













SOLUTIONS QUICK GUIDE





















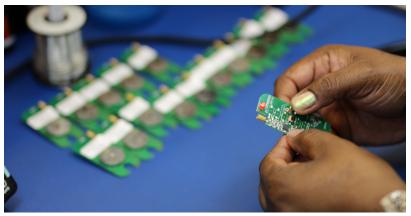














WHO WE ARE

At BEA Americas, our team is inspired and empowered to provide advanced sensor solutions that help to grow a safe and convenient automated world.

BEA is a world leader in developing sensors for the safety and activation of automated systems, including pedestrian and industrial automatic doors, vehicle gates and barriers, transportation systems, security access control, and retail sensing applications.

A **Halma** company

Since 2002, BEA has been a part of Halma, a global holding company headquartered in the United Kingdom. Halma-owned companies produce products and services for markets related to health, safety and environmental safety. BEA operates within the Infrastructure Safety Division of HALMA plc.

OUR EXPERTISE

BEA researches, develops and integrates the latest technologies into our products to create a diverse range of sensing solutions for pedestrian, industrial, logistics and security applications.

Our sensors improve safety and accessibility, while streamlining pedestrian and vehicular flow in applications around the world.

We partner with OEMs in key markets to ensure that our sensors and other solutions can be incorporated seamlessly with their equipment.





PRESENCE





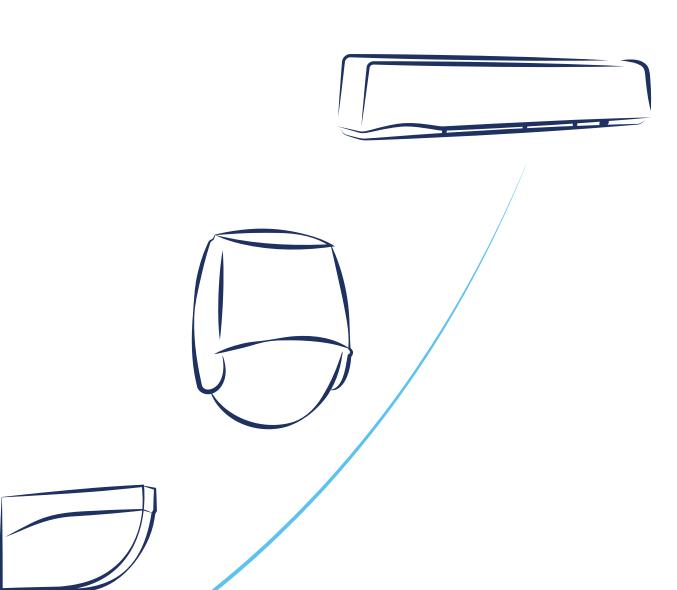
SAFETY

RAW DATA

























TECHNOLOGIES

LASER

LASER technology works according to the principle of Time-of-Flight. The sensor sends an intense light impulse in a defined direction and measures the time until the signal returns. As the speed of light is a constant value (approximately 300,000 km/s), this time is directly proportional to the distance between the sensor and the first object encountered by the light impulse.

As a result, and by sending multiple beams in multiple directions (2D or 3D), the sensor is capable of knowing the exact position of any object in its detection area at any given time.

ACTIVE INFRARED (WITH BACKGROUND ANALYSIS)

Active infrared with background analysis technology works with a background (e.g. a sensor shines infrared light on the floor). In this case, the sensor lights up one or more areas and analyzes the energy that returns. Detection is triggered if there is any significant difference when compared to the original picture.

ACTIVE INFRARED (WITH BACKGROUND SUPPRESSION)

Active infrared with background suppression technology works on the principle of "triangulation" in which the sensor calculates the distance between the emitter and receiver. The emission angle is already known and the reflection angle becomes the key element as the distance to the object can be calculated according to the position of the reflected spot on the receiver side (a triangle can be drawn when you know one distance and two angles).

PASSIVE INFRARED

Passive infrared technology measures the infrared light radiating from objects in its field of view. Motion or presence is detected when an infrared source with one temperature, such as a human being, passes in front of an infrared source with another temperature, such as the normal environment.

RADAR

Radar technology, also known as microwave technology, is based on the Doppler Effect: the radar sensor continuously emits microwaves with a certain frequency in a defined area. These microwaves are reflected back to the sensor by all of the objects present in its environment.

