

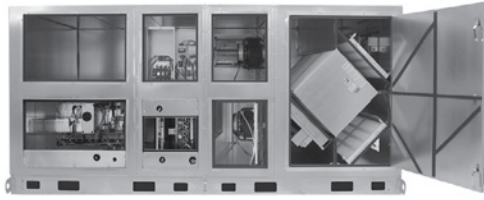
# DN 2RT

## 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:** 375-1,650 CFM

**AHRI 1060 Certified Core:**

One L-62-G5 and one 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 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", 20 gauge galvanized double wall foam-injected R6.5 insulation
- Modbus RTU or IP Integration

**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 Weight for 1" Cabinets:** 1500-2700 lbs.

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

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

**Unit Weight for 2" Cabinets:** 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

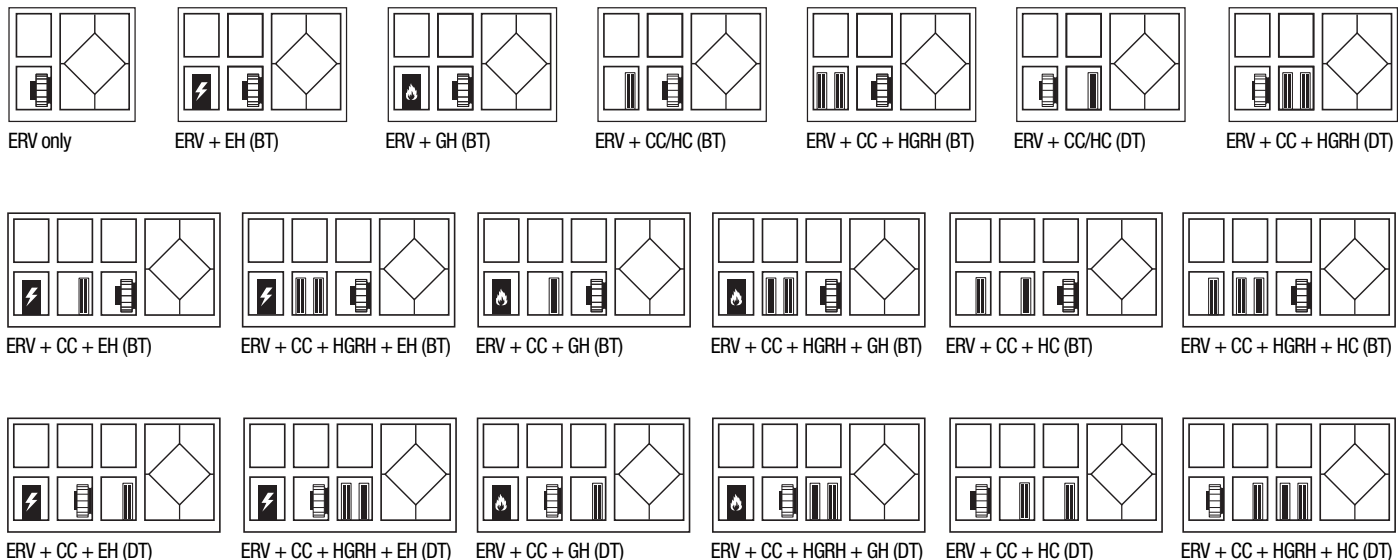
**Options:**

- 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", 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





