



Airtho Solutions
Creating the Environment for Success



About Us

- Founded in 2018
- Airtho specializes in modular, pre-engineered kits for controlled environments
- Full turnkey solutions utilizing a mixture of our proprietary, market specific products and off-the-shelf components
- Co-located with the University of New Hampshire's John Olson Advanced Manufacturing Center



Our Mission

Design and supply controlled environments that create the environment for success. Create and implement pre-engineered products and kits for the FASTEST, MOST EFFICIENT and HIGH QUALITY project execution.



Our Specialty

Design, engineer, source and supply complete controlled environment solutions. Expertise in advanced cleanliness and humidity control. Applications including lithium-ion battery dry rooms, composite testing, electronic assemblies and glass production.



Battery Dry Room Kits

- Modular, pre-engineered components and assemblies provide QUALITY, SPEED & FLEXIBILITY
- Optimized HVAC designs and products for ENERGY EFFICIENCY
- Superior products for aesthetic designs creates a GREAT ENVIRONMENT TO WORK IN
- Proprietary building materials and methods for near 0 leakage rooms
- Highly configurable and scalable



Battery Solutions

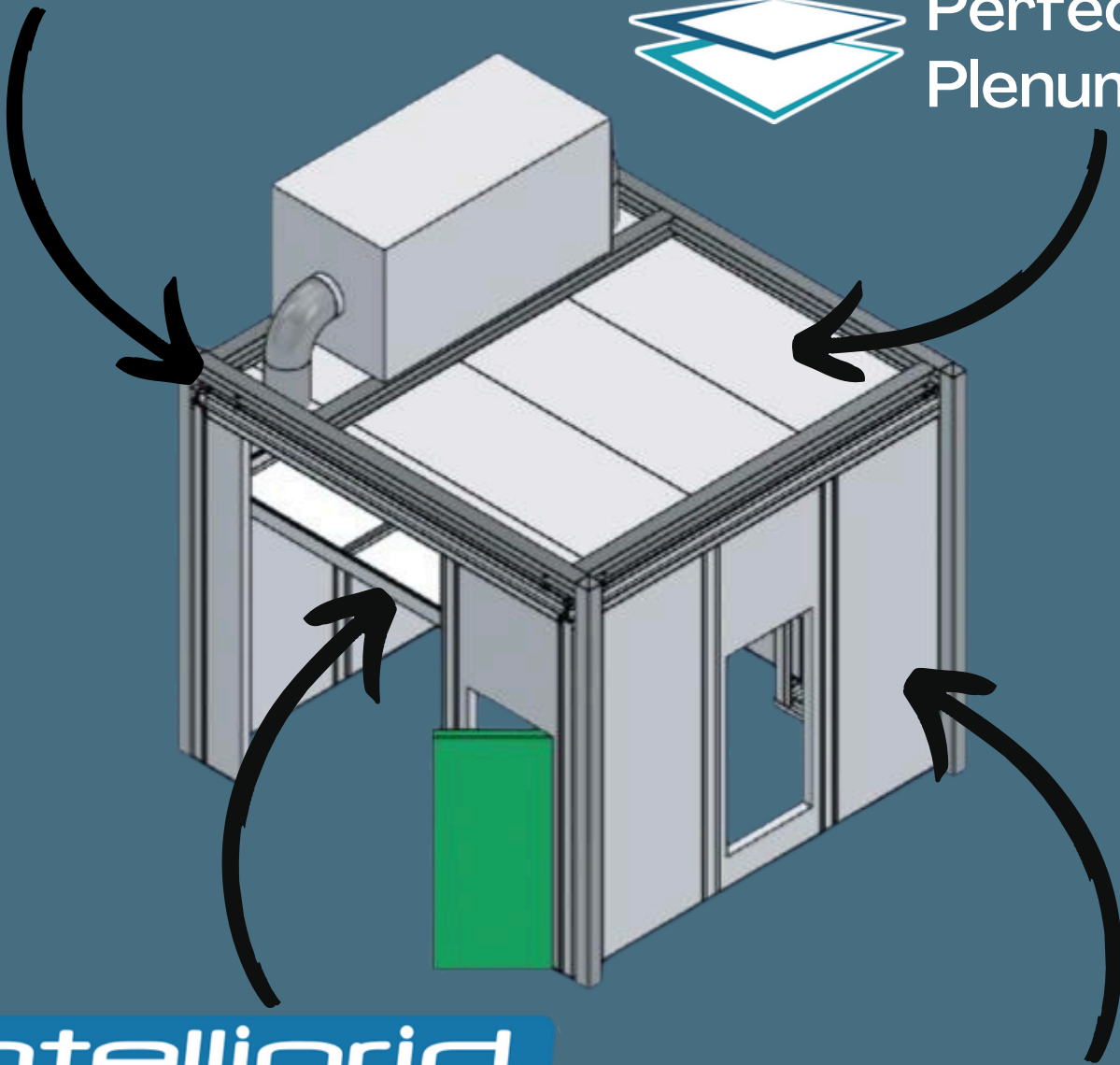
- REDUCE DESIGN DEVELOPMENT TIME
 - Provide initial models and utility requirements in DAYS, NOT MONTHS
 - Flexible design development process
- Systems designed for QUALITY ASSURANCE AND PERFORMANCE
- -10 to -70 C Dewpoint solutions available
- Fully pre-engineered solutions for -40 C dewpoint



