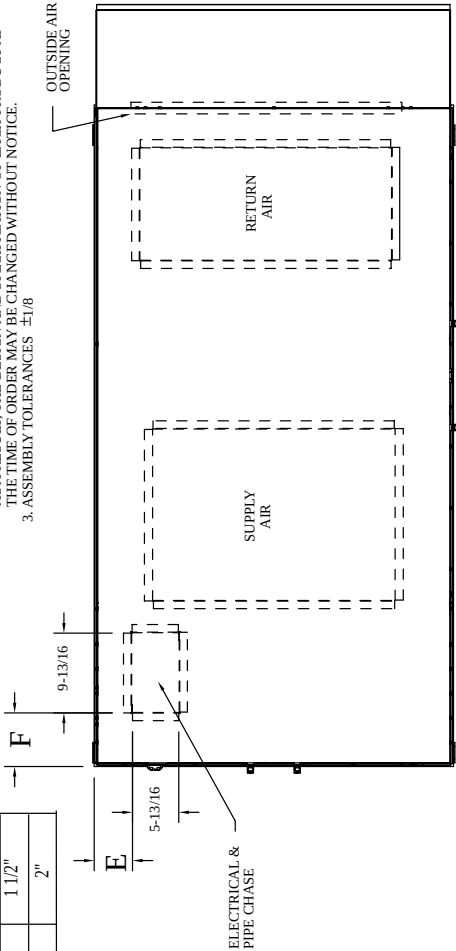
CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT

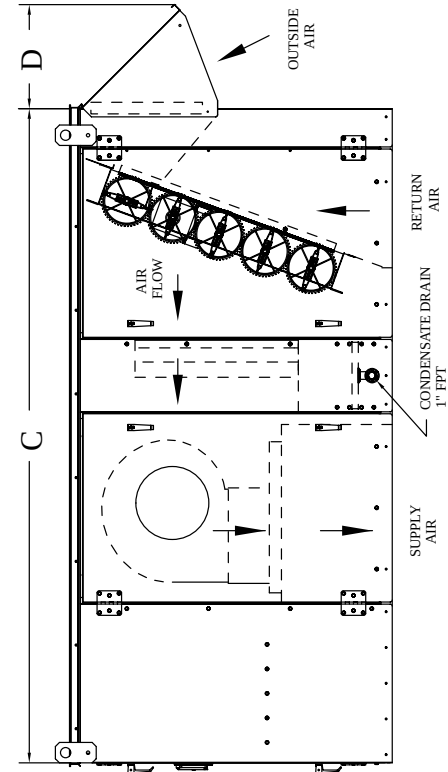
DIMENSIONS (in.)

UNIT	A	B	C	D	E	F	OUTSIDE AIR OPENING SIZE	WATER IN/OUT (PPT)
50RTG03/04	39.52	43.90	81.00	12.32	4.692	6.614	12.57 X 30.00	3/4"
50RTG05	39.52	43.90	81.00	12.32	4.692	6.614	12.57 X 30.00	1"
50RTG07	39.52	43.90	81.00	12.32	4.692	6.614	12.57 X 30.00	1 1/4"
50RTG08	45.40	49.90	91.07	16.48	5.692	6.614	18.95 X 36.00	1 1/4"
50RTG10/12	45.40	49.90	91.07	16.48	5.692	6.614	18.95 X 36.00	1 1/2"
50RTG15/20	50.62	88.00	91.07	16.48	4.543	6.566	18.95 X 74.00	2"

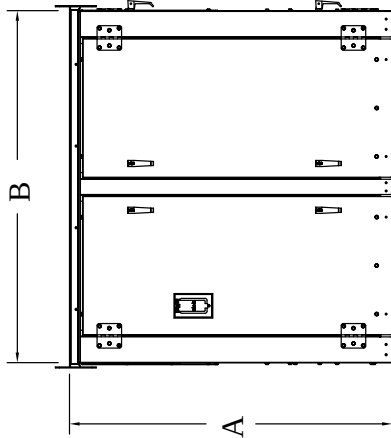
- NOTES:
1. ALL DIMENSIONS ARE IN INCHES.
 2. CARRIER WORKS CONTINUOUSLY TO IMPROVE ITS PRODUCTS. AS A RESULT, THE DESIGN AND SPECIFICATION OF EACH PRODUCT AT THE TIME OF ORDER MAY BE CHANGED WITHOUT NOTICE.
 3. ASSEMBLY TOLERANCES $\pm 1/8$



