



**50FJX, FJY034, 044, 054, 064  
SINGLE-PACKAGE COOLING UNITS  
EXTENDED PLENUM  
CONSTANT VOLUME  
50 Hz**

- PERFORMANCE DATA**
- TYPICAL FIELD WIRING**
- CERTIFIED DIMENSION PRINTS**
- CERTIFIED ROOF CURB  
DIMENSION PRINTS**



Date:	Supersedes:	<b>50FJX, FJY034, 044, 054, 064 SINGLE-PACKAGE COOLING UNITS, EXTENDED PLENUM CONSTANT VOLUME</b>	50FJX, FJY	Rev:
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JOB NAME:	LOCATION:
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BUYER:	BUYER P.O. #	CARRIER #
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UNIT NUMBER:	MODEL NUMBER:
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PERFORMANCE DATA CERTIFIED BY:	DATE:
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**DESCRIPTION**

50FJX, FJY units are completely packaged, prewired, and precharged electric cooling only units. 50FJX, FJY units are built for **BOTTOM** supply and return applications. Their waterproof construction makes 50FJX, FJY units ideally suited for installation on the accessory roof curb.

- 50FJX, FJY units have CONSTANT VOLUME controls.
- Units include a discharge plenum at supply fan outlet for sound attenuation and/or field installed auxiliary devices.

**FEATURES**

Large hinged access doors.  
 Units are rated in accordance with ARI Standard 360 (U.S.A. Standard).  
 115-volt and 24-volt control circuit.  
 51 mm (2-in.) disposable-type return air filters.  
 Semi-hermetic Carrier compressors.  
 Lifting lugs.  
 Dual refrigeration circuits.  
 Crankcase heaters.  
 Circuit breaker protection for all power components.  
 Single low rpm supply fan with 51 mm (2 in.) deflection springs under fan sled.

High efficiency indoor motors (supply and exhaust).  
 Tuf-Skin Rx™ anti-microbial insulation.  
 Sloped condensate pan.  
 Single-point electric service entry.  
 Manual adjustable outside air intake for up to 25% outside air.  
 Cabinet made of prepainted galvanized steel.  
 Compressor protection includes high- and low-pressure cutouts.  
 Evaporator-fan motors are protected by circuit breakers.  
 Condenser-fan motors are internally protected.  
 Low outdoor temperature cooling operation to 7.2 C (45 F) as standard.  
 Two-stage cooling.

**PERFORMANCE DATA**

Unit Operating Weight \_\_\_\_\_ Curb Weight \_\_\_\_\_

**COOLING**

Gross Total Cap. \_\_\_\_\_ Condenser Air Temp \_\_\_\_\_ Airflow \_\_\_\_\_ Ext. Static Pressure \_\_\_\_\_  
 Gross Sensible Cap. \_\_\_\_\_ Compressor Power Input \_\_\_\_\_ Indoor Fan Motor Size \_\_\_\_\_  
 Indoor Entering Air db \_\_\_\_\_ wb \_\_\_\_\_ Exhaust Fan Motor Size \_\_\_\_\_

**ELECTRICAL DATA**

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

**OPTIONS AND ACCESSORIES**

**FACTORY-INSTALLED OPTIONS (FIOP)**

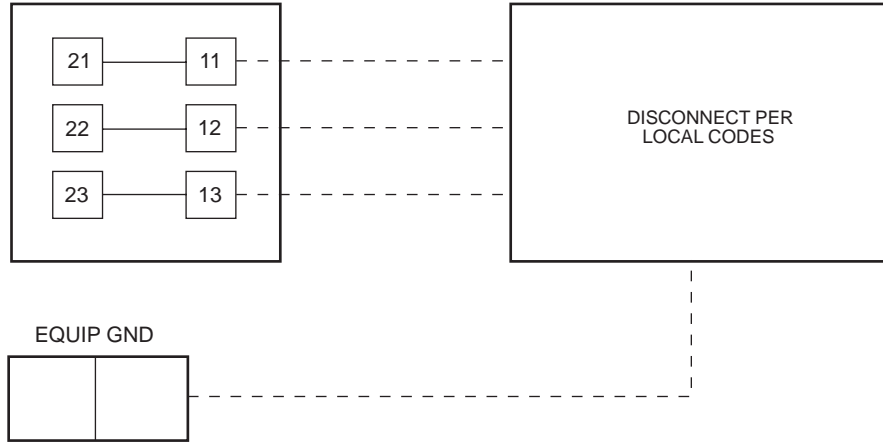
- Integrated economizer with low leak dampers and spring return motor
- Pleated filters (30%) 51 mm (2 in.)
- Bag filters with prefilters (90%)
- Barometric relief
- Constant volume power exhaust
- 100% modulating power exhaust
- Copper condenser coil
- Pre-coated Al fin condenser coil
- Non-fused unit mounted disconnect
- Hot gas bypass

**FIELD-INSTALLED ACCESSORIES**

- Roof curb with condenser end support (50, 60 ton)
- Roof curb to enclose the condenser section (50, 60 ton)
- Roof curb with full perimeter support (30, 40 ton)
- Barometric relief
- 100% modulating power exhaust
- Condenser hail guard
- Compressor unloaders
- Motormaster® head pressure control
- Differential enthalpy sensor
- Compressor anti-recycle timer
- Communicating programmable thermostat
- Thermostat and subbase

