

# VALENT DEDICATED OUTDOOR AIR SYSTEMS

## DESIGNED FOR 100% OUTDOOR AIR

Valent was one of the first to specialize in high outdoor air units, which can be more challenging to design than recirculated air units. Valent's robust designs are highly configurable to fit almost any project.

### OUTDOOR AIR EXPERTS

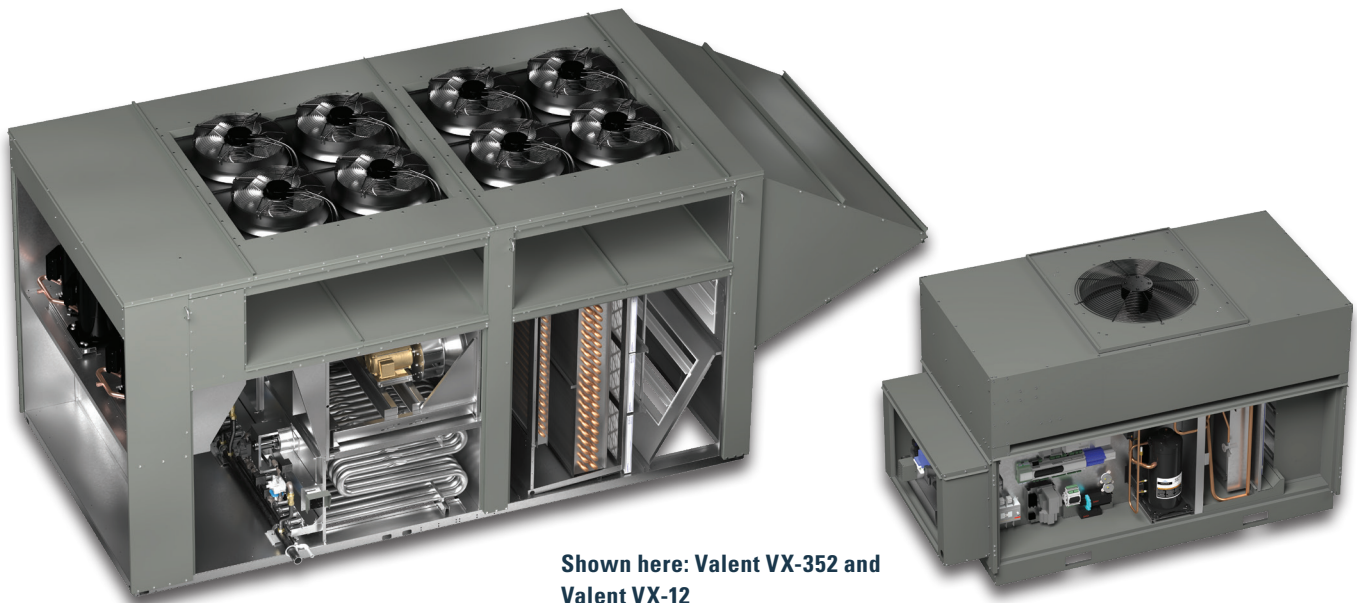
- Valent's years of experience in high outdoor air applications lead to high performing solutions
- Valent's application expertise can be helpful in the design process

### ROBUST DESIGNS

- Valent uses quality components to increase unit longevity
- Injected foam casings improve thermal performance
- Pre-painted cabinets reduce environmental wear and tear

### DEDICATED SUPPORT

- Valent's commitment to quality reduces the need for post sale support, but we'll help with any issues
- Valent representatives can provide product and selection support in the design process
- End-of-line testing reduces installation time



