

# MODEL FT5000 Automated Teller Machine

# SITE PREPARATION AND INSTALLATION GUIDE

## VERSION 4.0

TDN 07100-00004D 02/2006

**CORPORATE HEADQUARTERS:** 

RMA (RETURN MATERIAL AUTHORIZATION) RETURN ADDRESS:

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#### FEDERAL COMMUNICATIONS COMMISSION (FCC) COMPLIANCE

Statement of Compliance: This equipment complies with Part 68 of the FCC rules. Located in the control area of the Automated Teller Machine (ATM) is the product label. This label lists the FCC registration number and ringer equivalence number of the unit. If requested, this information must be provided to the telephone company. USCO/FIC Codes: When ordering service from the telephone company for the FT5000 ATM, the following information should be supplied: Universal Service Order Code (USOC): RJ-11C

The Facility Interface Code (FIC): 02LS2

Plug and Jack: The plug and jack used to connect this equipment to premise wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. The telephone cord is designed to be connected to a compatible modular jack that is also compliant.

Ringer Equivalent Number (REN): The REN is used to determine the number of the devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the RENs should not exceed five (5). To be certain of the number devices that may be connected to a line, as determined by the local RENs, contact the local telephone company.

Harm to the Network: If the FT5000 ATM causes harm to the telephone network, the telephone company will notify the customer that a temporary discontinuous of service may be required. If advanced notice is not possible, the telephone company will notify the customer as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it's necessary.

Notification of Changes in Telephone Company Equipment: The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advanced notice in order for you to make necessary modifications to maintain uninterrupted service.



Repairs and Returns: If telecom compatibility trouble is experienced with the FT5000 ATM, you may contact for repairs and warranty information: Triton at 1-228-868-1317

Triton Systems of Delaware, Inc. 522 East Railroad Street Long Beach, MS 39560

If the equipment is causing harm to the network, the telephone company may request that you disconnect the equipment until the problem is resolved. Repairs should be made only by qualified factory representatives.

Party Lines: The FT5000 ATM must not be used on party lines.

Alarm Equipment: The FT5000 ATM should have its own dedicated phone line. Do not install the FT5000 on the same line as alarm equipment.

Electrical Safety Advisory: telephone companies report that electrical surges, typically lightening transients, are very destructive to customer equipment connected to AC power sources. This has been identified as a major nationwide problem. A commercially available, power surge suppressor, is recommended for use with the FT5000 to minimize damage in the event of an electrical surge.

#### CANADIAN IC COMPLIANCE NOTICE:

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate terminal equipment technical requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.



#### UNITED KINGDOM

This equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in the different countries, the approval does not, of itself, give unconditional assurance of successful operation on every PSTN network termination point. In the event of problems, contact your equipment supplier in the first instance. This unit uses only Dual-Tone Multi-Frequency (DTMF) address signaling.

#### NOTICE:

The REN assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed 5.

#### AVIS:

L'étiquette d'Industrie Canada identific le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le maté-riel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la comformité aux conditions énoncées cidessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'fl y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales. Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à an service d'inspection des installations électriques, ou à un électricien, selon le cas.



#### AVIS:

L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent étre raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'exède pas 5.

# **EMISSIONS (EMI)**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two (2) conditions:

1) This device may not cause harmful interference.

2) This device must accept any interference received, including interference that may cause undesired operation.

#### Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### CANADIAN EMISSION REQUIREMENTS

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set in the Radio Interference Regulations of the Canadian Department of Communications. This Class A digital apparatus complies with Canadian ICES-003.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la Class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada. Cet appareil numerique de la classe A est conforme a la norme NMB-003 Canada.

#### UK/AUSTRALIAN EMISSION REQUIREMENTS

#### Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



# What's in This Installation Guide

This Installation Guide provides information for the preparation and installation of the FT5000 ATM. It contains requirements for site preparation, electrical specifications, and cabinet accessibility that comply with all relevant codes, laws and regulations. The Installation Guide is divided into the following sections:

**Introduction**. Summarizes the basic steps that must be completed to physically install a FT5000 ATM. Configuration of operating parameters is not covered! Refer to the applicable Configuration and/or Service Manual for instructions on configuring the operating parameters.

**ATM Installation for Accessibility**. Describes the basic Americans with Disabilities Act (ADA) requirements for ATM location and access. Note: These are the general requirements that should be applicable to most installation locations. Please verify the specific requirements with the state where the ATM is to be installed, prior to installation. For state contact information, you may call the ADA information line at 1-800-514-0301.

**ATM Environmental Precautions Checklist.** Describes the general environmental precautions considered when installing the ATM. To help ensure proper operation of the ATM, ensure the environmental criteria listed in this checklist are met.

**Site Preparation/Installation**. Describes site preparation for exterior wall or vestibule locations. Instructions provide dimensions/clearances needed to install the FT5000 and procedures for installing the cabinet and front fascia. NEW - Optional platforms ("plinths") available in 2 sizes expediate raising the unit, if needed. [ P/N 06100-00071 (2-3/8") and P/N 06100-00072 (4-3/4")] Also, cabinets now come with their own leveling feet.

**Power and Communication**. Describes how to connect the ATM to the facility power and telephone connections.

**Dispensing Mechanism Installation**. Describes how to install/remove the dispensing mechanism into the ATM security cabinet.

**Installing the Rear Service Panel (RSP).** Describes how to install and connect the RSP to the cabinet sleeve.

- **TCP/IP** (Ethernet) Cable Installation. Describes where to install the 10Base-T CAT-5 cable for Ethernet communication.
- **VSAT Cable Installation.** Describes where to install the optional VSAT cable.



## INTRODUCTION

This document contains the information necessary for the preparation and installation of a FT5000 Triton ATM. It's important that the site complies with the requirements specified in this document. In addition, electrical wiring and mechanical systems must also comply with all relevant laws and regulations.

The site must be prepared by the customer or his agent who is fully conversant with the requirements of installing through-the-wall ATM equipment. The responsibility for ensuring that the site is prepared in compliance with this document remains with the customer.

For information and guidance only, a list is provided in general terms of those matters for which the customer is responsible. The list is not intended to be comprehensive and in no way modifies, alters, or limits the responsibility of the customer for all aspects of adequate site preparation.

- 1. Location of the equipment and site preparation.
- 2. Site wiring (power, communication).
- 3. Location of other equipment that may cause electrical, electromagnetic, or heat induced interference.
- 4. Make building alterations to meet wiring and other site requirements.
- 5. Install all communication cables, wall jacks, and associated hardware.
- 6. Provide and install necessary power distribution boxes, conduits and grounds.
- 7. Ensure all applicable codes, regulations and laws (electrical, building, safety) are adhered to.
- 8. Ensure the environmental requirements of this unit are met.
- 9. Install the unit at a height which meets the ADA accessibility regulations for the state/country installed.



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# ATM INSTALLATION FOR ACCESSIBILITY



# A Guide to the New ADA-ABA Accessibility Guidelines

On July 23, 2004, the U.S. Access Board, an independent Federal agency, issued updated accessibility guidelines for new or altered facilities covered by Americans with Disabilities Act and the Architectural Barriers Act. These guidelines address a wide range of facilities in the private and public sectors. Presented here is an overview of the new guidelines that also highlights significant changes. The following guidelines (305 and 308) pertain to floor/ground space and reach ranges.

