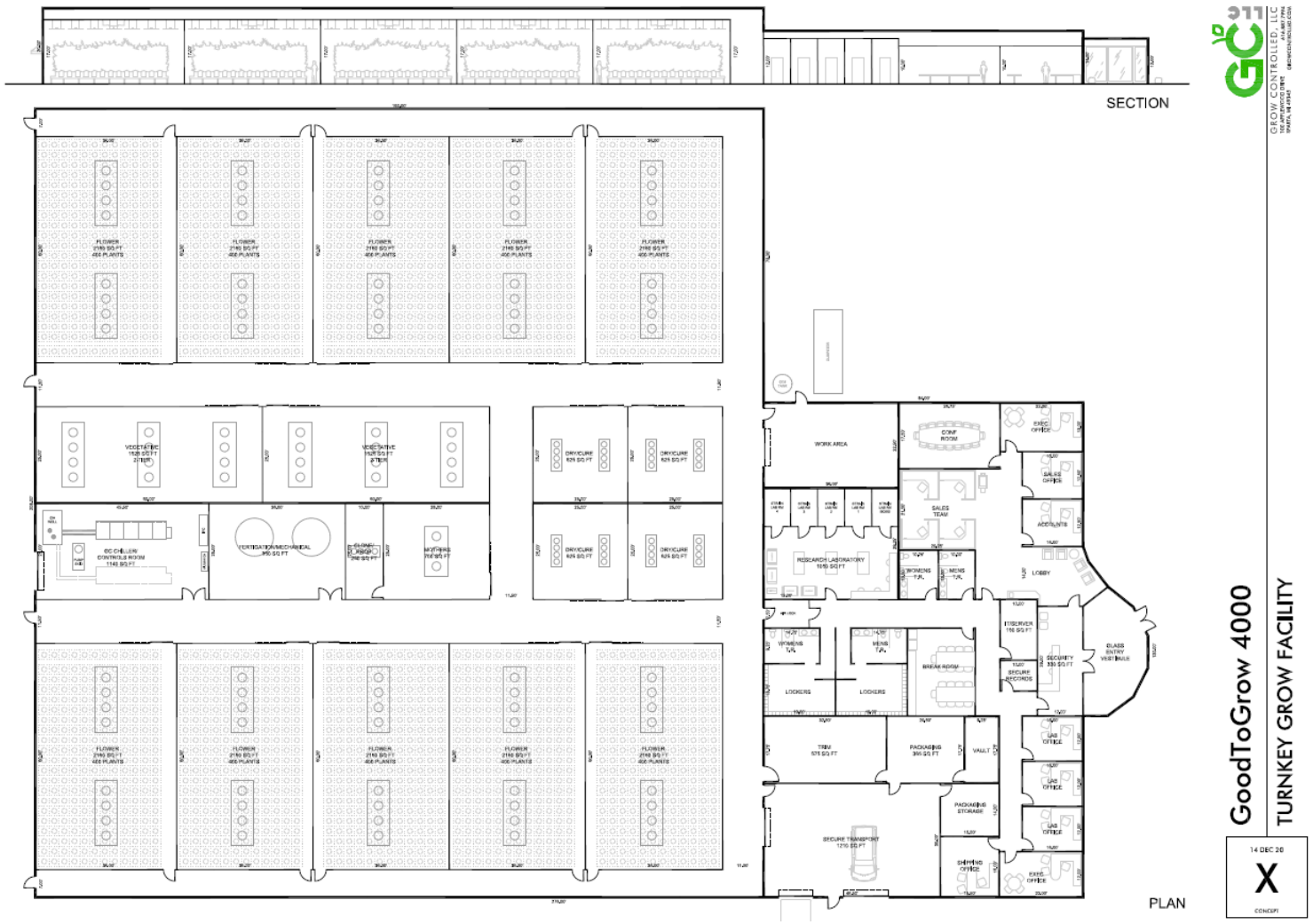
GC LLC

GROW CONTROLLED

CONTROLLED ENVIRONMENTS

Facility Design



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