

RYTEC

KNOCK TEMPERATURE DIFFERENTIALS OUT COLD WITH HIGH-PERFORMANCE DOORS

SELECTING THE RIGHT COLD STORAGE
DOOR FOR YOUR APPLICATION

RYTEC

2nd Edition

With updated
applications
and features

RYTEC
HIGH PERFORMANCE DOORS

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Less air infiltration leads
to lower refrigeration costs.

WEIGHING TEMPERATURE NEEDS

Different products can require widely different storage temperatures. Environmental temperature often can be the most critical aspect when assessing which high-performance door is right for a particular application. With food storage, it is especially important to maintain recommended temperatures and ensure added protection from spoilage. There is a variety of cold storage doors available, each one capable of helping manage cold storage conditions using speed, sealing efficiency and secure separation.

Above Freezing. For environments with temperatures above freezing (such as coolers) lighter weight fabric doors can control temperature and guarantee product freshness. These models are designed for high-speed operation and feature tight-sealing perimeters. These doors typically protect against air infiltration from nearby ambient environments.

Below Freezing. When it comes to protecting goods in temperatures below freezing, additional requirements are often crucial to controlling temperatures and minimizing air exchange. Heavy-duty materials combined with fast opening and closing speeds ensure efficient traffic flow and high product quality. Highly insulated panels and tight-sealing perimeters play critical roles in helping maintain temperature consistency.

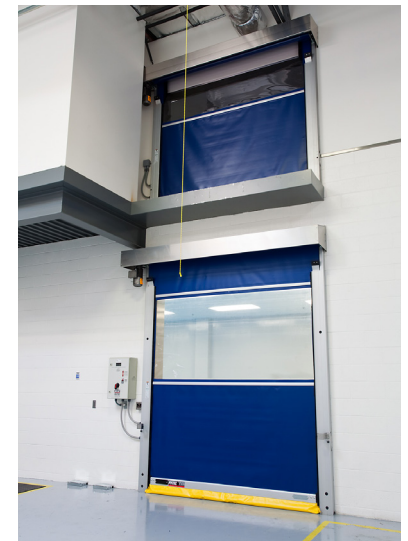
ABOVE FREEZING SOLUTIONS

Multi-use and Durable. Where dependability and customization meet for a wide variety of applications, high-speed fabric doors are there. These models typically feature a sturdy, standard fabric material or can be furnished with USDA-compliant or tear-resistant materials. Other characteristics often include variable AC drive and control, top and side brush seals and floor-hugging loop seal to protect against air infiltration.

Insulated and Fast. When speed and thermal insulating materials are a must, certain doors offer the most energy-efficient insulated panels available. In addition, standard or proprietary features might include next-generation thermal panels, full-height quad brush seals and full perimeter breaks.

Low Profile. When space is a concern but the need for a full perimeter seal is still required a lower-profile high-speed door is recommended. A smaller footprint that allows for installation in tighter spaces doesn't require sacrificing performance. Features such as counterweight design and specialized panel options – including 3-ply and USDA/FDA-compliant materials – can suit a variety of specialized needs.

Self-Repair. Some models have a self-repairing feature that eliminates user intervention if the door is impacted. This is yet another characteristic that allows facilities to operate effectively, keeping the flow of product moving smoothly.



BELOW FREEZING SOLUTIONS

Highly Insulated and Secure Sealing. Given the rigorous demands of freezer environments, fast-sliding insulated doors can also be used to maintain cold storage conditions. These doors feature sturdy yet flexible panel materials, closed-cell foam core and full-perimeter sealing capability.

Insulating values
spanning up to R-40.



Flexibility Without Frost. Moving goods between freezer and other environments is always a cause for concern. Freezer-specific products are designed to provide the utmost in sealing capacity. In addition, their high-speed operation is often enhanced by using heated side columns and offering multiple defrost systems. This combination of features helps to virtually eliminate frost build-up.



Intelligent controllers
adjust speed and
door functions.



LOADING DOCK, VESTIBULE & EXTERIOR DOORS

Exterior. Fabric doors used on exterior openings either with or without a sectional door often require wind-resistant features in order to withstand the outside elements. Some may include wind ribs that keep the panel horizontally firm, preventing bowing and disengagement from the side columns. Others may include durable drive teeth that can resist pressure and stay aligned within the side columns.

Interior. Pressure and temperature variability are also factors in loading dock and vestibule staging areas. High performance doors used in these areas typically come with either a heated or unheated blower and insulated or non-insulated panels, depending on the degree of temperature variance.

