



# NCR SelfServ™ 38 ATM

## Site Preparation

B006-6592-D000  
0909

## EMC COMPLIANCE

### Federal Communications Commission (FCC) Radio Frequency Interference Statement

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.

### EU EMC Directive 2004/108EC

This equipment has been found to comply with the essential requirements of EMC Directive 2004/108EC, by testing to harmonized standard, EN55022 and EN55024. The equipment complies with the limits for a Class A digital device, pursuant to EN55022.

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

### 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.

The ATM complies with the following Electromagnetic Compatibility (EMC) directives and standards for IT equipment:

- 2004/108/EC 'EMC Directive'
- 93/68/EEC 'CE Marking Directive'.

For further information, refer to the *Electromagnetic Compatibility (EMC) and Safety* section.

### NOTICE

This is a contractual document. It contains important warnings 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.

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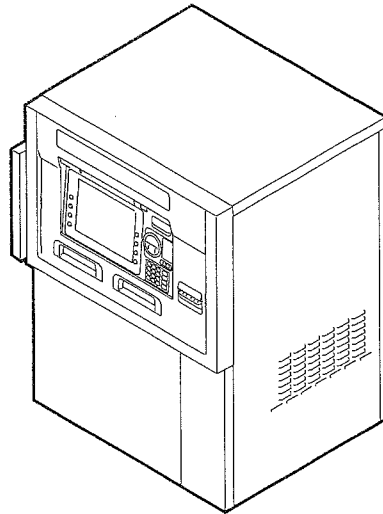
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# *NCR SelfServ 38 ATM Site Preparation*

## **INTRODUCTION**



The NCR SelfServ 38 Automated Teller Machine (ATM) is a drive-up ATM which can also be deployed as a walk-up ATM.

**Note:** All dimensions are rounded to the nearest millimetre.

## How to Use This Site Preparation Bookset

The site preparation manual is part of the NCR SelfServ 38 ATM Site Preparation Bookset. It acts both as a specifications book, and also as a gateway to the other book in the bookset, which is:

- *NCR SelfServ 32, 34 and 38 Site Preparation Requirements (B006-6670)*

## Purpose and Audience

This book is intended for architects and those responsible for preparing a site prior to the arrival of the ATM.

Site preparation details are given under the following main sections within this book:

Package Dimensions

ATM Dimensions

Access for All

Installation and Service Clearances

Requirements for the Island

Camera

## Site Compliance

This bookset 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 bookset, 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 bookset 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 bookset remains with the customer.

For information and guidance purposes 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 bookset 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.

## **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.

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- Provide floor coverings and environmental systems that limit or control static electricity build-up and discharge.

**Note:** Research has shown that asphalt is not an effective method of controlling electrostatic discharge. It is recommended that local ESD (Electrostatic Discharge) professionals be consulted when determining site construction requirements.

- Install the product at a height which meets the accessibility regulations of the relevant country.

## Product Identification

The product is identified by the class type number 6638, and a 4 digit model number, (normally 0100), which is printed on a label fixed inside the top cabinet of the ATM. 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.

	<b>NCR</b>	NCR SelfServ™ XX	
NCR Global Solutions Ltd.	Class: XXXX	Model: XXXX	
Made in UK	Tracer: XX - XX	Serial: XX - XXXXXXXX	
	Văc: XXX - XXXv	Hz: 50/60	A: X.X
			
<small>CLASSIFIED BANK EQUIPMENT CLASSIFIED BY UNDERWRITERS LABORATORIES INC. AS TO ELECTRICAL FIRE, SHOCK AND CASUALTY HAZARDS ONLY. 583R</small>	LR32207	ACN 000 003 592	
Manufactured: Xxxxxx XXXX			
<b>Electromagnetic Compatibility</b> 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.			
<hr/> This apparatus does not exceed Class A limits for radio noise emissions set out in the Radio Interference Regulations of Canada. <hr/> 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 <hr/>			
Complies with FDA Radiation Performance Standards, 21 CFR Subchapter J			