PIEZO

Piezo technology, also known as piezoelectric, is the process of converting mechanical pressure (pushing a button) into electrical energy. A piezo switch is paired with a field effect transistor (FET) that, when pushed, allows current to flow through the FET.

VIDEO

Video technology uses optics and light to create pictures and videos. Enhanced definition cameras capture door environment and traffic usage in full color and high quality. Cameras are used within sensors to increase security and decrease liability.













LASER-BASED SENSORS



LZR®-FLATSCAN SW

STANDALONE, DOOR MOUNTED SWING DOOR SAFETY SYSTEM

- Leading edge safety extends the detection area beyond the leading edge of the door for enhanced safety
- Easy door width programming with Hand Gesture Setup™ reduces configuration time
- LASER technology provides a reduced uncovered zone of down to 3/4 inch
- Hub-less system offers fewer components for easier setup and installation



LZR®-FLATSCAN 3D SW

FOUR CURTAIN STAND-ALONE, DOOR-MOUNTED SAFETY SYSTEM WITH VIRTUAL PUSH BUTTON FUNCTIONALITY

- The four detection curtains ensure full-safety coverage of the leaf, hinge area and leading edge of the door
- Virtual Push Button functionality offers an additional form of initial activation
- Offers all the benefits of LZR-FLATSCAN SW



LZR®-FLATSCAN S

COMPACT, SINGLE-CURTAIN, LASER SCANNER FOR DOOR, GATE, AND BARRIER APPLICATIONS

- Virtual presence loop ideal for applications where cutting ground for loops is prohibited, impossible, or expensive
- Left or right, horizontal or vertical sensor mounting allows for convenient sensor installation based on application needs
- Low-profile solution reduces risk of wear and tear in vehicle applications
- Metal enclosure and IP66 rating protects sensor in harsh environments
- Fog filter and additional immunity settings allow for field adjustments to mitigate environmental interferences



LZR®-FLATSCAN W

MOTION, PRESENCE & SAFETY SENSOR FOR INDUSTRIAL DOORS

- Pattern covers the entire window including the inner frame borders
- Universal mounting base offers flexible installation and allows a variety of positions to suit niche application needs
- The detection field size is defined by a simple hand movement; height and width of the field are automatically calculated
- One or both virtual push buttons can be programmed to activate the opening or closing of the window



LZR®-MICROSCAN T

STAND-ALONE, DOOR-MOUNTED, SWING DOOR SAFETY SYSTEM

- Plug & play technology utilizing a centralized hub and intuitive LCD interface greatly reduces installation and setup time
- High resolution, self-adapting detection zones, coupled with reduced uncovered zones create the most accurate and reliable safety sensor
- Fully monitored internally, capable of external monitoring
- Meets UL 10B/C, fire rated for up to three hours



LZR®-WIDESCAN

MOTION, PRESENCE & SAFETY SENSOR FOR INDUSTRIAL DOORS

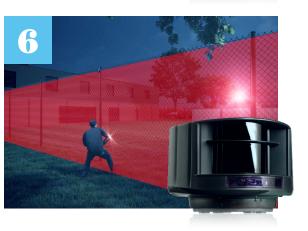
- Utilize mobile app to easily configure sensor settings (available on the Apple App Store & Google Play Store)
- Virtual pull-cord function can differentiate between pedestrian and vehicle traffic and can provide pulse-on-stop activation
- Two visible LASER alignment spots ensure accurate pattern placement
- Promotes energy savings by reducing false detections / unnecessary door cycling, helping to regulate HVAC



LZR®-H100

LASER SCANNER FOR VIRTUAL LOOP APPLICATIONS

- Ideal for applications where cutting ground for loops is prohibited, impossible or expensive
- Two relays allow for activation via motion or presence
- Time-of-Flight presence-based opto-electronic sensor ensures accurate and immediate detection
- Ability to detect vehicle trajectory during approach and departure



LZR®-S600

LASER SCANNER FOR BUILDING AUTOMATION AND SECURITY

- External entrapment protection device capable of monitoring with interfaces building management systems
- Maximum detection range of 82 x 82 feet
- High immunity to environmental interferences
- Has the ability to ignore dynamic ground conditions and extreme weather

