

## TH055 FREEZE THAW CHAMBERS

### TH Series Overview

The TH series chambers are our state of the art freeze/thaw chambers used for a variety of applications. Controls are able to be quickly exchanged for future upgrades or repair.

#### TH09

The TH09 is a bench top freeze thaw chamber designed to fit on 24" benchtops or stacked with optional racking.

#### TH030

The TH030 is a single-door freeze thaw chamber.

#### TH055

The TH055 is a 2-door freeze thaw chamber.

#### TH084

The TH084 is a three-door freeze thaw chamber.



Featured photo is the TH055 two-door freeze thaw chamber open door view to show adjustable internal racks.



Featured photo is the TH055 two-door freeze thaw chamber closed door view.



## TH SERIES: FREEZE THAW CHAMBERS

### Performance

Range -25° C to 50° C, temperature control  $\pm 0.2^{\circ}\text{C}$  (non-defrost),  
temperature uniformity  $\pm 2.5^{\circ}\text{C}$  (non-defrost).

### Greatly Reduced Direct and Indirect Energy Loads

The TH Series freezers utilize less energy than comparable freeze thaw chambers and introduce less impact upon building cooling systems.

### Options Available

Data Logging  
Chart Recorder

Touch Screen Control Interface

### Widely Proven, Non-Proprietary Controllers

Standard controllers for the TH Series are manufactured by Fuji Electric and are ideal for laboratory freezers. Unlike many proprietary controllers, this controller is commercially available and proven in tens of thousands of installations. Standard functions include: autotuning, fuzzy logic, PID control, programmable alarms, calibration capability, ramp/soak, offset capability, etc. A touchscreen control interface is optional. Other controller manufacturers are also supported (Watlow, Allen-Bradley etc.)

### Services and Warranties

We offer technical support throughout the lifetime of your freezer. In addition to standard warranties, we also offer extended warranties for cooling components, parts and labor. We also provide qualifications, validations and preventive maintenance services at an additional cost. Please ask for a quote.

### Refrigeration System

The TH Series provides an oversized and balanced, environmentally friendly R404A refrigeration system, epoxy coated evaporator. Along with an automatic evaporator fan motor delay during defrost.

## TH055 Freeze Thaw Chamber Specifications (ambient 21° C)

**NOTE:** All Specifications come standard as following. We offer customized specification options as mentioned below. If you have specifications in mind that are not listed, please contact our sales team. We will accommodate your needs.

Performance	Standard	Customized Options
Temperature Range	-25° C to 50° C	Available
Ambient Temperature	21° C ± 3° C	Available
Temperature Control	± 0.2° C	Available
Temperature Uniformity	± 0.8° C	Available
Control Resolution	0.1° C	Available
Temperature Sensor	NIST Traceable PT 100 RTD Class A	Available

