



AGRIFY™

# PRECISION ELEVATED™

Fully-Integrated Vertical Farming System





# THE FUTURE OF CULTIVATION RELIES ON DELIVERING A CONSISTENT, HIGH-QUALITY EXPERIENCE TO THE CONSUMER

TOGETHER, LET'S BUILD THIS.





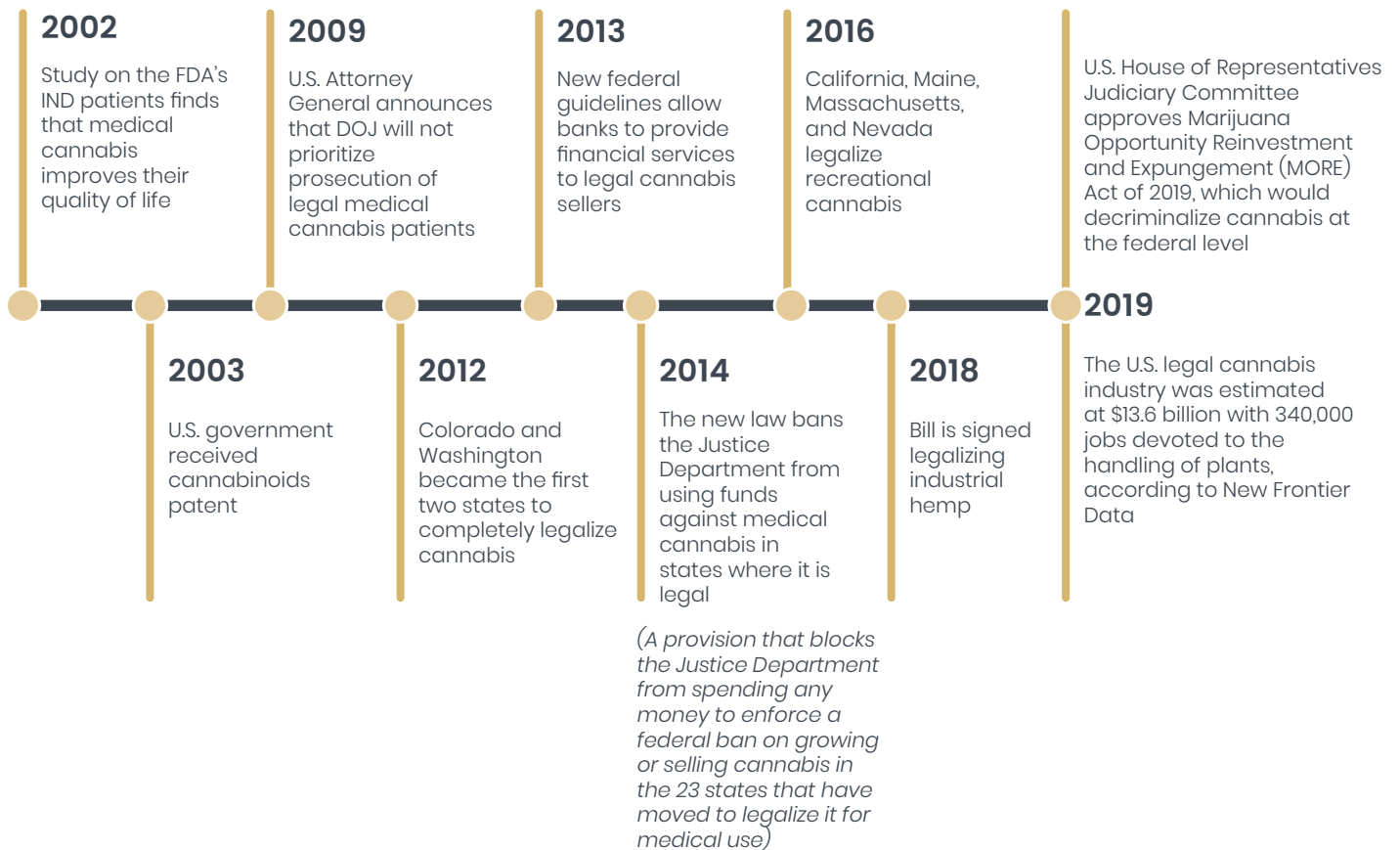
# REACH NEW HEIGHTS WITH PRECISION ELEVATED™

- Precision Elevated™ is a tech-forward, bundled solution of equipment, software, and services that is turnkey, end-to-end, and fully-integrated for optimal growth.
- Agrify™ products and services enable our customers to consistently produce quality crops efficiently.
- We enable our customers to:
  - Operate profitably
  - Adapt continuously
  - Grow sustainably
- Our software empowers cultivators to optimize their outcomes by providing unique insights into their operations with an unparalleled breadth and depth of information.
- Valiant-America, our general contracting service and primary installer, enables optimization of facility build-out to ultimately meet the needs of the end consumer.

