

DSI[®]

DESIGNED SECURITY, INC.

A Detex Company

ES8100



Bi-Directional Slimline Optical Turnstile

Model ES8100

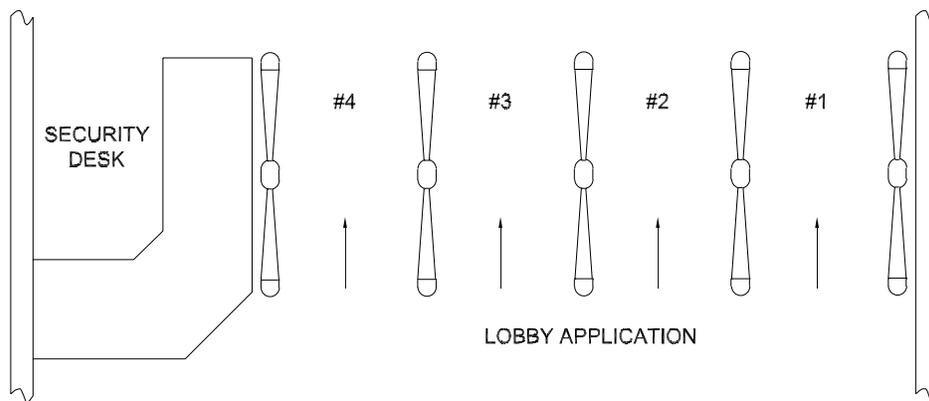


BI-DIRECTIONAL SLIMLINE OPTICAL TURNSTILE

The Designed Security, Inc. **ES8100 Series Optical Turnstile** monitors pedestrian traffic flow through an access control point and assures that only one individual can pass for each valid card presented, thus eliminating “Tailgating”. This system utilizes sensing pedestals to form passageways at the entrance to a controlled area. An individual must be granted ACCESS by the facility’s access control system in order to pass between the pedestals without activating an ALARM. The system is compatible with any type of card reader technology and can be field configured for **CARD-IN/CARD-OUT**, or **CARD-IN/FREE-EXIT** operation. The system inputs allow the unit to be bypassed remotely and the outputs can be used to indicate an intrusion alarm, or to count individuals as they enter and exit. The ES8100 Optical Turnstile System is designed for lobby/entry applications where space and styling is important.

When a user presents a valid card an audible chime sounds and a green arrow illuminates to indicate that access has been granted. When the individual walks through the passageway the system is reset for the next user. If an individual walks through the passageway without being granted access, an alarm output contact will be activated which can be used to initiate appropriate security response.

Designed Security, Inc. Bi-Directional Slimline Optical Turnstiles meet the standards of the Americans with Disabilities Act of 1990.



ES8100 BI-DIRECTIONAL SLIMLINE OPTICAL TURNSTILE - TYPICAL APPLICATIONS

Criteria for designing an optical turnstile walkway

1. Determine the number of walkways required based on the desired pedestrian throughput and space availability. Typical pedestrian throughput is 60 people per minute, 3600 per hour, per lane.
2. Walkway bollards should be spaced 24" - 36" apart. Wider spacing results in pedestrians attempting to pass through the lane two abreast, resulting in a high incidence of alarms.

