

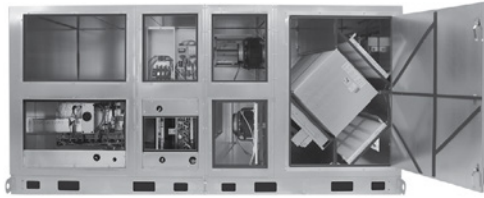
DN 5RT

Dedicated Outdoor Air System Standard



ROOFTOP UNIT

Dedicated Outside Air System
Unit with Energy Recovery



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

Energy Recovery Core is AHRI Certified®



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: 1,125-4,950 CFM

AHRI 1060 Certified Core:

One L-62-G5 and four L-125-G5

ETL Certification:

Tested to UL standards 1812 and 1995

Standard Features:

EC Motors for both airstreams
Direct Drive backward inclined plenum
Higher ESP of up to 3" w.g. at 4,500 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", 20 gauge galvanized double wall foam-injected R6.5 insulation
Modbus RTU or IP Integration

Inlets/Outlets:

OA & RA Inlets: 60" x 16"

SA Outlet: 24" x 16"

EA Outlet: 20" x 32"

Filters:

Total qty. 10, MERV 8:

16" x 20" x 2"

Bypass Filters:

Total qty. 4, MERV 8:

16" x 20" x 2"

Unit Weight for 1" Cabinets: 2975-5500 lbs.

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

180" L x 101 1/2" W x 98" H

3225-5750 lbs.

Unit Weight for 2" Cabinets: 3100-5700 lbs.

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

180" L x 101 1/2" W x 100" H

3350-5950 lbs.

Motor(s):

Qty. 4, 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", 20 gauge galvanized double wall foam-injected R13 insulation with thermal break construction
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"

Custom 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",

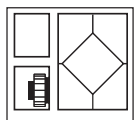
without display 0-1"

Waterless trap negative pressure

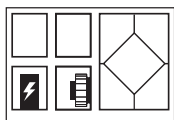
Waterless trap positive pressure

Remote display

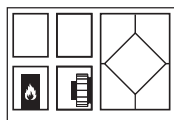
INTERNAL OPTIONS FOR HEATING AND COOLING



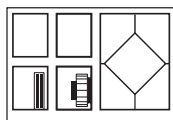
ERV only



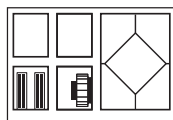
ERV + EH (BT)



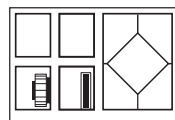
ERV + GH (BT)



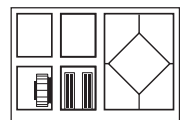
ERV + CC/HC (BT)



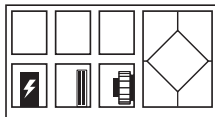
ERV + CC + HGRH (BT)



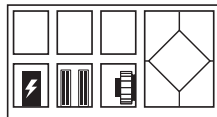
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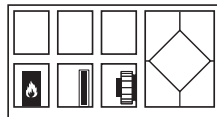
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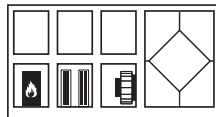
ERV + CC + EH (BT)



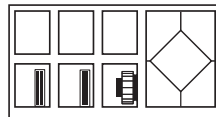
ERV + CC + HGRH + EH (BT)



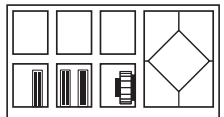
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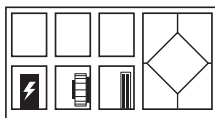
ERV + CC + HGRH + GH (BT)



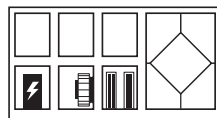
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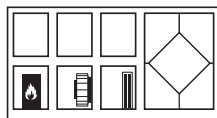
ERV + CC + HGRH + HC (BT)



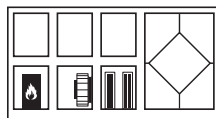
ERV + CC + EH (DT)



