# Turnlock 150 TASTG 7’ High Tandem Full Security Turnstile

### Section 11 14 00 – Pedestrian Control Equipment (Gates/Turnstiles)

## **PART I - GENERAL**

**1.01 SECTION INCLUDES**

1. This section covers the furnishing and installation of a complete Tandem Security Turnstile. Provide complete system that has been fabricated and tested for proper operation at the factory. It includes two rotor assemblies, two shield assemblies, a center barrier assembly, mechanism housing and security systems as required for installation.
2. Overall dimensions are 89” high, 96” wide (105” and 114” widths available), 52 5/16” deep (57” and 63 -3/4” depths available).

**1.02 RELATED SECTIONS**

1. Section 10450 – Pedestrian Control Devices
2. Section 08400 – Entrances and Storefronts

**1.03 QUALITY ASSURANCE**

1. Manufacturer shall be a company specializing in the supply of security turnstiles with a minimum of 10 years’ experience.

**1.04 SUBMITTALS**

1. Submit project specific shop drawings and finish samples.
2. Indicate pertinent dimensions, general construction, component connections and location, anchorage methods and location, hardware, and installation details.

**1.05** **DELIVERY, STORAGE AND HANDLING**

1. Deliver material to job site in manufacturer’s packaging undamaged, compete with installation instructions.
2. Store off ground, under cover, protected from weather and construction activities.

**1.06** **PROJECT/SITE CONDITIONS**

1. Install tandem security turnstile on the finished floor. Floor must be dead level at any point within the footprint of the turnstile.

**1.07 WARRANTY**

Boon Edam warranties its products against defects in material and workmanship for a period of twelve (12) months from the date of shipment of the product. This warranty excludes glass breakage, normal wear on finishes or damage that occurs due to abuse, misuse or acts of God.

## **PART II - PRODUCTS**

**2.01**  **MANUFACTURER**

Turnlock150-TASTG Electric Turnstile as manufactured by:

Boon Edam Inc., 402 McKinney Parkway, Lillington, NC 27546

(910) 814-3800 Fax: (910) 814-3899 Homepage: [www.boonedam.us](http://www.boonedam.us)

**2.02 PRODUCT**

Turnlock150-TASTG Full Height Security Turnstile, no substitutions. Features of this turnstile shall include a self-centering mechanism to maintain rotor at the stop position, a tamper proof ceiling, an IP56-rated weatherproof top channel cover to house mechanical and electrical controls and a UL listing (i.e., 294) for the turnstile.

**2.03 TURNSTILE CONSTRUCTION –** All materials meet the ASTM standards as set forth by the materials industry.

1. Heavy-duty anodized aluminum construction.
2. The Turnlock150-TASTG model shall be constructed of two (2) shield assemblies, one (1) center barrier section, two (2) rotor assemblies, two (2) controller mechanism enclosed in a rectangular cover, and two (2) ceiling plates.
3. This turnstile shall be available in one-way or two-way electrical controlled models or can mechanically controlled for both left and right rotors.
4. The turnstile design shall allow shipping the turnstile disassembled for installation at site.

**2.04 EQUIPMENT**

1. Transparent shield assembly design minimizes claustrophobic effect and increases visual security.
2. One-way mechanical turnstiles use a steel ratchet assembly per rotor to direct traffic flow.
3. Electric turnstiles use a heavy-duty electro-mechanical ratchet and pawl operating mechanism per rotor to restrict traffic flow. All electrical controls are low voltage 24 VDC. (Step-down transformer is supplied as a standard item - please select either 110 VAC or 220 VAC input voltage).
4. Standard self-centering feature automatically returns rotor assembly to the home position assuring the correct starting position of each rotor (left and right).
5. All arms are fabricated from custom oval extruded aluminum with internal webbing to provide durability and strength.
6. Maximum open space is 4 ¾” between arms, too small to allow human penetration.
7. Bottom Bearing: pre-greased thrust Axial Deep Groove Ball Bearing. The bearing is on a 9” x 1” clear anodized aluminum base plate. The base plate attaches to the floor with 3 anchor bolts, 3/8” x 4” long. It has a dynamic load capacity in excess of 14,300 lbs., a static load capacity of over 39,500 lbs. and maximum rated RPM of 1800.

**2.05 SECURITY EQUIPMENT**

1. Actuation: Turnstile actuation by external card reader, biometric reader, key pad or remote push button. Although tied into the Turnlock150-TASTG, actuation devices are not by Boon Edam.

**2.06 OPERATION SPECIFICATIONS**

1. The locking and unlocking of the turnstile is accomplished by use of low voltage, 24 VDC, system. Activation is by a momentary, isolated normally open dry contact closure.
2. Electrical controls are available in both entrance and exit directions. Controls may be fail-safe, fail-lock or any combination, in either controlled direction. All turnstiles are built to the customer’s specified configuration. If for some reason, the configuration needs to be changed, this can be easily done in the field in less than 30 minutes without any additional spare parts.
3. All fail-lock applications include a mechanical key release, which will allow free passage in case of an emergency or power loss.
4. Once a direction of passage is opened, it will remain open until the user proceeds through to the other side of the turnstile. Once the user proceeds through the turnstile, the reset system automatically re-locks the turnstile and readies it for the next user.
5. Double turnstiles have two controlled entry points and two controlled exit points (left and right). Each of the controls points operates completely independently from any other direction of travel by utilizing two separate control boxes (one per each rotor).

**2.07 FINISHES**

1. Clear anodized
2. Optional Colors – Black, Dark Bronze, Champagne

**2.08 STANDARD FEATURES**

* Fail-lock or fail-safe for electrical configurations
* Free or locked exit for mechanical configurations
* Field configurable mechanism
* Pulse relay
* Time-out Relay
* Heel protectors
* Mechanical key overrides
* Red/green indicator lights
* Rotation detection switch (except 114” wide unit)
* Home position switch (except 114” wide unit)

**2.09 AVAILABLE OPTIONS**

* Out-of-use-lock
* Remote release pushbutton
* Hydraulic speed control
* Electric key override switches
* Card reader mounting weather resistant box
* Solenoid activation switch
* Extended overall size
* Hinged top channel cover
* Battery back-up
* Rotation detection switch (114” wide unit)
* Home position switch (114” wide unit)

**2.10 SPECIFICATIONS**

* Height: 89”
* Width: 96”
* Depth: 52 5/16”
* Shipping weight: 1700 lbs.

## **PART III – EXECUTION**

**3.01 INSTALLATION**

1. Inspection: Installer must examine the location and advise the Contractor of any site conditions unacceptable for proper installation of product. These conditions include but are not limited to the following:

1. Floor must be dead level at any point within the footprint of the turnstile.

Install shall not begin until these unacceptable conditions are rectified.

1. Erection: Install turnstiles in accordance with manufacturer’s printed instructions. Set units level, plumb and with uniform hairline joints. Anchor securely into place. Use only factory trained installers.
2. Adjustment: Installer shall adjust turnstile, hardware and sensors for smooth operation and proper performance.
3. Maintenance: Follow maintenance procedures as outlined in the Instruction or Operation Maintenance Manual.
4. Cleaning: Clean metal and glass surfaces carefully after installation to remove excess caulk, dirt and labels.

**Boon Edam Inc. reserves the right to change this specification at any time without notice.**