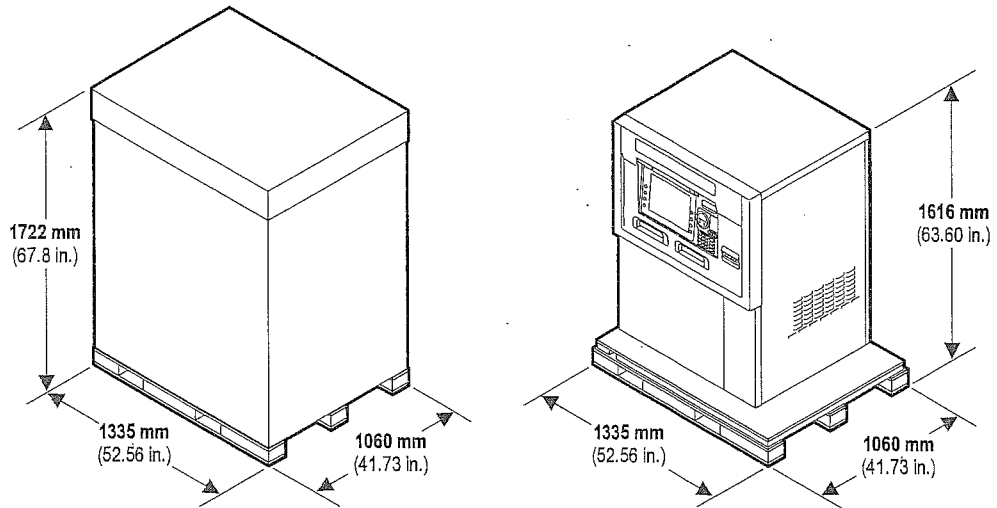
## Base Insulation Sheet

The ATM sits on a supplied base insulation sheet which compresses to **9.0 mm** (0.35 in.) after installation.



## PACKAGE DIMENSIONS

The dimensions of a packaged ATM, with and without carton, are shown in the following illustration.