Dedicated Outdoor Air System  
Standard

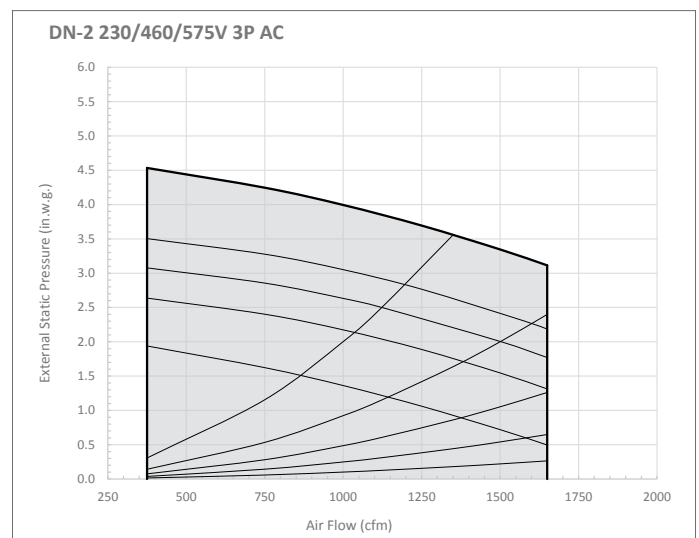
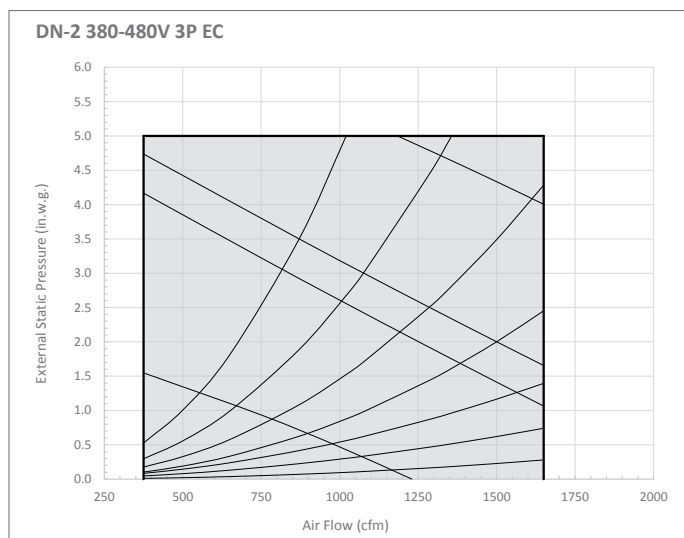
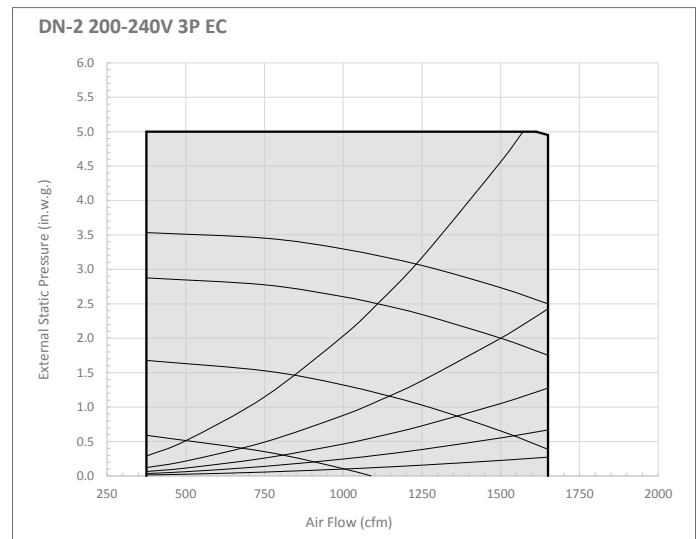
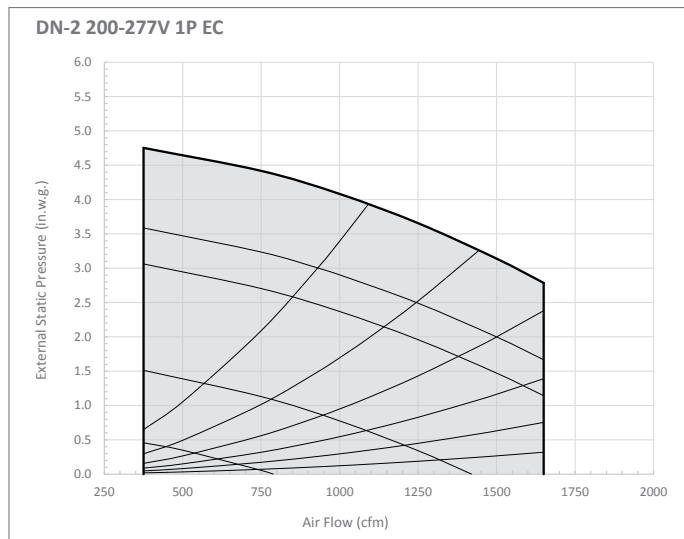


ELECTRICAL DATA

Electrical Specifications							
	Motor Qty/kW or HP	Volts	Frequency	Phase	Min. Cir. Amps.	Max. Overcurrent Protection Device	FLA per motor
EC	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](http://cores.renewaire.com) for project specific submittal for electrical data for the specific unit with all included options.

