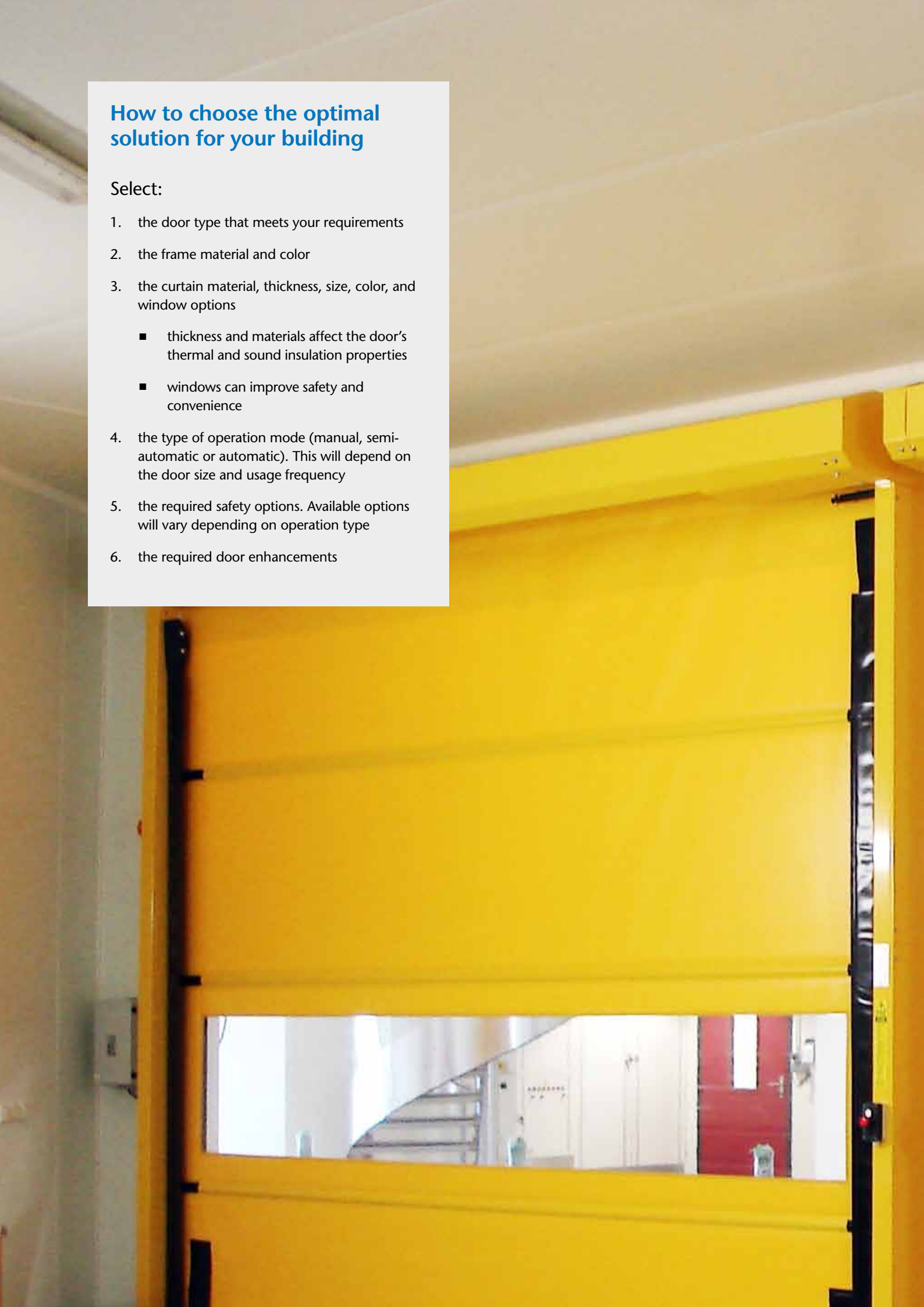
Dedicated to People Flow™

KONE

EFFICIENT, SAFE GOODS FLOW FOR COMMERCIAL ENVIRONMENTS

KONE High-Speed Doors



How to choose the optimal solution for your building

Select:

1. the door type that meets your requirements
2. the frame material and color
3. the curtain material, thickness, size, color, and window options
    - thickness and materials affect the door's thermal and sound insulation properties
    - windows can improve safety and convenience
4. the type of operation mode (manual, semi-automatic or automatic). This will depend on the door size and usage frequency
5. the required safety options. Available options will vary depending on operation type
6. the required door enhancements

Efficiency, safety, and flexibility

In high-throughput commercial environments, ensuring a reliable, smooth flow of goods is critical for competitive operations. KONE's range of eco-efficient high-speed internal and external doors is designed to improve goods flow and minimize energy costs in environments such as logistics centers, food processing and distribution facilities, and vehicle storage areas.