Shown here: Valent VX-352 and  
Valent VX-12

# VALENT UNITS AT A GLANCE

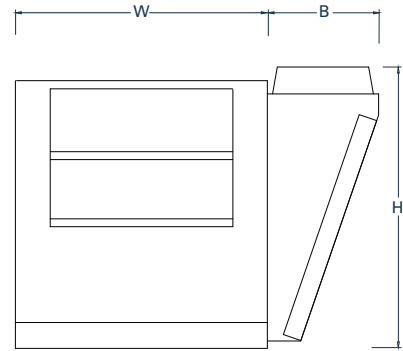
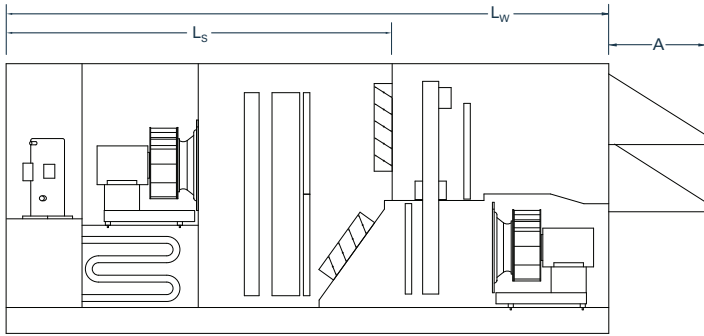
|                      |  | VX, VXE & VXC CASING |               |            |               |               |               |
|----------------------|--|----------------------|---------------|------------|---------------|---------------|---------------|
|                      |  | 12                   | 112           | 212        | 312           | 352           |               |
| AIRFLOW              | Minimum <sup>a</sup><br>(cfm)                  | 500                  | 800           | 2,250      | 3,750         | 3,900         |               |
|                      | Maximum <sup>a</sup><br>(cfm)                  | 2,500                | 6,500         | 9,500      | 16,000        | 18,000        |               |
| COOLING TYPE         |  | Tons                 | Tons          | Tons       | Tons          | Tons          |               |
|                      |  | 3                    | 5             | 15         | 25            | 30            |               |
|                      |  | 4                    | 7             | 17.5       | 30            | 40            |               |
|                      |  | 5                    | 10            | 20         | 40            | 50            |               |
|                      |  | 6                    | 12.5          | 25         | 50            | 60            |               |
|                      |  | 7                    | 15            | 30         | —             | 70            |               |
|                      |  | Circuits             | Circuits      | Circuits   | Circuits      | Circuits      |               |
|                      |  | 1                    | 1             | 1          | 2             | 2             |               |
|                      |  | Chilled water        | Not available | Option     | Option        | Option        | Option        |
|                      |  | Air source heat pump | Not available | Option     | Option        | Not available | Not available |
|                      | No cooling                                     | Option               | Option        | Option     | Option        | Option        |               |
| COOLING COMPONENTS   | Inverter scroll compressor                     | Standard             | Standard      | Standard   | Standard      | Standard      |               |
|                      | Modulating hot gas reheat                      | Option               | Option        | Option     | Option        | Option        |               |
|                      | Lead EC modulating condensing fans             | Standard             | Standard      | Standard   | Standard      | Standard      |               |
|                      | All EC modulating condensing fans <sup>b</sup> | Not applicable       | Option        | Option     | Option        | Option        |               |
| INDIRECT GAS FURNACE | Minimum (MBh)                                  | 75                   | 100           | 300        | 600           | 600           |               |
|                      | Maximum (MBh)                                  | 200                  | 300           | 500        | 1,200         | 1,200         |               |
|                      | Turndown (NG)                                  | Up to 16:1           | Up to 16:1    | Up to 16:1 | Up to 16:1    | Up to 10:1    |               |
|                      | Turndown (LP)                                  | Up to 16:1           | Up to 16:1    | Up to 16:1 | Not available | Up to 6:1     |               |
| ELECTRIC HEAT        | Minimum <sup>c</sup><br>(kW)                   | 4                    | 15            | 35         | 35            | 50            |               |
|                      | Maximum <sup>c</sup><br>(kW)                   | 60                   | 60            | 120        | 230           | 200           |               |
| OTHER HEAT           | Air source heat pump                           | Not available        | Option        | Option     | Not available | Not available |               |
|                      | Hot water                                      | Not available        | Option        | Option     | Option        | Option        |               |
|                      | Steam coil                                     | Not available        | Option        | Option     | Option        | Option        |               |

