

# NEWLAVIE MOBILE GROW RACKS

**MODEL: NLV-RACKS** 

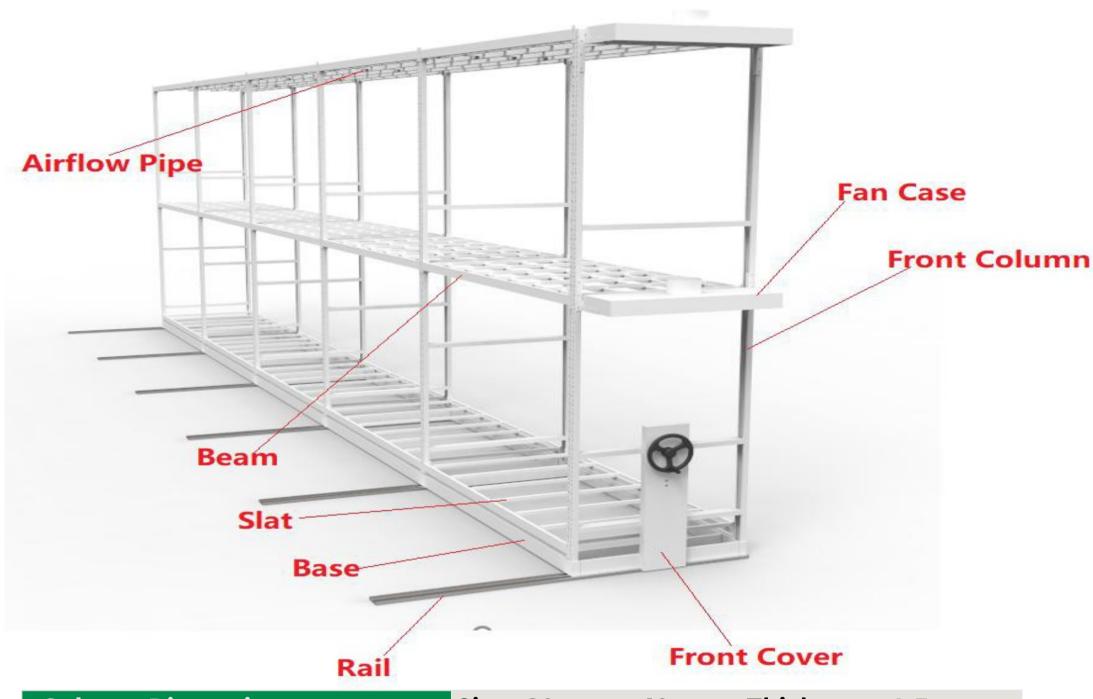






#### **Mobile Vertical Grow Racks:**

Mobile Grow Racks are engineered for higher space utilization, up to 20x based on the number of vertical layers. Each layer is designed to provide enough vertical clearance between the LED Grow Lights and the Crop Canopy for better air flow, ventilation system, and injection of Cold Air where it is highly desired. The downward air injection along the length of rack eliminates the hot spots thus maintaining a uniform temperature across the grow room at all levels. This creates a perfect environment for the Crop to be cultivated in the grow room. Any Crop any Climate!



Column Dimensions	Size: 80mm x 40 mm, Thickness: 1.5mm		
Beam Dimensions	Size: 80mm x 50 mm, Thickness: 1.3mm		
Middle Support Tray Slats	Size: 30mm x 30 mm, Thickness: 1.3mm		
Rail	Thickness: 1.5mm		
Airflow Pipe	Size: 40mm x 40 mm, Thickness: 0.9mm		
Front Cover	Thickness: 1.5mm		
Fan Case	Diameter: 8" to 12", Thickens: 1.2mm		
Features			