# EVOLUTION OF CULTIVATION

## WHERE THE CANNBIS INDUSTRY IS HEADED

In order to understand where the industry is going, first, we need to understand how we got here. Traditional cultivation arose during an era of cannabis prohibition, where it was more important to be discreet rather than efficient. Now, as regulations loosen and we head towards federal legalization, we can anticipate more changes each year. The pace of growth for this nascent yet booming industry will be determined by the adoption of new regulations, the evolution of consumer buying habits, and ultimately the ability of growers and facilities to adapt.





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# CULTIVATION CHALLENGES

CURRENT CULTIVATION TECHNIQUES ARE NOT BUILT TO MEET THE NEEDS OF THE MARKET

## LACK OF DATA



- No historical and predictive data for decision making
- Art-based rather than scientific approach
- Inconsistency in quality and yield

## UNSCALABLE



- Difficult to manage multiple grows
- Hard to deliver a consistent product
- Unrestricted canopy space

## MASTER GROWERS



- Key man risk
- Art-based rather than scientific approach
- Varying degrees of experience with commercial-size operations

## USE OF PESTICIDES



- Harmful to consumers
- Hygiene issues
- Potential harm to employees
- Harmful to plant's integrity and quality
- Presents issues when processing Certificates of Analysis/Lab Testing for consumer products



# AGRIFY'S SOLUTIONS ADDRESS THESE CHALLENGES HEAD-ON

WITH OUR SUITE OF PRODUCTS AND SERVICES

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## EMPOWERED TEAM



- Provide your team with the tools to optimize genetics and production

## SUPERIOR PRODUCT QUALITY



- Cultivation as a manufacturing process
- Highly automated with precision control

## DESIRABLE END PRODUCT



- High-quality flower and concentrate
- High potency with desirable cannabinoid & terpene profile

## LOW COST OF PRODUCTION



- Contact us to find out how low your cost per lb can be!

Increased Yield | Higher Profitability | Lower Risk

# AGRIFY'S VERTICAL FARMING UNIT (VFU)

Agrify's Proprietary Vertical Farming Unit (VFU) technology is the only product on the market that offers a modular, compartmentalized micro-climate growing system for indoor vertical farming. Agrify's VFU system is designed for large single-state and multi-state operators who are looking to produce higher quality crops consistently at scale.

Agrify's VFU is an 8.5 ft. long x 4 ft. wide x 9.3 ft. tall integrated hardware and software 2-tier growing system. The unit is designed to line up horizontally in rows, and they can be stacked vertically up to 3 units tall allowing a total of 6 layers of canopy, taking advantage of unused indoor vertical space.



| Agrify's Vertical Farming Unit |



# GENERAL CONTRACTING AND INSTALLATION: VALIANT – AMERICA



Valiant-America is a leader in consulting and general contracting of a wide range of industrial facilities, but they have a particular specialization and expertise in the development of cannabis cultivation facilities and dispensaries. With General Contracting, Electrical, Plumbing and HVAC licenses in MA, NY, NJ, CT, NH, RI, and FL, and strategic partners in CA, NV, CO, and TX, Valiant-America has developed approximately 2,816,000 million square feet of indoor cultivation with 43 clients including some of the leading MSO's. Valiant's qualified professionals possess a deep working knowledge of Agrify's grow systems and how to integrate our offerings when developing cannabis cultivation facilities.

The Agrify™-Valiant Joint Venture complements our offering and provides our clients an end-to-end turnkey solution. Valiant is the primary installer of Agrify's VFU.





