



Personas M Series

5886 Site Preparation

B006-6191-F000
0805

NOTICE

This is a contractual document. It contains important warning and confers important legal rights and obligations. You are advised to read it carefully.

It is the responsibility of the customer to assure that all installation preparations are complete and in compliance with all specifications and requirements of NCR and all applicable national, state, or local codes, regulations and laws.

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It is the policy of NCR Corporation (NCR) to improve products as new technology, components, software, and firmware become available. NCR, therefore, reserves the right to change specifications without prior notice.

All features, functions, and operations described herein may not be marketed by NCR in all parts of the world. In some instances, photographs are of equipment prototypes. Therefore, before using this document, consult with your NCR representative or NCR office for information that is applicable and current.

To maintain the quality of our publications, we need your comments on the accuracy, clarity, organization, and value of this book.

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Federal Communications Commission (FCC) Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the 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.

Canadian Class A Device Declaration

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

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Information to User

This equipment must be installed and used in strict accordance with the manufacturer's instructions. However, there is no guarantee that interference to radio communications will not occur in a particular commercial installation. If this equipment does cause interference, which can be determined by turning the equipment off and on, the user is encouraged to consult an NCR service representative immediately.

Caution NCR Corporation is not responsible for any radio or television interference caused by unauthorised modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by NCR. Such unauthorized modifications, substitutions, or attachments may void the user's authority to operate the equipment. The correction of interference caused by such unauthorized modifications, substitutions, or attachments will be the responsibility of the user.

Revision Record

Date	Page	Description of Change
July 00	All	New Publication for Personas 86
Mar 01	All	Update for Severe Environment, Dip TTW, Coin Dispenser, alpha numeric, vestibule touchscreen and Infill Panels.
Oct. 01	All	Update for Rosengrens safe, alarm and power cable data, ADA dimension correction, in-fill panels dimensions and change of weights to allow for CDM/CPM.
May 02	All	Update to include dual dispenser and removable latch fast bin
Sept. 03	All	Update to include Cash Acceptor and Cheque Acceptor Title change from Personas 86 to Personas M Series 5886
Sept 03	All	Revision B : update to include short sleeve
May 04	All	Revision C : update to short sleeve height requirements removal of disclaimer relating to Cheque Acceptor on title page amendments to Hole in Wall ADA requirements.
July 04	chap. 1	Revision D: update for new dispenser slides.
Dec 04		Revision E: update to incorporate Type 2 Coin Dispenser.
Aug. 05		Revision F: update to include CEN Grade L, corrected errors to shortsleeve combinations, changes power requirements.

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Preface

This document contains the information necessary for the preparation of a site conforming to NCR specifications. It is very important that the site complies with the requirements specified in this document because, once the equipment has been installed, deficiencies in site preparation or the problems caused by these deficiencies are much more difficult to detect and correct. Further, failure to comply with these requirements or to take proper steps to protect equipment against risks identified in this document may cause serious damage to the equipment and to the customer's business.

In addition to the need to comply with the requirements specified, electrical wiring and mechanical systems must also comply with all relevant codes, laws and regulations.

It is important that the site be prepared by a customer or his agent who is fully conversant with the special requirements of electronic 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. This 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.

NCR staff will be available to answer questions relating to the contents of this document but, except where:

- a the customer has been notified that a full or partial consultancy service is available and/or that NCR will be willing to undertake a preliminary or final site survey and
- b the customer shall have entered into a formal contract with NCR for provision of the same.

No comment, suggestion or advice offered or not offered about preparation of the site nor any inspection of the site whether before or after preparation is to be taken as approval of the location of the site and equipment or of its preparation and NCR will not be liable in respect of any comment, suggestion or advice given by its staff or in respect of any failure to give advice.

Finally, only the customer can know the full extent of damage which may be caused to his business by reason of failure of the equipment which is to be installed. For this reason it is the customer's responsibility to ascertain the extent of any such possible damage to his existing or planned business, and to effect full insurance in respect of it.

Overview

The NCR Personas M Series 5886 Automated Teller Machine (ATM) is a self-service ATM which may be installed through any suitable exterior wall or vestibule location.

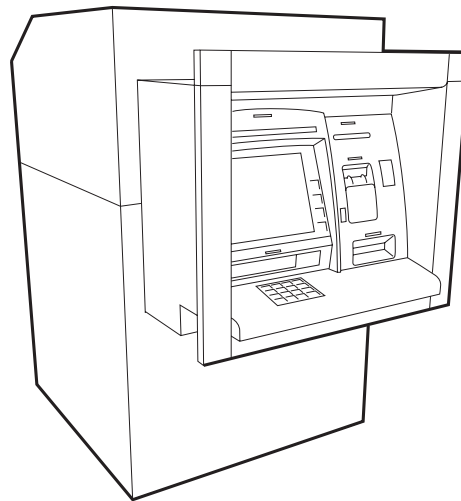
This publication is specific to Walk-Up. For the Drive-Up version, refer to the publication 'Personas M Series 5886 Drive-Up Site Preparation and Installation Manual' (B006-6328).

The 5886 is available as:

- Walk-Up
 - short sleeve (UL (feature 001) and CEN Grade L security enclosures only)
 - standard sleeve.
- Drive-Up
 - short sleeve (UL (feature 001) and CEN Grade L security enclosures only)
 - standard sleeve.

The ATM is designed to provide a range of services such as:

- Cash withdrawals
- Statement printing
- Passbook updating (vestibule installations only)
- Cheque book requests
- Account enquiries
- Transfers
- Envelope deposits
- Envelope dispensing
- Coin dispensing
- Cheque deposits
- Cash deposits.







Customer Responsibilities

The customer must do or provide the following:

- When required by NCR, provide the NCR customer service representative with appropriate drawings that indicate:
 - Location of the equipment
 - Site wiring (power and signal, paths and lengths)
 - Location of other equipment capable of generating electrical noise, electromagnetic interference, heat, etc.
- Make building alterations necessary to meet wiring and other site requirements.
- Provide and install all communications cables, wall jacks, special connectors, and associated hardware.
- Provide and install necessary power distribution boxes, conduits, grounds, lightning protection, and associated hardware.
- Make sure all applicable codes, regulations and laws (including, but not limited to, electrical, building, safety, and health) are met.
- Provide and install auxiliary power or other equipment as required.
- Provide storage or service areas as required.
- Make sure the environmental requirements of the system/unit are met.
- Provide floor coverings and environmental systems that limit or control static electricity build-up and discharge.
- Install the product at a height which meets the accessibility regulations of the relevant country.

Product Identification

The product is identified by a class type number (5886), and a 4 digit model number which is printed on a label fixed inside the top cabinet of the ATM and above the receipt printer. The first two digits of the model number identify the major model (normally 01), the next two digits identify the minor model (normally 01). The serial number is unique to each ATM. The tracer number is used to identify where the ATM was built. Please quote all of the serial and tracer numbers, including the prefix, when making reference to the ATM.

 NCR Global Solutions Ltd. Made in UK	Model: XXXX Tracer: XX-XXXXX
	Class: 5886 Serial: XX-XXXXXXXXX Vac: 220 - 240 Hz: 50/60 A:6.3
 LISTED 549 Automated Teller Machine 24 Hour Service Level 1	 LR 32207
	
Electromagnetic Compatibility This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.	
This apparatus does not exceed Class A limits for radio noise emissions set out in the Radio Interference Regulations of Canada. Le present appareil n'emet pas de bruits radioelectriques depassant les limites de la classe A prescrites dans le Reglement sur le brouillage radioelectrique du Canada.	
Complies with FDA Radiation Performance Standards, 21 CFR Subchapter J	

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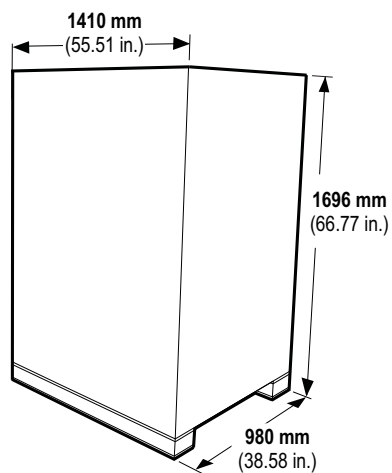
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Physical Requirements

Package Dimensions

The dimensions of a packaged ATM are shown below.



Manoeuvring the ATM Into Position

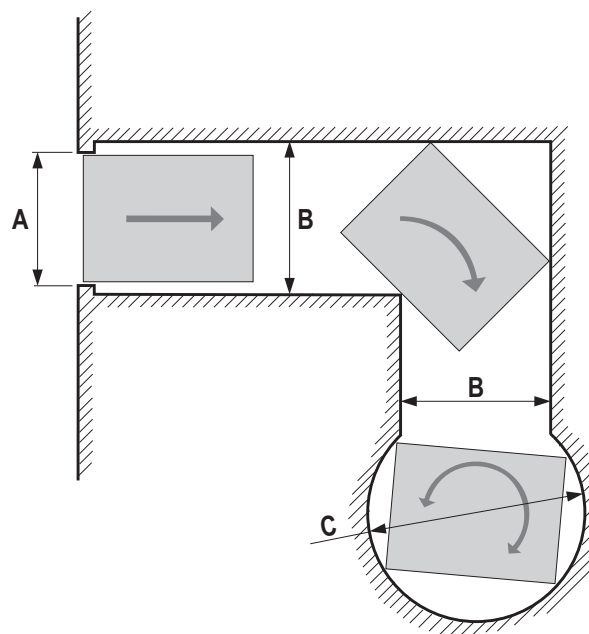
Ensure that doorways and corridors leading to your point of installation are wide enough to allow the package to pass through, or make arrangements to unpack the ATM in an area with sufficient access and then move it to the installation site. Also ensure that any corridors can support the weight of the ATM.

The following table shows the **minimum** dimensions for doorways, corridors with right angle corners and the space required to rotate an ATM on its axis.

Note 1: The dimensions assume the ATM is being moved using equipment that does **not** extend beyond the base of the ATM or packaging.

Note 2: A surrounding clearance of **6 mm** (0.25 in.) has been allowed in the figures.

	Unpackaged ATM (Standard Sleeve)	Unpackaged ATM (Short Sleeve)	Packaged ATM
A Doorway or straight corridor	827 mm (32.56 in.)	827 mm (32.56 in.)	992 mm (39.06 in.)
B Corridor with corner	1048 mm (41.26 in.)	1008 mm (39.69 in.)	1203 mm (47.36 in.)
C Rotation about centre	1546 mm (60.87 in.)	1452 mm (57.17 in.)	1729 mm (68.07 in.)



ATM Dimensions

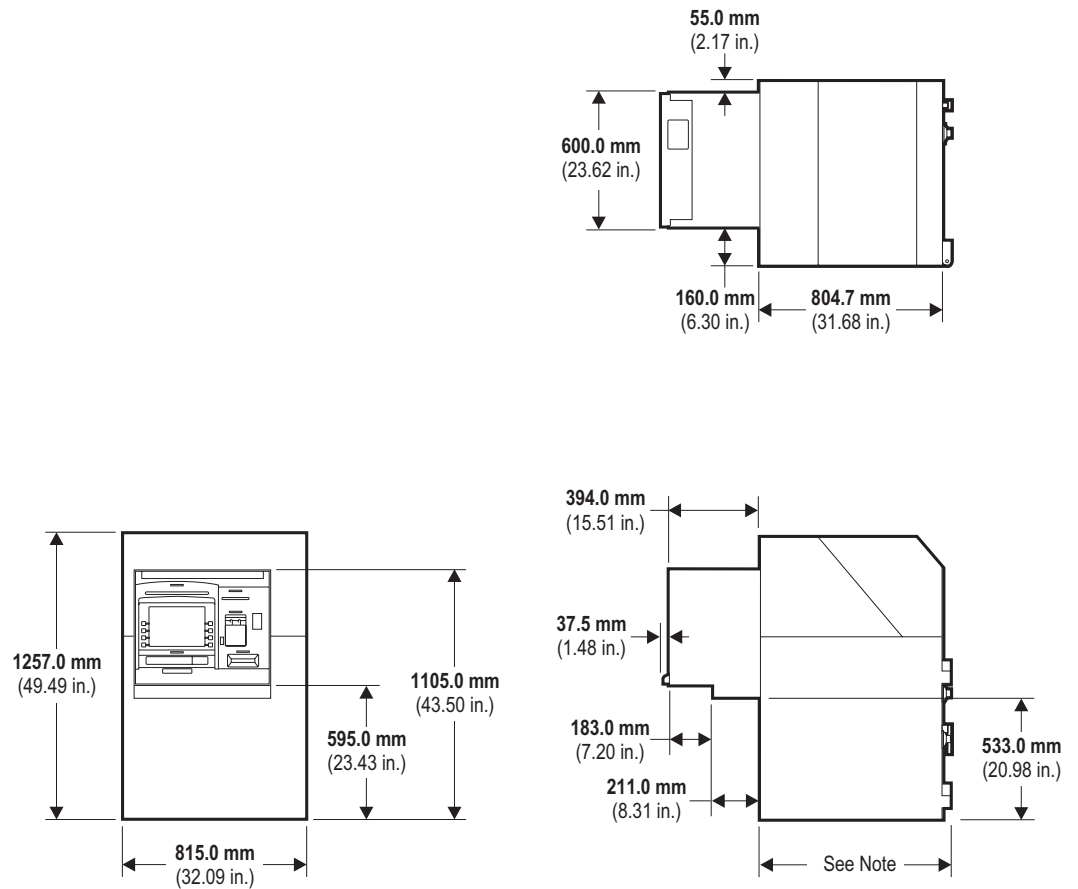
The following illustrations show dimensions for ATM's configured with CEN Grade L, CEN Grade III, CEN LGAI Security, and UL enclosures.

Note 1: Cables enter the ATM through the hole in the base of the ATM security enclosure. The location of the hole is shown in the illustration "Support Plinth" (see page 1-58).

Note 2: The shelf on the 5886 is straight, unlike the shelves on Personas 84 and Personas 85 which are curved.

**Standard Sleeve Before
Collar has Been Fitted**

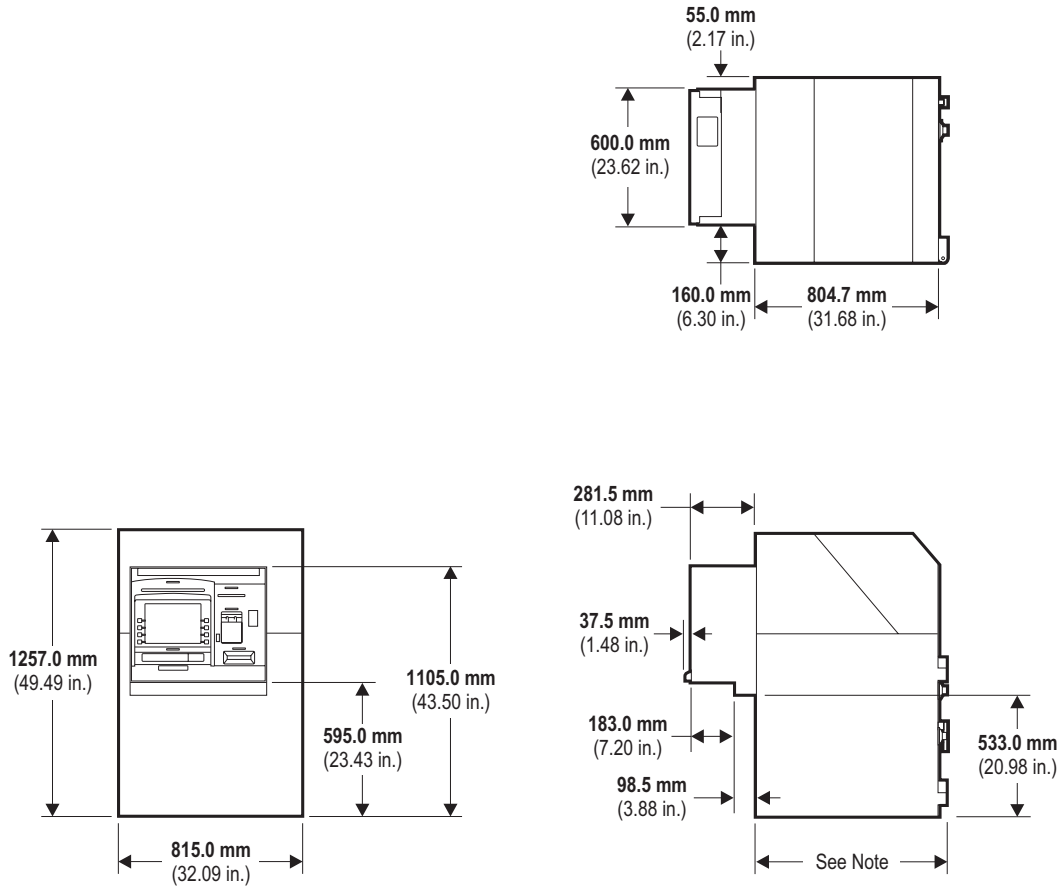
The dimensions in the illustration below show the ATM before a collar has been fitted.



Note: For UL (feature 001) security enclosures, this dimension is **835.0 mm (32.87 in.)**. For CEN Grade L security enclosures, this dimension is **868.0 mm (34.17 in.)**.

**Short Sleeve Before Collar
has Been Fitted**

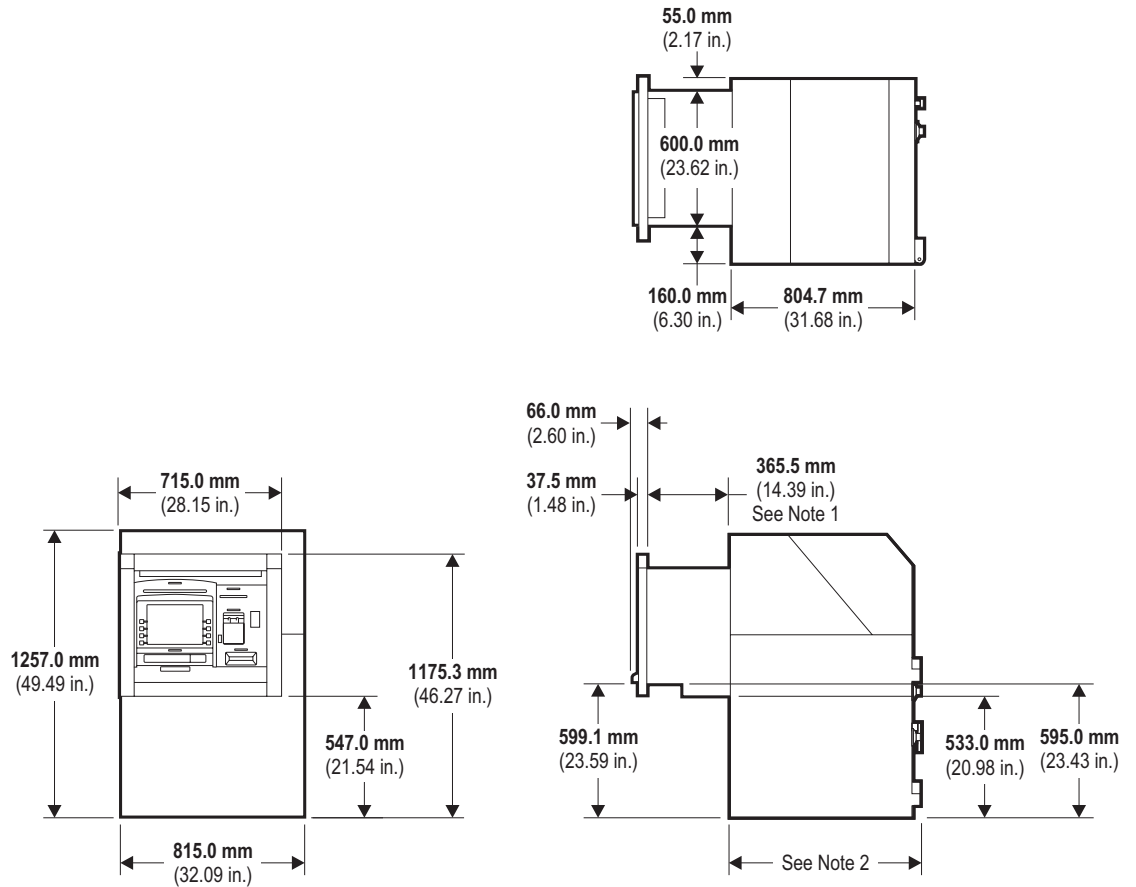
The dimensions in the illustration below show the ATM before a collar has been fitted.



Note : For UL (feature 001) security enclosures, this dimension is **835.0 mm (32.87 in.)**. For CEN Grade L security enclosures, this dimension is **868.0 mm (34.17 in.)**.

Standard Collar

The dimensions in the illustration below show a standard sleeve ATM with a standard collar fitted.

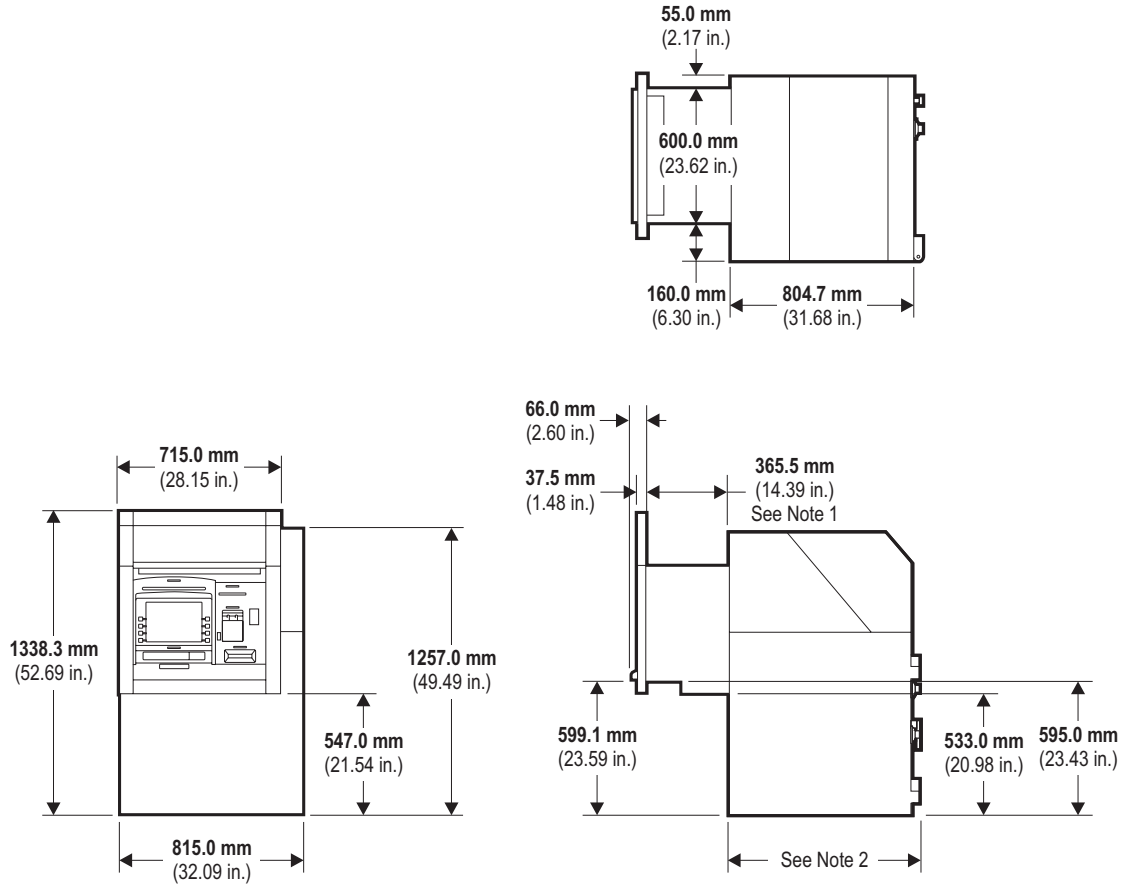


Note 1: For short sleeve terminals, this dimension is **253.0 mm (9.96 in.)**

Note 2: For UL security enclosures, this dimension is **835.0 mm (32.87 in.)**. For CEN security enclosures, this dimension is **868.0 mm (34.17 in.)**.

Standard Collar With Advert Light

The dimensions in the illustration below show a standard sleeve ATM with a standard advert light fitted.

