

# Revolving Doors

If an entry is a mobility hotspot that signifies the gateway to the visitor's destination, a building's entrance is a small mobility hotspot in itself. The entrance is the first contact a visitor has with a building; it is the building's calling card and should signal to the visitor that he is in the right place; that he has almost reached his destination. As for any other mobility hotspot, the entrance needs to fit the building's criteria on three key areas: sustainability, security and service. However the entrance requires a fourth element: great design.







### Sustainability

Revolving doors are the most energy efficient entrance solutions available today. The always open, always closed principle of a revolving door ensures that the conditioned inside air and the unconditioned outside air remain separated, preventing draft, dust and noise coming into the building. As less energy is required to maintain the conditioned climate inside the building, revolving doors help reduce the carbon footprint of a building and save both energy and cost.

The same effect can be reached by installing a vestibule comprised of two sets of doors; one at the exterior and one several feet into the interior. For a vestibule with traditional sliding or swinging doors to be truly effective at saving energy, both sets of doors can never be open at the same time and so users may be required to hesitate as they enter or exit. In addition, vestibules occupy a significant amount of space at the entrance, which in many cases is not practical for smaller lobbies. The advantage

of revolving doors is that they save energy and occupy the least amount of space while facilitating a continuous flow of people.

At Boon Edam we are proud of what we have achieved over the past 140 years and we want to guarantee the existence of our company for at least another 140 years. As such we strongly believe in building a sustainable future and preserving the earth for future generations. Our entrance solutions help to reach our goals but we look further into our manufacturing process and try to use recycled or recyclable materials wherever possible, use manufacturing processes with minimal impact on the environment and separate and recycle waste materials as much as possible. We also have detailed information available on the carbon footprint of each of our products. This information can be used for LEED certification processes.

#### Service

At Boon Edam we work together with our clients to create the best entrance solution for your building. Our services extend from the first conception phase of the design process through to the installation and service and maintenance afterwards.

Whether seeking information regarding local building regulations, safety guidelines or accessibility requirements, our network of business development managers local offices can provide detailed knowledge and advice. As we have local representatives across the world, we know the intricacies of local rules and regulations and can help you to ensure your building's entrance meets them all.

Other services that Boon Edam can offer are:

- BIM Boon Edam was the first manufacturer of entrance solutions to release Revit models of their products for BIM. Models for most of our revolving doors are currently available for download through our website.
- Support throughout the design and specification process with CAD drawings and specification texts among others.
- Energy Savings Calculation Software 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.
- A dedicated project manager to be your contact throughout the manufacturing and installation process to support in any way necessary.
- Professional installation all our service and installation managers are well trained and certified. They are able to solve most unexpected problems on site to ensure that the installation can be completed without delay.
- A variety of service and maintenance options after installation customized to your needs and the local climate's effect on your door's operation.













#### Security

Security in an entry has two different aspects: the security of the building and the safety of its users. Boon Edam revolving doors comply with the strictest safety regulations. Sensors in the door wings and the frame ensure that the speed with which the door revolves is limited. Other sensors can prevent or minimize the force of impact of the door wing on users. These settings can be customized to suit your building's requirements; for applications where children, elderly people or people with special needs form a large part of the user profile, preventing all impact is preferable. Boon Edam can offer additional safety measures such as temporary low speed buttons and visual signage on the door wings and curved walls to ensure the accessibility of our doors for all user groups. In other applications fewer safety measures and a minimal impact may be allowable in order to improve the flow of people through the door. Boon Edam can advise on what safety measures are advisable in your situation.

Emergency egress is one of the main issues when considering the main entrance to a building. Boon Edam three and four wing revolving doors are equipped with a collapsible or folding door set, creating a free passage that can be used as a supplemental emergency exit of a building in addition to dedicated emergency doors. All Boon Edam revolving doors are available with a variety of night locking options that can ensure the building is securely closed during the non-opening hours. Options include different types of locking mechanisms that secure the door wings

in their rest position and night sliding doors that close over the throat opening of the revolving door. Vandal and bullet resistant glass is also available. Which option is required in your building, depends on your security needs and the type of revolving door you choose.

We recommend our Tourlock security revolving doors for applications where stricter security measures are necessary. The Tourlock can be equipped with a number of access control systems, preventing unwanted visitors from entering the building. Moreover this door is available with bullet resistant glass to improve the safety of those inside even further. For more information on Boon Edam's security doors and portals, please visit our website www.boonedam.us.







#### Design

A building's entrance is its calling card, its first contact with visitors. As such its design is a key element to its success. All Boon Edam revolving doors are available in a number of finishes and designs.