AIRTHO DRY ROOM ARCHITECTURAL PACKAGE



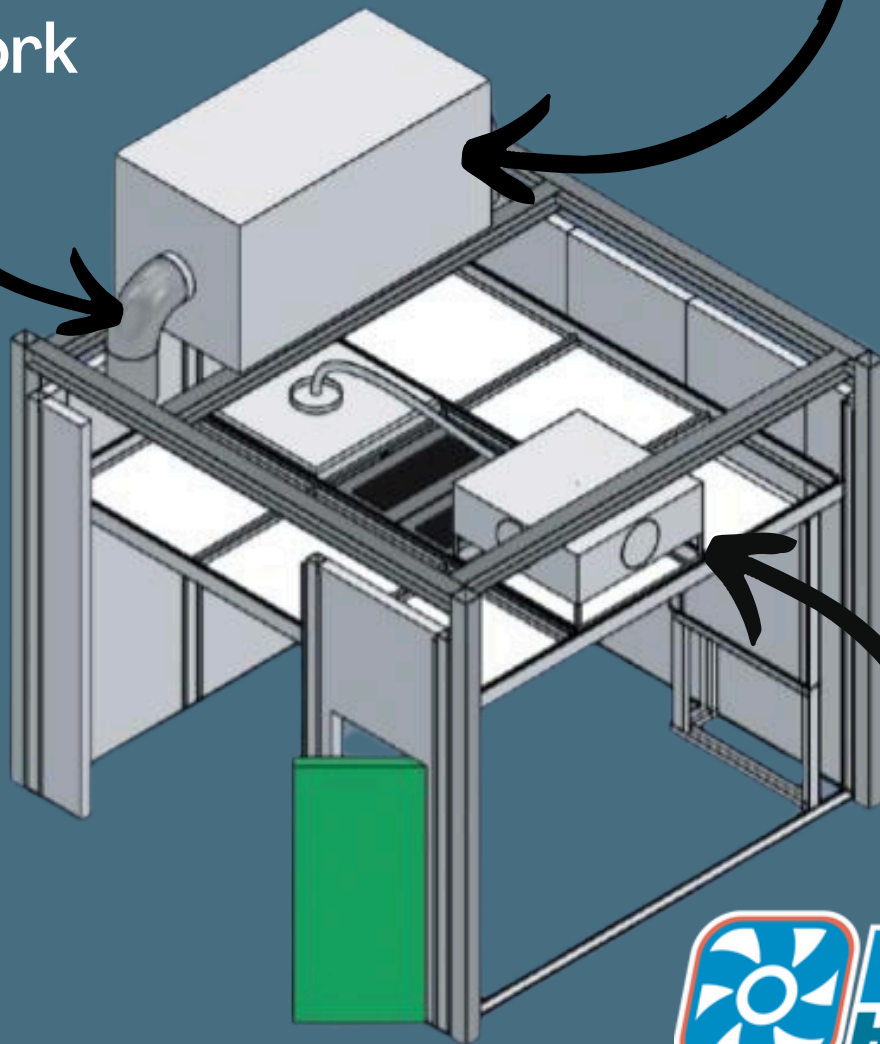
Perfect
Plenum Cap



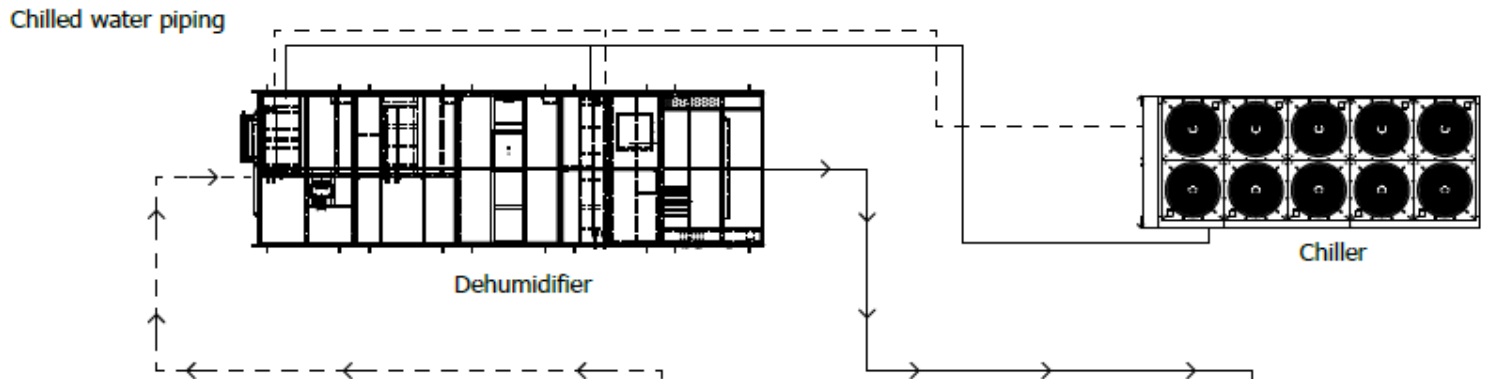