# TYPICAL FIELD WIRING

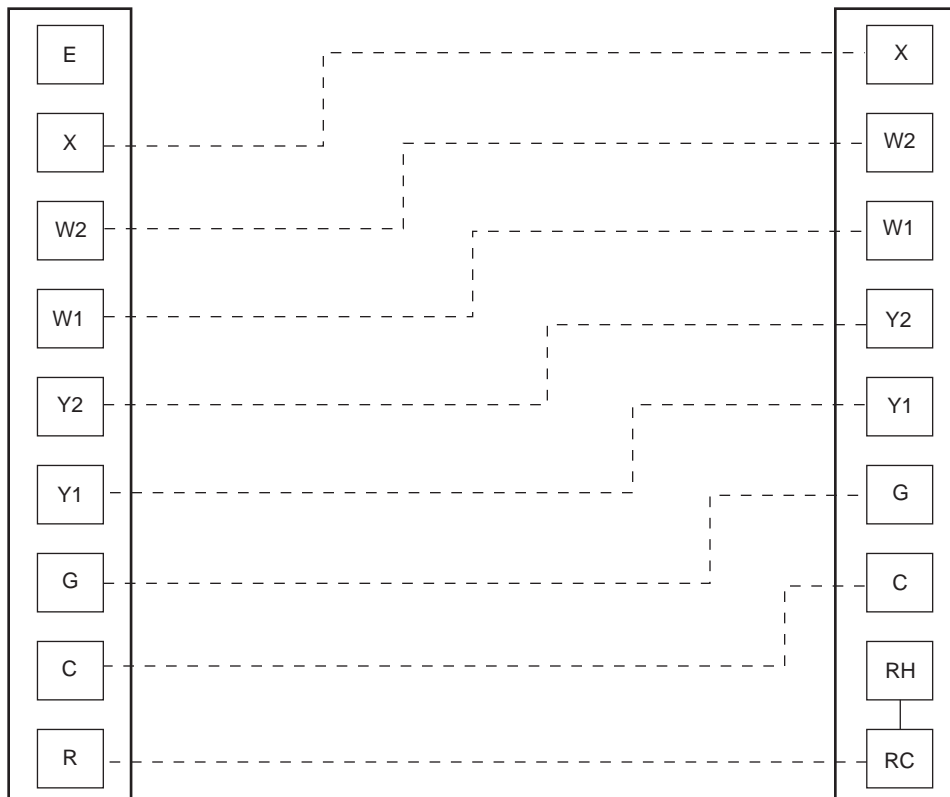
## FIELD POWER WIRING CONNECTIONS



## FIELD CONTROL THERMOSTAT WIRING

LOW-VOLTAGE  
TERMINAL BLOCK  
IN UNIT CONTROL BLOCK (P1)

THERMOSTAT/  
SUBBASE



LEGEND  
**EQUIP** - Equipment  
**GND** - Ground

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

# CERTIFIED DIMENSION PRINT



UNITED TECHNOLOGIES  
CARRIER

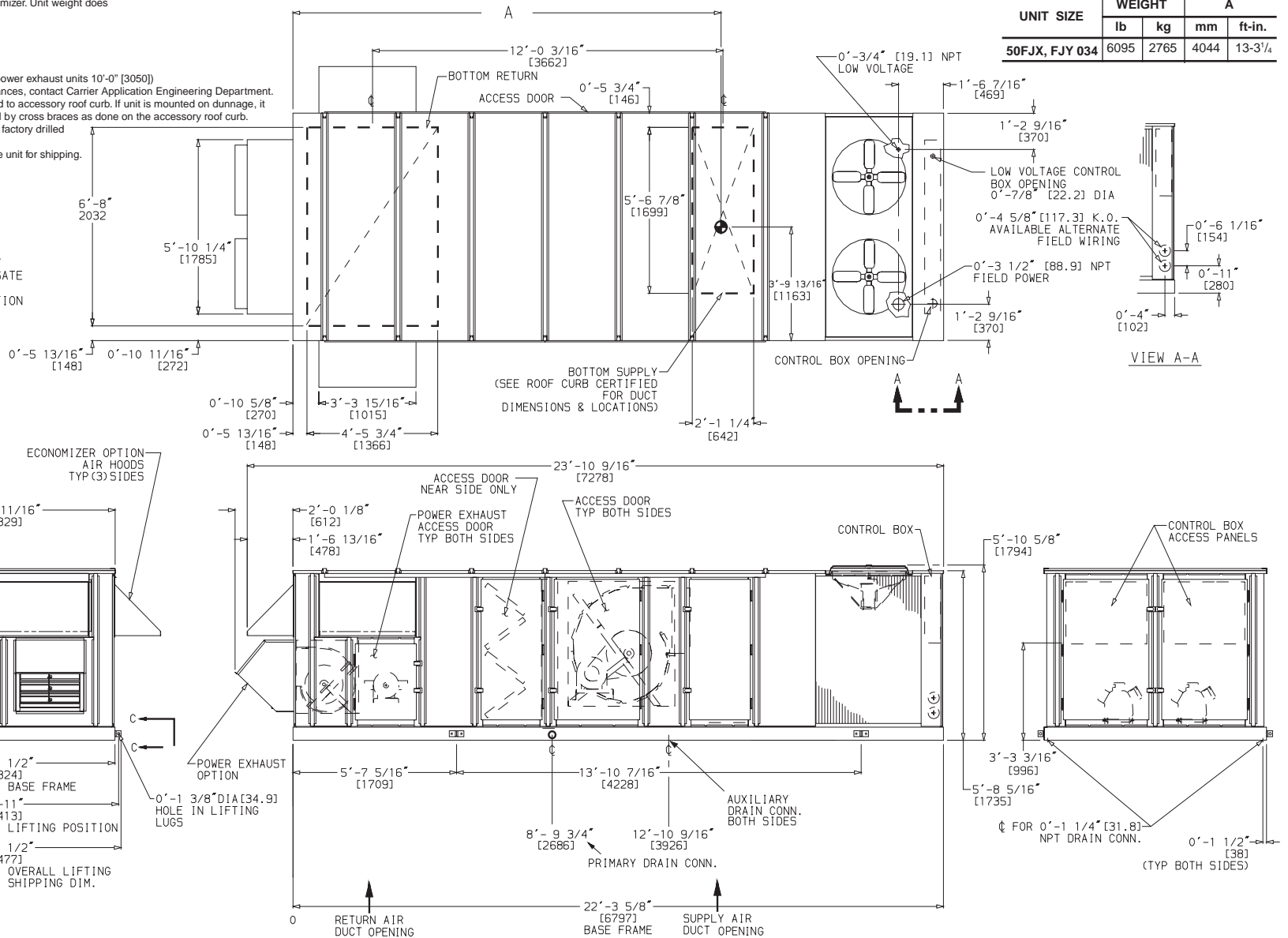
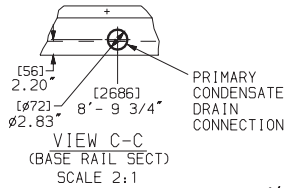
P O BOX 4808  
SYRACUSE N. Y.  
13221