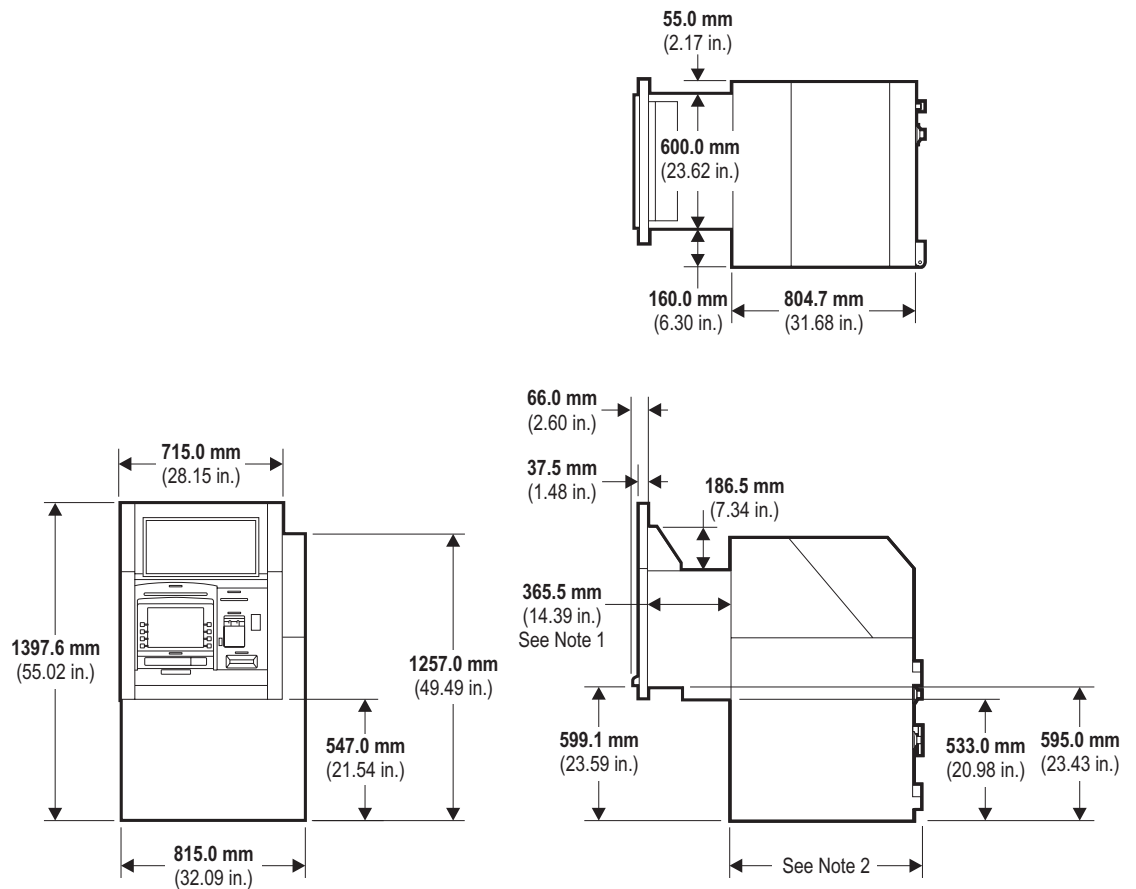


Note 1: For short sleeve terminals, this dimension is **253.0 mm (9.96 in.)**

Note 2: For UL security enclosures, this dimension is **835.0 mm (32.87 in.)**. For CEN security enclosures, this dimension is **868.0 mm (34.17 in.)**.

Lowered Height Collar

The dimensions in the illustration below show a standard sleeve ATM with a collar for lowered height installations fitted.



Note 1: For short sleeve terminals, this dimension is **253.0 mm (9.96 in.)**

Note 2: For UL security enclosures, this dimension is **835.0 mm (32.87 in.)**. For CEN security enclosures, this dimension is **868.0 mm (34.17 in.)**.

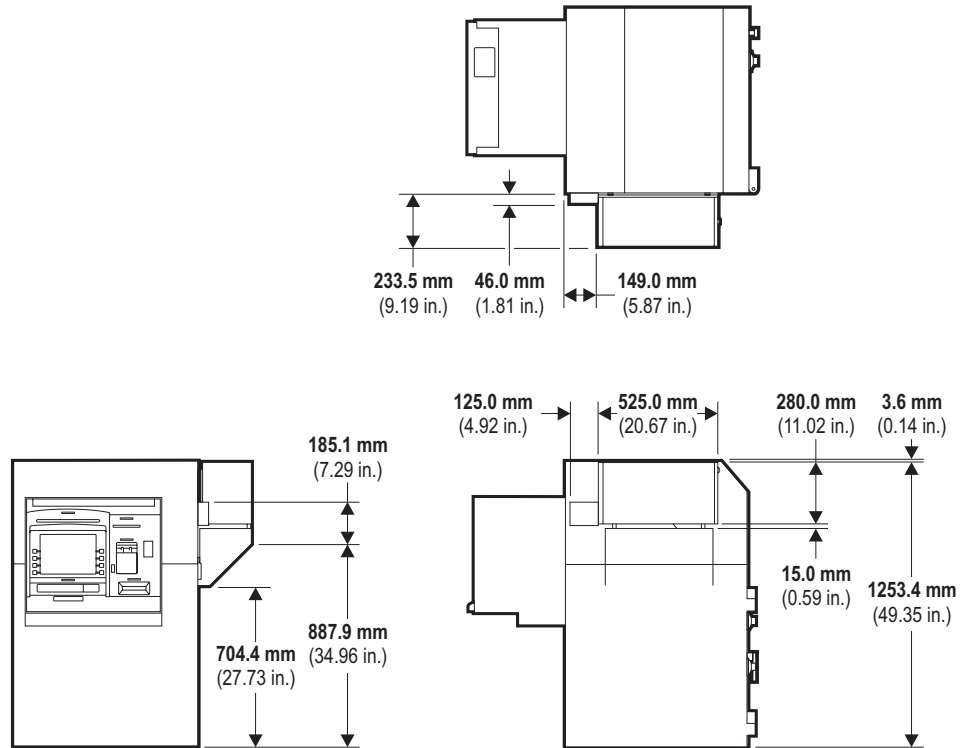
Note 3: For a definition of “Lowered Height” refer to page 1-40.

Coin Dispenser Fitted

Your ATM can be configured with one of two types of coin dispenser. The main difference is that Type 1 contains four dispense mechanisms, while Type 2 contains an eight-column cassette.

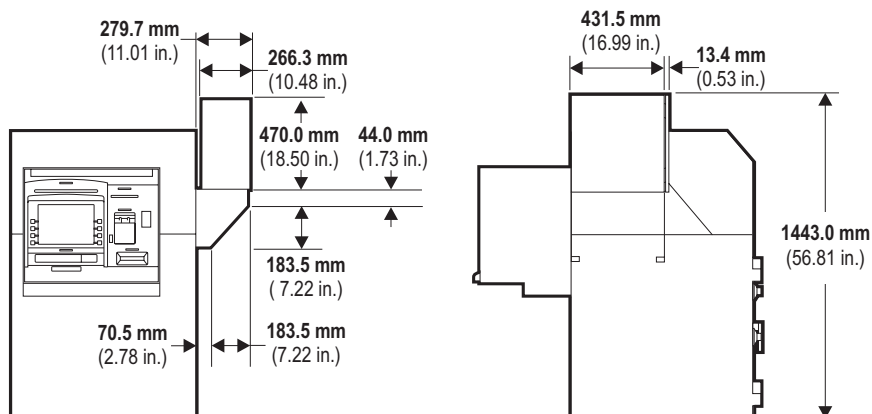
Type 1

The dimensions in the illustration below show the ATM with Type 1 coin dispenser fitted.



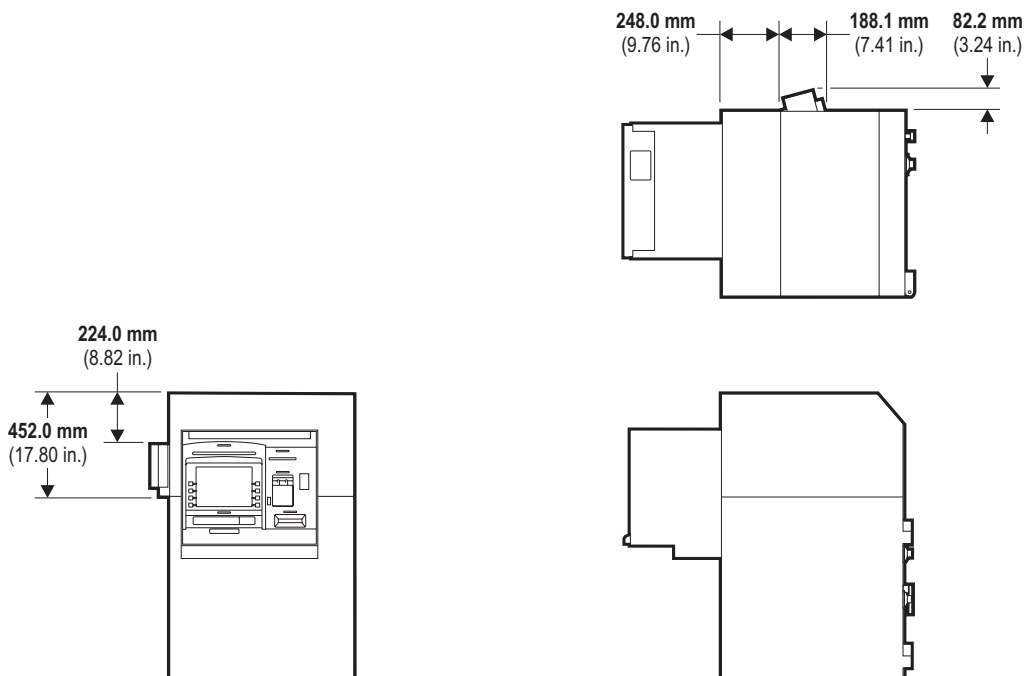
Type 2

The dimensions in the illustration below show the ATM with Type 2 coin dispenser fitted.



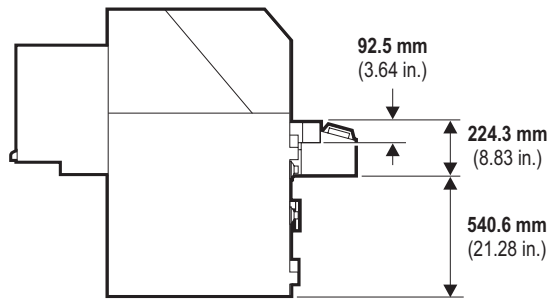
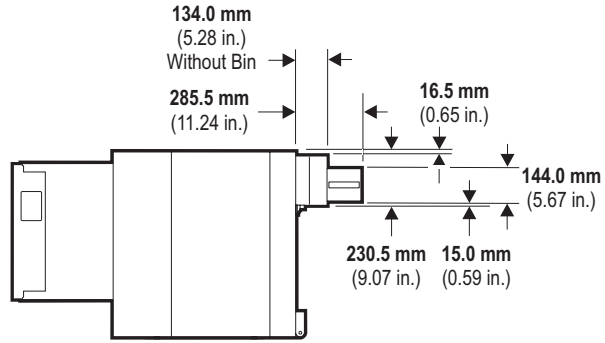
Severe Environment Fitted

The dimensions in the illustration below show the ATM with severe environment fitted.



Cheque Acceptor Fitted

The dimensions in the illustration below show the ATM with a cheque bin when a cheque acceptor has been fitted.



Access For All

The ATM has been designed to meet the height and reach requirements of the ATM user population of the world, from the smallest to the tallest, both able-bodied and disabled. For wheelchair users, the ATM offers optimised parallel approach, providing easy access, security and private space if installed according to the specifications detailed in this document.

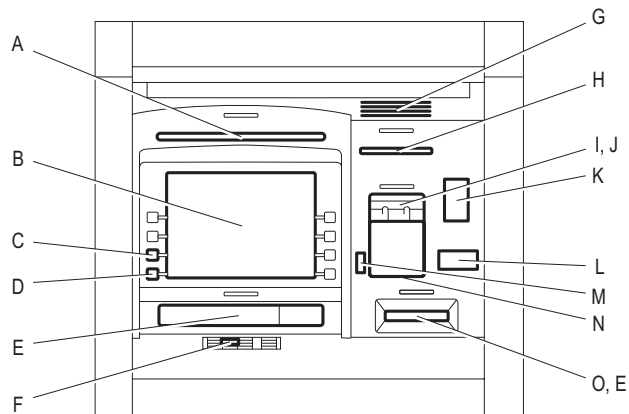
Note: For ADA Accessibility Guidelines (ADAGG) only, the ATM can be installed for forward approach.

Height and Depth to Main Facia Items

The following table gives the height (from the security enclosure base) and depth (from the frontmost point on the ATM) to the centre of the main facia items located on the 5886 facia. All the height dimensions are calculated from the base of the ATM.

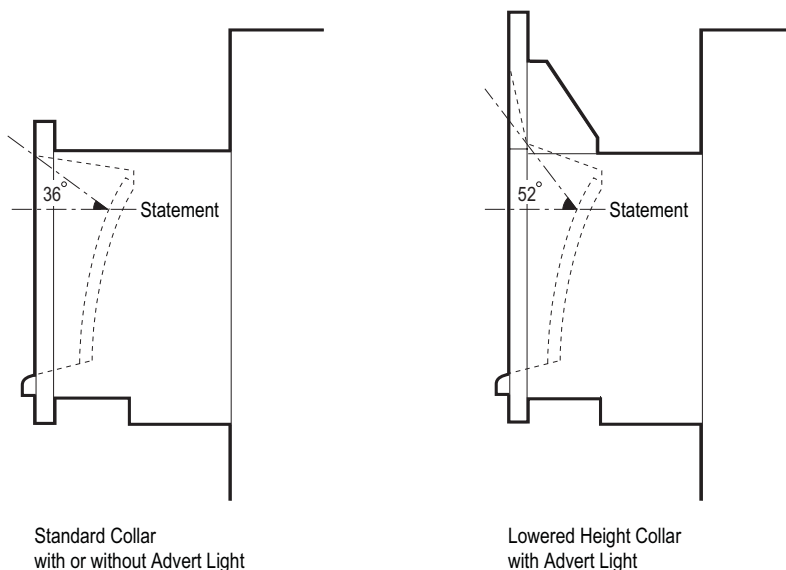
The height from **sidewalk level** to each facia item will vary depending on the difference between sidewalk level and the plinth height for each installation.

Item	Height (from Base of Terminal)	Depth (from front of Collar)
A Statement	992.7 mm (39.08 in.)	151.0 mm (5.94 in.)
B Display	846.7 mm (33.33 in.)	150.5 mm (5.93 in.)
C 2nd Functional Display Key	798.0 mm (31.42 in.)	120.0 mm (4.72 in.)
D 1st Functional Display Key	765.0 mm (30.12 in.)	115.0 mm (4.53 in.)
E Cash Exits 1 & 2	698.6 mm (27.50 in.)	116.0 mm (4.57 in.)
F No. 5 Key	656.0 mm (25.83 in.)	46.5 mm (1.83 in.)
G Speaker	1038.5 mm (40.89 in.)	178.0 mm (7.01 in.)
H Receipt	969.5 mm (38.17 in.)	157.0 mm (6.18 in.)
I Card Reader, Motorised	882.8 mm (34.76 in.)	138.0 mm (5.43 in.)
J Card Reader, Dip	882.0 mm (34.72 in.)	87.0 mm (3.43 in.)
K Camera Window	886.0 mm (34.88 in.)	130.0 mm (5.12 in.)
L Coin Exit	810.0 mm (31.89 in.)	69.3 mm (2.73 in.)
M Audio Jack Plug	783.4 mm (30.84 in.)	105.0 mm (4.13 in.)
N Barcode Reader	775.3 mm (30.52 in.)	76.6 mm (3.02 in.)
O Envelope/Cheque/Cash deposit	692.5 mm (27.26 in.)	116.0 mm (4.57 in.)



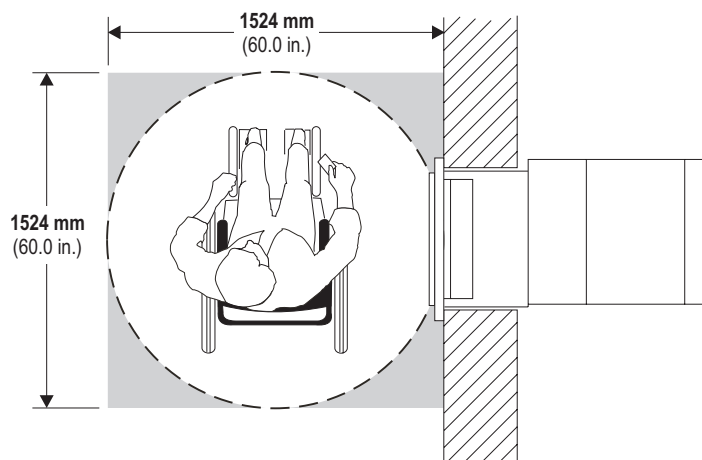
Topmost Viewable Facia Item

The following illustrations show the projected angle from the front of the standard collar and the lowered height advert light to the topmost viewable facia item.



Wheelchair Clearance

The following illustration shows the clearance required for wheelchair approach and its turning circle.



Installation and Service Clearances

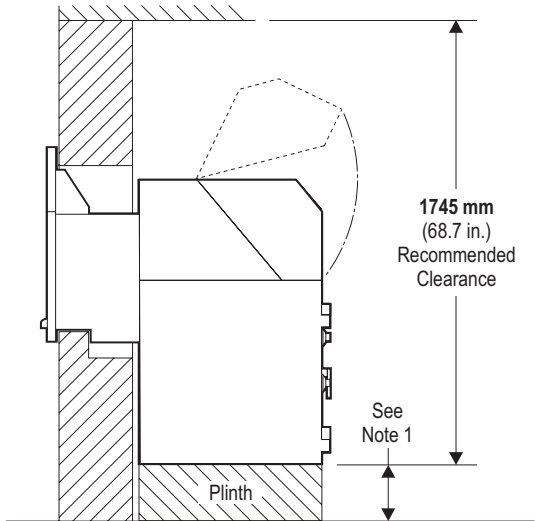
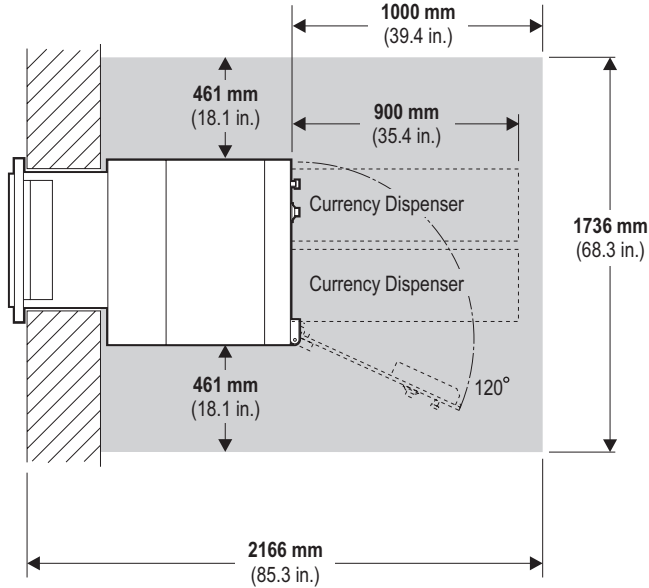
Recommended Clearances

The following illustrations show the **recommended** areas required for installing and servicing the ATM.

Important Notice to Users

If it is likely that the ATM might be fitted with other new modules as they become available, you should use the recommended clearances.

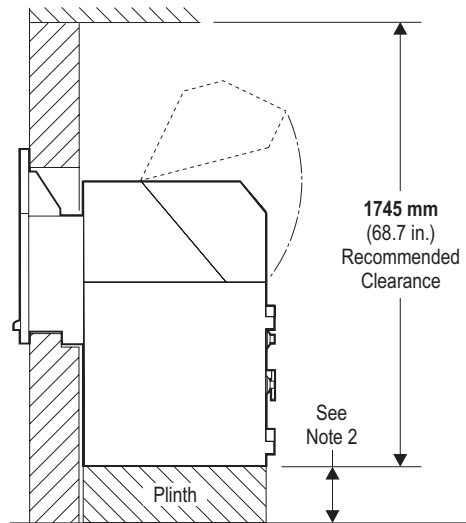
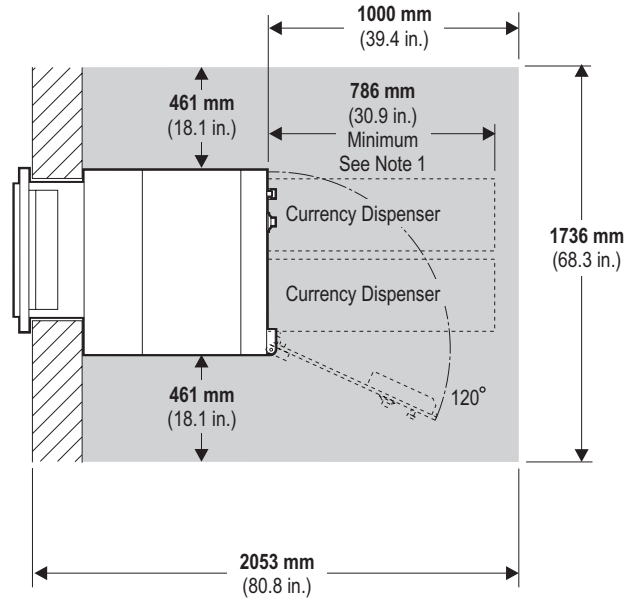
Standard Sleeve Recommended Clearance for all Security Enclosures



Note 1: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 2: If your ATM is configured with a cheque acceptor, it is recommended that the cheque acceptor bin is removed from the security enclosure door before opening the enclosure.

Short Sleeve Recommended Clearance for UL (feature 001) and CEN Grade L Security Enclosures



Note 1: The currency dispenser can be serviced without fully extending its slides, giving a dimension of **786 mm** (30.9 in.) as shown. This can be achieved by pulling the slides until the nose of the currency presenter is out of the security enclosure.

Note 2: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 3: If your ATM is configured with a cheque acceptor, it is recommended that the cheque acceptor bin is removed from the security enclosure door before opening the enclosure.

Minimum Clearances

The following illustrations show the **minimum** areas required for installing and servicing the ATM. Note that installing the ATM in the minimum servicing footprint may increase the servicing time for the unit.

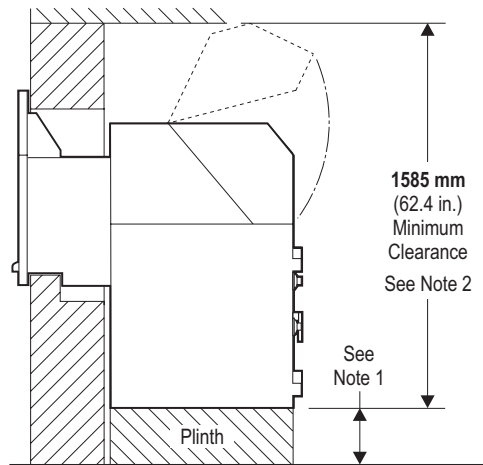
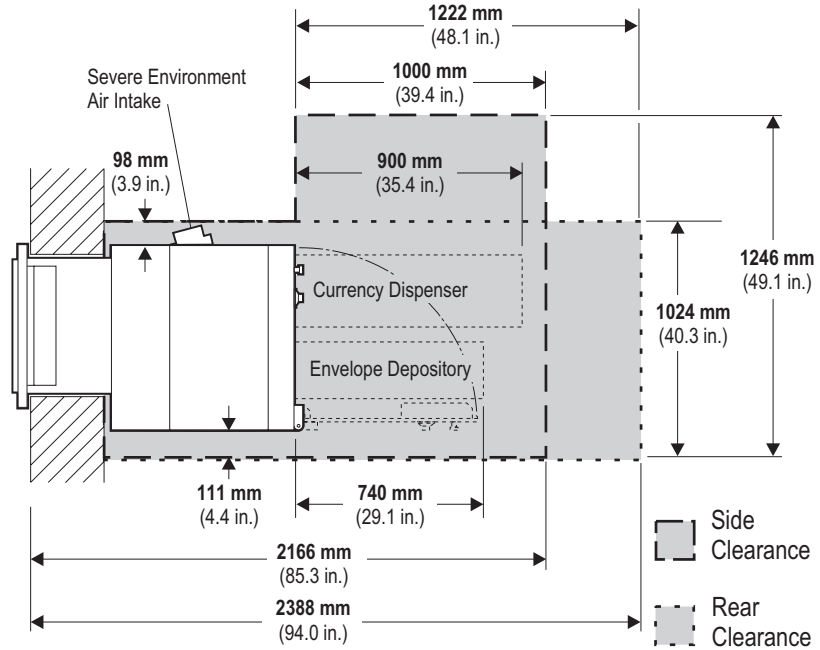
Important Notice to Users

UL and CEN Grade L Enclosures If you have a UL or a CEN Grade L enclosure, and the ATM is fitted with, or is likely to be upgraded with the cheque acceptor, cash acceptor, or dual dispenser, the ATM must be sited within at least the minimum clearance area, as shown on page 1-32.

CEN III and CEN LGAI Enclosures If you have a CEN Grade III or CEN LGAI enclosure, and the ATM is fitted with, or is likely to be upgraded with the cheque acceptor, cash acceptor, or dual dispenser, the ATM must be sited within the recommended clearance area, as shown on page 1-17.

