

Specifications

Pod Building Door Replacement for the Tennessee Department of Correction (TDOC), West Tennessee State Penitentiary (WTSP)

PURPOSE:

This is a open Invitation to Bid (ITB) issued by the Tennessee Department of Correction (TDOC), West Tennessee State Penitentiary (WTSP) for the replacement of pod entry doors, frames and hardware. There are 2 doors per housing unit one interior and one exterior in a sallyport configuration on each housing unit. This bid is to remove/furnish and install 4 pod entry doors, frames, and hardware in housing units number 3 and 4. (See appendix A) The lock shall be a Southern Steel 10120AM electromechanical, 24 VDC, half-cycle, wide jamb, automatic deadlocking latch bolt locks matching the other swing doors at the facility. Services are to include the removal of the current doors, frames and locks, the replacement of the doors, frames and locks, and the installation of all other associated hardware and accessories. Disposal of existing doors, frames and hardware will be provided by the Institution and can be eliminated from the Contractor's bid and scope of work. The Contractor shall provide written notification to the State upon project completion and shall provide a minimum warranty of twelve (12) months on both parts and labor. Contractors shall need to use the 24 volt 10120 series Southern Steel Locks. Respondents that reference a different lock manufacturer and/or product number may be disqualified for failing to meet the minimum requirements.

BACKGROUND:

The existing frames are rusted and have received abuse and damage throughout their lifespan. The current frames are beyond their useful life and replacement is needed to maintain a safe and secure environment. As such, it is in the best interest of the State to provide new doors and locking systems matching existing facility hardware. WTSP 480 Green Chapel Road, PO Box 1150, Henning, TN 38041-1150. Lauderdale County TN. All visitors, including the Contractor, shall notify the Warden Johnny Fitz, the Facility Manager or designee prior to arrival on-site by calling 731-738-5044.

FIELD VERIFICATION, SCHEDULE OF WORK, AND PHASING/SECURITY PLAN:

Upon award, the Contractor is required to complete the following prior to commencing construction:

1. **Field Verification Visit:** The Contractor shall visit the facility to field verify all

measurements, existing conditions, and local site requirements identified in the specifications. Any conflicts between the field conditions and the specifications must be immediately brought to the State's attention.

2. **Phasing and Security Plan:** The security of the facility will be a primary concern and all work shall follow the TDOC policies and procedures outlined during the required field verification visit. Since these are occupied buildings, demolition on any doors to install new door frames shall not exceed one door per building at a time unless approved by the Warden. The Contractor will not begin any demolition until the new door, frame, and hardware are all available for immediate installation. The reinstallation of the new door and locking system shall be completed on the same day as the removal except when approved in advance by the Warden. The facility shall make all alternate access and exit arrangements as needed for the safety of building occupants in advance of the work.
3. **Schedule of Work:**
 - a) To ensure the safety and security of all parties, the Contractor shall be under the escort of a correctional officer assigned by the Warden of NWCX at all times while inside the secure perimeter of the facility. The Contractor shall coordinate the work with the Warden or else they may be refused access to the facility and turned away when attempting to work on days outside of the agreed upon schedule.
 - b) Contractor shall provide updates to the facility on a weekly basis so that the schedule may be modified due to institutional operational needs or changed due to the Contractor's needs. Proposed changes to the schedule must be presented by the Contractor to the State ten (10) days in advance for consideration.

SCOPE OF SERVICES:

1. The Contractor shall remove the existing doors, frames, and locks from each opening and then install the new detention grade wide jamb frame and door complete with a security glazed vision panel(s) and the components necessary to electronically operate the door from Central Control. While the work is being performed, the door shall be deemed out-of-service and the Contractor shall maintain security of the area until the door is accepted and determined to be operable by the State.
2. Both the inside and the outside of the doors shall have the same features.
3. Provide detention grade lock for each door, Southern Steel 10120am 24v jamb mounted lock, 24 VDC, half-cycle, wide jamb, automatic deadlocking latch bolt locks for swing doors being installed. Provide different key cylinder bitting for each door. Provide a separate line-item unit cost for one mogul key. The intent is for the key control officer with TDOC to order (5) or more standard mogul keys for each door with unique key

bitting.

