

10 THINGS TO KNOW

In a vertical, multi-tier farm, efficient and effective harvesting and drying practices are essential for **maximizing productivity** and **maintaining the quality** of cannabis crops. Read on to explore some **best practices** that can be implemented to optimize these processes and ensure successful outcomes in a vertical farming environment.



Prune Excess Foliage



During the last week of the flowering stage, remove the majority of fan leaves and excess foliage while leaving the bud sites undisturbed. By doing this before harvest day, you minimize labor tasks and make the process more manageable. Additionally, it promotes better airflow and a more consistent moisture removal rate throughout the drying room.



Utilize Modular Dry Carts



Invest in modular dry carts that facilitate the transfer of plants from the flowering area to the dry room. These carts simplify the movement process, **minimize plant damage**, and maintain organization within the facility. Pipp offers a variety of dry cart styles and options to meet all of your storage needs.



Pre-Harvest Preparations



One harvest method many growers have found useful is to **dim the lights** and **cease irrigation** events approximately 24-36 hours prior to cutting the plants down. By leveraging transpiration during this period, growers can jump-start the drying process and reduce the load on the HVAC system in the dry room during the initial stages of drying. This method also reduces the overall wet weight of the harvest, including the plant and its substrate, resulting in **cost savings** and a **faster harvest process** (i.e. less physical weight for your staff to move from the upper tiers).



Choosing the Right Load-In Strategy



Evaluate the benefits of both **single load-in** and **continual load-in** strategies. While a single load-in approach (one harvest batch into a single drying room) provides better control over the drying environment and consistency, continual load-in strategies (multiple harvest batches into the same drying room) can support continuous production. A **single load-in approach is preferable** but choose the strategy that aligns best with your facility's goals and available resources.



Minimizing Touches & Transfers



Every touch and transfer of the plants increases the risk of **product damage**, degradation, and contamination. Minimizing unnecessary handling and movement of plants is essential. Aim to complete the harvest and transfer of a single crop into a designated drying room within a day to **maximize efficiency** and **preserve product quality.**



DRYING CARTS



NESTING RACKS





Whole Plant vs. **Hook n' Hang**



Achieving Desired Moisture Content



Regardless of the drying method chosen—whole plant or "hook-and-hang"—maintaining **consistent plant space** is vital for even drying. Initially, the drying space may appear crowded, but as moisture content decreases, sufficient spacing is created, allowing for efficient drying and airflow. Whole plant hanging is the **preferred method** by most growers as it tends to result in a higher quality product, reduced labor tasks on harvest day, and simplifies track-and-trace compliance duties.

Target a moisture content **between 10-14%** for optimal product quality and smoking experience. This range ensures proper drying while preserving terpene profiles and cannabinoid potency. It is a delicate balance; higher moisture contents increase the total sellable weight of your harvest while slightly lower moisture contents increase the total cannabinoid potency on your lab results (less water weight per gram).



Maintaining Controlled Drying Environments



Minimize the Mess



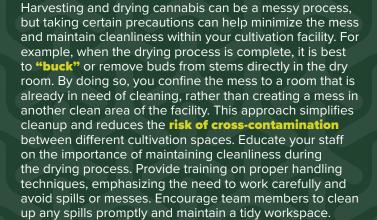
Invest in a properly sized HVAC system with sufficient latent load sizing to remove moisture effectively. The **drying rate** is influenced by factors such as the total wet weight of the harvest, room temperature, dehumidification capacity, airflow, and time. Increase room temperatures slightly (HVAC systems and dehumidifiers remove more moisture at higher temperatures) if the drying rate is too slow but be cautious to avoid excessive heat that may lead to terpene loss. To **preserve product integrity**, keep the dry room door closed and lights off as much as possible. Minimize unnecessary entries into the room, allowing for





Moisture Content & Water Activity

Tracking moisture content (MC%) and water activity (Aw) levels is a great way to standardize your drying process, reduce your risk of product loss, and maximize your revenue. In the early stages of the drying process, the goal is to get your crop's water activity below 0.65 to reduce the risk of pathogen proliferation and product loss. Use these readings to fine-tune and optimize your HVAC set points, either increasing or decreasing your drying rate by modulating temperature.





Implementing best practices for harvesting and drying cannabis in a vertical, multi-tier farm is crucial for maximizing efficiency and maintaining product quality. By preparing for the harvest ahead of time, minimizing touches and transfers, utilizing modular equipment, and optimizing the drying environment, growers can achieve successful outcomes and enhance their cultivation operations in the vertical cannabis farming industry.