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**NOTES**

- Dimensions in [ ] are in millimeters.
- Center of Gravity includes economizer. Unit weight does not include economizer.
- Unit clearances:  
Top - Do not restrict condenser fans  
Control Box End - 6'-0" [1830]  
Sides - 6'-0" [1830]  
Economizer End - 6'-0" [1830] (except power exhaust units 10'-0" [3050])  
For smaller service and operating clearances, contact Carrier Application Engineering Department.
- Downshot ducts designed to be attached to accessory roof curb. If unit is mounted on dunnage, it is recommended the ducts be supported by cross braces as done on the accessory roof curb.
- When the unit is slab mounted, plug the factory drilled auxiliary condensate drain holes.
- Economizer side hoods are folded inside unit for shipping.



50FJX, FJY034 (EXTENDED PLENUM)

DATE

SUBMITTER

REV

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

# CERTIFIED DIMENSION PRINT



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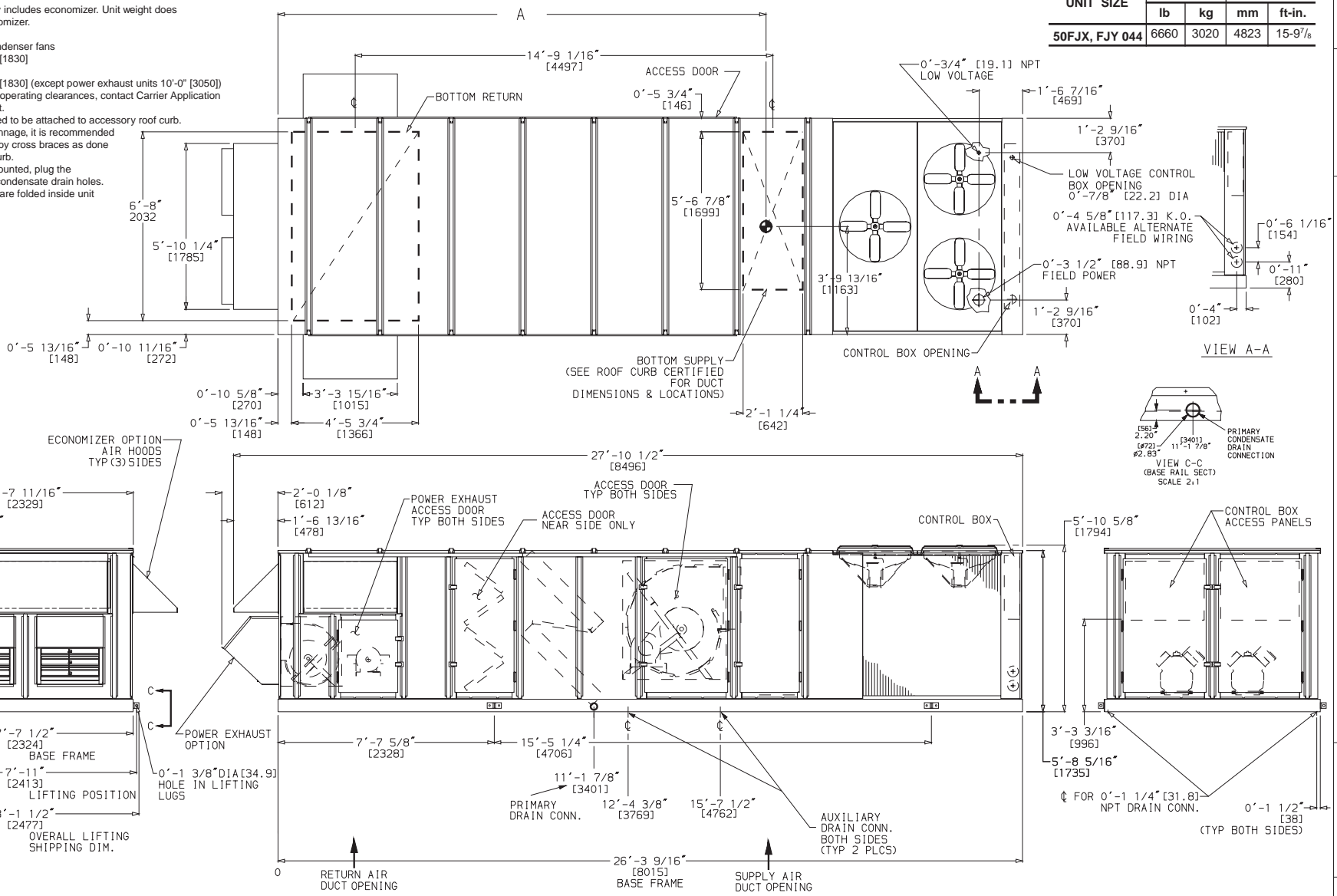
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UNIT SIZE	WEIGHT		A	
	lb	kg	mm	ft-in.
50FJX, FJY 044	6660	3020	4823	15-9 <sup>7</sup> / <sub>8</sub>



50FJX, FJY044 (EXTENDED PLENUM)

