



**BOON EDAM**

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.

 *your entry experts*



With 140 years of experience providing beautiful, environmentally friendly and successful entrance solutions, Boon Edam can make virtually all entrance wishes come true. We provide a range of standardised solutions that have been tried and tested. Your design ideas and our engineering expertise can turn these proven technologies into a beautiful and workable door.



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 draught, 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 draught lobby but for draught lobbies with conventional sliding or swinging doors to be truly effective, the entrance and exit doors of the lobby can never be open at the same time. This means that users are often required to wait in the draught lobby for the next door to open, causing frustration and a feeling of being unwelcome. The advan-

tage of revolving doors is that they save energy 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 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 www.boonedam.com.
- 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 including Teleboon remote monitoring.





Security

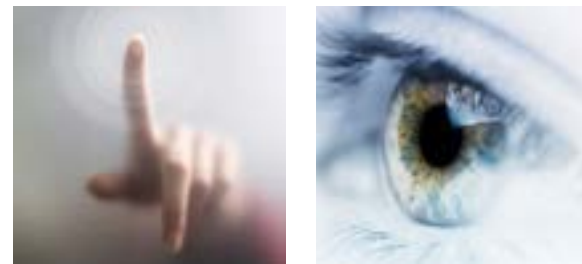
Security in an entry has two different aspects: the security of the building and the safety of its users. Boon Edam revolving doors comply with the strictest safety regulations. Sensors in the door wings and the frame ensure that the speed with which the door revolves is limited. Other sensors can prevent or minimise the force of impact of the door wing on users. These settings can be customised 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 virtually all available with a collapsible or folding door set, creating a free passage that can be used as the main emergency exit of a building. However many building regulations prescribe that a two wing revolving door can no longer be the only means of emergency exit in a building; regulators sometimes feel that the movement and design of the door may not work intuitively enough in case of an emergency. In those cases we recommend placing a swing door that can be opened only in an emergency near the revolving door to allow emergency exit without compromising the sustainable properties of the entry.

All Boon Edam revolving doors are available with a variety of nightlocking 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. Which option is required in your building, depends on your security needs and the type of revolving door you choose.

Moreover, our Tourniket and Tournex revolving doors are available with an approved class 3 burglary resistance package which includes burglary resistant glass, special locking and reinforced profiles. This package was developed, tested and certified in compliance with European ENV1627 standards.

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.com.



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 anodised or powder coated in a wide variety of colours. For a more polished look it can be clad with in stainless steel or another type of metal. Our Tourniket revolving door is also available in a wooden finish for a vintage look. 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 standardised products. If your design falls outside the options that are available, our sales managers and engineers will work with you to create a safe and sustainable entrance that meets all requirements.





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Crystal Tourniket

Our Crystal Tourniket 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 customisation, tinted glass can be used for the door wings and curved walls.

The Crystal Tourniket is available with either manual or automatic operation, however we recommend using an automatic drive for diameters of over 2800mm.



NRG+ Tourniket

The NRG+ Tourniket 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+ Tourniket tells visitors that the occupants care about the environment and strive to build a sustainable future.



Tourniket

The Tourniket is our most versatile revolving door that can be fully customised to reflect your building's design and functionality. It is available with three or four door wings, with manual or automatic operation and in virtually any colour or finish you can think of.

The Tourniket is also available with a door set that can collapse itself automatically when the disabled access button is pushed. This feature allows easy, unhindered, disabled access even in small diameter doors.





Duotour

Our Duotour is an automatic revolving door with two door wings. A showcase or curved panel at the end of each door wing ensures that the always open, always closed principle of the revolving door is maintained. Sliding or swinging doors are incorporated between the two showcases. These allow the Duotour to be used as a revolving door or as a sliding or swinging door; they also provide free egress in case of an emergency

or passage to hospital beds or other large objects. This door is particularly well suited to healthcare facilities or shopping centres as the large segments allow easy passage. The showcases can be decorated to set visitors to healthcare facilities at ease or to advertise the products on sale in a shopping centre. The showcases can be omitted in order to maximise the surface of the segments even further.



Tournex

A larger version of the Tourniket, the Tournex is available with three or four door wings and allows easy and quick access to large amounts of visitors, wheelchairs, large carts and luggage. Like the Tourniket it is available in virtually any colour or finish. Optional showcases around the centre column of the door set allow for customisation or advertisements. Because of its size it is only available in an automatic version.



Twintour

Revolving doors force visitors to walk through them in a semi-circle. This can be inconvenient in airports or large shopping centres 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 passage way allows users to walk in a straight line. This provides greater comfort for users and increases 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

	Tourniket	Crystal Tourniket	NRG+ Tourniket	Tournex	Duotour	Twintour	Tourlock 120	Tourlock 180+90	Circlelock	Swinglane 900	Speedlane 900	Speedlane 300	Speedlane 2048	Twinglock 900	Winglock 900	Transpalock 900	Trilock 900	Trilock 75	Trilock 60	Trilock 50	Turnlock 100	Turnlock 150	Turnlock 200	Turnlock 250	
Diameter (mm)	1600-3800	1600-3000	2000-2800	3600-7400	3600-5400	3000-3800	1500-2200	1600-2200	1000/1500							1600					1524	1524	1524	1524	
Unit Width (mm)										195	390-590	315	240	185	260		230	178	178	178		1524	1524	1524	1524
# Door Wings	3 / 4	3 / 4	3	3 / 4	2	2x 2	3	4	2	1	2	2	0	2	1	3	tripod	tripod	tripod	tripod	3 / 4	3	3	3	
Capacity / Minute	2x 22-46	2x 22-38	2x 20-33	2x 32-91	2x 40-59	2x 60-75	1x 15	2x 20	5	25-30	25-30	25-30	50-60	25-30	15-30	15-20	15-20	15-20	15-20	15-20	15-18	15-18	15-18	15-18	
Height (mm) (Under Canopy / Barrier)	2100-3600	2100-3400	2100-2600	2200-2600	2200-2600	2200-2700	2100-2600	2100-2600	2100-2600	1000	900-1800	934		1000	1000	1000	872-896	813	838	826	2057	2057	2057	2057	
Security Level	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
Disabled Access	✓	x	x	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	x	x	x	x	x	✓	x	x	x	
Emergency Exit*	✓	✓	✓	✓	x	✓	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Fail-Safe / Fail-Secure	x	x	x	x	x	x	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	✓/✓	
Collapsible Door Set / Barrier	✓	✓	✓	✓	✓	✓	✓	✓	x	x	x	x	x	x	x	x	✓	✓	✓	✓	x	x	x	x	
Finish																									
Stainless Steel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Powdercoated Aluminium	✓	x	✓	✓	✓	✓	✓	✓	✓	✓**	✓**	x	x	x	x	x	x	x	x	x	✓	x	x	x	
Anodised Aluminium	✓	x	✓	✓	✓	✓	✓	✓	✓	✓**	✓**	x	x	x	x	x	x	x	x	x	✓	✓	✓	✓	
Wood	✓	x	x	x	x	x	x	x	x	✓**	✓**	x	x	x	x	x	x	x	x	x	x	x	x	x	
Stone	x	x	x	x	x	x	x	x	x	✓**	✓**	x	✓**	x	x	x	x	x	x	x	x	x	x	x	
Options																									
Burglary Resistance Package	✓	x	x	✓	x	✓	x	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Night Locking Doors	✓	✓	✓	✓	x	x	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Price	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	

* Requirements are subject to local regulations
 ** Top cover only





Crystal Tourniket



NRG+Tourniket



Tourniket



Tournex



Duotour



Twintour