#### When will the new guidelines take effect?

The Board's guidelines are not mandatory on the public, but instead serve as the baseline for enforceable standards (which are) maintained by other Federal agencies. In this respect, they are similar to a model building code in that they are not required to be followed except as adopted by an enforcing authority. Under the ADA, the Department of Justice (and in the case of transit facilities, the Department of Transportation) are responsible for enforceable standards based on the Board's guidelines. These agencies will update their ADA standards based on the new guidelines. In doing so, they will indicate when the new standards are to be followed. Several other agencies (the General Services Administration, Department of Defense, Department of Housing and Urban Development, and the U.S. Postal Service) hold a similar responsibility for standards used to enforce the ABA.

#### **Existing Facilities**

The ADA and ABA guidelines cover new construction and planned alterations and generally do not apply to existing facilities except where altered. Facilities built or altered according to earlier versions of the ADA or ABA standards will not necessarily have to meet the updated version except where they are subsequently altered or renovated. The Department of Justice, which regulates requirements for existing facilities under the ADA, intends to address coverage of facilities built or altered according to the original ADA standards in its rulemaking to update the standards. It will also address facilities retrofitted under ADA provisions for existing facilities, such as the requirement for barrier removal in places of public accommodation. With respect to ABA facilities, the Board has clarified in the guidelines that facilities built to earlier ABA standards are subject to the new requirements only in relation to planned alterations.

#### **305** Clear Floor or Ground Space

- **305.1** General. Clear floor or ground space shall comply with 305.
- **305.2** Floor or Ground Surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted.
- **EXCEPTION**: Slopes not steeper than 1:48 shall be permitted.
- **305.3** Size. The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.

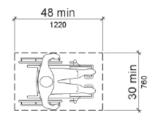


Figure 305.3 Clear Floor or Ground Space

- **305.4** Knee and Toe Clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.
- **305.5 Position.** Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

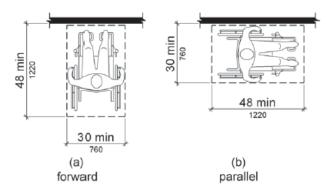


Figure 305.5 Position of Clear Floor or Ground Space

**305.6** Approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

**305.7 Maneuvering Clearance.** Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

**305.7.1** Forward Approach. Alcoves shall be 36 inches (915 mm)wide mini mum where the depth exceeds 24 inches (610 mm).

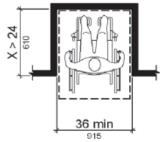


Figure 305.7.1 Maneuvering Clearance in an Alcove, Forward Approach

**305.7.2 Parallel Approach.** Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

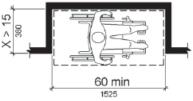


Figure 305.7.2 Maneuvering Clearance in an Alcove, Parallel Approach

## 308 Reach Ranges

- **308.1** General. Reach ranges shall comply with 308.
- 308.2 Forward Reach.
- **308.2.1 Unobstructed.** Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

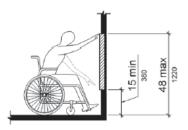


Figure 308.2.1 Unobstructed Forward Reach

**308.2.2 Obstructed High Reach.** Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

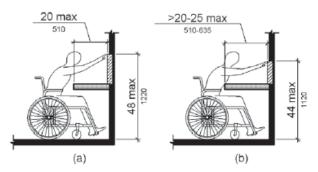


Figure 308.2.2 Obstructed High Forward Reach

#### 308.3 Side Reach.

**308.3.1 Unobstructed.** Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

**EXCEPTIONS:** 1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm)maximum.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

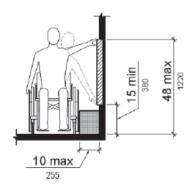


Figure 308.3.1 Unobstructed Side Reach

**308.3.2 Obstructed High Reach.** Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

**EXCEPTIONS:** 1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

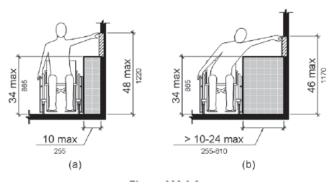


Figure 308.3.2 Obstructed High Side Reach



# ATM INSTALLATION FOR ACCESSIBILITY

- 1. This document supersedes all other information provided by Triton for ATM installation for accessibility.
- 2. Information provided in this manual is based on federal guidelines (ADAAccessibility Guidelines for Buildings and Facilities – ADAAG)as amended through January 1998. You should verify it has not been amended. States may also have accessibility codes. These codes may be more restrictive than the federal guidelines. Please verify this with the state where the ATM is to be installed prior to installation. For state contact information, you may call the ADA information line.
- **3.** For countries other than the US, please use the guidelines for accessibility for that country.
- 4. A complete copy of the ADAAG referred to here can be found at http://www.access-board.gov. Included in this document is the section of the ADAAG specifically for ATMs. For additional information on floor surfaces and other ADAAG requirements, please see the complete specification.

#### 4.34 Automated Teller Machines.

- **4.34.1 General.** Each machine required to be accessible by 4.1.3 shall be on an accessible route and shall comply with 4.3.4.
- **4.34.2** Clear Floor Space. The automated teller machine shall be located so that clear floor space complying with 4.2.4 is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both to the machine.

#### 4.34.3 Reach Ranges.

(1) Forward Approach Only. If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in 4.2.5.

(2) **Parallel Approach Only.** If only a parallel approach is possible, operable parts of controls shall be placed as follows:

(a) **Reach Depth Not More Than 10 inches (255 mm).** Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be 54 inches (1370 mm).



(b) Reach Depth More Than 10 inches (255 mm). Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be as follows:

ACCESSIBILITY SPECIFICATIONS					
REACH DEPTH			MAXIMUM HEIGHT		
Inches	Millimeters		Inches	Millimeters	
10	255		54	1370	
11	280		53 1/2	1360	
12	305		53	1345	
13	330		52 1/2	1335	
14	355		51 1/2	1310	
15	380		51	1295	
16	405		50 1/2	1285	
17	430		50	1270	
18	455		49 1/2	1255	
19	485		49	1245	
20	510		48 1/2	1230	
21	535		47 1/2	1205	
22	560		47	1195	
23	585		46 1/2	1180	
24	610		46	1170	

(3) Forward and Parallel Approach. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in paragraphs (1) or (2) of this section.

(4) **Bins.** Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in paragraph (1), (2), or (3) of this section.

**EXCEPTION:** Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.

**4.34.4** Controls. Controls for user activation shall comply with 4.27.4.

**4.34.5 Equipment for Persons with Vision Impairments.** Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.

(20) Where automated teller machines (ATMs) are provided, each ATM shall comply with the requirements of 4.34 except where two or more are provided at a location, then only one must comply.

**EXCEPTION:** Drive-up-only automated teller machines are not required to comply with 4.27.2, 4.27.3 and 4.34.3.

# 4.2.4\* Clear Floor or Ground Space for Wheelchairs.

**4.2.4.1 Size and Approach.** The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (760 mm by 1220 mm) (see Fig. 4a). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object (see Fig. 4b and 4c). Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.



**4.2.4.2** Relationship of Maneuvering Clearance to Wheelchair Spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Fig. 4(d) and 4(e).

**4.2.4.3** Surfaces for Wheelchair Spaces. Clear floor or ground spaces for wheelchairs shall comply with 4.5.

**4.2.5\*** Forward Reach. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 inches (1220 mm) (see Fig. 5(a)). The minimum low forward reach is 15 inches (380 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

**4.2.6\* Side Reach.** If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (1370 mm) and the low side reach shall be no less than 9 inches (230 mm) above the floor (Fig. 6(a) and 6(b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig 6(c).

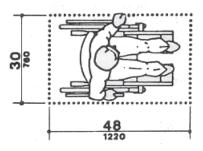


Figure 4a. Clear floor space.