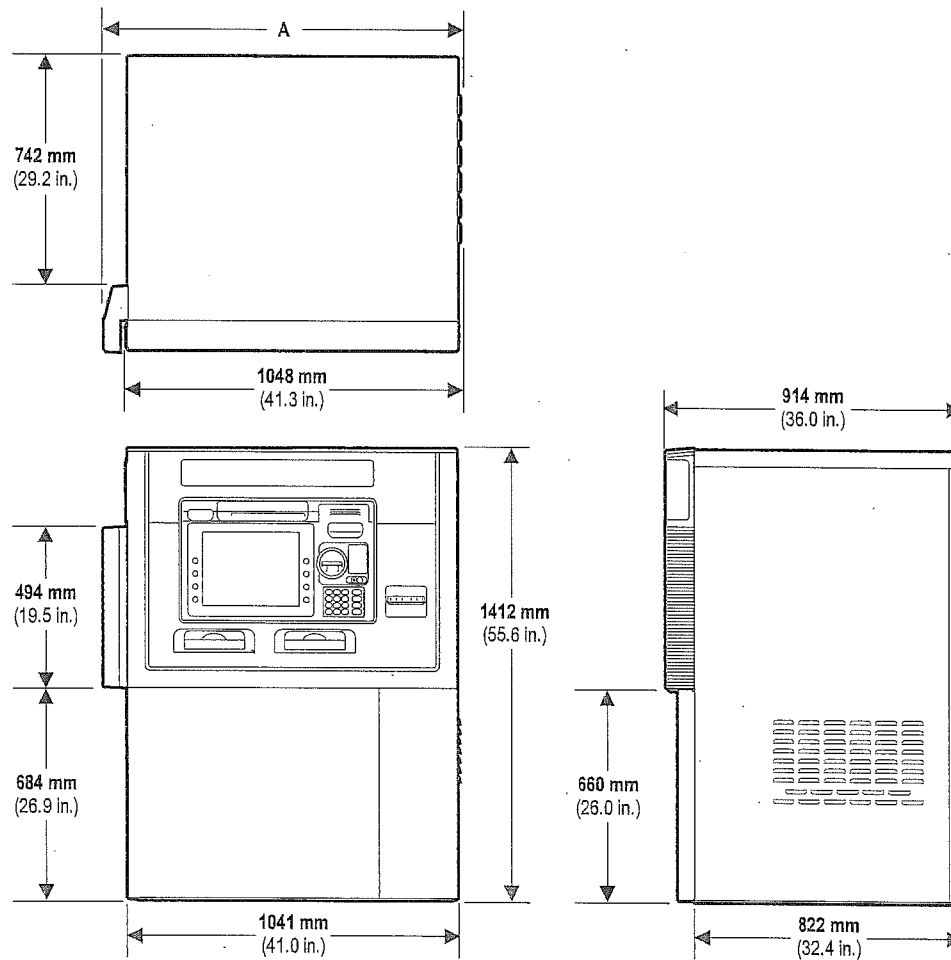
## ATM DIMENSIONS

### ATM without Air Conditioning Unit

The illustration below shows the dimensions for an ATM without the optional air conditioning unit.

**Note 1:** All height dimensions include the compressed base insulation sheet (9.0 mm (0.35 in.)).

**Note 2:** Overall width dimensions include air vents and fascia.

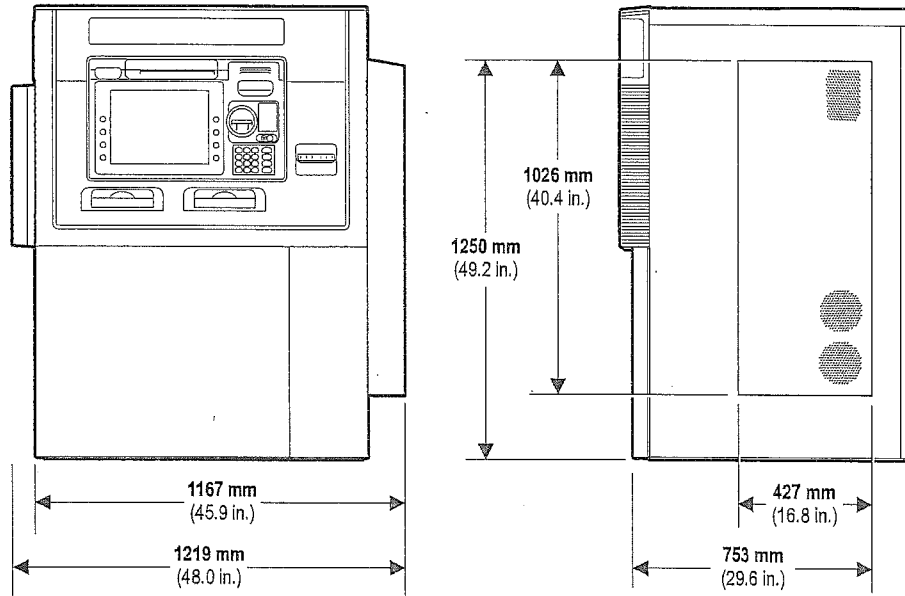


	UL	CEN Grade L
A	1100 mm (43.3 in.)	1106 mm (43.5 in.)

## ATM with Air Conditioning Unit

The illustration below shows the dimensions of the ATM with the optional air conditioning unit.