TOP VIEW



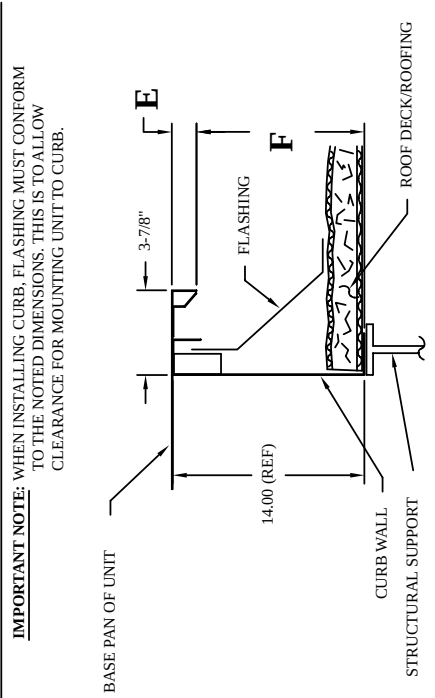
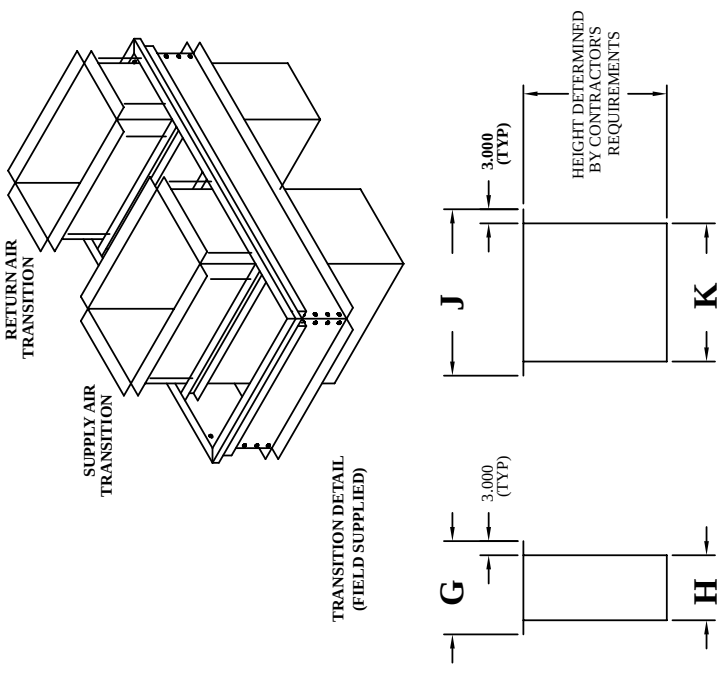
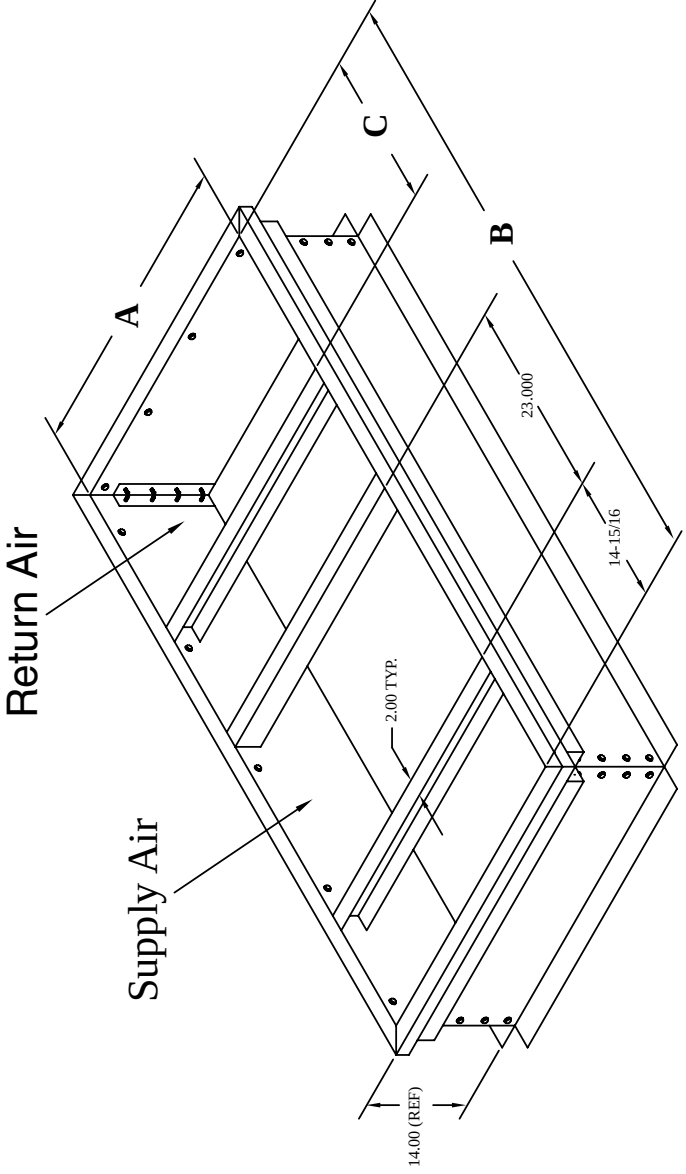
SIDE VIEW



FRONT VIEW

CERTIFIED ROOF CURB DIMENSION PRINT

ROOF CURB	DIMENSIONS (in.)												
	A	B	C	E	F	RETURN AIR TRANSITION				SUPPLY AIR TRANSITION			
						G	H	J	K	G	H	J	K
50RTGACURBCAAA	35.25	72.25	18.00	1.50	12.50	22.00	16.00	39.25	33.25	27.00	21.00	39.25	33.25
50RTGACURBBAAA	41.25	82.25	21.00	1.50	12.50	25.00	19.00	45.25	39.25	27.00	21.00	45.25	39.25
50RTGACURBAAAA	78.875	82.25	21.00	5.00	9.00	25.00	19.00	82.875	76.875	27.00	21.00	82.875	76.875



IMPORTANT NOTE: WHEN INSTALLING CURB, FLASHING MUST CONFORM TO THE NOTED DIMENSIONS. THIS IS TO ALLOW CLEARANCE FOR MOUNTING UNIT TO CURB.