Standard Sleeve Minimum Clearance for all Security Enclosures (Envelope Depository Module and/or Currency Dispenser)

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below.



Note 1: Refer to the next section “Hole in the Wall” for the height of the plinth.

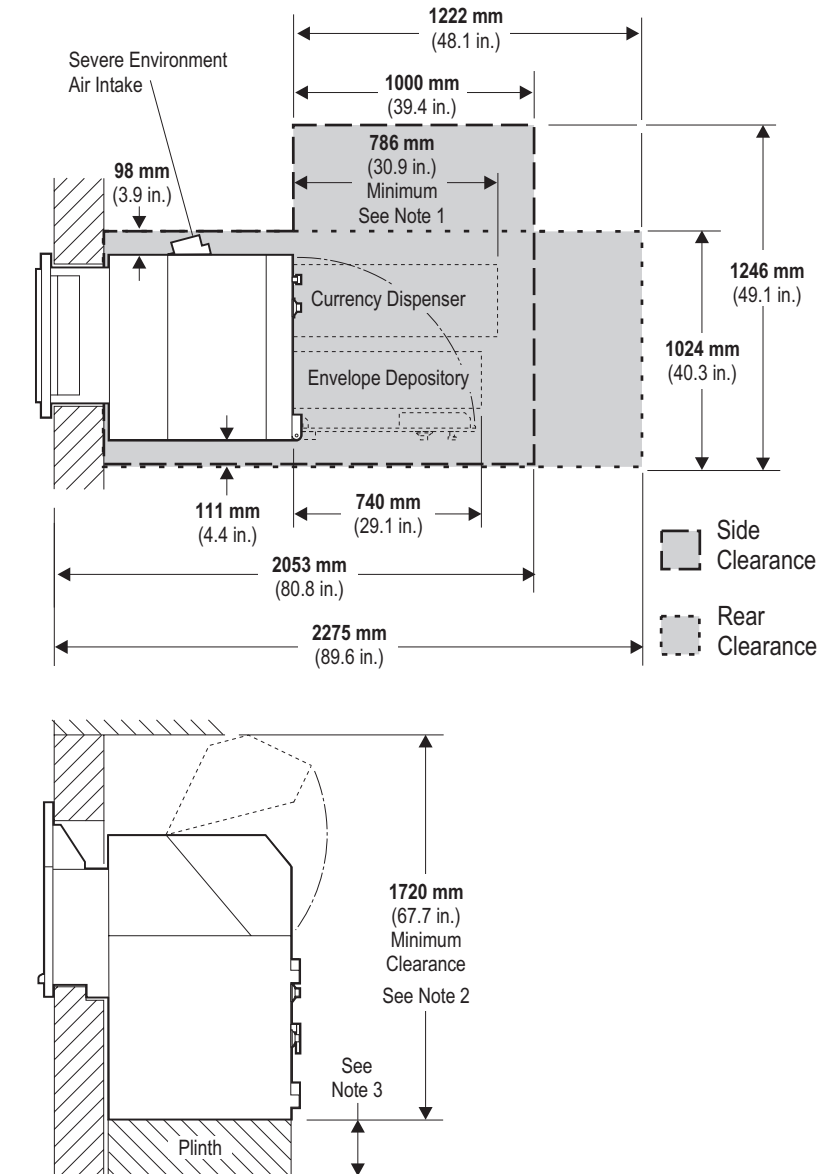
Note 2: If your ATM is installed within the minimum height clearance of **1585 mm (62.4 in.)** the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

Note 3: When the ATM is installed within the minimum service clearance, the 80 Column printer must be removed to service the keyboard and shutter areas.

Note 4: Your ATM may be fitted with the severe environment option, which is shown in the illustration (see ATM Dimensions section for more information). When severe environment is configured, the 80 Column printer must be removed to service the module from the rear.

Short Sleeve Minimum Clearance for UL (feature 001) and CEN Grade L Security Enclosures (Envelope Depository Module and/or Currency Dispenser)

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below.



Note 1: The currency dispenser can be serviced without fully extending its slides, giving a dimension of **786 mm** (30.9 in.) as shown. This can be achieved by pulling the slides until the nose of the currency presenter is out of the security enclosure.

Note 2: If your ATM is not configured with an 80 column printer, the minimum height clearance is **1585 mm** (62.4 in.). If installed at this height, the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

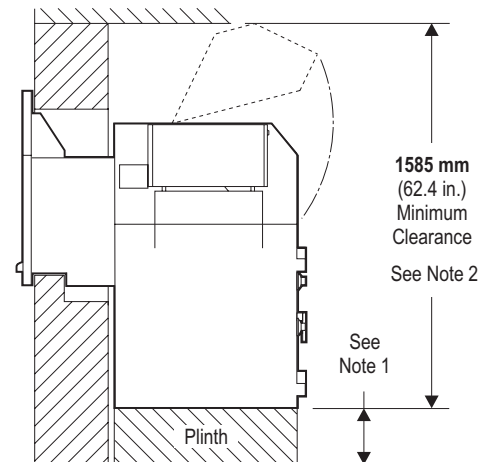
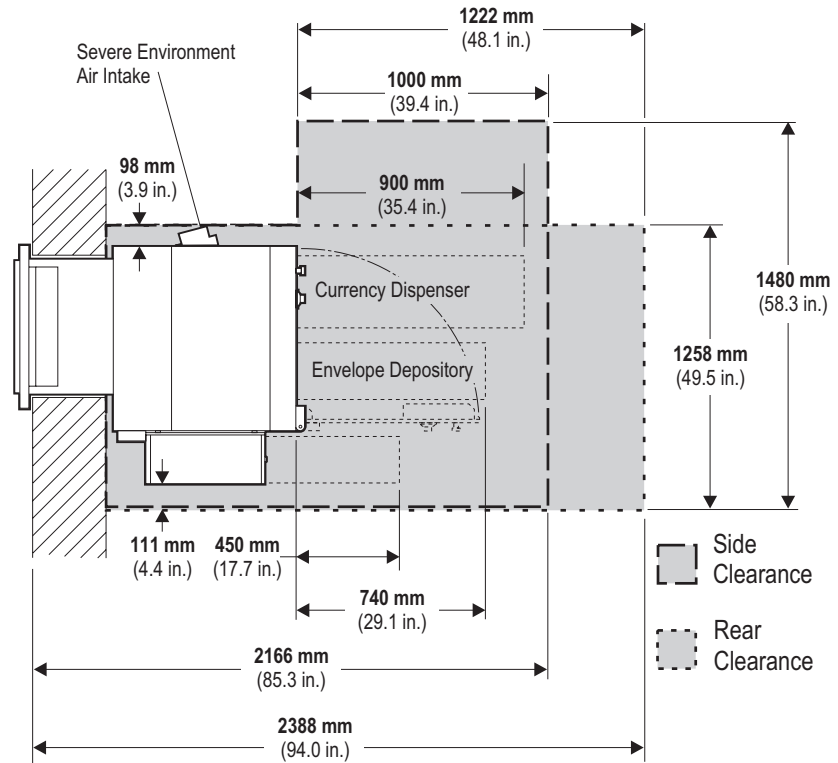
Note 3: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 4: When the ATM is installed within the minimum service clearance, the 80 Column printer must be removed to service the keyboard and shutter areas.

Note 5: Your ATM may be fitted with the severe environment option, which is shown in the illustration (see ATM Dimensions section for more information). When severe environment is configured, the 80 Column printer must be removed to service the module from the rear.

Standard Sleeve Minimum Clearance for all Security Enclosures (Type 1 Coin Dispenser)

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below.

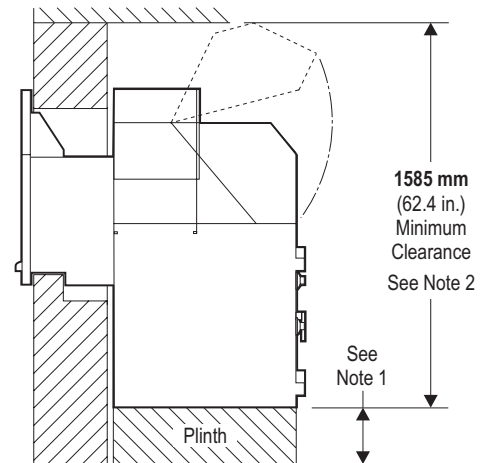
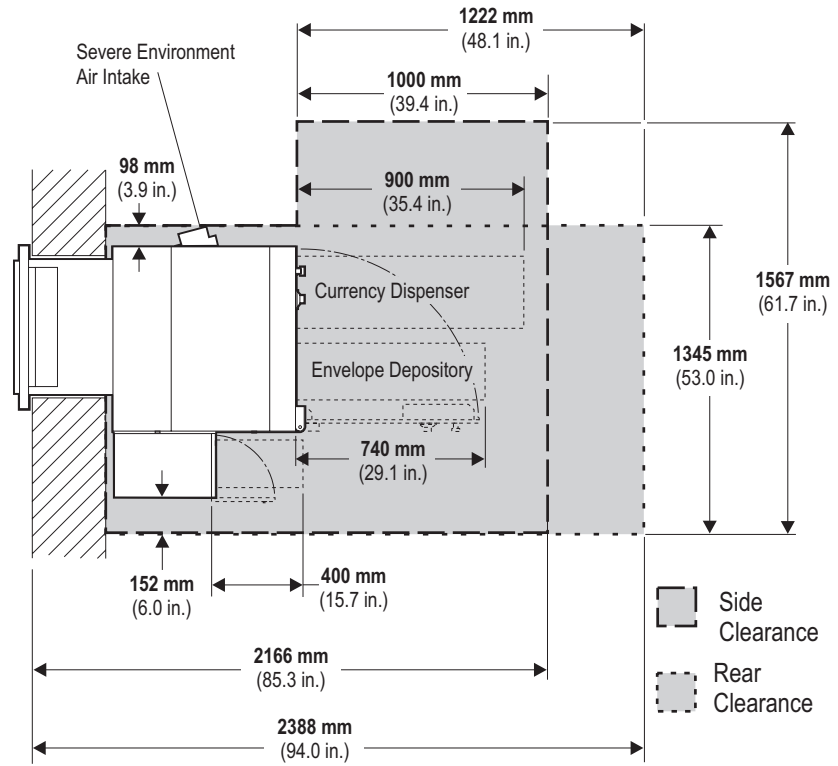


Note 1: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 2: If your ATM is installed within the minimum height clearance of **1585 mm (62.4 in.)** the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

Standard Sleeve Minimum Clearance for All Security Enclosures (Type 2 Coin Dispenser)

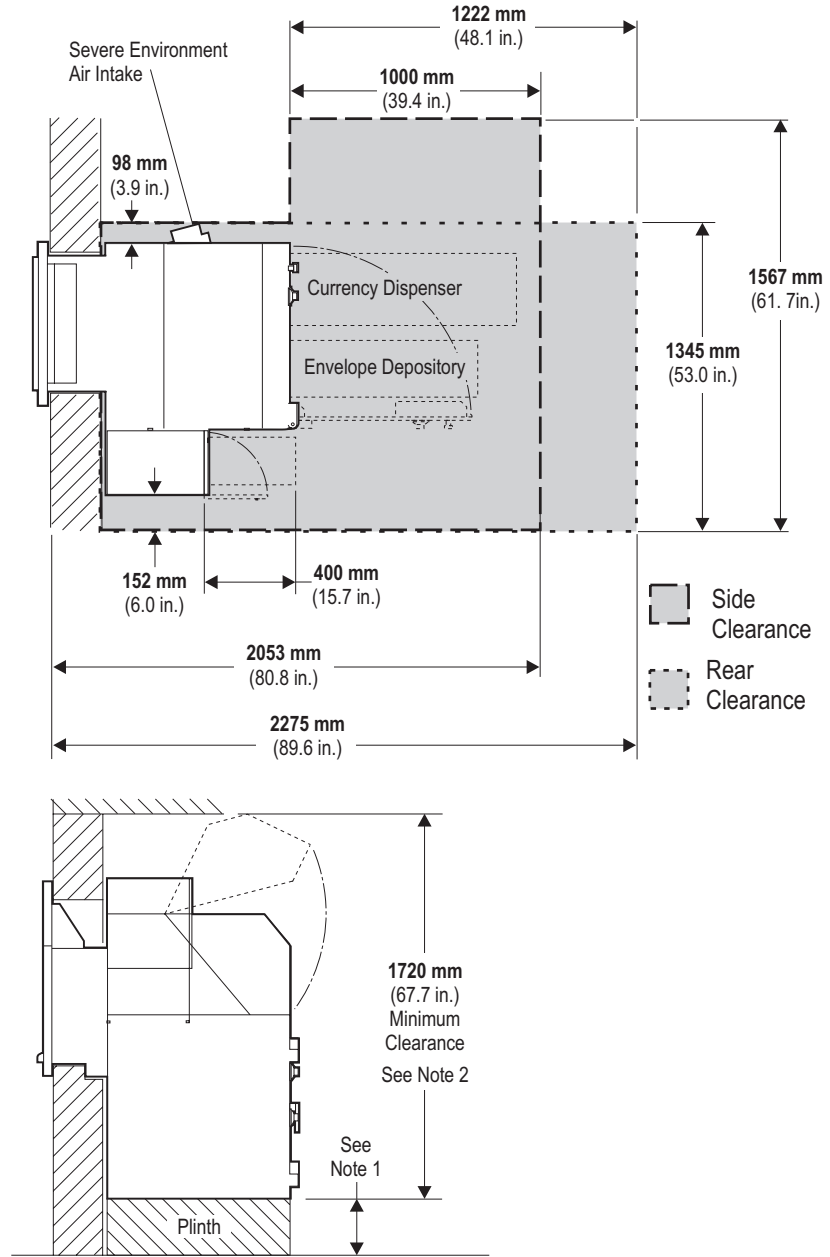
Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below.



Note 1: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 2: If your ATM is installed within the minimum height clearance of **1585 mm (62.4 in.)** the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

Short Sleeve Minimum Clearance for UL (feature 001) and CEN L Security Enclosures (Type 2 Coin Dispenser)



Note 1: The currency dispenser can be serviced without fully extending its slides, giving a dimension of **786 mm** (30.9 in.) as shown. This can be achieved by pulling the slides until the nose of the currency presenter is out of the security enclosure.

Note 2: If your ATM is not configured with an 80 column printer, the minimum height clearance is **1585 mm** (62.4 in.). If installed at this height, the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

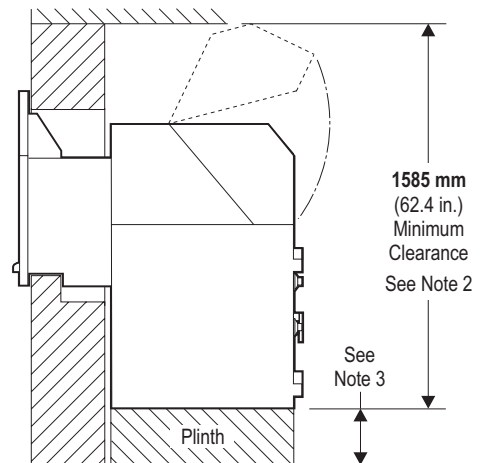
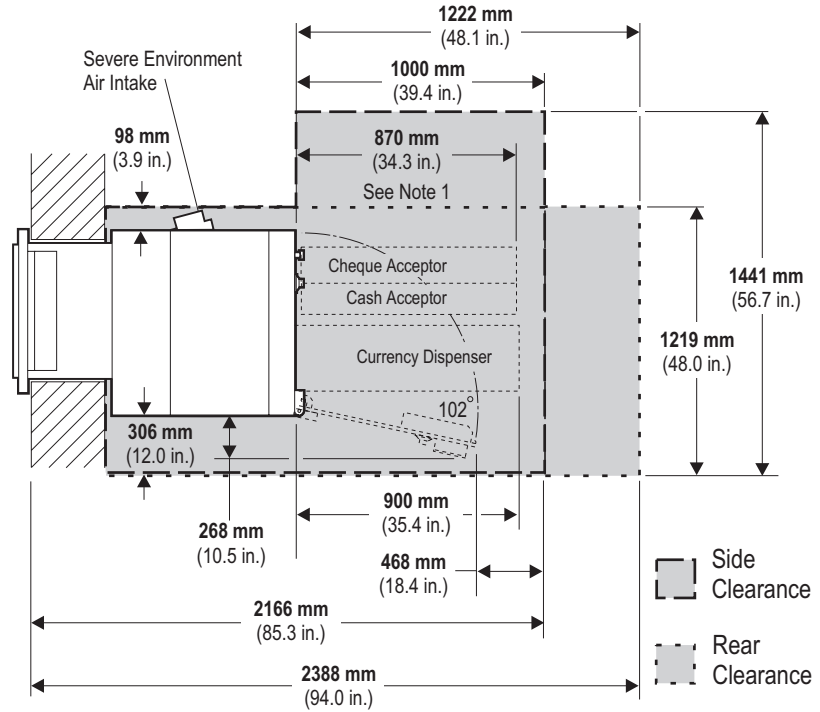
Note 3: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 4: When the ATM is installed within the minimum service clearance, the 80 Column printer must be removed to service the keyboard and shutter areas.

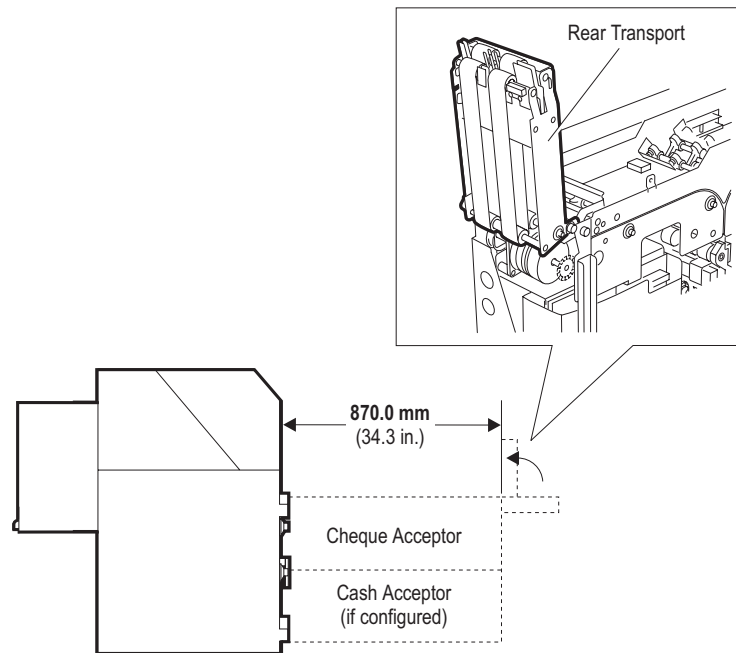
Note 5: Your ATM may be fitted with the severe environment option, which is shown in the illustration (see ATM Dimensions section for more information). When severe environment is configured, the 80 Column printer must be removed to service the module from the rear.

Standard Sleeve Minimum Clearance for UL and CEN Grade L Security Enclosures (Cheque Acceptor (Type 2) and/or Cash Acceptor (UD-686), or Dual Dispenser)

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below. However, if you have a cheque acceptor, you MUST use the side clearance dimensions.



Note 1: To allow a cheque acceptor to be serviced within the minimum service clearance area, the rear transport can be pivoted from its horizontal position to a vertical position as shown below.



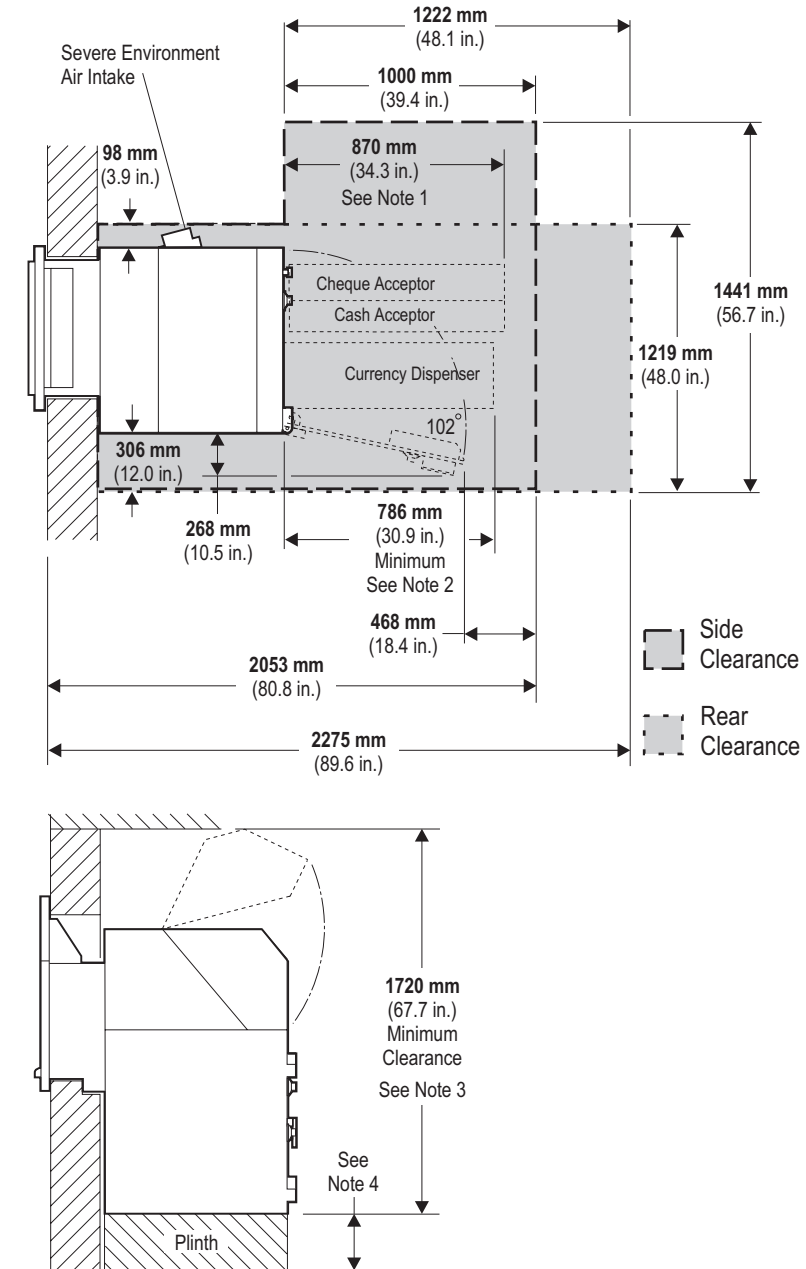
Note 2: If your ATM is installed within the minimum height clearance of **1585 mm (62.4 in.)** the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

Note 3: Refer to the next section “Hole in the Wall” for the height of the plinth.

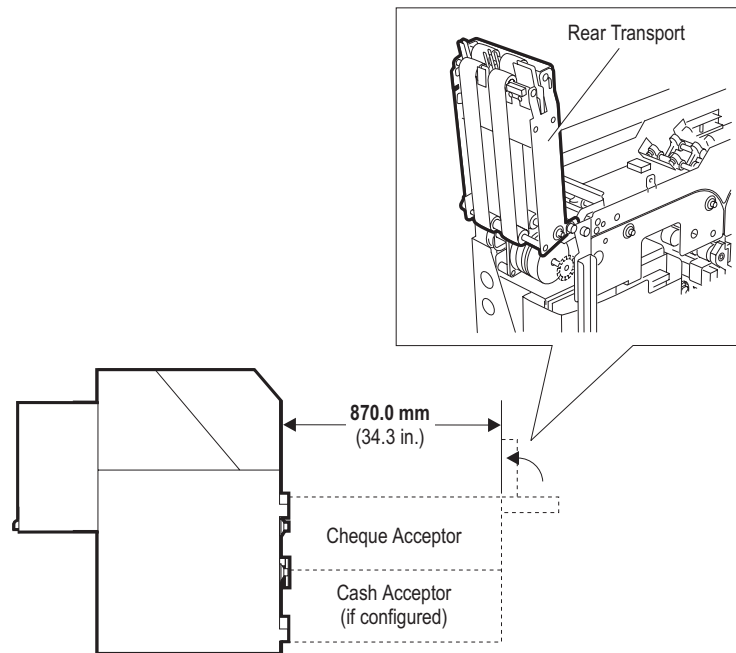
Note 4: If your ATM is configured with a cheque acceptor, it is recommended that the cheque acceptor bin is removed from the security enclosure door before opening the enclosure.

**Short Sleeve Minimum Clearance for UL (feature 001) CEN
 Grade L Security Enclosure (Cheque Acceptor (Type 2)
 and/or Cash Acceptor (UD-686), or Dual Dispenser)**

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below. However if you have a cheque acceptor, you MUST use the side clearance dimensions.



Note 1: To allow a cheque acceptor to be serviced within the minimum service clearance area, the rear transport can be pivoted from its horizontal position to a vertical position as shown below.