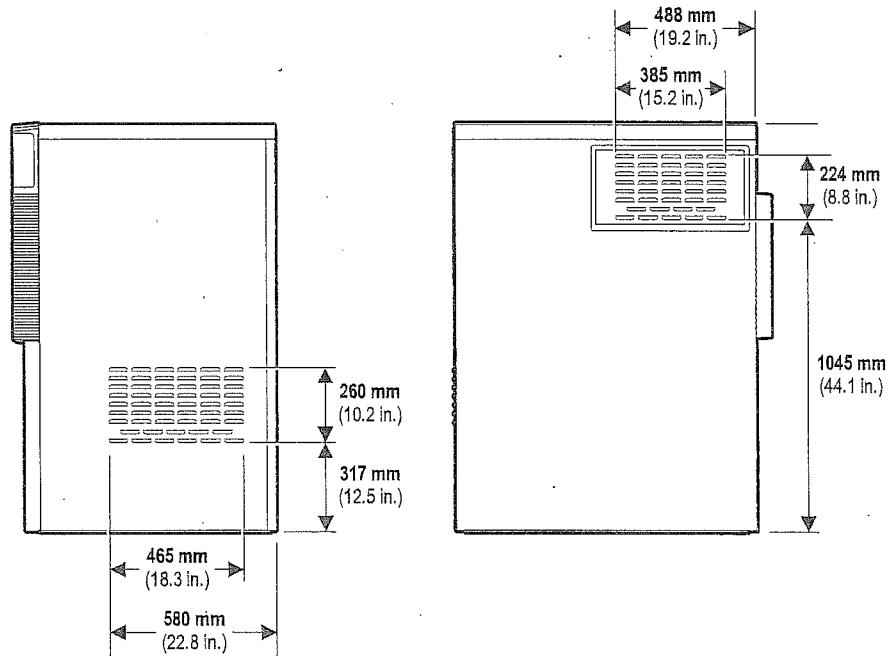
**Note:** All height dimensions include the compressed base insulation sheet (9.0 mm (0.35 in.)).



## Vent Locations - Air Flow

Unrestricted air flow is required on the right hand side and at the rear of the ATM. There must be no obstruction of the vents at any time. If a third-party surround/topper is fitted then equivalent venting, or a hot air extraction system installed within the surround, is mandatory.

**Note:** All height dimensions include the compressed base insulation sheet (9.0 mm (0.35 in.)).














## ACCESS FOR ALL






The ATM has been designed to comply with accessibility guidelines and legislation relevant to drive-up ATMs. In addition, the interface depth on this product has been minimised to improve reach for all users. Accessibility features offered by this product include personal audio with tactile identifier and separate volume control and audio voice guidance (speech output).

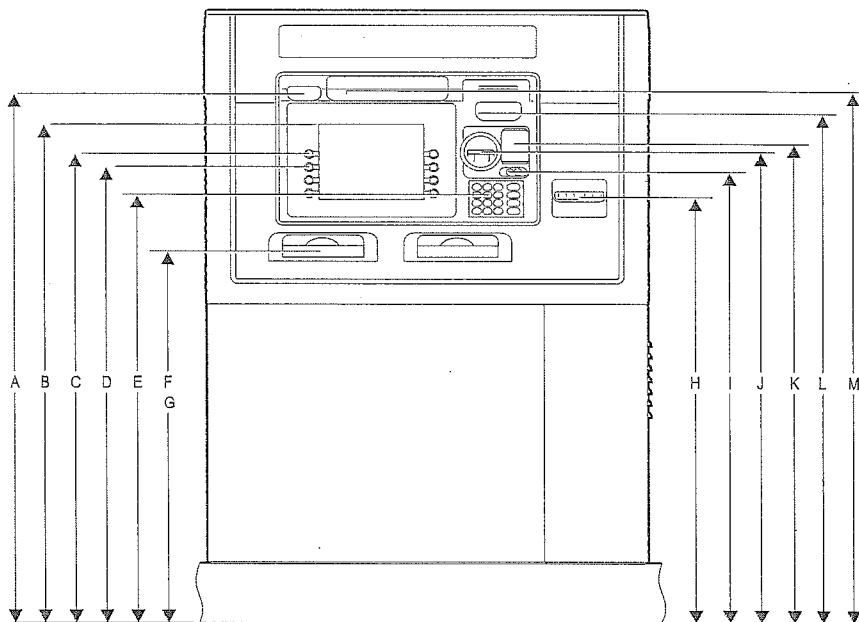
### Height and Depth to Main Facia Items

The following table gives the height and depth to the main facia items located on the facia. All the height dimensions are calculated from the road surface, are based on an island height of **152 mm** (6.0 in.) and include the compressed base insulation sheet (**9.0 mm** (0.35 in.)).

