RenewAire Engineered Combo Curbs Have Been Designed to:

- **Eliminate Suctioning and Cross Contamination**
  Through detailed analysis, using computational fluid dynamics, RenewAire has engineered the combo curbs so the conditioned supply airstream from the ERV does not cross back into the ERV’s return air duct.

- **Provide Highly Effective Air Mixing**
  RenewAire combo curbs have been engineered to provide appropriately distributed airflow from the ERV’s supply airstream across the RTU’s heating and cooling coils. This feature ensures design efficiencies of heating and cooling of the RTU are fully maintained.

- **Minimize System Effect Factors**
  To ensure the highest levels of efficiency, the RenewAire combo curbs include an engineered component which minimizes negative system effect factors at the ERV’s supply air blower opening, improving airflow across the curb and increasing efficiency.

- **Eliminate Short Circuiting and Cross Contamination**
  Through detailed analysis, using computational fluid dynamics, RenewAire has engineered the combo curbs so the conditioned supply air-stream from the ERV does not cross back into the ERV’s return air duct.

**ENGINEERED EXCELLENCE**

**Standard Construction**

- Prime G-90, 18-gauge galvanized steel
- Fully welded and mitered corners (single piece curb lift)
- Base flange attachments for securing to the building structure
- 1 1/2” X 3½” Density Rigid Board Insulation
- Reinforced with cross channel supports on center
- Conforms to ASTM A653/A653M (standard specification for sheet metal)

**Available Options (Special Order)**

- Seismic and/or wind load applications
- Pitched roof applications
- High vibration applications
- Custom curb heights
- Heavier metal gauges
- Aluminum linings

**SUPPORTS CARRIER MODELS:**

WeatherExpert
WeatherMaster
WeatherMaker

RenewAire Engineered Combo Curbs create the perfect HVAC solution by combining trusted RenewAire ventilation with Carrier Rooftop air-conditioning — AND reduce installation time!

- Designed to work with Carrier Rooftop Units and RenewAire Energy Recovery Ventilators
  - Eliminates the need for field-installed duct transitions between the Carrier RTU and the RenewAire ERV
  - Simplifies specification and ordering
  - Significantly reduces the time and cost of installation
  - Allows Carrier unit to function in both standard and full-flow economizer modes

**DESIGNED TO:**

- Even airflow mixing
- Conditioned air doesn’t cross back

**Simulation Detail - No Cross-Contamination**

**Simulation Detail - Effective Air Mixing**

**Simulation Detail - Minimize System Effect Factors**

**Available Options (Special Order)**

- Seismic and/or wind load applications
- Pitched roof applications
- High vibration applications
- Custom curb heights
- Heavier metal gauges
- Aluminum linings

**SUPPORTS CARRIER MODELS:**

- EV450RTV
- HE1XRTV
- HE1.5XRTV
- HE2XRTV
- HE3XRTV
- HE4XRTV
- HE6XRTV
- HE8XRTV
- LE6XRTV
- LE8XRTV
BENEFITS OF RENEWAIRE ENGINEERED COMBO CURBS

RenewAire Engineered Combo Curbs easily combine Carrier Rooftop Units with our Energy Recovery Ventilators. They eliminate the need for transitional ductwork between the RTU and the ERV, reducing the time and costs of installation.

Traditional Curbs Application (Stand Alone Units)

- Transitional ductwork required between the ERV and the rooftop unit
- Two sets required
- Two sets of rooftop penetrations

RenewAire Engineered Combo Curb Application

- Simply install the curb, run the return and supply duct to the curb openings, then install the Carrier and RenewAire units onto the curb. Additionally, the curbs allow the Carrier unit to function in its standard operation as well as full-flow economizer modes.

Standard Operation - View 1 (Heating Application)

- Standard operation as well as full-flow economizer modes.

Standard Operation - View 2 (Heating Application)

- Two sets of rooftop penetrations
- Two curbs required

Traditional Curbs Application (Stand Alone Units)

- Transitional ductwork required between the ERV and the rooftop unit
- Two sets required
- Two sets of rooftop penetrations

SELECTING A CURB

Simply install the curb, run the return and supply duct to the curb openings, then install the Carrier and RenewAire units onto the curb. Additionally, the curbs allow the Carrier unit to function in its standard operation as well as full-flow economizer modes.

Curb measurement

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (L)</th>
<th>Width (W)</th>
<th>Height (H)</th>
<th>Weight (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECCWI8X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWJ8X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWK8X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWF8X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWFEV</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWJ4X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWK4X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWJ2X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWK2X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWJ1X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWK1X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWJ0.5X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
<tr>
<td>ECCWK0.5X</td>
<td>2000 - 7950</td>
<td>HE6XRTV</td>
<td>1500 - 6600</td>
<td>LE6XRTV</td>
</tr>
</tbody>
</table>

Note: Each model includes a 4" flange.

