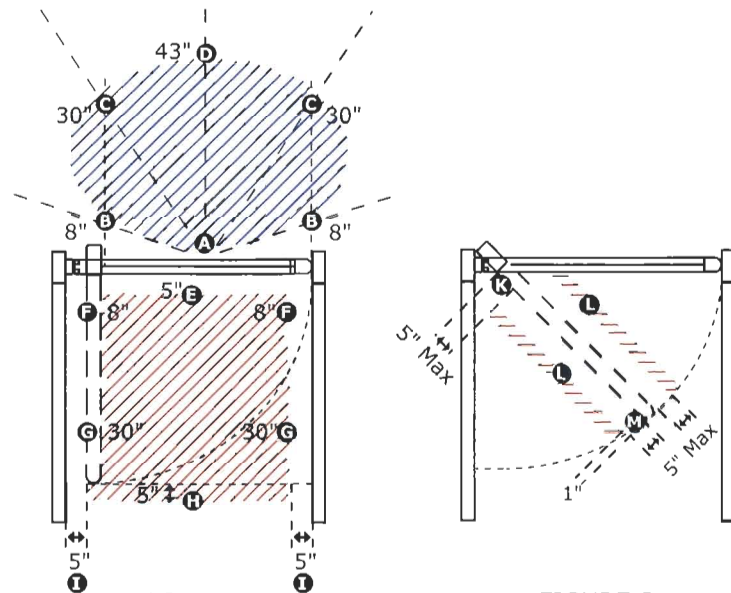


Single swing



ACTIVATION (Blue)

SECTION 8.1.1 (FIGS. 1 & 3)

- Minimum width equal to the width of the clear door opening
- Detection points measured at 8" (B) & 30" (C) perpendicular from the face of the closed door
- Length from the face of the door is 43" min. (D) measured at the center of the clear door opening
- Detection to be effective to within 5" (A) from the face of the door measured at the center of the clear door opening

SECTION 8.1.2

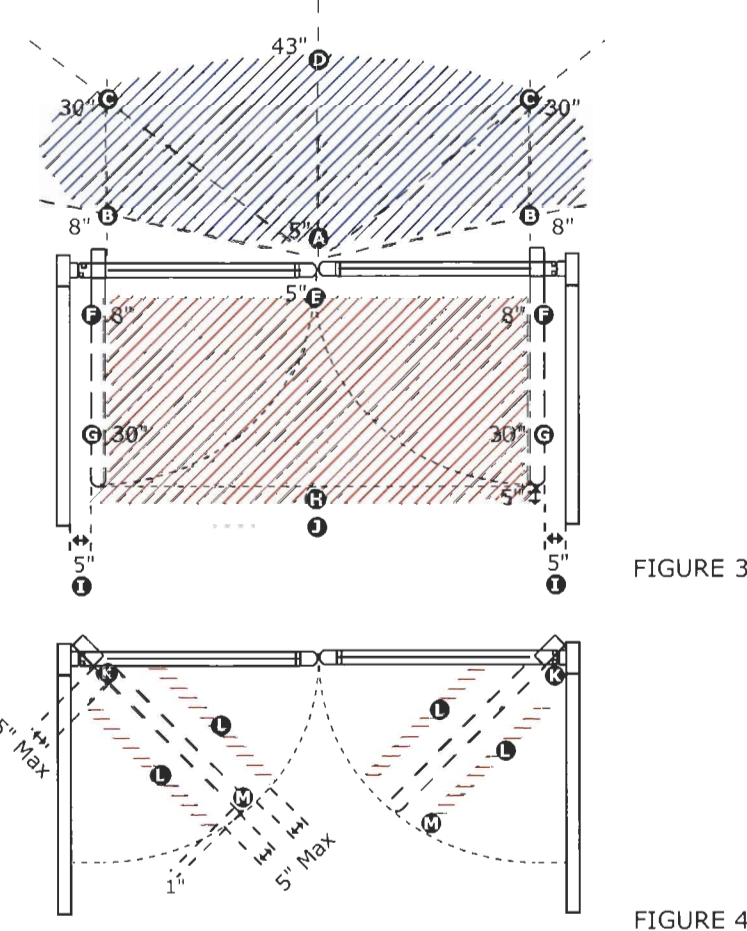
- Motion sensors shall detect a 28" minimum high person
- Motion sensors shall detect a person moving at a rate of 6" per second towards the center of the door

SAFETY (Red)

SECTION 8.1.3

- Presence sensors shall detect a stationary 28" minimum high person within the detection areas for a minimum of 30 seconds

Simultaneous Pair



SECTION 8.2.2.1 - Overhead Sensor (FIGS. 1 & 3)

- Length of active area to be effective to within 5" (E) of the face of the closed door measured at the center of the door opening
- Safety zone shall extend 5" (H) beyond the leading edge of the open door measured at the center of the door opening
- Width of the active area measured perpendicular from the face of the closed door shall:
 - > Equal the door opening less 5" (I) maximum on both sides
 - > Measured parallel to the face of the door at 8" (F) and 30" (G)

SECTION 8.2.2.2 (FIG. 3)

- An additional sensor, sensors, or photo beam shall be used to inhibit reopening of the door until the safety zone is cleared (J)