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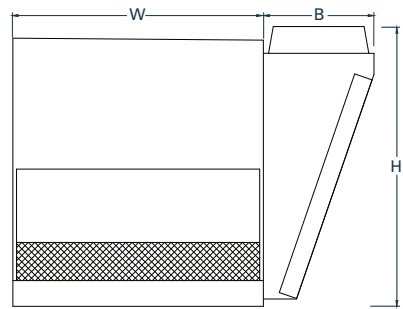
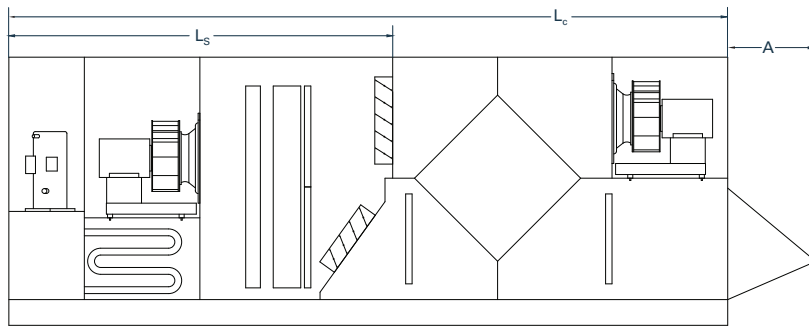
|  |                                     | VX, VXE & VXC CASING |                     |                     |                     |                     |
|--|-------------------------------------|----------------------|---------------------|---------------------|---------------------|---------------------|
|  |                                     | 12                   | 112                 | 212                 | 312                 | 352                 |
| ENERGY RECOVERY  | <b>Full width wheel</b><br>Polymer  | Not available        | Option              | Option              | Option              | Option              |
|  | <b>Full width wheel</b><br>Aluminum | Not available        | Option              | Option              | Option              | Option              |
|  | <b>Enthalpy core</b><br>Polymer     | Not available        | Option              | Option              | Not available       | Option              |
|  | <b>Enthalpy core</b><br>Fiber       | Not available        | Option              | Option              | Not available       | Not available       |
| DUCT CONNECTIONS   | <b>Bottom supply/<br/>return</b>    | Standard             | Standard            | Standard            | Standard            | Standard            |
|  | <b>Side supply</b>                  | Option               | Option              | Option              | Option              | Option              |
|  | <b>Side return<sup>d</sup></b>      | Not available        | Option              | Option              | Option              | Option              |
|  | <b>End return<sup>e</sup></b>       | Option               | Option              | Option              | Option              | Option              |
| CONTROLS   | <b>Full controls</b>                | Standard             | Standard            | Standard            | Standard            | Standard            |
|  | <b>Heat-cool only</b>               | Option               | Option              | Option              | Option              | Option              |
|  | <b>Web user interface</b>           | Standard             | Standard            | Standard            | Standard            | Standard            |
| AIRFLOW MONITORING   | <b>Damper</b>                       | Option               | Option              | Option              | Option              | Option              |
|  | <b>Fan</b>                          | Option               | Option              | Option              | Option              | Option              |
| CONSTRUCTION   | <b>Injected foam insulation</b>     | 2" double-wall R-13  | 2" double-wall R-13 | 2" double-wall R-13 | 2" double-wall R-13 | 2" double-wall R-13 |
|  | <b>Exterior</b>                     | Gray prepainted      | Gray prepainted     | Gray prepainted     | Gray prepainted     | Gray prepainted     |
|  | <b>Interior</b>                     | Galvanized           | Galvanized          | Galvanized          | Galvanized          | Galvanized          |
| CERTIFICATION  | <b>AHRI 1060</b>                    | N/A                  | Compliant           | Compliant           | Compliant           | Compliant           |
|  | <b>ASHRAE 90.1-2019</b>             | Compliant            | Compliant           | Compliant           | Compliant           | Compliant           |
|  | <b>DOE 2023</b>                     | Compliant            | Compliant           | Compliant           | Compliant           | Compliant           |
| <p>Refer to Valent CAPS® selection software or the Valent Mechanical IOMs for additional detail.</p> <p>a Based on packaged DX cooling, indirect gas heating, 100% outdoor air, 1.5 in. wg supply external and 0.5 in. wg return air static pressure. Airflows will vary based on unit configuration.</p> <p>b All EC condensing fans are not available for 575V unit configurations.</p> <p>c Actual kW minimums and maximums vary by voltage.</p> <p>d Not available in the VXC-112 or VXC-212.</p> <p>e Not available with energy recovery or powered exhaust. Not allowed with barometric relief damper in the end position.</p> |                                     |                      |                     |                     |                     |                     |