# **Product Specifications:**

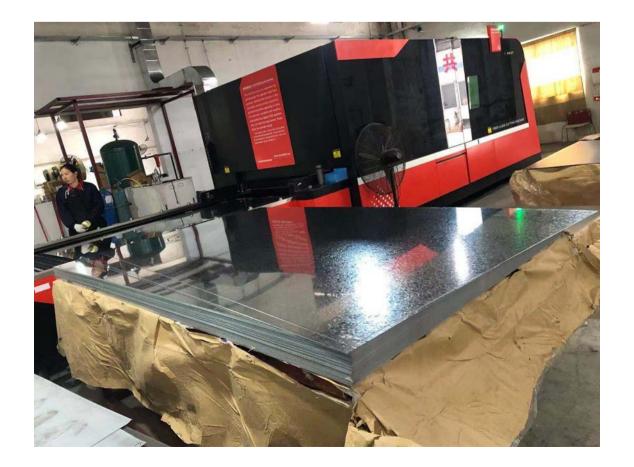
Size	Width: 4 ft (custom sizes 3', 5' or 6') Section length: 4' or 8' Height: 8', 10', 12', 14', 16'		
Loading Capacity	200 Kgs per tray Other loading capacity can be customized		
Structure	Rectangular Beam Structures Needs assembly on site Snap on reduces labor		
Layer Height	Adjustable		
Growing Tiers	1 to 10 layers Based on customer request		
Material	High quality steels - Cold Rolled Steel / Zinc Steel - Galvanized Steel		
Finish	White, Pinkish, Accent Green Anti rust coating Anti fungal and anti microbial coated		

# **Raw Materials:**

The racks are made of high-quality Galvanized Steel or Cold Rolled Steel based on application requirements









# **Surface Treatment & Powder Coating:**

Before any coatings are applied, the surfaces are cleaned from any oil, dust, rust or any other contaminant on the surface. The material is fed to a 300-meter-long automated power coating ling. After first coating, any contaminant on the surface are cleaned before doing a second coating treatment. Another anti rust, anti fungal and anti microbial coatings are applied after the second powder coating. The material is kept for drying and packed.



#### **Rack Base:**

Each base has 3 pcs driving tube. This allows the base of the rack to move evenly with increased loads of up to 500Kgs each section.



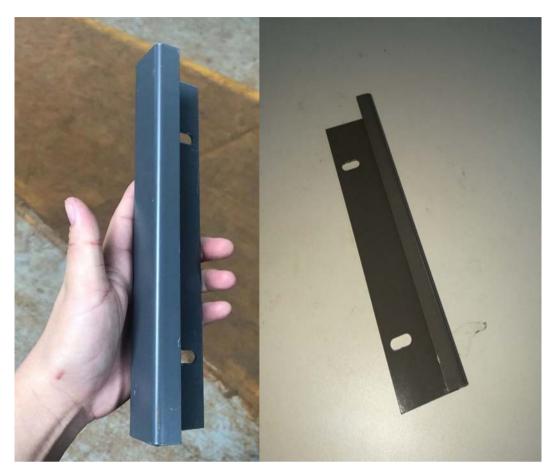




# **Rack Safety – Anti-tipping:**

The base of each section is provided with an Anti-tipping device for reliable operation of the racks over long period of time. This prevents any accidents in the grow facility due to rack falling or seismic activity.

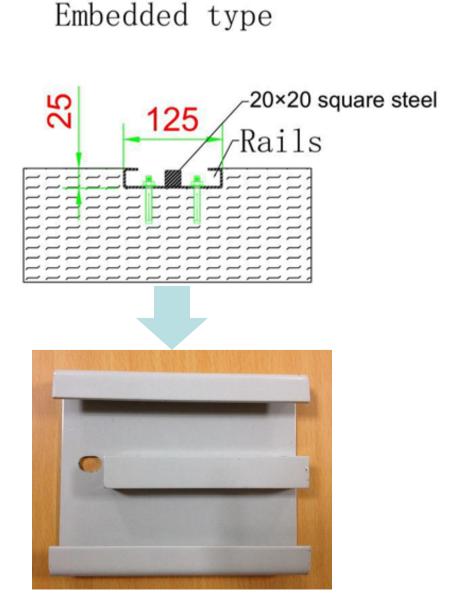




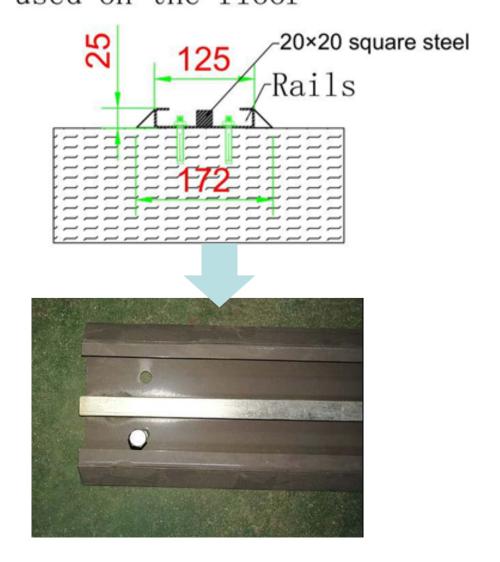
#### **Rack Rails or Track:**

Two type of rails are provided based on customer requirements;

