

# DN 2RT

## Dedicated Outdoor Air System Standard



**ROOFTOP UNIT**  
Dedicated Outside Air System Unit with Energy Recovery

**NEW**



DN3IN, ERV + CC + HGRH + GH (BT) shown

Download specification at:  
[renewaire.com/specifications](http://renewaire.com/specifications)

- ERV** - Energy Recovery Ventilator
- EH** - Electric Heater
- CC** - Cooling Coil
- HC** - Heating Coil
- GH** - Gas Heat Module
- HGRH** - Hot Gas Reheat Coil
- BT** - Blow Thru
- DT** - Draw Thru

### SPECIFICATIONS

**Energy Recovery Type:**

Static plate total energy transfer

**Typical Airflow Range:** 375-1,650 CFM

**AHRI 1060 Certified Core:**

One L-62-G5 and one L-125 G5

**Standard Features:**

- EC Motors for both airstreams
- Direct Drive backward inclined plenum
- Higher ESP of up to 2" w.g. at 1,500 CFM
- Integrated programmable controls
- True 100% Face and bypass enthalpy based modulating economizer
- Class 1 low leakage motorized isolation dampers
- Stainless steel double-sloped drain pan with cooling option
- 1" Double wall foam injected 20 gauge galvanized panel construction with R6.5 insulation

**Inlets/Outlets:**

- OA & RA Inlets: 24" x 16"
- SA Outlet: 24" x 16"
- EA Outlet: 20" x 16"

**Filters:**

- Total qty. 4, MERV 8:
- 16" x 20" x 2"

**Unit Dimensions & Weight for 1" Cabinets**

- 151 5/8" L x 76 3/4" W x 73 1/8" H
- 1500-2700 lbs.

**Max. Shipping Dimensions & Weight for 1" Cabinets (on pallet):**

- 140" L x 90" W x 79" H
- 1700-2900 lbs.

**Unit Dimensions & Weight for 2" Cabinets**

- 154 1/8" L x 78 5/8" W x 75 1/8" H
- 1600-2825 lbs.

**Max. Shipping Dimensions & Weight for 2" Cabinets (on pallet):**

- 140" L x 90" W x 81" H
- 1800-3025 lbs.