LASER-BASED SENSORS



LZR®-130

LASER SCANNER FOR INDUSTRIAL AUTOMATION

- Four curtains of detection each capable of 30 × 30 feet
- Detects objects as small as 2 inches at 30 feet away, depending on application
- Has the ability to ignore dynamic ground conditions and extreme weather
- Three visible LEDs for pattern alignment



LZR®-U920 / U921

COMPACT RAW DATA LASER SCANNER

- Background or substrate has limited effect on measurements
- Measurement range: up to 65 m (213 ft)
- Standard RS485 bus communication (bi-directional)
- No external illumination of target object necessary as compared to camera systems

BEA's LASER technology produces intense light beams at a rate of over 16,000 pulses per second - faster than the human eye blinks! When these light beams reflect off the multi-faceted mirror in our sensors, curtains of LASER spread across your designated application. With the speed at which the beams pulse and the coverage of the LASER curtains, BEA's LASER sensors can detect objects as small as two inches.

MICROWAVE SENSORS



EAGLE ARTEK

COMPACT, MOTION SENSOR FOR AUTOMATIC DOORS

- Slim and compact design permits integration with all types of automatic door operators
- Electronic management of the radar field shape and push-button adjustments allow for quick installation and setup
- Immunity Filter, Field Size, and Field Shape settings work together with direction sensing capability (Detection Mode) to reduce door open time
- Same mounting references and plug-in interface accessory make it easy to retrofit EAGLE



SPARROW

VARIABLE MOUNT INDUSTRIAL MOTION SENSOR

- Mounting height from 6 ½ feet to 20 feet
- Ten sensor sensitivity settings can be applied to optimize detection
- IP64 rated enclosure for industrial and harsh environments
- Immunity settings can be adjusted to reduce unwanted detections caused by rain, snow and header vibrations
- Adjustable microwave antenna can be rotated ±120 degrees to create different sensing fields



COLIBRI ONE

UNIDIRECTIONAL MOTION SENSOR FOR OFF-DOOR APPLICATIONS

- Variable sensitivity adjustment provide different detection areas
- Lateral angle adjustment for ceiling, wall and low level mount versatility
- Compact size provides flexibility in mounting
- Pairs well with LED Signal Lights for warning indication applications
- Has the sensitivity to detect objects moving as slow as 2 inches per second



FALCON FAMILY

MOTION SENSOR FOR INDUSTRIAL DOORS, GATES & WARNING INDICATION

- Six modes of detection filtering for pedestrian and parallel traffic rejection
- Remote control programming enables users to quickly and safely make changes from the ground
- IP65 rated enclosure / FALCON EX offers explosion / flame proof housing

MICROWAVE SENSORS



PHOENIX EX

MOTION SENSOR WITH EXPLOSION-PROOF / FLAME-PROOF HOUSING FOR INTRUSION PROTECTION

- Bidirectional, unidirectional approach and unidirectional depart microwave detection options
- Integrated tamper alert switch and end-of-line resistors
- Explosion-proof / flame-proof housing weighs 10 lbs
- Tilt adjustment angle: -90 to 30° in elevation



MS09

IP65 RATED, MICROWAVE TOUCHLESS ACTUATOR

- Detection zone from 4 24 inches
- IP65 enclosure capable of use in industrial and extreme environments as well as washdown facilities
- Can be used in a variety of indoor and outdoor applications
- External mounting boxes are not required
- Detects moving objects such as a hand, pallet jack or forklift and is ideal for applications requiring a touchless activation method including hospitals, pharmacies, clean rooms and food services



MS31

MICROWAVE TOUCHLESS ACTUATOR WITH ADJUSTABLE RANGE AND RELAY **HOLD TIME**

- Detection zone from 4 24 inches
- IP54 rated enclosure for protection against outdoor weathering and daily
- Dipswitch position determines if LED illuminated when in detection or when not in detection
- Silent activation for hospitals and other noise-sensitive environments



MS41

STAINLESS STEEL, TOUCHLESS ACTUATOR WITH ADJUSTABLE RANGE AND **RELAY HOLD TIME**

- Detection zone from 4 24 inches
- IP55 rated enclosure capable of use in industrial and extreme washdown environments
- Stainless steel faceplate increases durability and protection from daily
- Configurable output hold time of ½ to 30 seconds allowing unique, userdefined device placement

