Secure Entry Portals

Prevent Piggybacking and Tailgating

Boon Edam's anti-piggybacking interlocking door systems utilize quality design, superior construction and state-of-the-art technology. Design and sophistication combine to ensure the highest level of security by preventing piggybacking and tailgating.

Interlocking door system

Boon Edam's Secure Entry Portals are fully programmable and can incorporate metal detection, bullet resistant glass and either uni-directional or bi-directional electrical controls.

The security portals can be integrated with any type of access control system and provide uncompromising security for entrance installations.

anti-piggybacking: preventing simultaneous entry of two or more people

Your Security. Our Solution.

BOON EDAM

TAP Interlocking Door Systems

Boon Edam's anti-piggybacking interlocking door system enables the entry and exit to be monitored independently, allowing controlled access, free access or no access in either direction. The patented "Stationary Object Detector" scans the portal with ultrasonic sensors to ensure that only one person has entered the portal, preventing the simultaneous transit of two people.

Operation

Doors are normally locked in the closed position. An access control device or personal identification activates the system opening the first door. If the user passes the access control criteria and is verified to be entering alone, the first door closes and the second door opens allowing access into the secured area.

When more than one person attempts to enter the portal, a voice synthesizer will notify the users that simultaneous transit of two people through the portal is denied. The second door will not open and the unauthorized user must exit the portal. If the user enters the portal with a sufficient amount of metal to alarm the metal detector (optional), a voice synthesizer will notify the user to exit the portal and re-enter without metal objects.

For enhanced security, a biometric device can be mounted within an optional internal alcove. Identity verification would be required for the second door to open allowing access into the secured area.

Once the entry or exit has been completed, the internal volume of the portal is measured by a volumetric sensing system to ensure that no objects have been left in the portal. If nothing is detected, the system is cleared for the next user.

interlocking: connecting so that the motion or operation of one part is constrained by another

TAP-50 Half Portal

The half portal secure interlocking door system
Boon Edam offers a unique solution for securing existing doorways with the TAP-50 Half Portal.

- Prevents piggybacking using a sophisticated ultrasound sensor to scan the cabin and deny access if two or more people are detected
- Fully programmable half cylinder portal
- Utilizes existing swing doors
- Minimizes construction necessary to accommodate portal installation
- Designed with either uni-directional or bi-directional electrical controls
- Optional bullet resistant glass
- Integrates with any type of access control system, including biometrics

Additional Configuration
TAP-50SD   Swing door included with unit

1.

2.

3.

4.

5.
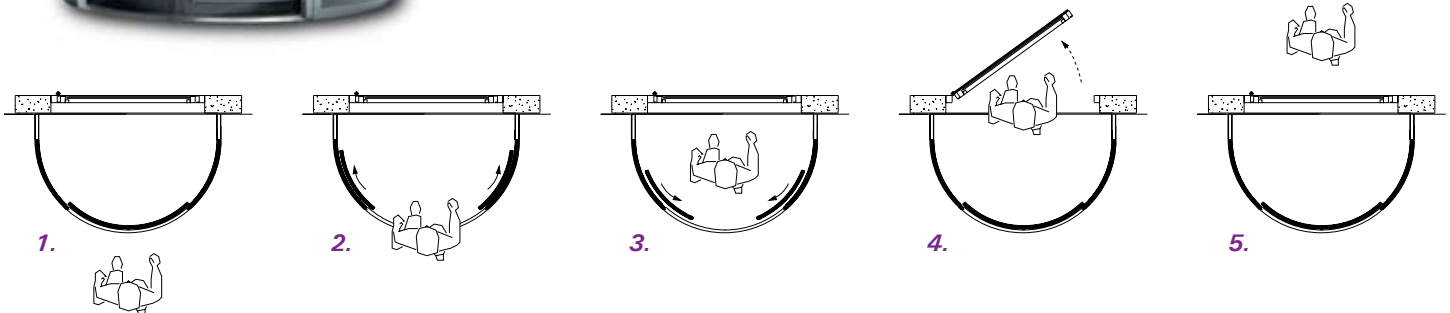
TAP-100 Single Entry

Single entry interlocking door system

The TAP-100 Interlocking Door System is a fully programmable cylindrical portal which can be designed with metal detection, armored glass, and uni-directional or independent bi-directional electrical controls.