DATE

SURFACES

REV

# CERTIFIED DIMENSION PRINT



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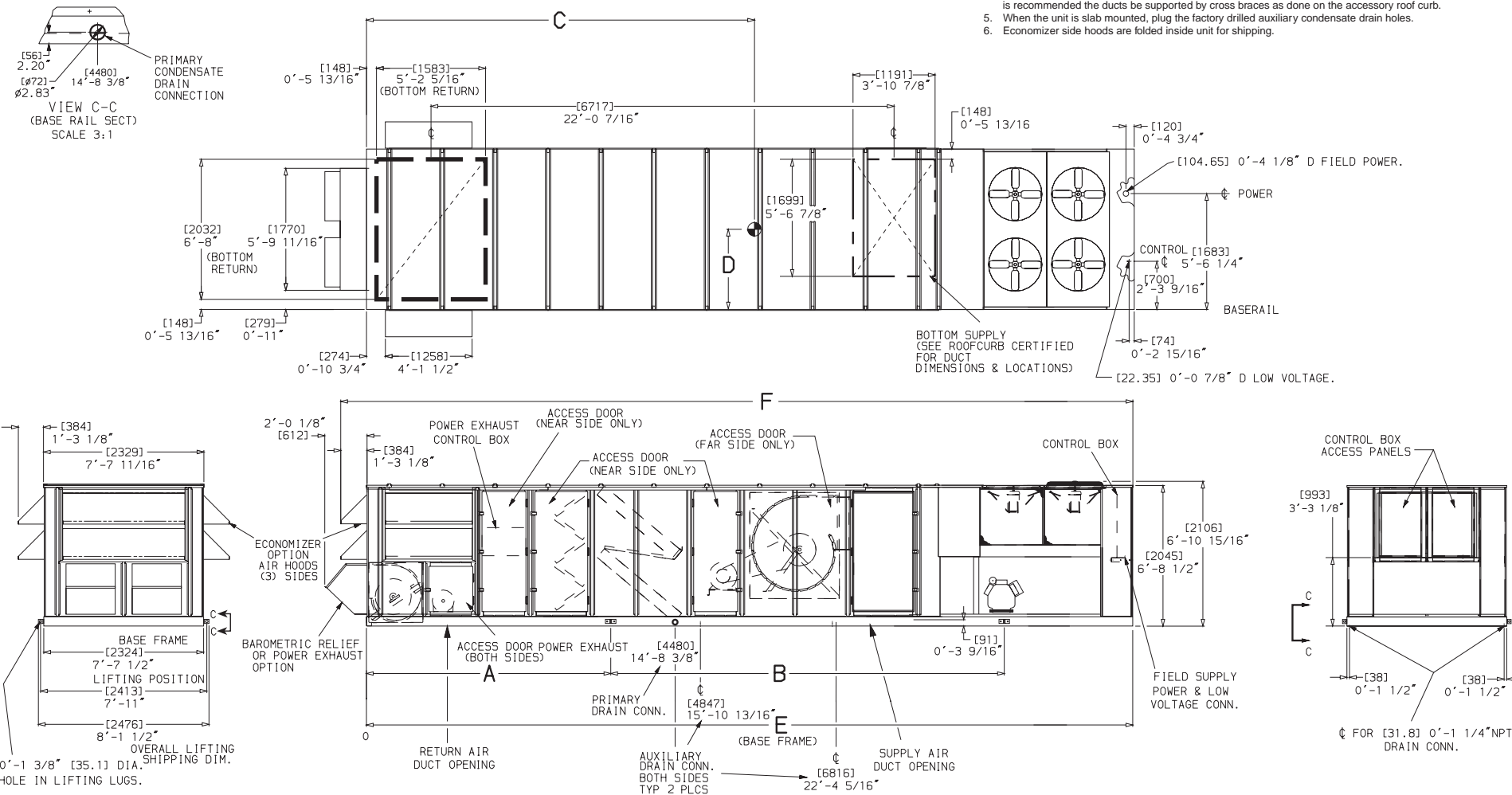
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UNIT SIZE	WEIGHT		A		B		C		D		E		F	
	Lb	Kg	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.
50FJX, FJY054	8355	3780	2830	9-3/4	6427	21-1	6045	19-10	1163	3-9 <sup>13</sup> / <sub>16</sub>	11 140	36-6 <sup>9</sup> / <sub>16</sub>	11 524	37-9 <sup>1</sup> / <sub>16</sub>
50FJX, FJY064	8650	3925	2830	9-3/4	6427	21-1	6045	19-10	1163	3-9 <sup>13</sup> / <sub>16</sub>	11 140	36-6 <sup>9</sup> / <sub>16</sub>	11 524	37-9 <sup>1</sup> / <sub>16</sub>

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50FJX, FJY054, 064 (EXTENDED PLENUM)