INFRARED SENSORS



MS51

BATTERY-POWERED, TOUCHLESS ACTUATOR

- Up to 3-year battery life provides uninterrupted operation in the field
- Quick push-plate retrofit reduces installation time and cost
- Three-step process simplifies installers' time in the field
- Built-in redundant sensor ensures consistent detection in the event of environmental interference such as window pollution
- Stainless steel faceplate and IP65 rating for harsh environments



MS51W

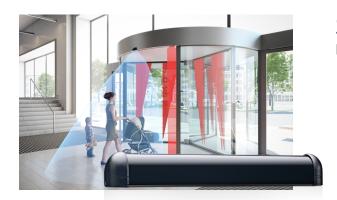
BATTERY-POWERED, TOUCHLESS ACTUATOR WITH BUILT-IN, 900 MHZ **TRANSMITTER**

- Up to 3-year battery life provides uninterrupted operation in the field
- Integrated 900 MHz transmitter reduces installation time and provides greater line-of-sight transmission distance for reliable activation
- Completely wireless solution reduces overall installation time and cost
- Stainless steel faceplate and IP65 rating for harsh environments
- Convenient one-box solutions available for ease of ordering and stocking





INFRARED SENSORS



SUPERSCAN-T

DOOR MOUNTED, ACTIVE INFRARED SAFETY SENSOR

- Housing available up to 102 inches in length; can be field cut to desired door width
- Capable of meeting ANSI 156.10 standard for swing door safety when coupled with BEA's BODYGUARD-T
- Designed to mount at the top of the door to reduce accidental damage
- Can be set to background analysis mode to reduce the chance of false detection from faulty environmental situations
- Capable of external monitoring



IXIO-ST

PRESENCE SENSOR FOR AUTOMATIC SLIDING DOORS

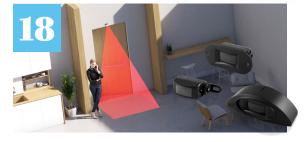
- Fully monitored internally, capable of external monitoring
- Two 24-spot, high-density, infrared safety curtains providing precise presence detection
- Intelligent programming and troubleshooting via a menu-driven LCD
- On board microprocessor optimizes data analysis, monitors sensor performance and enables system integration



IS40P

PRESENCE SENSOR WITH VIRTUAL LOOP FUNCTIONALITY

- Nine unique infrared patterns capable of highly flexible presence detection in any industrial environment
- Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light, sun, rain and snow
- Remote control programming enables user to quickly and safely make changes from the ground (sold separately)



FLY KIT

COMPACT PASSIVE INFRARED REQUEST-TO-EXIT SENSOR

- Compact, aesthetically pleasing design; packages include both ceiling and surface mount adapters
- Sensing field adjustments masks provide accurate detection zones (2 included)



BEAMBOX

ACTIVE INFRARED MOTION AND PRESENCE SENSOR

- Recessed mounting for low profile applications
- Three rows of five infrared spots ideal for unique off door applications
- Four infrared immunity modes and nine unique preset patterns are available

DUAL TECHNOLOGY SENSORS



ULTIMO

AUTOMATIC SLIDING DOOR SENSOR WITH EXTENDED / ENHANCED SAFETY

- Three infrared curtains offer deeper & broader safety coverage in front of the door panels
- Positioning the innermost infrared safety curtain through the threshold allows for sustained presence detection in the door opening
- Eight visible red alignment spots are projected onto the ground, verifying the location of the infrared curtains and helping to increase the accuracy of setup
- Fully monitored internally, capable of external monitoring complying with ANSI 156 10



IXIO-DT1V

MOTION AND PRESENCE SENSOR WITH CAMERA FOR SLIDING DOORS

- Provides an SDTV camera that shoots 30 frames of footage per second
- Ten microwave activation sensitivity settings and three infrared safety immunity settings
- Fully monitored internally, capable of external monitoring
- Integrates with building surveillance systems
- Video replacement kit available to upgrade any IXIO in the field
- Two 24-spot, high-density, infrared safety curtains providing precise presence detection



IXIO-DT1 INDUSTRIAL

MOTION AND PRESENCE SENSOR FOR INTERIOR INDUSTRIAL DOORS

- Ten microwave activation sensitivity settings and three infrared safety immunity settings
- Two 24-spot, high-density, infrared safety curtains providing precise presence detection
- Fully monitored internally, capable of external monitoring
- Four visible red alignment spots are projected on the ground to assist in precise IR curtain adjustment