- Prevents piggybacking
- Small 32-1/4" diameter cylindrical portal
- Integrates with any access control system
- Optional bullet resistant glass
- Optional metal detection

Additional Configuration

TAP-100EE   Integrated with emergency exit to allow automatic opening of curved doors and swing door simultaneously

TAP-200 Multipurpose

Multipurpose interlocking door system

Boon Edam's Multipurpose Interlocking Door System provides flexibility and state-of-the-art technology to ensure the highest level of security with a larger portal size

- Prevents piggybacking
- Large 54-1/2" exterior diameter cylindrical portal
- Wheelchair accessible
- Integrates with any access control system
- Optional bullet resistant glass
- Optional metal detection

TAP-250 Multipurpose/ADA

Multipurpose/ADA Interlocking Door System ♿

Boon Edam's Multipurpose/ADA Interlocking Door System provides flexibility and state of the art technology to ensure the highest level of security with a larger portal size for ADA or other requirements. The TAP-250 Interlocking Door System with extended cabin length is a fully programmable cylindrical portal.

- Prevents piggybacking
- Extended 72" cabin length
- Wheelchair accessible
- Accommodates small cart traffic
- Integrates with any access control system

Features & Options

Safety and Emergency Controls

- The interlocking door system is equipped with an inside call button and intercom in the event that assistance is needed.
- The remote control panel may be used by the installation site manager to open both doors for continuous entry and exit.
- The portals can be connected to the building's fire alarm system, opening both doors immediately to allow evacuation.
- In the event of a power outage, the portal's battery back-up system allows for two hours of continuous use. The portal also can be opened manually with a mechanical release lever that releases the door on the public side. On the secure side, a hand crank is provided to open the door.

Characteristics	TAP-50		TAP-100		TAP-200		TAP-250	
	Std	Opt	Std	Opt	Std	Opt	Std	Opt
Anti-Piggybacking and Anti-Tailgating	•		•		•		•	
Wheelchair Accessible					•		•	
Access Control Connection Box	•		•		•		•	
Remote Control Panel	•		•		•		•	
Battery Backup (2 hours)	•		•		•		•	
Access Control Housing, Horizontal or Vertical		•		•		•		•
Interior Call Button/Intercom	•		•		•		•	
Interior Emergency Lever		•	•		•			•
Exterior Emergency Lever	•			•		•	•	
Emergency Lever/90° Pull-Handle		•						•
Metal Detection				•		•		
Two-Zone Presence Mat		•		•	•		•	
Floor Installation Kits				•		•		
Surface Mount Track System	•			•	•		•	
Stainless Steel Construction (Clad)		•		•		•		•
Stainless Steel Top Cover		•		•		•		•
Locked Top Cover	•		•		•		•	
Bi-Parting Doors	•					•	•	

Light

Camera

Monitor

Fingerprint Reader

Speaker

Access Control Horizontal Housing

Control Panel

Emergency Handle

Footprints & Dimensions

Portal Type	Exterior Dimensions		Interior Dimensions		Cabin Entrance
	Width	Height	Width	Height	Width
TAP-50	54.37″	91.45″	51.73″	81.22″	35.03″
TAP-100	38.98″	93.84″	32.28″	81.22″	24.02″
TAP-200	54.53″	93.44″	47.24″	81.22″	33.86″
TAP-250	54.37″	91.45″	51.73″	81.22″	35.04″

TAP-50 FOOTPRINT

Technical Characteristics

Power

Power Requirements – 110V AC, 60Hz
Power Supply – 24V DC with two backup batteries
Battery Operation – 2 hours continuous duty
Motors – One 24V DC (TAP-50)
– Two 24V DC (TAP-100, TAP-200, TAP-250)

Glass Options

Standard/Impact Safety Glass – 10mm (0.39″)
Vandal Resistant Glass – 14mm (0.55″)
Bullet Resistant, Level 3 – 27mm (1.06″)

TAP-50SD FOOTPRINT

Single Sliding Door Throughput (people per minute)	TAP-50	TAP-100	TAP-200	TAP-250
Standard/Impact Safety Glass	–	7	5	–
Vandal Resistant Glass	–	5	4	–
Bullet Resistant Glass, Level 3	–	4	–	–