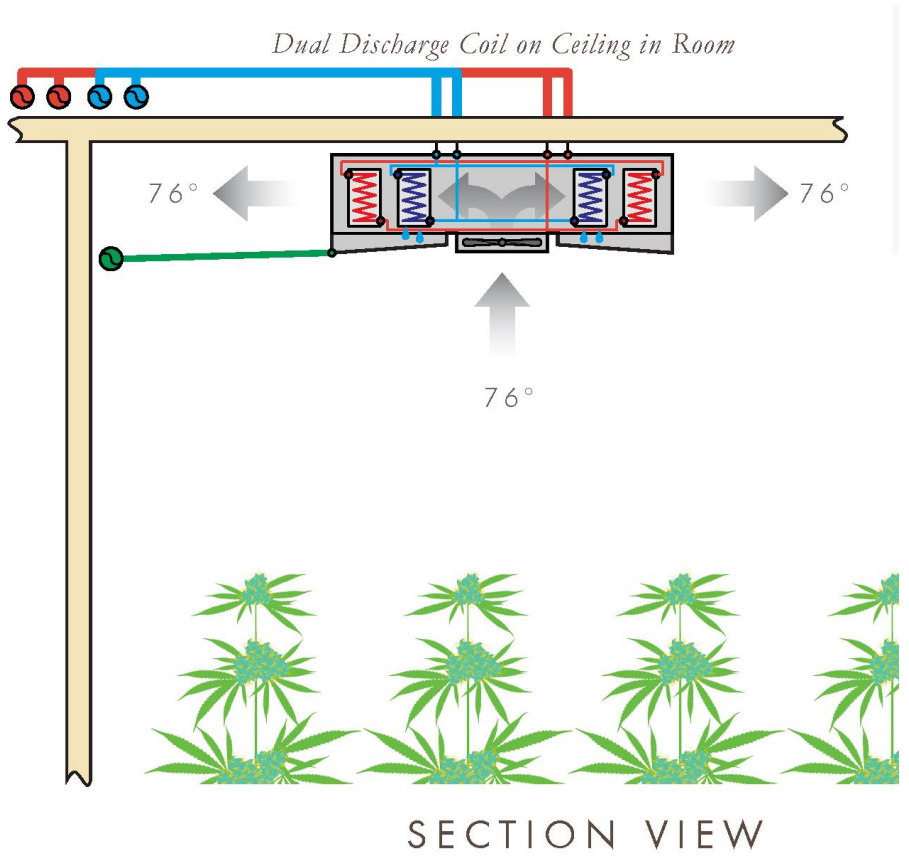
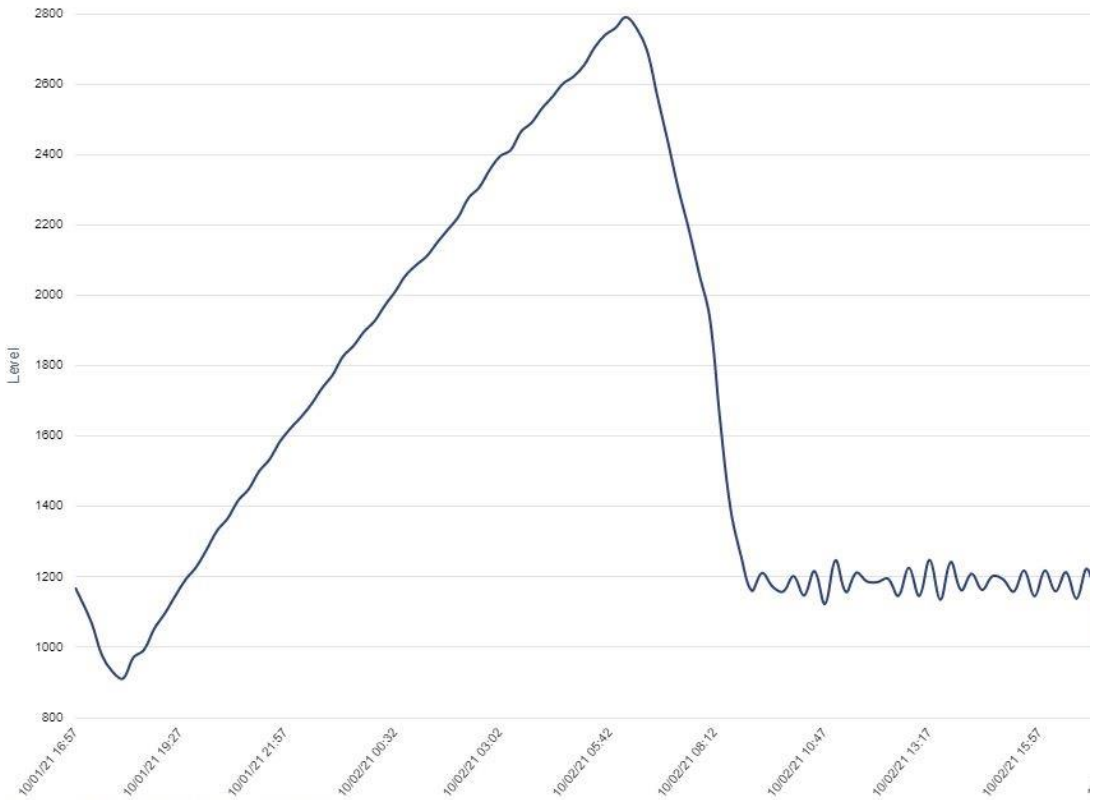
Insulated Metal Panel (IMP)