The frame is constructed from aluminium that can be either anodized or powder coated in a wide variety of colors. For a more polished look it can be clad in stainless steel or another type of metal, such as muntz metal (bronze). The door wings and curved wall can be inlaid with clear or tinted glass or with solid metal. Vandalism or burglary resistant glass is also available.

Our revolving doors are available in a wide variety of heights and widths with different canopy heights and heights under canopy, ensuring that many design wishes can be solved with one of our standardized products. If your design falls outside the options that are available, our sales managers and engineers can work with you to create a safe and sustainable entrance that meets all requirements.









## CrystalTQ

Our Crystal TQ manual revolving door is the ultimate eye catcher. Virtually completely transparent with only a minimal stainless steel frame and patch fittings for maximum strength, it exudes elegance and style. This revolving door is available with three or four door wings and as an element of fun or customization, tinted glass can be used for the door wings and curved walls.









Canopy / Soffit

**Bottom Pivet** 

Collapsed Door Wings

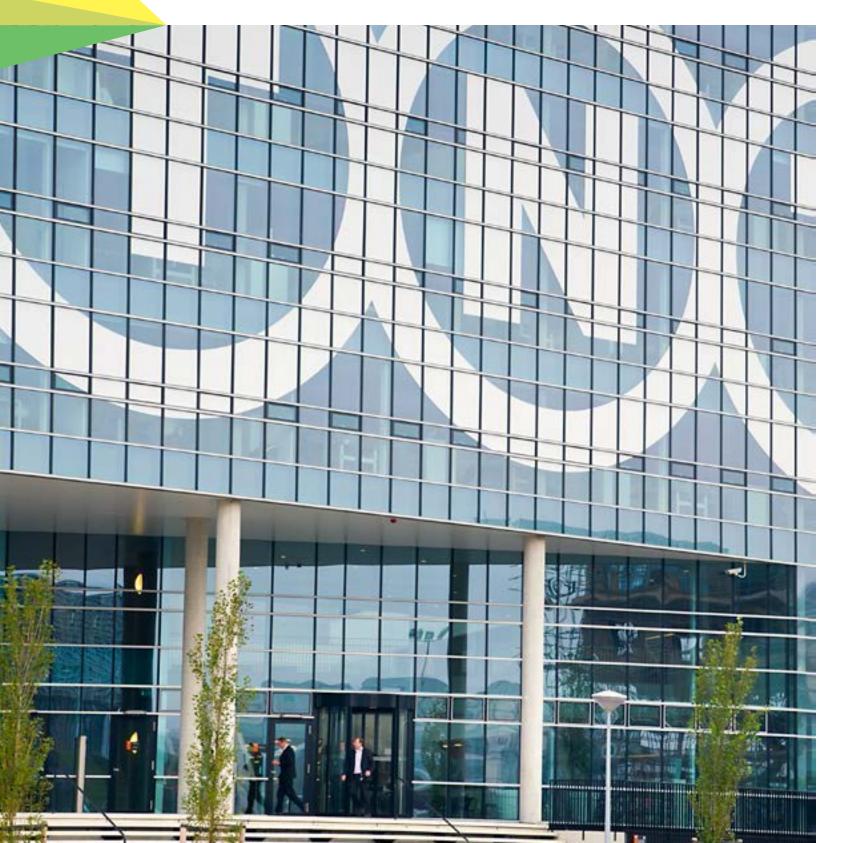
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#### NRG+TQ

The NRG+ TQ is the most unique product in our product range. This manual revolving door is the first door in the world to turn the energy applied to rotate it into electricity. The electricity generated from one turn is limited but enough to power the lights in the ceiling of the door. With technology improving we expect to be able to increase the amount of energy generated in the future in order for

the door to truly contribute to the building's energy supply. This revolving door is available with three or four door wings and a full range of finish options.

As a building's first impression, the NRG+ TQ tells visitors that the owner or occupants care about the environment and strive to build a sustainable future.



#### TQM

The TQM is a sturdy and versatile manual revolving door can be fully customized to create an entrance to a building that represents any design statement or brand as proven by the number of installations at hotels, restaurants and office buildings around the world. It is available with three or four door wings in virtually any color or finish.

#### TQA

The TQA is an automatic revolving door that is ideal for buildings where moderate throughput is needed as well as touchless operation. Like the TQM, this door can also be fully customized to reflect your building's design and functionality. It is available in 10' and 12' diameters, with your choice of three or four door wings in virtually any color or finish.



Customised Lighting





Stop Button



Wooden Tourniket



Door wing with SRD sensor



Disabled Access Button







#### Tournex

As a larger version of the TQA, the Tournex automatic revolving door is available with three or four door wings and allows easy and quick access to large amounts of visitors, wheelchairs, large carts and luggage, making the door of choice for casinos, large hotels and resorts and airports alike. Like the TQA it is available in virtually any color or finish. Optional showcases around the center column of the door set allow for customization or advertisements.