AIRFLOW PERFORMANCE



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

**ABBREVIATIONS**

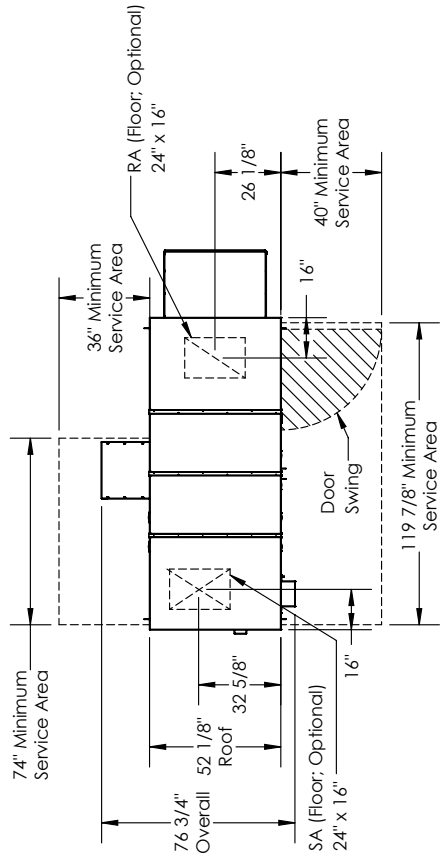
- EA: Exhaust Air to outside
- OA: Outside Air Intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside

**INSTALLATION ORIENTATION**

Unit must be installed in orientation shown.

**NOTE**

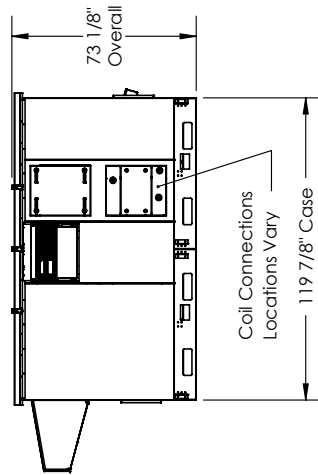
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.
3. FOR PIPE CONNECTION DETAILS REFER TO CORES OR UNIT SELECTION SUBMITTAL.
4. UNIT, UNIT DOORS, AND COILS CANNOT BE MIRRORED.
5. FOR CURB DETAILS REFER TO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