Ceiling Suspension

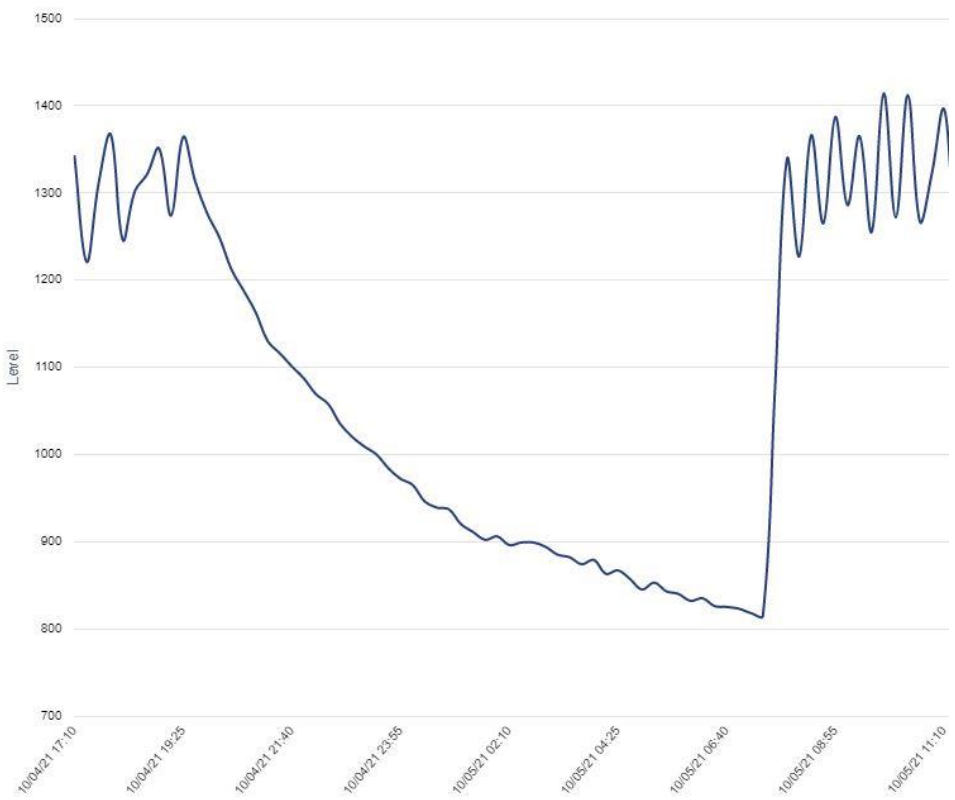
GC Gastight Grow Rooms



GC Gastight Grow Rooms – CO_2 Retention



Our Room



Competitor's Room

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Dry Rooms

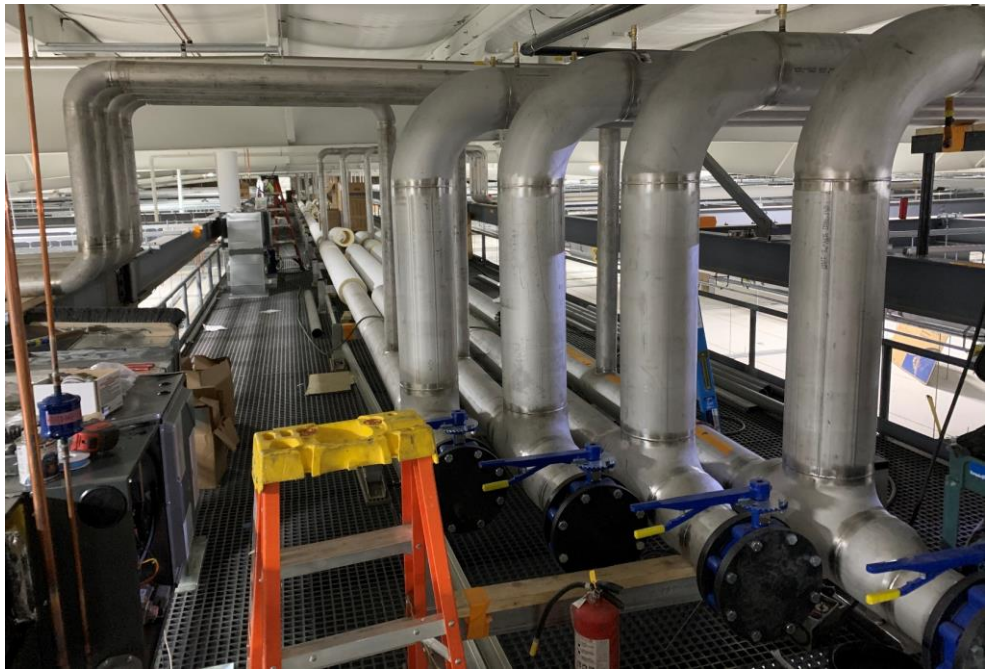
Secondary Refrigeration

Secondary Refrigeration

Secondary Refrigeration

Refrigeration mains

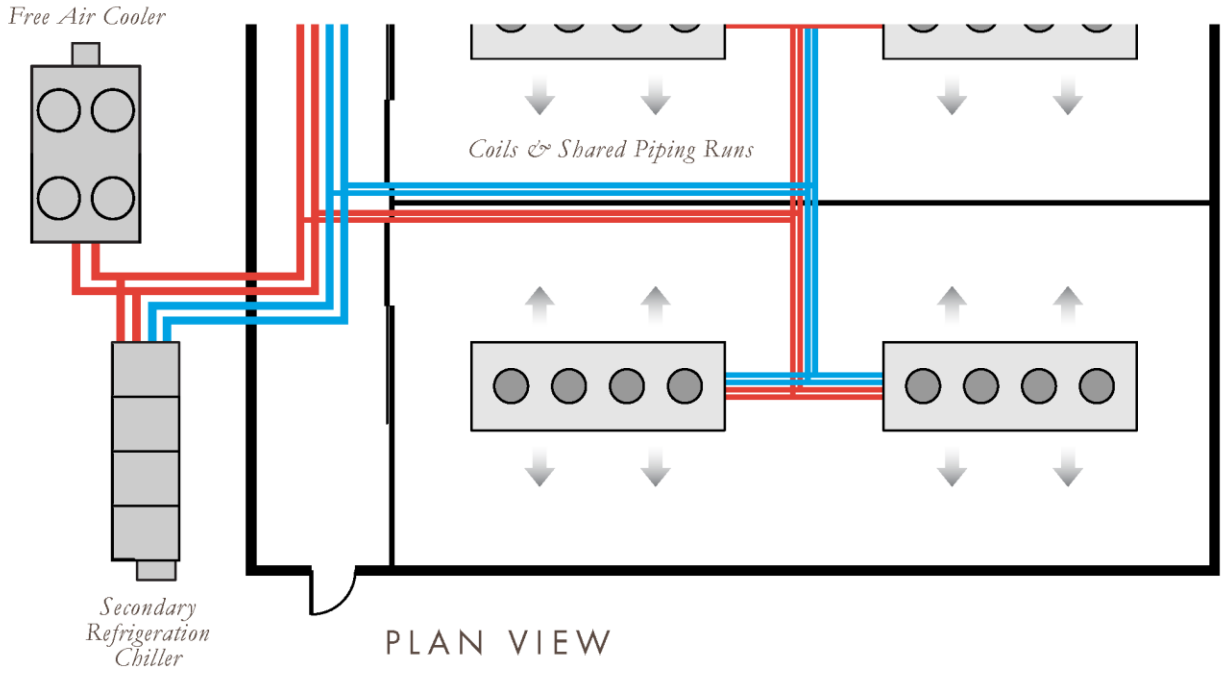
Stainless steel schedule 10 welded

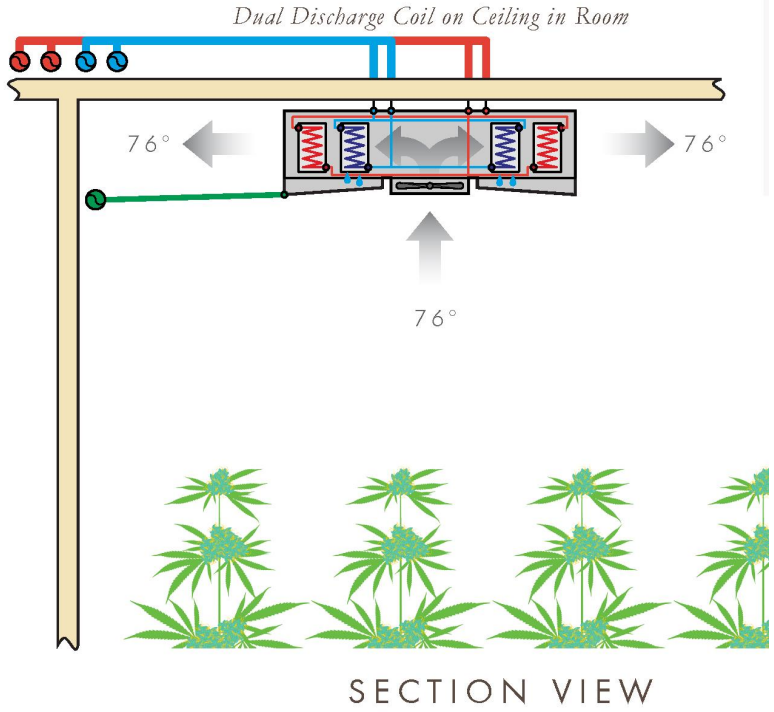


After pressure testing and insulation

