



R&D FACILITY DRY ROOM

Fully Pre-Engineered Kit Case Study

Montreal, Canada

TIMELINE: 6 MONTHS

SIZE: 1,875 SQUARE FEET

SPECIAL FEATURES

ARCHITECTURE

-

25'x75' kit with  **SuperSTEEL**, internal airlock, and material pass-through.

HVAC SYSTEM

-

7000 CFM desiccant dehumidifier with high efficiency terminal HEPA filters and low wall returns
40C DEWPOINT WITH 8 OCCUPANTS
ISO 7 CLEANLINESS



TIMELINE

Materials onsite to start critical construction in less than 3 months.

JUNE 2021 - ORDER CONFIRMED

DECEMBER 2021 - ROOM CONSTRUCTED

JANUARY 2022 - FINAL HANDOVER



ENERGY EFFICIENT

Locating the DHU directly on the room, created an efficient ductwork design and ultra high-efficiency terminal.

Paired with high-efficiency terminal HEPA filters, created a system with only 2.5" total static pressure.



CLEAN

The pre-engineered kit includes Airtho  with 8 inch large windows and  ceiling system with bright white AL blanks and LED lighting for a welcoming working environment.



PROVEN DESIGN

Airtho's fully pre-engineered dryroom kit produced a 1,875 sqft space with design submittals completed in 2 weeks and \$0 of change orders. This R&D room facilitated the planned development of an all new production gigafactory in the US.

PROJECT HIGHLIGHTS

RAPID DESIGN

Airtho rapid design created a full submittal package in 2 weeks and allowed delivery of critical room components within 3 months from the purchase order.

INFRASTRUCTURE

SuperSTEEL supported the critical loads of Airtho's dry room package without any required upgrades to the base building.

Located in a mixed-use facility, Airtho aligned access to the walkable plenum cap directly from the existing second-floor offices for ease of access.

CUSTOMIZATION

The client maximized speed and cost efficiency by using a fully pre-engineered kit without customization.

SOLUTIONS

Airtho's kit solution allowed for highly efficient cross-border production, utilizing local contractors for installation, critical during Covid restrictions.



To learn more about kit sizing or to receive a quote specific to your project needs, respond here or give us a call at 603-257-0002.