Electrical Specifications

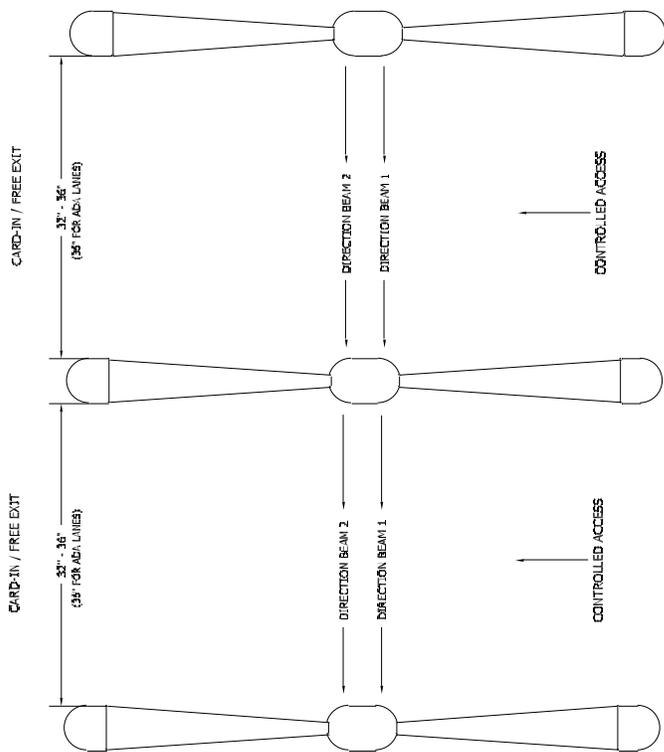
Power: 12 VDC @ 700 mA/walkway
Control Input: N/O-Momentary "Valid A card" (max. 1 sec. pulse closure)
 N/O-Momentary "Valid B card" (max. 1 sec. pulse closure)
 N/O-Momentary/Maintained "Remote bypass"
Control Output: Form "C" Alarm contact status
 Form "C" "A" passage complete contact status
 Form "C" "B" passage complete contact status
 All relays rated at 1 Amp @ 30VDC

Audible Alarm: 80 dB @ 3 ft.

Mechanical Specifications for the Bollard

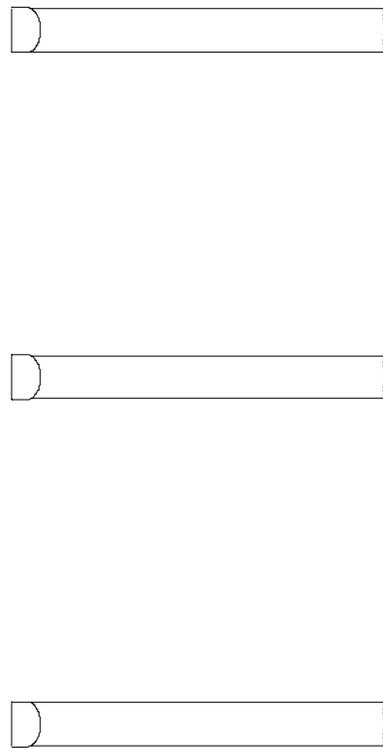
Size: 60" L x 38" H x 4.38" W
Mounting: 12 gauge steel base with 6 - 3/4" mounting holes and 2" conduit hole in center stanchion
Finish: Top Surface: Avonite Black Lava*/Stainless Steel
 Side Panel: Satin Brushed Stainless Steel* and Acrylic Panel