Note 2: The currency dispenser can be serviced without fully extending its slides, giving a dimension of **786 mm (30.9 in.)** as shown. This can be achieved by pulling the slides until the nose of the currency presenter is out of the security enclosure.

Note 3: If your ATM is not configured with an 80 column printer, the minimum height clearance is **1585 mm (62.4 in.)**. If installed at this height, the ceiling will restrict the full opening of the top-box. If you want to have a clearance above the top-box when fully open, refer to the recommended clearance.

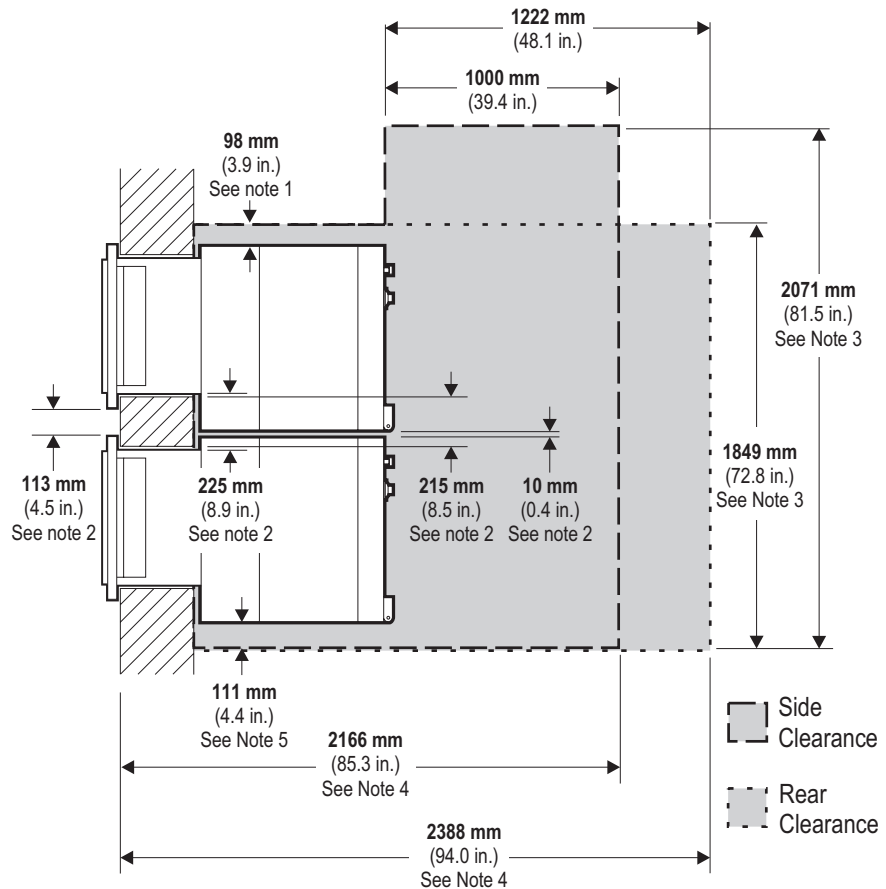
Note 4: Refer to the next section “Hole in the Wall” for the height of the plinth.

Note 5: If your ATM is configured with a cheque acceptor, it is recommended that the cheque acceptor bin is removed from the security enclosure door before opening the enclosure.

Minimum Distance Between Two Installations

The absolute minimum distance available between two ATMs, installed side by side is **10 mm (0.4 in.)** between the security enclosures, as shown below.

Minimum clearance can be achieved by offering either side clearance or rear clearance, as shown below.



Note 1: For ATMs fitted with a cheque acceptor, this dimension is **320 mm (12.6 in.)**.

Note 2: For ATMs fitted with severe environment option, these dimensions are increased by **90 mm (3.5 in.)**. For ATMs fitted with a coin dispenser, these dimensions are increased by:

- Type 1: **335 mm (13.2 in.)**
- Type 2: **422mm (16.6 in.)**

Note 3: For ATMs fitted with severe environment option, these dimensions are increased by **90 mm** (3.5 in.). For ATMs fitted with a coin dispenser, these dimensions are increased by:

- Type 1: **569 mm** (22.4 in.)
- Type 2: **702 mm** (27.6 in.).

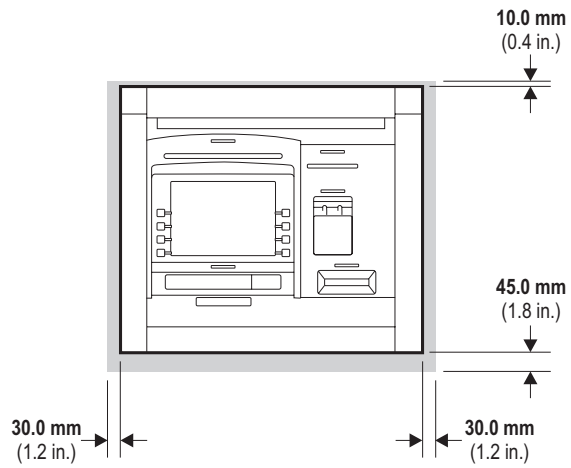
Note 4: For short sleeve terminals, these dimensions are decreased by **112 mm** (4.4 in.).

Note 5: For ATMs fitted with a cheque acceptor and/or cash acceptor or dual dispenser, this dimension is **306 mm** (12.0 in.). For ATMs fitted with a Type 2 coin dispenser, this dimension is **152 mm** (6.0 in.).

Exterior Wall

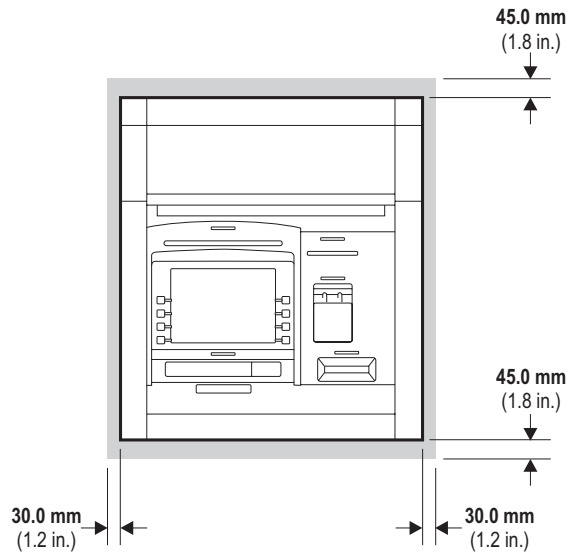
The following illustrations show the **minimum** clear wall area required around the collar (facia surround) for installation and servicing.

Standard Collar



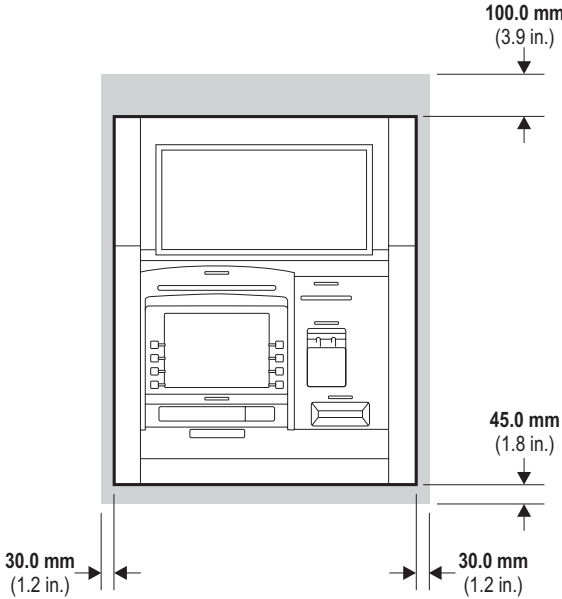
Note: A standard collar is configured when you order 5886 features 240 and 770.

Standard Collar with Advert Light



Note: A standard collar with advert light is configured when you order 5886 features 241 and 770.

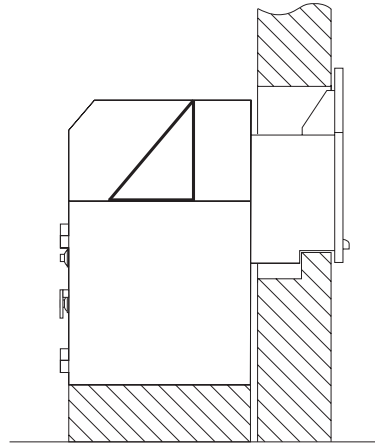
Lowered Height Collar



Note: A lowered height collar is configured when you order 5886 features 240 and 771.

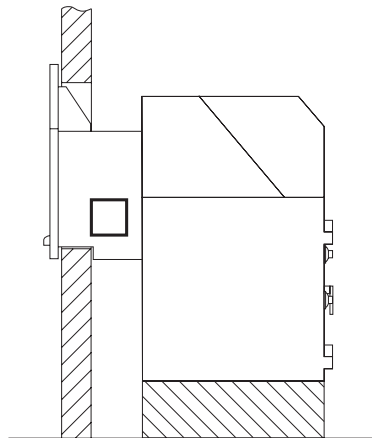
Service Access Panels

For installations where there is enough room to stand at the right-hand side of the sleeve (when viewing the ATM from the rear) there is an access panel on the top-box, as shown below. The panel can be removed to allow easier access to the keyboard and shutter areas.



Note: If the severe environment feature is configured, first remove the fan assembly.

There is another access panel on the left-hand side which is only accessible if the ATM is installed through a thin wall. This panel is located on the sleeve, as shown below.



Hole in the Wall

5886 can be installed through a new hole, or an existing NCR 5081/84/85, 5684/85 or Personas 84/85 hole in the wall with minimal rework required depending on the ATM being replaced, wall thickness and the local cardholder access legislation.

Customised collars or surrounds made by the owning organisation may need rework or replacement due to the following installation requirements.

The installation categories listed in this chapter, describe two different installation heights: “NCR Recommended” or “Lowered”, described below.

NCR Recommended Height for No Modifications

This height is recommended for replacement installations to assure the best display viewability for able-bodied people, and to avoid modifying the existing hole in the wall. This height does not comply with the regulations listed in the next section.

The NCR Recommended Height for 5886, is the same as the Recommended Height for 5081/84/85, 5684/85 or Personas 84/85. The height from sidewalk level to the base of the hole in the wall must be **1026 mm** (40.39 in.). This means 5886 is installed with the number five key on the keyboard at **1086 mm** (42.76 in.) from sidewalk level, (this keyboard height was **1100 mm** (43.31 in.) for Personas 84/5).

Lowered Heights

The following installation heights have been designed to meet the regulations listed below and therefore meet the requirements of both able-bodied and disabled people.

Centre for Accessible Environments in the UK (CAE)

To ensure maximum user accommodation relative to the UK Design Guidelines “Access to ATMs”, published by the Centre for Accessible Environments in the UK (CAE), the ATM must be installed with the middle of the number five key on the keyboard, no higher than **900 mm** (35.43 in.) from sidewalk level.

Americans With Disabilities Act Accessibility Guidelines (ADAAG)

To comply with the ADA Accessibility Guidelines (ADAAG) the ATM must be installed for either.

- Parallel approach, with the middle of the number five key on the keyboard no higher than **1023 mm** (40.28 in.) from sidewalk level. This ensures the height of the highest consumer interface element is below **1372 mm** (54.00 in.) from the sidewalk level.

or

- Forward approach, with the middle of the number five key on the keyboard no higher than **870mm** (34.25 in.) from sidewalk level. This ensures the height of the highest consumer interface element is below **1220 mm** (48.00 in.) from sidewalk level.

The wheelchair clearance on page 1-9 shows adequate floor space for forward or parallel approach. For minimum floor space for only forward or only parallel approach, refer to the ADA Accessibility Guidelines and implement the appropriate forward or parallel height requirements.

Canadian Standards Association (CSA)

To comply with the Canadian Standards Association (CSA), the ATM must be installed with the middle of the number five key on the keyboard, no higher than **850 mm** (33.46 in.) from sidewalk level. This ensures the height of the highest consumer interface element is below **1200 mm** (47.24 in.) from sidewalk level.

Installation Categories

The physical installation of 5886 is divided into five different categories.

- 1 An installation, at the NCR Recommended Height, where a 5886 replaces a Personas 84, 5X84 or a 5081 and where no modification has been made to the hole in the wall. The existing

plinth must be replaced with a new one.

This category also includes a new installation of 5886 at the NCR Recommended Height. See page 1-42.

- 2 An installation, at the NCR Recommended Height, where a 5886 replaces a Personas 85, or a 5X85 and where no modification has been made to the hole in the wall. The existing plinth must be replaced with a new one. See page 1-44.
- 3 A new installation of a 5886 at the Lowered Height. See page 1-47.
- 4 An installation where a 5886 replaces a Personas 84, 5X84 or a 5081. The hole in the wall must be modified and the plinth must be replaced with a new one to position the 5886 keyboard at the Lowered Height. See page 1-50.
- 5 An installation where a 5886 replaces a Personas 85, or a 5X85. The hole in the wall must be modified and the plinth must be replaced with a new one to position the 5886 keyboard at the Lowered Height. See page 1-53.

For cases 3, 4 and 5 a “Lowered Height” collar must be used. This is designed with a cut away at the top to allow taller customers a clear view of the facia. For cases 1 and 2, a standard collar or standard collar with advert must be used.

For cases 2 and 5 an infill panel is required to accommodate the larger hole used by the previous Personas 85 or 5X85 installation.

Cases 1 and 4 require an infill panel, if replacing a 5084.

For cases 1, 2, 4 and 5, the location of the cable access hole in the base of the ATM will change. Refer to the section “Requirements for the Floor” for more details.

Installing Through a Glass Wall

If you are installing your ATM through a glass wall you may require a suitable glass support (normally a steel collar) to sit between the ATM collar and the glass. The requirement for this support should be determined by the architect. If required, any such support should be sourced locally.

Replacing Personas 84, 5X84 or 5081 With No Modifications to Hole in the Wall (Recommended Height)

It is the responsibility of the owning institution to ensure that the heights from the sidewalk level to the fascia items comply with any local regulations. Where no such regulations exist, 5886 can be installed at the NCR Recommended Height for Personas 84, 5X84 and 5081 as shown in the following illustrations.

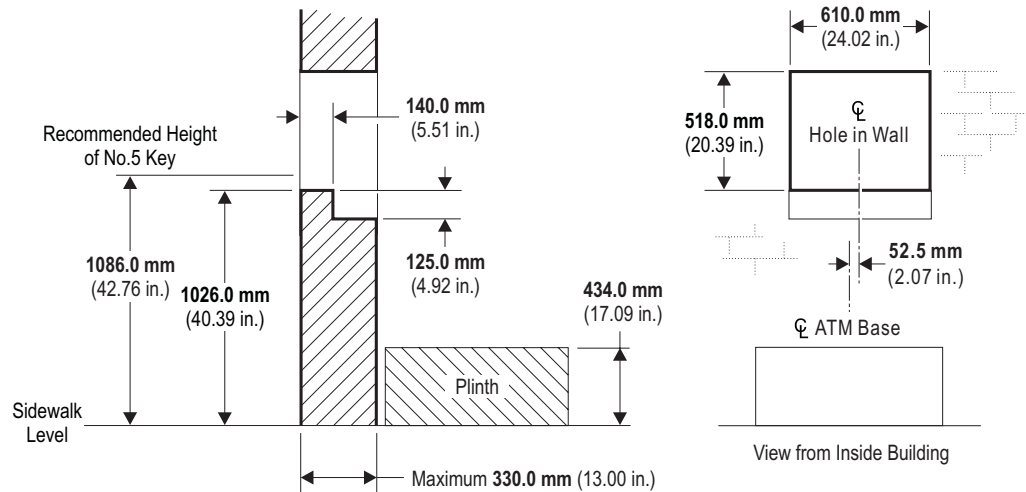
Note 1: A standard or advert collar is required at installation.

Note 2: The existing plinth must be replaced with a new one.

Note 3: If replacing a 5084 ATM, an infill panel is required. For information on the infill panel, refer to the publication “Personas M Series, 5886 Installation Manual”, (B006-6193).

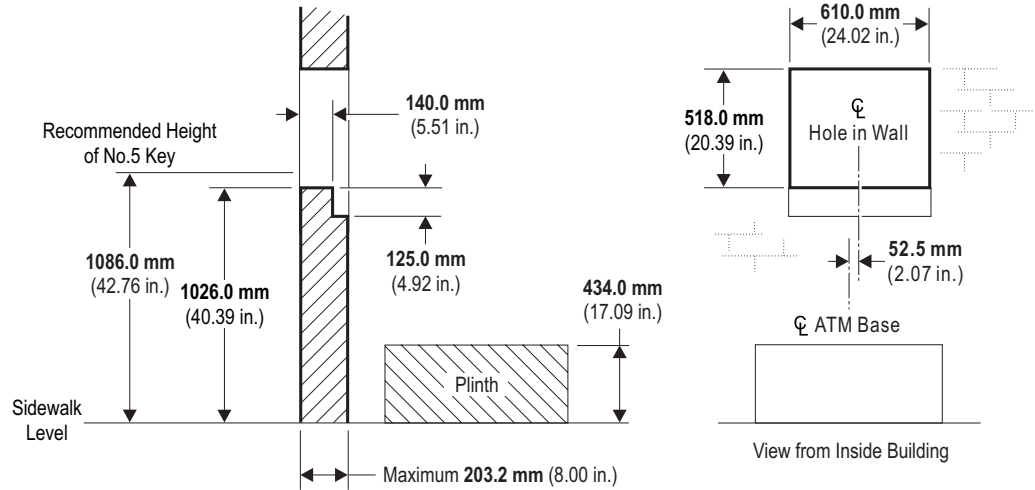
Dimensions for an ATM With Standard Sleeve

The standard sleeve 5886 can be installed through a wall that is up to **330 mm (13 in.)** thick.



Dimensions for an ATM With Short Sleeve

The short sleeve 5886 can be installed through a wall that is up to **203 mm (8.0 in.)** thick.



Plinth Requirements

Refer to page 1-58 for plinth requirements.

Replacing Personas 85 or 5X85 With No Modifications to Hole in Wall (Recommended Height)

It is the responsibility of the owning institution to ensure that the heights from the sidewalk level to the facia items comply with any local regulations. Where no such regulations exist, 5886 can be installed at the NCR Recommended Height for Personas 85 or 5X85 as shown in the following illustrations.

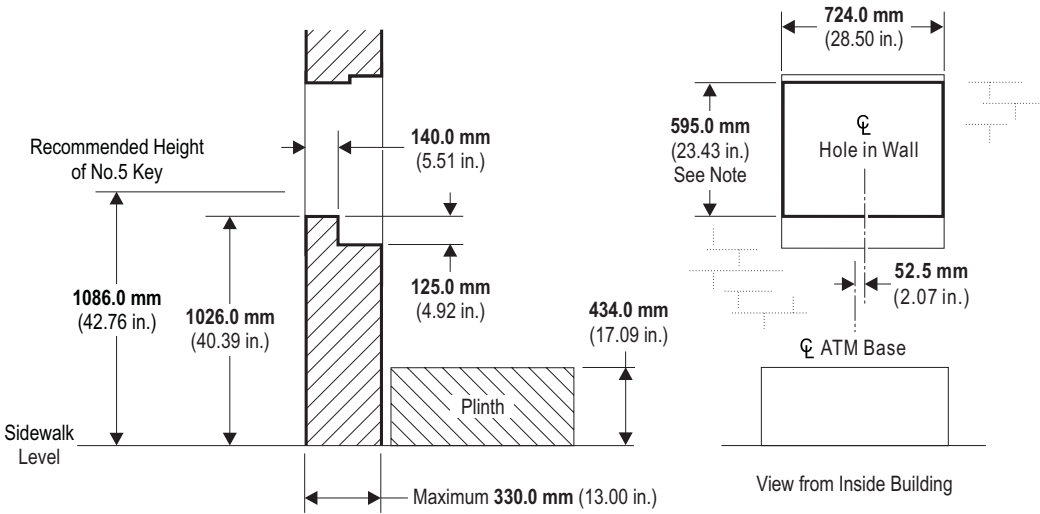
Note 1: A standard or advert collar is required at installation, as well as a standard infill panel. For information on the infill panel, refer to the publication “Personas M Series, 5886 Installation Manual”, (B006-6193).

Note 2: The existing plinth must be replaced with a new one, as the location of the bolt holes and the cable access hole are different for 5886. For more information, refer to “Personas85 ATM Site Preparation Manual”, (B006-0000-0027).

Replacing Personas 85 or 5X85 With No Modifications to Hole in Wall (Recommended Height)

Dimensions for an ATM With Standard Sleeve

The standard sleeve 5886 can be installed through a wall that is up to **330 mm (13.0 in.)** thick. The following illustration shows the dimensions before the infill panel has been fitted.

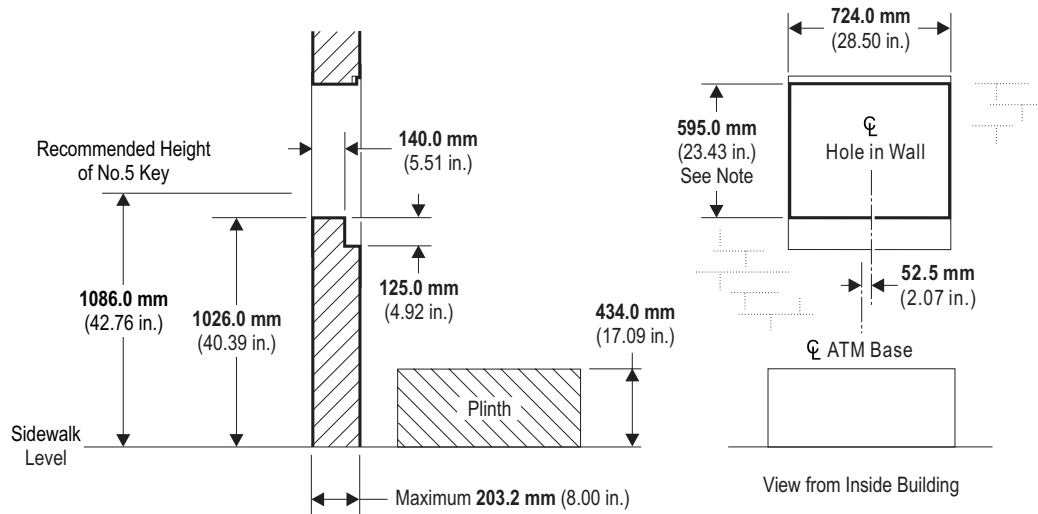


Note: When replacing a 5085 or 5685 ATM, the dimension 595 mm (23.43 in.) will be 624 mm (24.57 in.).

Replacing Personas 85 or 5X85 With No Modifications to Hole in Wall (Recommended Height)

Dimensions for an ATM With Short Sleeve

The short sleeve 5886 can be installed through a wall that is up to **203 mm (8.0 in.)** thick. The following illustration shows the dimensions before the infill panel has been fitted.



Note: When replacing a 5085 or 5685 ATM, the dimension **595 mm (23.43 in.)** will be **624 mm (24.57 in.)**.

Plinth Requirements

Refer to page 1-58 for plinth requirements.

Installing Through a New Hole at Lowered Height

It is the responsibility of the owning institution to ensure that the heights from the sidewalk level to the fascia items comply with any local regulations.

When viewing the two illustrations in this section, refer to the heights listed in the table below. For more information on installation heights and regulations, refer to the earlier section “Lowered Heights”.

	Installation Height			
	CAE parallel approach	ADAAG parallel approach	ADAAG forward approach	CSA parallel approach
A	900 mm (35.43 in.)	1023 mm (40.28 in.)	870 mm (34.25 in.)	850 mm (33.46 in.)
B	826 mm (35.52 in.)	949 mm (37.36 in.)	796 mm (31.34 in.)	776 mm (30.55 in.)
C (See Note 2)	234 mm (9.21 in.)	357 mm (14.06 in.)	204 mm (8.03 in.)	184 mm (7.24 in.)

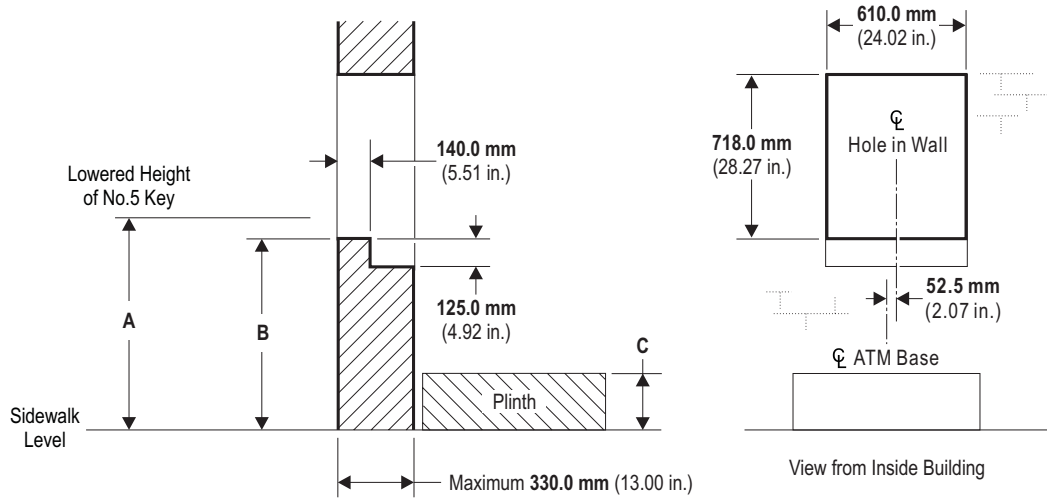
Note 1: A “Lowered Height” collar is required at installation.