Speed is crucial. In both interior and exterior applications, speed is crucial because air infiltration will cause increased energy usage and may affect product quality as well. Fast opening and closing doors help ensure the amount of time a door is open is minimized, while also ensuring energy efficiency.

Quality and effective perimeter seals. Edge-to-edge seals provide a tight seal - securing the panel and side column components - to minimize air infiltration while high performance doors are closed. Proper door selection is important for varying temperature differentials in individual locations of a facility.

Transitioning from ambient air to freezer areas requires different door features than required for ambient-to-refrigerated spaces.

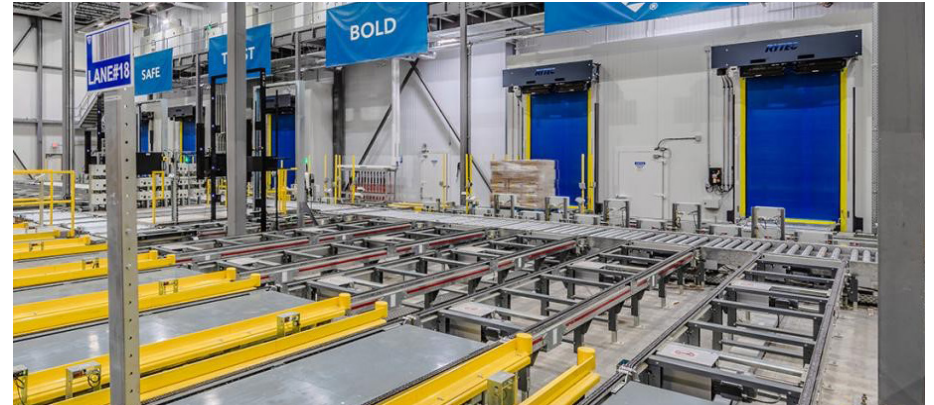
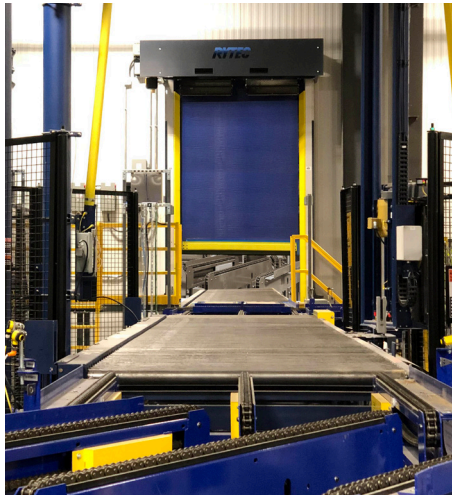


AUTOMATED STORAGE & RETRIEVAL SYSTEMS (ASRS)

Future of cold storage. For ASRS facilities - fast becoming more popular in cold storage environments - doors that can separate different types of environments are critical components. Doors for these non-human applications are properly modified since technology systems move product from one location to another, rather than by human-driven equipment such as forklifts or pallet jacks.



Easily integrates into ASRS controls for configurable and customized functions.



Intelligent integration. High performance doors designed for ASRS systems can easily be integrated into an ASRS control system with an expansion board - allowing the opening and closing to be specifically timed. This ensures fast paced environments keep product moving seamlessly through the conveyor system.

Reliability. With speeds up to 100 inches per second and designed for high cycle environments, these doors can withstand the daily rigors of opening and closing thousands of times a day, even in 24/7 operations.

Energy-efficient. ASRS high performance doors maintain the full perimeter seal of standard high performance doors, helping to keep air infiltration at a minimum, especially when transitioning from ambient temperatures to freezer or cooler to freezer.

SIZE AND CLEARANCE QUALIFICATIONS

It is important to know and understand the door size and clearances required when planning your project. With many different types of environments, ranging from new construction and renovation to replacement situations, every effort should be made to accommodate specific applications with a properly-fitting high-speed door.

When considering cold storage doors, take into account the maximum sizes available for each door type as well as any available options. In addition, some models may require more space if they have optional heater or blower systems added. In other instances additional wall space may be required if selecting sliding doors vs. roll-up doors.

Accurately
record all relevant
dimensions.



Typical Size Considerations:

- ▶ Door opening size
- ▶ Headroom above lintel
- ▶ Head projection
- ▶ Side column projection
- ▶ Side column width



SAFETY IN YOUR CORNER

Multiple Safeguards. High-performance cold storage doors offer a full array of safety features to provide safeguards and assure operational standards.

