

-fabricAir

COMPLETE AIR SOLUTIONS FOR GROW FACILITIES

— 50 Years of Innovation — 600+ Grow Facilities — Custom Engineered Products

smart air
solutions.





Precise air dispersion is essential for faster growth and higher yields

Indoor grow facilities are designed to create optimal conditions that mimic the best parts of nature. From germination to cultivation, air movement plays a vital role in growing healthy plants.

Educated growers know that precise air dispersion in each room can help grow healthier plants faster.

OUR SYSTEMS PROTECT YOUR CROP FROM:

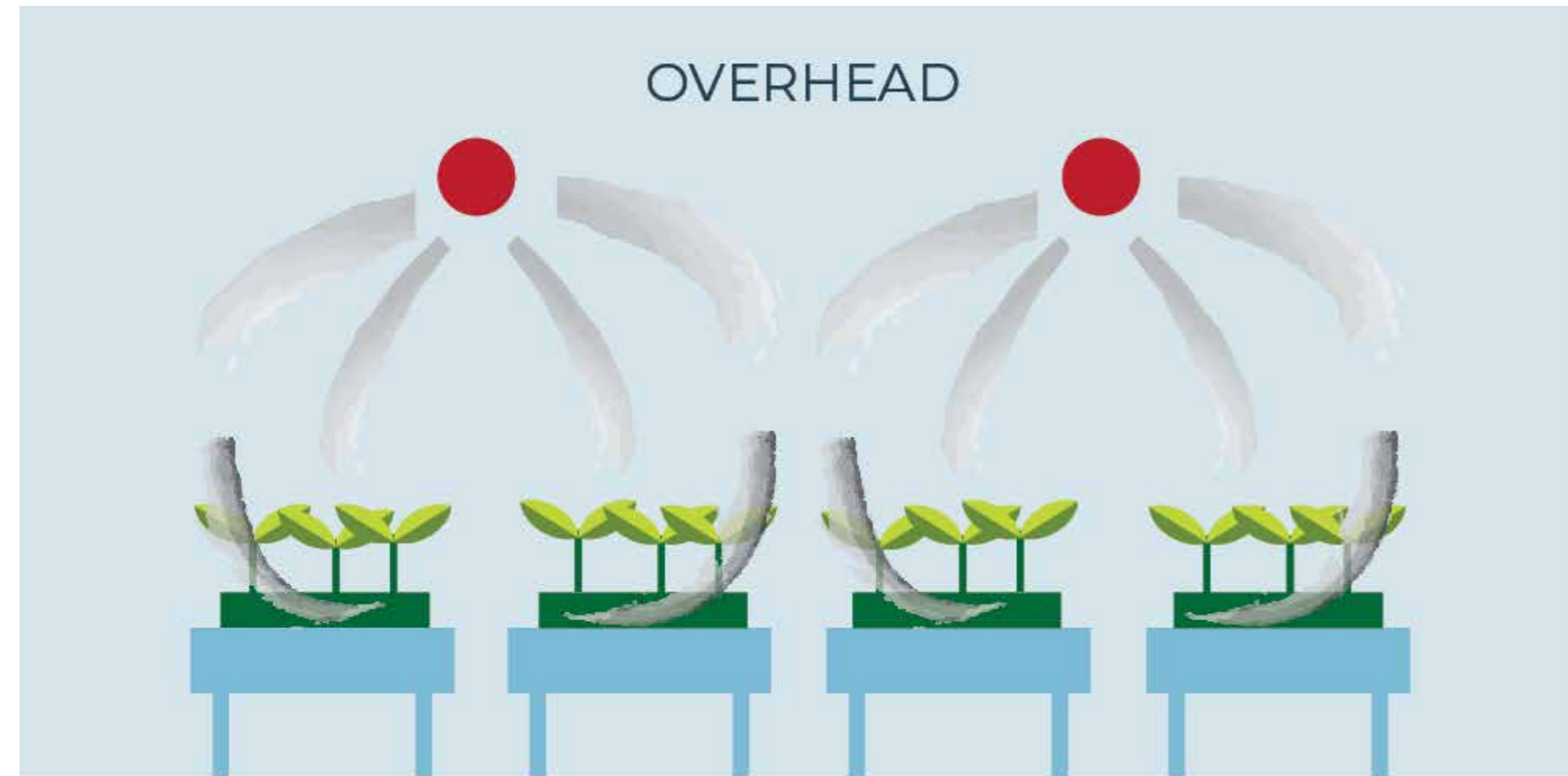
- ✗ Poor transpiration and gas exchange
- ✗ Unregulated Vapor Pressure Deficit (VPD)
- ✗ Heat stress
- ✗ Stagnant air and microclimates
- ✗ Uneven heat and humidity spikes leading to mold, mildew, or pests

