# Rambridge Wholesale International



#### Who is

### Rambridge?

We're a family-run manufacturer and wholesale distributor based in Canada, focused on indoor/outdoor garden and greenhouse goods. Our partners receive our heartfelt dedication to accelerate every project. While we have grown over the past 35+ years, we remain people-focused: your success is our success.

Our knowledgeable team provides education to small-scale and professional application growers to lead successful grows from start to finish.

### Planting the first seed

It all started in our backyards with garden greenhouse installations for our own grows.

We began to create and rigorously test nutrients and additives specifically designed to enhance growth in Canadian soil - and from our discoveries, we opened our very first warehouse in Calgary. We rapidly evolved to full-scale lighting and application engineering, and we didn't stop there.

From there, we continued to grow with the future and evolved to expand our operations in the US, and adding two additional Canadian warehouses. We had one goal that still remains the same: provide growers of all sizes with innovative, reliable products proven to achieve optimal growth.



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## **Table of Contents**

Fertilizers & Additives	Environmental
Blossom Blood	· Anden Dehumidifiers
· Veg Booster	<ul> <li>Mammoth Grow Tents</li> </ul>
Growing Substrates	Commercial Applications
· Eazy Plug & HGA Propagators	· Brome Compost
<ul> <li>Gold Label Substrates</li> </ul>	

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#### Lighting

- FOHSE
- Growstation LED

- · Bruin De Bruine
- NetLED
- · Benching Layouts
- · Dehumidifer Layouts
- Lighting Layouts





# Blossom Blood and Veg Booster

#### **Blossom Blood**

The addition of Blossom Blood to your feed schedule during the flowering stage of a plant will promote fuller buds and flowers utilizing selective pH control. Blossom Blood's reputation comes from over 25 years of positive results. Developed for stabilization and floral production in hydroponic applications, Blossom Blood may also be used in soilless growing mediums. Blossom Blood is a specific type of pH buffer salt and is compatible with all quality nutrients.

#### **Veg Booster**

Enables young cuttings or seedlings to better promote stronger fuller plant growth during the vegetative stage. Add Veg-Booster directly to your reservoir only once at the beginning of a plant's vegetative cycle when the seedling/cuttings have gotten over transplant shock. Works on soil grown plants too.





# Eazy Plug System

Eazy Plug & Eazy Block are made of organic materials which are bonded and formed into an extensive product line of plugs and blocks for the professional horticulture and can be used for the production of a wide range of crops. HGA Garden manufactures this breakthrough, natural and sustainable growth solution for growing all of your plants. Our products are carefully balanced and have a predetermined pH, EC value and a fixed air- to - water ratio. Because of this, growing conditions are always optimal and a very fast and powerful rooting or germination is ensured. The Eazy Plug and Block are supplied dried, making them clean and lightweight, with limitless shelf life and no risk of molds. The dry Eazy Plug & Eazy Block take water back up very easily and quickly, retaining all of their former characteristics.

#### **Gold Label Substrates**



Gold Label Coco is the best buffered coco in the market with a very low EC. This not only quarantees a clean and buffered substrate, but also a production process with respect for the environment. Gold Label Coco is an ideal hydroponics substrate: It's an organic rest material and a renewable resource, light and airy, can hold 8-10 times its weight in water, has a high capillary action, a stable pH and can be reused or recycled in the compost bin.

Gold Label Hydrocorn are manufactured using a mix of the best quality pure clay and are baked in an open furnace using high grade clean fuels. This guarantees absence of heavy metals or other contaminates. Gold Label Hydro carries the RHP for Horticulture quality certificate. Gold Label Hydrocorn is the inert hydroponics substrate of choice for professionals. The 16-25 mm size provides stability and the unique uneven shape of the pebble is an ideal surface for roots and beneficial bacteria. The porous structure has a high water capacity and is





Gold Label 60/40 is 60% Hydrocorn and 40% Coco. It is an ideal match for high water capacity, lower watering frequency and better rooting. We utilize the 16-25mm Hydrocorn from Gold Label and the purest Gold Label Coco to give you the perfect ebb and flood growing substrate that also works well in any pot based systems. The 60/40 mix allows you to feed less frequently than in straight Hydrocorn. This gives you a buffer on the watering times but still allows you to feed regularly without over watering.