**Motor(s):**

Qty. 2, Direct drive motorized impeller packages

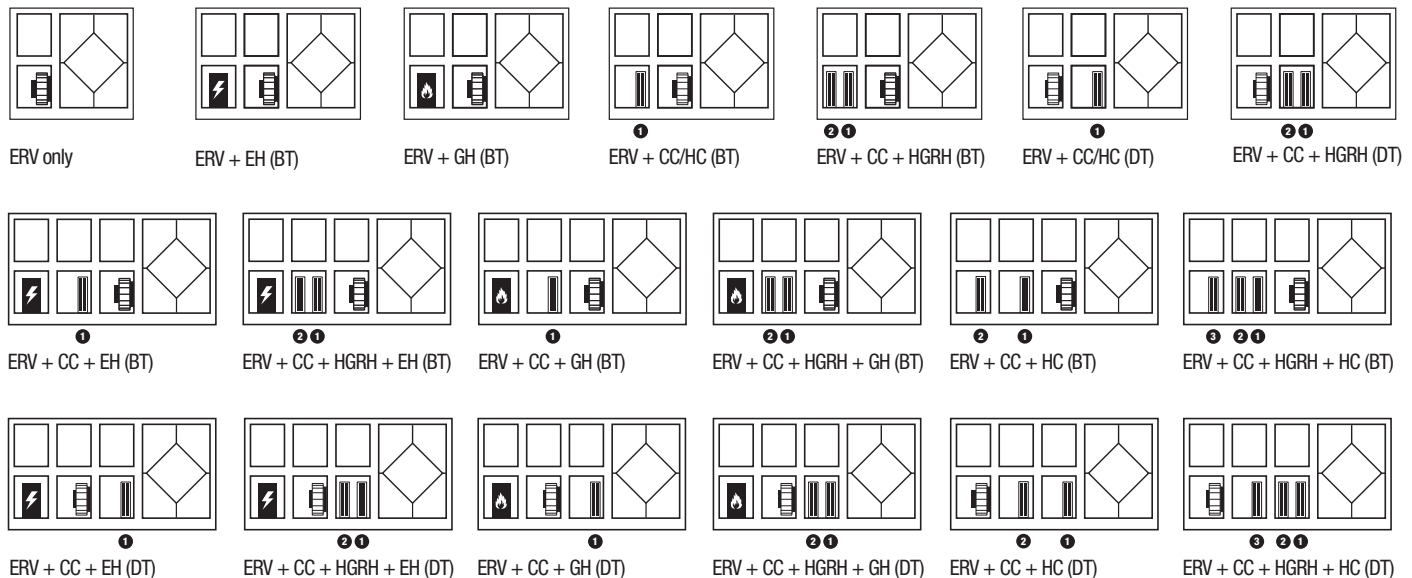
**Options:**

- DX, heat pump, or chilled water cooling coil
- Modulating hot gas reheat
- Steam or hot water coil, gas heat module or electric heater
- Onboard variable frequency drives (VFDs) - both airstreams
- Fused disconnect
- Spring isolators (VFDs only)
- 2" Double wall foam injected 20 gauge galvanized panel construction with R13.0 insulation
- Exterior paint - grey, white, custom color
- Salt spray - 2500 hour
- BACNET factory activation
- GFCI convenience outlet
- Recirculation damper
- Drain overflow switch
- Mist eliminator
- Electrofin coating for coils

**Accessories:**

- Filters - MERV 13, 2" and 4" (shipped loose), MERV 14, 2" and 4" (shipped loose)
- Additional filters available upon request
- Roof curb - standard 14"
- Hurricane or seismic rated curbs
- Curb clip kit
- Carbon dioxide sensor/control - wall mount (CO2-W), duct mount (CO2-D)
- IAQ sensor - wall mount (IAQ-W), duct mount (IAQ-D)
- Motion occupancy sensor/control - ceiling mount (MC-C), wall mount (MC-W)
- Smoke detector
- Room temperature and humidity sensor
- Duct static pressure sensor with display to 10", without display 0-2"
- Room pressure sensor with display to 1", without display 0-1"
- Waterless trap negative pressure
- Waterless trap positive pressure
- Remote display

### INTERNAL OPTIONS FOR HEATING AND COOLING



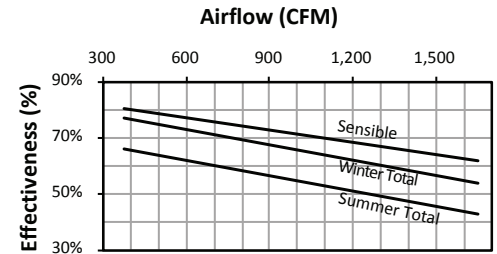
Specifications may be subject to change without notice.

### ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	2 @ 1.35 kW ea.	200-277	50/60 Hz	Single	15.1	20	6.7-4.8
	2 @ 2.70 kW ea.	200-240	50/60 Hz	Three	19.4	25	8.6-7.2
	2 @ 3.70 kW ea.	380-480	50/60 Hz	Three	13.5	15	6.0-4.6
VFD	2 @ 3HP ea.	208-230	50/60 Hz	Three	20.3	25	9-8.4/4.2
	2 @ 3HP ea.	460	50/60 Hz	Three	9.5	15	4.2
	2 @ 3HP ea.	575	50/60 Hz	Three	7.4	15	3.3