Note 2: The height of the plinth depends upon the difference in height between the sidewalk and the interior floor. If there is no difference, as the illustrations show, the plinth must have the height that is specified in the table.

Physical Requirements
Installing Through a New Hole at Lowered Height

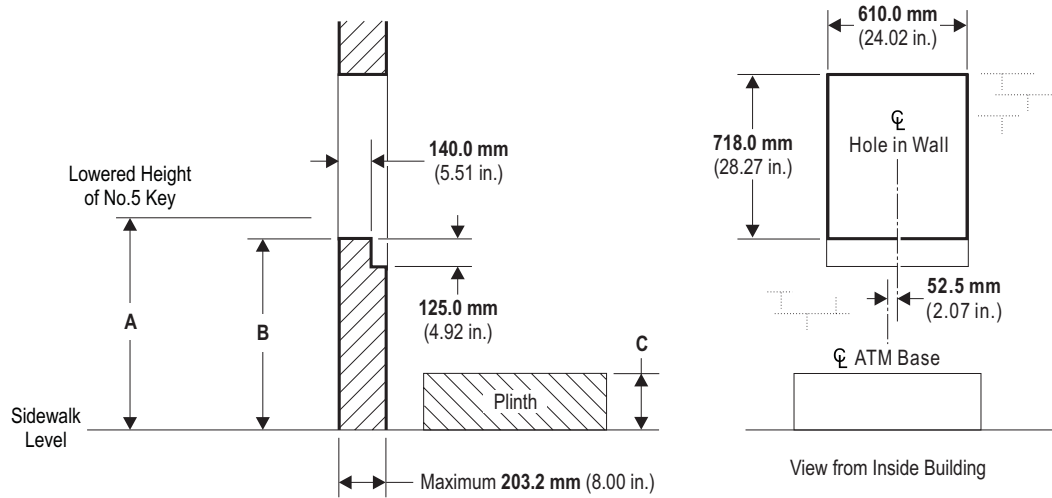
**Dimensions for an ATM
With Standard Sleeve**

The standard sleeve 5886 can be installed through a wall that is up to **330 mm (13.0 in.)** thick.



Dimensions for an ATM With Short Sleeve

The short sleeve 5886 can be installed through a wall that is up to **203 mm (8.0 in.)** thick.



Plinth Requirements

Refer to page 1-58 for plinth requirements.

Replacing Personas 84, 5X84 or 5081 at the Lowered Height

It is the responsibility of the owning institution to ensure that the heights from the sidewalk level to the fascia items comply with any local regulations.

When viewing the two illustrations in this section, refer to the heights listed in the table below. For more information on installation heights and regulations, refer to the earlier section “Lowered Heights”.

	Installation Height			
	CAE parallel approach	ADAAG parallel approach	ADAAG forward approach	CSA parallel approach
A	900 mm (35.43 in.)	1023 mm (40.28 in.)	870 mm (34.25 in.)	850 mm (33.46 in.)
B	826 mm (35.52 in.)	949 mm (37.36 in.)	796 mm (31.34 in.)	776 mm (30.55 in.)
C (See Note 3)	234 mm (9.21 in.)	357 mm (14.06 in.)	204 mm (8.03 in.)	184 mm (7.24 in.)

Note 1: A “Lowered Height” collar is required at installation.

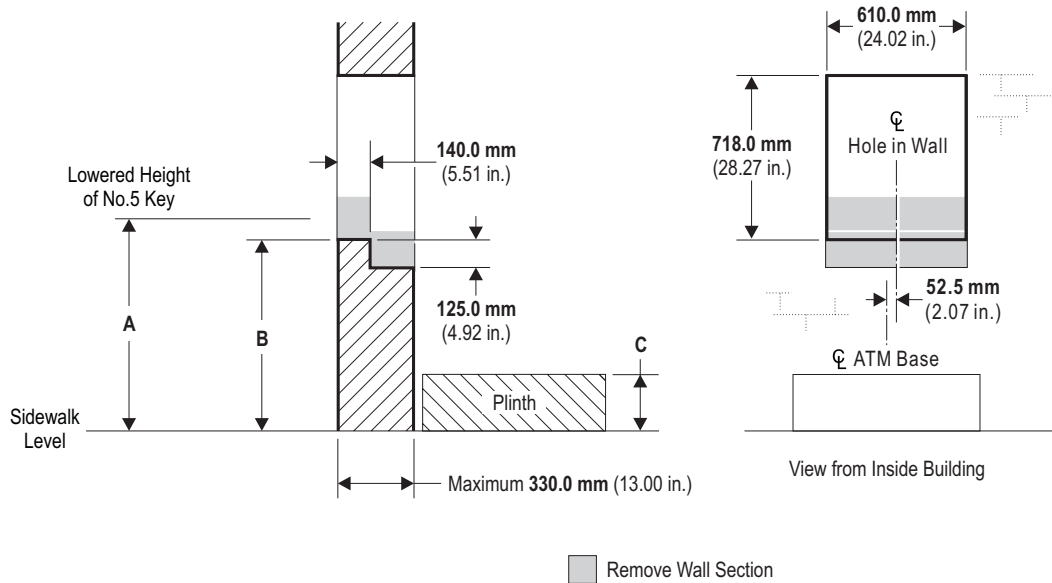
Note 2: The existing plinth must be replaced with a new one.

Note 3: The height of the plinth depends upon the difference in height between the sidewalk and the interior floor. If there is no difference, as the illustrations show, the plinth must have the height that is specified in the table.

Note 4: If replacing a 5084 ATM, an infill panel is required. For information on the infill panel, refer to the publication “Personas M Series, 5886 Installation Manual”, (B006-6193).

Dimensions for an ATM With Standard Sleeve

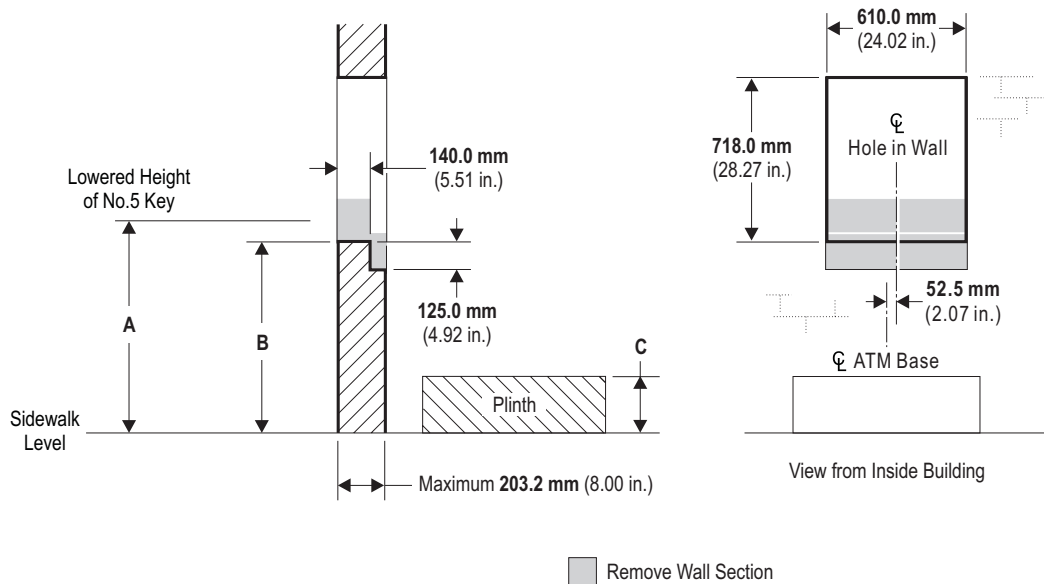
The standard sleeve 5886 can be installed through a wall that is up to **330 mm (13.0 in.)** thick. The following illustration shows the modifications required for the hole in the wall.



Note: The top of the hole should not be modified. The bottom of the hole should be lowered as shown.

Dimensions for an ATM With Short Sleeve

The short sleeve 5886 can be installed through a wall that is up to **203 mm (8.0 in.)** thick. The following illustration shows the modifications required for the hole in the wall.



Note: The top of the hole should not be modified. The bottom of the hole should be lowered as shown.

Plinth Requirements

Refer to page 1-58 for plinth requirements.

Replacing Personas 85 or 5X85 at the Lowered Height

It is the responsibility of the owning institution to ensure that the heights from the sidewalk level to the fascia items comply with any local regulations.

When viewing the two illustrations in this section, refer to the heights listed in the table below. For more information on installation heights and regulations, refer to the earlier section “Lowered Heights”.

	Installation Height			
	CAE parallel approach	ADAAG parallel approach	ADAAG forward approach	CSA parallel approach
A	900 mm (35.43 in.)	1023 mm (40.28 in.)	870 mm (34.25 in.)	850 mm (33.46 in.)
B	826 mm (35.52 in.)	949 mm (37.36 in.)	796 mm (31.34 in.)	776 mm (30.55 in.)
C (See Note 3)	234 mm (9.21 in.)	357 mm (14.06 in.)	204 mm (8.03 in.)	184 mm (7.24 in.)

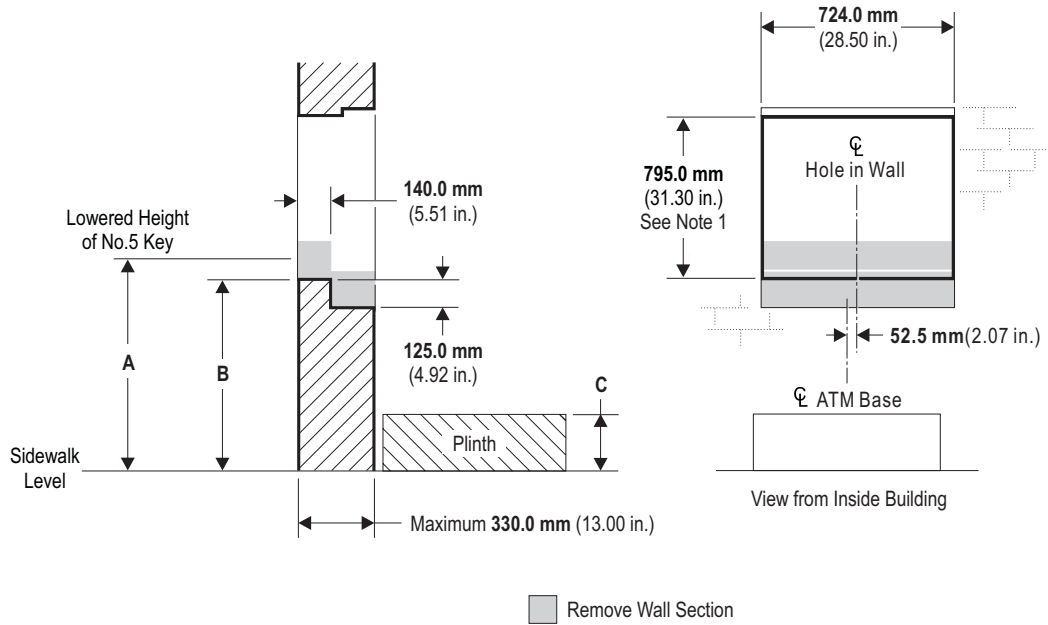
Note 1: A “Lowered Height” collar and a “Lowered Height” infill panel are required at installation. For information on the infill panel, refer to the publication “5886 Installation Manual”, (B006-6193).

Note 2: The existing plinth must be replaced with a new one.

Note 3: The height of the plinth depends upon the difference in height between the sidewalk and the interior floor. If there is no difference, as the illustrations show, the plinth must have the height that is specified in the table.

Dimensions for an ATM With Standard Sleeve

The standard sleeve 5886 can be installed through a wall that is up to **330 mm (13.0 in.)** thick. The following illustration shows the modifications required for the hole in the wall and before the infill panel has been fitted.

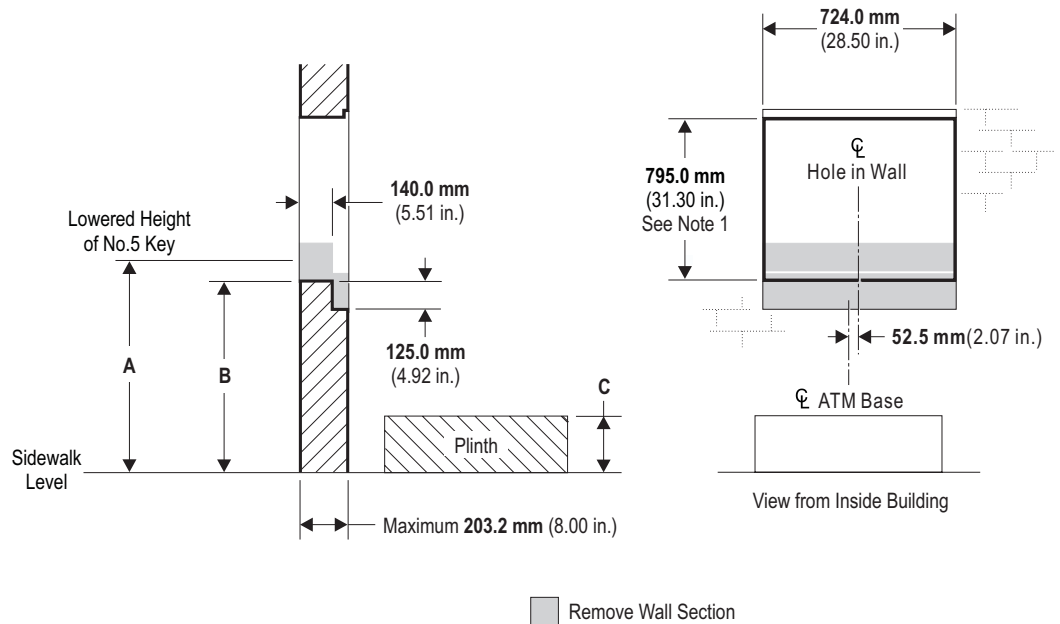


Note 1: When replacing a 5085 or 5685 ATM, the dimension **795 mm (31.30 in.)** will be **824 mm (32.44 in.)**.

Note 2: The top of the hole should not be modified. The bottom of the hole should be lowered as shown.

Dimensions for an ATM With Short Sleeve

The short sleeve 5886 can be installed through a wall that is up to **203 mm (8.0 in.)** thick. The following illustration shows the modifications required for the hole in the wall and before the infill panel has been fitted.



Note 1: When replacing a 5085 or 5685 ATM, the dimension **795 mm (31.30 in.)** will be **824 mm (32.44 in.)**.

Note 2: The top of the hole should not be modified. The bottom of the hole should be lowered as shown.

Plinth Requirements

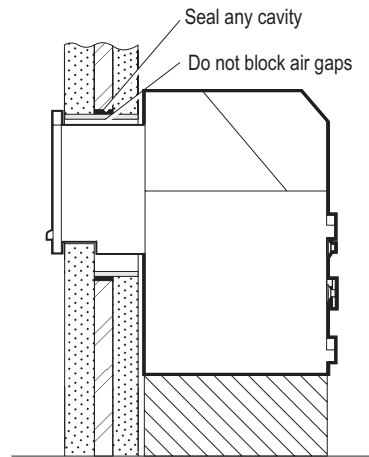
Refer to page 1-58 for plinth requirements.

Sealing the Hole in the Wall Against Cold and Water

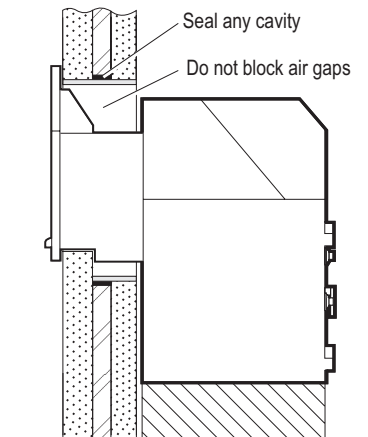
To ensure that the temperature around the ATM is maintained during cold weather, it is important that the wall opening is prepared correctly. Any cavity in the wall should not extend into the wall opening, but sealed to provide a flush surface. The gap between the ATM sleeve and the wall opening should be left clear to allow air at room temperature to circulate.

To enable a good weather seal to be made between the wall and the ATM fascia, a **25 mm** (1 in.) wide smooth surface is required around the periphery of the wall opening.

NCR Recommended Height Installation



Lowered Height Installation



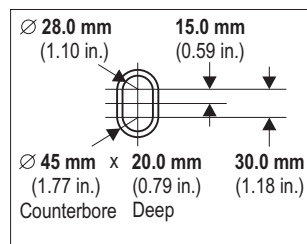
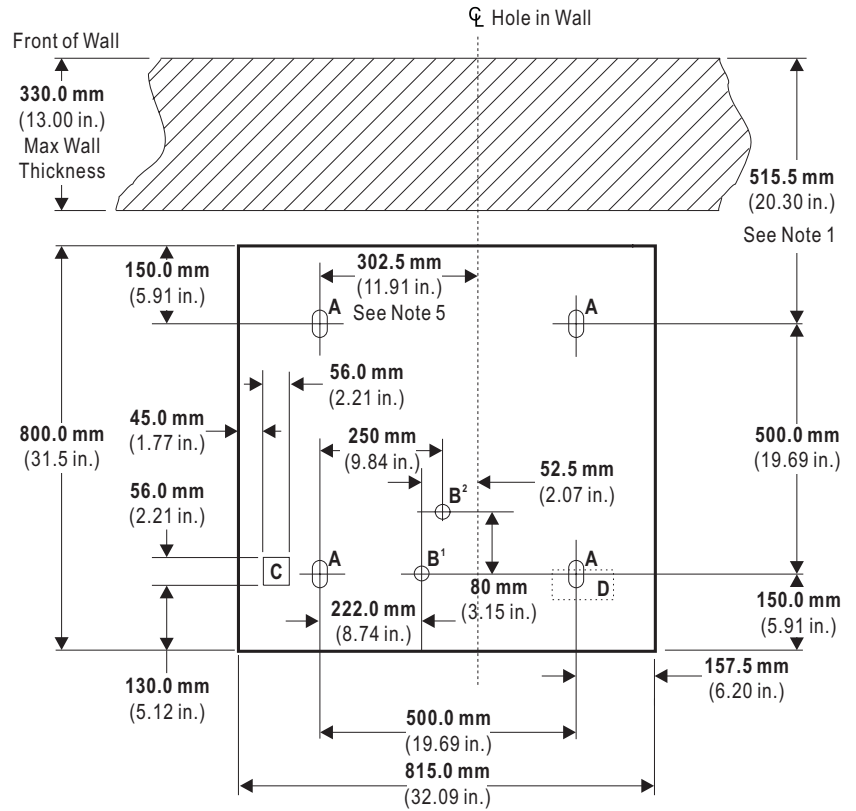
Requirements for the Floor

Support Plinth

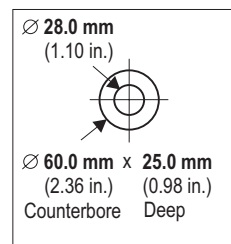
The following illustrations show a plan of the base of the ATM (viewed from above) and its relationship with the exterior wall. If a plinth is used it must be no smaller than the base of the ATM and it must be constructed of a material, and in such a way, that it is capable of supporting the weight of the ATM (see page 1-70).

The definition of a plinth is a platform on to which the ATM is bolted. This plinth enables the ATM to be installed at the required height through the wall.

Standard Sleeve Installation for CEN Grade L, CEN Grade III, and CEN LGAI Security Enclosures



Detail of hole A



Detail of hole B¹/B²

Note 1: When an infill panel is required, this dimension is **503.5 mm (19.82 in.)**. For information on the infill panel, refer to “Appendix C” of this publication. For information on installing the infill panel, refer to the publication “5886 Installation Manual”, (B006-6193).

Note 2: The boundary, marked with a ‘C’, shows the cable access hole for all cables.

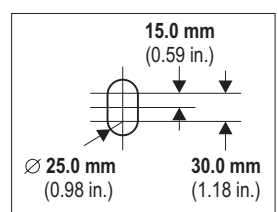
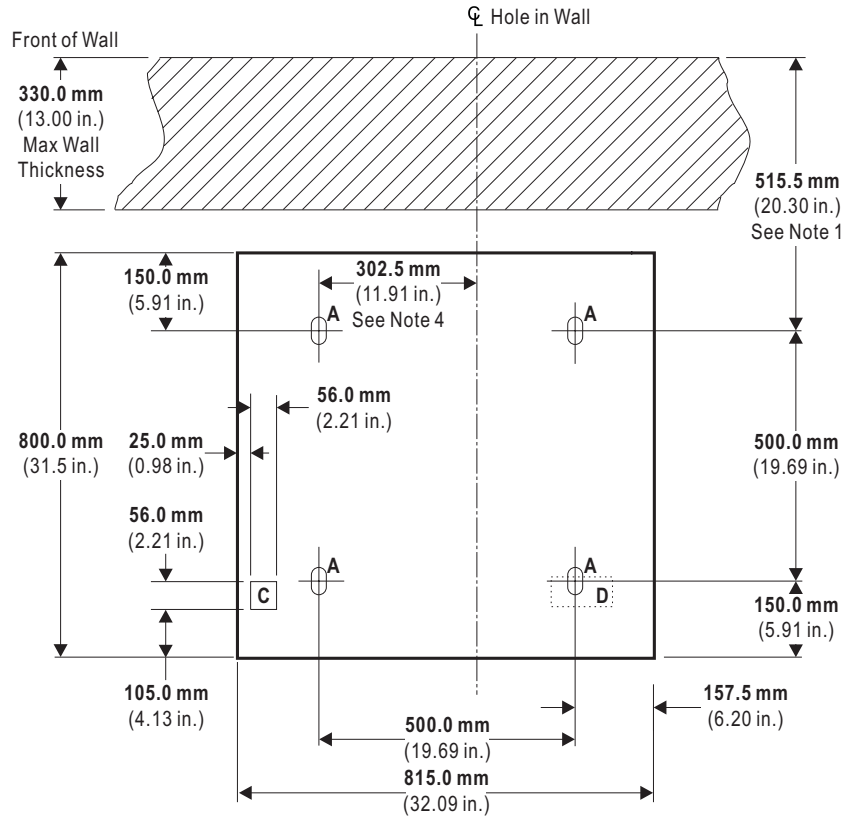
Note 3: The dotted boundary, marked with a ‘D’, shows where the cable access hole would be on an ATM being replaced with 5886.

Note 4: The hole marked “B1” is on cheque acceptor security enclosures only. All other CEN enclosures have hole “B2”.

The hole must not be used for bolting the ATM to the floor. Use “A” holes for fixing to the floor.

Note 5: When a cash acceptor is fitted on the left-hand side, when viewed from the rear, the cable will obstruct access to the rear bolt hole. For information on accessing the rear bolt hole, refer to “5886 Installation Manual”, (B006-6193).

Standard Sleeve Installation for UL Security Enclosure Only



Detail of hole A

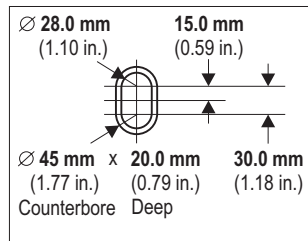
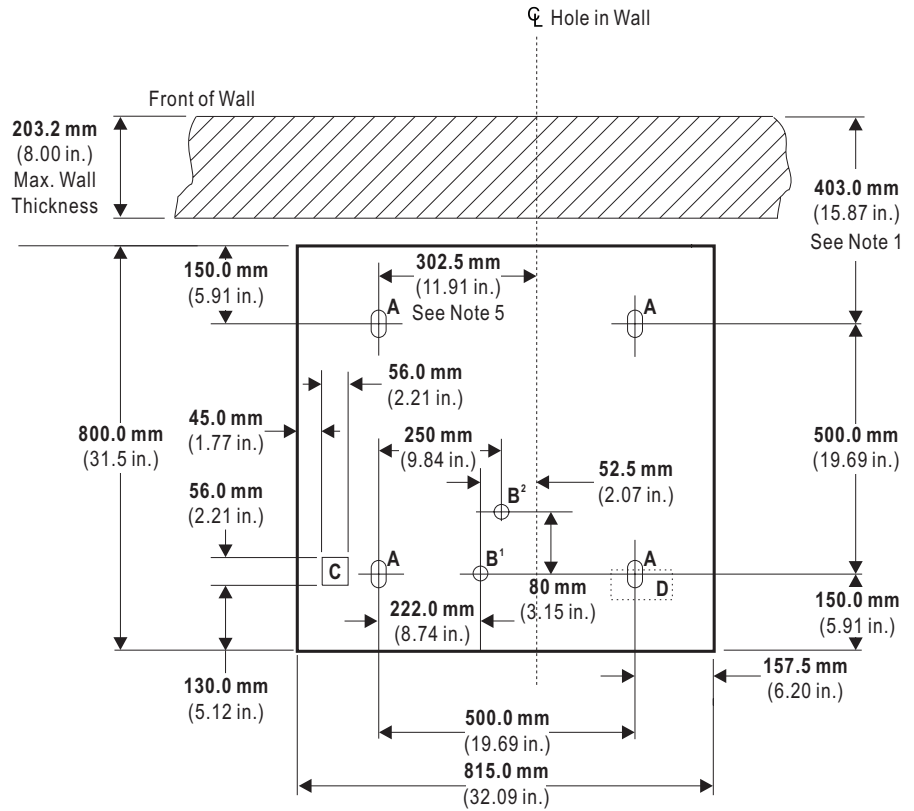
Note 1: When an infill panel is required, this dimension is **503.5 mm (19.82 in.)** For information on the infill panel, refer to “Appendix C” of this publication. For information on installing the infill panel, refer to the publication “5886 Installation Manual”, (B006-6193).