IS40 / XL

MOTION AND PRESENCE SENSOR FAMILY FOR INDUSTRIAL DOORS

- Bidirectional, unidirectional approach and unidirectional depart microwave detection options
- Six modes of detection filtering are available for microwave immunity, as well as pedestrian and parallel traffic rejection
- Nine unique infrared patterns capable of highly flexible presence detection in any industrial environment
- Adjustable infrared immunity modes mitigate environmental disturbances such as subtle door vibrations, light and sun

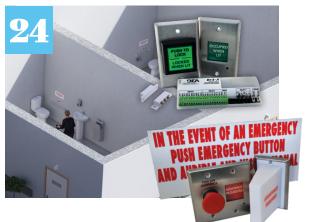
ACCESSIBILITY SOLUTIONS



900 MHZ SERIES

WIRELESS TRANSMITTERS AND RECEIVER

- Connects up to 500 feet (open-air transmission)
- DIP switch function settings and push button learn modes
- 1, 2, 3 and 4 button hand-held transmitters, plus an in-wall transmitter
- IP65 rated handheld transmitters available
- BEA also offers 433 MHz & 300 MHz frequencies



RESTROOM KIT

FOR SINGLE OCCUPANCY NORMALLY LOCKED / UNLOCKED RESTROOM

- Kit includes BR3-X logic module, Occupied Indicator, "Push to Lock" Button and Door Position Switch
- Ontario Regulation 368/13 compliant

EMERGENCY ADD-ON KIT

FOR SINGLE OCCUPANCY RESTROOMS

• Kit includes "assistance required" Signal, "Push for Emergency Assistance" Button + Indicator and Emergency Signage



FULL-LENGTH, 36 INCH HIGH-LOW ACTUATOR

- Hardwired and wireless versions available
- An economical actuator for ADA building codes requiring two push plates

PUSH PLATES

STAINLESS STEEL ACTUATORS

- Available in various sizes and styles to fit almost any application, hardwired and wireless
- Water-resistant, IP65 rated versions available

KNOWING ACT PACKAGES

One-box solutions and customizable packages available.

Get everything you need - knowing act device, mounting hardware, transmitters and receiver!

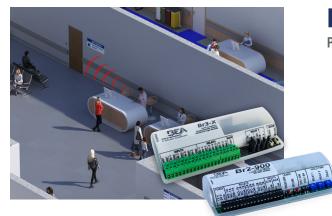
Contact BEA today to order.



SECURITY SOLUTIONS







UL LISTED MAGLOCKS

MAGLOCKS WITH ADJUSTABLE RELOCK TIME DELAY & LOCK STATUS SENSOR

- Adjustable zero to 90 second relock time delay
- Lock (bond) status sensor with visible LED offers either normally open (NO) or normally closed (NC) output configuration
- Listed models are rated for access control systems to 1,000 lb static force and must be used with a UL Listed power supply
- UL294 Listed Models include a security screw on the front face blocks access to the bottom of the electromagnetic lock preventing tampering or dismounting

ELECTRIC STRIKES

RIM EXIT & UNIVERSAL CYLINDRICAL STRIKES FOR ACCESS CONTROL

- Three modular faceplates for the most common door types: hollow metal, aluminum and wood
- UL 294 & UL1034 listed Universal Cylindrical and Rim Exit strikes
- UL tested to 250,000 cycles, factory tested to 1,000,000 cycles
- Universal Cylindrical strikes are rated to 1000 lbs static / 70 lbs dynamic (50 lbs dynamic for CUV model). The Rim Exit strikes are rated to 1500 lbs static / 70 dynamic.

UNIVERSAL KEYPAD FAMILY

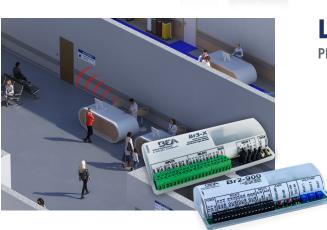
ACCESS CONTROL KEYPADS FOR INDOOR AND OUTDOOR USE

- IP66 rating ensures the device will withstand the elements in harsh, industrial and outdoor environments
- Two-zone feature provides 2 relays and 2 exit button outputs for twozone applications
- Backlit numbers allow for ease of use in dimly-lit areas
- Allows for up to 1100 user codes