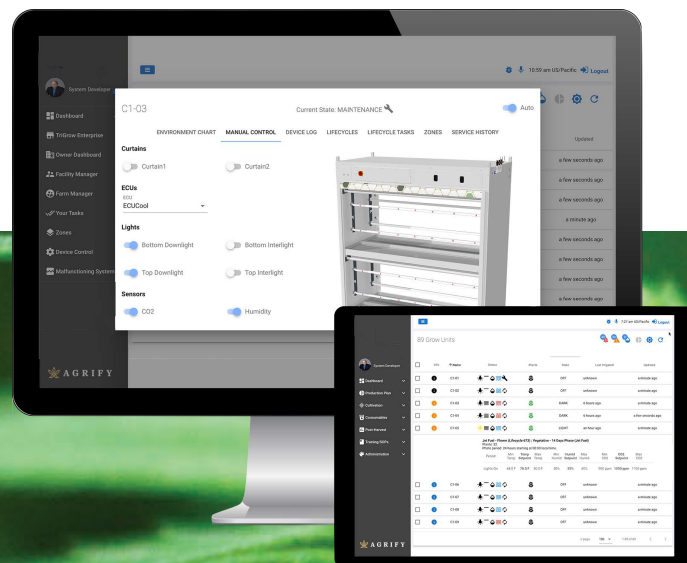
# CULTIVATION SOFTWARE : AGRIFY INSIGHTS™

A key component of Agrify's™ cultivation offerings is Agrify Insights™, a subscription-based software that is integrated with Agrify's hardware and provides facility owners, facility managers, and cultivators real-time control and monitoring of facilities, growing conditions, and insights into production and profit optimization

Agrify Insights™ software is focused around optimizing four key components:

- Plant
- VFU
- Facility
- Overall Business/Operation

By reducing human error and providing insights through data collection and analysis, Agrify Insights™ minimizes risk and increases operational function.



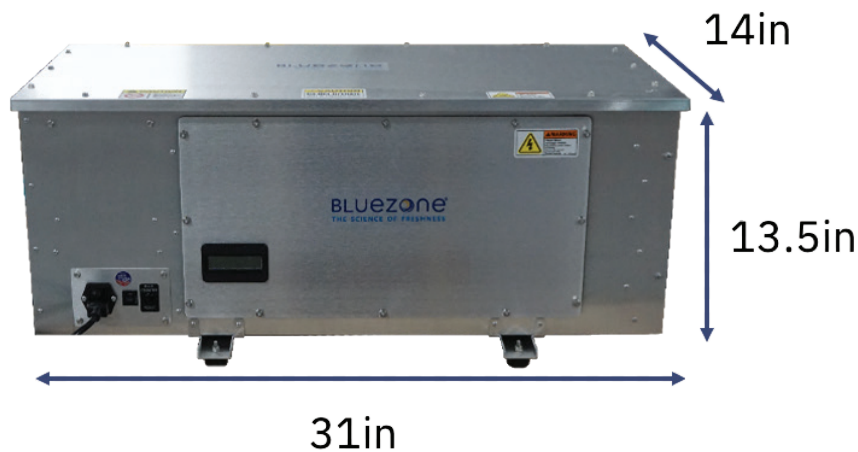
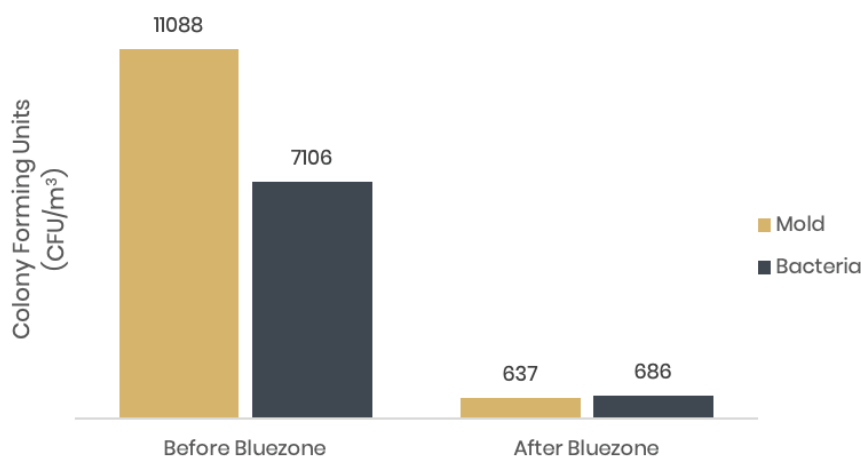


# AIR PURIFICATION

Bluezone® is a revolutionary technology tested and fielded by the U.S. military to prevent the spread of airborne diseases. Bluezone® has now applied this military-grade technology to protect your grow facility, killing and/or converting airborne pathogens with ultraviolet-enhanced oxidation.