Curbs

- 102 ¼" x 30”
- 80” x 20”
- 70” x 20”
- 60” x 20”
- 50” x 20”
- 40” x 20”
- 30” x 20”
- 25” x 20”
- 20” x 20”
- 15” x 20”
- 10” x 20”
- 8” x 20”
- 5” x 20”
**BENEFITS OF RENEWAIRE ENGINEERED COMBO CURBS**

- Reduce the time and costs of installation.
- Simply install the curb, run the return and supply duct to the curb openings, then install the Carrier and RenewAire units onto the curbs.
- Additionally, the curbs allow the Carrier unit to function in its standard operations as well as full-flow economizer mode.

**SELECTING A CURB**

- **Standard Operation** - View 1 (Heating Application)
- **Standard Operation** - View 2 (Heating Application)
- **Standard RTU Economizer Operation**
- **RenewAire ERV Powered Relief**

**Traditional Curbs Application (Stand Alone Units)**
- Transitional ductwork required between the ERV and the rooftop unit.
- Two curbs required.
- Two sets of rooftop penetrations.

**CURB DIMENSIONS**

- **Model**
- **Length (L)**
- **Width (W)**
- **Height (H)**
- **Weight (est.)**

- **Note**: Curb measurements do not include flanges.
RenewAire Engineered Combo Curb Have Been Designed to:

- **Eliminate Crossflow and Contamination**
  - Through detailed analysis, using computational fluid dynamics, RenewAire has engineered the combo curbs so the conditioned supply air-stream from the ERV does not cross back into the RTU's return air duct.

- **Provide Highly Effective Air Mixing**
  - RenewAire combo curbs have been engineered to provide appropriately distributed airflow from the ERV's supply air-stream across the RTU's heating and cooling coils. This feature ensures design efficiencies of heating and cooling of the RTU are fully maintained.

- **Minimize System Effect Factors**
  - To ensure the highest levels of efficiency, the RenewAire combo curbs include an engineered component which minimizes negative system effect factors at the ERV's supply air blower opening, improving airflow across the curb and increasing efficiency.

- **Eliminate Short Circuiting and Cross Contamination**
  - Through detailed analysis, using computational fluid dynamics, RenewAire has engineered the combo curbs so the conditioned supply air-stream from the ERV does not cross back into the ERV's return air duct.

**Standard Construction**

- Prime G-90, 18-gauge galvanized steel
- Fully welded and mitered corners (single piece curb lift)
- Sleeve flange attachments for securing to the building structure
- 1 1/2” 3lbs density fiberglass insulation
- Reinforced with cross channel supports on center
- Conforms to ASTM A653/A653M (standard specification for sheet metal)

**Available Options (Special Order)**

- Seismic or wind load applications
- Pitched roof applications
- High vibration applications
- Custom curb heights
- Heavier metal gauges
- Aluminum liners

**SUPPORTS CARRIER MODELS:**

- WeatherExpert
- WeatherMaster
- WeatherMaker
- EV450RTV
- HE1XRTV
- HE1.5XRTV
- HE2XRTV
- HE3XRTV
- HE4XRTV
- HE6XRTV
- LE8XRTV

RenewAire Engineered Combo Curb create the perfect HVAC solution by combining trusted RenewAire ventilation with Carrier Rooftop air-conditioning... AND reduce installation time!
Engineered Excellence

RenewAire Engineered Combo Curb

- Eliminate Circuiting and Cross Contamination
- Simplify Specification and Ordering
- Significantly reduce the time and cost of installation
- Allow Carrier unit to function in both standard and full-flow economizer modes

Engineered Excellence

RenewAire Engineered Combo Curb Have Been Designed To:

- Provide Highly Effective Air Mixing
  - RenewAire combo curbs have been engineered to provide appropriately distributed airflow from the ERV’s supply air-stream across the RTU’s heating and cooling coils. This feature ensures design efficiencies of heating and cooling of the RTU are fully maintained.

- Minimize System Effect Factors
  - To ensure the highest levels of efficiency, the RenewAire combo curbs include an engineered component which minimizes negative system effect factors at the ERV’s supply air blower opening, improving airflow across the curb and increasing efficiency.

- Eliminate Short Circuiting and Cross Contamination
  - Through detailed analysis, using computational fluid dynamics, RenewAire has engineered the combo curb so that the conditioned supply air-stream from the ERV does not cross back into the ERV’s return air duct.

Standard Construction

- Prime G-90, 18-gauge galvanized steel
- Fully welded and mitered corners
- Base flange attachments for securing to the building structure
- 1 1/2” 3lbs density fiberglass insulation
- Reinforced with cross channel supports on center
- Conforms to ASTM A653/A653M (standard specification for sheet metal)

Available Options (Special Order)

- Seismic and/or wind load applications
- Pitched roof applications
- High-vibration applications
- Custom curb heights
- Heavier metal gauges
- Aluminum liners

Designed to work with Carrier Rooftop Units and RenewAire Energy Recovery Ventilators

- Eliminates the need for field-installed duct transitions between the Carrier RTU and the RenewAire ERV
- Simplifies specification and ordering
- Significantly reduces the time and cost of installation
- Allows Carrier unit to function in both standard and full-flow economizer modes

Supports Carrier Models:

- WeatherExpert
- WeatherMaster
- WeatherMaker

RenewAire Energy Recovery Ventilation

1.800.627.4499  RenewAire.com