



# EVO SERIES

## WALK-IN

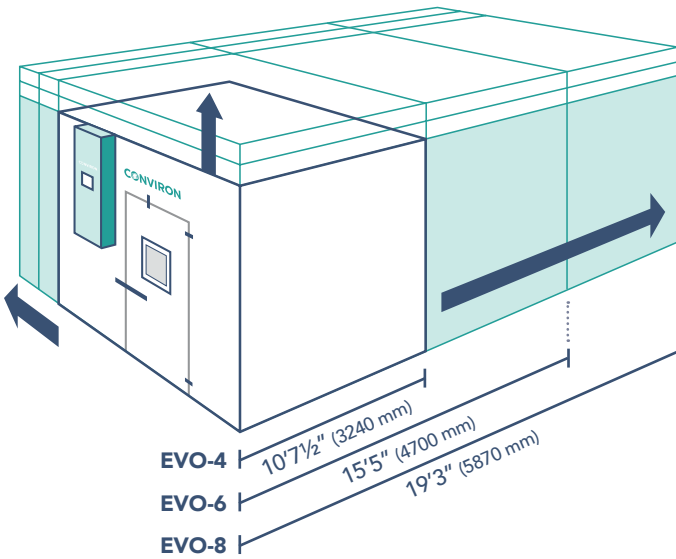
MULTI-PURPOSE GROW ROOM



**CONVIRON**<sup>®</sup>

## PRODUCT OVERVIEW

EVO is a cost-effective and energy efficient series of plant growth rooms, suitable for a wide range of short, medium or tall plants. The EVO series features a unique horizontal air movement design that delivers a high degree of spatial uniformity for plant growth. EVO can be configured at the time of purchase in a range of modular sizes based on the number of carts selected. Carts can be single or multi-tier with a range of LED intensities and spectra to suit your plant research requirements. The modularity of design eases installation and allows some flexibility to fit non-standard spaces.



Room dimensions can be scaled to meet your unique facility requirements.

## AIRFLOW

The airflow design directs conditioned air horizontally across the shelving from uniquely designed ducts on the side wall that reach from floor to ceiling. Air returns upward through circulating fans. Filtered fresh air is conditioned prior to entering the growth area.

## REFRIGERATION

Cooling for the EVO series is provided by a self-contained water-cooled condensing unit with hot gas bypass for continuous compressor operation. An electronic modulating valve provides tight temperature control while ensuring quiet operation. Pressure transducers are included for monitoring the status of the refrigeration system and enabling real time diagnostics. Alternative refrigeration methods are available depending on site-specific and/or user-defined requirements. Consult the factory for heat rejection information and other refrigeration options.

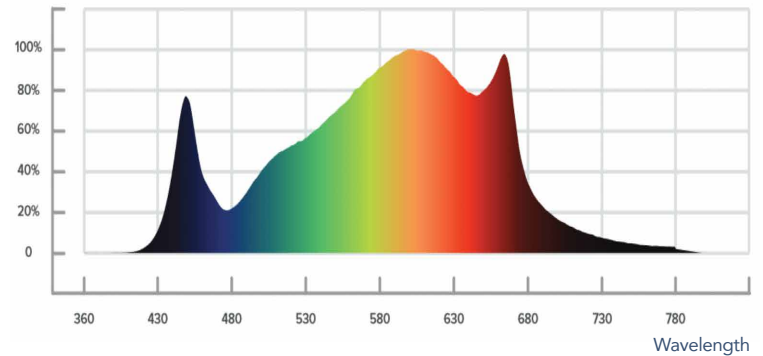
## LIGHTING

The standard lighting systems for the EVO use high efficiency balanced spectrum LEDs, delivering 500  $\mu\text{mol}/\text{m}^2/\text{s}$  with 3-levels of intensity in the two and three-tier configuration.

With single-tier configuration, intensity becomes 1,000  $\mu\text{mol}/\text{m}^2/\text{s}$ . Using advanced LEDs with dimming controllable directly through the control system, LED combinations have been designed to ensure uniform light distribution throughout the growing area.

### LED Spectrum

Measurements of Normalized Photosynthetic Photon Flux



Energy saving LEDs with broad white spectrum.

## CONTROL AND MONITORING

EVO comes equipped with Convirion's most advanced controller – the CMP6060. In addition to powerful programming and reporting capabilities, the CMP6060 includes a full-color, high resolution touchscreen with an intuitive graphic interface.