- 1. Embedded type: In this case the rail tracks are buried inside the floor. This is very desirable if moving heavy equipment like electrical lift carts or forklift inside the grow room.
- 2. Surface type: Rails are installed on the floor with ramp (slope) for easy trolley moving.



rail with slope protection, used on the floor

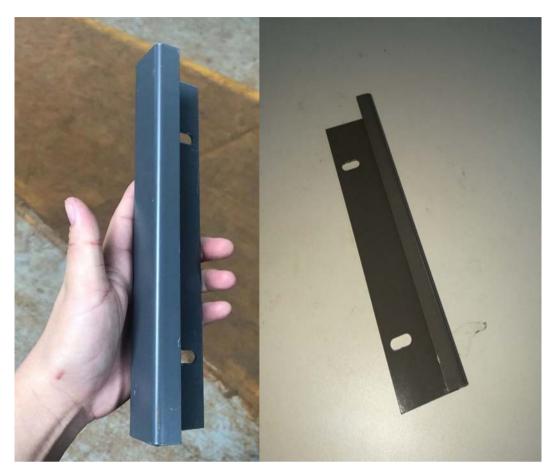




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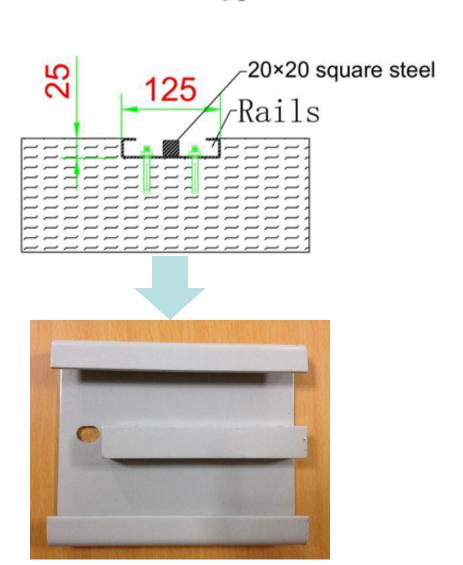


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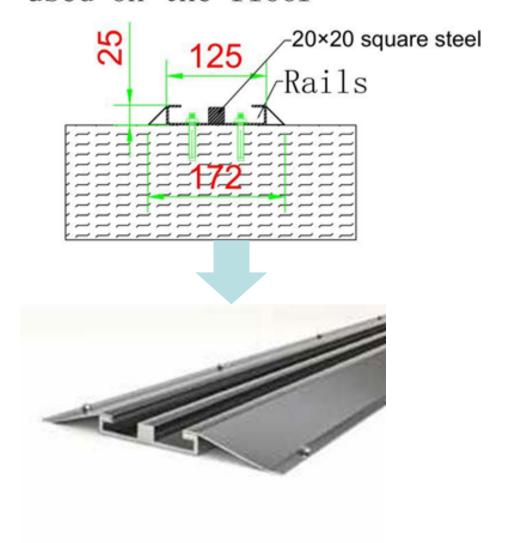
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#### **Rack Beams:**

The beams are designed to fit a multitude of options without using screws and are easy to assemble. There are different slots in the front, middle and end positions to avoid any confusions.





#### **Rack Columns:**

The rack columns define the height of the racking system. The beams can be as high as 19ft. The height of each shelf can be adjusted as per the customer requirements.







# **Middle Support Tray Slats:**

The slats are used to support the growing tray (ABS, or Meshed Screens) weight (plants, substrate or other equipment on the tray bed). Each section of 8 ft length is provided with 7 pcs of slats for high loading capacity.





# **Rack Moving Mechanical System:**

The mechanical system for moving the racks is very strong (high load capacity) and allows for multiple racks to be connected together and move as one unit.