**60/40 Mix Grow Slab 12L** are easy, Plug & Play grow trays for hydroponically cultivation. You can cut the bottom parts for drainage and plug in your system for automated irrigation. Gold Label HydroCoco 60/40 is an ideal match for high water capacity, lower watering frequency and better rooting.

The 60/40 mix allows you to feed less frequently than in straight Hydrocorn and gives a buffer on the watering times.









PPF: 4,200 µMol/s

Light source: Samsung LEDs

Fixture Efficacy (100% - 50% power): 2.8 - 3.0 µMol/J

Input power: 1500W

Input voltage: Options up to 480V

Fixture dimensions: 42.28L x 42.5W x 4H in

Weight: 70 lbs

Thermal management: Passive

Lens angle: 90°

Maximum Ambient Operating Temperature: 37.8°C

Dimming: 30% Lens angle: 90°

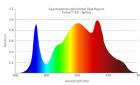
CRI: 92

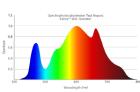
Control interface Wall-mounted OLED panel

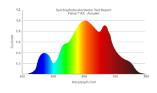
L90: 50,000 hours

Power Suppl;y Rating: 100,000 hours

Certifications: ETL, IP67, CE Mounting: Universal Hanging







#### **F1V 600W LED**

For accelerated vegetative growth in multi-tier vertical cannabis applications.

PPF: 1,440 µMol/s

Light source: Samsung LEDs

Fixture Efficacy (100% - 50% power): 2.4-2.6 µMol/J

Input power: 600W

Input voltage: Options up to 480V

Fixture dimensions: 42L x 46.5W x 4.6H in

Weight: 38 lbs

Thermal management: Passive

Maximum Ambient Air Temperature: 37.7°C

BTUs/hours: 2,047 Dimmina: 30% Lens angle: 100°

CRI: 90

Control interface Wall-mounted OLED

panel

L90: 50,000 hours

Power Suppl;y Rating: 100,000 hours

Certifications: UL, IP65, CE Mounting: Universal Hanging

Communication protocol: RS485, 0-10V w/Converter, or Ethernet w/Converter

Spectrophotocolorimeter Test Report

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#### **FIV 1000W LED**

For high-intensity flowering cycles in multi-tier cannabis applications.

PPF: 2,400 µMol/s

Light source: Samsung LEDs

Fixture Efficacy (100% - 50% power): 2.4-2.6

µMol/J

Input power: 1000W

Input voltage: Options up to 480V

Fixture dimensions: 42L x 46.5W x 4.6H in

Weight: 38 lbs

Thermal management: Passive

Maximum Ambient Air Temperature: 37.7°C

BTUs/hours: 3,412

Dimming: 30%

Lens angle: 100°

CRI: 90

Control interface Wall-mounted

OLED panel

L90: 50,000 hours

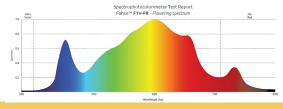
Power Suppl; v Rating: 100,000 hours

Certifications: UL, IP65, CE

Mounting: Universal Hanging

Communication protocol: RS485, 0-10V

w/Converter. or Ethernet w/Converter





#### **Aries**

#### **Fixture Specifications:**

Light Source: Samsung LEDs

PPF: 1,792 µMol/s

Fixture Efficacy (100% - 50% power): 2.8-3.0 µMol/J

Input power: 640W

Input voltage: Options up to 480V

Fixture dimensions: 33L x 34W x 4.25H in

Weight: 34 lbs

Thermal management: Passive

BTUs/ hour: 2,183 Dimming: 10% Lens angle: 100°

CRI: 92

Control interface: Wall-mounted OLED panel

L90: 50,000 hours

Power supply rating: 100,000 hours

Certifications: IP67

Communication protocol: RS485, 0-10V w/Converter,

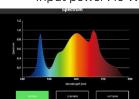
or Ethernet w/Converter

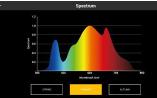
Mounting: Universal Hanging

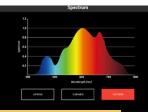
#### **FOHSE Central Control**

- Daisy chain up to 100 fixtures per controller (or more with signal repeaters)
- · Automate lighting schedules, brightness, and spectrum
- · Wall-mounting bracket included
- · Compact size : 9" x 6.7" x 1.68"
- · Standard 110 volt outlet plug
- · Input power: 10 Watts









