

# RETROFIT CHEAT SHEET

## 5 TIPS FOR A SMOOTHER UPGRADE

Why start from scratch when you can transform what you already have? A well-planned retrofit can **save you serious time and money** while setting you up for scalable, high-yield growth. But here's the catch: not every space was designed with controlled environment agriculture (CEA) in mind. Things like ceiling height, airflow, drainage, and HVAC capacity can make or break your operation. Let's look at how to overcome these challenges, and why going vertical is your best move.

### GROW UP, NOT OUT

**Space is your most valuable asset** in a retrofit. Instead of spreading your canopy across more square footage, stack it. Pipp's Mobile Vertical Grow Racks let you grow multiple tiers of plants with ergonomic access and zero wasted aisles. You'll maximize yield, streamline workflows, and create a more organized grow room, all without moving walls.

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### KEEP YOUR CLIMATE IN CHECK

Older buildings often struggle with uneven airflow and temperature control. That's where Pipp's **VAS 2.0 In-Rack Airflow System** comes in. It's designed to move air evenly across every tier, eliminating micro-climates that lead to inconsistent growth. **Better airflow** = healthier plants, fewer hot spots, & higher quality harvests.

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### LIGHT SMARTER WITH LEDs

Retrofitting your lighting isn't just a swap, it's an upgrade. Modern LED grow lights **reduce heat load, lower energy costs, and give you precise control** over intensity and spectrum. Plus, they're perfect for multi-tier environments, helping you hit ideal PPFD levels on every canopy layer.



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### FIX THE FLOW: WATER & DRAINAGE

Water management is one of the trickiest parts of any retrofit. Sloped floors, old plumbing, or poor drainage can lead to big problems. That's why **Pipp's Grow Trays** are designed with built-in slope technology to capture and drain water efficiently, keeping roots healthy, preventing mold, and helping you meet compliance standards with ease.

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### DESIGN FOR COMPLIANCE & SAFETY

Every retrofit needs to pass inspection and protect your team. From fire suppression systems to ADA-compliant floor tracks, Pipp's vertical systems are engineered for both **efficiency and safety**. You'll avoid costly rework, delays, and compliance headaches down the line.



#### The Vertical Advantage

A retrofit is more than a renovation; it's an opportunity to build smarter. By investing in vertical systems, optimized airflow, efficient lighting, and proper water management, you'll set your grow up for consistency, compliance, and profitability.

When space is limited, going vertical is the clear path to growth. The right racking, airflow, and drainage can:

- Increase yield per square foot
- Boost operational efficiency
- Scale faster as demand grows
- Build a facility that performs long-term

# FREQUENTLY ASKED QUESTIONS

## ABOUT RETROFITTING

A retrofit isn't just about fitting plants into an old space; it's about **building efficiency and profitability** into your foundation.

- Improve consistency through controlled airflow, lighting, and irrigation.
- Stay compliant and future-ready with designs built for safety and accessibility.
- Grow more in the same footprint by moving vertically instead of expanding outward.
- Cut costs by repurposing existing infrastructure.

### “IS IT CHEAPER TO RETROFIT AN EXISTING BUILDING OR BUILD NEW?”

In most cases, retrofitting is more cost-effective than new construction because you're working with an existing structure. However, costs can vary depending on building condition, compliance upgrades, and how much infrastructure (HVAC, plumbing, electrical) needs updating.



### “WHAT'S THE BIGGEST MISTAKE GROWERS MAKE WHEN RETROFITTING?”

Underestimating environmental controls. HVAC, airflow, and drainage are often overlooked in favor of lighting or racks—but without proper climate and water management, even the best equipment can underperform.

### “HOW DO I KNOW IF MY BUILDING IS A GOOD CANDIDATE FOR A CANNABIS RETROFIT?”

Start by looking at ceiling height, available utilities (power, water, HVAC), and overall layout. Column spacing is also a major factor. Older buildings often have tighter column grids, which can limit how efficiently mobile racking systems can be laid out and reduce usable canopy space. Modern structures with wider column spacing typically allow for better rack alignment, smoother workflow, and easier equipment access. Warehouses and industrial spaces often retrofit well, while facilities with very low ceilings or limited power may require additional investment.

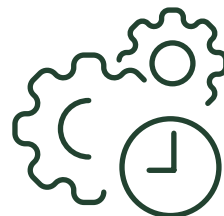


### “CAN VERTICAL GROW RACKS REALLY MAKE A DIFFERENCE IN RETROFITS?”

Absolutely. Vertical systems maximize limited square footage, allowing cultivators to double or triple their canopy while maintaining efficient workflows. Pairing vertical racks with systems like the VAS 2.0 and Grow Trays ensures stability and scalability.

### “HOW LONG DOES A RETROFIT USUALLY TAKE?”

Timelines vary, but most retrofits move faster than ground-up builds since you're not waiting on full-scale construction. Planning, permitting, and any necessary infrastructure upgrades are typically the biggest variables.



#### Ready to Start Planning Your Retrofit?

The Pipp Horticulture team can help you design a grow that makes every inch count. Contact us to get started!