AIRTHO DRY ROOM HVAC PACKAGE

Prefabricated
Leak-Free
Ductwork

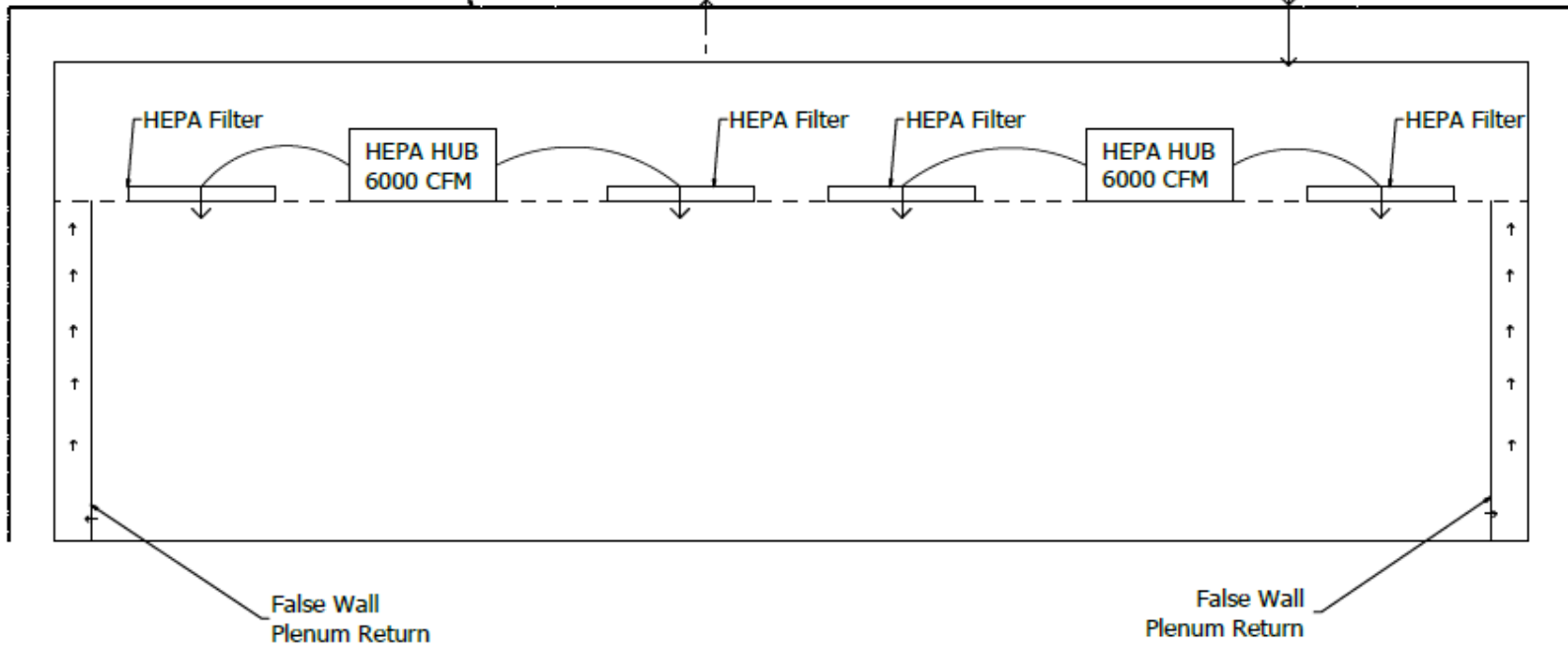
(DHU) Desiccant
Dehumidifier Make
Up Air System