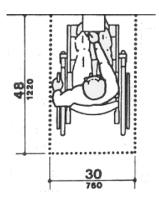


Figure 4b. Forward approach.

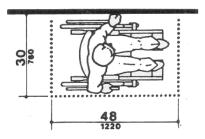
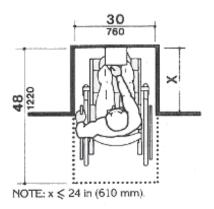


Figure 4c. Parallel approach.

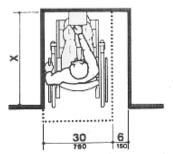


Figures 4d. Clear Floor Space in Alcoves.



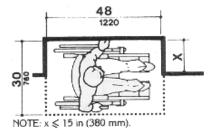
For a front approach, where the depth of the alcove is equal to or less than 24 inches (610 mm), the required clear floor space is 30 inches by 48 inches (760 mm by 1220 mm).

Figures 4e. Clear Floor Space in Alcove.

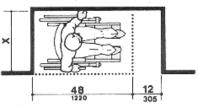


NOTE: If x > 24 in (610 mm), then an additional maneuvering clearance of 6 in (150 mm) shall be provided as shown.

For a front approach, if the depth of the alcove is greater than 24 inches (610 mm), then in addition to the 30-inch (760 mm) width, a maneuvering clearance of 6 inches (150 mm) in width is required.



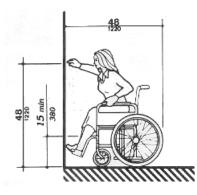
For a side approach, where the depth of the alcove is equal to or less than 15 inches (380 mm), the required clear floor space is 30 inches by 48 inches (760 mm by 1220 mm).

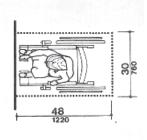


NOTE: If x > 15 in (380 mm), then an additional maneuvering clearance of 12 in (305 mm) shall be provided as shown.

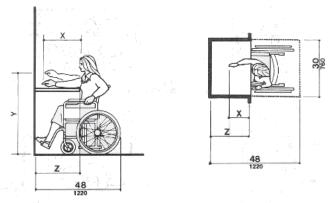
For a side approach, where the depth of the alcove is greater than 15 inches (380 mm), then in addition to the 48-inch (1220 mm) length, an additional maneuvering clearance of 12 inches (350 mm) is required.







#### Figure 5a. Forward reach, unobstructed.



NOTE: x shall be  $\leq$  25 in (635 mm); z shall be  $\geq$  x. When x < 20 in (510 mm), then y shall be 48 in (1220 mm) maximum. When x is 20 to 25 in (510 to 635 mm), then y shall be 44 in (1120 mm) maximum.

Figure 5b. Forward reach, obstructed.

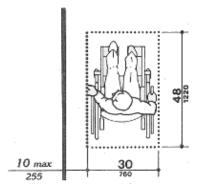


Figure 6a. Parallel approach - side reach.

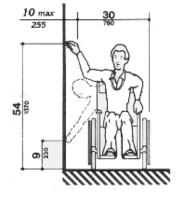


Figure 6b. Parallel approach - high/ low side reach.



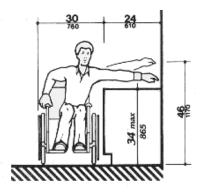


Figure 6c. Side reach, obstructed.

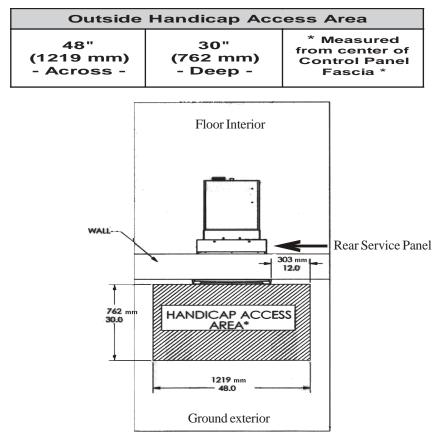


Figure 7. ADA access dimensions for throughthe-wall ATM.



# ATM ENVIRONMENTAL PRECAUTIONS CHECKLIST



When installing an ATM, some general environmental precautions need to be considered. Evaluate the location where the ATM will be installed. To help ensure proper operation of the ATM, ensure the environmental criteria listed in this checklist are met.

#### TEMPERATURE/HUMIDITY

1. The ATM will operate over a range of temperatures and humidity. Generally, these parameters must fall within the following ranges:

**Temperature (Interior)** 

- 10°C 40°C
- 50°F 104° F
- **Relative Humidity**
- 20% 80%
- (Non-Condensing)

**Temperature** (Exterior)

- -35°C 50°C
- -30°F 122°F

**Relative Humidity** 

• 20% - 100%

#### AC POWER REQUIREMENTS

2. Ensure the following AC power requirements are met:

#### Current (Max)

- 5.05A @ 120V
- 2.01A @ 240V

#### Voltage

- 90V 136V @ 50/60 Hz
- 198V 257V @ 50/60 Hz

#### Power Consumption (Idle)

- 2.0A @ 115 VAC at 60 Hz
- 1.0A @ 230 VAC at 50 Hz

#### Power Consumption (Max Load)

- 606 Watts @ 120V
- 482 Watts @ 240V

**Dedicated source.** The ATM AC power feed will be a dedicated line to which no other electrical devices are connected. The ATM power line will be wired for a single "duplex"-style outlet and connected directly to the AC service panel.

**Isolated Ground.** An equipment grounding conductor that is insulated from the conduit or raceway and all other grounding points throughout its entire length. The only points of electrical connection will be at the duplex outlet and service panel ends of the line.

#### **DEDICATED TELEPHONE**

#### 3. Ensure the following telephoneline requirements are met:

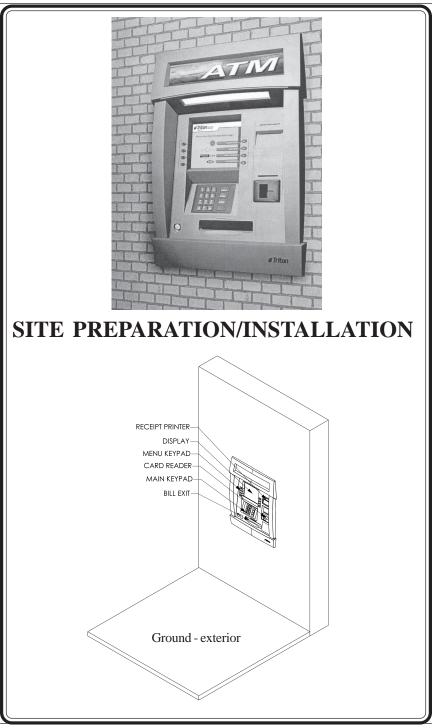
**Dedicated line.** The telephone line servicing the ATM will not be a "party" line or any other shared type connection.

**Proximity to Interference Sources.** The telephone line must not be in close proximity to "noisy" devices that could induce interference into the ATM communications channel.