Drive Chain Mechanism



**Moving Handle** 

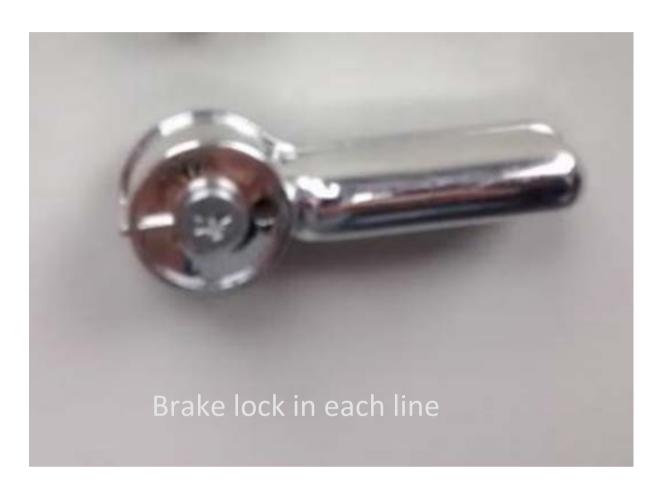


# **Safety Lock:**

The racks are designed with two types safety locks:

- 1. Brake Lock: Each row of racks has its own brake lock. This lock must be locked in position if any operator is inside between two row.
- 2. Center Lock: The center lock is installed on the first and last row of the racks in a room. This is locked with keys. It locks all the racks in the room. Mostly used when no one is allowed to go in the grow rooms.





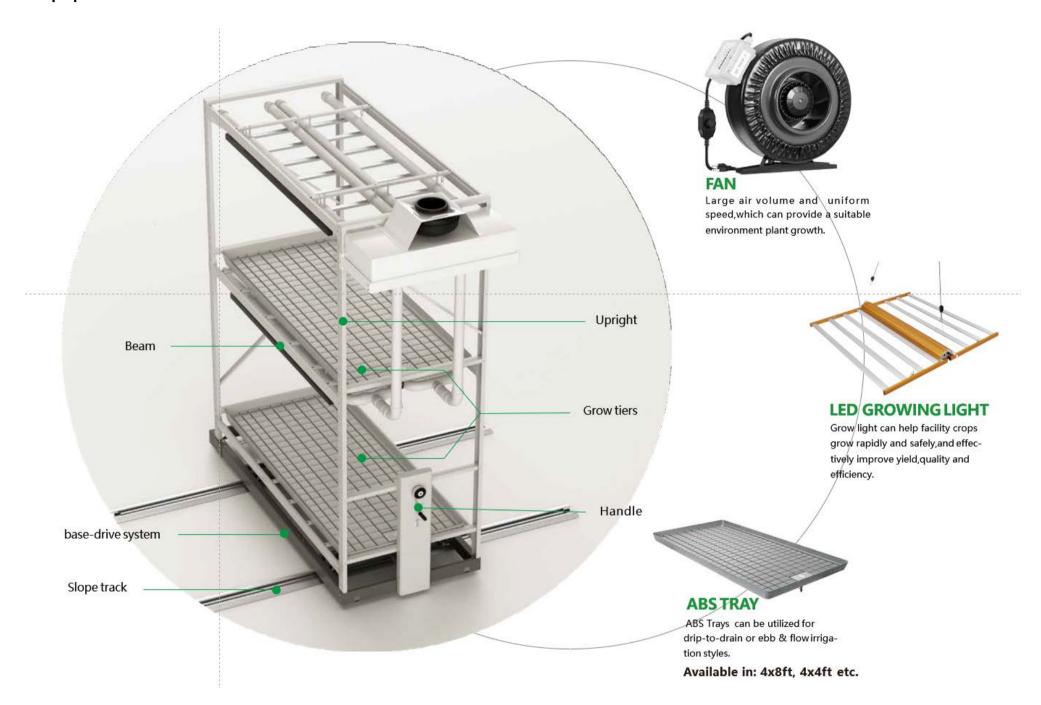
# **Ventilation Control – Airflow Pipe & Fan Case:**

Ventilation and delivery of the conditioned air is one of the most important aspects of indoor growing. The airflow delivery system can be installed on top of the canopy, by attaching the air carrying beams to the rack slats. The manifold for the inline fan is installed on the end beams with ducting for 6" to 10" inline fan. For uniformity, four beams are provided per level.





In case humid air (such as in early seeding/ Clone phases), the ventilation pipes of food safe PVC material should be used to eliminate any contamination of the air or rusting of the steel pipes.



# **One Platform – Multiple Choices:**

The versatile rack system allows to meet multiple customer applications. Based on the customer budget, the system can be customized to meet the customer requirements.



#### ■ ROLLING TABLE

It is also called rolling bench. With lower height there is one layer for growing. The table size could be customized. Standard depth is 4ft or 5ft, Length 8ft or 10ft or 12ft etc.

