

EQUIPMENT INFORMATION SHEET / TECHNICAL SPECIFICATION

Box4Grow – 40ft Low-Temperature Drying Container Technical Specification

A preliminary technical specification for a 40 ft modular drying environment with insulated interior fit-out, rack-based drying capacity, ducted cooling, humidity management, app-capable controls where supported, and a provisional US electrical basis.

SYSTEM CLASS

LOW-TEMPERATURE DRYING CONTAINER

40 ft modular equipment information sheet

STATUS

PRELIMINARY

Technical basis only.

Final configuration is subject to engineering and approved submittals.

DESIGN BASIS

This sheet organizes the stated equipment information into a Box4Grow technical format. It is an equipment information sheet, not a purchase document or fabrication release. Values identified as approximate remain subject to final engineering, site conditions, code review, and approved submittals.

1. System Overview

The system is a modular, insulated enclosure intended for controlled low-temperature drying using a dedicated rack system, ducted air conditioning, environmental controls, and standalone dehumidification.

System type	40 ft modular low-temperature drying container.
Primary function	Controlled drying environment with rack-based interior layout and temperature / humidity management.
Standard equipment basis	Container shell, insulated interior fit-out, stainless-steel floor, electrically operated double door, 18 drying racks, ducted 5-ton air-conditioning system, environmental controls, app-capable control interface where supported, and one professional cultivation dehumidifier.
Design status	Preliminary technical specification. Final arrangement, performance, utilities, controls, and code requirements require confirmation before release for fabrication.

2. Dimensional Basis

EXTERNAL ENVELOPE / APPROX.

39 ft 11 in × 8 ft × 9 ft 6 in

Length × width × height
 12.17 m × 2.44 m × 2.89 m

INTERNAL ENVELOPE / APPROX.

38 ft 1 in × 7 ft 6 in × 8 ft 4 in

Length × width × height
 11.6 m × 2.28 m × 2.53 m

External dimensions	Approximately 39 ft 11 in L × 8 ft W × 9 ft 6 in H (12.17 m × 2.44 m × 2.89 m).
Internal dimensions	Approximately 38 ft 1 in L × 7 ft 6 in W × 8 ft 4 in H (11.6 m × 2.28 m × 2.53 m).
Access	Electrically operated double door. Final clear opening, swing / travel, hardware, and access clearances to be confirmed during engineering.

BOX4GROW / 40FT LOW-TEMPERATURE DRYING CONTAINER

TECHNICAL BASIS / INTERIOR

3. Interior Construction and Finishes

The interior fit-out is based on a cleanable, insulated enclosure with panelized wall and ceiling cladding and a stainless-steel walking surface.

ELEMENT	TECHNICAL BASIS
Interior cladding	2-inch / 50 mm purification-panel interior cladding.
Insulation	Insulated interior fit-out integrated with the panelized enclosure.
Floor	Stainless-steel floor.
Door	Electrically operated double door.
Final coordination	Panel joints, penetrations, service clearances, door clear opening, and finish transitions to be confirmed in approved submittals.

4. Drying Rack System

PARAMETER	TECHNICAL BASIS
Rack quantity	18 drying racks included in the standard configuration.
Approx. rack size / each	3 ft 10 1/2 in W × 2 ft 4 3/8 in D × 7 ft 3 3/4 in H (1.18 m × 0.72 m × 2.23 m).
Arrangement	Final rack arrangement, aisle widths, access clearances, door approach, and service access to be confirmed before fabrication.
Performance basis	Rack dimensions are approximate source values; structural capacity, anchorage, and loading requirements require final submittal confirmation.

5. Environmental Control

Air-conditioning system	Ducted 5-ton air-conditioning system.
Control function	Environmental control system for temperature and humidity management.
Control identifiers	Source equipment identifiers: BeHive-E, BLS-4, and BCB-12.
User interface	Smartphone / app-capable control interface where supported by the final control hardware and site connectivity.
Final coordination	Airflow pattern, duct routing, sensor locations, drying setpoints, alarms, control integration, and operating sequence to be confirmed during engineering.

