
Walk-In
Coolers
& Freezers

Thermo-Kool®

Thermo-Kool was established in Laurel, Mississippi, in 1960. With only a handful of employees, the company's founders set out to engineer the best quality walk-in refrigerators in the industry. Today, our products are used by many of the best-known restaurants and institutions in the United States, as well as in many foreign countries. The pride of our master craftsmen has been handed down through the years, allowing us to build and maintain our reputation for quality and customer service.

In 1975, the company moved to its new, modern manufacturing facility in the North Laurel Industrial Park. After several expansions, this spacious ten-acre plant has allowed us to meet the level of production demanded by our ever-increasing sales volume. In 2020, Thermo-Kool purchased a new, additional office in our city's downtown area. This facility houses the company's sales, scheduling, accounting, data processing, and credit departments.

Staffed with experienced design, sales, and production personnel, Thermo-Kool strives to continually offer new product advancements and the highest-quality consulting and design services to our customers. That is our pledge to you.

OUR STANDARD DESIGN

Thermo-Kool walk-ins are customized to fit any facility, no matter how big, how small, or how unique your space is. We do this by manufacturing our panels in 1" increments and our corners 1' x 1', making them interchangeable, low cost, and quality controlled. This eliminates cut-and-paste at the job site and gives you the freedom of expansion in the future. With many metal finishes and accessories to choose from, we can build a walk-in for any occasion, both inside and out.

Class 1 Foam - Thermo-Kool foamed-in-place panels have a zero ozone depleting HFO Solstice 1233A Class I urethane foam classified according to UL723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The 4" core material shall have a flame spread of 25 or less and a smoke density of 250.

"Insta-Lok" Cam Assembly

A cam-action hook-arm assembly set in one panel and a self-aligning, self-centering pin assembly in the matching panel provide a positive seal. "Insta-Lok" are operated by means of a hex wrench supplied with each unit. Access ports are sealed with vinyl, snap-in closures to provide a neater and more sanitary installation.

DURABLE

Quaility Construction

CUSTOMIZED

Fits Any Space

RELIABLE

10-Year Warranty

FLEXIBLE

Interchangeable Panels

Thermo-Kool looks at Walk-In

a different angle

ns from

FROM A SMALL BREW

TO A TALL ORDER

Standard Door Construction Features

Thermo-Kool's standard door construction consists of a flushed mounted hinged entrance door that can be mounted in nominal 4', 5', or 6' frames. It is listed by Underwriters Laboratories and bears the UL seal. Standard hardware is also available. Entrance doors and frames are fabricated to prevent warping, sagging, or buckling under heavy use. The edge of the entrance door is equipped with adjustable, vinyl double wiper gasket.

U-Channel Frame

A heavy, reinforced, galvanized steel frame that is foamed-in-place for extra support.

Hydraulic Door Closer

Entrance doors with break-away hardware are equipped with a hydraulic closer to assure automatic closing and a positive seal of door.
Meets Energy Standards

Break-Away Hardware

This hardware includes a break-away type of latch with adjustable strike; an inside safety release handle so that the door can be opened from inside even if locked; and a nine-inch, modified strap, camift, self-closing design hinges with door lift off capability. It ensures easy opening and self-closing features with a magnetic door seal.

Dial Thermometer

2 ½" diameter dual reading, adjustable dial thermometer indicates temperature from -40°F to +60°F and -40°C to +15°C.

Vapor Proof Light Fixture

A shatterproof, incandescent, vapor-proof light is mounted on the interior of each door frame and is connected to an exterior switch and pilot light.
Meets Energy Standards

NON-STANDARD

Door Monitor/Alarm

- Two compartment temperature monitoring
- Door status monitoring
- Easy to read blue OLED display
- Automatic temperature settings with selection of cooler or freezer
- Compartment identification
- dB built-in buzzer with visual alarm display
- Door/door frame/peep window heater control
- 100 - 240 VAC universal power
- 9V Ni-MH rechargeable back-up battery
- 304 stainles steel milled front panel with embossed illuminated buttons with tactile/ visual/audible response
- Light status is indicated by iluminated light button on front panel
- Air probe offset adjustment
- 3-Way and 4-Way light control from any Thermo-Kool door controller in the same compartment
- Panic alarm
- Power failure alarm
- Door open alarm
- High and low temperature alarm
- Temperature probe failure alarm
- Real time clock with automatic DST adjustment
- NO/NC dry contacts for remote notification
- °F or °C display

- Built-in USB 2.0
- HACCP compliant

TK4700HL features only

ACCESSORIES

Peep Window

Observation windows are available in walk-in doors to provide a view into the walk-in. Frost formation and fog are prevented by the use of a heater in the window. **Meets Energy Standards**

Kickplates

When the application requires excessive traffic of carts, mobile shelving, and/or hand trucks, additional door protection is accomplished by supplying stainless steel or treadplate kickplate to the interior and exterior of doors.