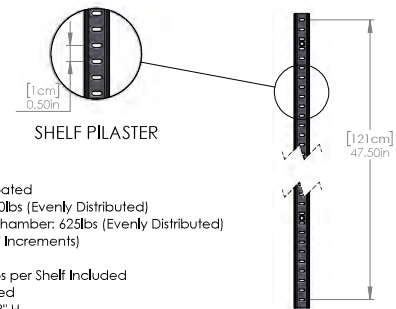
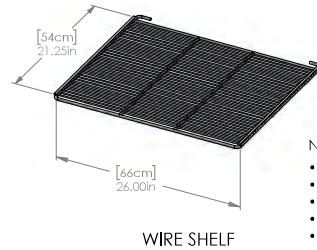
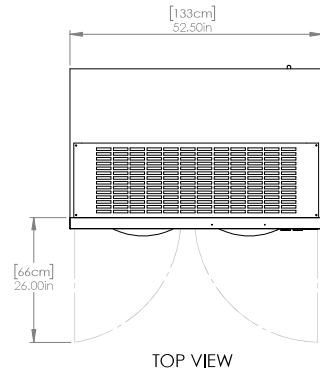
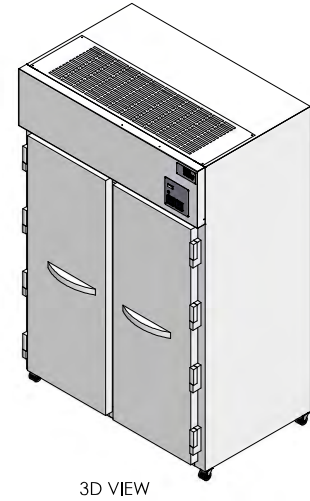
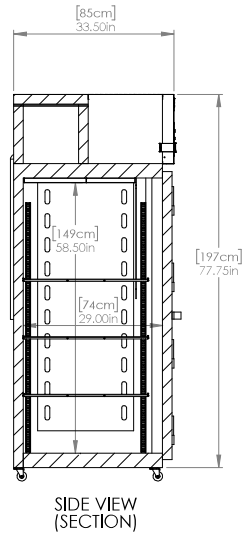
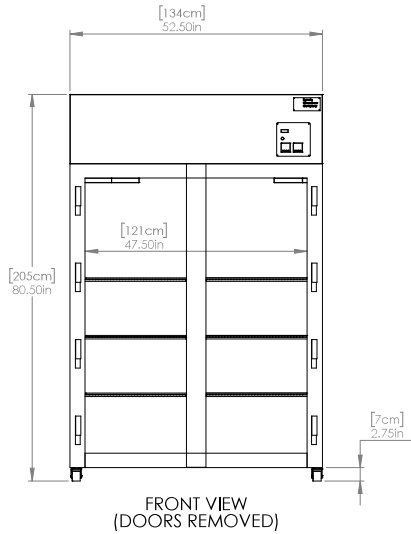
Control System	Standard	Customized Options
Controller	Fuji PXF4 (PID - Fuzzy Logic)	West EC-44, Future Design Touchpad + More
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Correction Capability	Actual and Set-Point Values	Available
Uniformity Off Set	Standard 0.1 Resolution	Available
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Available	Dry Alarm Contact, RS 485 & Analog Output
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Universal Power Supply for Monitoring	N/A	Available

Construction	Standard	Customized Options
Exterior	Stainless Steel Door & Front, Aluminum Sides	Stainless Steel Door, Front & Sides
Interior	Aluminum Side Walls & Back, Stainless Steel Floor & Ceiling	Stainless Steel Side Walls, Back, Floor, Door Liner & Ceiling
Shelving	6 Gray PVC Coated, Adjustable 1" Increments, Supports Up to 150 lbs of Evenly Distributed Weight	Stainless Steel, Chrome Plate or Custom
Casters	2.75" Total Weight Capacity is 300 lbs per Castor, Not Including the Weight of the Chamber	5" Casters or Seismic Legs

Capacity & Dimensions	US Standard	Metric
Interior Capacity	47 ft <sup>3</sup>	1330.89 liters
Exterior Dimensions	Refer to Drawing Below	Refer to Drawing Below
Internal Dimensions	Refer to Drawing Below	Refer to Drawing Below
Shelf Dimensions	Refer to Drawing Below	Refer to Drawing Below
Crated Weight	965 lbs	437.72 kg

Electrical	US Standard	International
Voltage	115v / 60HZ	230 / 50 / 1
RLA	6	3 With Step Down Transformer
Cord Length	9 ft	2.74m





Notes:

- Shelf Finish: Gray PVC Coated
- Max Weight per Shelf: 150lbs (Evenly Distributed)
- Max Load Capacity of Chamber: 625lbs (Evenly Distributed)
- Pilaster Height: 47.5" (1/2" Increments)
- Minimum Spacing: 2"
- 4 Stainless Steel Shelf Clips per Shelf Included
- 2" I.D. Access Port Included
- Door Opening: 21" W x 58" H

**Note:** Tolerances are 0.25" unless otherwise stated  
\*Dimensions and components are subject to change without notice.