4. The Contractor shall install the new door and frame and make all connections to the existing electrical wiring for lock control. Institutional maintenance will repair all electrical wiring going back to the existing security electronics room. Wiring termination in the security electronics room will be accomplished by State's ITS staff.
5. The doors shall have a door position switch built into the recessed door closer with a two-part switch where part A is in the frame and part B is in the door.
6. The door position switch shall be wired in series with door lock and report to a 2 color LED indicators to identify when the door is in a secure/unsecure condition. Each mogul cylinder shall be identified with a life safety identification tag.
7. Each Detention Grade Door shall adhere to the following:
 - a) The doors shall be same in size as existing and shall be hollow galvanized steel with seamless twelve (12) gage skin and stiffened steel cores reinforced at hinges, strikes, closers, lock pockets, etc. and edge channels welded so they are flush the with edge of the doors on all four (4) sides. (See Appendix A)
 - b) There shall be four (4) full mortise stainless steel hinges with security studs which shall be grade one (1) per ANSI A156.1 and ASTM F1450.
 - c) The frames shall be twelve (12) gage galvanized steel with welded seams that are punched and dimpled then anchored with post installed expansion anchors capable to sustain, without failure, the load of four (4) times the load imposed and filled with non-shrink grout behind frames continuously.
 - d) All hardware accessories shall be included with the doors, such as thresholds, stops, raised pulls on hinge side, recessed on stop side, door position switch and detention grade closers.
 - e) All moldings shall be secured with ¼-28 hardened stainless steel security grade fasteners spaced two inches (2") from corners and eight inches (8") oc and caulked with "pick proof" security grade sealants.
 - f) Glazing panels must comply as ANSI Security 1 Grade and be mounted vertically on the strike side of the door so the bottom of the glazing does not to exceed forty inches (40") above the finished floor.

- g) Glazing materials shall be a detention grade 2 minimum of 13/16" thick laminated impact resistant glass clad polycarbonate with wire to be supplied and installed in all doors and side-lites. Glass can be the same size if rough openings are all filled in with doors or frames. Also, Contractor has the option to substitute a fixed door style insert instead of a window in the side and top lites and also, he may eliminate the bottom lite in the door.
 - h) The intercom is existing both sides in the wall and will not be part of this scope of work. However, the Contractor shall test with the owner present each device and report the condition as working or not prior to commencing any work to avoid claims after completion. The intercom has wiring to report to central control that may be near the scope of work.
 - i) The primary lock shall be remotely controlled by central control and must include the associated wiring terminal block per the manufacturer.
 - j) Remotely controlled swinging door lock is required to be manufactured by, Southern Steel 10120 AM mounted in square cylinder pockets. Keys shall be investment grade cast silicon bronze alloy or hard temper copper alloy of design to fit mogul cylinders.
 - k) There shall be an abuse resistant lexan red/green indicator light mounted above the electronic key switch to report the door status. The door status is determined by both a door position switch and a lock position switch, so the indicator light shows green only when both are securely closed. The indicator shall light up red all other times.
 - l) Touch and sight recognition to facilitate manual release of egress door lock cylinders is to be provided using a TDOC standard life safety identification tag for sight and touch recognition – 1.5" x 1.5" with a number of notches on the top and specific color. This identification tag is placed above the mechanical lock cylinder by the Contractor.
 - m) All operational features, keys, cylinders, hardware, and accessories shall have the approval of the facility's Key Control Staff or designated representative in writing prior to ordering the materials.
 - n) When completed, the finished assembly shall comply with all installation tolerances indicated in HMMA 841-13 standards and meet with requirements to be considered a Detention Grade 1 door installation according to the latest edition of ASTM F 1450.
8. At the completion of each individual door installation, the final wiring will be completed,

and the door position, switch, lock, and intercom components will be fully tested by the State's ITS staff and facility key control staff. After testing and acceptance by TDOC staff, the door will no longer be deemed out of service by the State.

PRODUCT CERTIFICATIONS AND LISTINGS AND ADHERENCES TO STANDARDS:

American Concrete Institute (ACI)

(<https://www.concrete.org>)

The Contractor shall adhere to the following building code requirements:

ACI 304	Guide to Measuring, Mixing, Transporting and Placing Concrete
ACI 305	Hot Weather Concreting
ACI 306	Cold Weather Concreting
ACI 308	Guide to Curing Concrete

American National Standards Institute (ANSI)

(www.ansi.org)

The Contractor shall adhere to the following specifications, test methods, and standards:

A156.1	This Standard establishes requirements for butts and hinges including cycle tests, lateral and vertical wear tests, friction tests, strength tests, finish tests, and material and dimensional requirements.
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American Society for Testing and Materials (ASTM)

(<https://www.astm.org>)

The Contractor shall adhere to the following specifications, test methods, and standards:

F 1450	Standard test method for hollow metal swinging door assemblies for detention facilities.
C 1107	Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-shrink).
E 488	Standard Test Methods for Strength of Anchors in Concrete Elements.

Hollow Metal Manufacturer's Association (HMMA)

A Division of National Association of Architectural Metal Manufacturers (NAAMM)

(www.naamm.org)

The Contractor shall adhere to the following specifications, test methods, and standards:

841-13 Tolerances and Clearances for Commercial Hollow Metal Doors and Frames.