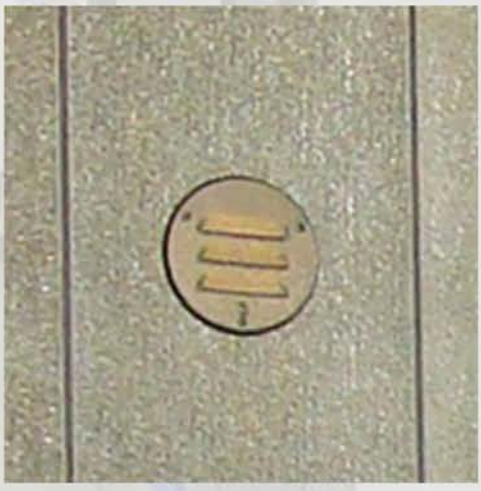
Weather Caps

Walk-ins installed outdoors can be protected from weather with prefabricated watertight vinyl caps.

NON-STANDARD ACCESSORIES
(CONTINUED)

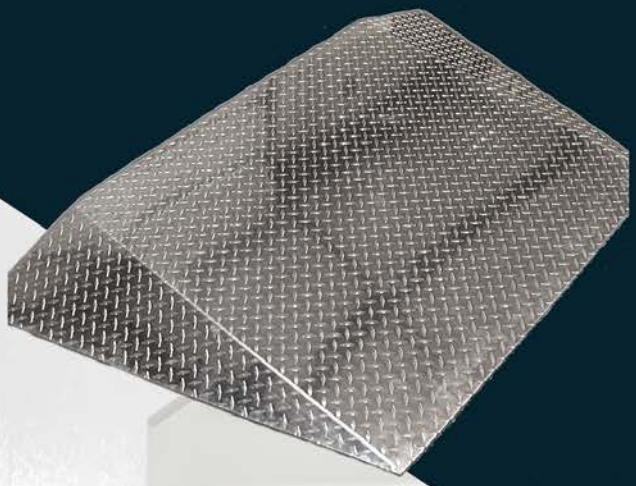
Glass Display Doors

Full-view, hinged, glass display doors can be supplied in various sizes and finishes to display and merchandise products. Two and three-pane insulated tempered safety glass with built-in heater is standard to prevent frosting and fogging.



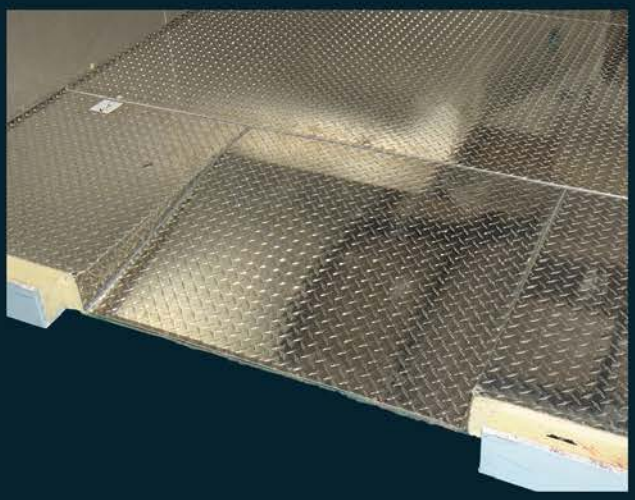
Pressure Relief Vent

Heated pressure relief vent equalizes pressure caused by temperature changes due to opening of doors, refrigeration defrost cycle, and product loading. A PRV is required on all freezer applications.



Exterior Ramp

When storage space is limited, walk-ins can be equipped with exterior ramps to accommodate traffic.



Interior Ramp

To facilitate ease of transfer into and out of walk-ins, an interior ramp can be utilized. Ramp has non-skid strips for safety and threshold with a heater wire for freezer applications to prevent frost accumulation. ***Our interior ramp includes a cove required by NSF.***

Reach-In Service Doors

Doors come in various sizes and finishes to match walk-in panels. They are the same construction as entrance doors, flush mounted, spring-loaded hinges, heater wire, and magnetic gasket.