Users can create custom programs for key parameters such as temperature, lighting and humidity and receive audible, visual and email notifications of alarms. Options include connection to your local area network (LAN) and connectivity to a central PC or mobile device with Convirion Central Management™. CMP Link allows seamless integration with an Argus Control system.



The CMP6060 home screen provides an easy-viewing dashboard for set points and actual conditions and quick access to other control features.

KEY SPECIFICATIONS

MODEL	TEMPERATURE RANGE (°C)	AREA (ft <sup>2</sup> /m <sup>2</sup> )	STANDARD			OPTIONAL					
			3-TIER			1-TIER			2-TIER		
			Growth Height (inches/mm)	Growth Area (ft <sup>2</sup> /m <sup>2</sup> )	Light Intensity (μmol/m <sup>2</sup> /s)	Growth Height (inches/mm)	Growth Area (ft <sup>2</sup> /m <sup>2</sup> )	Light Intensity (μmol/m <sup>2</sup> /s)	Growth Height (inches/mm)	Growth Area (ft <sup>2</sup> /m <sup>2</sup> )	Light Intensity (μmol/m <sup>2</sup> /s)
EVO-4	+10 to +25 lights OFF +15 to +35 lights ON	123/11.4	19.5/495	144/13.38	500	92.25/2345	48/4.46	1000	30/760	96/8.92	500
EVO-6		179/16.6		216/20.07			72/6.69			144/13.39	
EVO-8		223/20.7		288/26.76			96/8.92			192/17.84	