Bluezone® works by circulating air through a reaction chamber designed to destroy pathogens. Chemical compounds that create odors are oxidized, while mildew spores and botrytis are drawn through self-contained ultraviolet light.

Microbial Load in Trim Room Before and After Bluezone



Bluezone Air Cleaning System

# SURFACE SANITIZATION

Enozo® uses aqueous ozone to kill 99.9% of harmful pathogens while keeping your workers, plants, and users completely safe. Enozo does this by utilizing their patented Active Diamond Electrolytic Process Technology™ (ADEPT) to create a sustainable, easy-to-use low-concentration ozone sanitizer from water in water. This electrical charge creates one of the most powerful oxidizers on the planet



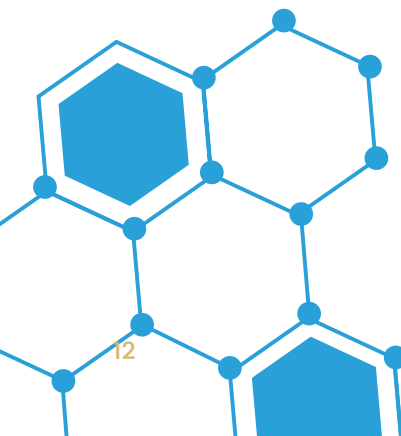
Image shows visible powdery mildew on plant Day 1 prior to Enozo application



Two days after Enozo application Image shows little to no signs of powdery mildew

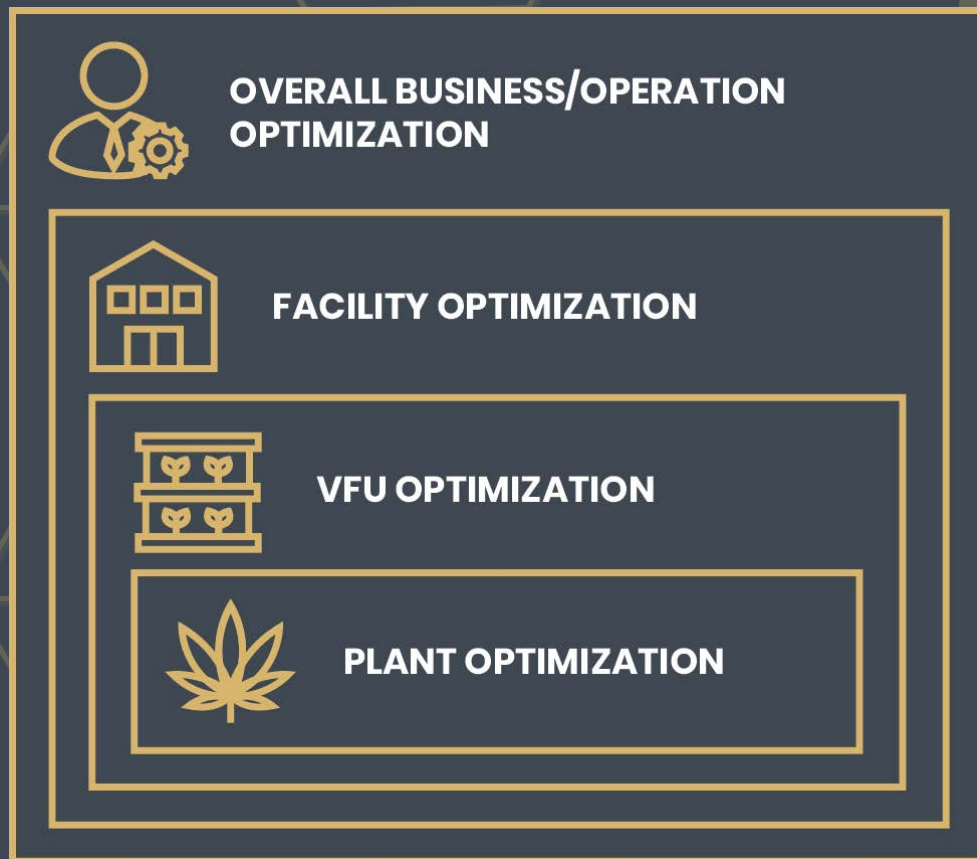
## \* Coming soon - EnozoWASH

- The EnozoWASH is an industrial spray washer developed by MIT masterminds that utilizes Enozo's patented Technology™ (ADEPT)
- The EnozoWASH attaches to a standard hose or backpack sprayer and delivers 7,500 gallons of ozonated water.