GC Reheat Dehumidification

Utilizing a 4-Pipe System to cool, condense water, and reheat the air for net-zero temperature change with high-precision humidity control



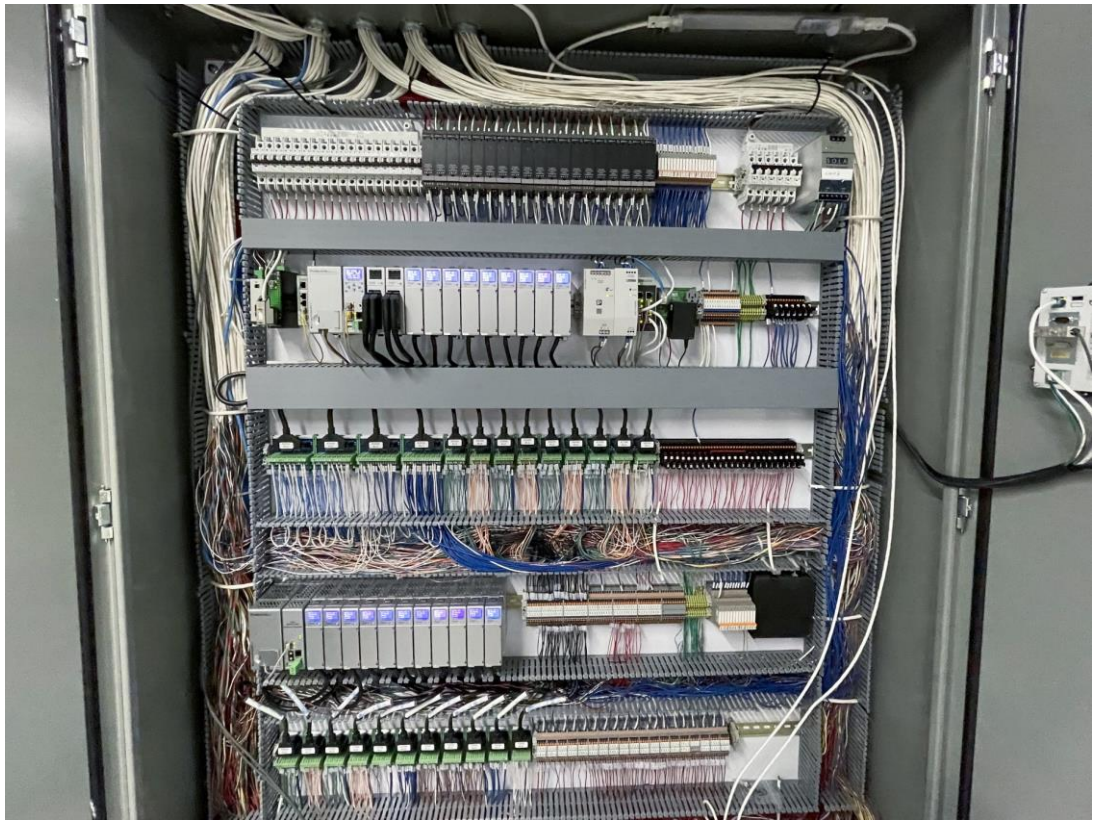


Animation

Two Tier Growing -17’ Ceiling

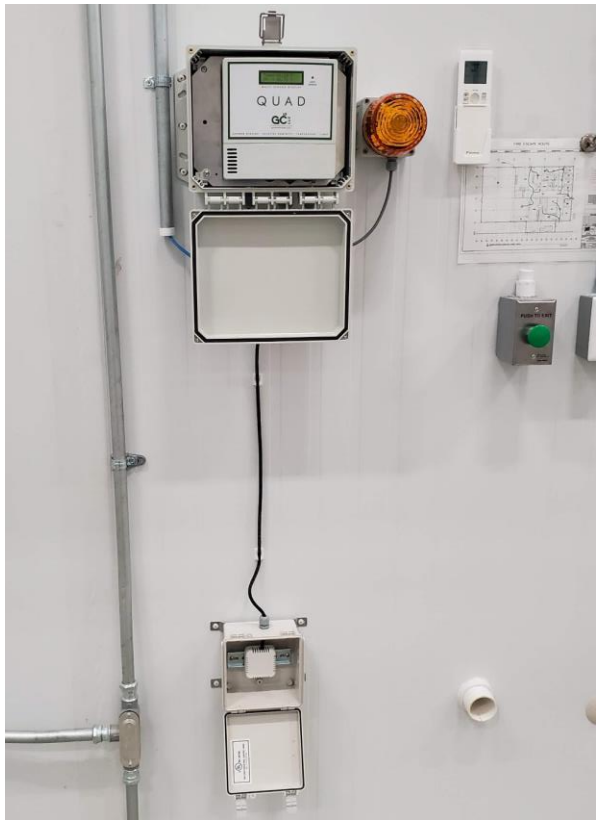
GC Growtight & Passtight Doors

GC KiloWatch Control Systems



GC Remote Sensors

- Ethernet Connected
  - Carbon Dioxide
  - Temperature
  - Relative Humidity
  - Oxygen
  - PPFD/PAR