OTHER ACCESSORIES

STANDARD

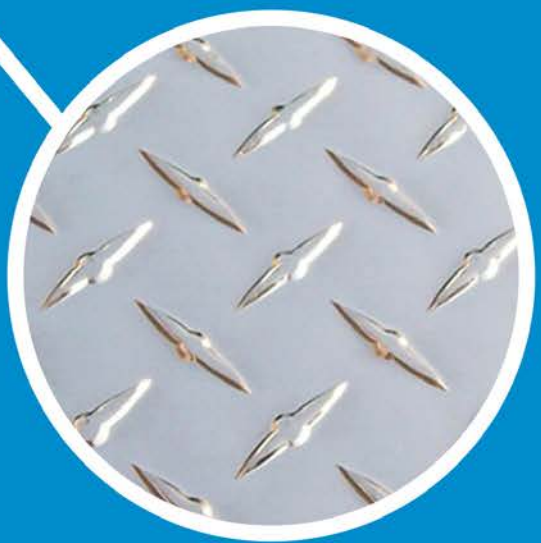
Pilot Light and Switch Assembly
Threshold and Heater Wire

NON-STANDARD

Positive Hardware
Door Canopy/Weatherproof Switch
Foot Treadle
Locking Bar
Trim and Enclosures
Bumper Rails

Thermo-Kool Floor Detail

Treadplate



Floor Construction Standard

Standard THERMO-KOOL prefab floor panels are constructed with .100 smooth aluminum, .100 treadbrite, 1/8" aluminum, 1/8" smooth aluminum, 16 ga. stainless steel or stainless steel rigidized treadplate. They are made to withstand uniformly distributed floor loads of up to and including 600 lbs. per square foot.

DURA-FLOOR Heavy-Duty Structural Floor Support

The DURA-FLOOR heavy-duty structural floor is available for added strength to the floor when required. The DURA-FLOOR has the capability to withstand up to 12,000 lbs. per sq. ft. stationary floor load as tested in accordance with the ASTM Standard Designation specifications.

Heavy Traffic

When mobile carts, dollies, mobile shelving, forklift, or pallet trucks are used, a concrete wearing floor must be installed over the existing or prefab floor. Floorless walk-in application should have a pre-insulated building floor over which a concrete wearing floor or quarry tile is installed.

Vinyl U-Channel Screeds (standard)

Vinyl U-channel screeds are designed to provide the most economical and easiest floorless walk-in installation. U-channel screeds are coved to meet NSF standards and are designed to be used with THERMO-KOOL's flat bottom panels and eliminates an entire seam during the installation procedure.

Foamed Screeds (optional)

THERMO-KOOL's 4 ¼" high x 4" wide foamed screeds with interior and exterior metal finish to match adjoining wall panels are used with multi-compartment is supplied with a prefab floor and another floorless.

Foamed screeds are also used in installing walk-ins near an existing walk-in with floor or screeds to maintain consistent height.

REFRIGERATION SYSTEMS

A complete line of standard refrigeration system is available to operate walk-ins over a wide range of temperatures.

Basic system components consist of condensing unit. Condensing units can be standard air-cooled or optional watercooled. Refrigerant for medium and low temperature sytem units are available in a wide voltage range for single-phase and three-phase applications.

Remote, Quick Connect

System supplied with applicable quick-connect line kit and pre-charged for fast, easy and economical job site installation. System requires electrical connection and drain line by qualified refrigeration, electrical and plumbing contractors

Top-Mount, Self-Contained

System installation is accomplished by inserting the unit into a slotted ceiling panel after installation of walk-in, and caulking. System consists of condensing unit, evaporator coil, control kit, and weatherproof housing assembled on a steel rack frame and factory tested for trouble-free operation.

Remote Pre-Assembled Systems

Systems can be supplied with all components factory mounted-tubing, electrical hook-up, drainline, and refrigeration charge shall be supplied by refrigeration, plumbing, and electrical contractors.

Evaporator coil is forced air type with components housed in heavy gauge aluminum housing. All freezer coils are supplied standard with automatic electric defrost.

Control kits for systems consist of pressure control, thermostat, liquid line drier, sight glass, suction line vibration eliminator, expansion valve, and coil mounting kit. Low temperature coil kits also include defrost timer, fan delay control, drain line heater, and liquid solenoid.

All systems are supplied with or can be equipped with optional acessories such as weatherproof housing, mounting base, and low ambient kit.

ARCHITECTURAL SPECS

General:
Walk-in coolers and freezer shall be THERMO-KOOL prefabricated, modular construction. They shall be designed and constructed to allow fast, easy field assembly, disassembly, relocation, and enlargement by the addition of like modular panels. Wall, ceiling, and floor panels shall be fabricated in 1" increments up to 46" wide. Corner panels shall be 90° angle, 12" x 12". All panels shall be interchangeable with like panels.

Panel Construction:
All panels shall consist of metal pans formed to precise dimensions. Metal finish to be as specified. Insulation shall be 'foamed-in-place' urethane foam bonded permanently to the complete inner surfaces of both interior and exterior metal pans to form a strong rigid unit. Panels shall not have internal wood or metal support, framing, straps, or other non-insulating members. Each panel shall be 100% urethane foam insulation exclusive of metal pans.