Bi-Parting Door Throughput (people per minute)	TAP-50	TAP-100	TAP-200	TAP-250
Standard/Impact Safety Glass	8	10	8	8
Bullet Resistant Glass, Level 3	–	–	4	–
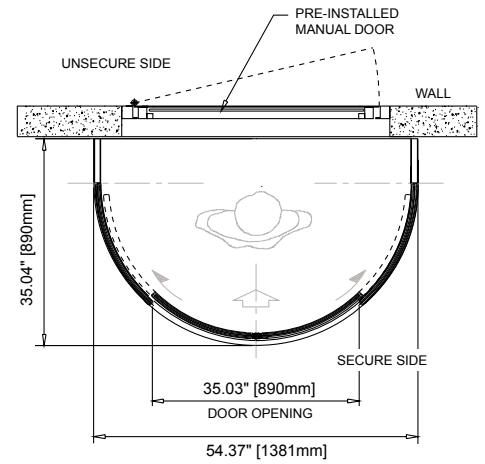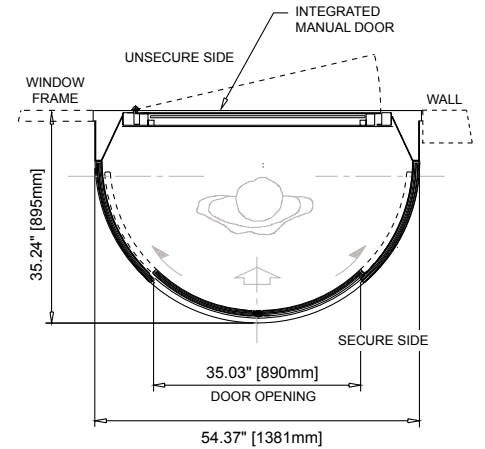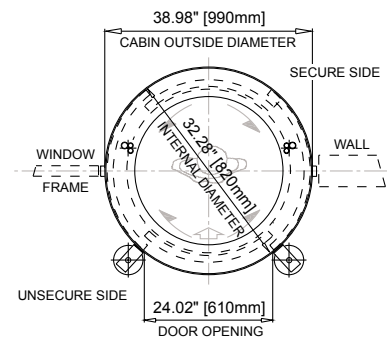
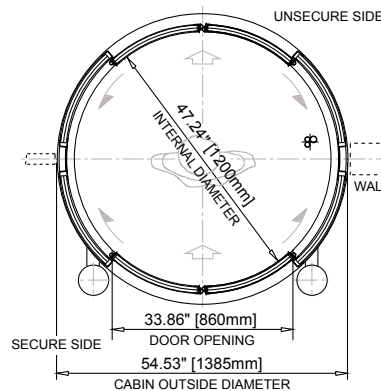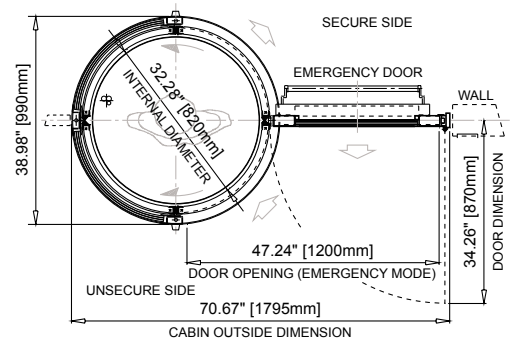*TAP-100 FOOTPRINT*
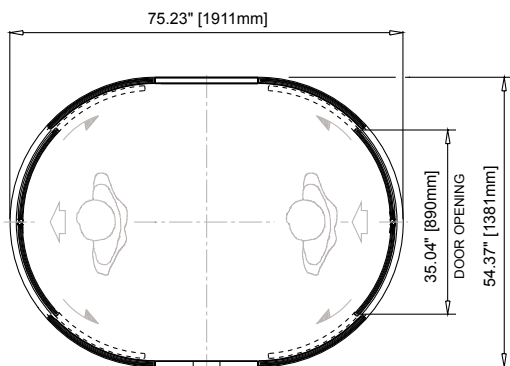
*TAP-250 FOOTPRINT*

TAP-200 FOOTPRINT

TAP-100EE FOOTPRINT

Circlelock Interlocking Door Systems

Boon Edam's Circlelock security entry portals offer a high level of security balanced with ease and speed of operation. The Circlelock security portal prevents piggybacking through the use of either an overhead sensor system or an integrated floor weight sensor. Two different sizes are available to accommodate various traffic requirements.

Operation

1. In the rest position, both sliding doors are closed and locked.
2. The first sliding door is activated by an external authorization system, such as a card reader or biometric system. Upon authorization, the LED display turns green and the first door opens, allowing the user to step into the portal.
3. Once inside, the first sliding door closes and locks. The standard weight sensor or optional StereoVision overhead sensor system will verify that only one person has entered the security portal.
4. Upon successful verification, the second door will open and the user may walk out.
5. The second door will close immediately after the user has exited the portal.
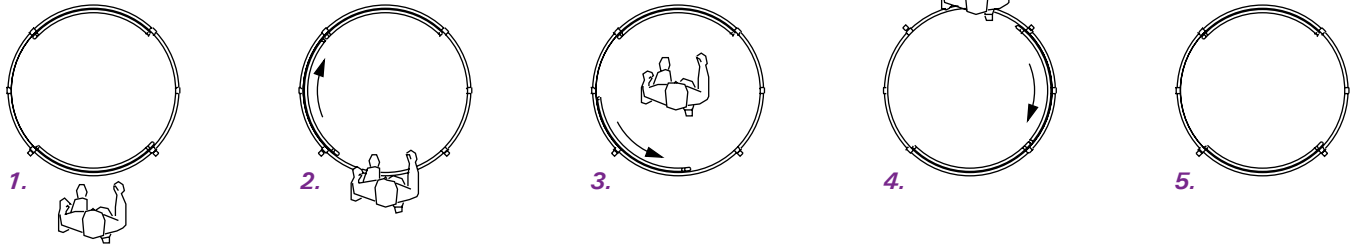
Circlelock-100 & Circlelock-200