3-Day Graph

CO2 ✖	RH ✖	O2 ✖	Par ✖
1099 PPM	49 %	20 %	1201 PPFD

Temp Probe 1 ✖	Temp Probe 2 ✖	Temp Probe 3 ✖	Temp Probe 4 ✖
75.5 F	76.1 F	76.2 F	76.8 F

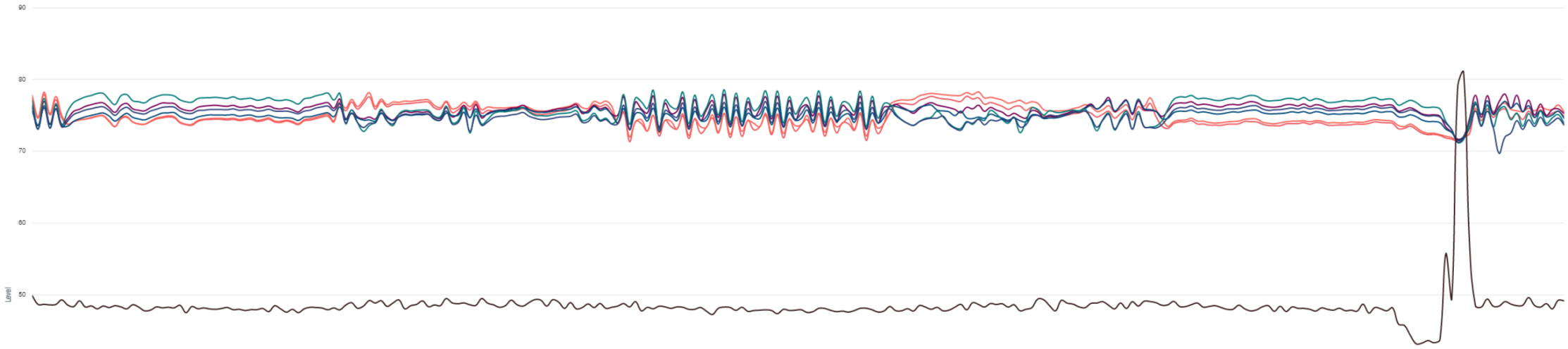
Temp Probe 5 ✖	Temp Probe 6 ✖
77 F	76.3 F

Measurement Timeline

Plot Range

Last 3 Days

← Expand Slider → | Enable Scroll to Zoom | Enable Drag to Zoom | Reset Zoom | Apply Smoothing



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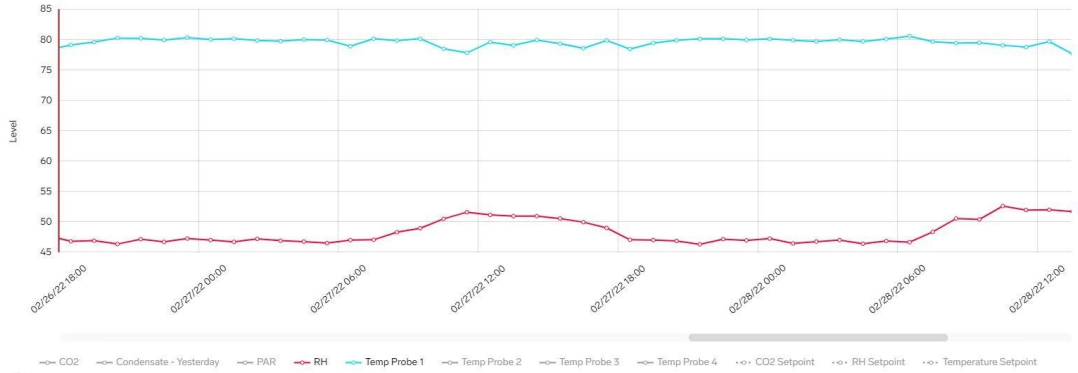
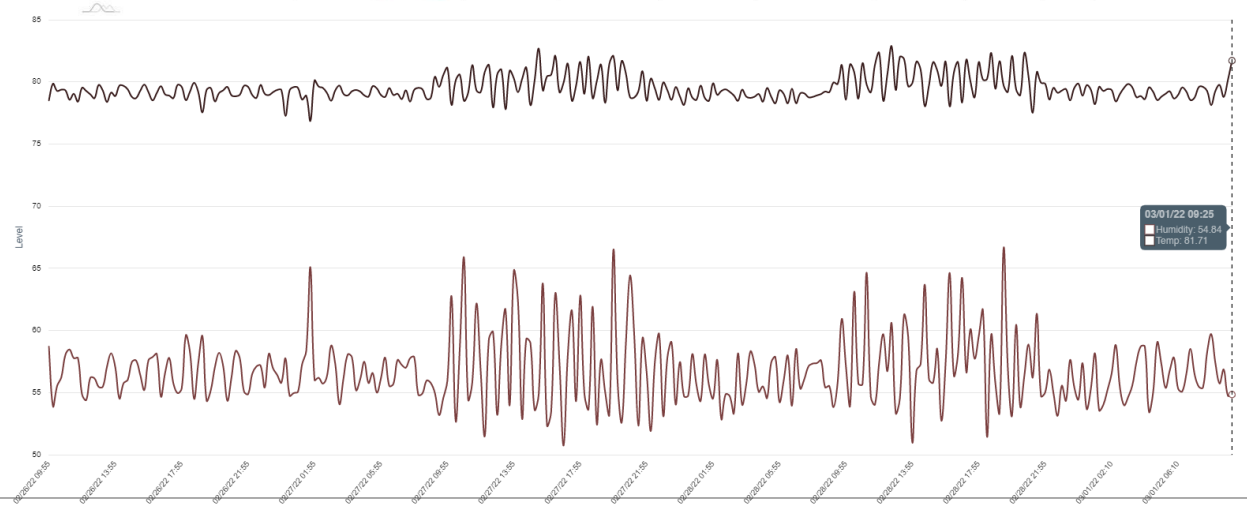
RE-Heat Coil Control vs Traditional