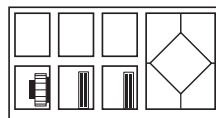
ERV + CC + HGRH + EH (DT)



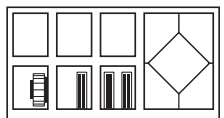
ERV + CC + GH (DT)



ERV + CC + HGRH + GH (DT)



ERV + CC + HC (DT)



ERV + CC + HGRH + HC (DT)



Dedicated Outdoor Air System Standard

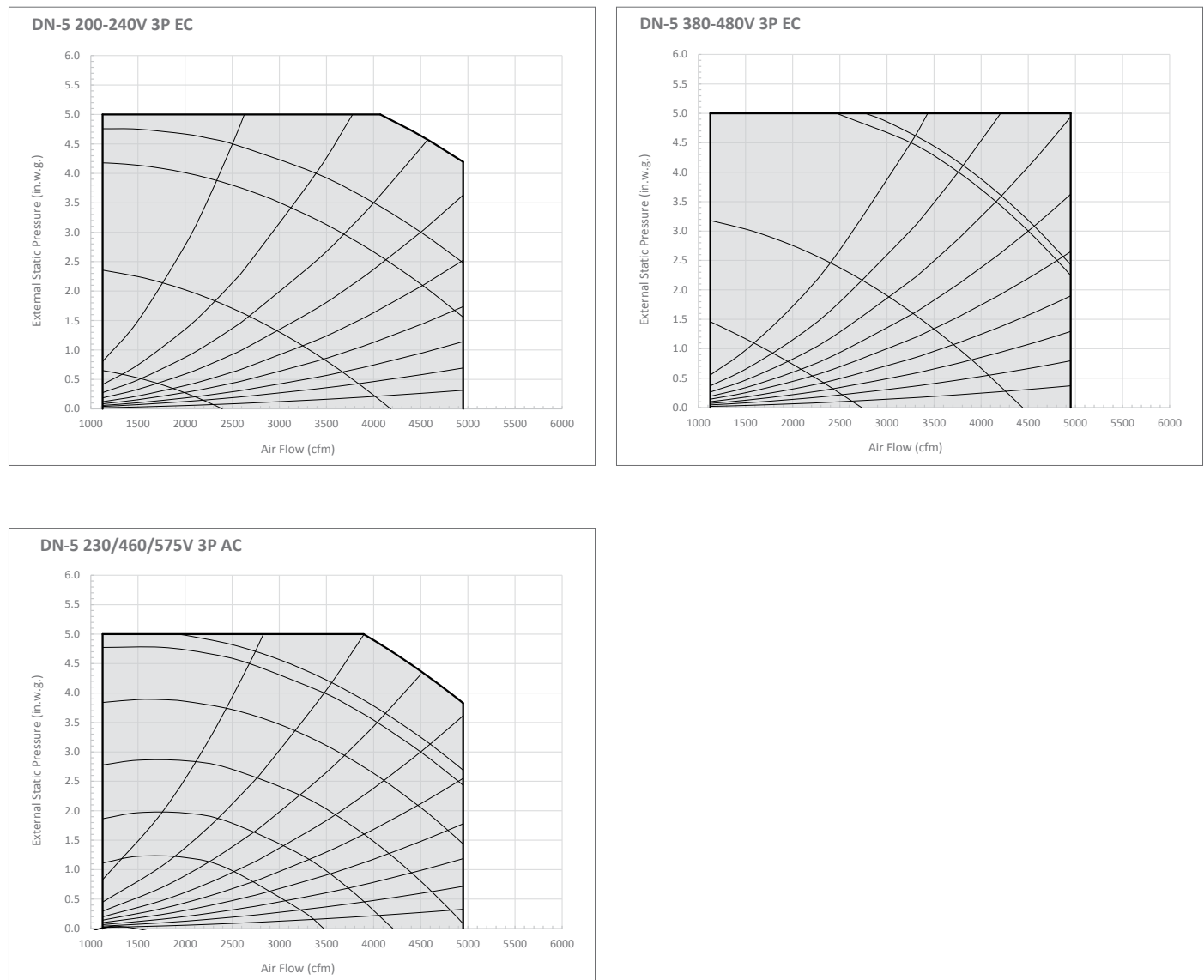


ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	4 @ 2.70 kW ea.	200-240	50/60 Hz	Three	36.6	45	8.6-7.2
	4 @ 3.70 kW ea.	380-480	50/60 Hz	Three	25.5	30	6.0-4.6