#### RFINTERFERENCE

- 4. Ensure there are no devices near the terminal that may cause RF interference, such as:
- TVs Coolers
- Security Devices
- Neon Signs
- Devices with Compressors







#### INTRODUCTION

The Triton FT5000 is a self-serviced, weatherized terminal adaptable for any suitable exterior wall or vestibule location. The new cabinet design allows flexibility for "Island" installations (wall thickness up to 6.3") or existing structures (wall thickness up to 10"). Built-in leveling feet and optional platforms ("plinths") allow the unit to be raised to the desired height of the wall opening. The following section provides the physical dimensions and requirements for installing the FT5000 for your particular site location. To assist you in preparing your site, a check list is provided of various procedures that should be carried out <u>prior</u> to the arrival of the ATM

#### **INSTALLATION ACCESSORIES**

When installing the FT5000, it is recommended that you or your agent have the following items available:

»	Lifting/moving device	»	Water-resistant sealant
»	Wooden/metal safety blocks		(caulk,etc)
	to support the ATM during	»	Level
	install	»	Tape measure
»	Framing square	»	Crowbar(s)
»	Hammer	»	Circular/Jig saws

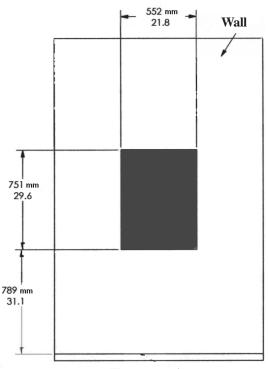
Tool kit consisting of open/closed box wrenches, magnetic Phillips/flat screwdrivers, socket set, pliers, Allen wrench set, etc.



# **EXTERIOR WALL DIMENSIONS**

The following illustrations show the nominal wall area dimensions required for installation. **Wall opening dimensions have a plus/minus (+/-) 1/4'' tolerance.** The height of the opening is from **exterior sidewalk level** to the base of the opening to comply with Federal ADA requirements.

Dimensions of Wall Opening				
Height	Width	Height (from exterior ground)		
29 - 5/8" (751 mm)	21 - 3/4" (552 mm)	31 - 1/8" (789 mm)		



#### Floor - exterior

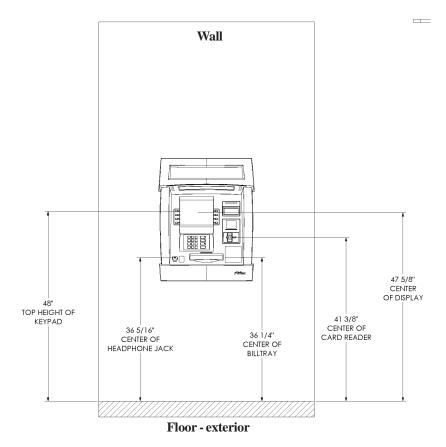
Note Dimensions listed comply with US Federal ADA Guidelines. For USA installations, check for additional guidance. For non-USA installations, check regulations relating to the country of install.



# HEIGHTS TO MAIN CONTROL PANEL

The following illustrations show the heights and the Federal ADA requirements to the main control panel items located on the FT5000. All the height dimensions are calculated from the base of the **exterior ground level** to each item.

Heights to Main Control Panel Items						
Top Ht. of Function Keypad	Center of Card Reader	Center of Display	Center of Bill Tray	Center of Headphone Jack		
48" (1220 mm)	41 - 3/8" (1051 mm)	47 - 5/8" (1210 mm)	36 - 1/4" (921 mm)	36 - 5/16" (922 mm)		





# DETERMINE IF UNIT NEEDS A PLINTH

Triton Systems offers two (2) metal-constructed optional plinths w/leveling feet. A "plinth" is a platform on which the ATM rests or is secured. A plinth enables the ATM to be installed at the required height through the wall. The plinths come in 2 heights: 2-3/8" (61mm - shown below) and 4-3/4" (122 mm). You can raise the unit by a fixed amount (2-3/8" or 4-3/4") and still be able to adjust up using the <u>plinths</u> leveling feet. To determine if you need to order a plinth with your unit, a few measurements will be needed at the site.

For sites that currently have a wall opening:

- 1. Measure from the bottom of opening to inside floor (Figure 1).
- 2. Cabinet dimensions are <u>26-1/2"</u> from bottom of sleeve to base of cabinet (Figure 2).
- 3. Subtract the difference to determine if a plinth is needed or what size plinth to order or build. If difference is less than 2-3/8"(for example), you may construct your own to fit. (Caution: The leveling feet on the cabinet itself should not be used to raise the unit significantly)



Figure 1. Determine height of opening to inside floor.

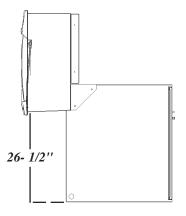
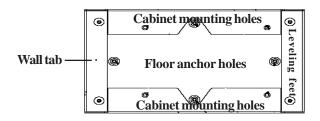
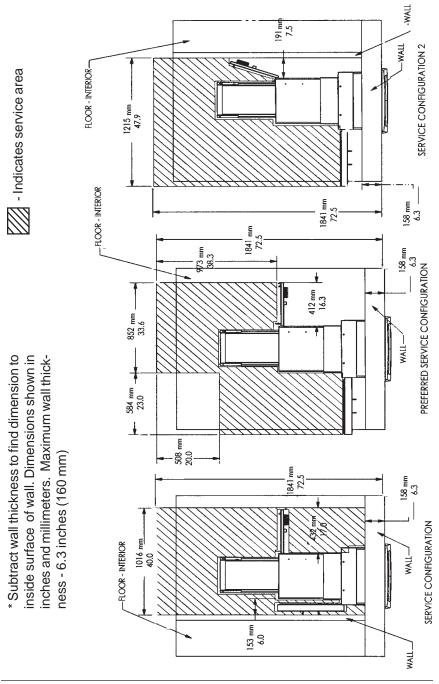


Figure 2. Height of cabinet base to bottom of sleeve (28").

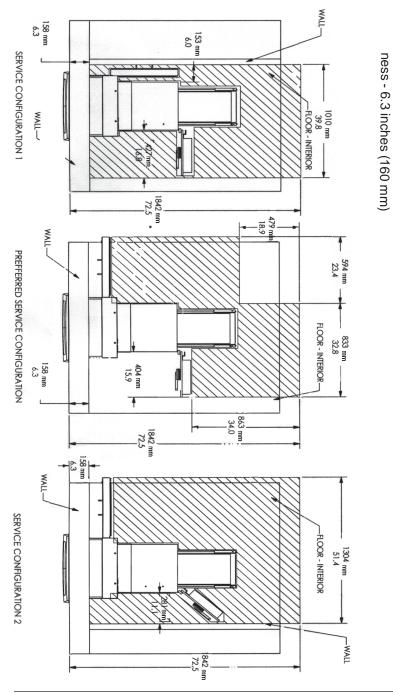






#### ISLAND LAYOUT (BUSINESS HOURS CABINET)

## ISLAND LAYOUT (LEVEL 1 CABINET)

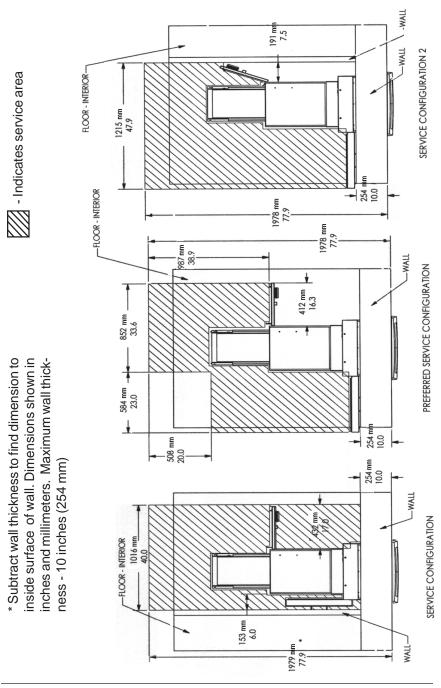




\* Subtract wall thickness to find dimension to inside surface of wall. Dimensions shown in