# THE AGRIFY™ ECOSYSTEM

Agrify's products and services work in tandem to provide end-to-end cultivation solutions. Each element has been designed in house and custom engineered to work seamlessly together to produce the highest quality, most consistent flower, with the lowest associated operating cost.



*Precision Elevated™ Ecosystem*



# PLANT LEVEL OPTIMIZATION



The end products of cultivation are determined by both the plant's genetics and the growing environment in which they are grown. Central to Agrify's solution is the ability to granularly control the growing environment by integrating Agrify Insights™ cultivation software to control the hardware.

## Agrify Insights™ Grow Plans

Grow Plans are templates used to plan the operational life cycles for individual strains. Grow Plans allow operators to customize environmental settings such as light exposure, temperature, humidity, and CO<sub>2</sub> levels. Grow Plans also incorporates scheduling of “plant-touching” tasks such as bottoming, defoliation, and harvesting.

Production Planning Calculator

1 Select Grow Plans 2 Scheduling Options 3 Allocation % 4 Calculations 5 Plant Movements 6 Schedule

Strain ↑	Grow Plan Name	Category	Clone Days	Veg Days	Flower Days
<input type="checkbox"/>	Cookies & Cream - Cookies & Cream - Flower	50% Indica/50% Sativa	21	14	56
<input checked="" type="checkbox"/>	Cookies & Cream - Cookies & Cream (21 Day Veg)	50% Indica/50% Sativa	21	21	56
<input type="checkbox"/>	Cookies & Cream - Cookies & Cream (21 Day Veg Manual Transition)	50% Indica/50% Sativa	21	21	56
<input type="checkbox"/>	Cookies & Cream - Cookies & Cream - Flower	CBD	21	14	60
<input type="checkbox"/>	Fofana - Fofana - Flower	Indica Dominant Hybrid	21	14	56
<input type="checkbox"/>	Gin Cake - Gin Cake Pheno Hunt (21 Day Veg)	50% Indica/50% Sativa	21	21	56
<input type="checkbox"/>	Gin Cake - Gin Cake (Veg Manual Transition)	50% Indica/50% Sativa	21	21	56
<input type="checkbox"/>	Gin Cake - Gin Cake 3 wk VEG	50% Indica/50% Sativa	21	14	56
<input type="checkbox"/>	Gin Cake #1 - Gin Cake #1 - Flower	50% Indica/50% Sativa	21	21	62
<input type="checkbox"/>	Gin Cake #2 - Gin Cake #2 - Flower	50% Indica/50% Sativa	21	21	62
<input type="checkbox"/>	Gin Cake #3 - Gin Cake #3 - Flower	50% Indica/50% Sativa	21	21	62
<input type="checkbox"/>	Gin Cake #4 - Gin Cake #4 - Flower	50% Indica/50% Sativa	21	21	62