VFD	4 @ 5HP ea.	208-230	50/60 Hz	Three	59.1	70	13.9-13.4/6.7
	4 @ 5HP ea.	460	50/60 Hz	Three	28.5	35	6.7
	4 @ 5HP ea.	575	50/60 Hz	Three	22.5	25	5.3

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.

AIRFLOW PERFORMANCE



DN5RT Dedicated Outdoor Air System Standard 1" Cabinet

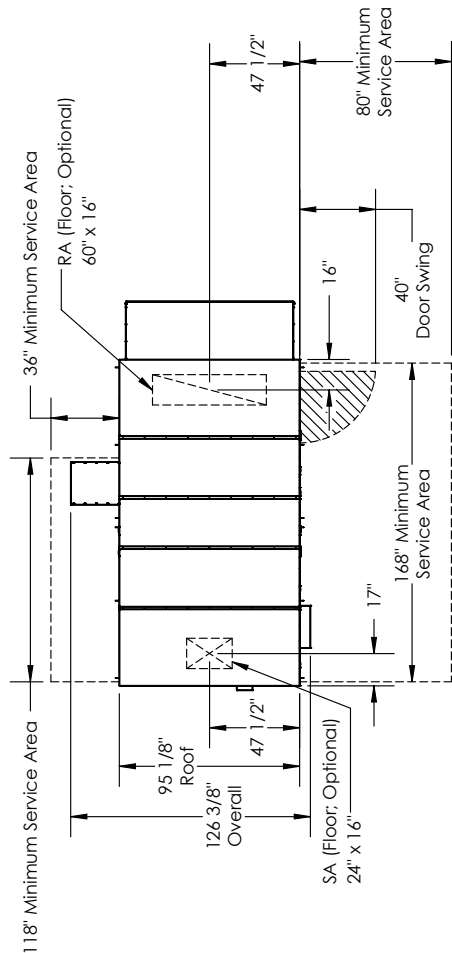
ABBREVIATIONS

EA: Exhaust Air to outside
OA: Outside Air Intake
RA: Room Air to be exhausted
SA: Supply Air to inside