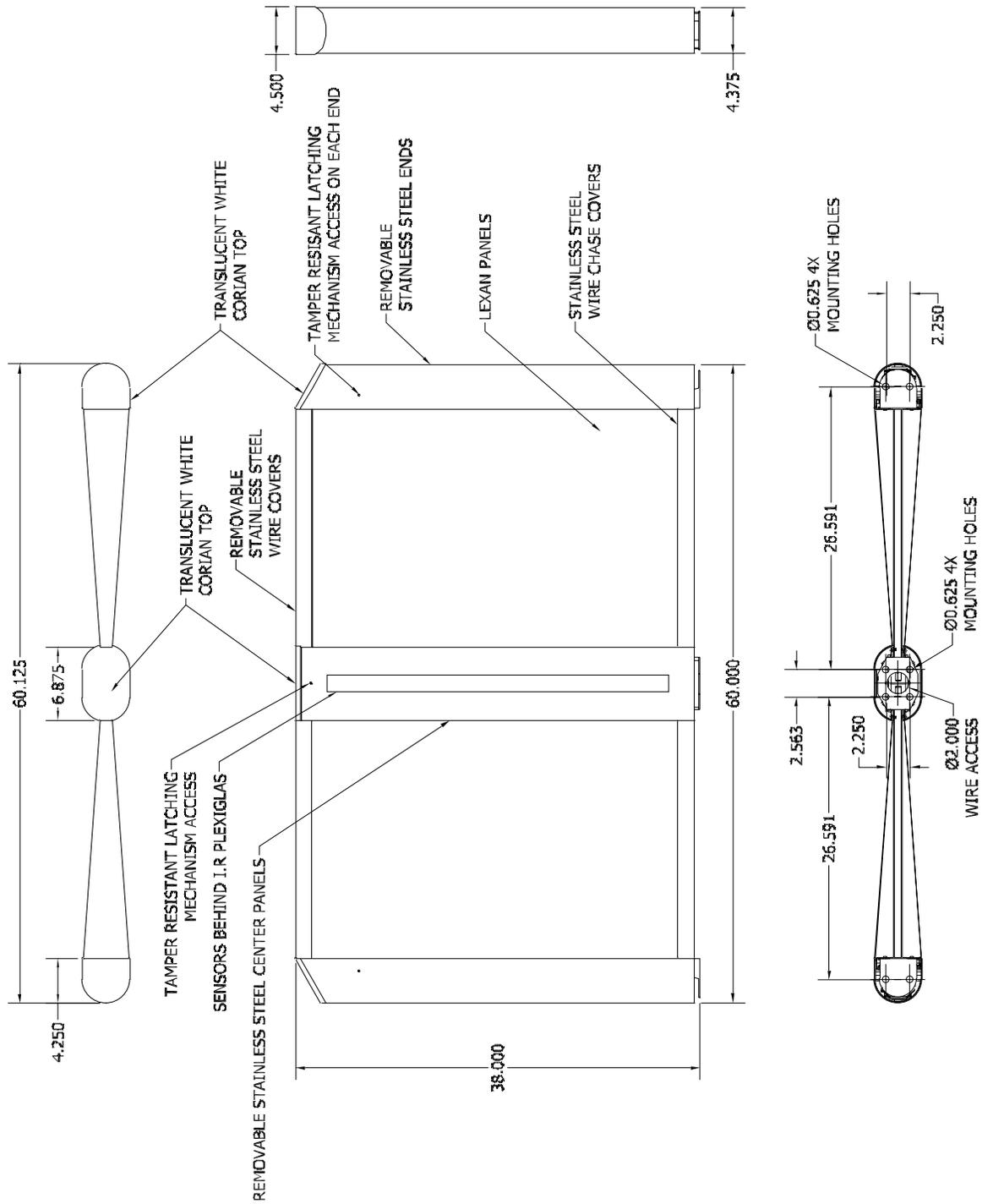
**Custom colors and finishes may be specified at additional cost.*



DESIGNING A TURNSTILE SYSTEM

- 1) DETERMINE THE NUMBER OF WALKWAYS REQUIRED BASED ON THE DESIRED PEDESTRIAN THROUGHPUT AND SPACE AVAILABILITY.
- 2) A CONSERVATIVE ESTIMATE OF PEDESTRIAN THROUGHPUT IS 20 PEOPLE/MIN, 1200/HR, PER LANE. THIS FIGURE ASSUMES THE USE OF A FAST RESPONSE (1/4SEC.) CARD READER SYSTEM.
- 3) TURNSTILES SHOULD BE SPACED 32" - 36" APART. UNDER SPACING RESULTS IN PEDESTRIANS ATTEMPTING TO PASS THROUGH THE LANE TWO-BREAST, RESULTING IN A HIGH INCIDENT OF ALARMS.





ES8100 Accessories

Floor plates

Floor Plates are used where floors cannot be core drilled such as in landmark buildings. The Floor Plates provide a mounting surface for the turnstiles and provide a wire way to run all cables. The ES8100 floor plates meet the standard of the Americans with Disabilities Act of 1990.

Card reader decals

Provides an icon to help communicate to users where the card reader is located.

Power Supply

The PS/DC12 is a plug-in Class II regulated power supply with an LED power indicator. It has built in cable strain relief. The housing is a bright white colored plastic and comes with a mounting tab and screw