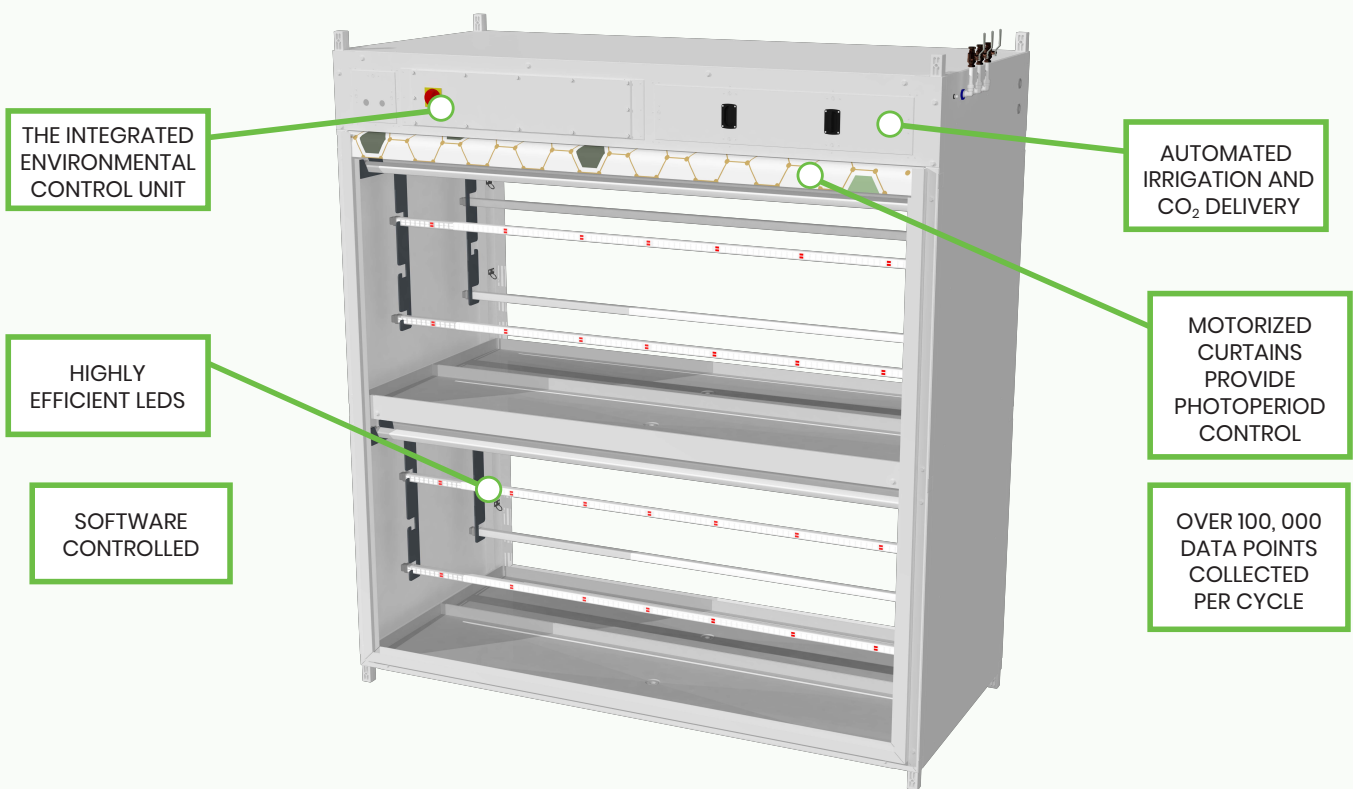
NEXT

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## Production Planning

## Precise Environmental Control

All VFUs operate independently from one another, capable of reproducing different environments in each one. Each VFU has an Environmental Control Unit (ECU) that is integrated with our proprietary cultivation software, Agrify Insights™. This integration allows for precise control and automation over light photoperiod and intensity, temperature, humidity, VPD, CO<sub>2</sub>, fertigation, and irrigation throughout the lifecycle of the plants.





# UNIT LEVEL OPTIMIZATION

Agrify's Vertical Farming Units (VFU) provide a precision-controllable microclimate environment. Our Vertical Farming Units are complete with highly-efficient horticultural grow lights, inter-canopy lights, integrated Agrify Insights™ software, automated irrigation, and CO<sub>2</sub> delivery, photoperiod control via motorized curtains, and the ability to collect over 1 million data points annually.

The unit has a motorized curtain on both sides that compartmentalize the VFU to prevent light-leak and the spread of disease that would typically lead to facility-wide crop failure. Contamination can be controlled and limited to the affected unit(s) which are designed with sanitation in mind. From the aluminum frame to the selection of antimicrobial plastics and down to the IP65 electronics and polycarbonate-lensed LED lights, the entire VFU can be easily sanitized.

## Vertical Farming Units:

- Controlled – micro-climate
- Reproducible data – consistency
- Scalable – maximize yields
- Stackable – maximize space
  - up to 3 units tall
- Vertical – minimize the footprint
- Sanitation – healthy grow environment

## Three Key Benefits

- Vertical farming = greater output
- Reduction of operating costs
- The potential increase of overall revenue by as much as 3x







# FACILITY LEVEL OPTIMIZATION



Agrify's modular VFUs are deployed to maximize the customer's footprint and facility capabilities.

## Modular Scalability

Each VFU supports 2 tiers of the canopy and is designed for deployments up to 3 units tall, sextupling production over the same footprint. Each unit is designed to easily integrate with a mezzanine catwalk system.