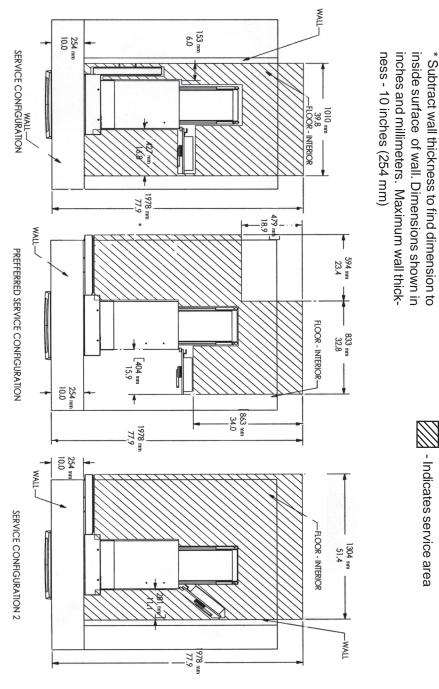
Indicates service area

inches and millimeters. Maximum wall thick-



## EXTENDED LAYOUT (BUSINESS HOURS CABINET)





# EXTENDED LAYOUT (LEVEL 1 CABINET)



# SECURING UNIT

It's recommended that the unit be secured to the facility floor and plinth structure. If a plinth was used, we recommend anchoring that structure first due to accessibility may be limited once the unit is mounted on the plinth. The footprint of the cabinet floor allows for securing to either a concrete pad or plinth structure. Anchor bolts may be too short to go straight from the cabinet to the floor, depending how high the unit was raised to accommodate the wall opening. It is the customer or their agent's responsibility to determine how the unit is affixed to the facility. Listed are some general considerations when securing the unit:

- 1. What is the floor structure? (concrete, wood, etc) Do you have anchors, lag bolts, screws to secure cabinet/plinth?
- 2. Is the unit a UL Level 1 Safe cabinet or Business Hours? Will the floor support the weight of the cabinet? What is the plinth constructed of? (If you build -concrete, metal, wood, etc).
- **3.** Is the inside floor level the same as the outside ground? If inside floor is higher or lower than outside, will you need the optional 2-3/8" or 4-3/4" plinths?
- 4. Is the floor level? Will the unit need to be raised using the plinth/cabinet leveling feet? (Leveling feet are for <u>minimal</u> corrections to level cabinet)
- 5. Is exterior wall solid? (brick, concrete) Wood framed? Aluminum siding? Do you need to insulate the wall cavity?
- 6. After cabinet is anchored, is the control panel trim flush against the exterior wall? Is the trim sufficiently sealed to prevent moisture from entering the control panel electronics?

## LEVEL 1 CABINET SAFETY

Level 1 cabinets are considerably heavier than Business Hours cabinets! Exercise extreme caution when moving Level 1 cabinets! At least two persons should work together to move the cabinet into position for mounting!

#### LEVEL FLOORING REQUIRE-MENT

It is very important that the ATM cabinet be located on flat, level flooring! If the floor is not flat and level, the cabinet bottom and/ or walls may become distorted when the mounting bolts are tightened down! This could prevent the security vault door from closing!

#### TOOL USE/SAFETY

Observe ALL safety precautions for operating hand and power tools! Wear eye and ear protection while operating the electric drill!

USEABACK-SUPPORT BELT WHENLIFTINGAND MOVING THE ATM!



# INSTALLING CABINET THROUGH WALL OPENING

- 1. Carefully inspect the unit for any shipping damage and report any damage immediately to the shipping company. Refer to the warranty information in the operation or service manual (as applicable) for information about reporting shipping damage.
- 2. After unpacking the unit, move the cabinet using the proper lifting/ moving device to the wall opening.

\*Important\* <u>DO NOT</u> install the control panel fascia at this time.

- **3.** Slide the unit up to the opening until the sleeve portion of the cabinet is near the wall (Figure 1).
- 4. Measure the distance from the bottom of the wall opening to the bottom of the sleeve. This will be the height requirement of the "plinth", if needed. Add an additional 1/8" (3.175mm) to your measurement for clearance (Figure 2).

#### Note

A "plinth" is a platform on which the ATM rests or is secured. This plinth enables the ATM to be installed at the required height through the wall.



Figure 1. Slide unit up to interior wall.

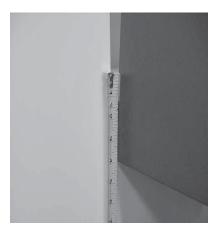


Figure 2. Measure from bottom of wall opening to bottom of sleeve.



- 5. If **no plinth** is needed, slide the unit forward towards the wall opening so the sleeve protrudes slightly out the front exterior (Figure 3). This is needed to temporarily affix the control panel trim. Minor adjustments for raising the unit can be made using the **cabinet** leveling feet (See "Adjusting Height of Unit" page 32).
- 6. If a **plinth is used** (either built or purchased), mount the cabinet on the plinth Figure 4). The optional plinths have a <u>wall tab</u> that is aligned facing the outside exterior wall. Anchor the cabinet to the plinth using the bolts provided (optional plinth) or secure to your built plinth. Tighten bolts enough to secure the two together for moving the unit.



Figure 3. Sleeve protrudes slightly.

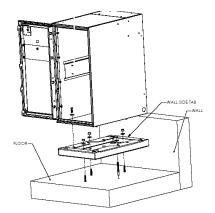
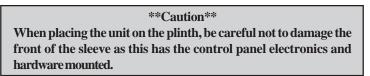


Figure 4. Mount cabinet on plinth.

7. Slide/move the unit forward towards the wall opening so the sleeve protrudes slightly out the front exterior (Figure 3). This is needed to temporarily affix the control panel trim. Minor adjustments for raising the unit can be made using the **plinths** leveling feet (See "Adjusting Height of Unit" page 32).



**8.** Locate the control panel trim included with the unit accessories (Figure 5). On the back side are 4 clips (Figure 6a) that will align with 4 slots on the sleeve control panel (Figure 6b).



Figure 5. Control panel trim.



Figure 7. Slide unit back flush to wall.



Figure 6a. Location of clips on control panel trim.



Figure 6b. Location of slots on sleeve control panel.

- **9**. Temporarily mount the trim on the protruding sleeve. **DO NOT** secure with screws at this time.
- **10.** Slide the unit back until the control panel trim is flush to the exterior wall (Figure 7).
- **11.** Adjust the **plinth's** leveling feet to ensure the control panel trim is flush against the exterior wall and the cabinet is level.



- 12 Mark the anchor holes through the cabinet floor or mark around the plinth structure using masking tape, pencil, etc. Remove the control panel trim and slide the unit back inside.
- **13.** Remove the unit from the plinth (if used). Align the plinth over the markings and mark the anchor holes. Drill the anchor holes and secure the plinth (if used) to the floor. Mount the unit back on the plinth (if used) and again slide the unit forward towards the wall opening until the sleeve protrudes slightly out the front exterior.

If no plinth was used, after drilling the anchor holes, again slide the unit forward towards the wall opening until the sleeve protrudes slightly out the front exterior.

The next pages involve installing and securing the control panel trim.

#### **Optional Plinths**

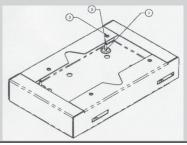
Triton Systems now offers two (2) metal-constructed optional plinths w/ leveling feet. The plinths come in 2 heights: 2 - 3/8" (61 mm) and 4 - 3/4" (122 mm). Based on the height requirement needed, you can either:

1) Raise the unit with the leveling feet installed in the cabinet (Business Hours and Level 1) using a 1/4" nut driver/socket wrench.