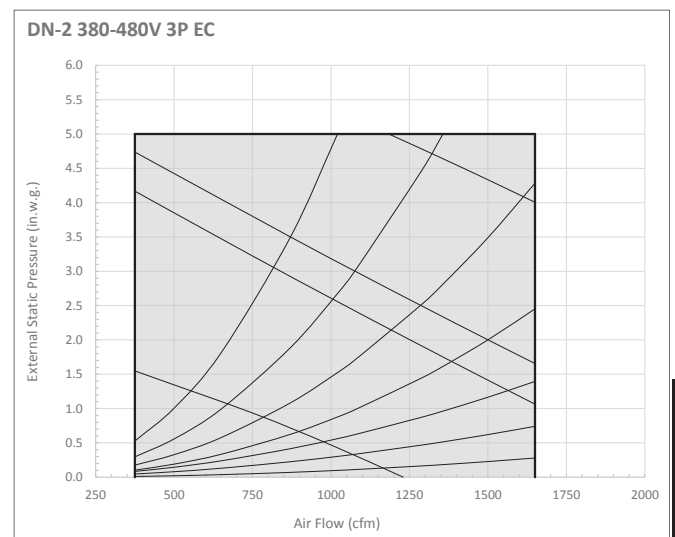
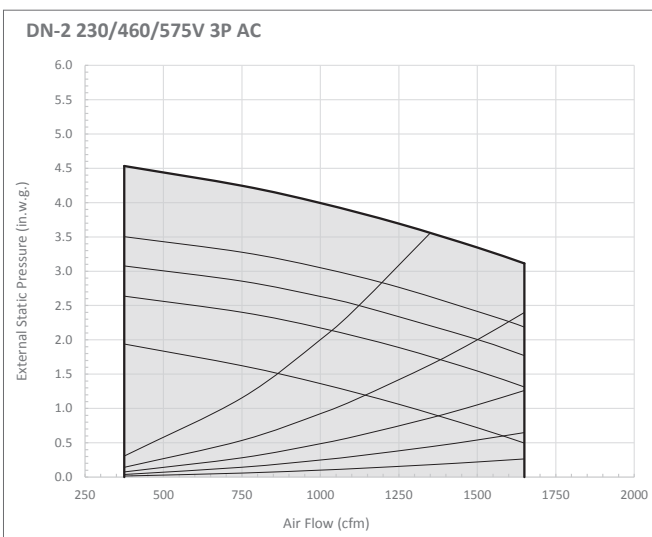
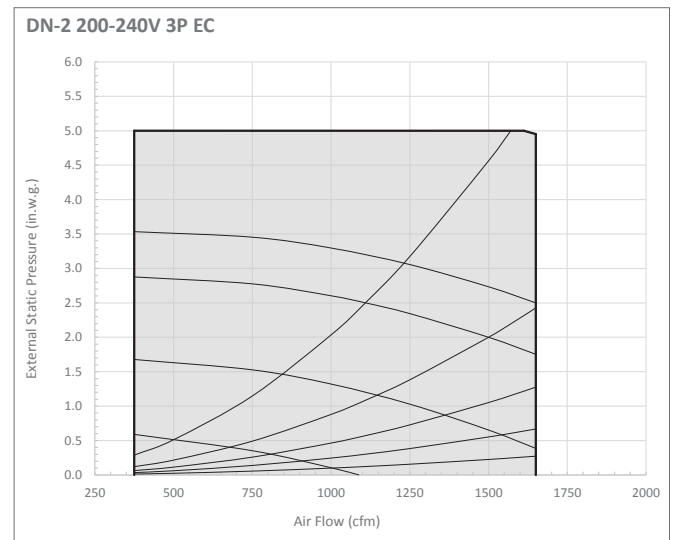
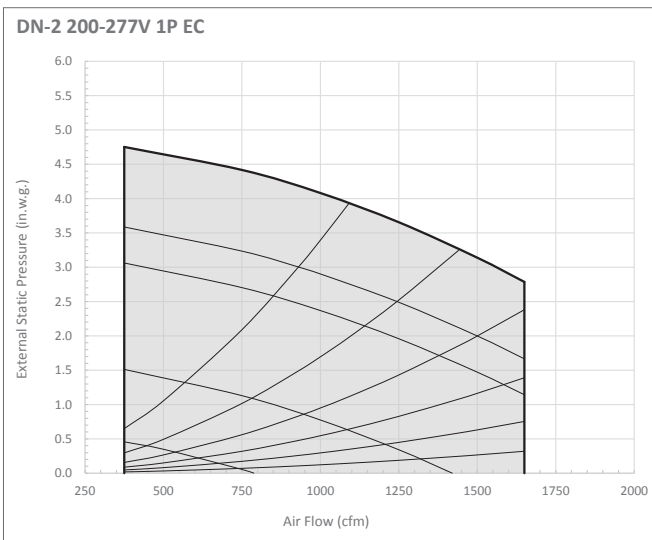
**Note:** Electrical data shown is for a standard unit without cooling and heating. Refer to cores.renewaire.com for project specific submittal for electrical data for the specific unit with all included options.