Perimeter structure shall be formed of DURATHANE, high-density urethane insulation forming tongues and grooves to assure vapor-proof and airtight joints and to prevent pre-installation damage and deterioration of low-density urethane. NSF approved double-bead vinyl gasketing shall be applied to the tongue side of all panels on both interior and exterior. Gaskets shall be impervious to stains, grease, oils, mildew, etc.

Assembly of the walk-in shall be accomplished by "Insta-Loks" consisting of a cam-action hook-arm assembly set in one panel and a self-aligning, self-centering pin assembly set in the matching panel. Rotation of the cam-action hook-arm shall pull and lock panels together to form airtight, vapor proof joints. No metal straps or connection rods shall be used inside the panels. Rotation of the camlocks shall be operated from inside the walk-in through access ports that are sealed with vinyl snap-in closures. The hexagonal wrench, which activates the cam-locks, shall be furnished with each walk-in.

Floor panels similar be in construction to panels and shall be designed to withstand uniformly distributed stationary loads of 600 lbs. per square foot. The DURA-FLOOR heavy-duty structural floor support is available for added strenght to the floor when required. The DURA-FLOOR has the capability to withstand up to 12,000 lbs. per foot uniformly distributed stationary floor load as tested in accordance with the ASTM Standard Designation specifications. Vinyl U-channel screeds shall be provided for floorless installations. Screeds shall be coved on interior and exterior side and designed to sit flat on the floor for attachment by means of nailing or lag-bolting through the center of the screeds.

Wall panels shall lock to screeds on 23" centers. (4 ¼" x 4" foam screeds and 2" vinyl Thermo-Screeds available when required or specified).

Walk-in panels shall be covered by a ten-year warranty.

Insulation:
Insulation shall be 4" thick rigid, low ozone depleting HFO Solstice 1233A Class I urethane foam classified according to UL723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The 4" core material shall have a flame spread of 25 or less and a smoke density of 250.

The urethane foam is foamed-in-place to bond to inner surfaces of metal pans having an average thermal conductivity (K factor) of 0.13 BTU/hr/sq. foot per degrees/Fahrenheit/inch. As tested in accordance with ASTM C 518-2004, the R factor for coolers at temperature of 55°F is greater than 29.0 for 4" thick and greater than 36.0 for 5" thick panels; for freezers at temperatures of 20°F the R factor is greater than 32.0 and 4" thick and greater than 40.0 for 5" thick panels.

The prefabricated urethane foamed panels shall be supplied with a Class I fire hazard classification according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. Panels shall have a flame spread rating of 25 or less and bear a certifying Underwriters Laboratories, Inc. label.

The rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Finishes:
Standard panel finishes are stucco embossed aluminum and stucco embossed galvanized. Also available are smooth galvanized steel, stucco embossed white aluminum, stucco embossed white steel, stainless steel, white prepainted aluminum, smooth white steel, or smooth aluminum. Interior of floor panels shall be smooth aluminum. (Type 304 #2B finish stainless steel, treadbrite aluminum; ⅛" aluminum treadplate also available upon request.)

Doors:
Each walk-in shall be equipped with one standard 34" x 76" hinge-type, flush mounted entrance door bearing the UL seal of approval. Each door section consist of a heavy, reinforce steel U-channel frame, foamed-in-place to give extra support and rigidity to the frame and to prevent racking, distortion, warping, and twisting. Door placement shall be within 1" increments to meet shelving space requirements. Exterior and interior finish of door will match adjoining wall panels unless otherwise specified. Walk-in entrance doors shall be equipped with a one-piece perimeter NSF approved PVC accordion type removable gasket. A magnetic core at top and sides shall provide positive seal. An adjustable wiper gasket shall be mounted along the bottom edge of door. Door frames shall be provided with an incandescent, vapor-proof light fixture, pilot light and switch assembly, concealed wiring 2 ½" diameter chrome plated dial thermometer, heavy gauge reinforced stainless steel threshold, and heater wire around the full perimeter.

Standard hardware shall be break-away type with cylinder lock and inside safety release handle so the door can be opened from the inside even if locked. A positive action hydraulic door closer shall be included to ensure gentle closing action of door and ensure a positive seal. Hinges shall be nine-inch modified strap, cam-lift, self-closing with door lift off capability. Hinges shall be high-pressure zinc die cast with highly polished chrome finish.

NSF Construction:
Walk-ins and refrigeration systems shall be constructed in accordance with NSF International, Standard No. 7. The NSF approval seal shall be affixed to the serial plate of the walk-in.

Installation, Operation, and Maintenance Instructions:
Each walk-in shall be supplied with a complete set of installation, operating, and maintenance instructions to cover erection of walk-in, installation of refrigeration systems, operating procedures, and routine maintenance schedule.

Specifications are subject to change without notice due to our program of continuous product development.

For a full set of specifications, contact the factory.

GET IN TOUCH

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Thermo-Kool®