(**Caution**: The leveling feet are primarily for that purpose - leveling the ATM, not to raise the unit by a significant amount).

**2**) Construct your own. A plinth is a platform on which the ATM rests or is secured. A plinth enables the ATM to be installed at the required height through the wall. If built, it must be no smaller than the base of the cabinet and must be constructed of a material that is capable of supporting the weight of the ATM.

**3)** Purchase an optional plinth (below). Raise the unit by a fixed amount (2 - 3/8" or 4 - 3/4") and still be able to adjust up using the <u>plinths</u> leveling feet (adjustable crescent wrench - side access). **Caution**: Leveling feet are primarily used for leveling the ATM, not to raise the unit by a significant amount.



(Note: Before installing the plinth, adjust the leveling feet a 1/4'' (6mm) below the platform to gain access with an open-end box wrench for additional adjustments)



## INSTALLING CONTROL PANEL TRIM

- Locate the control panel trim included with the unit accessories. On the back side are 4 clips (Figure 1a) that will align with 4 slots on the sleeve control panel (Figure 1b).
- 2. Before mounting the trim, ensure the speaker wires won't be pinched when installing. These will be connected later. Align the trim clips with the sleeve slots and insert until the trim is seated on the control panel.
- 3. Once the trim is in place, open the cabinet on the back side of the sleeve and secure the trim panel with 16 Phillips head screws included in the accessory kit. (4 on each side, Figure 2a).

#### Note

2 screws holes are located inside the small silver panel. Recommend sliding the dispensing mechanism back approximately one (1) foot and use a magnetic Phillips driver to hold screws. Screw holes are located in upper slot shown in Figures 2b and 2c.



Figure 2a. Location of fascia screws.



Figure 1a. Location of clips on control panel fascia.



Figure 1b. Location of slots on sleeve control panel.



Figure 2b. Panel opened and screw locations.



Figure 2c. Blown-up view of screw location.



- 4. After the control panel trim has been secured, route the speaker wires and topper AC power cord through the grommet located in upper right (Figure 3). Close the topper light assembly until it snaps in place (Figure 4).
- Connect the light assembly AC power cord to the power supply mounted on the sleeve cabinet door (Figure 5). Connect the speaker wires to the audio input circuit board located in the lower right corner of the cabinet (Figure 6).
- 6. With 2 persons (inside/outside), slide the whole unit back inside until the control panel trim is flush with the outside wall.
- 7. Before securing/anchoring the cabinet, check to ensure the control panel trim is flush against the exterior wall. Minor adjustments can be made using the cabinet leveling feet.
- **8.** Secure/anchor the cabinet to the floor or plinth, if used. Cabinet/trim installation is complete.

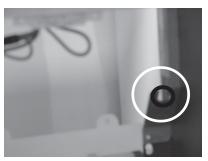


Figure 3. Cable slot holder.

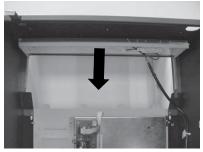


Figure 4. Topper light assembly pivots down.



Figure 5. Power supply.



Figure 6. Audio circuit board.



### **EXTENDED CONFIGURATION**

The illustration on right shows the FT5000 extended. The primary purpose for this configuration is for installation in facilities with exterior walls having a maximum thickness of 10 inches (254 mm). The dispensing mechanism has a bill chute extension designed for the elongated configuration. A protective plate is inserted on the underside of the cabinet sleeve for security and environmental purpose.

### \*\*Warning\*\*

Units are shipped as specified configurations and the dispensing mechanism assembled with the required bill chute extension. Changing configurations require dispenser modifications and/or additional hardware. YOU CAN NOT CHANGE CABINETCONFIGURATIONS WITHOUT THE REQUIRED HARDWARE.



Figure 12. Extended configuration.



Figure 13. Screw holes for Island configuration.

### **ISLAND CONFIGURATION**

The illustration on right shows the FT5000 "collapsed" or Island configuration. The cabinet sleeve is moved back approximately 5 - 7/16" inches (137 mm). This configuration allows installation in facilities with exterior walls having a maximum thickness of 6 - 5/16" inches (160 mm). The dispensing mechanism has a shortened bill chute extension due to the collapsed state of the unit.

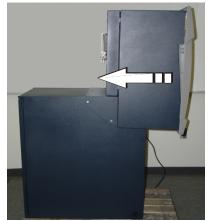


Figure 14. Island configuration.



### SEALING THE CONTROL PANEL TRIM

To ensure that the temperature around the unit is maintained during cold weather, it's important that the wall opening is prepared correctly. Any cavity in the wall should be sealed to provide a flush surface. The gap between the ATM and the inside wall opening should be left clear to allow air to circulate at room temperature. After the control panel trim is installed, a **good weather seal is needed between the exterior wall and the trim**. A suitable water -resistant sealant product is required around the periphery of the control panel trim. There are also products that are color tinted to closely match the trim color.

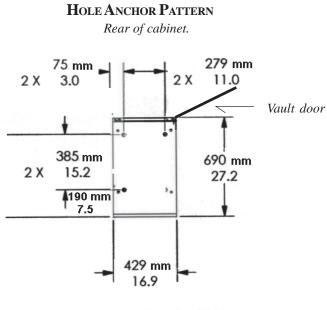


Figure 15. Control panel trim sealed.

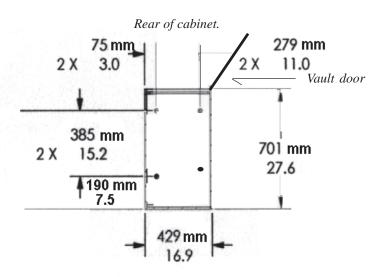
## \*\*IMPORTANT\*\*

SEAL THE TRIM TO THE EXTERIOR WALL WITH A WATER-RESISTANT SEALANT TO PREVENT WATER INTRUSION. <u>DO NOT</u> SEALAROUND THE BOTTOM OF THE TRIM! A SMALL DRAIN HOLE IS LOCATED ON THE UNDERSIDE THAT MUST BE CLEAR.





HOLE ANCHOR PATTERN Business hours cabinet footprint.



## HOLE ANCHOR PATTERN

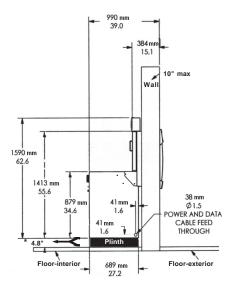
Level 1 (safe) cabinet footprint.



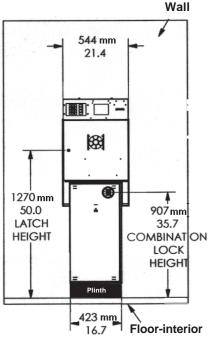
## CABINET DIMENSIONS (BUSINESS HOURS)

The following illustrations show dimensions of the Business Hours cabinet in the extended and Island configurations.

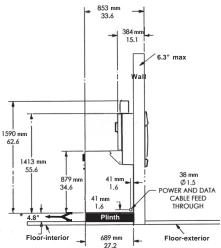
\* This dimension is only accurate if inside and outside "floor" level is the same. If they are not, this dimension should be modified accordingly. [4.8 " (122 mm)]



Business Hours (extended) configuration (side view).



Business Hours cabinet (rear view).