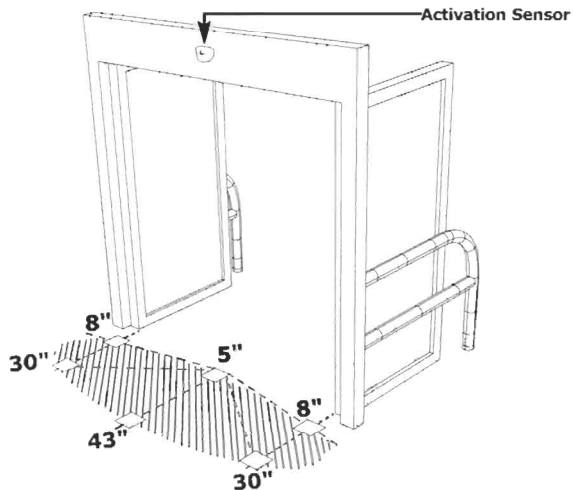
SECTION 8.2.2.3 - Door Mounted Sensor (FIGS. 2 & 4)

- Shall be effective to within 5" (L) from the face of the door
- Shall be effective for the width of the door less 5" (K) from the pivot point
- Shall be effective for the width of the door within 1" (M) of the lead edge
- Shall detect a 28" minimum high person fully in the swing path
- Shall cause the door to reverse direction, stop or slow down to a maximum latch edge speed of 4" per second measured within 1" of the latch edge

SWINGING DOOR REQUIREMENTS

ACTIVATION

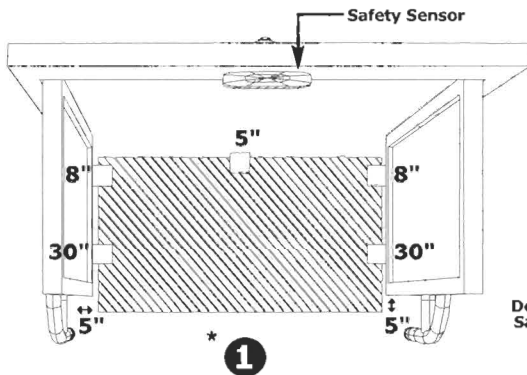
1 Way Traffic



- ANSI does not recommend 2 way traffic for swinging doors.

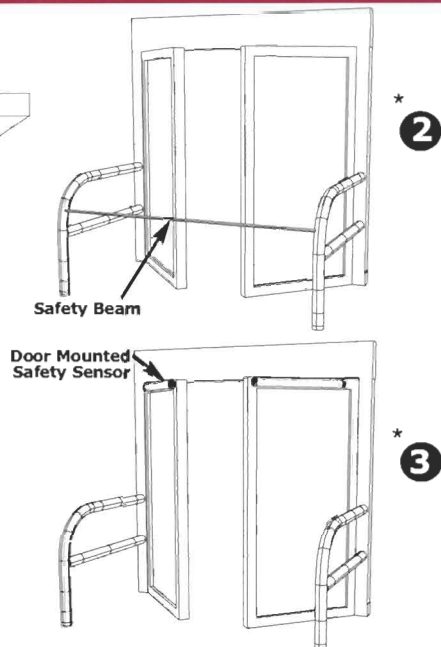
SAFETY

1 Way Traffic



- *1 is required with 2 or 3.
BEA Recommends 1+3.

- For 1 way traffic an activation zone is required only for the approach side.



BEA's explanation to help you understand:

1. **ANSI-** American National Standard Institute. ANSI is a standard not a law. Because there are no regulations for automatic doors, the ANSI standard is utilized in a court of law as the reference point in determining many cases.
 - a. 156.10 full power operated pedestrian doors (2005)
 - b. 156.19 low energy (ADA) power operated doors (2002)
 - c. 156.27 power and manual operated revolving pedestrian doors (2003)
2. **AAADM-** American Association of Automatic Door Manufacturers. AAADM is a trade association of automatic door manufacturers dedicated to the promotion of safety throughout the automatic door industry. AAADM certified inspectors learn the following:
 - a. The ANSI 156.10 standard
 - b. How to conduct field tests of automatic door installations to ensure the door complies to the ANSI standard
 - c. How to complete necessary inspection forms
3. **Presence sensor (safety)-** A presence sensor will detect the "presence" of an object or person within a predetermined detection pattern and prevents the door from striking the person or object, depending on the situation.
4. **Infrared Technology-** Detects the presence of a stationary person, or object by emitting a pulsed invisible light signal from the LED (Light Emitting Diode) back to a receiver that analyzes the reflected signal. In other words, the infrared takes a "picture" of the safety area and if the "picture" changes, the door will remain safe. Infrared Technology is ideal for detecting presence, not motion. Caution: not all infrared sensors are created equal, if a weaker infrared technology is used the sensor may not detect some dark colors which could result in an unsafe door.
5. **Motion sensor (activation)-** A motion sensor will detect the movement of an object or person within its detection pattern.
6. **K-Band Microwave Technology-** Provides a sharp, crisp, stable pattern that can detect motion moving as slow as 2" per second. Microwave technology has been proven to be the best technology to activate a door open.
7. **Low energy swinging door (ADA)-** The opening time shall be 3 seconds or longer and meet other criteria of ANSI 156.19.
8. **Full Automatic swinging door-**The opening time shall be 1.5 seconds or longer and meet other criteria of ANSI 156.10.
9. **Photo-electric beams-**A device which employs the use of a visible or invisible light beam across or through an opening typically used as a safety device. When the beam is interrupted by a person or object, a signal is generated. Caution: beams cover a small area and can miss detecting an object, such as a walker or child lying on the floor.
10. **Knowing Act-** Pressing a push plate or performing another act to open a door.
11. **Trained traffic-**People trained in the safe use and operation of a particular automatic door. ANSI does not apply to trained traffic doors. Caution: very few doors are actually trained traffic doors.
12. **Two-way traffic-** Traffic approaching from both sides of the door. (i.e. traffic entering both the swing and non-swing side of the door)

**For more information, please visit: www.bea-arch.com