FABRICAIR'S ENGINEERED AIR DELIVERY ENSURES:

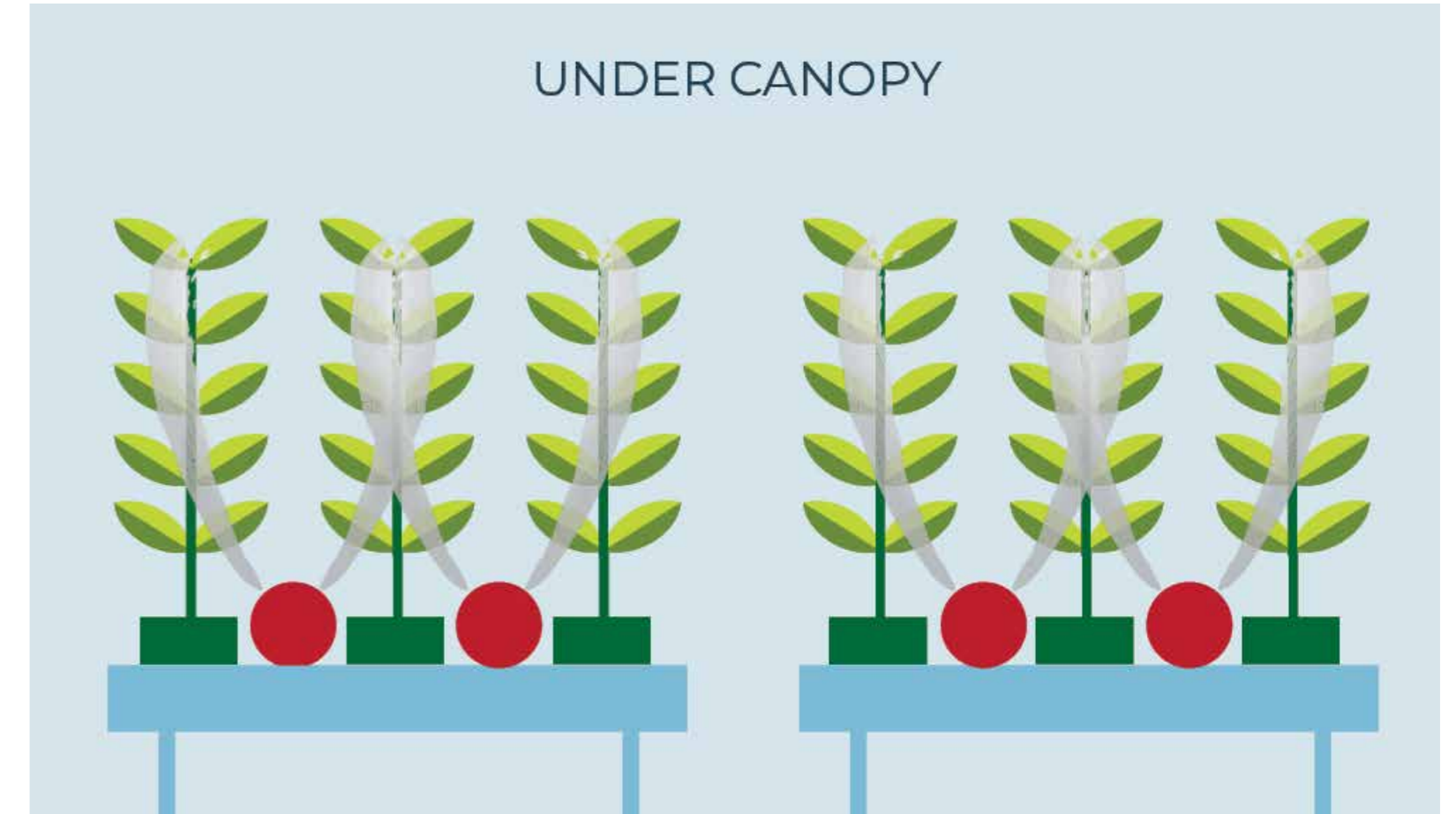
- ✓ Even air distribution
- ✓ No condensation
- ✓ No microclimates
- ✓ Hygienic air delivery
- ✓ Uniform growing conditions
- ✓ Maximum results with minimal energy usage