6. Dehumidification

PARAMETER	TECHNICAL BASIS
Equipment	One professional cultivation dehumidifier, vertical configuration.
Nominal capacity	Approximately 500 pints/day at 27°C and 60% RH.
Approx. unit dimensions	3 ft 5 5/16 in W × 1 ft 6 1/8 in D × 5 ft 8 7/8 in H (1.05 m × 0.46 m × 1.75 m).
Approx. unit weight	441 lb (200 kg).
Performance confirmation	Final performance to be confirmed during engineering. Capacity depends on operating conditions, setpoints, airflow, condensate routing, and final system coordination.

7. Electrical and Controls

Electrical basis / source equipment data	480 V, 50/60 Hz. Subject to US electrical engineering and site utility confirmation.
Electrical panel	Electrical panel associated with the environmental control and app-capable interface where supported.
Final electrical design	Service capacity, phase, feeder and branch-circuit requirements, disconnecting means, grounding, protection, conductor sizing, and equipment connection details to be confirmed by US electrical engineering.
Controls integration	Final control points, communications, network / app support, alarm routing, and integration requirements to be confirmed before release for fabrication.

8. Safety and Compliance Considerations

The source technical information does not define a complete safety or life-safety package. The following items are not included as standard by this sheet unless confirmed through code review and approved submittals.

ITEM	STATUS
Smoke / CO detection	To be confirmed during code and life-safety review.
Emergency lighting / exit signaling	To be confirmed during code and life-safety review.
Portable fire extinguishers	To be confirmed during code and life-safety review.
Fire suppression	To be confirmed during code and life-safety review.
Egress and access compliance	Door operation, clear opening, egress path, accessibility, and local AHJ requirements to be confirmed during code review.
Site-specific compliance	Applicable building, electrical, fire, mechanical, energy, accessibility, and life-safety requirements require site-specific engineering and AHJ coordination.

9. Included in Standard Configuration

The following items define the preliminary standard equipment basis for this technical sheet.

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| 01 | 40 ft modular drying container. |
| 02 | External dimensions approximately 39 ft 11 in L × 8 ft W × 9 ft 6 in H (12.17 m × 2.44 m × 2.89 m). |
| 03 | Internal dimensions approximately 38 ft 1 in L × 7 ft 6 in W × 8 ft 4 in H (11.6 m × 2.28 m × 2.53 m). |
| 04 | 2-inch / 50 mm purification-panel interior cladding and insulated interior fit-out. |
| 05 | Stainless-steel floor and electrically operated double door. |
| 06 | 18 drying racks , each approximately 3 ft 10 1/2 in W × 2 ft 4 3/8 in D × 7 ft 3 3/4 in H (1.18 m × 0.72 m × 2.23 m). |
| 07 | Ducted 5-ton air-conditioning system. |
| 08 | Environmental control system for temperature and humidity management, with smartphone / app-capable interface where supported. |
| 09 | One professional cultivation dehumidifier rated approximately 500 pints/day at 27°C and 60% RH; final performance confirmed during engineering. |
| 10 | Electrical basis from source equipment data: 480 V, 50/60 Hz , subject to US electrical engineering and site utility confirmation. |

10. Configuration Notes

FINAL COORDINATION REQUIRED

Before release for fabrication, the final rack arrangement, aisle and access clearances, airflow pattern, drying setpoints, condensate drainage, electrical service, controls integration, fire / life-safety requirements, code compliance, and site-specific engineering must be confirmed and documented in approved submittals.

LAYOUT Confirm rack layout, door approach, aisle widths, service clearances, maintenance access, and final interior coordination.

POWER Confirm utility service, electrical distribution, equipment loads, protection, disconnects, grounding, and US code requirements.

AIR Confirm duct routing, airflow pattern, temperature / humidity setpoints, operating sequence, and system performance basis.

CODE Confirm fire / life-safety scope, egress, accessibility, permits, AHJ requirements, and site-specific code compliance.

DRAIN Confirm dehumidifier condensate collection and drainage path, slopes, termination, and site connection requirements.

RELEASE Release for fabrication only after engineering review, site coordination, code review, and approved submittals are complete.

FINAL RELEASE GATE

This document is a preliminary technical specification. It is not permit-ready or construction-grade and does not establish final performance, utility capacity, safety equipment, or code compliance until the coordinated engineering package and approved submittals are complete.