	Facia Item	Height (from road level)	Depth (from front of facia)
A	 Camera	<b>1366 mm</b> (53.8 in.)	<b>32 mm</b> (1.2 in.)
B	 <b>381 mm</b> (15.0 in.) Touchscreen Display	<b>1305 mm</b> (51.4 in.)	<b>51 mm</b> (2.0 in.)
	 <b>307 mm</b> (12.1 in.) Touchscreen Display	<b>1279 mm</b> (50.4 in.)	<b>49 mm</b> (1.9 in.)
C	 <b>381 mm</b> (15.0 in.) Display - 1st FDK	<b>1216 mm</b> (47.9 in.)	<b>33 mm</b> (1.3 in.)
	 <b>307 mm</b> (12.1 in.) Display - 1st FDK	<b>1204 mm</b> (47.4 in.)	<b>33 mm</b> (1.3 in.)
D	 <b>381 mm</b> (15.0 in.) Display - 2nd FDK	<b>1176 mm</b> (46.3 in.)	<b>29 mm</b> (1.2 in.)
	 <b>307 mm</b> (12.1 in.) Display - 2nd FDK	<b>1170 mm</b> (46.1 in.)	<b>29 mm</b> (1.2 in.)
E	 No. 5 Key	<b>1099 mm</b> (43.3 in.)	<b>25 mm</b> (1.0 in.)
F	 Cash Exit or Entry	<b>955 mm</b> (37.6 in.)	<b>32 mm</b> (1.3 in.)
G	 Envelope Exit or Entry	<b>955 mm</b> (37.6 in.)	<b>32 mm</b> (1.3 in.)
H	 Cheque Entry	<b>1090 mm</b> (42.9 in.)	<b>32 mm</b> (1.3 in.)

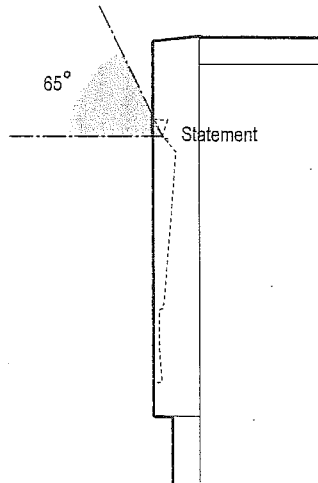
**NCR SelfServ 38 ATIM Site Preparation**

I		Audio Jack Plug	<b>1158 mm</b> (45.6 in.)	<b>36 mm</b> (1.4 in.)
J		Card Reader	<b>1209 mm</b> (47.6 in.)	<b>31 mm</b> (1.2 in.)
K		Contactless Card Reader	<b>1228 mm</b> (48.3 in.)	<b>22 mm</b> (0.9 in.)
L		Receipt	<b>1307 mm</b> (51.5 in.)	<b>31 mm</b> (1.2 in.)
M		Statement Exit	<b>1363 mm</b> (53.7 in.)	<b>22 mm</b> (0.9 in.)

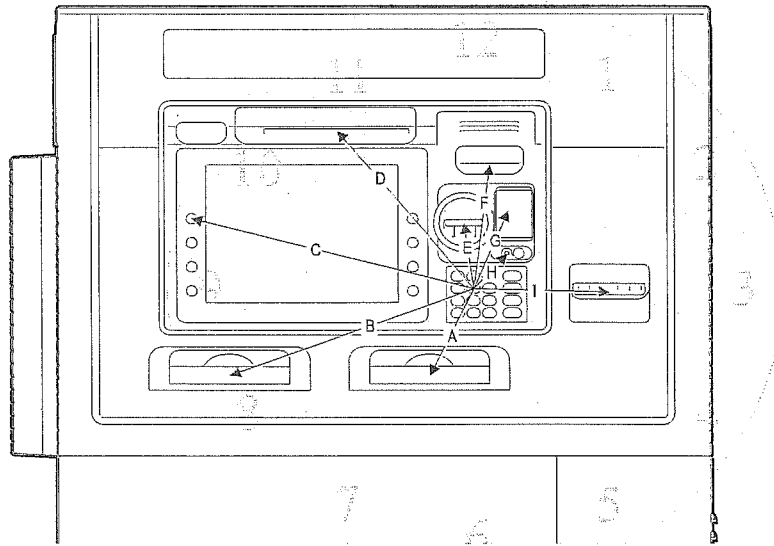


### **Topmost Viewable Facia Item**

The following illustration shows the projected angle from the front of the ATM facia to the topmost viewable facia item.