Proven airflow solutions for grow facilities

Controlling vital metrics like temperature, relative humidity, water, and light will yield a higher quality crop and prevent problems with mold and pests. Our air dispersion solutions offer the latest technology and are custom designed to fit your space.



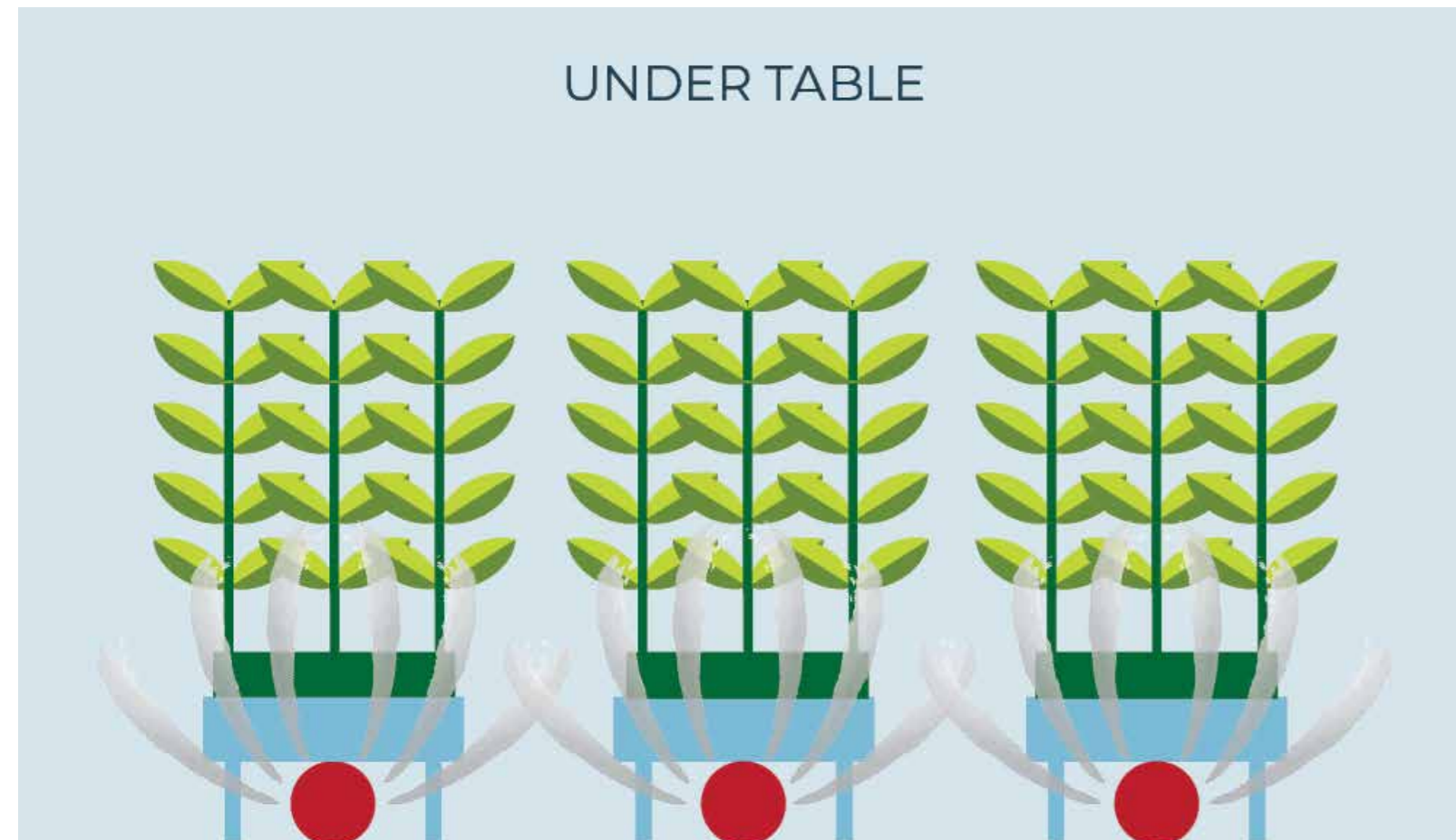
Overhead – Overhead fabric systems are the most commonly used air distribution solutions, ensuring that conditioned air is evenly distributed throughout the room. FabricAir systems provide excellent mixing and are engineered to evenly disperse air from the ceiling to the plants. Overhead air distribution is applicable in both single and multi-tiered grow rooms, as well as greenhouses, tissue culture labs, dry/cure and packaging rooms. Overhead air is often combined with ambient air delivery systems such as Rack Flow, under canopy, and drying systems.