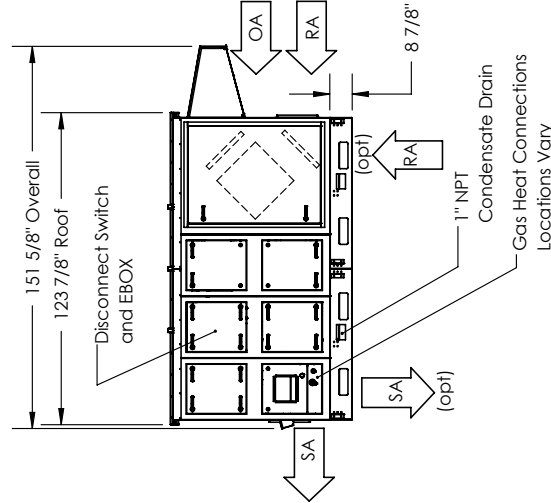
**TOP VIEW**

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

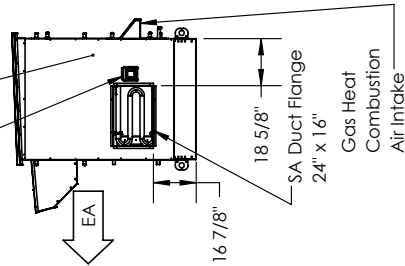
Gas Heat Combustion Exhaust



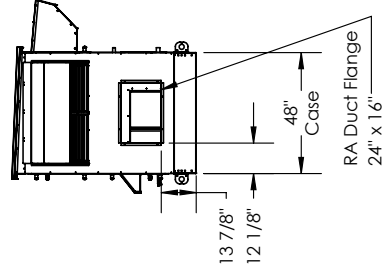
**BACK VIEW**



**FRONT VIEW**



**LEFT VIEW**



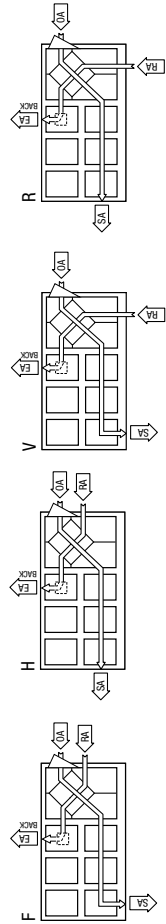
**RIGHT VIEW**

**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.

**DN2RT** 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

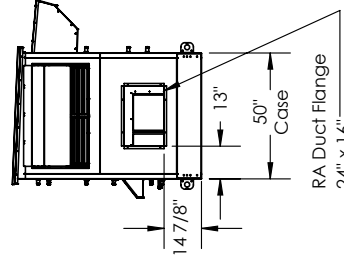
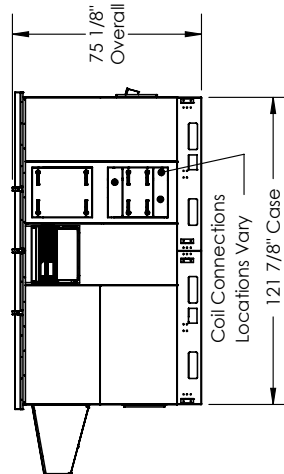
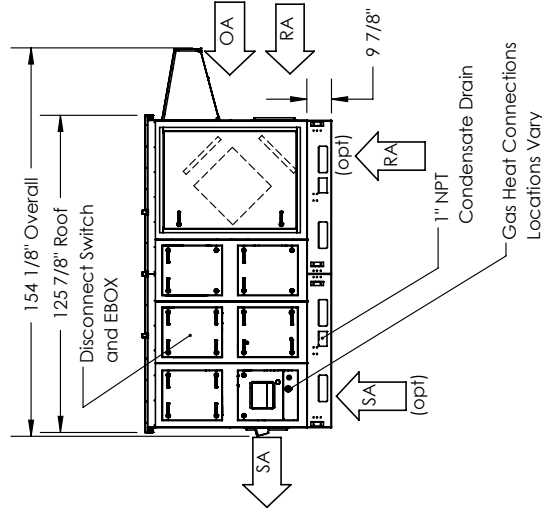
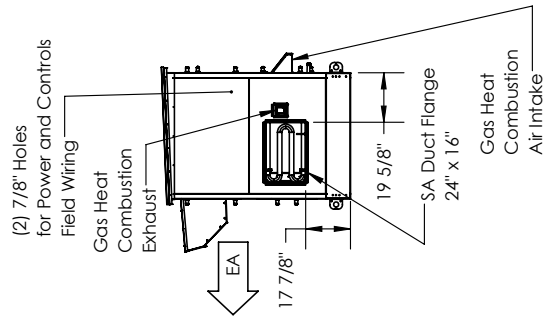
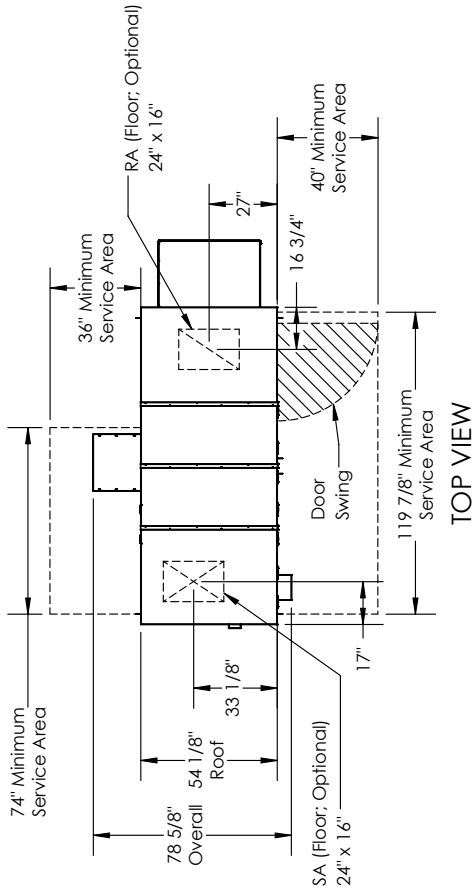
**INSTALLATION ORIENTATION**