*Our facility design experts can implement Agrify's Bluezone® for overlapping zones of protection from environmental threats.*

Powdery mildew and botrytis can damage your crops or wipeout the entire grows. Cannabis has not benefited from modern plant breeding for pest and disease resistance making widespread contamination a common problem. Limited treatment options vary from state to state and the risk of crop loss is significant

*Agrify's modular VFUs offer superior safety and accessibility, maximizing the productivity of the worker.*

## Worker Safety

The unit's working area allows for easy access, allowing easy access to both rows of plants within the unit. Motorized curtains can be lifted on either side, this allows for efficient ergonomics and plant access at arm's length. Similarly, Agrify's Interlight LED technology is dimmed or turned off when the curtains are raised for a more comfortable working environment.

Agrify Insights™ is designed to operate these individual VFUs as a combined facility. Agrify Insights™ features at the facility level include:

## Production Planning

This feature is designed to maximize a facility's utilization by executing a "best-fit" scheduling algorithm for

the facility's selected Grow Plans. The Production Planning module is a critical component for optimizing the plants' schedules, significantly increasing plant productivity and reducing the cost per pound.



*Production Software*

### **Workforce Management**

Agrify Insights™ includes a workforce planning feature to assign tasks to staff based on the user's role or their knowledge, skills, and abilities. The calendar displays the estimated amount of time required to complete plant-touching tasks on any given day. Get access to the workforce dashboard and information specifically suited to your workforce's various needs.

### **Automatic Notification System**

Users can select to subscribe to anomalous events and will receive notifications in chain-of-command order, providing the operation with 24/7 monitoring and notifications. Preventative maintenance schedules and related tasks are also contained, tracked, and monitored within Agrify Insights™.

### **Facility Infrastructure Controls**

Agrify Insights™ controls irrigation on a facility level as well as by unit, connecting with water chiller HVAC systems and ambient lighting systems.



# OPTIMIZATION AT THE BUSINESS LEVEL

Agrify's VFUs minimize OPEX with superior space utilization and the ability to meet supply chain needs by allowing for a single space to be multi-use.

## Superior Floor Space Utilization

The unit provides 64 sq. ft. of a canopy, which can veg/flower 48 to 64 plants over a 32 sq. ft. floor print producing an estimated average of 35lbs+ of dried cannabis flower and 14 lbs of trim each year. This eliminates the need to build out multiple separate, dedicated photoperiod-based rooms reducing buildout costs. Our approach allows an open-room facility design to maximize available cultivation floor print space while offering superior risk mitigation via individual compartmentalized cultivation chambers.

*Agrify Insights™ analyzation tools enable customers to understand how cultivation decisions impact their overall business. Understanding data can help you better plan and make more informed decisions for the future.*

## Consumables Procurement Integration

Setting tasks that are consumable-related allows customers to effectively manage supply levels and automatically create/submit purchase orders so that they stay well-stocked on required supplies.



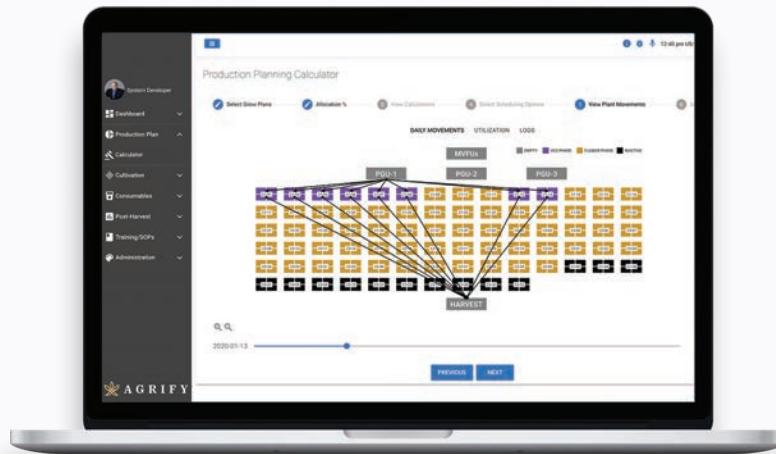


## Online SOPs and Safety Datasheets

Access digital copies of Agrify's Standard Operating Procedures (SOPs) and datasheets, or upload your own via our content management system.