DATE

SURFACES

REV

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

# CERTIFIED ROOF CURB DIMENSION PRINT



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CARRIER

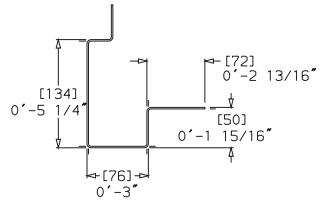
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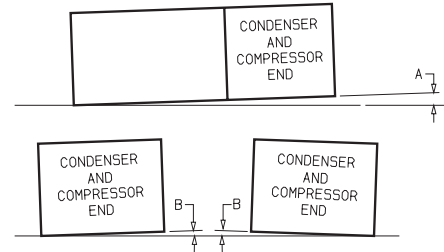
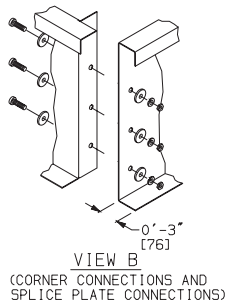
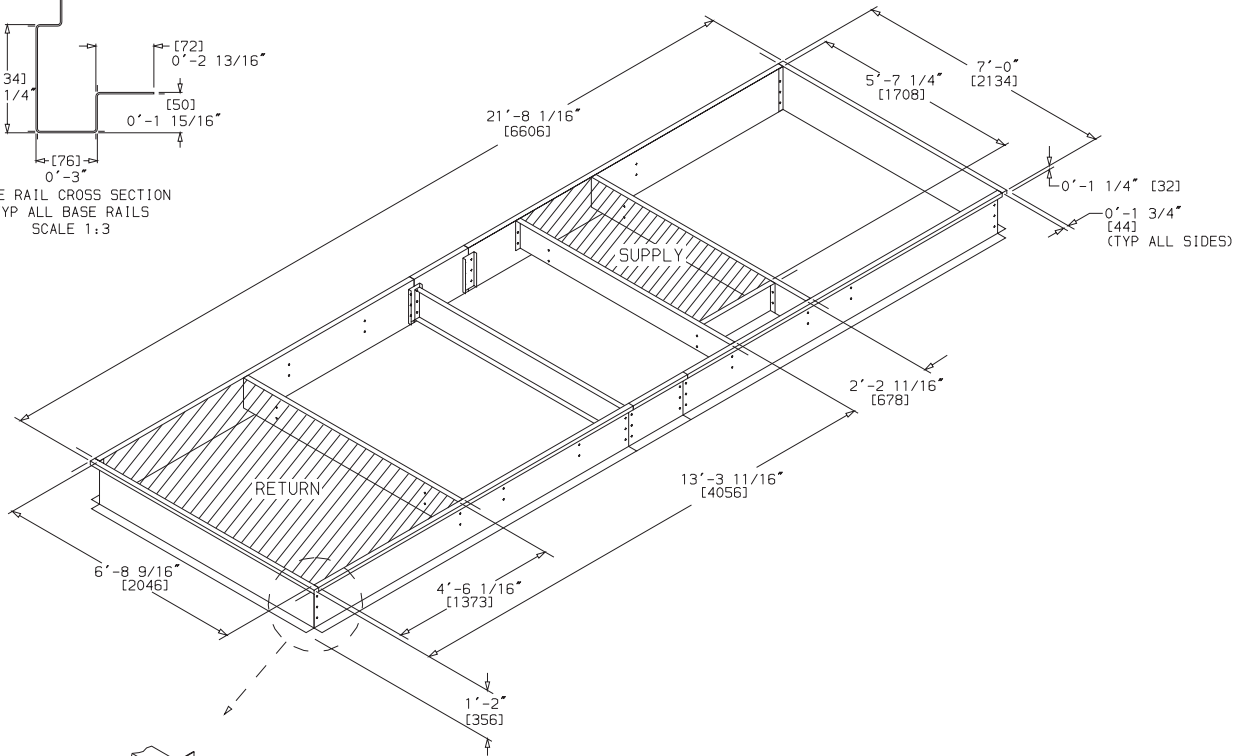
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NOTES:

1. ROOF CURB IS SHIPPED DISASSEMBLED.
2. ROOF CURB: 14 GA. [VA03-56] STL.
3. DIMENSIONS IN [ ] ARE MILLIMETERS.



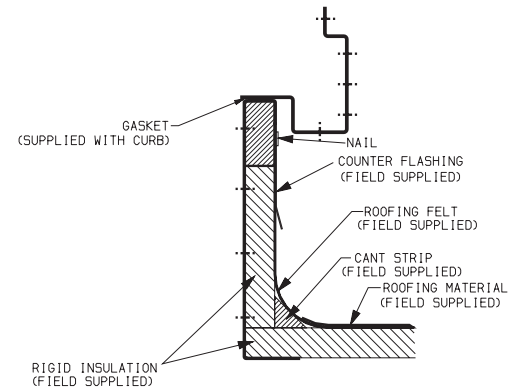
BASE RAIL CROSS SECTION  
TYP ALL BASE RAILS  
SCALE 1:3



DIMENSIONS\*  
(degrees and inches)

A		B	
DEG.	MM	DEG.	MM
1.0	51	2.0	19
			.75

UNIT LEVELING TOLERANCES  
\*From edge of unit to horizontal.



DATE

SUBJECT

ROOF CURB - 50FJX, FJY034 (EXTENDED PLENUM)