#### **06i 1200W LED**

For supplementary, full-cycle light in greenhouse cannabis applications



PPF: 3,000 µMol/s

Fixture Efficacy(100% - 50% power): 2.5 - 2.7 µMol/J

Input power: 1200W

Input voltage: Options up to 480V LIGHT HARVESTING SENSORS FOR AUTO-DIMMING Fixture dimensions: 16L x 8W x 13H in

Weight: 45 lbs

Thermal management: Passive& Active Maximum Ambient Operating Temp: 100°F

BTUs / hour: 4,094

Dimming: 10%

CRI: 80

Control interface: Wall-mounted OLED

panel

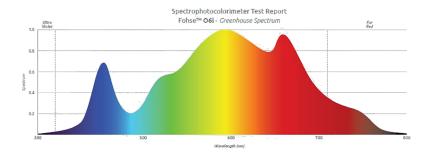
L90: 50.000 hours

Power supply rating: 100,000 hours

Certifications: IP67

Communication protocol: Wireless, 0-10V w/converter, Ethernet w/converter, RS485

Mounting: Universal Hanging





#### **GrowStation 640W**





#### **Basic Dimmer**

Input Voltage: 110V Power Consumption: 2 watt Operating temperature: 14~104F Warranty: One year limited.





- -Growstation LED is powered by MeanWell drivers
- -Excellent lighting performance certified by 3rd party laboratory SGS
- -PPF: 1570 micromoles per second & 2.45 micromole/J
- -Dimmable: dimmable range from 0 ~ 100% at 10% increments
- -FCC Class A certified, ETL certified conforms to UL 1598: 2018 Ed.4 & CSA 02.2#250.0:2018 Ed.4
- -The whole fixture is IP65 rated suitable for humid environment & wet location
- -Reduce air conditioning usage up to 35% compared with 1,000W HID lighting
- -Basic Dimmer: 0,.,100% Range, Input Voltage: 11 av, Power Consumption: 2 watt, Operating temperature: 14~104F, Warranty: One year limited.
- -Daisy Chain Dimming Cable is IP65 rated

**GROWStation 640W Specifications** 

- -PPF: 1570 umole/s
- -Input Power: 640W
- -Efficacy: 2.45 umole/J
- -Input Voltage: 110-277V
- -Dimensions: 45' L x 42'W x 3' H
- -Weight: 33 lbs
- -Max. Ambient Temperature: 95 F
- -Dimming: 0-IOV
- -Light Distribution: 120 x 115 Degree
- -Average Life Hours: 50,000
- -Power Factor: >0.9
- -Certifications: FCC, cETL, Wet
- Location
- -Warranty: 3 Years Limited
- -Max. Current by 120V 5.6A
- -Max. Current by 208V 3.2A
- -Max. Current by 240V 2.77A
- -Max. Current by 277V 2.42A

#### **GrowStation 640W Pro 1800**

# Introducing the latest Growstation PRO 1800 full-spectrum 640W LED

#### fixture.

PRO 1800 640W LED fixtures are here to help you achieve better results!

- Same 640 watt energy consumption
- Higher light output
- IP65 rated
- Higher energy efficiency
- More yield for your garden
- DLC Hort Listed
- PPF: 1,800 umol/s
- Efficacy: 2.80 umol/J

## GROWSTATION 640W PRO 1800 Specifications:

- PPF: 1800 umol/s
- Efficacy: 2.8 umol/J
- · Dimensions (inches): 45.4 x 42.4 x 3.4
- Weight (lbs): 30
- Light distribution: 125° x 120°
- · Average Life Hours : 50,000
- Power Factor: >0.95
- Input Voltage (V): Max. Current (A)
- · 120: 5.60
- · 208: 3.20
- · 240:2.77
- · 277: 2.42
- · Warranty: 5 years limited
- · Certification: DLC, ETL, FCC
- Max. Ambient Temp.: 95°F



#### Programmable Dimmer

Product specifications: Input Voltage: 110V

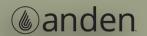
Power Consumption: 2 Watts

PWM Dimming Signal: 0-100% +/- 1%, 0-10V Dimming Voltage: 0-10V +/- .1V Operating Temperature: 14-104F

One-year Limited Warranty.







#### **ANDEN**

Anden has been an innovator in the development of precise humidity control systems for commercial and residential applications since 1954. Trust Anden to deliver the reliable products and expert technical support that are critical to successful harvests. At capacities up to 300 pints per day and up to 500 cubic feet per minute of airflow, our dehumidifiers are the only products on the market specifically designed to pull moisture out of the air at lower temperatures.