### CORE PERFORMANCE



At AHRI 1060 standard conditions.  
See all AHRI certified ratings at [www.ahrinet.org](http://www.ahrinet.org).

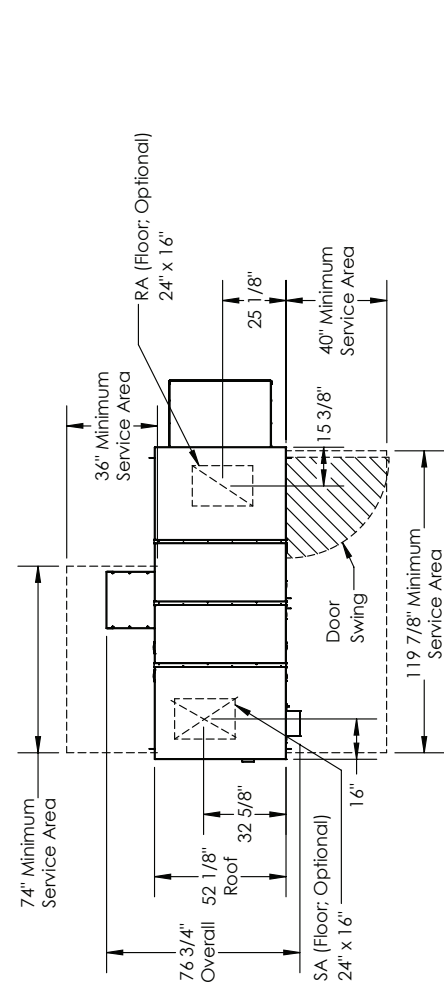
### AIRFLOW PERFORMANCE



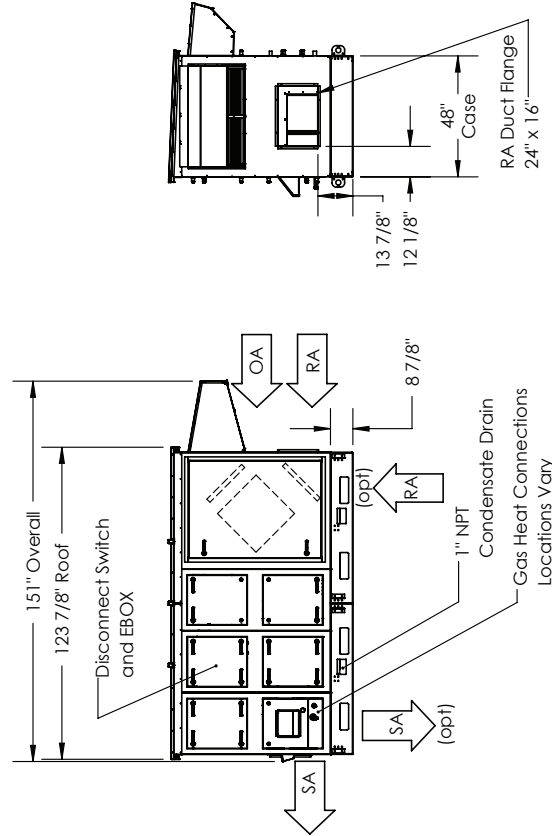
**DN-SERIES**

**DN2RT** Dedicated Outdoor Air System Standard 1" Cabinet

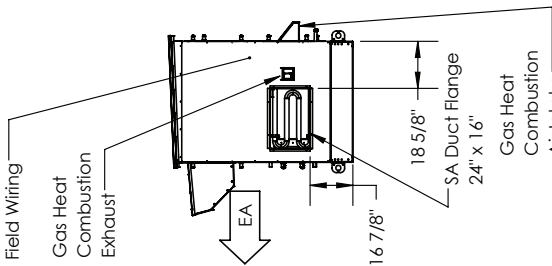
Dimension drawings for the DN depict largest cabinet size available. Refer to [CORES.RenewAire.com](http://CORES.RenewAire.com) for project specific unit drawings.



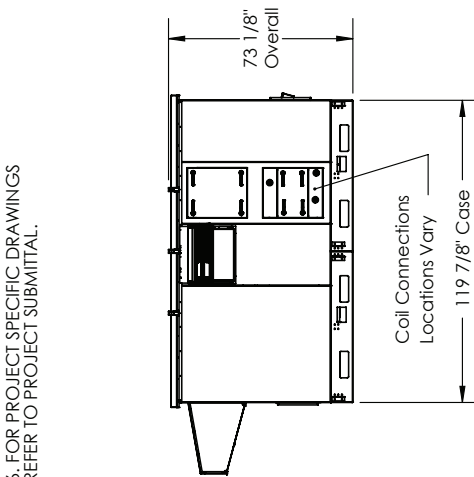
**TOP VIEW**



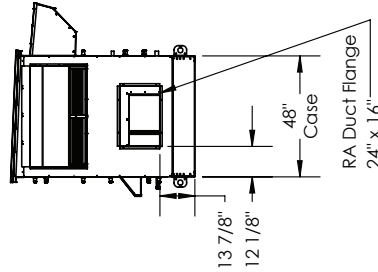
**FRONT VIEW**



**LEFT VIEW**



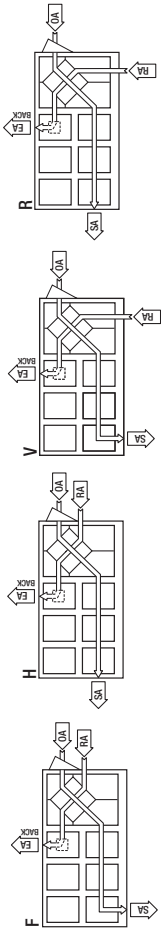
**BACK VIEW**



**RIGHT VIEW**

- ABBREVIATIONS**  
 EA: Exhaust Air to outside  
 OA: Outside Air Intake  
 RA: Room Air to be exhausted  
 SA: Supply Air to inside
- INSTALLATION ORIENTATION**  
 Unit must be installed in orientation shown.
- NOTE**  
 1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.  
 2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.  
 3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.  
 4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.  
 5. FOR CURB DETAILS REFER TO CURB DRAWING.  
 6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

**UNIT MOUNTING & APPLICATION**  
 Must be mounted as shown. Airstreams can not be switched. Duct configuration is field convertible.