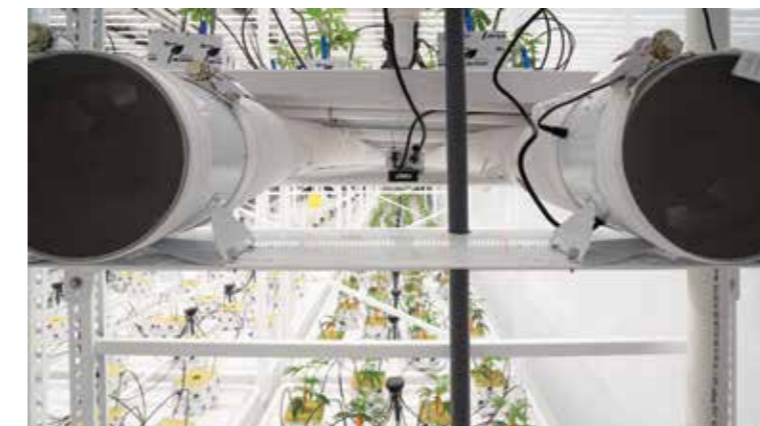
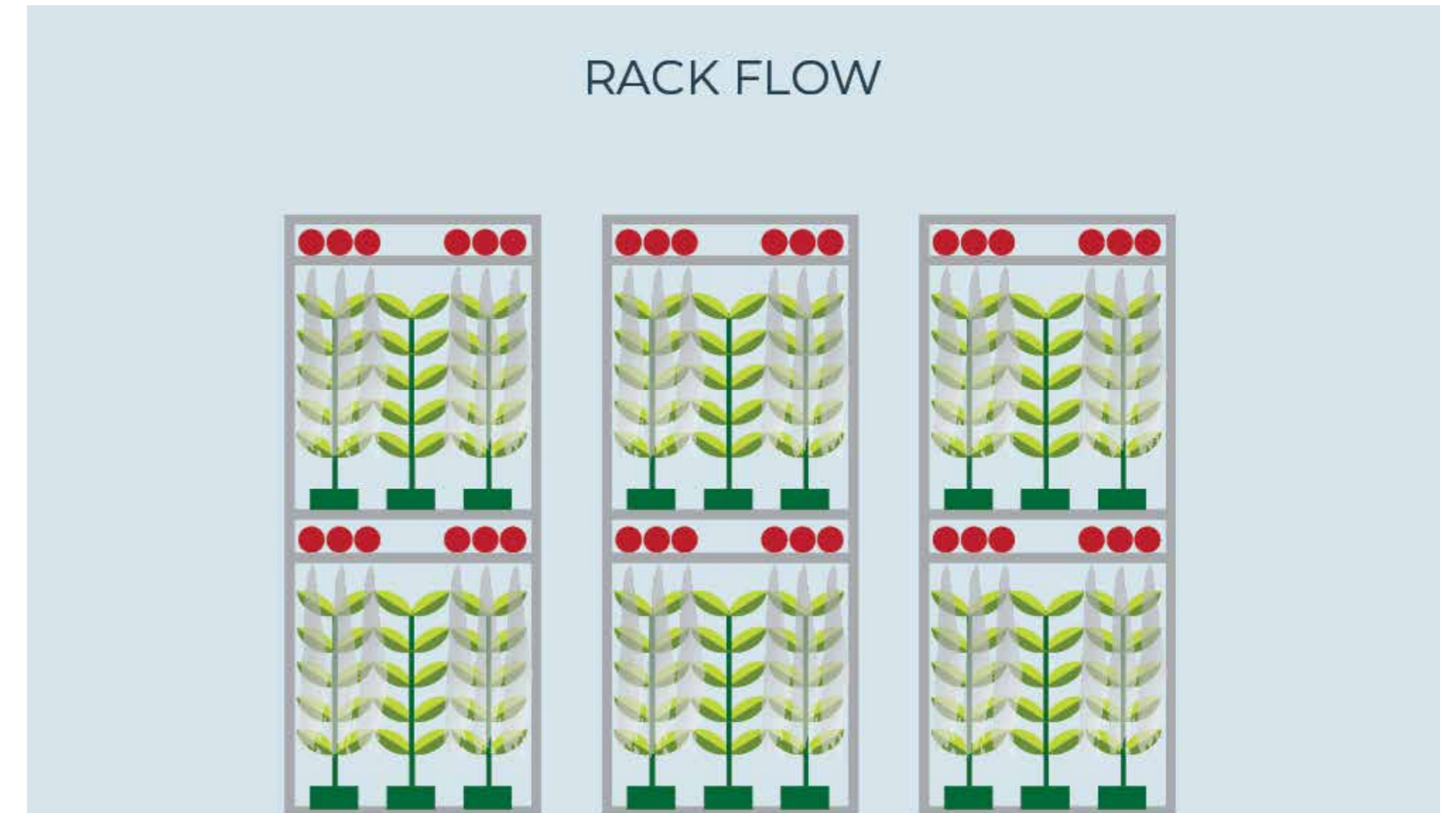
Under canopy – Under canopy ductwork provides conditioned ambient airflow evenly along the length of tables or racks to dissipate heat and humidity. Air is pushed up through the plant canopy, displacing warm, humid air to create favorable, uniform growing conditions. Ducts and fans can also be custom engineered for mounting in drying racks to increase efficiency.