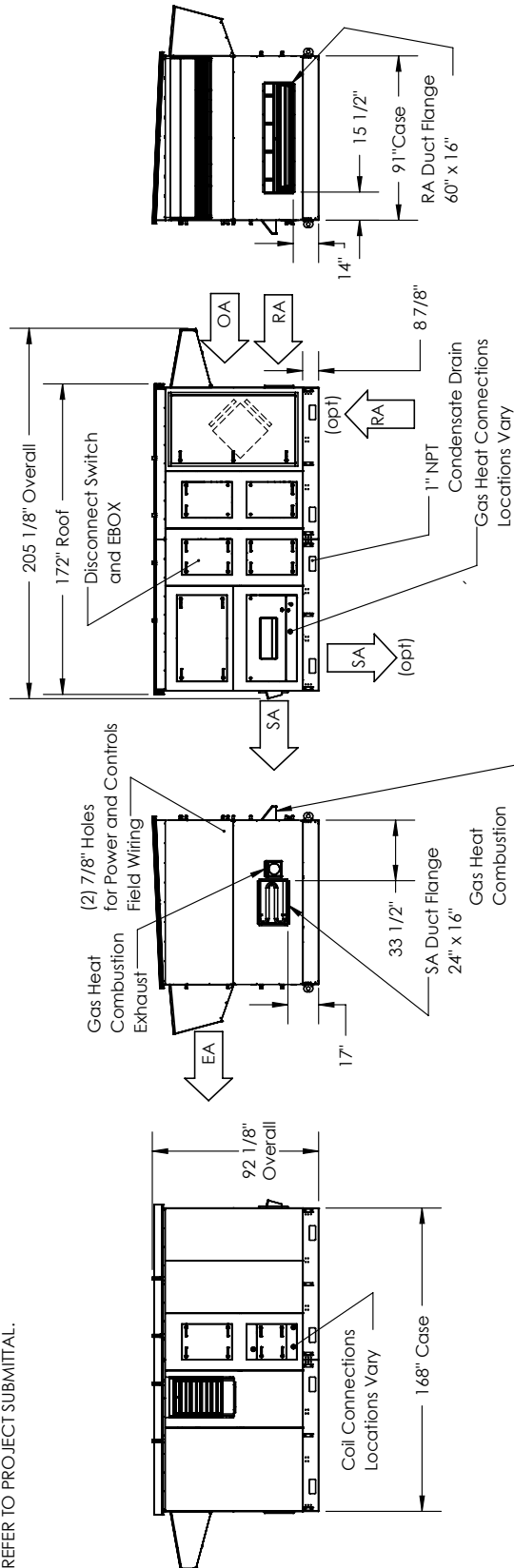
INSTALLATION ORIENTATION
Unit must be installed in orientation shown.

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.



TOP VIEW



RIGHT VIEW

FRONT VIEW

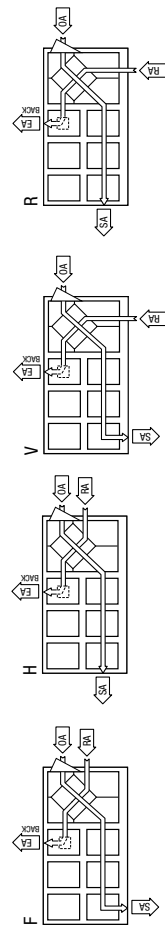
LEFT VIEW

BACK VIEW



AIRFLOW ORIENTATION

Available as shown:



UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.

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

DN5RT Dedicated Outdoor Air System Standard 2" Cabinet

ABBREVIATIONS

EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
SA: Supply Air to inside

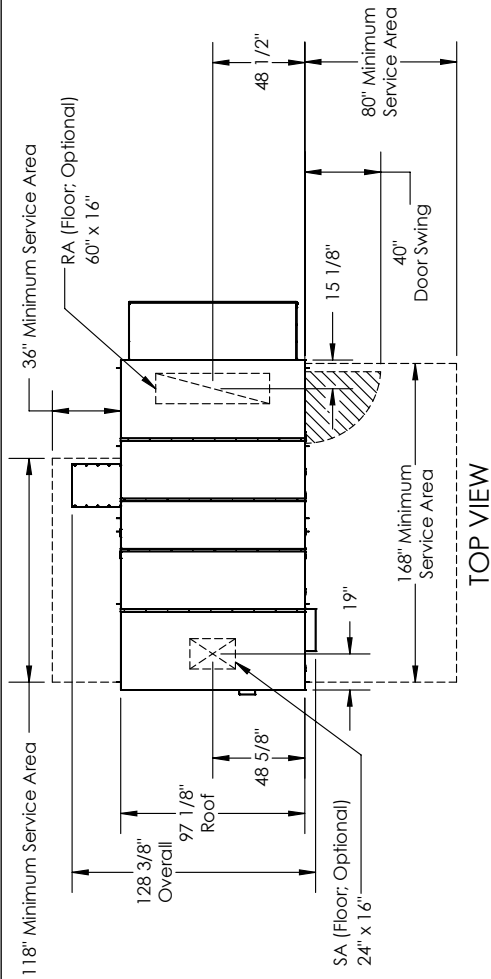
INSTALLATION ORIENTATION

Unit must be installed in orientation shown.