- Re-Heat Coils
- RH setpoint 48%
- RH is held between 47% - 49%
- The flower coming out of our rooms is exceptional



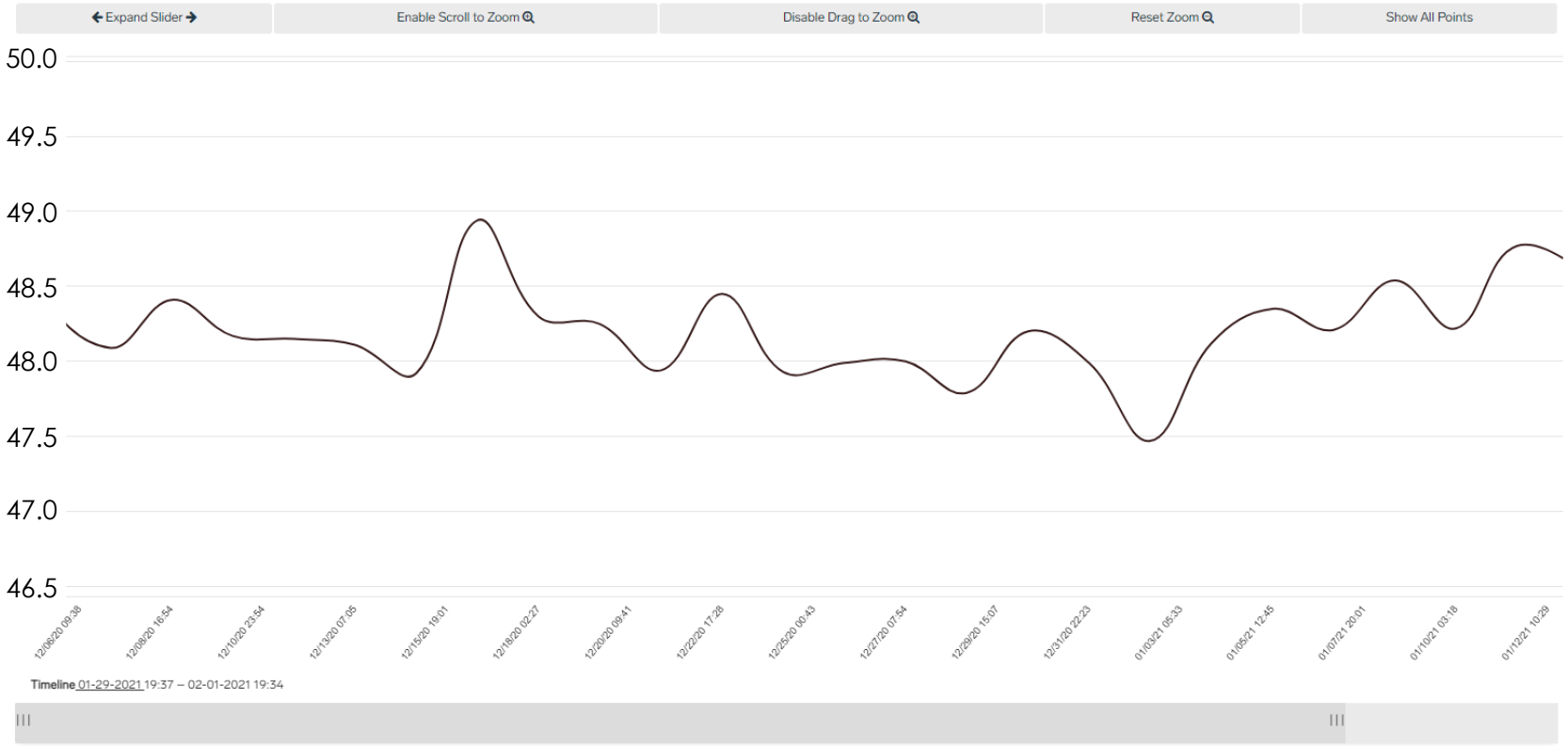
- Traditional cooling & dehu
- RH setpoint 57%
- RH is held between 51% - 61%



