

CRYSTAL TQ.

THE **ALL-GLASS** REVOLVING DOOR



# **OVERVIEW**

At first glance, the Crystal TQ is an eye-catching masterpiece that demands attention. Its sleek and modern design, coupled with its all-glass construction, is a true testament to the phrase "less is more."

This revolving door is the perfect addition to any building that wishes to make a bold statement while providing a welcoming entrance for guests.

# STYLISH TRANSPARENT DESIGN

The Crystal TQ is designed with beauty and functionality in mind. Its all-glass construction creates an uninterrupted view, allowing guests to feel welcomed and at ease before they even step foot into the building. The door's circular design adds to its visual appeal and makes it stand out from traditional doors.

This statement door is customizable to fit the specific needs of any building. It can be designed with various glass options, including tinted or frosted glass, to suit the aesthetic of the building. The door's diameter can be adjusted to accommodate the building's foot traffic, making it an efficient and practical choice.

The Crystal TQ comes in three-wing and four-wing versions. The three-wing version provides a spacious compartment for added comfort, while the four-wing version offers a wider day opening and efficient passage in two directions simultaneously. Both versions can be collapsed to create a wide escape route during emergencies.

# SAFETY AND SECURITY

The Crystal TQ is not just visually stunning; it also prioritizes safety and security. Safety sensors in the door wings and frame minimize impacts, ensuring user protection.

#### We offer the following additional safety measures:

- BoonAssist: PPS a control system that helps the user during pushing (power assisted), positions automatically to the rest position (positioning), and limits the speed during pushing (speed control).
- Accessibility buttons
- Contrasting stickers with safety icons on the door wings and curved walls
- Sensors with laser technology
- Block detection
- Emergency stop and / or open buttons

The front entrance to a public building, such as a hotel, office building, residential building, or municipal building, should also include security options. Whether an uninvited visitor is outside the door or the facility manager is locking up for the night, revolving door security options allow for an added layer of protection.

# We offer the following additional security measures:

- Manual locking
- Manual external shield doors (night locking)
- Security lockdown for immediate action
- Access control options (semi-secured passage)

# **ESCAPE ROUTE**

The escape route is one of the main issues when considering a building's main entrance. The Crystal TQ comes standard with a rigid doorset but can be specified with a collapsible doorset on both the three- and four-wing models.

If equipped with a collapsible doorset, the Crystal TQ can be used as an escape route. The door wings unlock in an emergency and can quickly and easily be folded together to create a clear, open passageway as escape route, for smoke discharge or an entry for emergency responders such as ambulance and fire fighting personnel. Escape route requirements are subject to local regul.ations.



#### **KEY FEATURES**

- 3 or 4-Wing configuration
- Rigid or collapsible doorset
- Manual, semi-automatic or fully automatic operation
- Tailored selection of dimensions
- · BoonAssist: Low energy assisting and positioning
- Transparent design

#### **KEY BENEFITS**

- Handles low to moderate throughput
- Minimal profile size creating a weightless impression
- Automatic operation for touchless entry
- Sustainable and energy-saving
- Draft-free entrance (Reduced air infiltration)
- Good ROI

### SUGGESTED SEGMENTS

- Corporate
- Governmental
- Retail
- · Restaurants and hospitality
- Hotels



# A SUSTAINABLE SOLUTION

Revolving doors are energy-efficient, separating conditioned inside air from outside air to prevent draughts, dust, and noise. This reduces energy consumption, costs, and carbon footprint.

At Boon Edam, we are proud of what we have achieved over the past 150 years. We strongly believe in building a sustainable future and preserving the earth for future generations. We constantly strive to improve our manufacturing processes and use recycled or recyclable materials wherever possible - this is part of our DNA. Production with minimal impact on the environment is a priority for us. For example, we have reduced the percentage of raw materials to lighten our carbon footprint. More detailed information on each of our products can be used for LEED certification processes - speak to your entry expert for the full story.

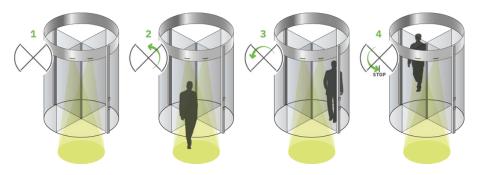
# **ENERGY SAVING CALCULATOR**

In general terms, air flows in and out of a building because of differences in air pressure and humidity in what is known as the stack effect. In the winter, heated air rises toward the top of a building, and as long as there are any openings on the ground floor, cold air rushes in to replace the heated air. The opposite happens in the summer, with the cold air flowing out the front doors. In addition, air flows through the building when doors, vents or windows are open; this is known as a wind tunnel effect. Regular foot traffic through ordinary doors can result in massive air leaks, requiring more energy to maintain the interior climate.

