

# Medical Saints:

Record Yields After Transition from  
Coco to Stone Wool



Part of ROCKWOOL Group

Case Study: Medical Saints Record Yields

Located just outside Niagara, Ontario, in the community of Beamsville, lies a greenhouse powerhouse and Canada's largest private cannabis company, Medical Saints. This beautiful 500,000 sqft multi-faceted facility, licensed for production and cultivation, is fully automated with cutting-edge technology to ensure product excellence, optimize plant health, and utilize sustainable growing practices.

In an effort to raise the bar of cannabis cultivation in Canada and uphold the highest levels of cleanliness and control, mirroring that of pharmaceutical-grade environments, Medical Saints knew it was time to make the switch from the coco/peat mixture they were using to a more consistent, clean, and steerable growing medium, which ultimately led them to Grodan stone wool.

When Cole Williams, Master Grower at Medical Saints, first joined the team in 2021, they used coco, had a grinder and potting machine out back, and many other costly bells and whistles. At that time, business was good, but Williams and the team knew they could significantly improve cleanliness, reduce operational costs, and push higher yields with a growing media like stone wool. So, they contacted Grodan and began a few side-by-side trials.

**"At scale, stone wool is really the future." said Williams**  
**"There are so many benefits, not only from a yield and quality perspective but also in terms of the cleanliness and consistency of the media. That's huge for us."**

— Cole Williams, Master Grower at Medical Saints



Following the resounding success of these trials and helpful advice from our Business Support team, Medical Saints made a complete transition from coco to Grodan stone wool. They eventually settled on the ideal substrate configuration for their greenhouse: the Grodan Improved Unislab and GR 6.5.

By utilizing this single slab combo, partnered with our new GroSens 2.2 sensors, Medical Saints can fully develop the rootzone within each slab and dry back much faster than they ever could when using coco. With this improved steerability, Medical Saints is now pushing the limits of what they thought was possible and achieving record yields facility-wide. So much so that according to Williams, "We [Medical Saints] can confidently say and prove we're doing yields at this facility on a square foot and per plant basis that I haven't seen, pretty much anywhere else across Canada at this scale."



## Improved Steerability Leads to Increased Yield

"From a steering standpoint, as well as moisture control, it's just so much easier to do in stone wool compared to coco." remarked Williams.

Medical Saints has consistently grown great cannabis, but it wasn't until they transitioned to stone wool and began utilizing the GroSens Suite that they truly dialed in and learned how to maximize the potential of each cultivar. With this improved steerability and proficiency, the team reached new heights on all key measurables, most notably the overall yield of each harvest.

"The last couple of harvests have been their biggest yet," said Williams. "It's helping us with irrigation. We've reached 225g per plant. On average, 150g per sqft, A and B. It's a testament to the new sensors, the substrate, but most of all, our company and cultivation team."

To put these numbers in perspective, we asked Grodan's R&D Project Manager, Frank Janssen, to tell us how they compared to trials we've conducted in partnership with CRIC Labs. "It's indeed impressive, especially given the added challenges greenhouses encounter in comparison to indoor," said Janssen.

With the team now hitting roughly 225g per plant and 150g per sqft, it is no surprise that

Medical Saints considers itself a beacon of innovation and product quality in Canada and as an exporter, across the globe as well. "We want to redefine large-scale quality cannabis production," says Williams. "So much so that you won't be able to determine if the cannabis grown was grown in a 10,000 sq ft or 500,000 sq ft facility. We want to be the biggest brand in the country and, eventually, the world. Known for producing craft cannabis at scale."

## High THC and Terpene Excellence

Medical Saints prides itself on producing only the highest-quality premium cannabis and hemp, which is one of the many reasons they made the switch to stone wool in the first place. Increasing yield and improving operational efficiency are essential, but if you ask Cole, one of the most impactful improvements they've made since the transition to stone wool is enhancements made in THC percentages and overall terpene profiles of each cultivator.

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"Right now, we have a couple of cultivars where we regularly hit between 27 -31% THC, and the terpenes are fantastic. We just hit a terpene on one of our pink gas strains, and that was 4.2%. We have been hitting some high terps lately. It's been huge for us."

— Cole Williams, Master Grower at Medical Saints

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## Improving Operational Efficiency



Before switching to stone wool, Medical Saints constantly had to worry about dust everywhere and regularly dealt with clogged tables and damaged emitters. Simply maintaining cleanliness using coco had become a daily challenge for the team and a significant labor cost.

“With coco, we had to spend a lot of time cleaning,” Williams noted. “We were cleaning the tables. Cleaning the facility. All the time. It was a huge labor cost. If you don’t stay on top of it, you’ll have issues like algae growth or fusarium. We don’t have that problem with stone wool.”

From their extensive terpene research and strain development to the importance placed on quality control and clean genetics, Medical Saints’ unwavering commitment to maintaining the highest standards of cleanliness and control throughout their greenhouse has allowed them to achieve new benchmarks in maximizing plant health and productivity and opened new doors into the export market.

Ever since cannabis was legalized in Canada in 2018, licensed producers have been constrained by the strength of the illicit market, packaging, and unfair taxes and fees. To weather the storm, successful producers found new avenues to grow their businesses and safeguard against further disruptions as the industry gradually edges back toward profitability.

At Medical Saints, they believe they’ve found the perfect formula for selling their premium cannabis both domestically and internationally. To export cannabis globally for medical or scientific use, they must adhere to the strict guidelines importing countries place on quality, cleanliness, and consistency, similar to the standards set domestically by Health Canada. Transitioning to a cleaner and more steerable substrate like stone wool has made it easier for Medical Saints to succeed in Canada and globally.





# Commitment to Sustainable Cultivation Practices

Given the cannabis industry's competitiveness and the growing impact of labor shortages, using a substrate like stone wool and reliable rootzone sensors has empowered Medical Saints to improve steerability significantly. As a result, the team now uses fewer resources every year, allowing them to remain committed to their sustainable cultivation practices.



"The cannabis industry uses a lot of water. We do. So, whatever I can do to help reduce our footprint and ensure that we're not using excessive water and nutrients at our facility is important to me and the entire Medical Saints team. Thankfully, Grodan stone wool has helped us do just that."



## Medical Saints' Product List

### GROWING MEDIA:

- Grodan Starter Plugs
- GR 6.5.
- Grodan Improved Unislab

### LIGHTING:

- HPS lighting

### IRRIGATION:

- Pressure Compensating Drip Emitters

To learn more about the benefits of our stone wool products and new GroSens 2.2 Sensors, contact us or request a trial at [info@grodan101.com](mailto:info@grodan101.com) or visit our contact page at [Grodan101.com](http://Grodan101.com).



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