#### **Industrial Dehumidifiers**

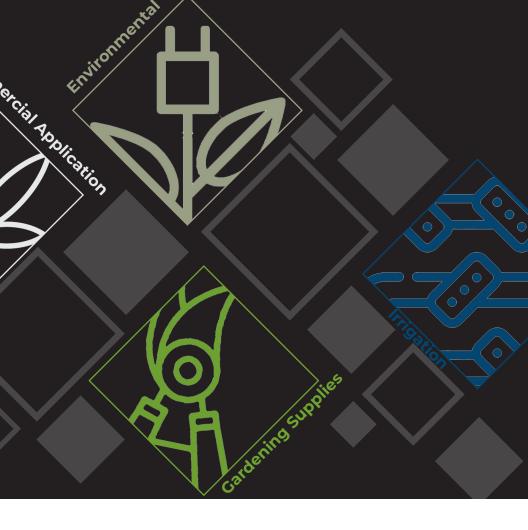
Anden A-Series Dehumidifiers' capacities range from 70–130 pints per day of moisture removal. From the serious hobbyist to medium-sized commercial facilities, Anden industrial dehumidifiers are designed to operate effectively in the extreme conditions of any indoor cultivation environment.







Build \



# Your Own Grow

#### **Industrial Grow-Optimized Dehumidifiers**

Anden AV-Series Dehumidifiers range from 210-320 pints per day of moisture removal. Components utilize materials designed for the most extreme conditions and demanding enterprises. The included Model 77 remote control relays diagnostics from the dehumidifier, giving you simple control of the conditions in your cultivation space (upgrade options available). Sensors and controls can be custom-configured for each facility. Anden AV-Series are recommended for the large, ultrahigh volume industrial facilities.



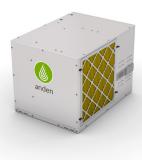
**A77 Control** 



A210V1











A710



#### **Anden 8840 Control**

The Anden 8840 Control Panel is our most advanced monitoring system, designed for the most demanding, grow-focused environments. It gives you the power to monitor and adjust the most crucial aspects of the indoor growth environment with all-in-one, touchscreen control. You can dial in the optimal temperature and humidity levels to create a healthy, grow-optimized environment. The 7" full color display offers a range of benefits: constant monitoring of temperature and humidity, easy adjustments, notifications when systems are active, and filter replacement reminders. Plus, there's an app for iOS and Android to keep you in control on the go. It provides full access to controls using your mobile device, so you can monitor and adjust conditions anytime, anywhere.

- All-in-One Control Real-time updates on temperature and humidity, plus notifications when systems are active
- Humidity Control Optimize the performance of your Anden humidity controls
- Temperature Monitoring Reach your preferred temperature range for maximum growth
- Ventilation Control Control the flow of fresh air for ideal growth conditions
- 7 inch Touchscreen The full color display makes it simple to monitor and adjust indoor conditions
- Large Font Size The most important information is displayed front and center for easy monitoring
- Backlit Display Easy to read, even in sunlight and includes a constant low-intensity light option
- · Screen Lockout Prevent inadvertent or unauthorized adjustments
- Permanent Memory Settings, time, and date are maintained during a power outage
- Built to Last Dependability is at the heart of what we do. That's why we
  offer a 5-year warranty on this product–so you can grow with confidence





#### **Mammoth Grow Tents**



Mammoth grow tents offer all options possible to growers from the novice to the advanced.

Quality assured with dual stitching, with reflective and durable Mylar, strong framing with plastic protective cornering.

Easy assembly with interlocking tent options. Mammoth grow tents have been designed for growing all types of plants, even those that require specific conditions (Orchids, Aloe Vera, citrus plants, carnivorous or tropical plants). These indoor grow tents incorporate a hammered effect Mylar in the material which acts as a barrier to toxins generated by PVC and also has a reflectivity value of over 95%.

Whether you are a beginner or a more experienced gardener, Mammoth grow tents will bring you total satisfaction in knowing you can reproduce plants and control the environment in a portable environment.

