

Arrival of Your Chamber

Before your chamber arrives, please refer to your order acknowledgment for the specific utility requirements. Ensure that all necessary utilities—typically including condensate drainage, electricity, water, and air—are installed and functional prior to delivery.

1) Electrical Supply

Electrical requirements vary by chamber model. Please refer to the **Specification Sheet** included with your order for the exact electrical configuration required for your unit.

Always verify your chamber's electrical needs before installation to ensure proper setup and safe operation.

2) Water Supply (If Equipped with Humidifier)

Must be connected to a non-softened water supply with:

- Conductivity: 0.1–10 μ S
- TDS: <10 ppm
- Pressure: 1–10 PSI

Connection: ¼" OD polyethylene tubing with a quick-connect fitting (included).

If water quality is unknown, send a sample to Darwin Chambers for testing (fees may apply).

Alternative Option: A 5-gallon carboy can be used if no suitable water supply is available. It must be placed on a sturdy shelf above the chamber (never directly on the chamber) to allow gravity-fed flow.

3) Facility-Supplied Compressed Dry Air

Basic Requirement: Compressor with 100–150 PSI capacity, regulated to 70 PSI.

Recommended: Compressor with a large storage tank to reduce cycling.

Air Quality:

- - Dew point: $\leq -40^{\circ}\text{C}$ (application-dependent)
- - Moisture and debris must be removed using a dryer and multistage filter.

Connection: ¼" OD polyethylene tubing.

Flow Rate:

- - Single chamber: Max 3.3 SCFM at 70–90 PSI
- - For multiple chambers: Required SCFM = $3.3 \times \text{Number of Chambers} \times 1.5$

Note: Compressed air tanks are not suitable for long-term use. Undersized compressors may lead to increased wear and longer recovery times.

4) Drainage

Each chamber includes a ½" ID, ⅝" OD drain tube (3 feet long).

Install chamber level and near a floor drain for proper condensate removal.

If no floor drain is available, a low-profile condensate pump (available from Darwin) may be required. It uses ⅜" ID polyethylene tubing.

If installation services are scheduled, notify Darwin in advance if a drain or pump is unavailable.

Shipping and Installation Requirements

Crate Dimensions: 91" high × 44" deep.

Handling Equipment: Pallet jack and/or forklift recommended for 2- and 3-door chambers.

Uncrating Tools: 6-foot step ladder, ¾" socket with ratchet, and electric drill with Phillips bit.

Clearance Requirements:

- - Minimum doorway clearance: 81" height (including hardware).
- - Ambient clearance: 12" above, 6" on all sides.
- - Internal clearance: 2" on all sides, 4" from interior ceiling.

Important Notes

Operations Manual: Review the manual before powering the chamber. It is included on a flash drive in the documentation packet (manila envelope).

Condensing Units: For all KB, DB, ST, FS, FZ, LT, TH, AR, MJ, PG, INR, and MC models, the chamber must remain upright for at least 24 hours before applying power to ensure proper operation.