Air Flow Diagram

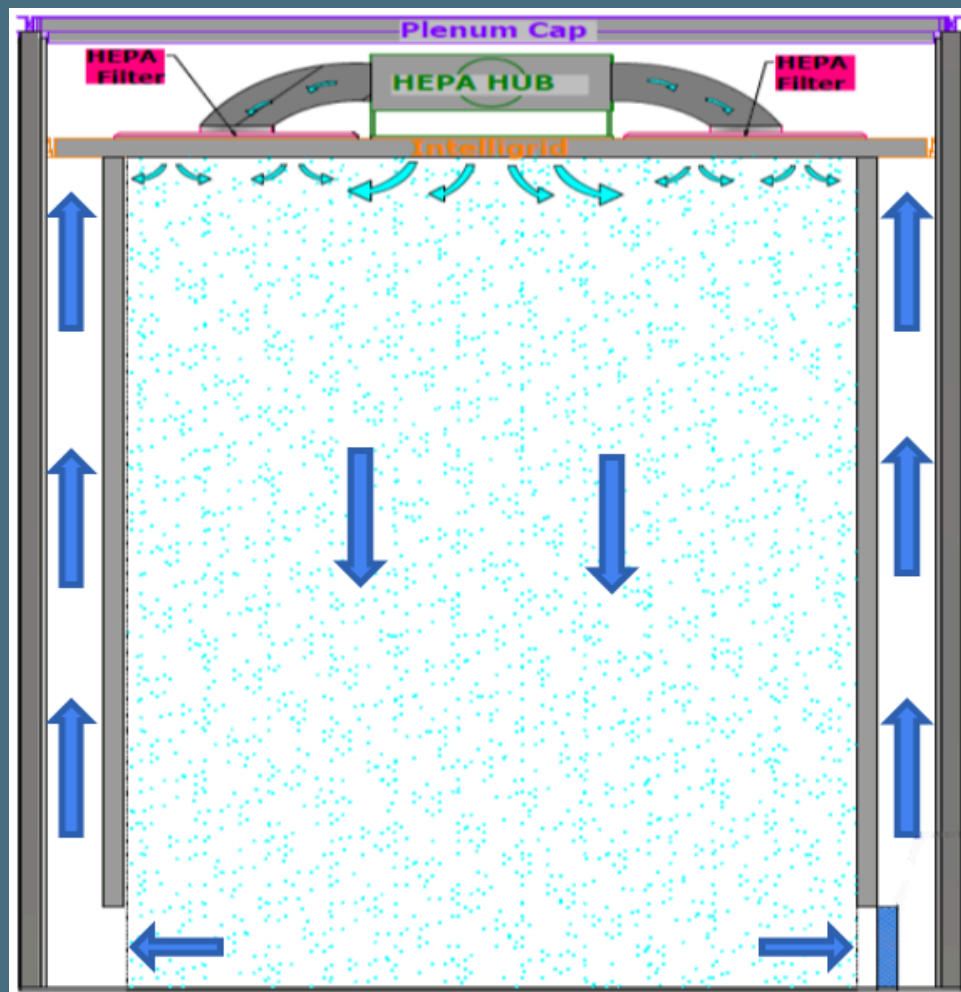


Super Steel Support Structure



OPTOMIZED AIR FLOW SYSTEMS

- Ceiling mounted HEPA filters
- Open plenum
 - Add/Subtract/Move HEPA supply locations
- Low wall returns
 - Sensible cooling via chilled water & DX systems





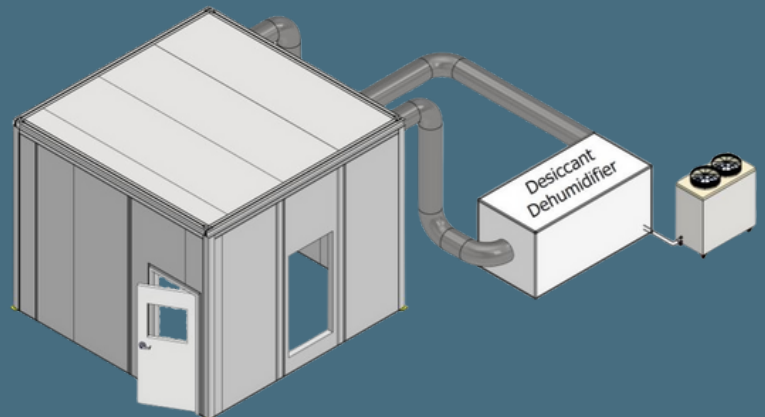
Desiccant Dehumidifier Make Up Air System (DHU)

WHAT IS IT?

Specialty make up air unit utilizing desiccant rotor technology to create ultra dry air.

WHAT MAKES IT SPECIAL?

- Designed and specified by Airtho for optimized system performance
 - Reduces CFM requirements up to 70%
 - Maximizes unit and system energy efficiency
- Total system integration
 - Controls
 - Cooling system
 - Ductwork







WHAT IS IT?

Fan filter system featuring the highest energy efficiency of any HEPA filtration system available. Made in the USA.

