

Converting a warehouse to a state-of-the-art grow

Designing a new cultivation facility requires foresight, research, and attention to detail. Ari Castro, a former Amazon operations manager, and Joshua King, an artist and technician, took a data-driven approach when they converted a Sacramento warehouse into a state-of-the-art facility.

"Like most growers, our

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every cubic inch."

- Joshua King | Presidential Garden Group

Architectural constraints

As is the case in many retrofits, the design team needed to work around existing architectural constraints and code requirements. Load-bearing walls determined room size, and the veg and flower rooms had to have a rated shaft to support the HVAC unit on the roof. That code requirement removed about 96 square feet of potential grow area from each room, and it posed a challenge when designing the bench layout.

Optimizing canopy

"Like most growers, our goal was to maximize every cubic inch," Joshua said. The team knew they wanted to explore options for growing more plants in the space.

Creating a safe workplace

Creating a safe and comfortable work environment was another top priority. Given that California is a seismically active area, the planning team wanted to build out the facility in a way that ensured employees would be safe in case of an earthquake.

Conserving resources

Cannabis grows are notorious for drawing lots of energy, so the planning team decided to go with LED lights to improve efficiency. That opened up the possibility of using mobile vertical racking, because LED lights take up less space. The racking, in turn, would allow them to design rooms that would grow more plants in the climate-controlled spaces, which would result in even more energy efficiency.



A custom, fully integrated growing system

GROW

The planning team wanted to create the most efficient system possible within the constraints posed by the warehouse. "Everything had to be designed with an eye toward ease of use, accessibility, optimization, efficiency, and aesthetics," Joshua said. Because the choice of racking would have a cascading effect on other decisions, they chose the racking first.

SOLUTION

Choosing a racking system

Racking was a big investment, so the planning team thoroughly investigated their options. "We put a lot of time and effort into researching the data behind these products," Joshua said. "We wanted to be sure we were making the right decision."

They narrowed down their options to Spacesaver and two other manufacturers. The Bay-area Spacesaver consultant took them to visit grows fitted with Spacesaver GROW Mobile Systems, and they toured facilities to see and use the other two manufacturers' racking as well.

After comparing the top three manufacturers, the choice was clear: they decided to go with Spacesaver. "We saw Spacesaver had a lower profile, everything was powder-coated inside and out, and the mechanical systems were enclosed," Joshua said. "It was a no-brainer."



but provided a lot more support."

- Joshua King | Presidential Garden Group

DECIDING FACTORS

The planning team wanted to choose the most efficient and sustainable system. Here's why they chose Spacesaver:



POWDER-COATED COMPONENTS



ENCLOSED MECHANISMS



LOCAL SUPPORT



Planning and installation

The Spacesaver consultant worked closely with the planning team to assess the space in the flowering rooms. Then he designed GROW Mobile Systems that fit perfectly into the rooms and complied with code requirements. He also specified anti-tip rails to help ensure employee safety in case of seismic events.

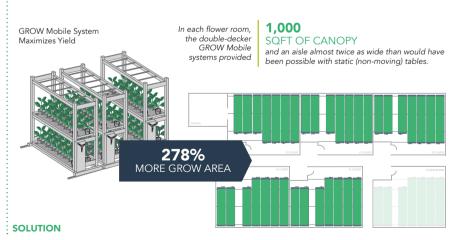
After the GROW Mobile Systems were designed and manufactured, the local, factory-certified Spacesaver installation crew worked efficiently to install them and train staff on their operation.

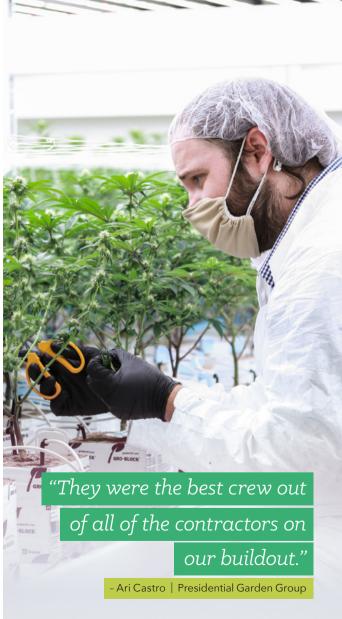
CHALLENGE: OPTIMIZING CANOPY AREA



Only 5 tables with aisles could fit in each room.

359 SQFT OF CANOPY





SOLUTION

Complete solution

A plan for the rest of the components for the growing system started coming together after the racking was in place. Due to the integration of Spacesaver's racking with products from Hawthorne Gardening Company, the planning team decided on Gavita lighting, Hawthorne trays and irrigation, and mobile-compatible ventilation systems. Spacesaver and Hawthorne routinely collaborate on product design to create easy-to-use integrations for lighting, trays, and other components.



- Joshua King | Presidential Garden Group



GROWING TOGETHER

Spacesaver's partnership with Hawthorne Gardening Co. provides expert advice from cannabis consultants and the best products in indoor horticulture. Hawthorne's trays, lights, HVAC systems, and other products integrate with Spacesaver's GROW Mobile Systems to streamline workflows and improve plant health.







A safe, sustainable, and efficient grow

All the research and planning has paid off. Not only is the Presidential Garden Group team growing almost three times the canopy they would have produced with typical static tables; they also have the satisfaction of knowing they're using less energy and purchasing a safe, sturdy, and reliable system that will last for years.

In addition to cultivating, processing, and curing flower, Presidential Garden Group now also serves as a resource for other growers in the area: the team gives tours to growers who are planning their own facilities. "Growing cannabis is a young science, and we all have a lot to learn," Ari said. "We're proud to be doing this in a responsible, sustainable way."







Ready to GROW more? Connect with the experts.

Spacesaver's innovative high-density systems have been optimizing space for universities, healthcare facilities, and other prestigious institutions for half a century. We've installed more than 300,00 systems worldwide and we hold more than 200 patents in space-saving technology.

Now we're bringing our expertise and our reputation for quality to the cannabis industry. With distributors in major cities across the U.S. and Canada, we have knowledgeable space-planning consultants and factory-certified service crews near you.

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