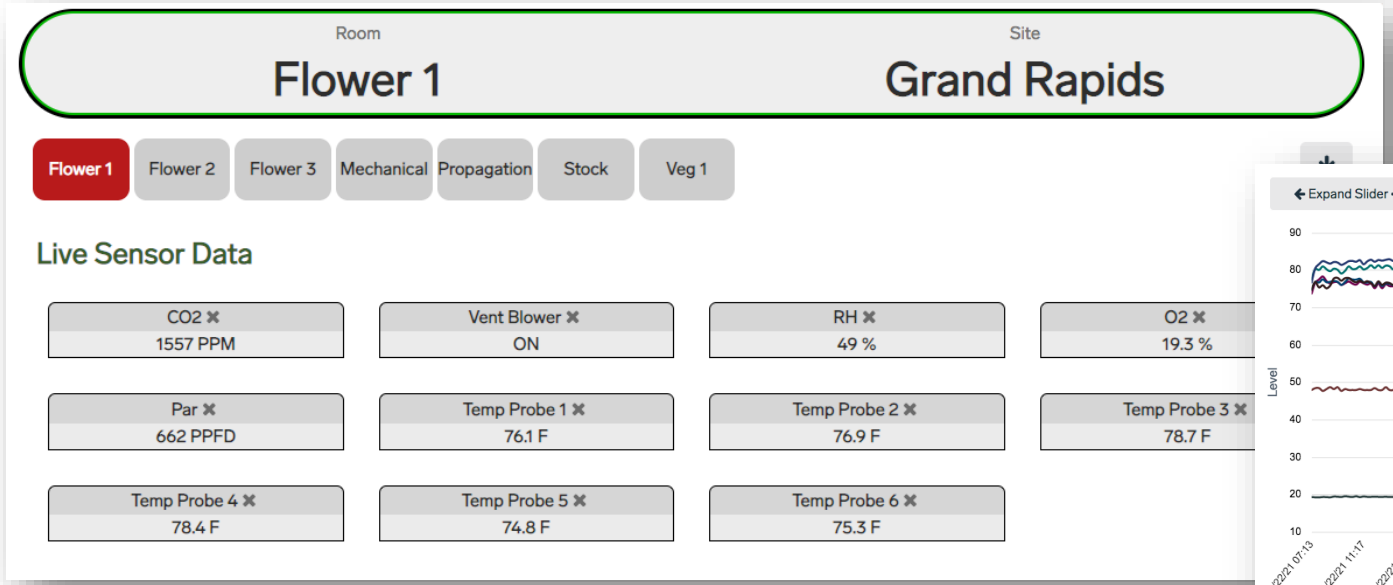
Control Parameters

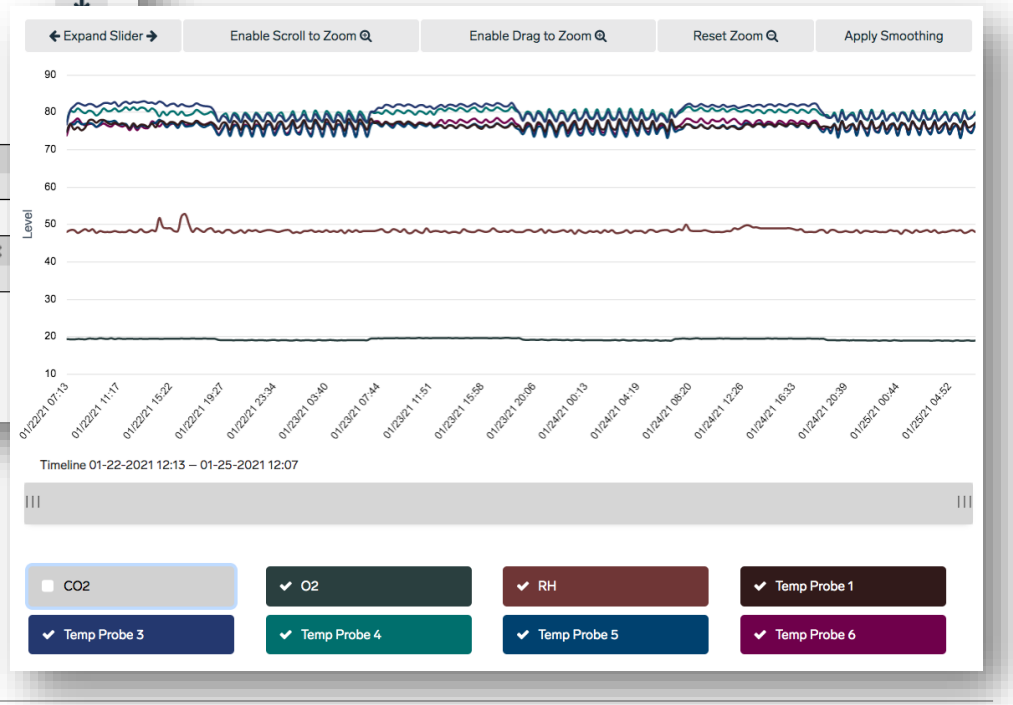
Temperature
Relative Humidity
CO_2
Lighting
PAR
VPD
Irrigation Timing
Automated Drying & Curing

- 2 Month Snapshot
- RH setpoint 48%
- RH is held between 47.5% - 48.5%
- The flower coming out of our rooms is exceptional



GC LiveView – Cloud Dashboard





Free demo of GC LiveView
https://app.growcontrolled.com/demo/

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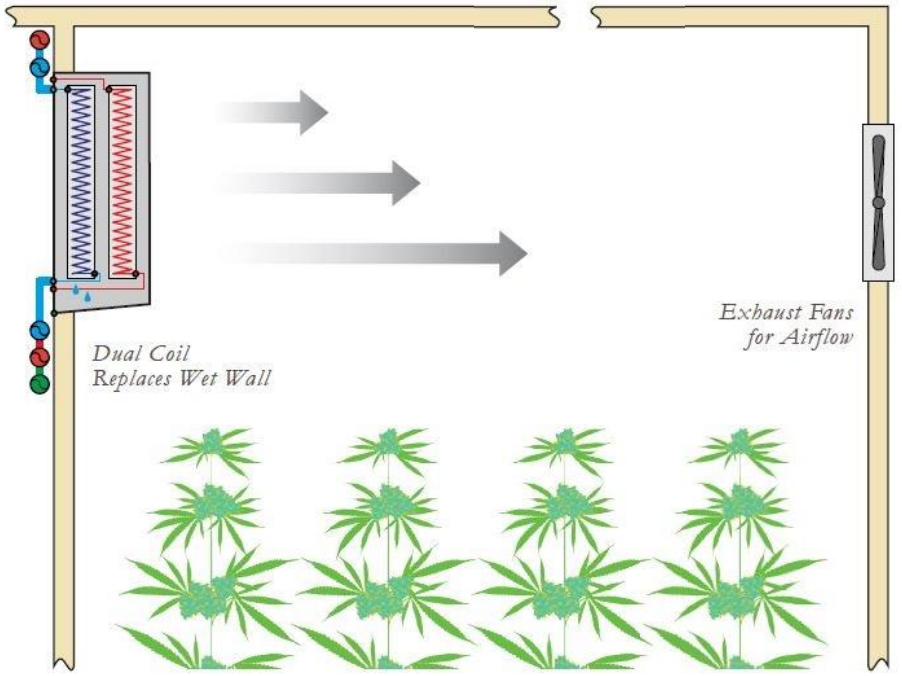
Greenhouse Controls