## Role-Based Dashboards

Facility owners have access to high-level information about crop yields and equipment used in an easy to understand scorecard. Cultivation managers receive a worksheet and calendar that lets them manage their workforce and automatically assign plant-touching tasks. This insight allows your facility manager to have an ongoing look into consumables and lets them set inventory levels as needed.



*Role-Based Dashboard*

## Data Collection

Agrify Insights™ is a centralized depository for all data that relates to your cultivation, including R&D testing data and the ability to capture and compare test results. Agrify Insights™ becomes your operation's cultivation statement of record.

## Regulatory Reporting Integration

Agrify Insights™ includes integration with Metrc, a leading seed-to-sale system, enabling customers the ability to produce regulatory reporting through the software.



**Valiant**  
Integrity • Synergy • Execution

Leading Indoor Farm GC and Consultant



**AGRIFY™**

Developer of Premium Indoor Grow Solutions

Facility Mgmt.  
Software

Equipment  
Financing

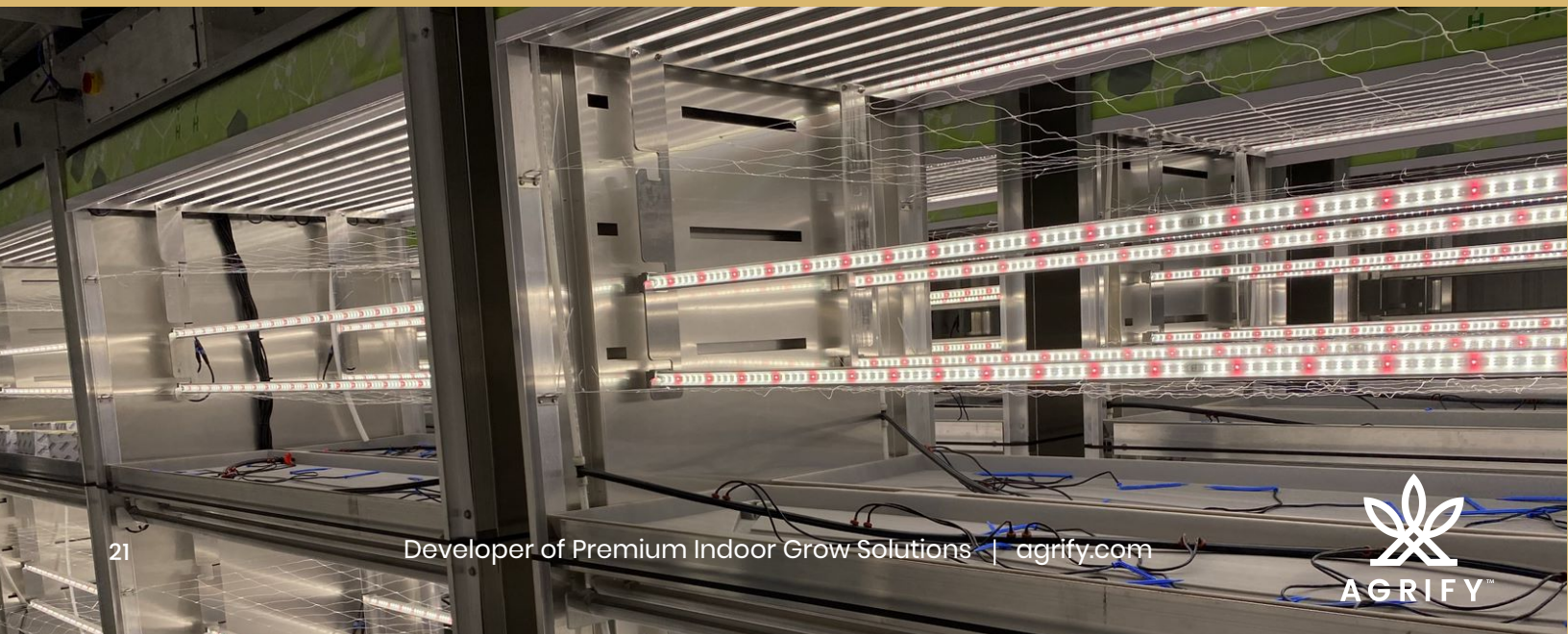
Agrify™ Grow  
Systems

**One - Stop Shop  
Design Build Solution**

Architectural  
Design

Construction

Engineering  
Services







## CONTACT US

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**AGRIFY™**