REV

# CERTIFIED ROOF CURB DIMENSION PRINT



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TECHNOLOGIES  
CARRIER

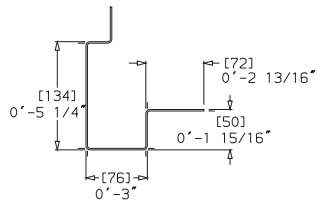
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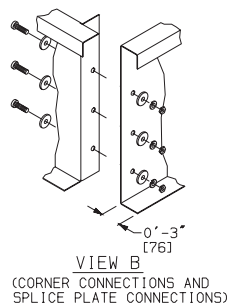
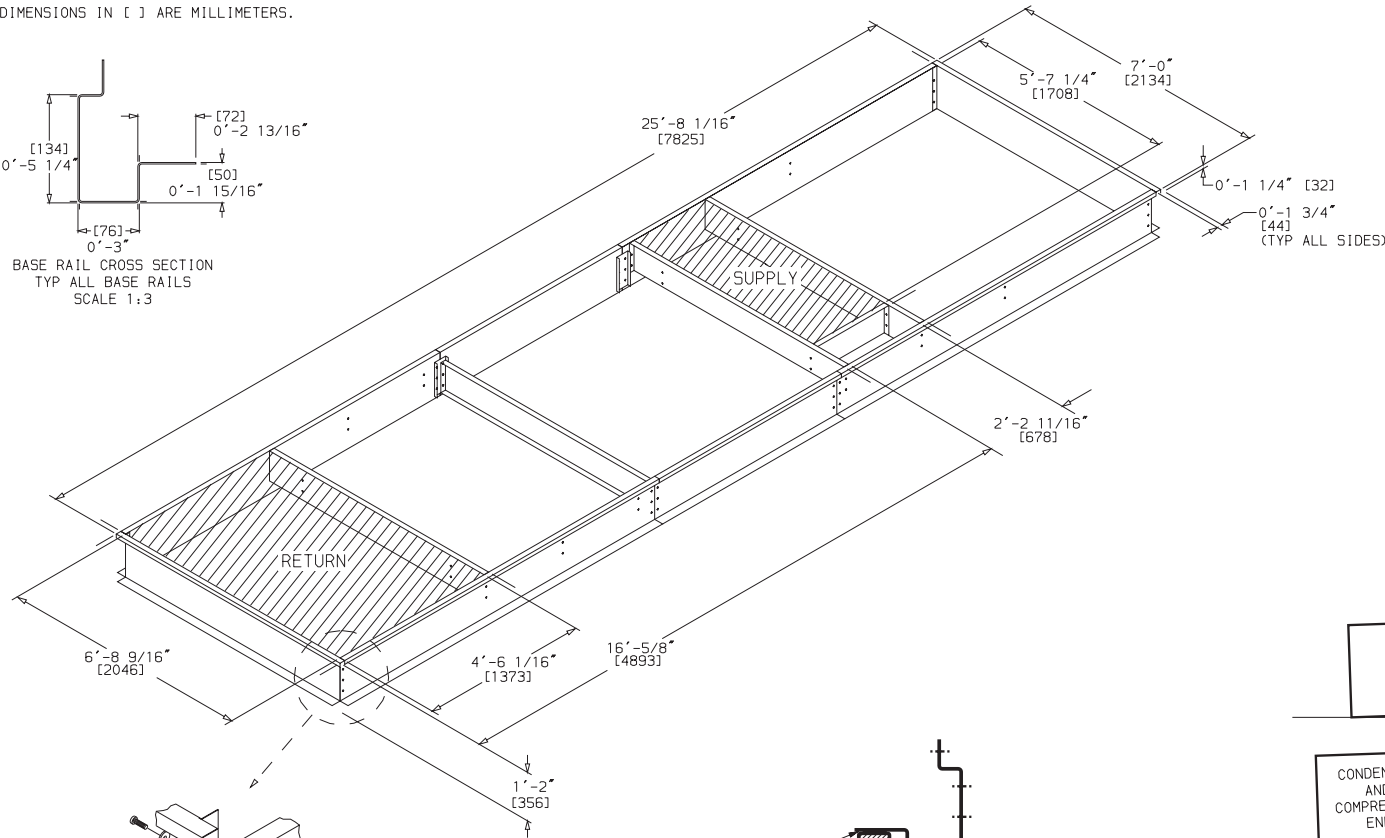
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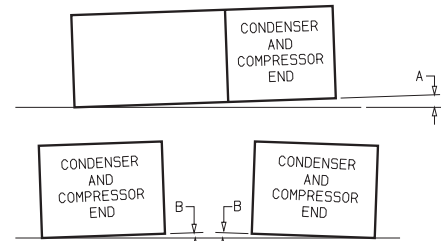
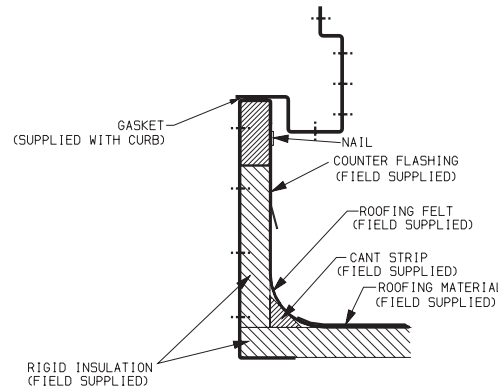
1. ROOF CURB IS SHIPPED DISASSEMBLED.
2. ROOF CURB: 14 GA. [VA03-56] STL.
3. DIMENSIONS IN [ ] ARE MILLIMETERS.



BASE RAIL CROSS SECTION  
TYP ALL BASE RAILS  
SCALE 1:3



VIEW B  
(CORNER CONNECTIONS AND  
SPLICE PLATE CONNECTIONS)



DIMENSIONS\*  
(degrees and inches)

A		B			
DEG.	MM	IN.	DEG.	MM	IN.
1.0	51	2.0	.50	19	.75

UNIT LEVELING TOLERANCES  
\*From edge of unit to horizontal.