Note 2: The boundary, marked with a ‘C’, shows the cable access hole for all cables.

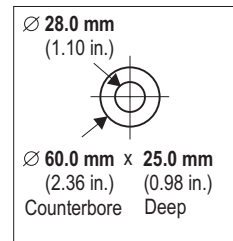
Note 3: The dotted boundary, marked with a ‘D’, shows where the cable access hole would be on an ATM being replaced with 5886.

Note 4: When a cash acceptor is fitted on the left-hand side, when viewed from the rear, the cable will obstruct access to the rear bolt hole. For information on accessing the rear bolt hole, refer to “5886 Installation Manual”, (B006-6193).

Short Sleeve Installation for CEN Grade L Security Enclosure Only



Detail of hole A



Detail of hole B¹/B²

Note 1: When an infill panel is required, this dimension is **391.0 mm** (15.39 in.). For information on the infill panel, refer to “Appendix C” of this publication. For information on installing the infill panel, refer to the publication “5886 Installation Manual”, (B006-6193).

Note 2: The boundary, marked with a ‘C’, shows the cable access hole for all cables.

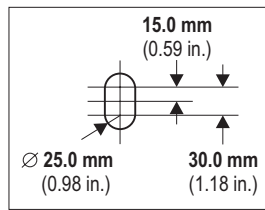
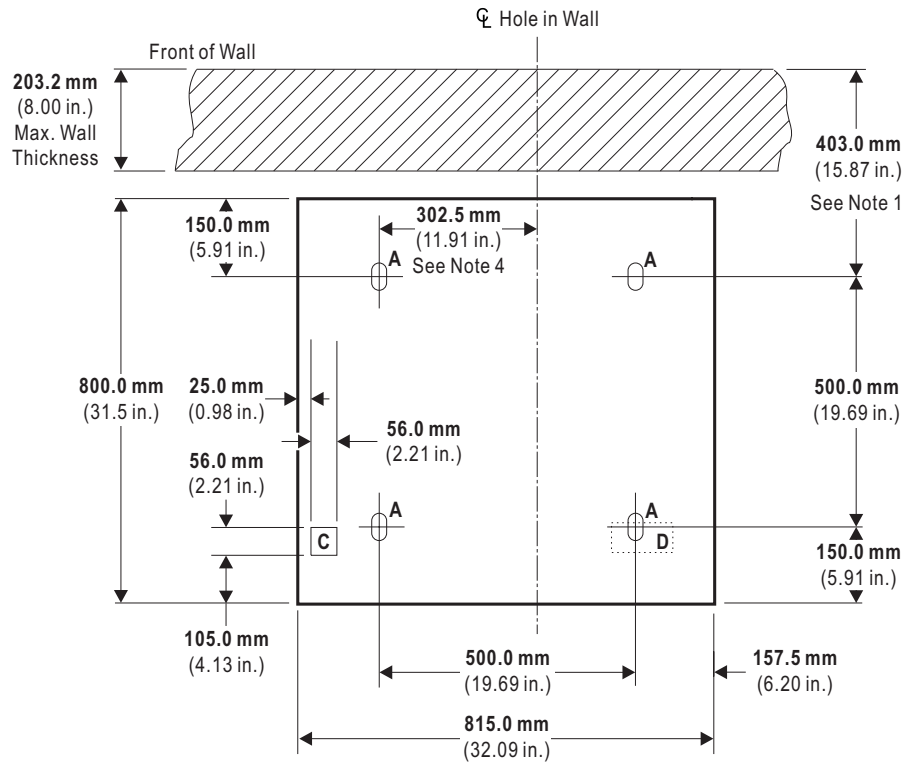
Note 3: The hole marked ‘B¹’ is on cheque acceptor security enclosures only. All other CEN Grade L enclosures have hole ‘B²’.

The hole must not be used for bolting the ATM to the floor. Use ‘A’ holes for fixing to the floor.

Note 4: The dotted boundary, marked with a ‘D’, shows where the cable access hole would be on an ATM being replaced with 5886.

Note 5: When a cash acceptor is fitted on the left-hand side, when viewed from the rear, the cable will obstruct access to the rear bolt hole. For information on accessing the rear bolt hole, refer to “5886 Installation Manual”, (B006-6193).

Short Sleeve Installation for UL (feature 001) Security Enclosure Only



Detail of hole A

Note 1: When an infill panel is required, this dimension is **391.0 mm** (15.39 in.). For information on the infill panel, refer to “Appendix C” of this publication. For information on installing the infill panel, refer to the publication “5886 Installation Manual”, (B006-6193).

Note 2: The boundary, marked with a ‘C’, shows the cable access hole for all cables.

Note 3: The dotted boundary, marked with a ‘D’, shows where the cable access hole would be on an ATM being replaced with 5886.

Note 4: When a cash acceptor is fitted on the left-hand side, when viewed from the rear, the cable will obstruct access to the rear bolt hole. For information on accessing the rear bolt hole, refer to “5886 Installation Manual”, (B006-6193).

Mandatory Modifications to Plinth or Floor

The following modifications must be made to the plinth:

Concrete Plinth

If a concrete plinth is used at installation, a section of the plinth should be cut-out to allow the cables which enter the base of the ATM to be fitted.

The following illustrations show the size of cut-out required for all security enclosure options.

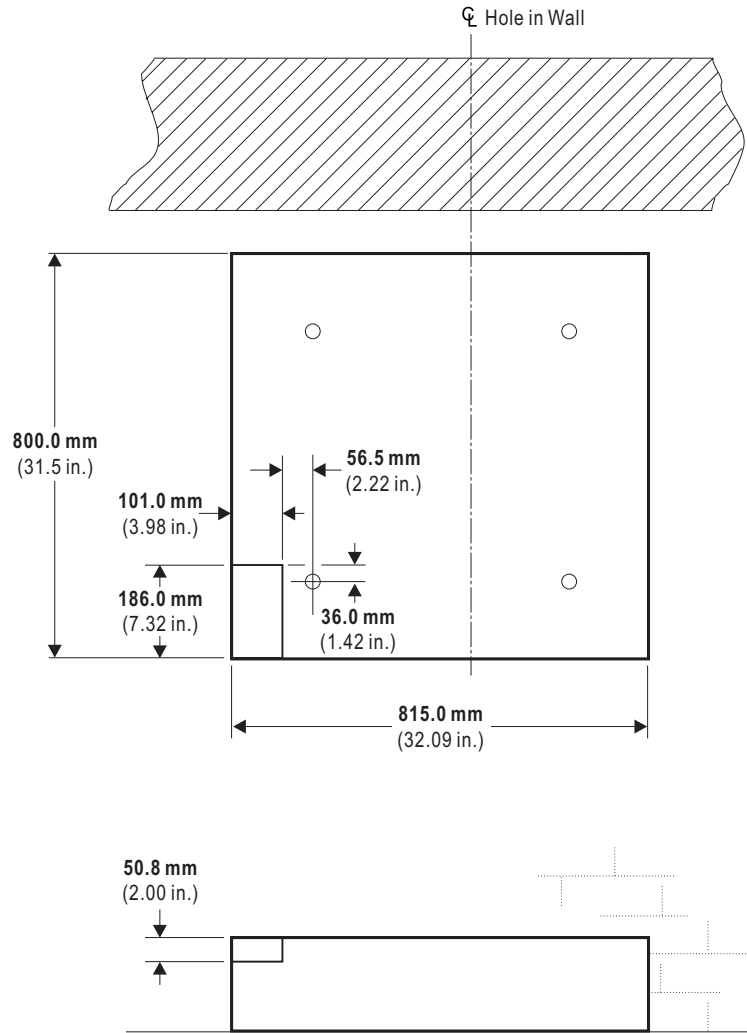
Adjustable Plinth

If an adjustable plinth is used, holes should be drilled through the plinth, to allow the cables which enter the base of the ATM to be fitted.

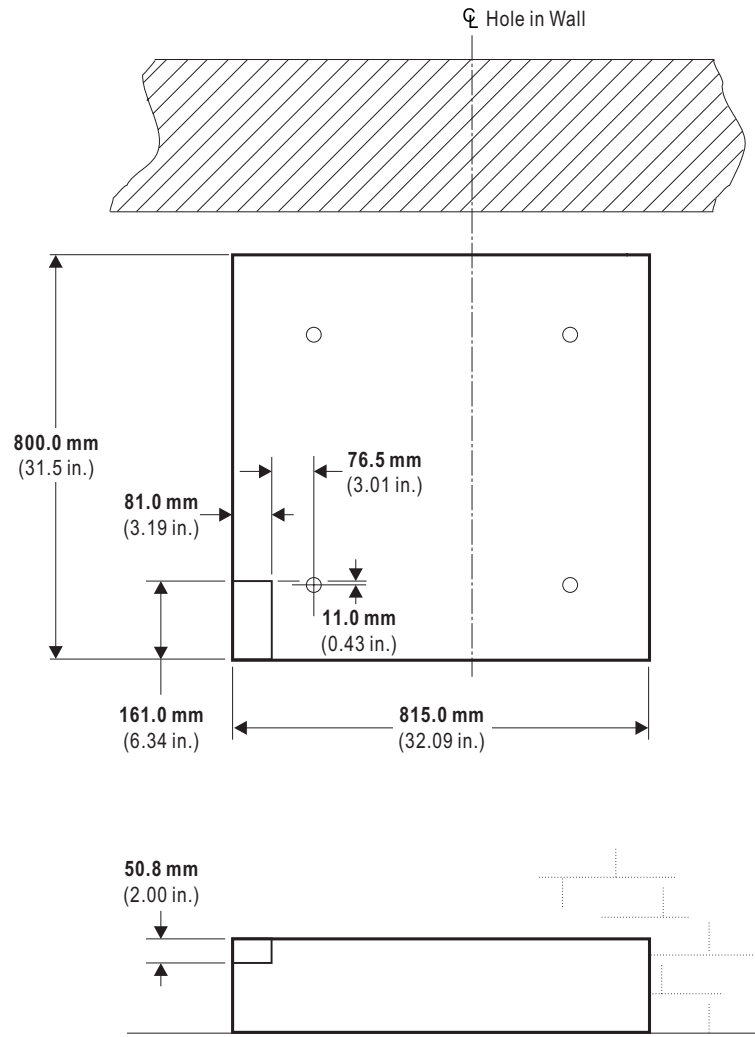
ATM Installed Directly Onto the Floor

If the ATM is installed directly on to the floor, without a plinth, the cabling must be routed through a channel in the floor. The channel must be large enough to allow the cabling to be routed along the floor and under the ATM.

Plinth for CEN Grade L, CEN Grade III, and CEN LGAI Security Enclosures



Plinth for UL Security Enclosure Only



Floor Loading

The ATM must be installed on a floor capable of supporting the maximum weight. Only the maximum weight should be considered as additional options may be added after installation.

Without external Coin Dispenser

- CEN Grade 3, or CEN LGAI Security enclosures:
 - Maximum weight: **1130 kg** (2491.7 lb.)
 - Floor loading: **1733.1 kg/m²** (354.9 lb./ft²)
- CEN Grade L Security enclosure:
 - Maximum weight: **945kg** (2083.7 lb.)
 - Floor loading: **1449.4 kg/m²** (296.8 lb./ft²)
- Standard Security enclosure (UL):
 - Maximum weight: **835kg** (1841.2 lb.)
 - Floor loading: **1280.7 kg/m²** (262.3 lb./ft²).

With external Type 1 Coin Dispenser (empty of coins)

- CEN Grade 3, or CEN LGAI Security enclosures:
 - Maximum weight: **1154.8 kg** (2546.3 lb.)
 - Floor loading: **1771.2 kg/m²** (362.7 lb./ft²)
- CEN Grade L Security enclosure:
 - Maximum weight: **969.8kg** (2138.4 lb.)
 - Floor loading: **1487.4 kg/m²** (304.6 lb./ft²)
- Standard Security enclosure (UL):
 - Maximum weight: **859.8kg** (1895.9 lb.)
 - Floor loading: **1318.7 kg/m²** (270.1 lb./ft²).

With external Type 2 Coin Dispenser (empty of coins)

- CEN Grade 3, or CEN LGAI Security enclosures:
 - Maximum weight: **1160 kg** (2557.8 lb.)
 - Floor loading: **1779.1 kg/m²** (364.4 lb./ft²)
- CEN Grade L Security enclosure:
 - Maximum weight: **975 kg** (2149.9 lb.)
 - Floor loading: **1495.4 kg/m²** (306.3 lb./ft²)
- Standard Security enclosure (UL):
 - Maximum weight: **865 kg** (1907.3 lb.)
 - Floor loading: **1326.7 kg/m²** (271.7 lb./ft²).

Security Bolts

The ATM should be bolted to the floor, through the 'A' holes, using four bolts with anchor washers. If the ATM is to be bolted down, the floor or plinth must be capable of withstanding the loading imposed by the anchor points for the bolts. The bolts and anchors must be supplied by the owning organisation.

The minimum specification for bolts to secure the ATM through any enclosure to a plinth or a stone/concrete floor, is high tensile M16 bolts with appropriate anchor washers of **6 mm** (0.24 in.) minimum thickness. It is recommended that these bolts be a minimum depth **150 mm** (5.91 in.) and that either resin anchor bolts or rawl type bolts are used.

Note 1: Bolting of CEN security enclosures should comply with requirements of EN 1143-1 (CEN safe Burglary Standard).

Note 2: For CEN security enclosures, the centre bolt hole 'B' in the floor is counterbored to a larger diameter than the other four. This enables a security alarm sensor to be fitted through the hole.

Floor Covering

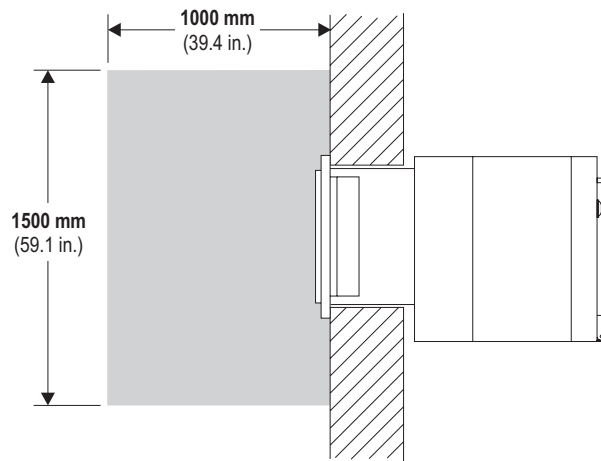
An antistatic floor covering should be used and must be of a type that will not generate dust or fluff.

Video Camera

Ambient Lighting

If the ATM is fitted with a video camera it is strongly recommended that there is a minimum of 50 LUX lighting at floor level within the area illustrated below. This lighting level conforms to:

- Australian Standard for Automatic Teller Machines (1990)
- Lighting for Automated Teller Machines as prepared by Illuminating Engineering Society of North America (1997).

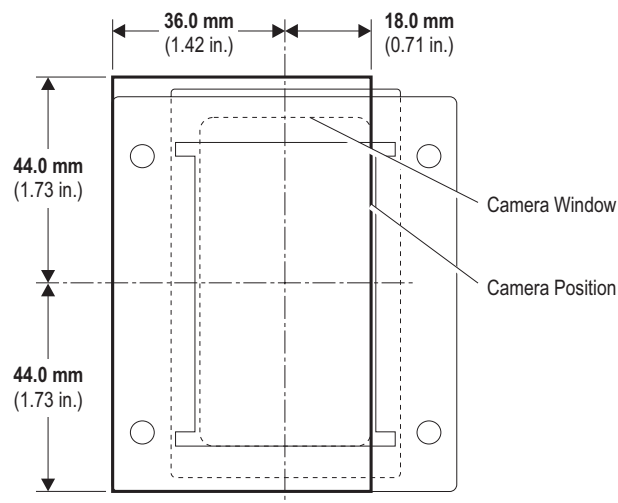


Note: A minimum of 200 LUX is recommended for task lighting.

Internal Space Constraint for Fitting a Third Party Video Camera

The ATM can be ordered with a video camera in either PAL or NTSC format. However, if a camera is not configured and a third party video camera is to be installed, there is a space constraint to consider. The location of the video camera is directly behind the

camera window. The following dimensions should be calculated from the centre point on the window, as shown below.



Note 1: The depth constraint, from the rear of the camera window, is **220 mm (8.66 in.)**.

Physical Requirements
Video Camera

Chapter 2

Electrical Requirements

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Electrical Requirements

Power Quality Distribution and Grounding Requirements

Voltage transients, line noise, surges, sags, impulses, and spikes may be experienced routinely or sporadically. When such phenomena occur, the use of protective devices, as described in Attachments A and B, may be required to ensure proper operation of the equipment.

AC Power Requirements

The maximum current requirements at the following input voltages are:

- 10A at 120V
- 6.3A at 220V - 240V.

The maximum inrush current at the following input voltages are:

- 200A peak at 136V
- 150A peak at 257V.

Note: If you are considering upgrading your ATM to include the cash acceptor, you should be aware that in the event of a power failure, there is the potential for customers cash to be retained in this unit, and for details of the transaction to be lost. For this reason NCR do not recommend running a 5886 with cash acceptor without an Uninterruptible Power Supply (UPS).

Input Voltage Setting

The ATM can operate from the following input mains voltages:

- 90V to 136V at 50/60Hz
- 180V to 264V at 50/60Hz.

Power Consumption

A typical power consumption rate for your ATM can be calculated from the following information:

Idle Mode

- 307 Watts at 120V
- 177 Watts at 240V.

Note: Power consumption is dependent on the configuration of your ATM.

Under Transaction

- 606 Watts at 120V, or 1092 Watts with severe environment
- 482 Watts at 240V, or 1008 Watts with severe environment.

Note: Power consumption is dependent on the transaction rate of your ATM.

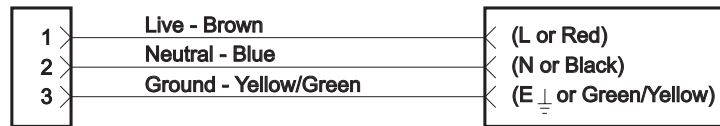
Power Cable

The ATM is supplied either as a 120V or a 220-240V unit. 120V ATMs are supplied with a power cable fitted with a NEMA type 5-15P power source connector. 220-240V ATMs are supplied with an unterminated power cable. Information about suitable power connectors is supplied with the accessories. Power connectors must be wired as shown below.

The power cable supplied is **3 metres (9 ft. 9.00 in.)** in length. If it is necessary to increase this length to meet site requirements, then the extension must satisfy local or country regulations.

Note: If the ATM being installed is replacing a 5084 or 5085 installation, it may be necessary to either lengthen the cable or re-position the electrical sockets.

Warning This equipment must be earthed.



Note: The annotations within brackets are included to comply with United Kingdom legislation and refer to the markings on United Kingdom three pin plugs.

Grounding Requirements

The ATM operates from a single phase, 3 wire supply; live, neutral and ground. The power requirements of this unit will normally permit it to operate within existing wiring configurations and from existing branch mains outlets providing:

- 1 Where this supply is provided from a general purpose distribution panel, then the other branch circuits from this panel must not be used to support heavy inductive loads such as air conditioners, elevators, microwave ovens, and so on. Nor may such equipment be operated on the same branch circuit as the ATM.

- 2 If using distribution panels, all branch circuit grounding conductors must be connected to an insulated ATM strip in the distribution panel. The grounding conductor from the distribution panel to the building ground point must be at least equal in size to the power conductor necessary to supply the NCR system.

Note: The building ground point can affect data integrity. For additional information refer to the 'Data Line Transient Protection' section of Attachment A.

Transient Power Loss

The voltage loss due to power interruptions must not be more than 50% of the nominal value, for a maximum of one half cycle, at a maximum rate of 1 every 10 seconds.

EMI Susceptibility

The ATM meets EN 55024 (1998) "ITE Immunity Standard".

EMI Emission

The ATM meets FCC CFR 47 Prt 15 Class A and EN 55022 (1998) Class A requirements for radiated and conducted emission.

The ATM meets EN61000-3-2 (latest revision) Mains Harmonics (Class A) and EN61000-3-3 (latest revision) Mains Flicker requirements for conducted emission.

Communications Requirements

Voltage transients, line noise, surges, sags, impulses, and spikes may be experienced routinely or sporadically. When such phenomena occur, the use of protective devices, as described in Attachment A, may be required to ensure proper operation of the equipment.

It is the responsibility of the customer to assure that all installation preparations are complete and in compliance with NCR specifications and requirements and with all national, state or local telephone and telegraph regulations and laws.

High Order Communications Cable

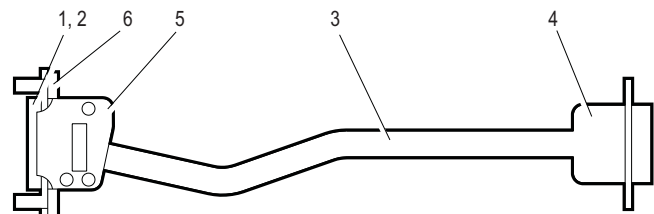
The high order communications cable type depends upon the communications system to be used. The following cable may be required.

Note: Communications cables are not supplied with the ATM. If these cables are required, it is the customer's responsibility to have them installed. The specification for this cable is supplied in the following section. When producing cables allow for **1.8 metres** (6 feet) of cable within the ATM.

High Order Communications Standard Cable (RS-232)

The standard high order communications system supports most common bit and byte oriented disciplines (synchronous and asynchronous) with an RS-232 interface.

The interconnecting cable to the remote modem should not exceed **15.24 metres (50 feet)** in length, and must conform to the specification and wiring given on the following diagram.

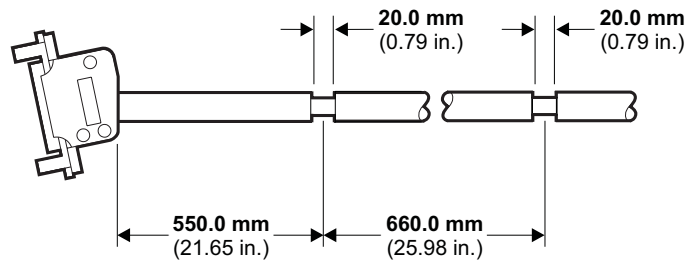


1. Connector, 25 way (NCR part no. 006-0005897).
2. Terminal wire, male (NCR part no. 009-0002642).
3. Cable, multiconductor (NCR part no. 007-8907033).
4. Connector (determined by remote device).
5. Shell hood (NCR part no. 006-1500038).
6. Screw retainer (NCR part no. 601-0101584).



At a point **550mm** (21.65 in.) from the connector end of the cable, remove a **20mm** (0.79in.) section of the outer sleeve as shown. At a further **660mm** (25.98 in.), remove another **20mm** (0.79 in.) section of the outer sleeve.

Note: Take care not to cut through the cable shielding when removing the outer sleeve.



Remote Device Cables

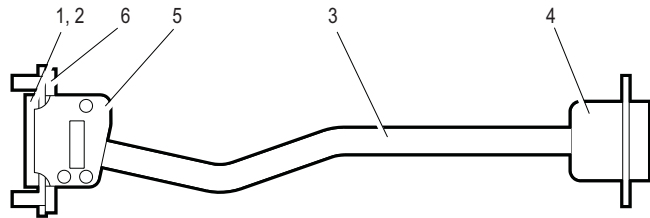
The specifications for these cables are supplied below.