Elite+ HC	Assembled Size (US)
(28mm poles, 1680D mylar, waterproof floor, linkable)	VxDxH (ft)
,,	
Mammoth Elite+ HC 480L	7.9 x 15.8 x 7.9
Mammoth Elite+ HC 600L	9.8 x 19.7 x 7.9
Mammoth Elite+ HC 900L	14.8 x 29.5 x 7.9
Mammoth Elite+ HC 1200L	19.69 x 39.37 x 7.9
Mammoth Elite+ HC 1500L	24.6 x 49.2 x 7.9
Pro+ HC	Assembled Size (US)
(22mm poles, 600D mylar)	VsDsH (ft)
	11
Mammoth Pro+ HC 120	3.9 x 3.9 x 7.4
Mammoth Pro+ HC 150	4.9 × 4.9 × 7.4
Mammoth Pro+ HC 240L	3.9 x 7.9 x 7.4
Mammoth Pro+ HC 300L	4.9 × 9.8 × 7.4
Mammoth Pro+ HC 240	7.9 x 7.9 x 7.4
Mammoth Pro+ HC 300	9.8 × 9.8 × 7.4
Elite S.A. (stand alone)	Assembled Size (US)
(25mm poles, 600D mylar)	VxDxH (ft)
Mammoth Elite S.A. 360S	7.9 x 11.8 x 7.4
Mammoth Elite S.A. 480L	7.9 x 15.8 x 7.4
Mammoth Elite S.A. 600L	9.8 x 19.7 x 7.4
Mammoth Elite S.A. 900L	14.8 x 29.5 x 7.4
Mammoth Elite S.A. 1200L	19.69 x 39.37 x 7.4
	Assembled Size (US)
Gavita Elite HC	VxDxH (ft)
Mammoth Elite HC G1	3.7 x 5.11 x 7.9
Mammoth Elite HC G2	5.11 x 7.3 x 7.9
	Assembled Size (US)
Gavita Elite	VsDsH (ft)
Mammoth Elite G1	3.7 × 5.11 × 7.11
Mammoth Elite G2	5.11 x 7.3 x 7.11
Pro+	Assembled Size (US)
(22mm poles, 600D mylar)	VxDxH (ft)
Mammoth Pro+80	2.6 x 2.6 x 5.9
Mammoth Pro+90	3.0 x 3.0 x 5.9
Mammoth Pro+ 100	3.3 x 3.3 x 6.6
Mammoth Pro+ 120	3.9 x 3.9 x 6.6
Mammoth Pro+ 150	4.9 x 4.9 x 6.6

Mammoth Pro+ 240	7.9 x 7.9 x 6.6
Mammoth Pro+ 300	9.8 x 9.8 x 6.6
Mammoth Pro+ 120L	3.9 x 2.0 x 5.3
Mammoth Pro+ 240L	7.9 x 3.9 x 6.6
Mammoth Pro+ 300L	9.8 x 4.9 x 6.6
Classic+	Assembled Size (US)
(19mm poles, 600D mylar)	VsDsH (ft)
Mammoth Classic+ 60	2.0 x 2.0 x 4.6
Mammoth Classic+ 80	2.6 x 2.6 x 5.9
Mammoth Classic+ 100	3.3 x 3.3 x 6.6
Mammoth Classic+ 120	3.9 x 3.9 x 6.6
Mammoth Classic+ 150	4.9 x 4.9 x 6.6
Mammoth Classic+ 200	6.6 x 6.6 x 6.6
Mammoth Classic+ 240	7.9 x 7.9 x 6.6
Mammoth Classic+ 240L	7.9 x 3.9 x 6.6
	Assembled Size (US)
Propagator & Dryer	WsDsH (ft)
Propagator & Drger	VxDxH (ft)
Propagator & Drger  Mammoth Propagator 90	WxDxH (ft) 3.0 x 2.0 x 2.0
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Mammoth Propagator 90	3.0 × 2.0 × 2.0
Mammoth Propagator 90 Mammoth Propagator 125	3.0 × 2.0 × 2.0 3.9 × 2.0 × 4.0
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90	3.0×2.0×2.0 3.9×2.0×4.0 3.0×3.0×5.9
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Lite+	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US)
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Lite+	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US)
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Lite• (16mm poles, 1700 mylar)	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US) WxDxH (ft)
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Lite- (16mm poles, 1700 mylar) Mammoth Lite+ 45	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US) WxDxH (ft) 1.47 x 1.47 x 3.9
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Lite+ (16mm poles, 170D mylar)  Mammoth Lite+ 45 Mammoth Lite+ 60	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US) WxDxH (ft) 1.47 x 1.47 x 3.9 2.0 x 2.0 x 4.6
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Litee (16mm poles, 170D mylar)  Mammoth Litee 45 Mammoth Litee 60 Mammoth Litee 80	3.0 x 2.0 x 2.0 3.3 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US) WaDxH (ft) 1.47 x 1.47 x 3.9 2.0 x 2.0 x 4.6 2.6 x 2.6 x 5.3
Mammoth Propagator 90 Mammoth Propagator 125 Mammoth Dryer 90 Litee (16mm poles, 170D mylar) Mammoth Lite+ 45 Mammoth Lite+ 80 Mammoth Lite+ 80 Mammoth Lite+ 90	3.0 x 2.0 x 2.0 3.9 x 2.0 x 4.0 3.0 x 3.0 x 5.9 Assembled Size (US) WxDxH (ft) 147 x 1.47 x 3.9 2.0 x 2.0 x 4.6 2.6 x 2.6 x 5.3 3.0 x 3.0 x 5.3