HEPA Hub Energy Savings Case Study

CASE STUDY #1 IM3NY

Size: 55,000sqft

HEPA Air Flow: 300,000 CFM

Standard FFU*

Of fans: **400**
Of filters: **400**

Total power consumption: **168 kW**

Total Savings with HEPA Hub HD

150 fewer installation items
350 fewer wiring items
621,960 kWh per year
\$106,160 per year**

HEPA Hub HD™

Of fans: **50**
Of filters: **200**

Total power consumption: **97 kW**

CASE STUDY #2 PROJECT NAME WITHHELD

Size: 1,250sqft

HEPA Air Flow: 12,000 CFM

Standard FFU*

Of fans: **16**
Of filters: **16**

Total power consumption: **6.7 kW**

Total Savings with HEPA Hub HD

6 fewer installation items
14 fewer wiring items
24,528 kWh per year
\$3,107 per year**

HEPA Hub HD™

Of fans: **2**
Of filters: **8**

Total power consumption: **3.9 kW**

*Based on Terra Universal Whisper Flow FFU 6601-24-H

**Avg. cost per kWh in 2022, as reported by the U.S. Energy Information Administration



K-3
48-1

J-3
48-1

K-4
48-1

J-4
48-1

MADE IN
USA
GMP
100%
Satisfaction
Guaranteed
Call Us
800-850-8500

Prefabricated Leak-Free Ductwork

WHAT IS IT?

Quick-connect modular ductwork.

WHAT MAKES IT SPECIAL?

- Industrial quality tubing system
- All custom fittings, parts and hardware included
- Welded seams
- EPDM gaskets and perfect torque clamping system ensure a perfect seal without adhesives
- Made in the USA



Airtho
www.airtho.com



SuperSTEEL

WHAT IS IT?

Purpose-built structural support systems that directly incorporate room, HVAC and other loads.

WHAT MAKES IT SPECIAL?

- Eliminates hanging loads from building
- Integrated connections for architectural and HVAC components
- Utilizes valuable building space
- Saves MEP and rigging costs
- Made in the USA





PERFECT PLENUMTM

WHAT IS IT?

Airtho's proprietary Perfect Plenum grid combines with interlocking Insulated Metal Panels (IMP) to create an air and moisture tight plenum cap with integrated channels for hanging drop ceiling and process MEP.

WHAT MAKES IT SPECIAL?

- Directly integrates with wall for perfect seal and alignment
- Walkable for equipment service
- Highly modular and configurable
- Class 1 flame spread and Class A smoke rating
- Made in the USA

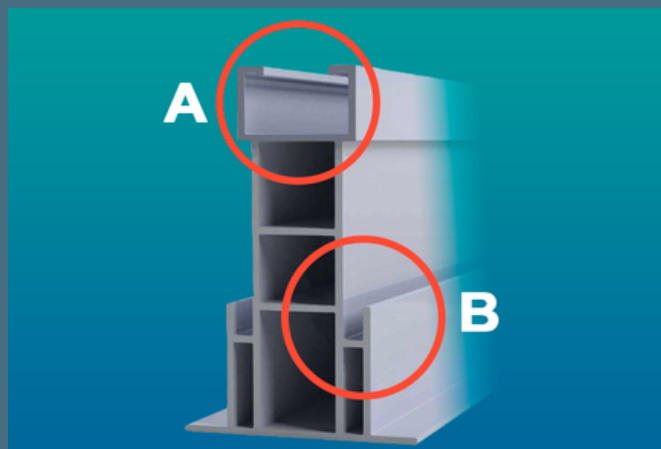


WHAT IS IT?

Airtho's Intelligrid ceiling system uses high strength extruded aluminum for Light Duty and Heavy Duty walkable options.

WHAT MAKES IT SPECIAL?

- Radically reduces design and installation times
- Eliminates/reduces hangers and unistrut
- Airtho standard 4' x 4' grid layout
 - Allows for access via scissor lift
 - Reduces number of parts by 50%
- A: Hangers mount anywhere on mains
- B: Cross T's mount anywhere on mains
- Made in the USA







WHAT IS IT?

Integrated modular components for non load bearing wall applications.

WHAT MAKES IT SPECIAL?

- Head track integrated into plenum cap
- Flush dual pane windows
- Removable sections, power posts and more
- Made in the USA





CREATING THE
ENVIRONMENT FOR
SUCCESS