#### **▶ VERTICAL HYDROPONIC SYSTEM**

Vertical grow rack can be quick and easy shelving assembly-No Special Tools Required, can add more shelves or expand the rack dimensions at any time. Vertical grow rack to create vertical grow space. Supports a wide variety of growing trays, accessories for LED lights and other utilities.

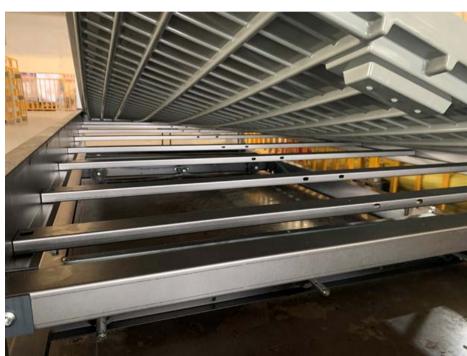






#### **◄ VERTICAL GROW RACK**

Vertical grow rack usually used for indoor growing, this type vertical grow rack size and function is same as rolling bench except for the base of vertical grow rack adopt newest design, Stronger and easier to assemble. The new base design reduces the packaging volume by nearly half compared with the previous one. Can help you save shipping cost.





#### ► TRACKLESS GROW TABLE

Trackless grow table is our latest design, The grow table size range is from 4' wide to 4-8' length. The height range is 8ft -- 18ft, The biggest feature of trackless grow table is that there is no track in the middle of the frame, which is more convenient for cleaning.



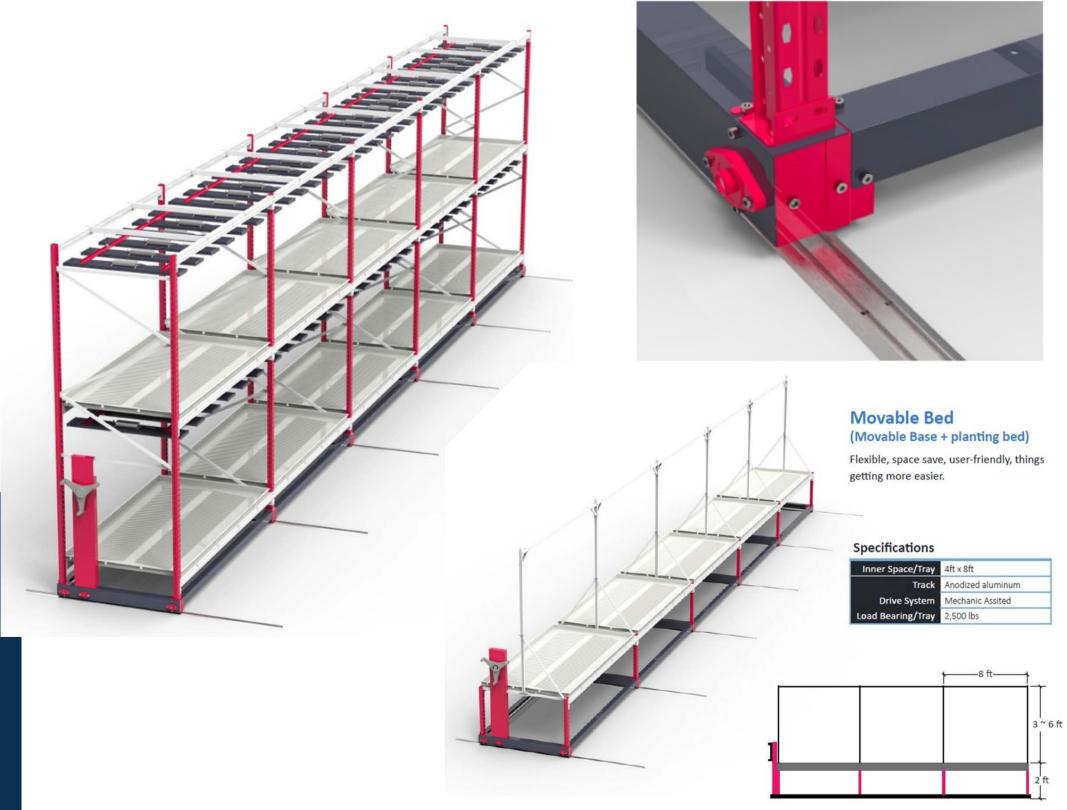


#### **<b>◄ CLONE GROW RACK**

This multipurpose small grow rack can be use in nursery or growing clones or seedlings, can rolled for transporting trays and plants from one location to another. This grow rack simple structure and easy assembly.