DATE: \_\_\_\_\_ SURFACES: \_\_\_\_\_ ROOF CURB - 50FJX, FJY04 (EXTENDED PLENUM) \_\_\_\_\_ REV: \_\_\_\_\_



CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

# CERTIFIED ROOF CURB DIMENSION PRINT



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CARRIER

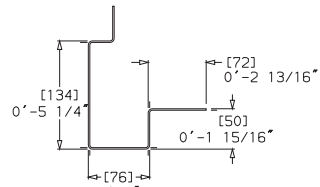
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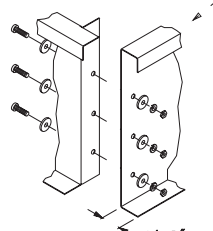
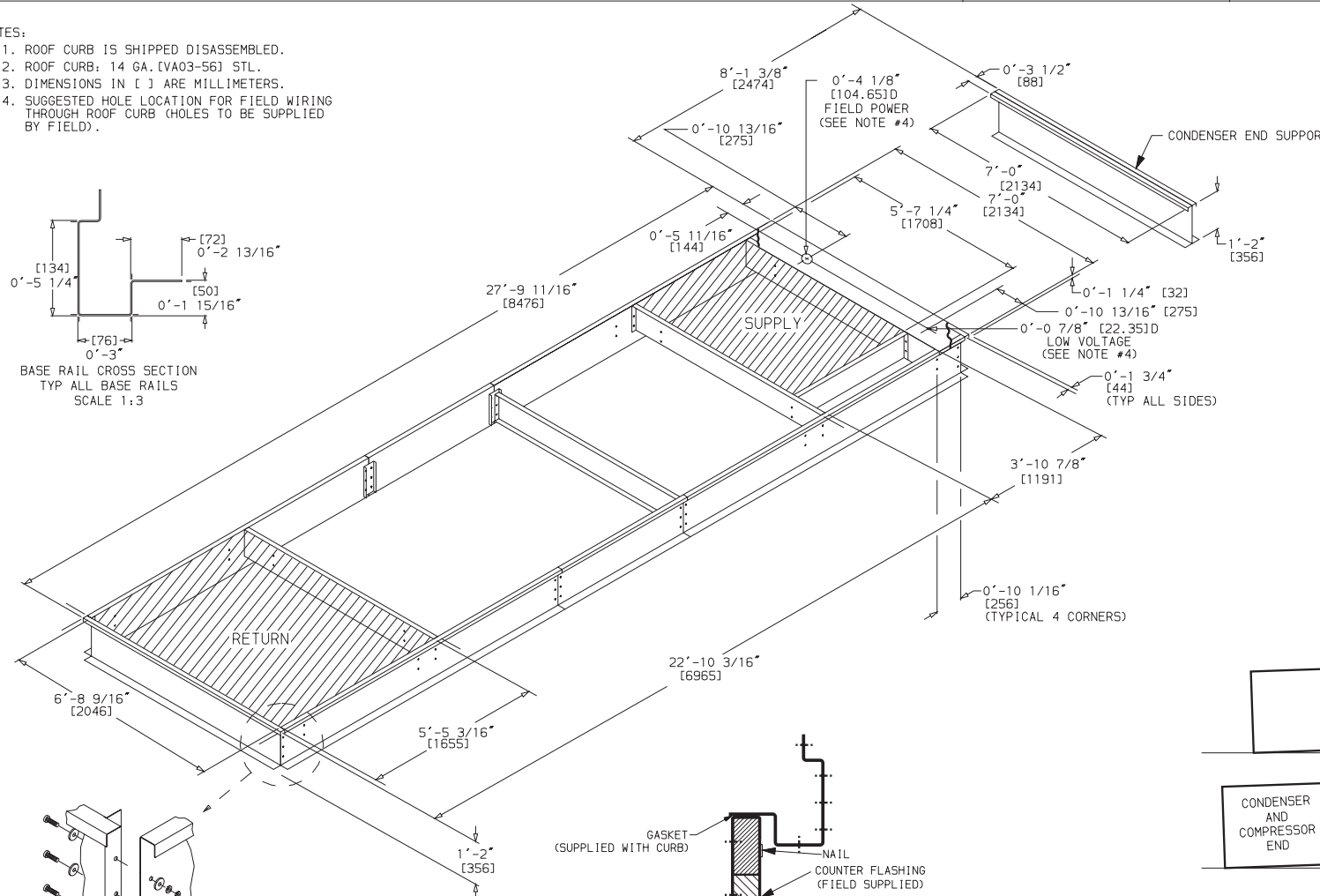
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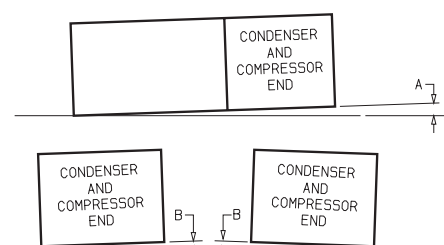
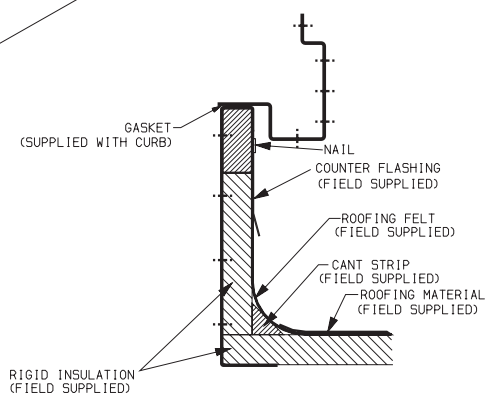
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2. ROOF CURB: 14 GA. [VA03-56] STL.
3. DIMENSIONS IN [ ] ARE MILLIMETERS.
4. SUGGESTED HOLE LOCATION FOR FIELD WIRING THROUGH ROOF CURB (HOLES TO BE SUPPLIED BY FIELD).



BASE RAIL CROSS SECTION  
TYP ALL BASE RAILS  
SCALE 1:3



VIEW B  
(CORNER CONNECTIONS AND SPLICE PLATE CONNECTIONS)



DIMENSIONS\*  
(degrees and inches)

A		B	
DEG.	MM	DEG.	MM
1.0	51	.50	19
			.75

UNIT LEVELING TOLERANCES  
\*From edge of unit to horizontal.