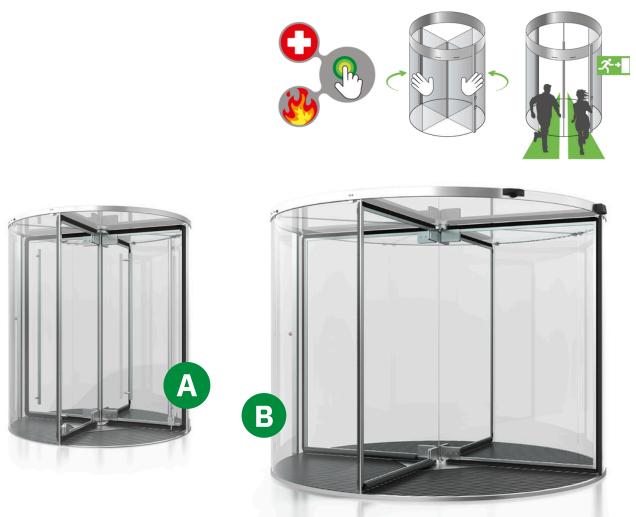
Working closely with the University of Delft, one of the leading technical universities in the Netherlands, Boon Edam has developed software that is able to use building-specific data to determine the energy saved by revolving doors compared to swinging or sliding doors.



# WORKING PRINCIPLE - REVOLVING MODE

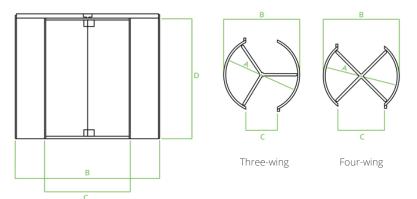


# WORKING PRINCIPLE - COLLAPSIBLE DOOR SET



# **DIMENSIONS**

From door diameter to height and various physical measurements, we fine-tune every detail to create your desired look that complements the surrounding building elements and location. Achieve a fluid and harmonious aesthetic that is uniquely yours.



<b>A</b> Internal Diameter (mm)	No. of Door Wings	Max Persons per Segment	Theoretical Capacity / Minute*	User Type		Escape Route**	<b>B</b> Installation Width (mm)	<b>C</b> Throat Opening (mm)	<b>D</b> Height Under Canopy (mm)	<b>E</b> Soffit Height (mm)
1600	3	1	2x22	Ť			1650	719	2100-3000	18
1600	4	1	2x26	Ť			1650	1069	2100-3000	18
1800	3	1	2x22	ψ			1850	819	2100-3000	18
1800	4	1	2x26	Ť			1850	1211	2100-3000	18
2000	3	1	2x22	Ť	ı		2050	919	2100-3000	18
2000	4	1	2x26	Ť			2050	1352	2100-3000	18
2200	3	1	2x20	Ť	ı	•	2250	1019	2100-3000	18
2200	4	1	2x26	Ť	ı	•	2250	1494	2100-3000	18
2400	3	1	2x18	Ť	ı	•	2450	1119	2100-3000	18
2400	4	1	2x24	Ť	ı	•	2450	1635	2100-3000	18
2600	3	2	2x33	Ť	ı	•	2650	1219	2100-3000	18
2600	4	1	2x22	Ť	ı	•	2650	1777	2100-3000	18
2800	3	2	2x31	Ť	( <u>iii</u> )	•	2850	1319	2100-3000	18
2800	4	1	2x20	Ť	IÎI	•	2850	1918	2100-3000	18
3000	3	2	2x29	Ť	( <u>Î</u>	•	3050	1419	2100-3000	18
3000	4	2	2x38	Ť	ı	•	3050	2060	2100-3000	18

Capacity figures are theoretical and based on the max. number of persons per segment in a continuous flow.
Only with collapsible doorset option. Requirements are subject to local regulations.

# SO MUCH MORE

The Crystal TQ offers many ways to be fine-tuned to ideally fit your project. The above table is merely an overview of what is possible with this flexible high

capacity revolving door. Please speak to your entry expert to find out more about putting your stamp on your Crystal TQ.



The design of a building's entrance is crucial in creating a memorable first impression. At Boon Edam, we collaborate with architects and contractors to help them make optimal choices that align with each project's unique specifications. With the Crystal TQ revolving door, you can customize your entrance to fit your specific goals.