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BACK VIEW

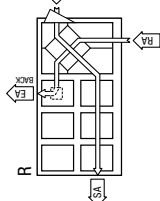
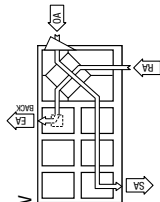
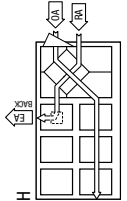
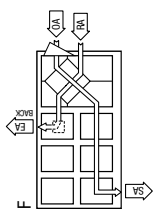
LEFT VIEW

FRONT VIEW

RIGHT VIEW

**AIRFLOW ORIENTATION**

Available as shown:



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



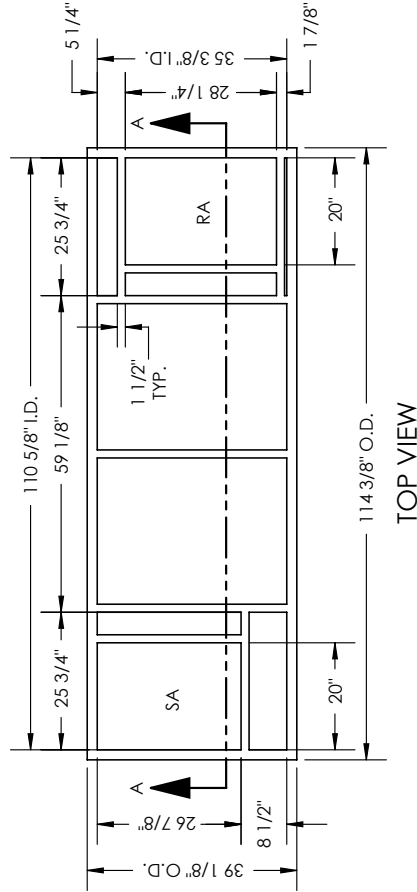
**DN2RT** Dedicated Outdoor Air System Curbs

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

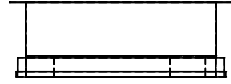
RA: Room Air to be exhausted  
SA: Supply Air to inside

DN2RT  
CURB DN2-ERV+C+H

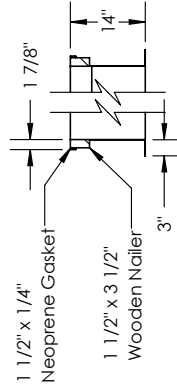
Dimension drawings for the DN depict largest cabinet size available.  
Refer to CORES.RenewAire.com for project specific unit drawings.



END VIEW



CURB CROSS-SECTION A-A (TYP.)

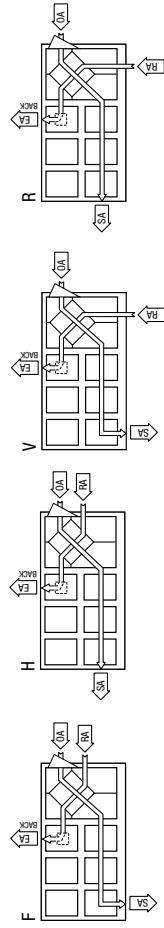


FRONT VIEW



SECTION A-A

**AIRFLOW ORIENTATION**  
Available as shown:



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