

EVO Series

Walk-In Chamber

Multi-Purpose
Grow Room

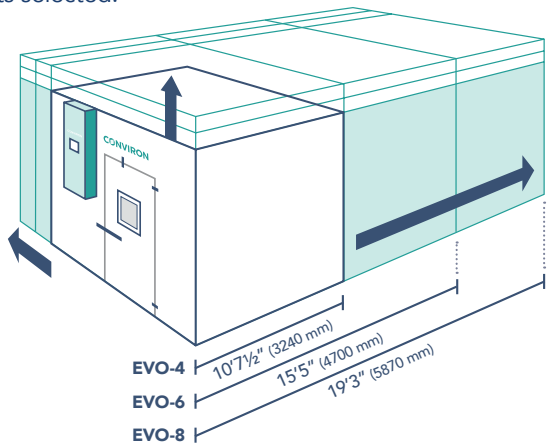


CONVIRON®

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.

The EVO series comes in three standard sizes – EVO4, 6 or 8. EVO’s modular design can be configured at the time of purchase based on your space availability and the number of carts selected.



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.

Control & Monitoring

EVO comes equipped with Conviron’s most advanced controller - the CMP6060



Intuitive Interface

7” full-color, high resolution touchscreen with intuitive graphic interface for easy navigation.



Easy Programming

Extended visibility of multiple timelines and processes.



At-a-Glance Monitoring

Historical trend graphs, vibrant alarm status, and easy-to-track alarm history.



Remote Connect

Connect from anywhere on your laptop or any LAN connected device with ConvironDirect.

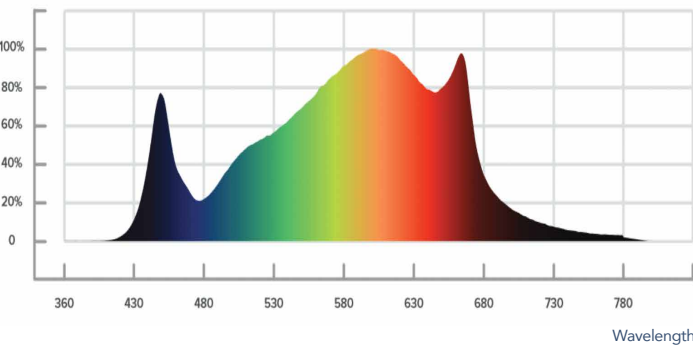
Lighting

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.

With ConvironDirect I always have access to my chamber — from anywhere.



KEY SPECIFICATIONS

MODEL	TEMPERATURE RANGE (°C)	AREA (ft²/m²)	STANDARD			OPTIONAL					
			3-TIER			1-TIER			2-TIER		
			Growth Height (inches/mm)	Growth Area (ft²/m²)	Light Intensity ($\mu\text{mol}/\text{m}^2/\text{s}$)	Growth Height (inches/mm)	Growth Area (ft²/m²)	Light Intensity ($\mu\text{mol}/\text{m}^2/\text{s}$)	Growth Height (inches/mm)	Growth Area (ft²/m²)	Light Intensity ($\mu\text{mol}/\text{m}^2/\text{s}$)
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.

SHORT PLANTS (Arabidopsis)



TALL PLANTS (wheat, cereals)

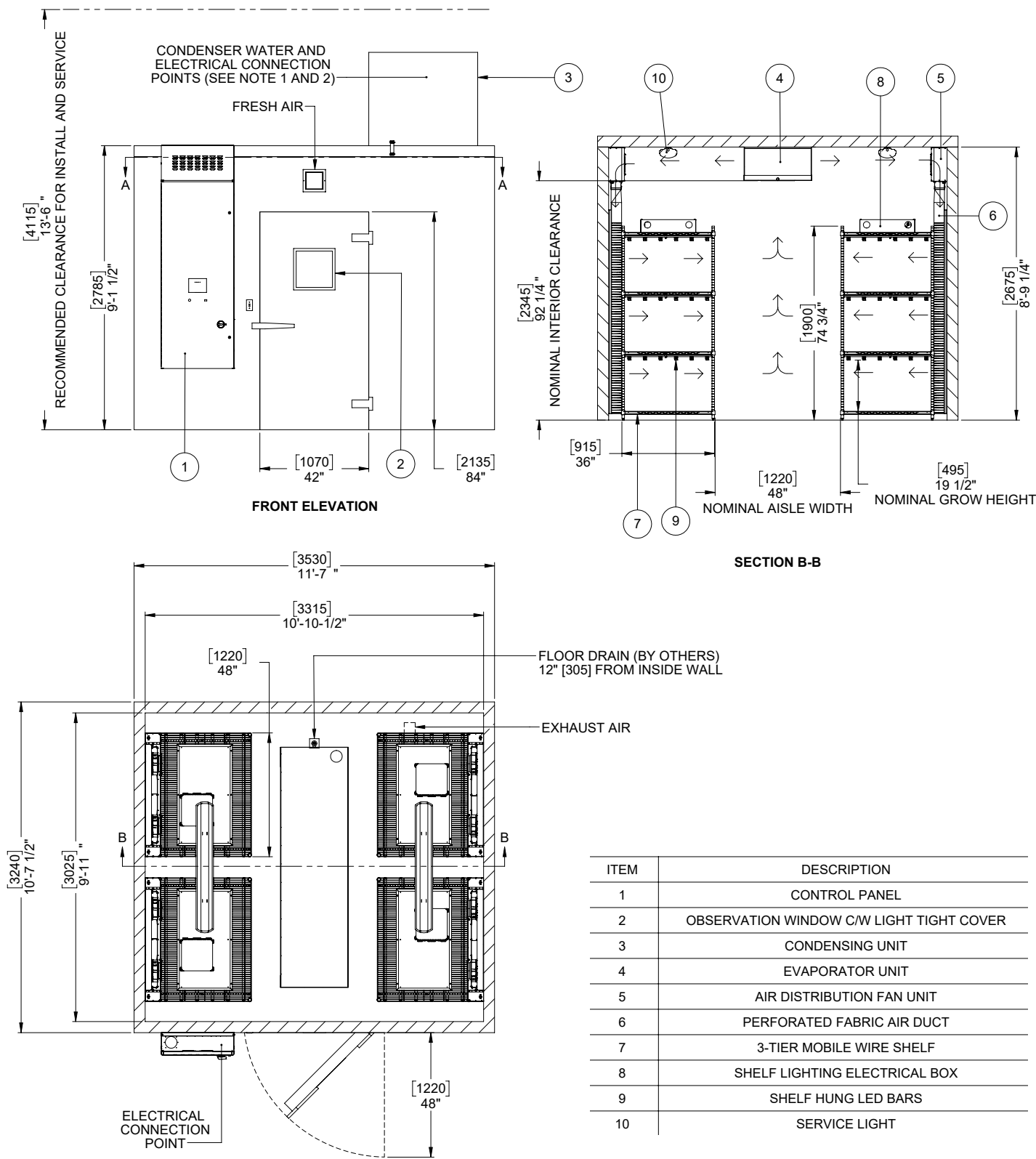


MEDIUM PLANTS (rice, wheat)



EXTEND YOUR CAPABILITIES WITH THESE OPTIONS

- Additive humidity
- Dehumidification
- CO₂ 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
- Conviron Central Management™ for control and monitoring multiple chambers / rooms
- ConvironDirect remote control software
- Argus Controls system or CMP Link to connect to your existing Argus System



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