Air circulation is the key to success

Combined with your existing HVAC supply unit, our custom designed systems ensure an even distribution of air at precise velocities and a balanced mixture of airflow. Ambient air distribution helps eliminate microclimates and enables vital gas exchange.



Under table – Under table ventilation effectively distributes conditioned, CO₂ rich air to the plant canopy while taking advantage of the buoyancy of the warm air it is displacing. This technique is commonly used in greenhouses with stationary tables where the air is directed up and through the tables.



Rack Flow – Rack Flow provides proper airflow for multi-tier facilities. The system moves conditioned ambient air evenly along the length of multi-tier racks down through the plant canopy to displace warm humid air. Rack Flow delivers air through the light grid to the canopy to eliminate microclimates and enable vital gas exchange. The custom-designed systems can mount to any rack system.

Custom engineered air dispersion to help you maintain optimal conditions for each stage of growth



Even air distribution

Air is distributed at the specified velocity throughout the grow space with customized hole patterns to suit the needs of the space.



No microclimates

Eliminate hot spots and humidity spikes and create uniformity throughout the canopy by dispersing fresh, conditioned air where it is needed most.



No condensation

Fabric ducts are permeable and don't sweat, eliminating the possibility of corrosion and rust. Condensation on metal duct can contain heavy metals that can harm the plants and contaminate the product.



Hygienic

Fabric ducts are easy to launder and sanitize to ensure safe and hygienic air delivery. Clean ducts provide clean air that helps grow strong, healthy plants.

ADDITIONAL BENEFITS OF FABRIC SYSTEMS:

- Easily configured to fit the needs of the space
- Simple and affordable installation
- Lower costs for maintenance versus metal
- Light weight material ensures minimal load on structures
- Low pressure drop – significantly lowers energy consumption
- Virtually noiseless operation
- Fast lead times: 2-4 weeks standard

“Cleaning metal duct is difficult while in place and taking them down would require the added costs of a contractor with the correct equipment. Laundering the fabric duct is easy and creates a more sterile environment.”

