

FREEZER ROOMS



Darwin Chambers Company Freezer Rooms are designed for maximum reliability, efficiency, and stability. Our standard freezers will accommodate a -20°C set-point with a control tolerance $\pm 0.5^{\circ}\text{C}$, or better. Many are custom-engineered for a wide variety of applications, including freeze-thaw test regimens in accordance with ASTM C666, GMP stability storage from 4°C to -30°C , wide-range test material test chambers, and mortuary/cadaver storage freezers. Our freezer rooms are typically supplied with desiccant or refrigeration-based dehumidification in order to maintain a low dew-point and prevent ice accumulation on both product and equipment surfaces.

Benefits

- Tight temperature control for reliability and accuracy.
- Tight temperature uniformity of $\pm 0.5^{\circ}\text{C}$ or better throughout the room.
- Work with any space constraints, flexible custom applications.
- Redundancy options that allow uninterrupted operation for critical applications.
- ADA compliance available with no additional cost to the customer.
- Simple, easy-to-use, easy-to-service control systems.
- Smooth ceiling, aluminum or steel, for optimal performance over competitors who use egg crate ceiling. Egg crate ceilings promote mold growth, difficult to service equipment, difficult to clean, and interfere with lighting and airflow.

Standard Features

- 4" to 6" Polyurethane Foam Insulated Panels, R- Value 31+ or Higher
- Embossed White Aluminum Interior Surface Finish
- Embossed White Galvanized Steel Exterior Surface Finish
- Exceptional Temperature Uniformity
- Temperature Control At Sensor / Set-Point: $\pm 0.2^{\circ}\text{C}$
- High / Low Alarms
- Flexible Configurations
- Complies With LEED Standards
- Incandescent Lighting
- Energy Efficient Offering Lowered Maintenance Costs
- Pre-tested, Pre-charged Refrigeration Systems
- Non-proprietary Controls
- Corrosive Resistant Equipment
- Precision Sizing
- Diurnal Cycling Temperature

Optional Features

- Added Dehumidification
- Ethernet / Remote Monitoring / Alarming
- Unlimited Door / View Window Sizing
- Stainless Steel / Special Surfaces
- Corrosive Resistant Equipment
- Added Redundancy in Controls and/or Conditioning system
- Data Logging
- Custom Lighting Systems
- High Density Shelving
- Insulated Glass View ports
- High Weight Capacity Flooring
- Calibration / Validation / Maintenance Services
- Touchscreen Control Interface
- Back-Up Control and/or Conditioning
- Water-Cooled or Air-Cooled Condensers
- Can Accommodate Rapid Cycling

The Darwin Advantage

All installed instrumentation is calibrated to NIST traceable standards and provided with a calibration form. In-house, factory calibrations are performed using state-of-the-art equipment with great accuracies. These reports are three-point verifications, traceable calibration documents.