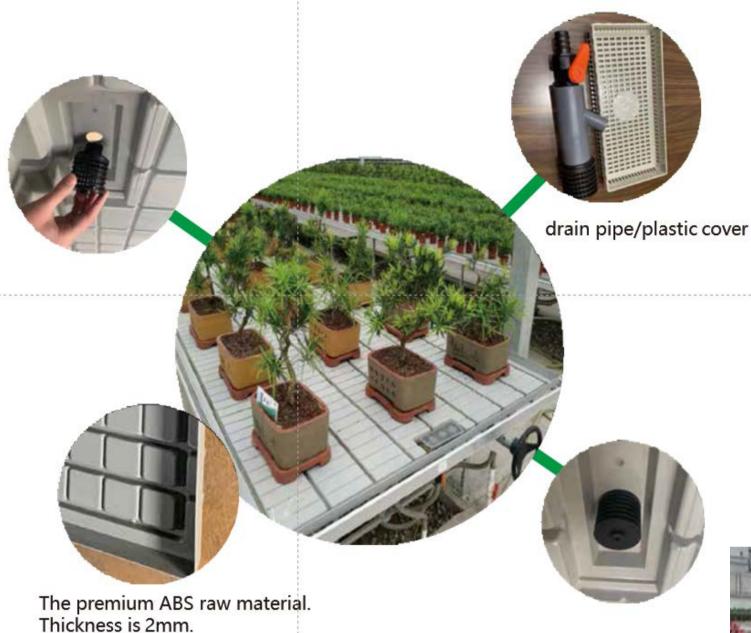
# **Old Versions:**



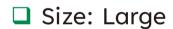




# **Rolling Tables and Benches:**







☐ Type: hot-dipped galvanized steel

☐ Cover Material: Aluminum Alloy Model

Number:cc-R, CC-01

☐ Frame material: Aluminum Alloy

■ Mesh panel material: hot-dipped galvanized iron wire

Application: Agriculture Planting

☐ Color: metal color

☐ Product name: Greenhouse Rolling Top bench

☐ Length: 3m/4m/6m

☐ Width: 1.9m

☐ Usage: flower growing, seedling growing



Size	Plastic Tray size	Plastic Tray size	Plastic Tray size
Length	8FT	5.6FT	15FT
Width	4FT	5FT	5.6FT



#### **Rolling Tables and Benches**

















# **Some Previous Projects:**





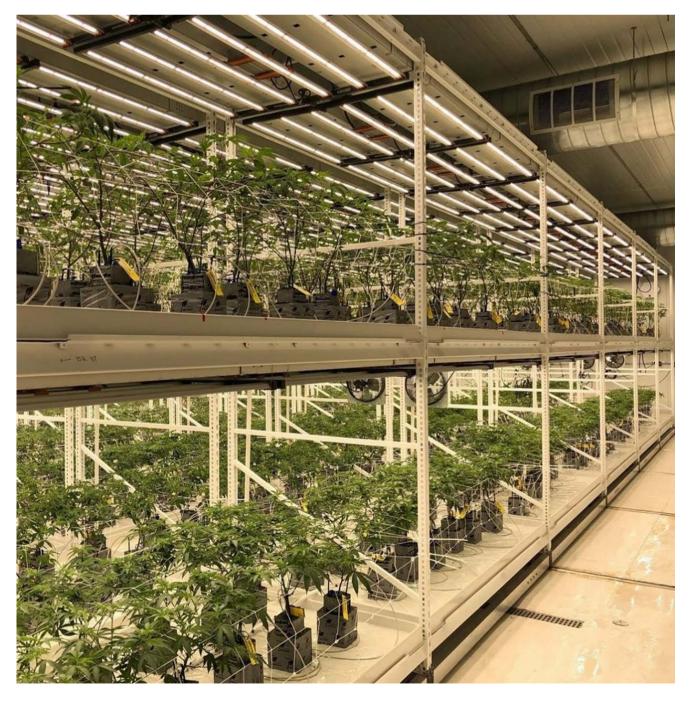














# **Drying Carts:**

The Drying Cart is designed to accommodate hanging plants in order to dry them out for further processing It has adjustable cantilever-style finger attachments which allow you to configure the cart as needed. The drying cart is an essential part of the cultivation process that can provide an increase in production and help streamline your workflow.











# **Some Previous Project Layouts:**







# Contact Info

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