### Mammoth Classic+

A high quality tent for the hobby grower, this mid-range grow room has features normally associated with higher end tents.

- High light proofing (Level 1)
- Equipment tubes are strong enough to hold 20kg
- · Large doors easy to access and work in various intakes and exhausts make setup flexible
- Straps and hooks for easy integration



#### Mammoth Pro+

A high end range, ideal for the professional grower.

- · High light proofing (Level 2)
- Polypropylene corners for maximum rigidity
- Equipment tubes that have 30kg load capacity
- · Large doors easy to access and work in
- Material is washable inside and out
- Straps and hooks for easy integration of
- equipment
   Light, easy-to-
- transport material and is easy to assemble



#### Mammoth Elite

The ultimate in quality for the professional grower.

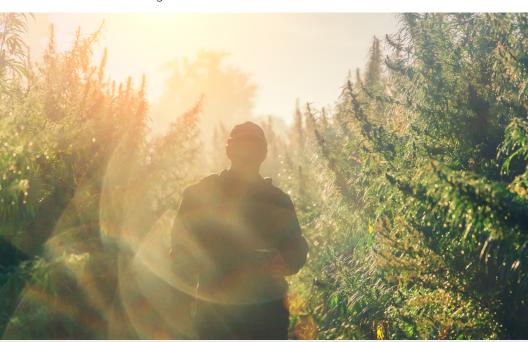
- Heavy duty frame, corners and fabric, with stainless steel / aluminium click system
- Dual multiple intake and
- extraction socks
- Equipment tubes that have a 75kg load capacity
- · Wide easy access door, with jam proof / waterproof zipper.
- · Waterproof floor
- · Large doors easy to access and work in
- · Material is washable inside and out
- · Modular: customize your own grow room by combining different Elites sizes - unique linkable panels - your shape, your size

#### **Commercial Cannabis**

Rambridge is proud to be an industry leader in the development and planning of commercial cannabis production. With over 35 years of experience in all facets of commercial production, we are dedicated to providing high quality products and service. We work closely with horticultural experts to provide our customers with consultation, design and installation of commercial cannabis system.

Our partners include leading experts in:

- Application Engineering
- Horticultural Lighting
- · Environmental and Climate Control Solutions
- Ventilation / HVAC
- Benching Systems
- Cloning Solutions
- Growing Substrates
- · Fertilizers and Additives
- · Testing / Monitoring PH / EC Solutions
- Composting
- · Clean Entrances
- · Professional Consultation
- · Vertical Farming





#### **Brome Compost**



Composting Greenhouse Residues and Destroying Grow Waste

For greenhouses and for other types of agricultural producers, managing plant waste is a key issue that can result in added operating costs. This is even more true for licensed cannabis producers, who must ensure the complete destruction and denaturation of their plant waste in order to conform to government regulations. An industrial composting system, composed of a BROME composter, a shredder and other complimentary equipment, is both a simple and an effective solution for the management of harvested plant waste.

In greenhouse, composting offers several benefits.

Improve greenhouse grow waste disposal operations:

- All plant parts can be composted;
- · Reduction of operating costs in comparison with other destruction methods;
- Better greenhouse production when finished compost is added to the substrate;
- Heat recovery from the composter for use in the greenhouse;
- Disposal of diseased plants through composting;
- Possible partnership with neighbors, allowing for the implementation of a resource pool for carbon or nitrogen feedstocks;
- · Resale opportunity for surplus compost.