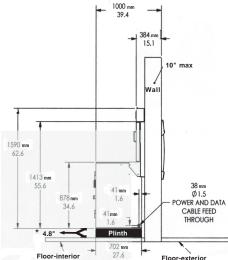
Business Hours (Island) configuration (side view).

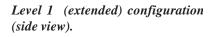


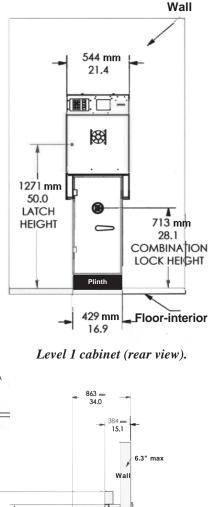
## CABINET DIMENSIONS (LEVEL 1)

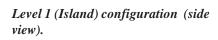
The following illustrations show dimensions of the Level 1 (safe) cabinet in the extended and Island configurations.

\* This dimension is only accurate if inside and outside "floor" level is the same. If they are not, this dimension should be modified accordingly. [4.8 " (122 mm)]









41 mm

6

Plinth 702 mm 27.6



38 mm

Ø1.5

OWER AND DATA

CABLE FEED THROUGH

Floor-exterior

1590 mm 62.6 1413 mm

55.6

4.8"

Floor-interior

878 .....

34.6

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# POWER AND COMMUNICATION



## Connecting AC Power and Telephone Line

IMPORTANT: AC power for the terminal should come from a dedicated source with an isolated ground.

- 1. Ensure the power and phone cables are routed through the cable clips located in the vault cabinet.
- 2. Route the AC power cord and the phone cord through either the front right or left side access hole (as applicable) in the security cabinet, as shown in Figures 1a and 1b.
- 3. Install the supplied snap bushing into the access hole that carries the power and phone cords.

See Figure 2 for an example that shows the snap bushing on the access hole.

- 4. Plug the AC power plug into the wall outlet.
- 5. Plug the phone cord into the wall mounted modular phone jack.

#### \*\*IMPORTANT\*\*

The phone line used for the ATM shall not be shared with any other device!

#### \*\*\* WARNING\*\*\*

This unit may be equipped with more than one power cord. **DISCON-NECT ALL POWER CORDS PRIOR TO SERVICING!** 



Figure 1a. Power and phone cords routed through right front side access hole.



Figure 1b. Power and phone cords routed through left front side access hole.



### POWEROUTLET ACCESSIBILITY

Whether you are installing a new outlet, or plan to use an existing outlet to supply power to the ATM, make sure the following requirements are met:

- 1. The outlet is located near the cabinet.
- 2. The outlet is easily accessible.
- 3. Access to the outlet will not be blocked once the cabinet is installed!

### POWER SUPPLY CORD SPECIFICATIONS

For European applications, the power supply cord must conform to the following specifications:

- 1. Two-conductor with physical earth ground.
- 2. IEC 320 molded connector on one end and molded plug on the other end.
- 3. Certified for country of installation.
- 4. Rated minimum H05VV-F with minimum 0.75 mm2 (except where specific countries require 1.0 mm2) conductors.
- 5. Maximum length: 3 meters.



Figure 2. Install snap bushing on access hole that carries power and phone cords.



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# NMD-100 DISPENSING MECHANISM REMOVAL/INSTALLATION



## REMOVING/INSTALLING THE NMD-100 DISPENSING MECHANISM

The dispensing mechanism for the FT5000 may be shipped hanging on the side rails inside the security vault. Several protective foam blocks have been strategically placed behind and along each side of the dispensing mechanism to reduce any movement during transit. The foam blocks must be removed before the dispensing mechanism can be removed. If the dispenser is shipped inside the cabinet, follow the procedures below for removal.

#### Removing The Dispensing Mechanism From The Cabinet

- 1. Unlock and open the cabinet sleeve door. Verify that the power switch located on the power supply is in the OFF (0) position. Close the sleeve door.
- 2. Open the security vault and remove all protective foam blocks from around the dispensing mechanism.
- Refer to Figure 1. Remove the transport 5/32" Allen screws located on top front of each slide rail. DIS-CARD SCREWS AFTER RE-MOVAL!
- 4. Pull the dispensing mechanism out of the cabinet until it reaches its fully extended position. The left slide rail has a locking pin that must be disengaged to extend the rail. (Figures 1 and 2)
- 5. Refer to Figures 3 and 4. Disconnect the DC power, serial communications, and shutter cables from the dispensing mechanism.

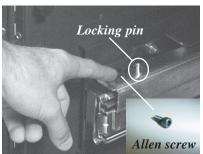


Figure 1. Slide rail locking pin and thumb screw location.



Figure 2. Dispenser fully extended on its mounting rails.

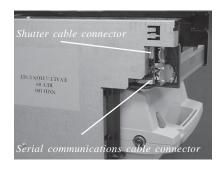


Figure 3. Shutter and serial cables removed (left side of dispenser).



6. Using two persons, grasp the green handles and lift the dispenser off the rails and slide out of the cabinet. (Figure 5)

#### \*\*WARNING\*\*

Two persons recommended to remove the dispenser from the cabinet. When removing dispenser from cabinet, use caution not to damage the throat extension on front of dispenser mechanism.

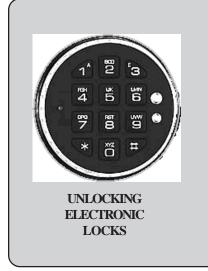
- 7. Place the dispenser in a safe location where it will not get accidently damaged.
- 8.\* If installing the cabinet at this time, follow the procedures provided in "Site Preparation" section of this manual.



Figure 4. AC power cable removed.



Figure 5. Lift dispenser off rails and guide out of cabinet. Use 2-person lift!



**ELECTRONIC LOCK.** Upon arrival, the combination of the lock should already be preset to 1-2-3-4-5-6. To unlock, enter the preset combination and check for proper operation. After each keypress, the lock will beep. After the final digit has been entered, the lock will beep twice, and the open period will begin. When a valid combination has been entered, the operator will have approximately 3 seconds to open the lock. To open the lock, turn the dial clockwise. After the lock is opened, the door latch may be turned and the safe opened.



### INSTALLING THE DISPENSING MECHA-NISM INTO THE CABINET

### \*\*CAUTION\*\*

Be certain that you have not applied power to the ATM before you continue!

- 1. Refer to Figure 1. Pull the slide rails out of the cabinet until they reach their fully extended position. The left slide rail has a locking pin that must be disengaged to extend the rail. Ensure all cables have been moved out of the way so they will not be damaged while installing the dispensing mechanism in the cabinet.
- 2. Pick up the dispensing mechanism by the handles and load it on to the slide rail by aligning the tabs (under handle) into the rail slots. (Figures 1 and 2)

#### \*\*WARNING\*\*

Use only the green handles and drive motor in rear of dispenser to lift the mechanism. Two persons recommended to install the dispenser on to the slide rails.

Refer to Figure 3. Connect the serial communication data cable and the shutter cable to the connectors on the left side of the dispenser. For the serial data cable, <u>BE SURE</u> to use the forward -most connector as shown. The plug is keyed to ensure proper installation.



Figure 1. Slide rails extended.



Figure 2. Tab into rail slot. Use 2-person lift!

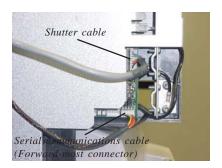


Figure 3. Shutter and serial data cable connectors.



- 4. Connect the AC power cable to the dispenser power supply. (Figure 4)
- 5. Slide the dispenser into the cabinet until the slide rail locking pin is engaged. (Figure 5)
- 6. Turn the dispenser power switch located just to the right of the power connector to ON (I).