# DIMENSIONS AND WEIGHTS

## Elevations with and without energy recovery wheel



## Elevations with enthalpy core heat exchangers



| DIMENSIONS (inches), WEIGHTS (pounds) |               |        |       |                     |                    |             |                  |             |                        |                 |                |        |        |
|---------------------------------------|---------------|--------|-------|---------------------|--------------------|-------------|------------------|-------------|------------------------|-----------------|----------------|--------|--------|
| CASING                                | Model         | Height | Width | Length <sup>a</sup> | Length with wheel  |             | Length with core |             | Hood length            | Condenser width | Nominal weight |        |        |
|                                       |               | H      | W     | L <sub>S</sub>      | L <sub>W</sub>     |             | L <sub>C</sub>   |             | A                      | B               | VX             | VXE    | VXC    |
|                                       |               |        |       |                     | Bottom return      | Side return | Bottom return    | Side return |                        |                 |                |        |        |
|                                       | <b>VX-12</b>  | 58.1   | 44.0  | 82.2 <sup>c</sup>   | N/A                | N/A         | N/A              | N/A         | 22.3                   | N/A             | 1,180          | N/A    | N/A    |
|                                       | <b>VX-112</b> | 59.3   | 52.5  | 98.6 <sup>a</sup>   | 149.5 <sup>a</sup> | 180.5       | 180.5            | N/A         | 22.1/40.0 <sup>e</sup> | 30.1            | 2,700          | 3,400  | 3,800  |
|                                       | <b>VX-212</b> | 72.5   | 68.2  | 109.0 <sup>a</sup>  | 163.2 <sup>a</sup> | 197.3       | 197.3            | N/A         | 27.1/38.0 <sup>e</sup> | 30.1            | 4,500          | 5,100  | 5,675  |
|                                       | <b>VX-312</b> | 101.3  | 98.0  | 155.2 <sup>d</sup>  | 247.9              | 276.9       | N/A              | N/A         | 39.0 <sup>b</sup>      | N/A             | 6,500          | 8,000  | N/A    |
|                                       | <b>VX-352</b> | 99.5   | 96.0  | 185.0               | 263.0              | 307.0       | 308.0            | 353.0       | 45.3/46.0 <sup>e</sup> | N/A             | 7,950          | 10,450 | 12,000 |

a Powered exhaust units with no energy recovery, whether bottom or side return, have the same length as the wheel units with bottom return. This applies to the VX-112 and VX-212.  
 b If the VXE-312 has an exhaust fan, the exhaust blower bump-out will have a length of 48.4 inches.  
 c If the VX-12 has an indirect gas furnace, the furnace bump-out will have a length of 13.3 inches.  
 d If the VX-312 has powered exhaust but no energy recovery, the length will be 203.6 inches for bottom return and 222.7 inches for side return.  
 e Longer dimension reflects VXC hood length.



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