RS-232 Cable

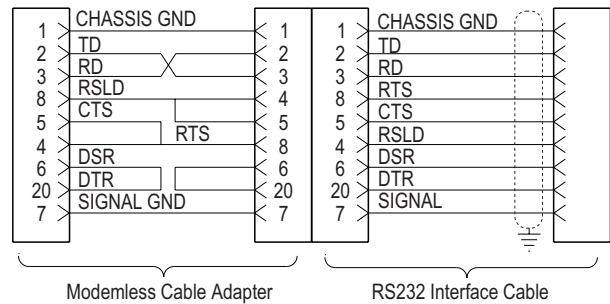
The ATM can have up to two RS-232 outlets which can be configured to provide an interface for one of two options:

- Remote camera
- Remote card access device.

For both options the cable is limited in length to **15.24 metres (50 feet)** and must conform to the specification and wiring given here.



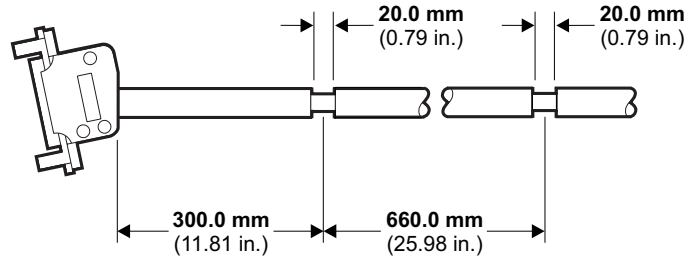
1. Connector, 25 way (NCR part no. 006-0005897).
2. Terminal wire, male (NCR part no. 009-0002642).
3. Cable, multiconductor (NCR part no. 007-8907033).
4. Connector (determined by remote device).
5. Shell Hood (NCR part no. 006-1500038).
6. Screw retainer (NCR part no. 601-0101584).



Note: The modemless cable adapter is supplied with RS-232 interface feature kits. This adapter performs crossover and linking normally associated with modemless operation. If this linking is not required, the modemless cable adapter may be removed and the RS-232 Interface Cable connected directly to the ATM.

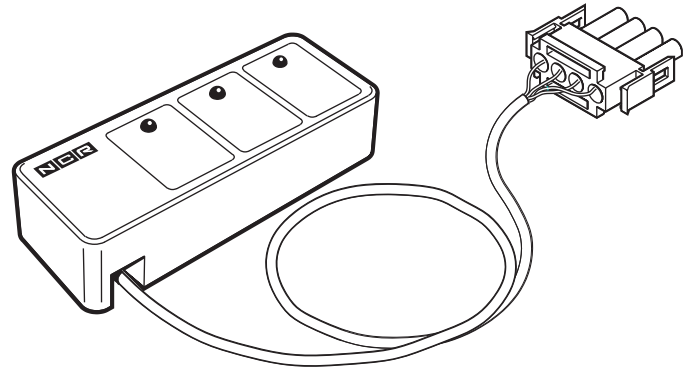
At a point **300mm** (11.81 in.) from the connector end of the cable, remove a **20mm** (0.79in.) section of the outer sleeve as shown. At a further **660mm** (25.98 in.), remove another **20mm** (0.79 in.) section of the outer sleeve.

Note: Take care not to cut through the cable shielding when removing the outer sleeve.



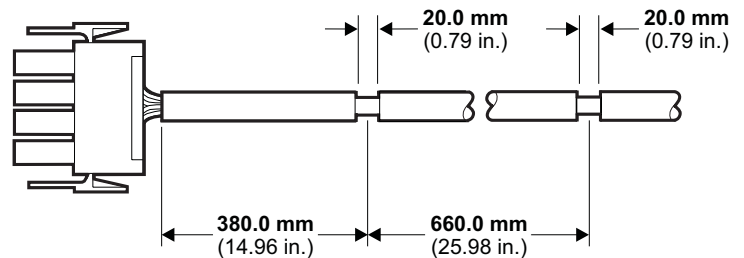
Remote Status Monitor

The remote status monitor feature is supplied as a complete assembly and consists of a status indicator unit, **76.2 metres** (250 feet) of cable and a connector.



At a point **380mm** (14.96 in.) from the connector end of the cable, remove a **20mm** (0.79in.) section of the outer sleeve as shown. At a further **660mm** (25.98 in.), remove another **20mm** (0.79 in.) section of the outer sleeve.

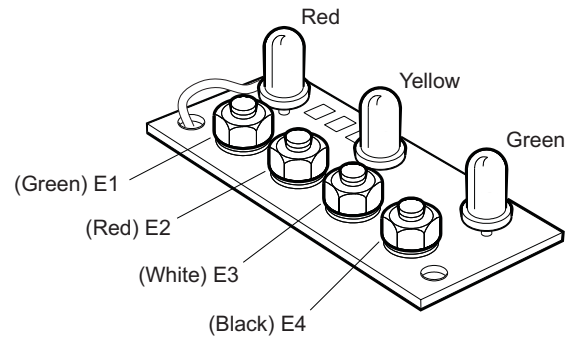
Note: Take care not to cut through the cable shielding when removing the outer sleeve.



If you are required to shorten the cable, proceed as follows:

- 1 Remove the cover from the remote status indicator unit.

- 2 Disconnect the four leads from the indicator, that is E1, E2, E3 and E4.



- 3 Cut the cable to the required length and strip the four wire ends.
- 4 Connect the wires to the correct terminals.
- 5 Replace the status indicator cover.

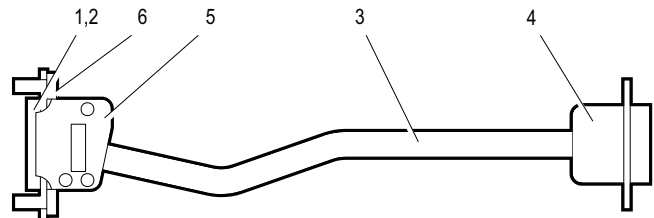
Alarm Interface Cable

The ATM may optionally be configured to provide an alarm interface which enables the ATM to be connected to an external local alarm system. The interface may take the form of one of two options; a basic alarm system or an enhanced alarm system.

The external alarm system must provide to the ATM, through the alarm interface cable wiring, a non interruptible, stabilised power supply with the following specifications:

- 12V +- 2V dc
- 200mA maximum
- Ripple, 5% maximum.

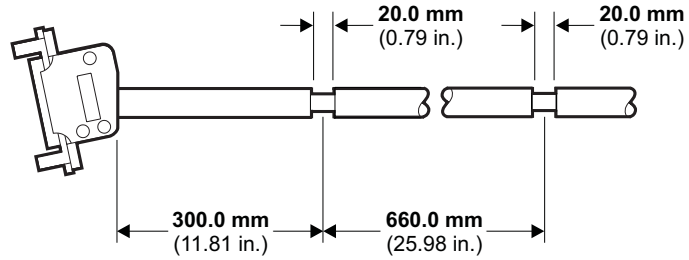
The interconnecting cable to the ATM is similar for both alarm interface options and must conform to the following specification and wiring:



1. Connector, 25 Way (NCR part no. 006-0005896)
2. Terminal, wire, female (NCR part no. 009-0002640)
3. Cable, multiconductor (determined by the alarm installed).
4. Connector (determined by remote device).
5. Shell Hood (NCR part no. 006-1500038).
6. Screw retainer (NCR part no. 601-0101584).

At a point **300mm** (11.81 in.) from the connector end of the cable, remove a **20mm** (0.79in.) section of the outer sleeve as shown. At a further **660mm** (25.98 in.), remove another **20mm** (0.79 in.) section of the outer sleeve.

Note: Take care not to cut through the cable shielding when removing the outer sleeve



Basic Alarm Interface Cable Wiring

1	CHASSIS GND	
7	SILENT ALARM COMMON *	X
8	DOOR ALARM N.O.	X
9	DOOR ALARM N.C..	X
10	VIBRATION/HEAT COMMON	X
12	+12V	X
19	SILENT ALARM N.O. *	X
20	SILENT ALARM N.C. *	X
21	DOOR ALARM COMMON	X
22	VIBRATION/HEAT N.O.	X
23	VIBRATION/HEAT N.C.	X
25	+12V RETURN	X

* Optional

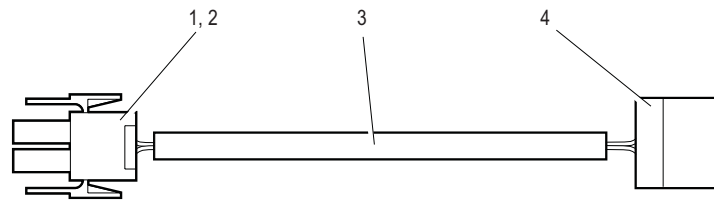
Enhanced and High Security Alarm Interface Cable Wiring

1	>	CHASSIS GND	<
3	>	TEST TRANSMITTER A	<
5	>	TAMPER ALARM N.O.	<
6	>	TAMPER ALARM N.C.	<
7	>	SILENT ALARM COMMON *	<
8	>	DOOR ALARM N.O.	<
9	>	DOOR ALARM N.C.	<
10	>	COMPOSITE ATTACK COMMON	<
12	>	+12V	<
16	>	TEST TRANSMITTER B	<
18	>	TAMPER ALARM COMMON	<
19	>	SILENT ALARM N.O. *	<
20	>	SILENT ALARM N.C. *	<
21	>	DOOR ALARM COMMON	<
22	>	COMPOSITE ATTACK N.O.	<
23	>	COMPOSITE ATTACK N.C.	<
25	>	+12V RETURN	<

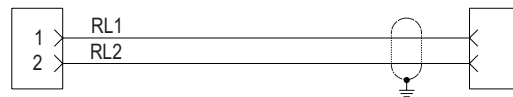
* Optional

Remote Relay Cable

The remote relay provides a pair of open contacts, rated at 28 volts per ampere for both ac and dc supplies, which can be closed to activate a remote device. The interconnecting cable to a remote device must conform to the following specification and wiring:

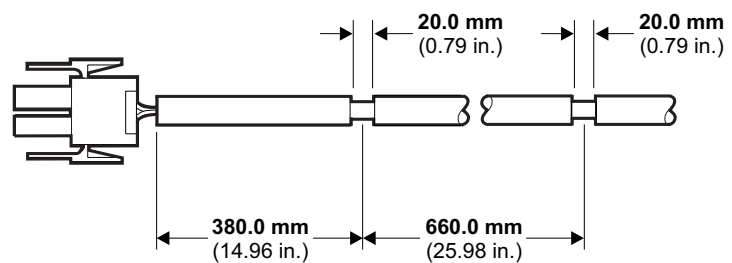


1. Connector, 2 way Mate-N-Lock (NCR part no. 007-9814285).
2. Terminal wire, male (NCR part no. 007-2009663).
3. Cable, multicouductor (NCR part no. 006-5800006).
4. Connector (determined by remote device).



At a point **380mm** (14.96 in.) from the connector end of the cable, remove a **20mm** (0.79in.) section of the outer sleeve as shown. At a further **660mm** (25.98 in.), remove another **20mm** (0.79 in.) section of the outer sleeve.

Note: Take care not to cut through the cable shielding when removing the outer sleeve.





Chapter 3

Environmental Requirements

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Electromagnetic Compatibility (EMC) and Safety	3-4
EMC Directives	3-4
Immunity Standards	3-4
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Temperature Rise	3-4

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Environmental Requirements

Environmental Requirements

For the ATM to function correctly the site at which it is to be installed should meet the following environmental requirements.

Temperature and Humidity

The ATM will operate over a range of temperature and humidity. However, continuous operating at or near the range limits or in a location where the temperature and humidity change beyond the specification, should be avoided. The temperature and humidity ranges are as follows:

Normal operating range (interior to wall environment):

- Temperature: **10°C to 40°C** (50°F to 104°F)
- Temperature change rate: **10°C/hour** (18°F/hour)
- Relative humidity: 20% to 80%
- Relative humidity change rate: 10%/hour
- Dew point temperature restriction: **26°C** (79°F) maximum.

Note: The humidity inside the building is restricted to a maximum of 30% at an outside temperature of **-35°C** (-31°F) with a linear (straight line) relationship between temperature and humidity to a maximum humidity of 80%.

Normal operating range (exterior to wall environment):

- Temperature: **-35°C to 50°C** (-31°F to 122°F)
- Temperature change rate: **10°C/hour** (18°F/hour)
- Relative humidity: 10% to 100%
- Relative humidity change rate: 10%/hour.

Normal operating range (exterior to wall environment when passbook printer, alpha numeric keyboard or vestibule touchscreen fitted):

- Temperature: **0°C to 50°C** (32°F to 122°F)
- Temperature change rate: **10°C/hour** (18°F/hour)
- Relative humidity: 10% to 80%
- Relative humidity change rate: 10%/hour.

Storage range (up to three months):

- Temperature: **-10°C to 50°C** (14°F to 122°F)
- Temperature change rate: **15°C/hour** (27°F/hour)
- Relative humidity: 10% to 90%

Transit range (up to one week):

- Temperature: **-40°C to 60°C** (-40°F to 140°F)
- Temperature change rate: **20°C/hour** (36°F/hour)
- Relative humidity: 5% to 95%

Extreme power on range (up to one hour):

- Temperature: **0°C to 40°C** (32°F to 104°F)
- Temperature change rate: **10°C/hour** (18°F/hour)
- Relative humidity: 10% to 95%.

Barometric Pressure

Barometric pressure details are as follows:

- Operating and transit limits: **105kPa** (15.2 lb. F/in.)
- Equivalent altitude: up to a maximum of **3000 metres** (9842 feet).

The ATM will accommodate an external to internal pressure difference of up to 70 pascal (with the severe environment option fitted).

How to determine whether the severe environment option is required

The following equipment is required:

- a gauge which measures pressure with an appropriate scale (up to 100 pascals)
- a piece of tubing to fit the gauge
- silicon sealant
- suitable wall sealant.

The following procedure should be followed, before the hole in the wall is created:

- 1 Drill a hole through the exterior wall where the ATM's fascia is to be located. The diameter of the hole should be correct to accommodate the diameter of the tubing being used.
- 2 Insert the tubing through the hole so that the tube is located **inside** the building.
- 3 Use the sealant to make sure that there are no gaps between the tubing and the exterior wall.
- 4 Attach the gauge to the loose end of the tube (that is, on the inside of the building).
- 5 Take a note of the pressure reading.
- 6 Remove the tube and gauge and seal the hole in the wall using a suitable sealant.
- 7 If the pressure gauge indicates a negative pressure differential, then NCR recommend that the ATM to be installed should have the severe environment option fitted.

Electromagnetic Compatibility (EMC) and Safety

The ATM complies with the following standards and directives:

EMC Directives

- 89/336/EEC “EMC Directive”
- 92/31/EEC “Amending EMC Directive”
- 73/23/EEC “Low Voltage Directive”
- 93/68/EEC “CE Marking Directive”.

The Harmonised EMC Standards are as follows:

Radiated and Conducted:

- EN 55022 (1998) Class A
- FCC CFR 47 Part 15 Class A.

Conducted (220V - 240V units):

- EN61000-3-2 (latest revision) Mains Harmonics (Class A)
- EN61000-3-3 (latest revision) Mains Flicker.

Immunity Standards

- EN 55024 (1998) “ITE Immunity Standard”.

The Harmonised Safety Standard is as follows:

- EN 60950 “Safety of IT Equipment”.

Acoustics

Sound Power

- 65 dB(A) idle
- 68 dB(A) operating.

Heat Dissipation

The heat dissipation of the ATM is **1580kJ/hour** (1500 BTU/hour) maximum.

Air Flow

The air flow through the ATM is rated at **0.1 m³/s** (212 ft³/min.).

Temperature Rise

The temperature rise for air passing through the ATM is **3°C** (5.4°F).



Chapter 4

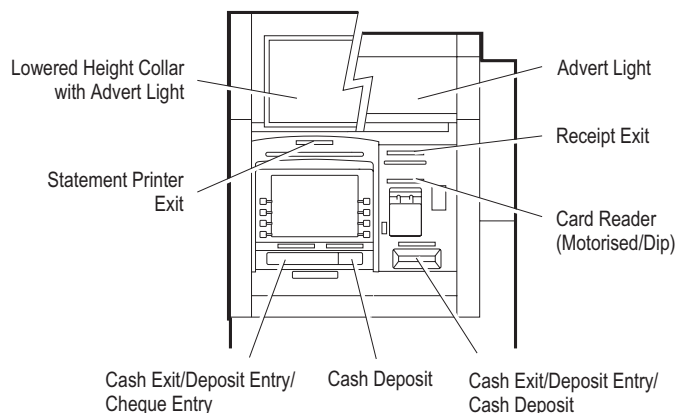
Decals

Decal Dimensions	4-1
Card Orientation Window	4-1
Card Acceptance Decal	4-2
Clear Window	4-2
Standard Collar With Advert Light	4-2
Lowered Height Collar	4-3
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Decals

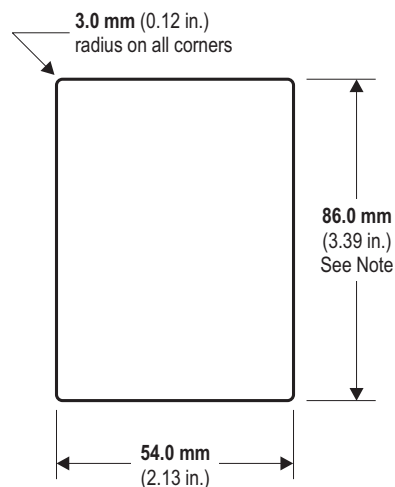
Decal Dimensions

The following illustrations provide the specifications and locations for the decals which you may wish to fit to the front of your ATM.



Card Orientation Window

If the window next to the Card Reader entry/exit slot is to be customised to indicate card orientation, the card/decals to be inserted into the window should be of the following dimensions.



The insert should be a maximum of **0.75 mm (0.029 in.)** thick.

The decal should not be made of an absorbent material if the front of the ATM is likely to be subjected to rain.

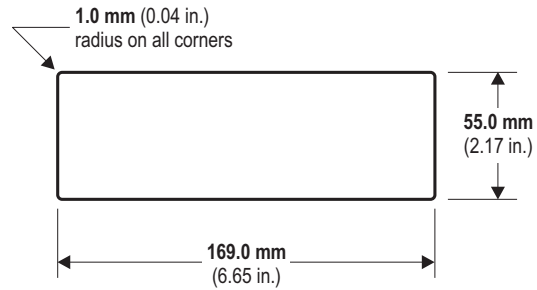
Note: For 5886 serial number 34940406/tracer number 2730 and below, the height of the card/decals is **73.0 mm (2.87 in.)**.

Card Acceptance Decal

If a decal is required to advertise which cards can be used in the ATM, it should be positioned on the side wall of the ATM facia. The decal can be any size, providing it fits onto this area.

Clear Window

If a deposit feature is not configured, then the front of the deposit blank moulding will have a large clear window. If an insert is to be made to go behind the window it should be of the following dimensions.



The insert should be a maximum of **0.8 mm (0.03 in.)** thick. NCR recommends that the insert be made from one of the following materials:

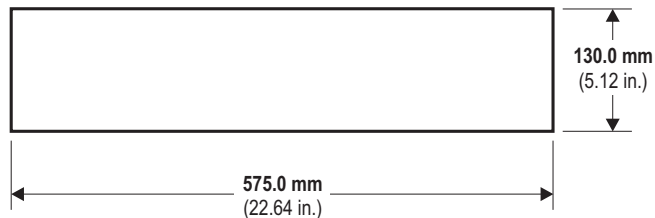
- Polycarbonate
- Polyester
- Paper.

Note: Paper is not recommended if the front of the ATM is likely to be subjected to rain.

Standard Collar With Advert Light

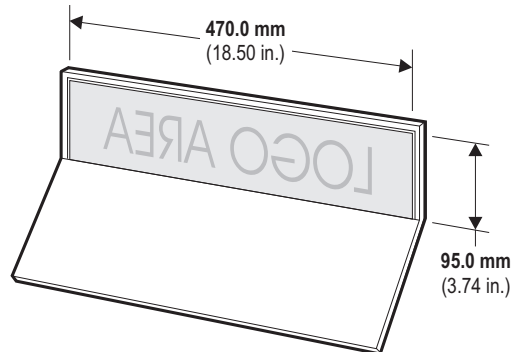
The following illustration shows dimensions for an advert light decal. These dimensions are based on a decal being applied to the flat inside area of the advert light panel.

Note: The decal is the same size as used on 5684 advert lights.



Lowered Height Collar

When a lowered height collar is ordered, a larger advert light panel will be supplied with the ATM. The following illustration shows dimensions for a suitable decal for this panel. These dimensions are based on a decal being applied to the **vertical** surface area on the inside of the advert light panel.



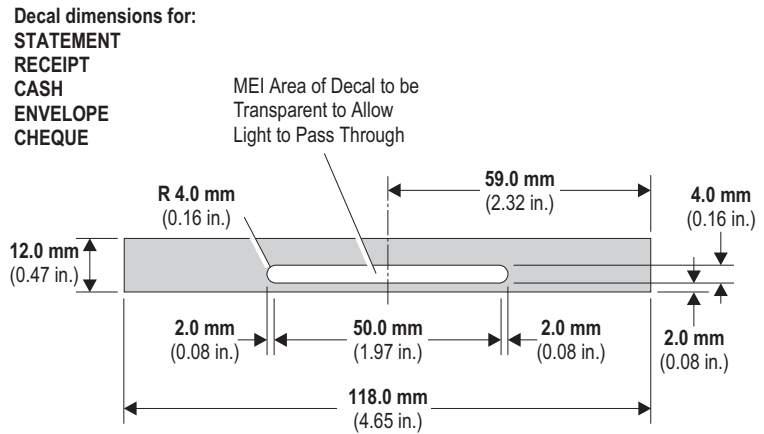
Note: To allow sufficient illumination of the customer interface, it is recommended that only the area indicated should be covered by any advert or logo.

The materials used for the facia light decal will depend on the method being used to apply the decal.

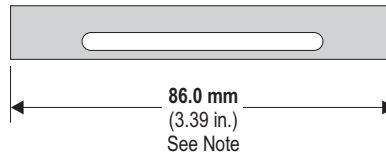
Entry/Exit Slot Decals

The front of the ATM has recesses for decals to identify the entry and exit slots. The following are guidelines to the decal sizes. The decals should be a maximum of **0.5 mm** thick and it is recommended that they be made from Textured Polycarbonate with 3M 467 High Performance MP adhesive.

Note: A combination of your application and screen graphics can be used as an alternative to indicate the cash/media exit slot.



Decal dimensions for
CARD



Note: For 5886 serial number 34940406/tracer number 2730 and below, the width of the card entry/exit slot decal is **118.0 mm (4.65 in.)**.



Chapter 5

Installation Accessories and Planning Check List

Installation Accessories 5-1

Planning Check List 5-2

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Installation Accessories and Planning Check List

Installation Accessories

When installing your ATM it is recommended that you have the following items available:

- Pincers/claw hammer to remove staples/nails from around the pallet
- Pozi drive screwdrivers (various sizes)
- Small flat blade screwdriver
- Hacksaw - only required to configure passbook printer
- To fit fixing bolts:
 - UL safe - **19 mm** (3/4 in.) ring/open-ended combination spanner and socket
 - CEN Grade III or CEN LGAI Security enclosure - **27 mm** (1 1/8 in.) socket with a maximum outside diameter of **33 mm** (1 5/16 in.)
- **7 mm** (9/32 in.) ring/open-ended combination spanner or socket to fit the standard or advert facia light
- **10 mm** (3/8 in.) ring/open-ended combination spanner for bolt heads
- **7 mm** (9/32 in.) nut spinner for M4 nuts
- Lifting/moving device. Lifting trolleys must have a maximum toe plate length of **380 mm** (14.96 in.) and a minimum toe plate width of **120 mm** (4.72 in.)
- cutter to cut cable ties
- Packing to protect the exterior of the ATM while on a trolley.

Planning Check List

To assist you in preparing your site for the arrival of your ATM we provide here a check list of the various procedures that you should carry-out **prior** to the arrival of your ATM. The procedures given are listed in chronological order, starting with the procedure that you should do first.

Activity	
Select site and make scaled floor plan	
Ensure correct environmental conditions	
Establish all contractor and vendor related schedules	
Check communication line requirements	
Plan application development	
Check floor plan and make any alterations	
Install additional electrical outlets (if required)	
Prepare site for data communication	
Arrange for designing and printing of overlays/ decals	
Order technical publications	
Order media supplies	
Plan operator training (optional)	
Ensure data comms. equipment is installed and tested	
Ensure installation accessories are available	



Appendix A

Transient Protection

AC Power Line Transient Protection A-1

Data Line Transient Protection A-3

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Transient Protection

AC Power Line Transient Protection

In the process of power distribution, transient electrical energy (including, but not limited to, lightning strikes, intermittent short circuits, and switching transients) can be introduced on to power lines. Such transient energy can be very damaging to electronic hardware and can also cause data corruption. Under these circumstances, NCR recommends the use of ac power transient suppressors and data (communication) line transient suppressors. Such protective devices are intended to guard against power and data line transients that can result in hardware damage and various system or program errors.

Improvement of any deficiencies in power quality is a customer responsibility. Malfunction and/or component failure as a result of power quality problems are/is not covered by NCR Maintenance Agreement, NCR accepts no liability for any such occurrence nor for its consequences.