Figure 4. AC power cable connection.



Figure 5. Slide dispenser into cabinet.



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# REAR SERVICE PANEL (RSP), TCP/IP, and VSAT INSTALLATION/CONNECTIVITY



### INSTALLING REAR SERVICE PANEL

The Rear Service Panel (RSP) is shipped in its own container. Follow the procedures for installing the RSP.

- 1. Carefully inspect the unit for any shipping damage and report any damage immediately to the shipping company. Refer to the warranty information in the User or Service manual (as applicable) for information about reporting shipping damage.
- 2. If the unit is **ON**, enter **Management Function>System Parameters>Shut Down the Terminal.** When prompted on the screen, open the sleeve cabinet and turn the power switch on the power supply to the **OFF** (0) position.
- Look on top of the cabinet sleeve and locate the five (5) mounting screw holes as shown in Figure 2. If there is a cable plug inserted, remove it by pushing up from inside the cabinet.
- 4. Remove the RSP and parts supplied from its shipping container. Remove the back panel of the RSP by loosening the 2 thumb screws located on top of panel and lifting back panel up off its retaining slots (Figure 3).
- 5. Place the service panel on top of the cabinet sleeve as shown in Figure 4. **CAUTION:** Panel overhangs slightly on edge of cabinet top when mounted. Panel may tip over before routing cables and inserting screws, so rest panel back on cabinet top before continuing with next steps.



Figure 1. Rear Service Panel (RSP).



Figure 2. Mounting screw holes (5).



Figure 3. Loosen 2 thumb screws and remove back panel.



Figure 4. Locate panel on top of cabinet sleeve.



- Route the power and data cables through the cable access opening shown in Figure 5. Feed cables into cabinet (Figure 6) but <u>DO NOT</u> connect at this time. Locate the black plastic grommet included in accessory box and insert in the cable opening to protect cable run.
- 7. Slide service panel over mounting screw holes and secure to cabinet top using the five (5) Phillip screws provided (Figure 7).
- Place the paper roll on the spindle ensuring the paper feeds from the <u>TOP</u> of the roll as shown in Figure 8.
- 9. Insert the edge of the paper roll into the printer take-up slot as shown in Figure 9. The printer will automatically grip and pull the paper into the paper path. If the paper feeds automatically, skip to step 12; if the paper does not feed automatically, continue with step 10.
- Pull the pin located on the left side of the printer bracket (Figure 10). Rotate the printer assembly upwards as shown in Figure 11.
- 11. The blue tension lever is located on the right side of the assembly. It must be in the closed position (Figure 11 and insert). If not, move the lever (moves in 3 positions) to the closed position. Close the printer assembly and retry to feed the printer paper. If successful, continue with step 12.



Figure 5. Feed cables through cable opening on top of cabinet.



*Figure 6. View of cables from inside sleeve cabinet.* 

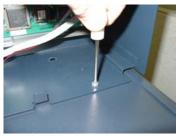


Figure 7. Secure RSP to top of cabinet.



Figure 8. Insert paper roll on spindle (paper feeds from TOP).



- 12. Reinstall the back panel to the RSP. Guide the back panel slots over the 2 tabs located on the bottom of the front panel and rotate forward until closed. Figures 12a/b. Tighten the 2 thumbscrews.
- Connect the 2 power cables to any 8 pin connectors on the power supply that are free (Figure 13).
- Route the data cable (RJ-45 connector end) along the existing cable run and connect to the "Auxillary" port on the docking board (Figure 14).
- 15. Turn the power switch on the power supply to the ON (I) position.
- 16. Refer to Appendix B in the User manual for program options.



Figure 13. Connect power cables.

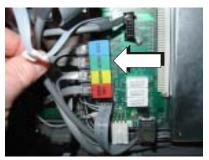


Figure 14. Data cable connection.



*Figure 9. Paper feeds automatically in take-up slot.* 



Figure 10. Pin location.

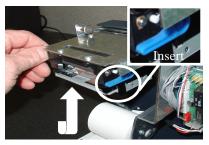


Figure 11. Printer assembly opened and blue tension lever position insert).



Figures 12a/b. Slots (above) fit over tabs (bottom).





## TCP/IP (ETHERNET)

Ethernet is the most popular LAN technology in use today. The IEEE standard 802.3 defines the rules for configuring an Ethernet network. It is a 10 Mbps, CSMA/CD baseband network that runs over thin coax, thick coax, or twisted pair cable.

The Ethernet option makes your FT5000 ATM LAN (Local Area Network) or WAN (Wide Area Network) capable. The ATM functions that are normally performed via the dial-up telephone system, such as customer transactions and remote monitoring, can now be performed using existing in-house communications network. ATM transaction processing and hardware monitoring functions are performed across a shared network medium. Ethernet is popular because it strikes a good balance between speed, cost and ease of installation. These benefits, combined with wide acceptance in the computer marketplace and the ability to support virtually all popular network protocols, make the Ethernet option an ideal networking solution for your FT5000 ATM.

## TCP/IP CABLE INSTALLATION

- 1. If the unit is **ON**, enter **Management Function>System Parameters>Shut Down the Terminal.** When prompted on the screen, open the sleeve cabinet and turn the power switch on the power supply to the **OFF** (0) position..
- 2. Refer to the section on <u>"Power and Communication"</u>. Route the 10Base-T (CAT-5) cable through the cabinet cable access hole. Secure cable inside vault area and continue up to the cabinet sleeve control area.



Figure 1. Rear view of TCP/IP connector.

- 3. Connect the RJ-45 end of the CAT-5 cable to the TCP/IP connector located on the docking board assembly as shown in Figure 1.
- 4. Secure cable into existing cable harness runs. Refer to the 5000- series Configuration manual for programming Ethernet options.



## VSAT (VERY SMALL APERTURE TERMINAL)

VSAT stands for "Very Small Aperture Terminal" and refers to receive/transmit terminals installed at dispersed sites connecting to a central hub via satellite using small diameter antenna dishes (0.6 to 3.8 meter).

VSAT technology represents a cost effective solution for users seeking an independent communications network connecting a large number of geographically dispersed sites. VSAT networks offer value-added satellite-based services capable of supporting the FT5000 and can provide powerful, dependable private and public network communications solutions.

### INSTALLING THE VSAT CABLES (OPTIONAL KIT)

- 1. If the unit is **ON**, enter **Management Function>System Parameters>Shut Down the Terminal.** When prompted on the screen, open the sleeve cabinet and turn the power switch on the power supply to the **OFF** (0) position.
- 2. Refer to the section on <u>"Power and</u> <u>Communication"</u>. Route the Comms cable through the cabinet base cable access hole. Secure cable inside vault area and continue up to the cabinet sleeve control area.
- 3. Connect the RJ-45 connector end of the Comms cable to the **Auxillary port** on the **Docking board** assembly (Figure 1).
- 4. Connect other end of the Comm cable (RJ-45 connector) to the Sub-D adapter (Figure 2).
- Connect 25-pin connector (Sub-D) to satellite transceiver or interface box, if applicable.
- 6. Refer to the 5000-series Configuration manual for programming VSAT parameters.

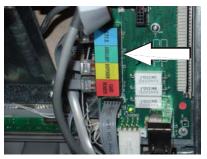


Figure 1. Connect RJ-45 connector to Auxillary port.

\*\*Warning\*\* The Rear Service Panel uses the same port (Auxillary) to operate. You will have to disconnect the RSP cable to operate in VSAT. The RSP will be non-operational.



Figure 2. Sub-D adapter.