Protect People and Assets. Maintaining temperatures is a high priority in the cold storage industry yet safety in the workplace is also a primary concern. While well-known for high performance and high speed, these doors are also designed to ensure safe operation and safe environments for people and plant-floor vehicles.

Typical Safety Features:

- ▶ Door Activation/Motion Sensors
- ▶ Flexible Bottom Edge
- ▶ Break-Away Bottom Bar
- ▶ Safety Light Systems
- ▶ Reversing Bottom Edge
- ▶ Photo Eyes

Protect staff, product,
and equipment.



Flexible Bottom Edge



Break-Away Bottom Bar



Safety Light System



Photo Eyes

Rytec introduced the first high-speed folding door for the cold storage industry over 35 years ago.



Many Rytec Fast-Fold doors are still in operation today with millions of operational cycles.

LASTING RELIABILITY

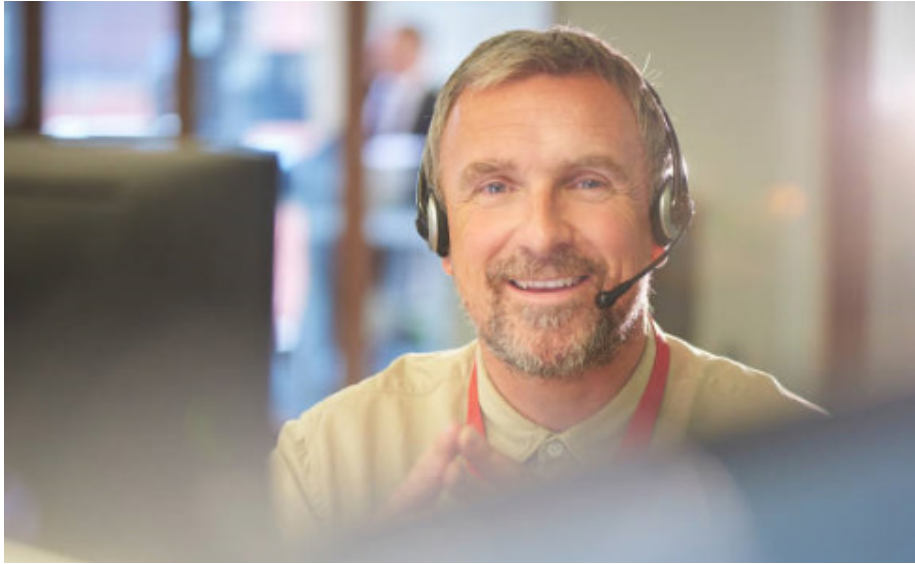
Longer Operating Life. Engineered to withstand the daily rigors of continued use, high-performance cold storage doors are built to last for countless operating cycles even in the most rigorous freezing conditions.

Perfect Fit. Custom manufactured to specifications, high-performance doors assure optimal fit and performance to keep product and operations moving smoothly.

Specialized Function. Engineered to control different types of environments, high-performance cold storage doors offer specialized solutions in refrigerated and frozen food distribution applications.

Specialized solutions:

- ▶ Perishable seasonal products
- ▶ Food processing and handling facilities
- ▶ Temperature controlled environments
- ▶ Refrigerated cooler and freezer storage
- ▶ Automated, non-live traffic environments



We have dedicated sales staff assigned to each region, and a large network of dealers across North America to better serve our customers.



CHECKLIST:

Please provide us with the following information to ensure you receive the most accurate advice.

- ▶ Placement in facility
- ▶ Traffic/environment needs
- ▶ Estimated number of cycles per day
- ▶ Activation needs
- ▶ Temperature on both sides of opening
- ▶ Size of door opening
- ▶ Surrounding clearances required

CONTACTING RYTEC

Each door application may have unique requirements. We recommend contacting a sales specialist to verify your specific needs. This will help to ensure you receive an accurate quote. Call 888.467.9832 or email us at info@rytecdoors.com.

RYTEC HIGH PERFORMANCE DOORS

SEE THE FULL LINE OF DOORS FOR COLD STORAGE ENVIRONMENTS

Rytec is North America's leading independent manufacturer of high-speed, high-performance doors. For over 35 years our focus has been exclusively on design, innovation and manufacturing of high-performance doors. Market-leading companies across a variety of industries trust and rely on Rytec for outstanding quality, performance and reliability.

LEARN MORE



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