When power transient suppression is required, the suppressors used should meet the following minimum requirements:

- Dissipate energy to match the appropriate application categories as defined by IEEE Standard 587. These categories are described in the table below:

Location Category	Comparable to IEC No 664 Category	Transient	
		Waveform	Amplitudes
A=Outlets > 10 m (30 ft) from Cat. B A= Outlets > 20 m (60 ft) from Cat. C	II	0.5 μ s Risetime, then 100 kHz Ringwave, each peak=60% of previous	6 kV 200A
B=Major feeders, short branch circuits, and load centres	III	Volts=1.3 x 5 μ s Current= 8 x 20 μ s and 0.5 μ s Rise = 100 kHz Ringwave	6kV 3kA 6kV 500A
C = Service Entrance and run to load centre	IV	Volts = 1.2 x 5 μ s Current = 8 x 20 μ s	10kV or more 10kA or more

- Be of the voltage limiting (clipping), or tracking filter type. The suppressor must not 'clamp' the voltage to zero, and must self-recover after passage of the transient. The suppressor may be of the hybrid type construction that makes use of various technologies in order to meet speed and dissipation requirements.
- Exhibit a 'short circuit' mode upon its failure, thus providing a positive indication of its failure such as a blown fuse or tripped breaker
- Be listed by the accepted safety organization for the country involved (e.g. UL, CSA, VDE, ETL, etc.) and the installation must conform to local, state, and national electrical codes and regulations.

Data Line Transient Protection

The nature of the transient phenomenon may extend to the data communication lines connected to this equipment. It is the responsibility of the customer to install and connect a data line transient suppression system to correct or prevent any deficiencies. Such systems must meet the following minimum requirements:

- Be of the voltage limiting type and must self-recover after passage of the transient
- Exhibit a 'short circuit' mode upon its failure to insure a positive indication of its failure
- Insert less than 5 ohms resistance and minimal inductive and capacitive loading at the operating frequency, in each data line in order to avoid signal degradation
- Be installed in accordance with all applicable local, state, and national electrical codes and regulations.

Note: In certain countries, NCR is able to supply both power and data line transient suppressors as well as a comprehensive line of power conditioning equipment. For application data, contact your NCR Customer Services Division Representative.

Transient Protection
Data Line Transient Protection



Appendix B

Power Protection

NCR Power Protection and Cabling Products	B-1
AC Power Line Transient Protection	B-1
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Uninterruptible Power Supplies	B-3
Contact Information	B-6

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Power Protection

NCR Power Protection and Cabling Products

Power protection equipment suitable for use with NCR ATMs can be purchased from the NCR Power Protection and Cabling group. Some of these products are outlined below.

AC Power Line Transient Protection

The following products can be purchased from the NCR Power Protection and Cabling group to help provide protection from power line spikes and surges:

NCR Product ID	Description
4060-4030-0094	110V, 3 outlet, wall plug-in, 15 Amp suppressor, United States applications
4060-4050-0094	110V, 3 outlet, strip, 15 Amp suppressor with 1.8 metres (6 feet) of power cable, United States applications
4060-4070-0094	110V, 7 outlet, strip, 15 Amp suppressor with 1.8 metres (6 feet) of power cable, United States applications
4060-4310-7594	220V, 4 outlet, strip, United Kingdom plug fitted
4060-4311-7594	220V, 4 outlet, strip, German/European plug fitted
4060-4312-7594	220V, 4 outlet, strip, French plug fitted

These products have numerous features:

- unique five-stage hybrid circuitry
- offers protection from spikes and surges
- protection covers all modes - line to neutral, line to earth (ground) and neutral to earth (ground)
- integral RF/EMI damping capability
- thermal overload protection
- high capacity fusing
- indicator lights display operational readiness
- plastic housing is highly flame retardant, conforming to UL94-5V.

Data Line Transient Protection

The following Data Line Transient Voltage Surge Suppressors can be purchased from the NCR Power Protection and Cabling group to help protect the communications port against harmful transient surges from both external and internal sources not eliminated by Uninterruptible Power Supplies or other AC protection:

NCR Product ID	Description
4060-K018-V000	25 pin, CMP, snaps in to United States surge suppressors
4060-K019-V000	25 pin, CFP, snaps in to United States surge suppressors
4060-K021-V000	25 pin, CMP, stand-alone, all applications
4060-K022-V000	25 pin, CFP, stand-alone, all applications

Note: The first two products are designed to snap-in to the interface port on NCR Series 4000 Transient Voltage Surge Suppressors in the United States. The second two products are designed to be stand-alone for use in Europe.

Uninterruptible Power Supplies

Uninterruptible Power Supplies (UPS) can be purchased from the NCR Power Protection and Cabling group to help protect information and equipment by providing power conditioning and battery back-up.

NCR Product ID	Description
4084-1000-7194	1000 VA on-line UPS with rack/tower configuration, 120VAC 50/60 Hz
4084-1000-7494	1000 VA on-line UPS with rack/tower configuration, 230VAC 50/60 Hz

These products offer:

- on-line topology
- 10 minute battery backup at full load
- true sine wave output
- 100% clean, conditioned power to connected equipment
- extended battery cabinets available for extended run times
- on-board SNMP optional on all models
- standard LAN/serial (RS-232) network interface
- standard rack-mountable unit design
- also available in 1500 VA, 2100 VA and 3000 VA sizes.

NCR Product ID	Description
4071-1000-7194	1000 VA Enhanced line-interactive UPS, 120VAC 60 Hz
4071-1001-7194	1000 VA Enhanced line-interactive UPS, 120VAC 60 Hz, Rack-mountable
4071-1000-7494	1000 V A Enhanced line-interactive UPS, 230 VAC, 50/60 Hz
4071-1001-7494	1000 V A Enhanced line-interactive UPS, 230 VAC, 50/60 Hz, Rack-mountable

These products offer:

- line-interactive topology
- 8 minute battery backup at full load
- true sine wave output
- input voltage selectable to 110/127 VAC or 220/240 VAC
- advanced battery management prolongs battery life and ensures quick availability after discharge
- advanced battery management for early failure detection and advanced user warning
- internal transformer provides voltage buck/boost
- standard LAN/serial (RS-232) network interface
- available in rack-mountable configuration
- also available in 600VA, 1500VA, 2000VA, 2200VA sizes.

NCR Product ID	Description
4070-1000-7194	1000 VA Line-interactive UPS, 120AC, 60 Hz
4071-1000-7494	1000 VA Line-interactive UPS, 230VAC, 50/60 Hz

These products offer:

- line-interactive topology
- 7 minute battery backup at full load
- modified sine wave output
- input voltage selectable at 110/127 VAC or 220/240 VAC
- advanced battery management prolongs battery life and ensures quick availability after discharge
- advanced battery management for early failure detection and advanced user warning
- internal transformer provides voltage buck/boost
- standard LAN/serial (RS-232) network interface
- hot-swappable batteries
- also available in 450 VA, 700 VA, 1500 VA sizes.

Contact Information

For more information from NCR's Power Protection and Cabling Group on the power protection, data line transient suppressors and uninterruptible power supply products available, warranty or configuration assistance, call the appropriate number below:

	Telephone
Worldwide (excl. USA)	+1 919 460 9489
USA only	1 800 257 0458

	Facsimile
Worldwide	+1 919 460 9653 or +1 919 460 8976



Appendix C
Infill Panel

Infill Panel Dimensions	C-1
Standard Infill Panel (5084, 5685 and Personnas 85)	C-1
“Lowered Height” Infill Panel (5084, 5685 and Personnas 85)	C-2
Standard Infill Panel (5085)	C-3
“Lowered Height” Infill Panel (5085)	C-4
Standard Infill Panel (Diebold 910/911)	C-5
Standard Infill Panel (Diebold 1062 ix)	C-6
“Lowered Height” Infill Panel (Diebold 1062 ix)	C-6
Standard Infill Panel (Diebold 1072 ix)	C-7
“Lowered Height” Infill Panel (Diebold 910, 911 and 1072 ix)	C-7
Standard Infill Panel (Fujitsu 7030, and 7040)	C-8
“Lowered Height” Infill Panel (Fujitsu 7030 and 7040)	C-8

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Infill Panel

Infill Panel Dimensions

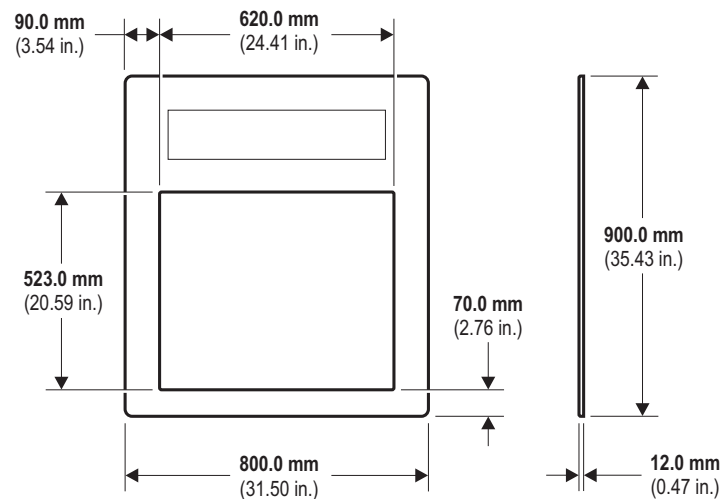
Infill panels are available, for appearance purposes only, to reduce the effective size of the hole in the wall.

When replacing non-NCR ATMs, the size of the hole in the wall must be reduced before the infill panel is fitted. Depending on your installation height, refer to either page 1-37, or page 1-42 for the reduced hole in the wall size.

Customised infill panels, made by owning organisations, should use the following dimensions as a guide:

Standard Infill Panel (5084, 5685 and Personas 85)

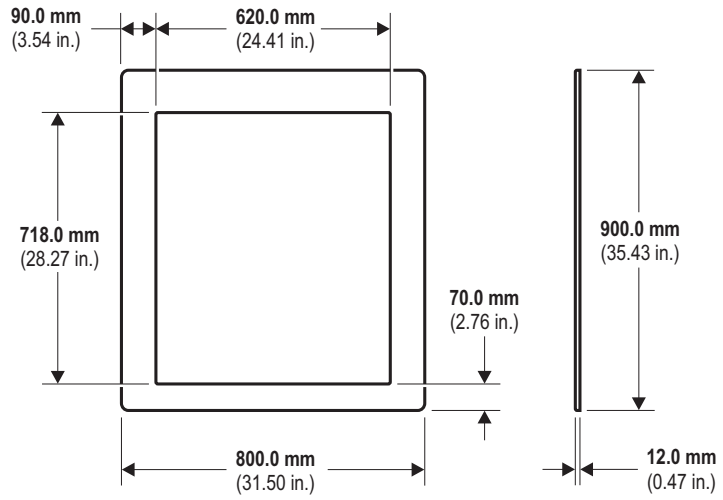
For a standard infill panel for the 5084, 5685 and Personas 85 replacement, use the following dimensions:



Infill Panel
Infill Panel Dimensions

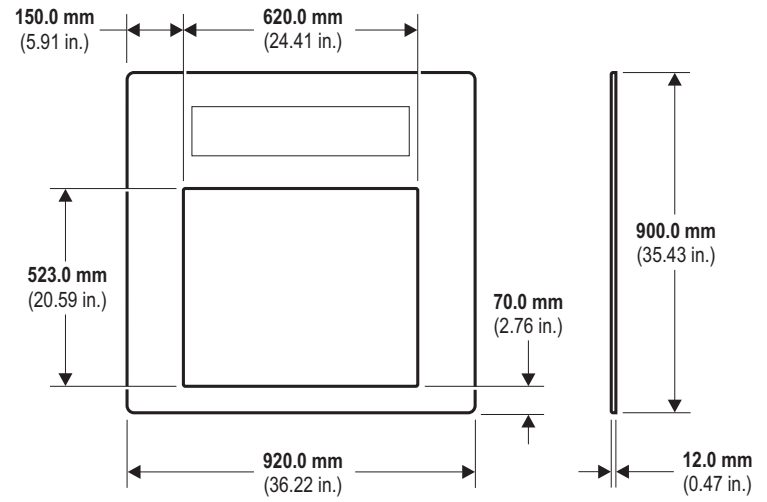
“Lowered Height” Infill Panel (5084, 5685 and Personas 85)

For a “Lowered Height” infill panel for the 5084, 5685 and Personas 85 replacement, use the following dimensions:



Standard Infill Panel (5085)

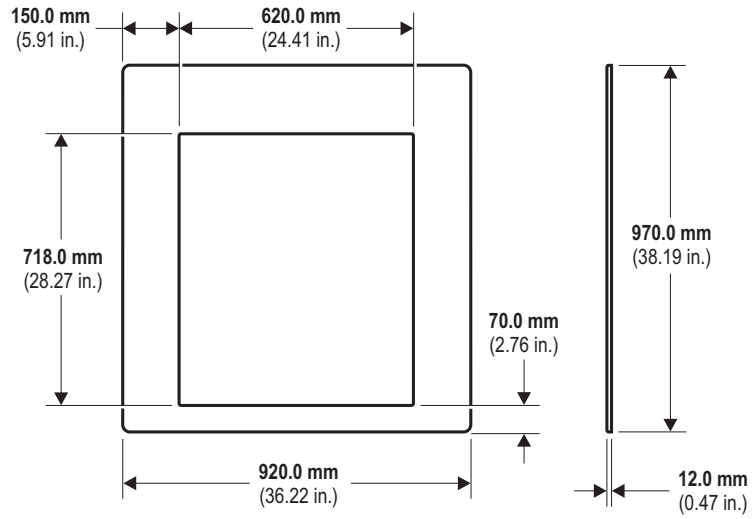
For a standard infill panel for the 5085 replacement, use the following dimensions:



Infill Panel
Infill Panel Dimensions

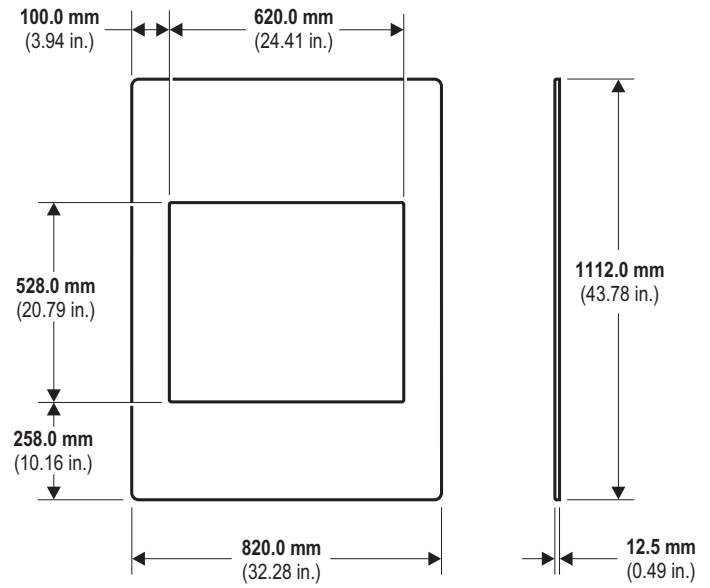
**“Lowered Height”
Infill Panel (5085)**

For a “Lowered Height” infill panel for the 5085 replacement, use the following dimensions:



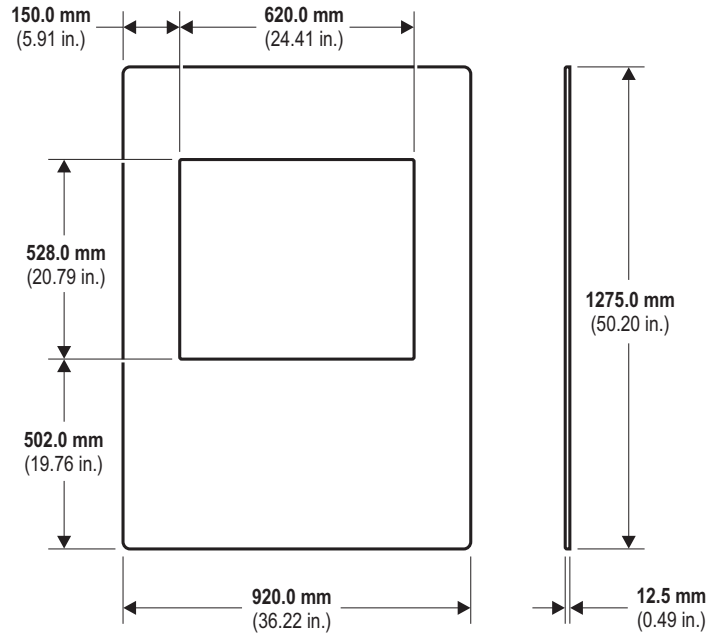
**Standard Infill Panel
(Diebold 910/911)**

For a standard infill panel for the Diebold 910/911 replacement, use the following dimensions:



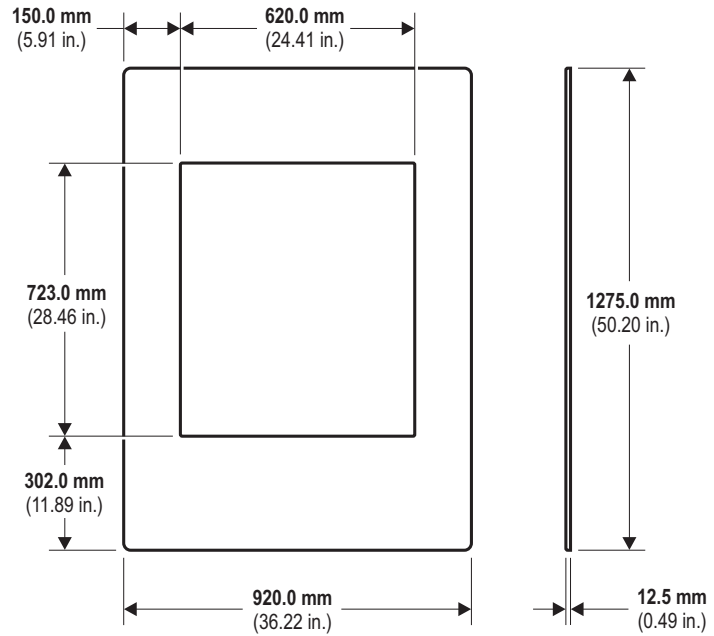
**Standard Infill Panel
(Diebold 1062 ix)**

For a standard infill panel for the Diebold 1062 ix replacement, use the following dimensions:



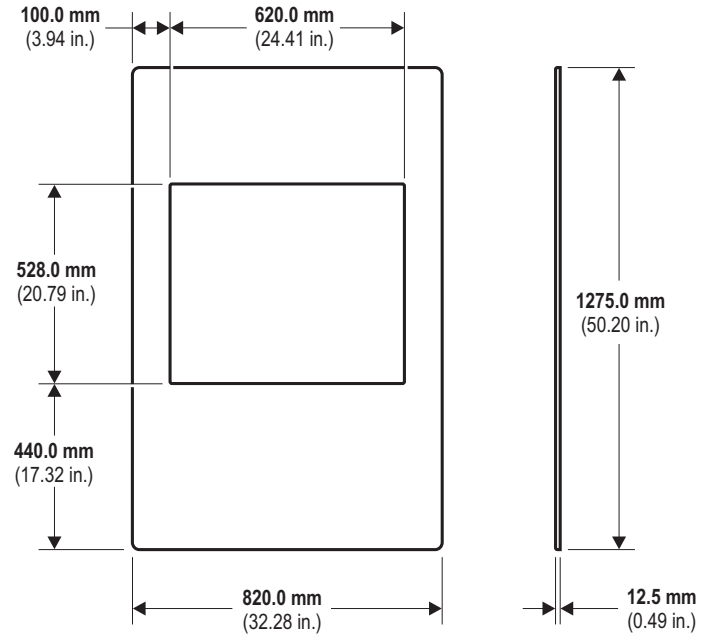
**“Lowered Height” Infill
Panel (Diebold 1062 ix)**

For a “Lowered Height” infill panel for the Diebold 1062 ix replacement, use the following dimensions:



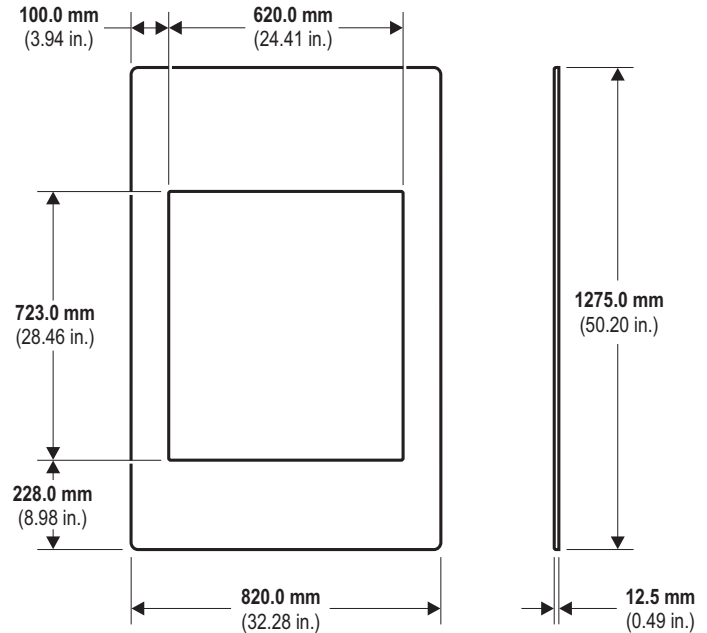
**Standard Infill Panel
(Diebold 1072 ix)**

For a standard infill panel for the Diebold 1072 ix replacement, use the following dimensions:



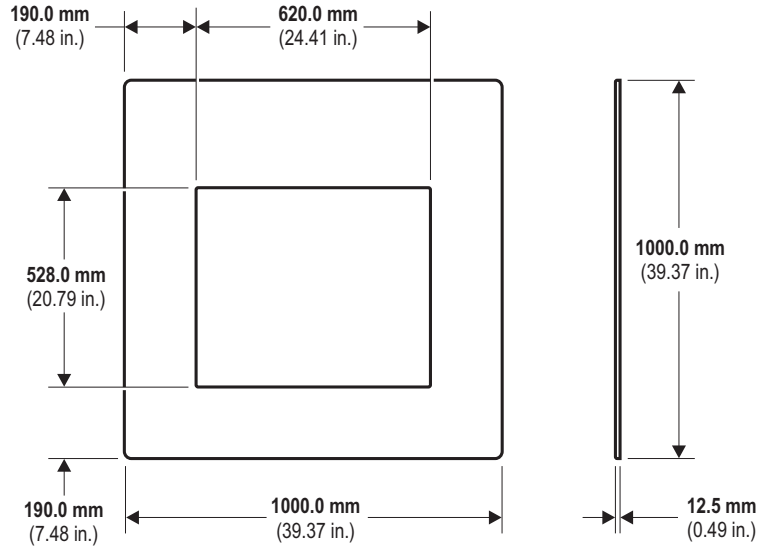
**“Lowered Height” Infill
Panel (Diebold 910, 911
and 1072 ix)**

For a “Lowered Height” infill panel for the Diebold 910, 911 and 1072 ix replacement, use the following dimensions:



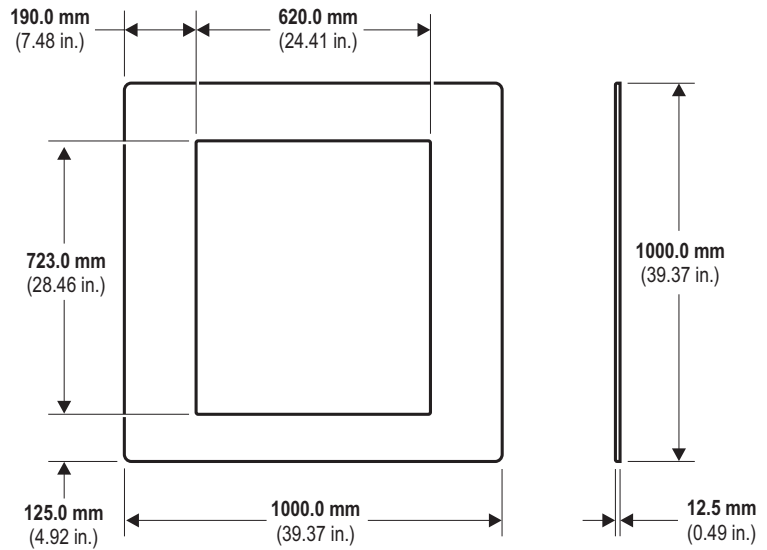
**Standard Infill Panel
(Fujitsu 7030, and 7040)**

For a standard infill panel for the Fujitsu 7030 and 7040 replacement, use the following dimensions:



**“Lowered Height” Infill Panel
(Fujitsu 7030 and 7040)**

For a “Lowered Height” infill panel for the Fujitsu 7030 and 7040 replacement, use the following dimensions:





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