**AIRFLOW CONFIGURATION**  
 Available as shown:



# DN2RT Dedicated Outdoor Air System Standard 2" Cabinet

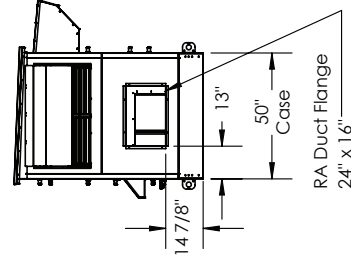
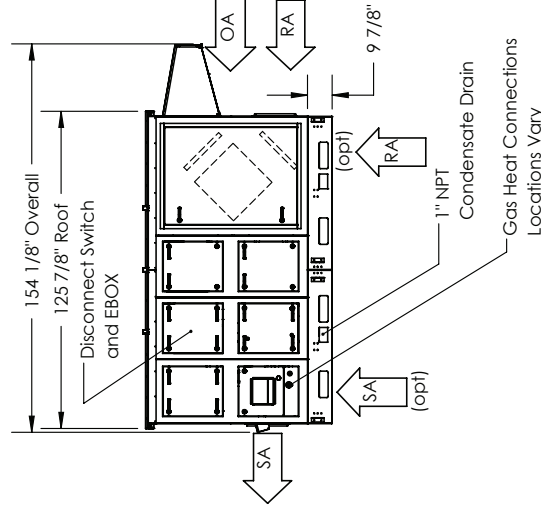
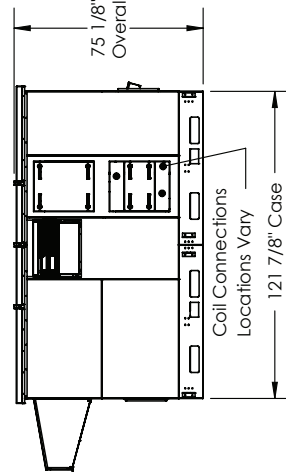
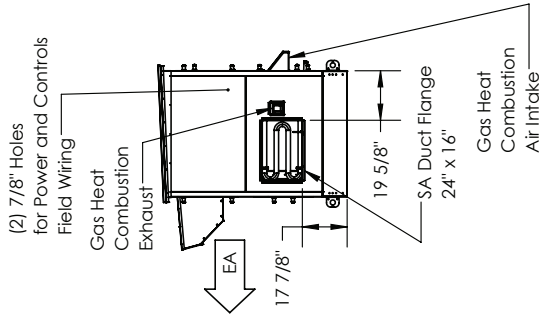
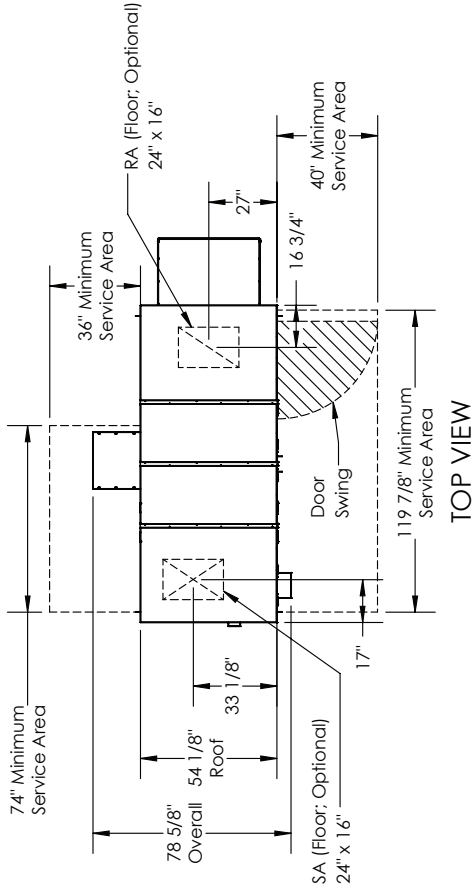
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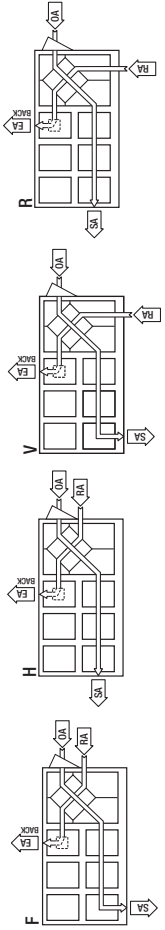


Dimension drawings for the DN depict largest cabinet size available. Refer to CORES.RenewAire.com for project specific unit drawings.



