# Trilock 75 Stainless Steel Electric Turnstile

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

## **PART I - General**

* 1. **SECTION INCLUDES**

1. This section covers the furnishing and installation of a complete security turnstile. Provide complete system that has been fabricated and tested for proper operation at the factory. It includes cabinet, barrier arms, mechanism, and hardware as required for installation.
   1. **RELATED SECTIONS**
2. Section 08710 - Door Hardware
   1. **QUALITY ASSURANCE**
3. 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 security turnstile on the finished floor. Floor must be deal 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 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**

Trilock-75: Security 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**  **CONSTRUCTION**

1. The operating mechanism consists of a hardened locking assembly and interchangeable precision fabricated parts using high quality steel materials.
2. The ratchet is made of machined high quality steel, not soft cast iron or several thin, laminated ratchets as other manufacturers.
3. Self-cleaning, sealed, maintenance free main bearing supports shaft and ratchet assembly.
4. The operating mechanism contains all electrical components, including low voltage 24 VDC power supply, 110 or 220 VAC step down transformers, reset system and access control interface.
5. Stainless steel cabinet has rounded edges and a sloped cover in order to prevent injuries. There are no exposed fasteners.
6. Hinged cover is equipped with security cam lock to prevent tampering.
7. All materials meet the ASTM standards as set forth by the materials industry.

**2.03**  **EQUIPMENT**

1. The operating mechanism consists of precision machined, interchangeable parts made out of high quality steel materials. No cast iron parts are used due to softness and excessive wear characteristics. All locking components are hardened to ensure long life and reliable service. Self-centering mechanism automatically returns arms to the basic position regardless of force used to pass through the turnstile. The rotation of the mechanism is cushioned by an aircraft quality hydraulic shock absorber.
2. The modular mechanism design mounts to a 3/8” thick steel plate, allowing rapid maintenance.
3. The stainless steel cabinet is constructed from 14 and 16 gauge type 304 stainless steel, polished to a #4B finish.
4. The hub is made from machined aluminum, 5” in diameter, with openings for three arms, 120 degrees apart. The hub is clear anodized to protect against oxidation and discoloring.
5. Arms are fabricated from 1-1/4” dia., 16 gauge stainless steel tubing, type 304. Ends are spun closed, ground and polished smooth. No plastic caps are used.
6. The Trilock-75 is designed to provide access or admission control into high volume and abusive locations. The stainless steel cabinet and heavy duty Transit mechanism are suitable for any interior and exterior application. The large cabinet provides sufficient space to mount various readers, interface controllers, and other electronics into the turnstile.
7. The Trilock-75 consists of an operating mechanism, stainless steel cabinet, hub and arm assembly
8. Overall cabinet dimensions are 38” high, 8” wide, 36” long.
9. Operation:
10. Mechanical: Unit is free to rotate in entry, exit or both directions.
11. Mechanical registers (counters) available for one or both directions for travel.
12. Electrical: The locking and unlocking of the turnstile is accomplished by use of a low voltage, 24 VDC, system. Activation is via a momentary, isolated normally open dry contact closure.
13. Electric controls available in one or both directions. Electrical controls may be fail-safe or fail-lock. A free or locked exit is available with no impact or entry operation.
14. Units may have free rotating or always locked configuration on opposite direction on one-way electrically controlled units. Once a direction of passage is opened, it will remain open until the user proceeds through to the other side of the turnstile and the reset system automatically re-locks the turnstile and readies it for the next user.

**2.04 FINISHES**

1. All fabricated components of the operating mechanism are yellow zinc plated to ensure long life and prevent oxidation and discoloring.
2. All stainless steel items are polished to a 304 #4B finish.

**2.05 AVAILABLE OPTIONS**

- Two way electric control

- Pulse relay

- Time-out relay

- Red and green indicator lights

- Battery counter

- Extended arms for larger aisle way

- Remote release pushbutton

- Serial port interface for direct PC connection

- Rotation detection switch

- Portable platform & railing

- Foam rubber arm guards

- Key override

- Collapsible arm

- Rounded ends on cabinet (Trilock-75ESRN)

**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 deal 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.**