#### Conform to disposal standards

- Breakdown and denaturation of plant residues;
- Low cost compared to waste collection:
- Social acceptability of composting.

#### Easy operation

- Cleanliness:
- Minimal operating costs;
- Few workers needed;
- · Simple installation;
- Better control over the composting process;
- · Better control over odor management;
- Better control in all weather conditions: air temperature, precipitation, evaporation and the risk of unpleasant odors.

BROME Compost offers different composter models and complementary equipment as well as services to adapt to the composting needs of your greenhouse. For a growing facility, a made to measure composting system is a simple and efficient method to ensure the destruction and denaturing of plant residues in compliance of regulations.





## TECHNISCH BUREAU W.M. BRUINE DE BRUIN B.V.

# aluminium Growing Benches

All our growing benches are customer made and exist of an aluminium bench top, mounted on hot dip galvanised steel legs. The aluminium bench top can be supplied in an assembly model (which is very useful for export) or in a welding model. We can supply both designs with several side profiles and with any kind of bottom. Our benches are available in rolling or static design. Installation of our benches system belongs, of course, also to the possibilities.

#### Supports of the growing benches

The supports of our various models are made of hot dip galvanised steel tubing. As standard the supports are provided with adjustable cross rails. It is very easy to set the benches on waterlevel or under a small angle of inclination. Also delivering of aluminium supports belongs to our skills. If desired we provide the supports with a special hostguide-system. It is also possible to deliver special supports for easy mounting in the "full ground".

#### Aluminium bench top of welding model

The aluminium bench top of the welding model will be supplied in parts of aprox. 6 -7 meters long and are mounted by means of couple joints. To give support for the bottom we weld special I-profiles in the bench top. As standard our rolling benches are provided of a anti-tipp construction. The more wider static tables are provided, as standard, with extra profiles to guaranty a stable construction.

Standard side profiles of the welding model: 10,13,16 cm. Specifications on request.

#### Aluminium bench top of assembly model

The aluminium bench top of the assembly model exists of loose aluminium profiles, with a length of 6 - 7 meter, which have to be connected by screws right on the job. Owing to this the assembly model is very easy to transport and quite suitable for export. The I-profiles which give support to the bottom are mounted very easily by the customer. The rolling benches of this model are also provided, as standard, of an anti tipp construction. The more wider static tables are provided, as standard, with extra profiles to guaranty a

stable construction. Standard side profiles of the assembly model: 6, 9, 12, 18 cm. Specifications on request.

#### **Cultivation bench bottoms**

For each type of cultivation we provide your bench system with the correct bottom. Here is a selection of the bottoms on offer:

- · ebb/flow bottoms in aluminium or plastic
- · galvanised wire, extended metal bottoms
- · tempex flat plate bottoms
- · tempex bottoms with ventilation holes
- · eternite plate bottoms
- · plasticol, shinplay bottoms
- · cultivation gutters
- aluminium bottoms

Various bottoms can be provided with heated top system and/or aluminium foil.



KOSTENBESPAREND MAATWERK VOOR UW BEDRIJF





### Turnkey Vertical farm



	STRUCTURE
Light source	LED
LED Thermal Management	Passive or Water cooling
Estimated annual power consumption	59 MWh
Power peak	23 kW
Circuit breaker	40 A
Dimensions	8 m W x 6 m L x 3 m H
Required space	10 m W x 8 m L x 3.5 m H
Facility requirements	Insulation and utilities
Required utilities	Water, Sewage, Electricity, Internet
Rack material	Aluminium
Gutter material	PVC
Collector gutters material	Stainless steel

Suitable for growing leafy greens, flowers and seedlings

VERA AUTOMATION	
Interface	Touch screen panel and remote VPN access via HTML combatible device
Controls	Light levels, Light cycles, Mobile gutters, Irrigation, Nutrients, Dosing, Humidity, Temperature, ${\sf CO}^2$
Method	Fully automatic with recipes or set values manually
Data	Includes for example histograms of growing conditions and data export for example to ERP
LIADVECT AND IDDICATION	



#### HARVEST AND IRRIGATION

Irrigation solutions	2 – 3 fertilizer solutions, pH agent, recirculating solution, control by EC and pH sensors
Capacity	5700 pots with 15 cm spacing
Growing time	27 – 35 days*  *Varies depending on plant, variety and growing recipe