#### **Twintour**

Revolving doors force visitors to walk through them in a semi-circle. This can be inconvenient in airports or large shopping centers where visitors pass through with unwieldy carts or large luggage. Boon Edam's Twintour offers a unique solution for this problem. A combination of two or more two-wing revolving doors connected by a passageway allows users to walk in a straight line. This provides greater comfort for users and increases the capacity of the door. A Twintour set up with three or more revolving doors can be used in different configurations to steer the flow of visitors to different parts of a building or lobby, thus separating users with different destinations.

# Product Overview

	ΤQ	Crystal TQ	NRG+ TQ	Tournex	Duotour	Twintour	Tourlock 120	Tourlock 180+90	Circlelock	Swinglane	Speedlane 900	Speedlane	e Speedlane 2048	e Twingloc 900	k Winglock 900	Transpaloo	ck Trilock 900	Trilock 75	Trilock 60	Trilock 50	Turnlock 100	Turnlock 150	Turnlock 200	Turnlock 250
			I	m						Du	11	11							1	1				M
										ja e														
Diameter (inch)	6′6″-12′0″	6'6"-7'6"	6′6″-8′0″	12′0″-20′0″	' 12'0"-18'0"	10′0″-12′9″	5'6"-9'9"	5′6″-9′9″	3'3-3/8" / 4'11-1/16"							63"					5′0″	5′0″	5′0″	5′0″
Unit Width (inch)										7-11/16"	15-11/32"-23-1/4	4"12-3/8"-19	-1/4"9-1/2"	7-9/32"	10"		230	36"	27"	18-3/16"				
# Door Wings	3/4	3/4	3/4	3/4	2	2x 2	3	4	2	1	2	2	0	2	1	3	tripod	tripod	tripod	tripod	3/4	3	3/4	3/4
Capacity	2x 25	2x 25 2x 35	2x 20 2x 30	2x 35 2x 30	2x 40 2x 80	2x 60 2x 65	1x 15 2x 75	1x 15 2x 75	5 2x 20	25-30	25-30	25-30	50-60	10-15	6-8	15-20	20-25	20-25	20-25	20-25	15-20	15-20	15-20	15-20
Height (inch)	7′0″	7'2-5/8"	83"-102"	7′0″	7′0″	7'2-5/8"	7′0″	7′0″	7'6-9/16"	39-3/8"	35"-71"	36-1/4"	na	39-1/2"	39-3/8"	39-1/2"	870-896	33"	33"	32-7/16"	81"	81"	81"	81"
(Under Canopy / Barrie	er)																							
Security Level	88888							88886	88888		88888											88888	88888	8888
Disabled Access	✓	×	×	✓	✓	✓	×	×	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	×	×	x	×
Emergency Exit	✓	✓	$\checkmark$	✓	×	✓	×	×	×	×	×	×	×	×	x	×	×	×	×	×	×	×	×	×
Fail Safe / Fail Secure	×	×	×	x	×	×	$\checkmark$ / $\checkmark$	√/√	√/√	√/×	$\checkmark$ / $\checkmark$	√/ x	√/×	√/x	√/ x	√/x	$\checkmark$ / $\checkmark$	√/√	√/√	√/√	$\checkmark$ / $\checkmark$	<b>√</b> / <b>√</b>	$\checkmark$ / $\checkmark$	√/√
Collapsible	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×	$\checkmark$	$\checkmark$	$\checkmark$	×	×	×	×	×	×	×	×	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×	×	×	×
Door Set / Barrier																								
Finish																								
Stainless Steel	✓	x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Powdercoated Aluminu	um √	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	x	×	×	✓	✓	✓	✓	×	x	x
Anodized Aluminum	✓	×	✓	✓	✓	✓	✓	✓	✓	<b>√</b> *	√*	x	×	×	x	×	×	×	×	×	✓	✓	✓	✓
Wood	×	×	×	×	×	×	×	×	×	<b>√</b> *	<b>√</b> *	×	×	×	x	×	×	×	×	×	×	×	×	×
Stone	×	×	×	×	x	×	×	x	×	<b>√</b> *	<b>√</b> *	x	<b>√</b> *	×	×	×	×	✓	×	×	x	×	×	×
Options																								
Night Locking Doors	✓	✓	✓	✓	✓	×	✓	✓	×	×	x	×	×	×	x	×	×	×	×	×	×	×	x	×
Price * Top cover only	****	****	****	****	****	****	****	****	****	****	****	****	****	***	****	****	****	****	****	****	****	****	****	****

<sup>\*</sup> Top cover only