NOTE

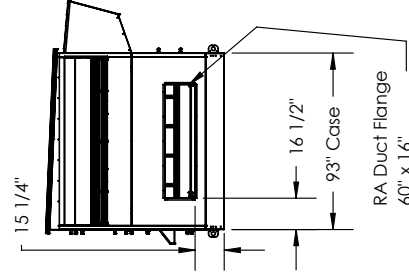
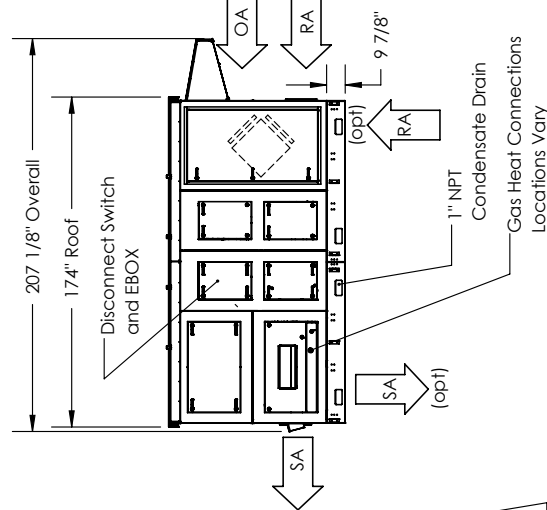
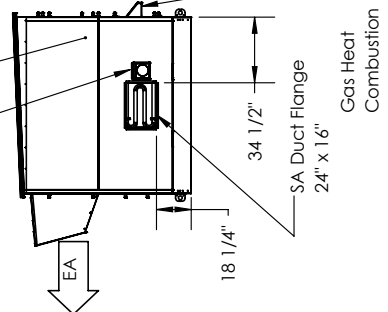
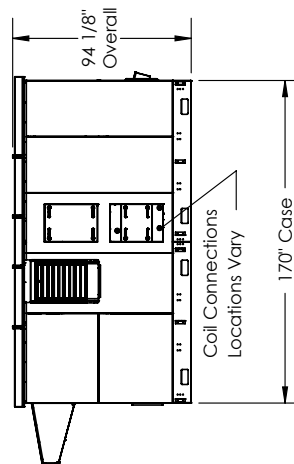
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORRED.
5. FOR CURB DETAILS REFER TO CURB DRAWING.
6. FOR PROJECT SPECIFIC DRAWINGS REFER TO PROJECT SUBMITTAL.

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



(2) 7/8" Holes
for Power and Controls
Field Wiring

Gas Heat
Combustion
Exhaust



BACK VIEW

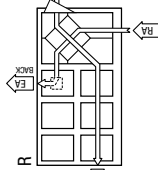
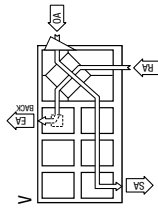
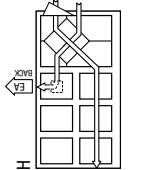
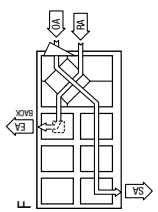
LEFT VIEW

FRONT VIEW

RIGHT VIEW

AIRFLOW ORIENTATION

Available as shown:



UNIT MOUNTING & APPLICATION
Must be mounted as shown. Airstreams can not be switched.