#### PUT YOUR STAMP ON IT

The Crystal TQ can be finished in completely clear glass, but colored glass is also available. With a variety of options available, we can work with you to ensure the Crystal TQ all-glass revolving door meets all your requirements. Choose three or four-door wings depending on the number of visitors you expect on a daily basis and whether they bring a briefcase or large luggage.

Our standard specified products come in different heights, widths, canopy heights, and clear passage heights, providing flexibility to meet diverse design, safety and security needs. If your requirements extend beyond the available options, our experienced sales managers and engineers will collaborate with you to create a safe and sustainable entrance just for you.

**NOTE:** Several option combinations can impact the throughput capabilities and integration with the building's structure. Therefore, we recommend that you discuss your needs with a Boon Edam entry expert.

#### You can select options in any of these areas:





### **THROUGHPUT**

- Diameter (mm)
- Number of doors / wings
- Manual / semi-automatic / automatic



# **SAFETY**

- BoonAssist
- Fire alarm connection
- Additional emergency stop buttor
- Emergency open buttor
- Accessibility button (push-to-slow button or barrier-free)
- Contrasting stickers on curved walls
- Collapsible doorset for escape routing



#### **AESTHETICS**

- Material / finish (Glass and stainless steel
- Coating / surface treatment (powder coating, Analok or anodized)
- Glass decals and / or branding
- Position (mid-post / interior)



# **SECURITY**

- Security lockdown
- Semi-secured passage with access control



# TECHNOLOGY

- External control panel
- · Array of configurable I/O contacts for BMS integration



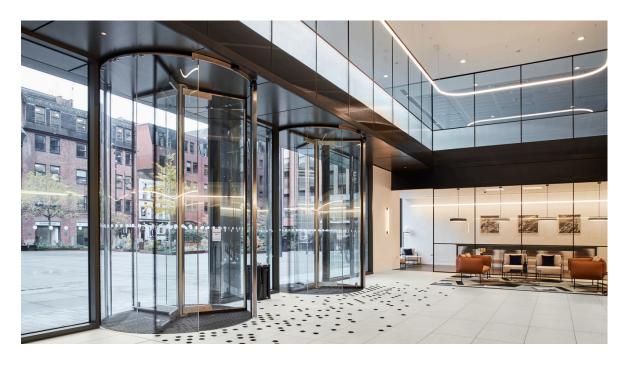
# COMFORT

- RoonAssist
- Drive unit with push and go or sensor activation
- Air curtair
- Floor mat
- Matwell trim



# SERVICE AND MAINTENANCE

- Service agreements and maintenance
- Technical support and parts
- Retrofit and upgrades to existing revolving doors
- Operational training



#### SERVICE AND MAINTENANCE

With millions of visitors passing through an entry every day, continued and reliable operation is vital. Regular service and maintenance can prevent unexpected hardware breakdowns. Our service and maintenance teams across the world are experienced in the effects the local conditions have on the wear and tear of your entry solutions and can offer specialized service and maintenance contracts that correspond to those conditions perfectly.

By employing our own fully trained and dedicated service maintenance experts, we continuously invest in our inhouse technicians and engineers. This ensures that you receive the best possible service, with minimal product downtimes and of course, a maintained high-quality entrance investment.

# RETROFITS AND UPGRADES

While we are fully confident in the longevity of all our products, we also understand that your own wants and needs can change over time. Between newer technologies, the need to adhere to new rules and regulations, or even just to give your building a new lease of life, we understand that it's important to have the flexibility and resources available to ensure your building's entrances always meet not only your needs but your staff and visitors needs too.

That is why we are proud to offer a range of upgrade and retrofit services, all designed to keep your entrance up to date and equipped to tackle the everyday.

#### **COMPLIANCE**

Boon Edam entrances are trusted solutions that allow organizations to meet compliance regulations related to restricting access to areas within a building. We take compliance and safety very seriously and ensure that our products are manufactured, installed and maintained to keep up with the strict criteria required in all our countries. We are always improving and committed to making sure our products are compliant and certified.



# OUR REACH IS GLOBAL.

We have been in business for over 150 years manufacturing premium aesthetic and security entrance solutions in the Netherlands, United States of America and China. We can confidently say that we cover every corner of the globe with subsidiary companies in major cities across the globe. Furthermore our global export division not only partner with our distributors, but also offer direct sales and service to every territory. This wide net allows us to have a strong global footprint as well as a personal grasp of local markets and their unique entry requirements.

To find your closest Boon Edam expert, please go to: **www.boonedam.com/contact** 