## AIRFLOW CONFIGURATION

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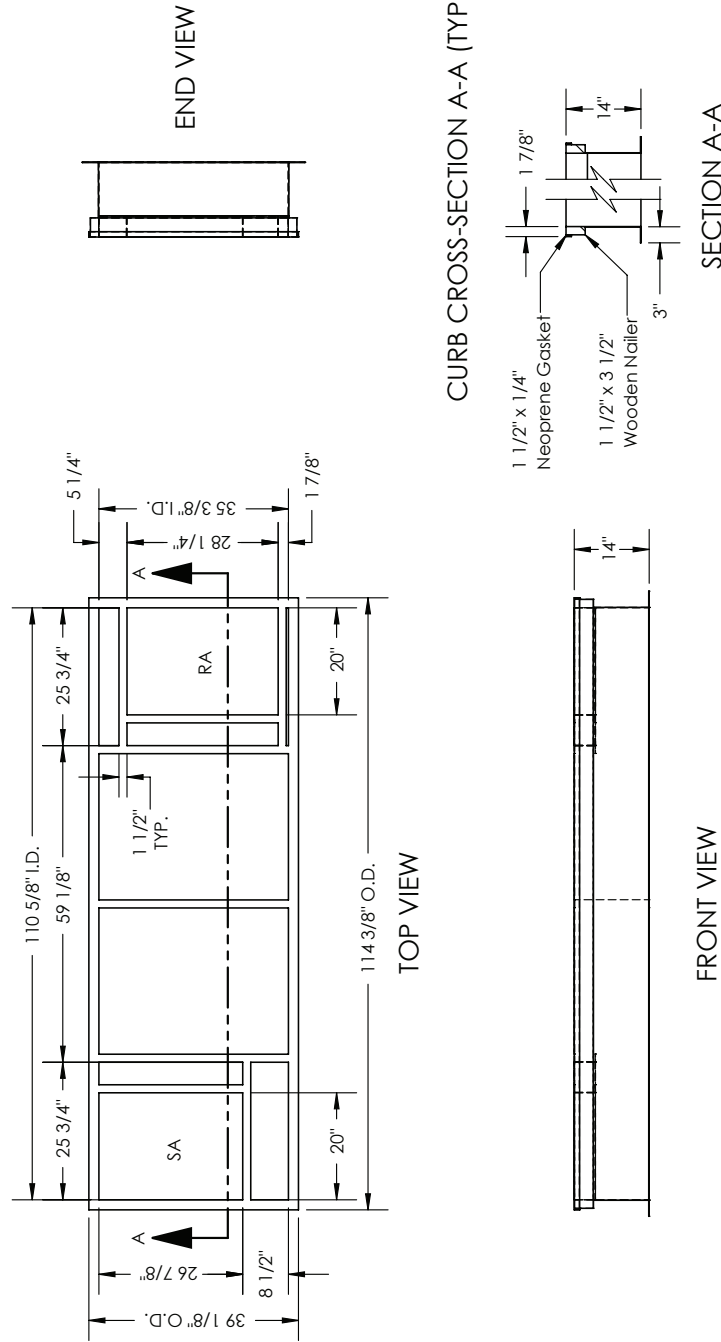
**DN2RT** Dedicated Outdoor Air System Curbs

DUCT SUPPORT DIMENSIONS  
WIDTH: 1 1/2" DEPTH: 3"

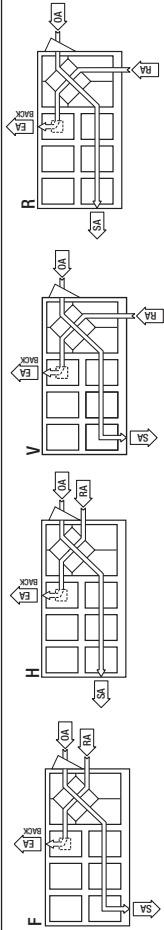
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DN2RT  
CURB DN2-ERV+C+H

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