## Facia Item Locations for Voice Guidance



Facia Item	Distance from No. 5 Key	Clock Face Position	
A	Cash Exit and/or Entry or Envelope Exit and/or Entry	162 mm (6.4 in.)	7
B	Cash Exit and/or Entry or Envelope Exit and/or Entry	418 mm (16.5 in.)	8
C	381 mm (15.0 in.) Display - Top left-hand FDK	466 mm (18.3 in.)	9
	307 mm (12.1 in.) Display - Top left-hand FDK	435 mm (17.1 in.)	9
D	Statement Exit	343 mm (13.5 in.)	11
E	Card Reader	111 mm (4.4 in.)	12
F	Receipt Exit	209 mm (8.2 in.)	12
G	Contactless Card Reader	141 mm (5.5 in.)	1
H	Audio Jack Plug	79 mm (3.1 in.)	1
I	Cheque Entry	217 mm (8.5 in.)	3



## **Task Lighting**

A minimum of 200 LUX is required for task lighting.

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## **INSTALLATION AND SERVICE CLEARANCES**

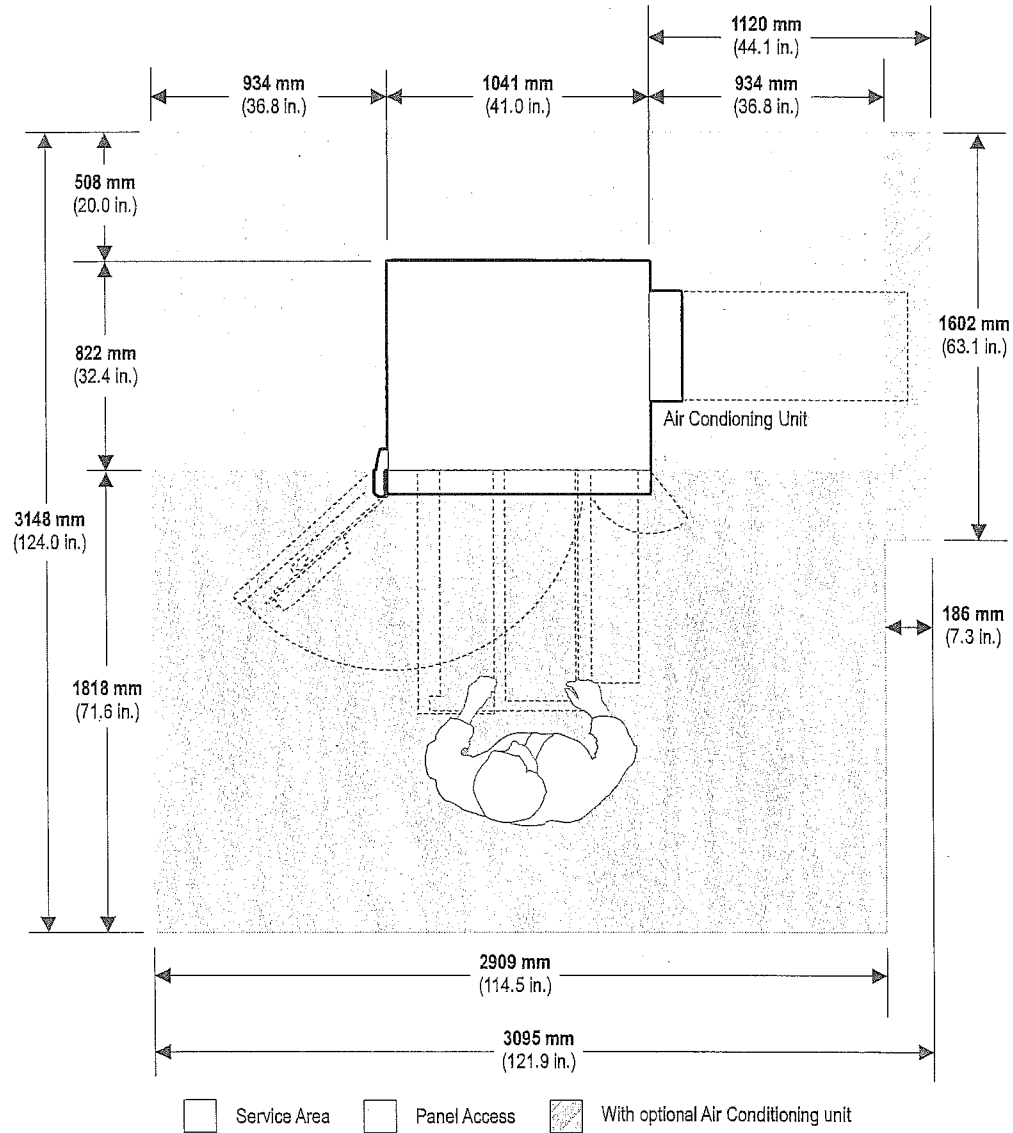
The illustrations in this section show the **optimum** and **minimum** areas required for installing and servicing the ATM.