LOGIC MODULES

PROGRAMMABLE 2- & 3- RELAY LOGIC MODULES

- 2-relay logic module with built-in 900 MHz wireless technology
- Programmable 3-relay logic module with 13 functions for sequencing doors with other devices (i.e., lights)
- BEA's BR3-X has WET output with AC / DC voltage for powering an electric locking device directly from the module



ACCESSORIES



BOLLARDS

EXTERIOR MOUNTING OPTION

- Choice of Bronze, Silver or Black
- Designed for mounting push plates, that activate automatic doors, in locations where a mounting surface is not available
- Compatible with a variety of push plate shapes and sizes, as well as wireless transmitters



SPACERS

MOUNTING ACCESSORIES

- Specifically designed to create distance from the mounting location to avoid obstructions like door hardware
- RETROFIT SPACER KIT allows for installation of a sliding door sensor + spacer where a competitor sensor had been installed



COVERS

REPLACEMENT COVERS & ACCESSORIES

- BEA offers replacement covers for a variety of sensors
- Silver or white options available for select products
- Rain covers available



- Control harness Quick disconnect harness
- Primary / secondary harness
- Optional cables available to provide additional length



MOUNTING BOXES

FLUSH & SURFACE MOUNT BOXES

- Low-profile options available
- Easy battery access surface mount box available



MOUNTING BRACKETS

MOUNTING ACCESSORIES

• Variety of mounting brackets available to allow product integration into challenging applications



ADAPTERS

MOUNTING ACCESSORIES

• Surface mount adapter

• Ceiling mount adapters

• Adapter plates for mounting products

to a mounting box or bracket





LOCKOUT MODULES

10L021, 10L021P

- Designed for swing door applications utilizing BEA's BODYGUARD
- The LO21 interprets door open or door closed positions based on motor voltage
- Provides optional safety beam input to override the inhibit signal during closing



JAMB MOUNTED COLOR VIDEO CAMERA

- Enhanced definition color video camera designed to monitor the usage and traffic flow of pedestrian door
- Sleek, low profile design provides a discreet method for improving loss prevention and limiting liability















LED SIGNAL LIGHTS

WARNING INDICATION SYSTEMS

- UL Listed, IP67 models available
- Stackable, column and traffic styles available
- Integrate seamlessly into industrial automation and vehicle flow management applications

POWER SUPPLIES

MOUNTED AND PLUG-IN POWER SUPPLY SOLUTIONS

- UL Listed
- Power supplies convert electric current from a source to the appropriate voltage, current and frequency to power a load
- BEA offers both mounted and plug-in power supply solutions to meet the need of most applications
- Battery backup option available





TRANSFORMERS

1012VAC, 1024VAC

• Variety of transformers to meet the needs of most applications





UNIVERSAL REMOTE CONTROL

10REMOTE

• Universal remote control assists in the adjustment of BEA sensors



ISOLATION RELAYS

• Used as a utility switching device

Available in 12 or 24 VAC or VDC

10ISO12, 10ISO24, 10REL12VAC

KEEP IN TOUCH

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NEWSLETTERS

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YOUTUBE

At BEA Americas, our team is inspired and empowered to provide advanced sensor solutions which help to grow a safe and convenient automated world. We have taken an innovative approach to enhance customer support and engagement by creating a dedicated YouTube channel. Our videos provide customers and technicians with comprehensive guidance on our diverse range of products and solutions. From product showcases to technical troubleshooting, customers can conveniently access valuable information at their fingertips.

Visit our channel to learn more:

YouTube.com/user/BEAsensors/

BEA Americas YouTube Channel



Scan for training and troubleshooting videos



WEBSITE

Our website sources a multitude of product material, technology breakdowns, contact and general info.



us.BEAsensors.com/en/

BEATOOLS

Tools at your fingertips. BEA has developed a collection of productspecific mobile apps and online tools to assist you before and during the installation process.



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CONTINUED EDUCATION

BEA is a member of the American Association of Automatic Door Manufacturers (AAADM) and is listed as a certified trainer by AAADM.

Additionally, our Sensor Integration School offers a comprehensive program designed to educate technicians on the integration of sensors and devices with automatic doors. BEA's highly trained staff are capable of providing the most effective and complete service possible.



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WEBINARS

BEA offers weekly online webinars on specific BEA products. Sign up to participate in a scheduled training or contact us to schedule a private webinar for your team.



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