Controlled access for all situations

If security at a secondary or remote entrance is a prime concern, the Circlelock security portal can help put your mind at ease. The Circlelock helps control access into and out of your facility, or selected area within your facility. Its unique design allows for authorized traffic only, one person at a time. The larger Circlelock can even accommodate a wheelchair, avoiding the security compromise that may occur in order to allow a disabled person access to a secured area.

- Small 39" diameter cylindrical portal (Circlelock-100)
- Large 60" diameter cylindrical portal (Circlelock-200)
- Wheelchair accessible (Circlelock-200)
- Optional bullet resistant glass
- Integrates with any access control system
- Optional StereoVision anti-piggybacking technology

Circlelock-100

Circlelock-200

StereoVision

Sophisticated 3D vision technology

Boon Edam's technological innovation, StereoVision, is available on the Circlelock security entry portal. StereoVision is a revolutionary overhead sensor system that recognizes shape, size and volume in three dimensions. The single or bi-directional sensor system can detect piggybacking in either direction.

By utilizing digital camera technology integrated in the ceiling, this ground-breaking advancement allows the Circlelock to more accurately monitor the interior of the portal to determine if a piggybacking violation is occurring. The StereoVision is an option that replaces the standard floor weight sensor. A special lighting system mounted in the ceiling is standard with the StereoVision system.

Digital Camera

StereoVision Technology

Features & Options

Characteristics	Circlelock-100		Circlelock-200	
	Std	Opt	Std	Opt
Interior emergency button	•		•	
Fail-safe/Fail-lock operation	•		•	
Battery backup	•		•	
Rubber safety buffers	•		•	
Floor weight sensor	•		•	
Feedback signals to authorization system	•		•	
Connection to external fire alarm system	•		•	
Cleaning mode function (operated with key switch panel on secured side)	•		•	
External control panel		•		•
StereoVision		•		•
Steel pedestal to allow mounting on a computer floor		•		•
Solid panels in door set or curved walls		•		•
Bullet resistant glass (U.L. Level 1 or 3)		•		•

Technical Characteristics & Dimensions

Power

Power Requirements – 200-240 VAC, 50/60 Hz
Power Consumption – 250 W
Fuse – External power supply fused with 16A slow
Drive System – Two AC motors with frequency controllers
Main Processor – Programmable Logic Controller (PLC) customized to meet specific installation requirements

Dimensions

Portal Type	Exterior		Interior	Cabin Entrance
	Width	Height	Diameter	Width
Circlelock-100	42-1/4″	7′8″	39″	26-1/2″
Circlelock-200	62″	7′8″	60″	40-1/2″

Single Sliding Door Throughput (people per minute)	Circlelock-100	Circlelock-200
Vandal Resistant Glass	5	5
Bullet Resistant Glass, Level 1	4	4
Bullet Resistant Glass, Level 3	3	3

Circlelock-100

Circlelock-200

7'8"*
7'0"*

2'2¹/₂"
3'6¹/₄"

3'4¹/₂"
5'2"

3'3"

5'0"
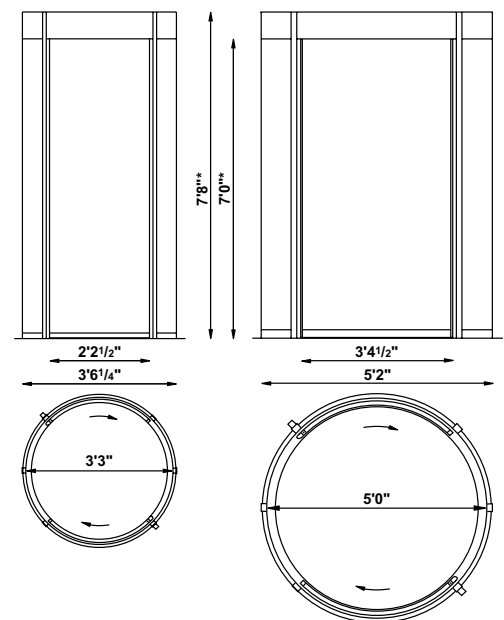
TAP-50 Secure Side   *TAP-50 Public Side*

Circlelock-200

TAP-100

Circlelock-200

TAP-200

Circlelock-100

Boon Edam operates a policy of continuous refinement and improvement and therefore reserves the right to modify design and details at any time.

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