### **Important Notice to Users**

If it is likely that the ATM will be upgraded with new modules as they become available, you should use the optimum clearances.

## Recommended Clearance

The illustration below shows the **optimum** clearance dimensions.



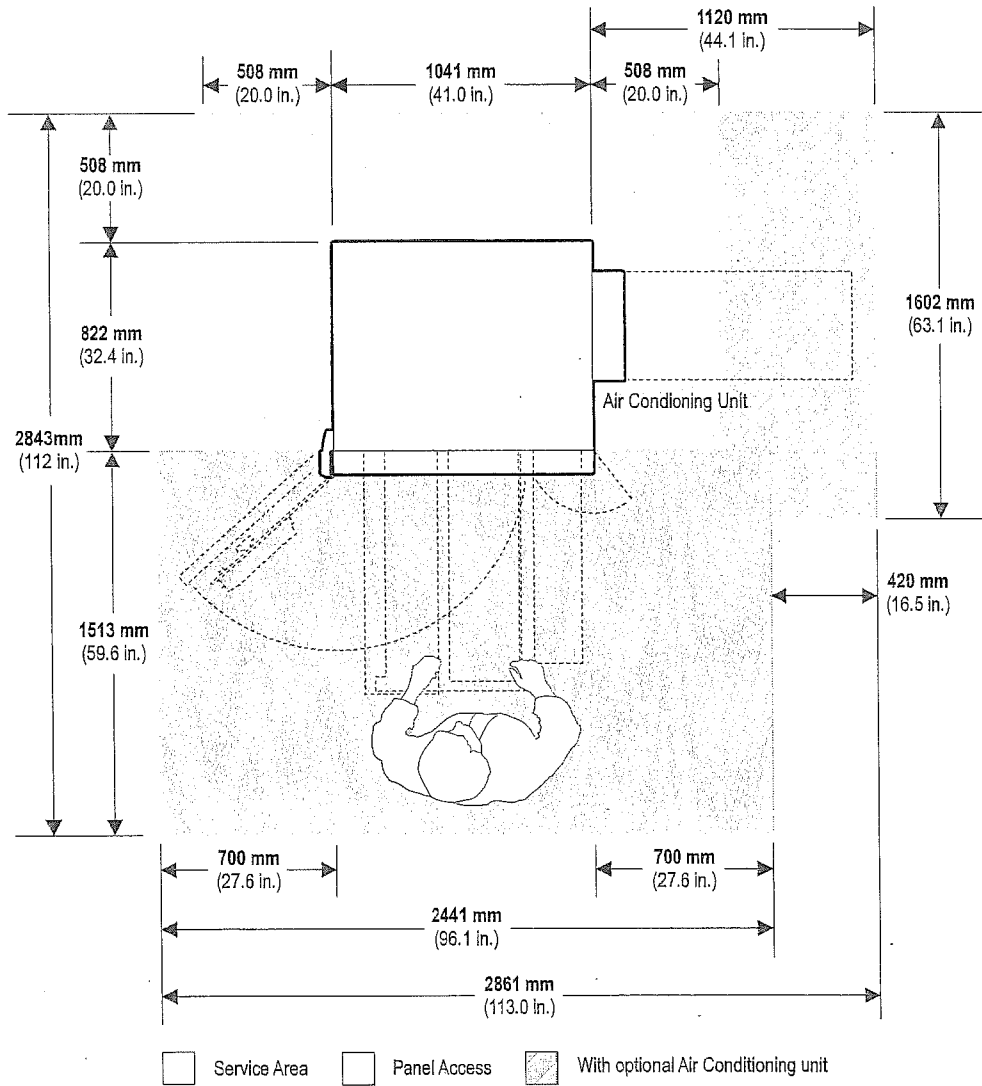
**Note 1:** If anti-theft bollards are to be fitted there must be a minimum gap of **60 mm** (2.36 in.) between the ATM and the bollard for panel access.