Greenhouse Controls



GREENHOUSE - SECTION VIEW

- Existing Louvres are Removed or Blocked
- Wet Wall is Removed
- New Set of Coil Packs replace Wet Wall

- Free Cooling Below 50°F
- Cooling Coil Creates Condensation
- Warm Coil Reheats Cool Air for Minimal Temp Change

Before

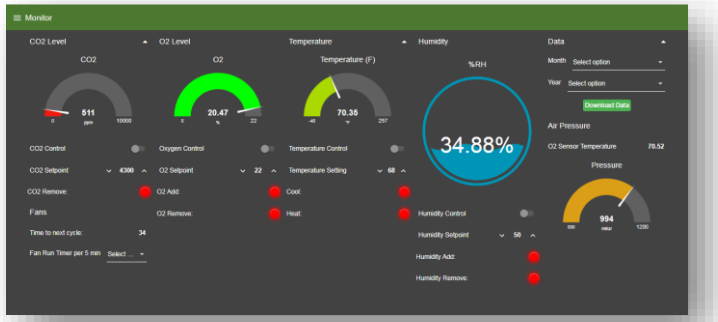
After

CurPod® SPACE SAVR

- Automatic Curing, Operation & Full Data Recording
- Self-Contained Control of Low O2 Atmosphere
- For Long Term Holding using N2 Gas
- Automatic Internal Sensors for O2, CO2, RH and Temperature
- Hydrate Dry Product
- Introduce Terpenes
- Standard Size for 18 RPCs (95 lbs)
- Cloud-Based Monitoring and Control
- Dashboard Showing Multiple CurPods

CurPod® MAX

- Automatic Curing, Operation & Full Data Recording
- Self-Contained Control of Low O2 Atmosphere
- For Long Term Holding using N2 Gas
- Automatic Internal Sensors for O2, CO2, RH and Temperature
- Hydrate Dry Product
- Introduce Terpenes
- Standard Size for 12 or 18 RPCs (65 or 95 lbs)
- Cloud-Based Monitoring and Control
- Dashboard Showing Multiple CurPods



CLOUD INTERFACE

GROW CONTROLLED, LLC

GC Pressure Atmosphere Grow Rooms

- Patent Pending
- Ability to simulate higher elevations with decreased oxygen levels
- Changing partial pressure on plants
- Allowing plants to breathe as easily as they do in the mountains
- Increased yield and consistency
- 14.3% O_2 = 10,000ft
- 10.1% O_2 = 19,000ft
- 6.9% O_2 = 29,000ft

ALTITUDE (ft)	ALTITUDE (m)	OXYGEN LEVEL (%)	BAROMETER (inHg)	SIMILAR LOCATION
SEA LEVEL	SEA LEVEL	20.9	29.9	STANDARD/BASE READING
1000	304	20.1	28.9	GC HEADQUARTERS
2000	609	19.4	27.8	
3000	914	18.6	26.8	CHAMONIX, FRANCE
4000	1219	17.9	25.8	SALT LAKE CITY, UTAH
5000	1524	17.3	24.9	BOULDER, COLORADO
6000	1828	16.6	24.0	STANLEY, IDAHO
7000	2133	16.0	23.1	FLAGSTAFF, ARIZONA
8000	2438	15.4	22.2	ASPEN, COLORADO
9000	2743	14.8	21.4	HUMBOLDT COUNTY, CALIFORNIA
10000	3048	14.3	20.6	LEADVILLE, COLORADO
11000	3352	13.7	19.8	CUSCO, PERU
12000	3657	13.2	19.0	LA PAZ, BOLIVIA
13000	3962	12.7	18.3	
14000	4267	12.3	17.6	PIKES PEAK, COLORADO
15000	4572	11.8	16.9	MOUNT RAINIER, WASHINGTON
16000	4876	11.4	16.2	
17000	5181	11.0	15.6	MOUNT EVEREST BASE CAMP, NEPAL
18000	5486	10.5	14.9	
19000	5791	10.1	14.3	MOUNT KILIMANJARO, TANZANIA
20000	6096	9.7	13.7	MOUNT DENALI, ALASKA
21000	6400	9.4	13.1	
22000	6705	9.0	12.6	
23000	7010	8.7	12.1	ACONCAGUA, ARGENTINA
24000	7315	8.4	11.6	
25000	7620	8.1	11.1	HINDU KUSH, PAKISTAN
26000	7924	7.8	10.6	
27000	8229	7.5	10.1	CHO OYU, TIBET
28000	8534	7.2	9.5	K2, PAKISTAN
29000	8839	6.9	8.9	MOUNT EVEREST, NEPAL

GCPA: In-House Grow Lab

- 4 Identical Experiment Chambers
- Controlling Temperature, Lights, RH, CO_2, O_2, and more
- 6 plants per room

GCPA: Cycle IV Experiment

- Genetic: 9lb Hammer
- 7 gal. grow bags
- Veg: 4 weeks
- Flower: 10 weeks
- 1200 ppm CO_2
- 21% O_2 vs. 14% O_2, all else held constant
  - Sea Level vs. 10,000ft simulated altitude

GCPA: Cycle IV Results

- 21% O_2 room:
  - 1158 grams dried & trimmed
- 14% O_2 room
  - 1371 grams dried & trimmed
- Increased yield of 18%

GC LiveView Demo

GC Showcase

growcontrolled.com

616.256.0420