DATE: \_\_\_\_\_ SUBMITTAL: \_\_\_\_\_ ROOF CURB - 50FJX, FJY054, 064 (EXTENDED PLENUM) REV: \_\_\_\_\_

# CERTIFIED ROOF CURB DIMENSION PRINT



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TECHNOLOGIES  
CARRIER

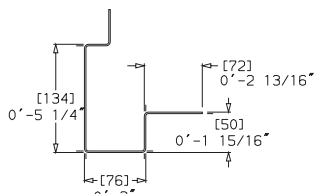
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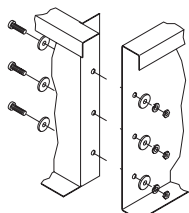
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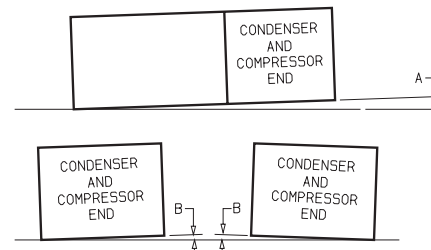
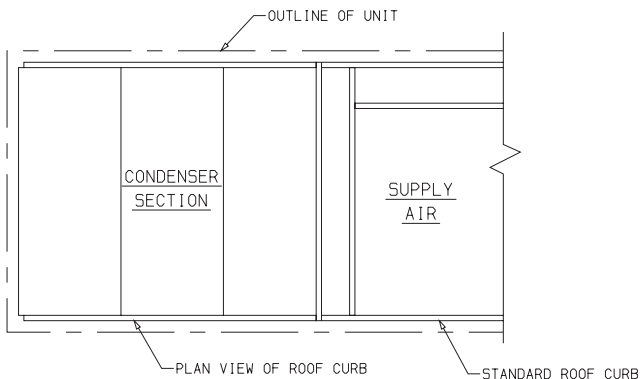
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2. DIMENSIONS IN [ ] ARE MILLIMETERS.
3. ROOF CURB: 14 GA. [VA03-56] STL.  
ROOF CURB PANS: 16 GA. [VA03-56] STL.



BASE RAIL CROSS SECTION  
TYP ALL BASE RAILS  
SCALE 1:3



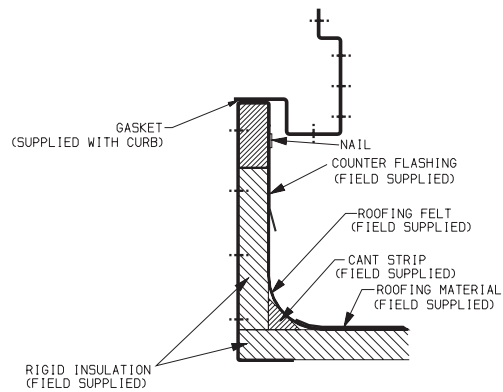
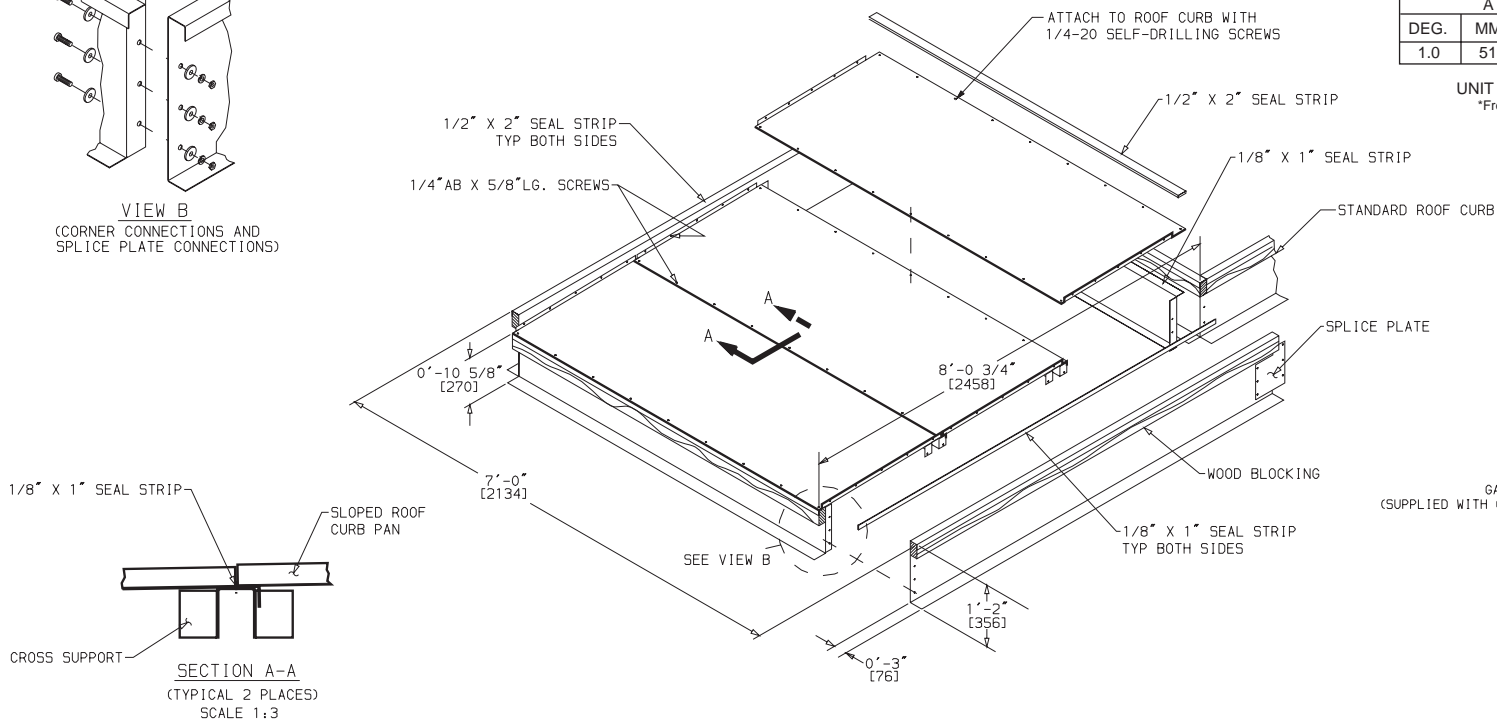
VIEW B  
(CORNER CONNECTIONS AND  
SPLICE PLATE CONNECTIONS)



DIMENSIONS\*  
(degrees and inches)

DEG.	A		DEG.	B	
	MM	IN.		MM	IN.
1.0	51	2.0	.50	19	.75

UNIT LEVELING TOLERANCES  
\*From edge of unit to horizontal.



DATE  
SURFACES  
ACCESSORY ROOF CURB - 50FJX, FJY054, 064  
REV