Our highly flexible solutions also help improve safety and convenience. They can be customized to match your building with a wide range of colors and materials, then complemented with your choice of optional features and accessories.

Increase efficiency and cut energy costs

KONE high-speed door solutions improve the flow of goods throughout your building – internally between different areas and externally for reception and dispatch. Our durable exterior doors are designed to cope with heavy usage and demanding weather conditions, while their fast operation minimizes waiting time and helps lower energy costs by reducing the impact of pressure and temperature changes. Our range of internal door solutions also improves cleanliness and sound insulation, and includes specialist doors for clean and cold room applications.

Key benefits

- Improve efficiency with fast, reliable door solution
- Increase convenience and safety with automation
- Reduce energy costs with improved climate control and weather protection
- Reduce cross-ventilation and increase hygiene for internal operations
- Increase flexibility with specialist internal and external rolling and folding solutions
- Improve reliability with KONE's world-class preventive maintenance services

World-class preventive maintenance

KONE provides world-class preventive maintenance services for all types of building doors, gates, and shutters. KONE Care™ maintenance packages are designed to maximize the reliability of your equipment by detecting and repairing minor faults before they cause disruption to your business. We create a customized maintenance plan for your site and equipment, backed up with 24-hour support 365 days a year via the KONE Customer Care Center.

Specifying your KONE High-Speed Door

Door frame

The doorframe is made from either stainless steel or galvanized steel with a polyester powder-coated finish, depending on the door solution you choose. Doorframes are available in a wide range of RAL colors.

Curtain

Material

The high-density PVC fabric and the unique fiber structure ensure good ventilation, while steel or composite bars are used to provide exterior doors with wind resistance of up to 120 km/h (Class 4).

Color

Curtains are available in the following RAL colors:

9016	7038	1015	1003
1018	3002	5015	5015
5002	6026	9005	2004

The door curtain can also be printed with a company logo or slogan.

Height

The curtain height can be customized according to your requirements.

Windows

Folding doors are available with oblong windows; roll doors are available with oblong or full-vision windows.

Winding roll

Innovative design prevents bending and ensures long curtain lifetime.

Seal

The flexible bottom edge of the curtain ensures a close seal, even with rough surfaces. This unique system helps to minimize dust and dirt contamination, as well as heating or cooling losses. With KONE Roll Clean, the curtain moves inside the tight guides and stays in contact with the uprights to minimize air leakage. A special sealing top hood is also fitted between the drum and the transom.

Motor and control system

The motors that power all our high-speed door solutions are designed for outstanding energy efficiency. They ensure rapid, reliable door operation and optimal performance.

Safety features

KONE high-speed door solutions include a wide range of innovative safety features as standard. We also offer a number of optional safety enhancements for even greater peace of mind.

Standard features

- Soft bottom-edge technology prevents impact
- Safety button for immediate emergency stop
- Full manual operation in the event of a power failure
- Traffic Control system – flexible guides allow automatic reinsertion of roll-door curtain
- Safe Control system – vertical photocells detect contact under the curtain for 180° safety protection

Optional features

- Hand crank for manual operation in case of power failure
- UPS backup battery for roll doors
- Semi-automatic counterweight for folding doors, for manual operation in case of power failure

Operating devices

KONE high-speed doors can be operated both manually and automatically. In manual mode the door is operated from the control box. In automatic mode you can use pulse generators such as pull or key switches, buttons, RFID systems, lasers, radar detectors, and card readers.

Contact-less pulse generators such as RFIDs, lasers, and radar detectors are mainly used for operating doors that handle vehicle traffic, such as trucks or forklifts. Manually operated buttons or pull switches with cantilevers are commonly used with doors intended for pedestrian traffic. We can customize any of our high-speed door solutions to meet your requirements, including combining different types of pulse generator systems.