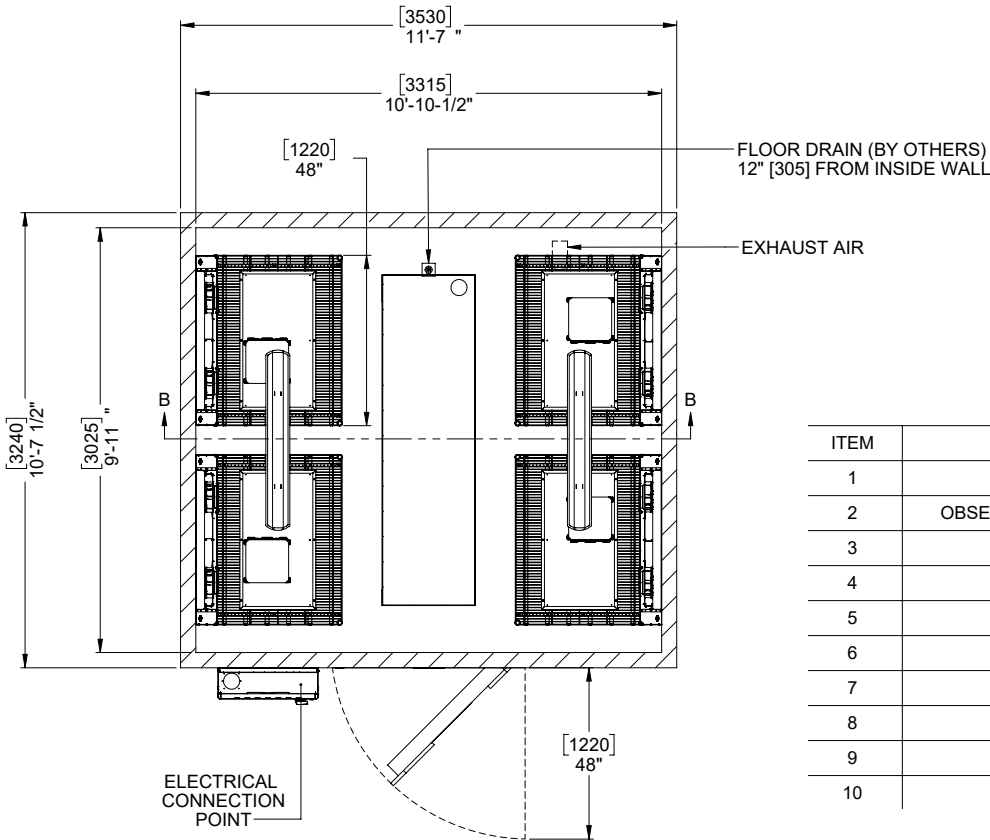
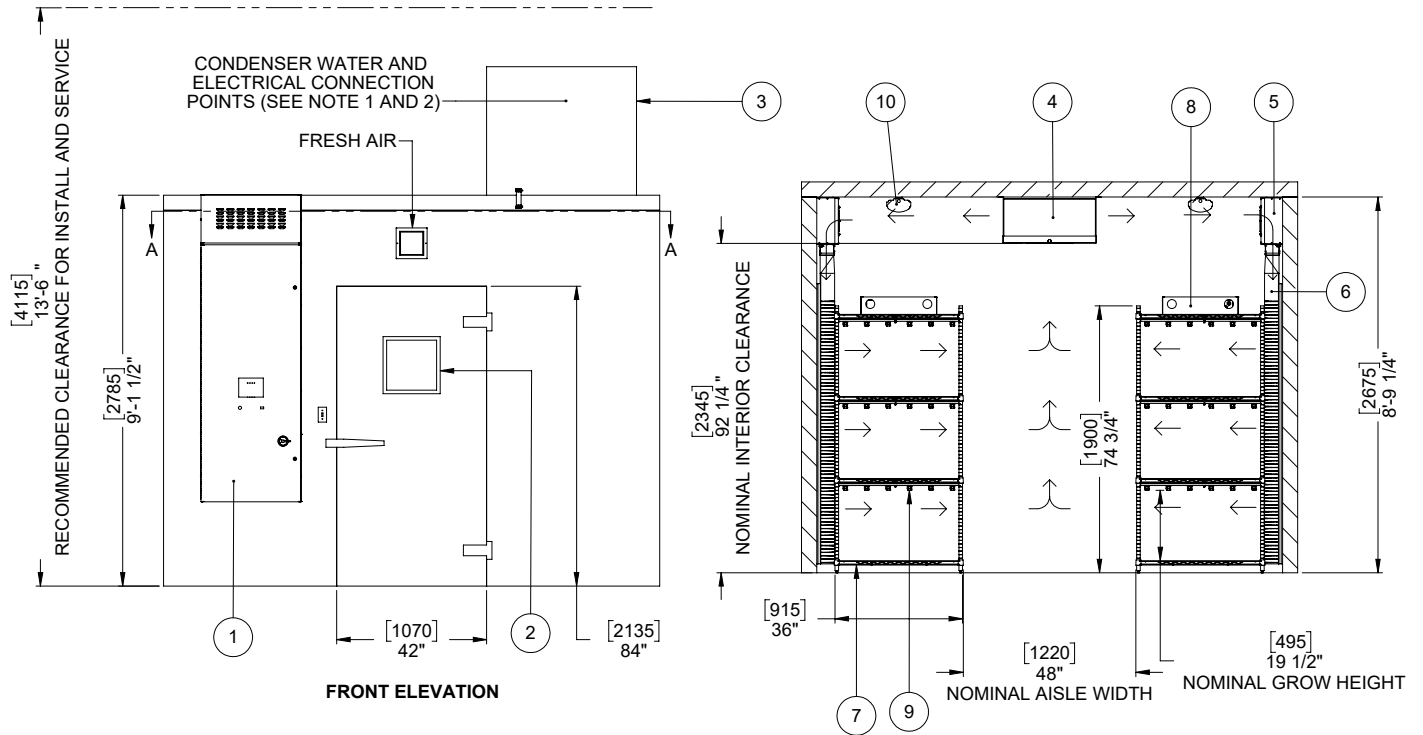
SHORT OR TALL PLANTS

The entire growth area of an EVO can be fitted with the standard three-tier configuration or an optional single or two-tier configuration – all of which deliver different light intensities. The height of each growth tier is easily adjustable and requires no special equipment, enabling you to vary the shelf height according to your requirements.



EXTEND YOUR CAPABILITIES WITH THESE OPTIONS

- Additive humidity
- Dehumidification
- CO<sub>2</sub> control
- Advanced broad-spectrum LEDs
- Far red LED lighting
- Air-cooled DX refrigeration systems
- Glycol refrigeration system
- Surge protection and uninterrupted power supply to controller
- High sensitivity light sensor
- Argus Controls system or CMP Link to connect to your existing Argus System



ITEM	DESCRIPTION
1	CONTROL PANEL
2	OBSERVATION WINDOW C/W LIGHT TIGHT COVER
3	CONDENSING UNIT
4	EVAPORATOR UNIT
5	AIR DISTRIBUTION FAN UNIT
6	PERFORATED FABRIC AIR DUCT
7	3-TIER MOBILE WIRE SHELF
8	SHELF LIGHTING ELECTRICAL BOX
9	SHELF HUNG LED BARS
10	SERVICE LIGHT

Drawing No. 301853 Rev 02  
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CE TÜV Management System Certified to ISO 9001

[www.conviron.com](http://www.conviron.com)

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