TOM BELLER, REAL LEAF SOLUTIONS' CO-OWNER
AND CHIEF OPERATIONS OFFICER



HIGH TECH FABRIC DESIGNED FOR AIRFLOW

Not all fabrics are the same. FabricAir textiles are engineered and manufactured to strict standards that present important benefits for grow facilities. Our experts will help you determine which fabrics will be best for your facility to ensure the highest level of performance.

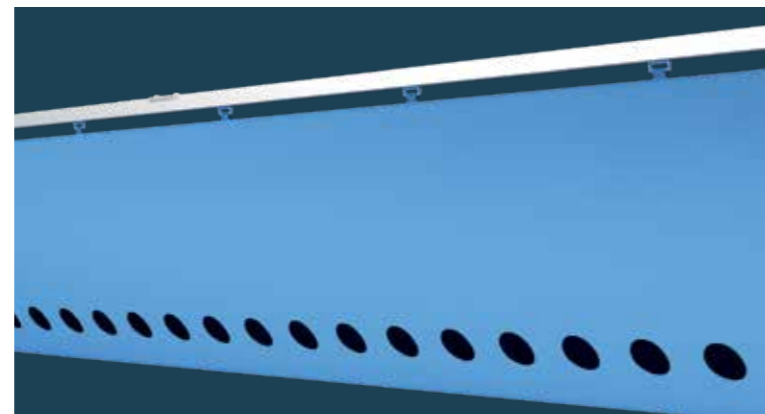
- **Antimicrobial finishes** prevent the development of harmful bacteria that could damage plants and inhibit growth.
- **Cleaning and sanitizing** is easy! Ducts are machine washable ensuring that the airflow is hygienic and free of debris.
- **UL and clean room certified** fabrics to meet the highest standards
- **Our fabrics will never shrink or shed**, providing years of dependable service. (5 and 10 year warranties available)



CUSTOMIZED AIRFLOW FOR YOUR SPACE

FabricAir optimizes the airflow patterns by utilizing relevant flow models for peak performance. Our laser cut perforations provide an endless array of distribution options to meet your precise needs.

- **Surface flow models** are ideal for creating gentle air movement. When dispersed from above, the airflow efficiently mixes the hot air for an even temperature gradient. When dispersed from below, the heat from light fixtures or sunlight is displaced.
- **Directional flow models** provide excellent mixing and are highly effective in creating controlled velocity in confined spaces. Our design staff can create optimal air delivery solutions, even from high elevations using OriFlow, NozzFlow, or JetFlow.
- FabricAir can **combine different flow models** to deliver precise air velocity for an effective and efficient design.



TIGHT SPACES? NO PROBLEM!

Fabric duct can go virtually anywhere with our versatile suspension systems.

We can meet any installation challenge utilizing cables or rails for large or small diameter ducts.

Our stainless steel suspension systems are the optimal choice for humid environments where condensation could otherwise lead to corrosion.

And, installation is easy with a few simple tools!



Rectangular duct between open web joist in an Ohio grow facility.

RACK: HIGH OUTPUT, LOW ENERGY CONSUMPTION

Rack Flow systems disperse dry conditioned air to penetrate even the thickest plant canopies using our **Rack Fans**.

The ETL and Energy Star-certified Rack Fan is built with a new generation variable speed EC motor that generates powerful, high-pressure airflow while saving energy.

This efficient solution provides more air volume to the plant canopy per watt consumed than any other system on the market. Rack Flow fans also integrate with automated control systems (0-10V or PWM controls) to maximize efficiency and deliver air as needed throughout the grow cycle.

The system can be mounted on any manufacturer's rack system and is designed to penetrate all lighting grids to ensure the airflow reaches the canopy at the desired velocity.



FabricAir

Innovating the HVAC industry since 1973

Expertise matters

FabricAir offers complete air dispersion systems for grow facilities. Our solutions and our team are unequalled for creating ideal air circulation in any space. We understand the needs of plants, growers, and facility owners.

- 50 years of innovating the HVAC industry
- 600+ custom-engineered grow facility installations
- Team of expert engineers

COMPLETE AIR SOLUTIONS FOR EVERY STAGE OF THE GROWING CYCLE TO ENSURE:

- Even air distribution
- No condensation
- No microclimates
- Hygienic air delivery

smart air
solutions.

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