Optional features

Our highly flexible solutions can be complemented with a wide range of optional accessories for even greater efficiency and convenience, including:

- a traffic-light system for managing doorways
- additional protection features such as posts that help prevent collisions and separate traffic zones
- interlock system for controlling access to multiple doors simultaneously
- adjustable opening height

Exterior doors

KONE Fold Max

A durable folding door solution designed for entrances with large dimensions. It includes a reinforced frame to provide excellent stability, and is ideal, for example, for large goods reception areas with multiple entrances.

- Maximum clear opening dimensions (w x h): 8 x 10 m or 10 x 8 m
- Self-supporting steel frame with polyester powder-coated finish
- Opening and closing speed 0.5 m/s
- Wind resistant up to 80 km/h, reinforced wind bar on curtain
- Curtain safety-strap system prevents accidental closing
- Safe Control photocell system for 180° safety protection
- EN 13241-1 compliant

KONE Fold

A highly efficient folding door solution suitable for all external applications. It offers smooth, quiet, hassle-free operation, and helps protect the building from dirt, dust, noise, and heating or cooling losses.

- Maximum clear opening dimensions (w x h): 6 x 6 m
- Self-supporting galvanized steel frame with polyester powder-coated finish
- Opening speed 1 m/s standard, 1.5 m/s optional; closing speed 0.5 m/s
- Up to Class 4 wind resistance (EN 12424)
- Flexible curtain guides deform without damage in case of impact.
- Soft bottom-edge technology minimizes impact
- Optional counterweight for manual operation in case of power failure
- EN 13241-1 compliant

KONE Fold Wash

An efficient folding door solution designed specifically for car washes. It offers fast, quiet operation and excellent noise insulation, as well as a flexible bottom edge for preventing leakage.

- Maximum clear opening dimensions (w x h): 4.5 x 4.5 m
- Galvanized steel frame with polyester powder-coated finish
- Opening speed 1 m/s standard, 1.5 m/s optional; closing speed 0.5 m/s
- Double-skin curtain, U value 2.7 W
- Noise-insulation maximum value: 16 dBA
- EN 13241-1 compliant

Interior doors

KONE Fold Chill

A durable, energy-efficient folding door solution for freezer and cold-room applications. Its fast operation reduces cooling losses and draughts for significant energy savings, and it also includes a hygienic, frost-resistant fabric curtain.

- Maximum clear opening dimensions (w x h): 4 x 4 m
- Self-supporting galvanized steel frame with polyester powder-coated finish
- Opening speed 1 m/s standard, 1.5 m/s optional; closing speed 0.5 m/s
- Operating temperature range: +5 to -30 °C
- Built-in heating system prevents ice formation even during intensive cooling
- Curtain safety-strap system prevents accidental closing

KONE Roll

A highly efficient, compact roll-door solution for internal applications. It offers smooth, quiet operation and helps prevent dirt, dust, and noise transfer between interior areas, as well as heating or cooling losses.

- Maximum clear opening dimensions (w x h): 4 x 4 m
- Self-supporting galvanized steel frame with polyester powder-coated finish
- Opening speed 1 m/s standard, 1.5 m/s optional; closing speed 0.5 m/s
- Automatic operation with battery backup (optional)
- Anti-crash breakaway curtain with automatic reinsertion
- Soft bottom-edge technology for preventing impact
- EN 13241-1 compliant

KONE Roll Clean

A highly efficient, compact roll-door solution for cleanroom applications. It offers fast, smooth operation, perfect sealing, and a gapless frame for the highest level of contamination prevention.

- Maximum. clear opening dimensions (w x h): 3.5 x 3.5 m
- Galvanized steel frame with polyester powder-coated finish
- Opening speed 1 m/s standard, 1.5 m/s optional; closing speed 0.5 m/s
- Designed for easy cleaning
- Anti-crash breakaway curtain with automatic reinsertion

KONE provides innovative and eco-efficient solutions for elevators, escalators and automatic building doors. We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE MaxiSpace®, and KONE InnoTrack™. You can experience these innovations in architectural landmarks such as Capital City in Moscow, Hongqiao Transport Hub in Shanghai, North LaSalle in Chicago and Tour First in Paris.

KONE employs on average 35,000 dedicated experts to serve you globally and locally in over 50 countries.

KONE Corporation
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