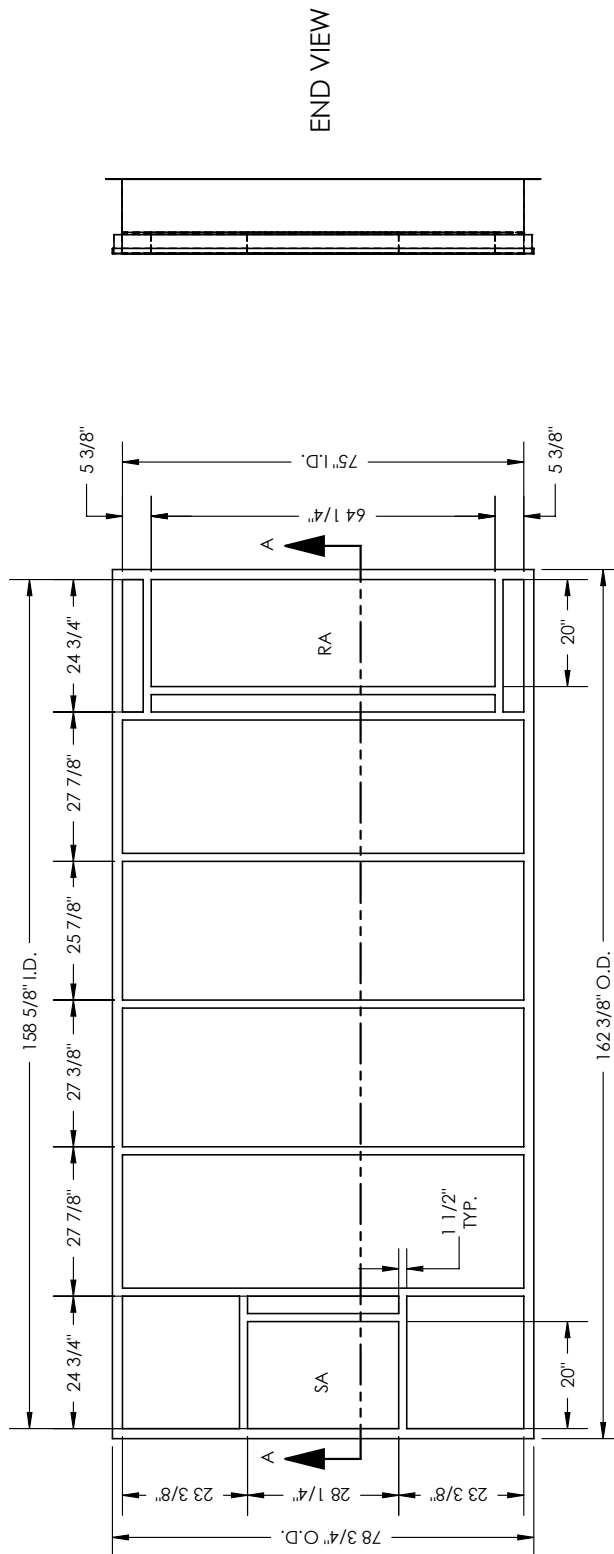
DN5RT Dedicated Outdoor Air System Curbs

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

DN5RT
CURB DN5-ERV+C+H

RA: Room Air to be exhausted
SA: Supply Air to inside

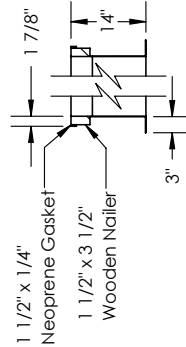
Dimension drawings for the DN depict largest cabinet size available.
Refer to CORES.RenewAire.com for project specific unit drawings.



END VIEW

TOP VIEW

CURB CROSS-SECTION A-A (TYP.)

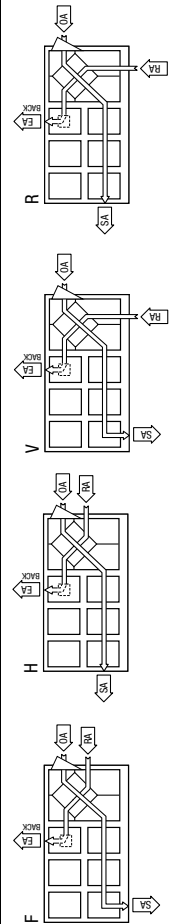


SECTION A-A



FRONT VIEW

AIRFLOW ORIENTATION
Available as shown:



UNIT MOUNTING & APPLICATION
This universal DN Series curb can be used in conjunction with RTE, RTH, RTV and RTR models.