GROWING CONDITIONS	
PPFD	Set between 0 – 190 $\mu$ mol/m²/s
Day cycle	Day and night lenght can be adjusted
CO <sup>2</sup>	Adjustable 200 – 2000 ppm
Relative humidity	Adjustable 55 – 85 %
Growing temperature	Adjustable 15 – 30 °C



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### Turnkey Vertical farm



MODULE STRUCTURE		
Light source	LED	
LED Thermal Management	Passive	
Annual power consumption	222 MWh (7300h and 6 layers)	
Module dimensions	6 m W x 6 m L x 6,75 m H (6 layers)	
Modularity	2-6 layers, 1-16 modules in series, any amount in pararrel	
Facility requirements	Insulation and utilities	
Required utilities	Water, Sewage, Electricity, Internet	
Frame material	Aluminium	
Gutter material	PVC	
Collector gutters material	Stainless steel	

VERA AUTOMATION	
Interface	Touch screen panel and remote VPN access via HTML combatible device
Controls	Light levels, Light cycles, Mobile gutters, Elevators, Irrigation, Nutrients, Dosing, Humidity, Temperature, Processing, CO <sup>2</sup>
Method	Fully automatic with recipes or set values manually
Data	Includes for example histograms of growing conditions and data export

#### HARVEST AND IRRIGATION

Irrigation solutions	2 – 3 fertilizer solutions, pH agent, recirculating solution, control by EC and pH sensors
Capacity	14 500 pots each module with 15 cm spacing
Growing cycle lenght	27 – 35 days*  *Varies depending on plant, variety and growing recipe

GROWING CONDITIONS	
PPFD	Set between 0 – 250 $\mu$ mol/m²/s
Day cycle	Day and night lenght can be adjusted
CO <sup>2</sup>	Adjustable 200 – 2000 ppm
Relative humidity	Adjustable 55 – 85 %

Adjustable 15 - 30 °C



Suitable for growing leafy greens, flowers and seedlings







Growing temperature

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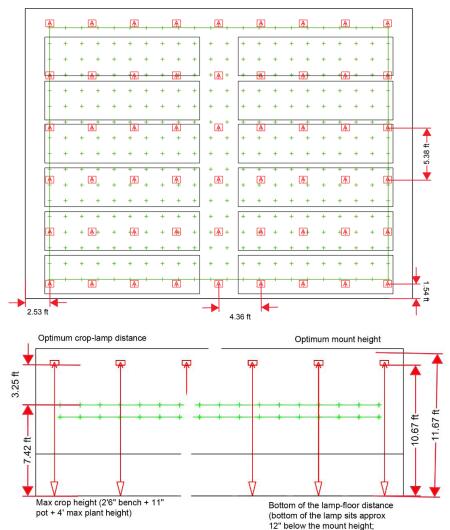


#### **Custom Lighting Layouts**

When considering supplemental lighting for your greenhouse operation, it is important to evaluate the following four factors:

- 1. Quantity (light intensity)
- 2. Duration
- 3. Quality (spectrum)
- 4. Distribution (uniformity)

When light is insufficient, it could hinder crop development and yields. Find out how much light is needed, how to measure existing light levels and the amount of light missing from your operation. Start your FREE personalized lighting layout today!



including bracket)

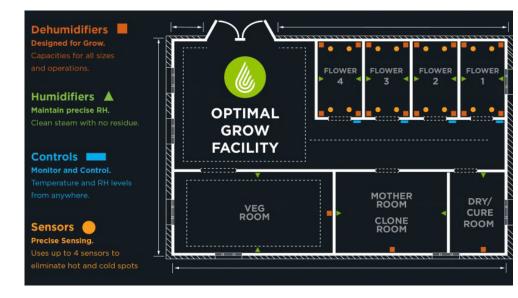


Dehumidifier placement is crucial to the efficient performance of your grow space.

It's all about creating predictable conditions, which are achieved by being intentional and specific about the placement and capabilities of your equipment.

Whether one unit is getting the job done, or you're up to 15 dehumidifiers and counting, take these tips into account so you can maximize predictability, efficiency, and growth.

- Even Distribution
- Maximize Airflow
- Remote Control
- Placement Options
  - o Suspended
  - o Freestanding
  - o Ducted
- A Helping Hand with Installation
- For full specs visit rambridge.com





Notes:	