**Note 2:** Do not obstruct access to the air conditioning unit (if fitted).

## Minimum Clearance

The illustration below shows the **minimum** clearance dimensions.

**Note:** The minimum clearance is not the preferred NCR service clearance. Installing with minimum clearance will impact the ability to perform the published service, and upgrading tasks, in the expected time.

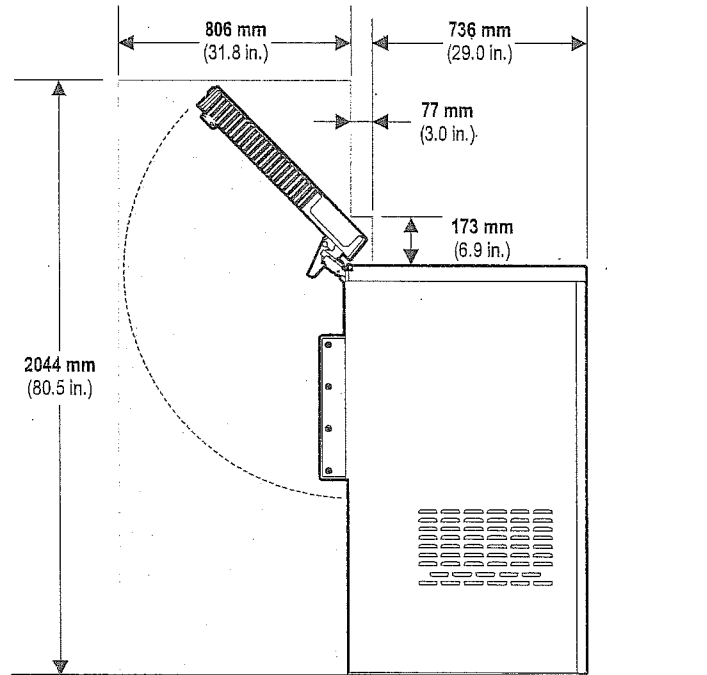


**Note 1:** If anti-theft bollards are to be fitted there must be a minimum gap of **60 mm** (2.36 in.) between the ATM and the bollard for panel access.

**Note 2:** Do not obstruct access to the air conditioning unit (if fitted).

## Facia Opening Clearance

The illustration below shows the clearance required to open the facia.



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## REQUIREMENTS FOR THE ISLAND

The ATM is designed for installation on a concrete island. It can be installed onto an existing NCR or non-NCR island with no reworking of the island required. The island should be level and even.

### Location

The ATM should not be located in a position where bright sunlight would fall directly on the ATM display.

### CAUTION

The ATM is designed to withstand exposure to rainfall. However it must not be located where it may be exposed to water spray, for example, from vehicles driving through puddles.

### Floor Loading

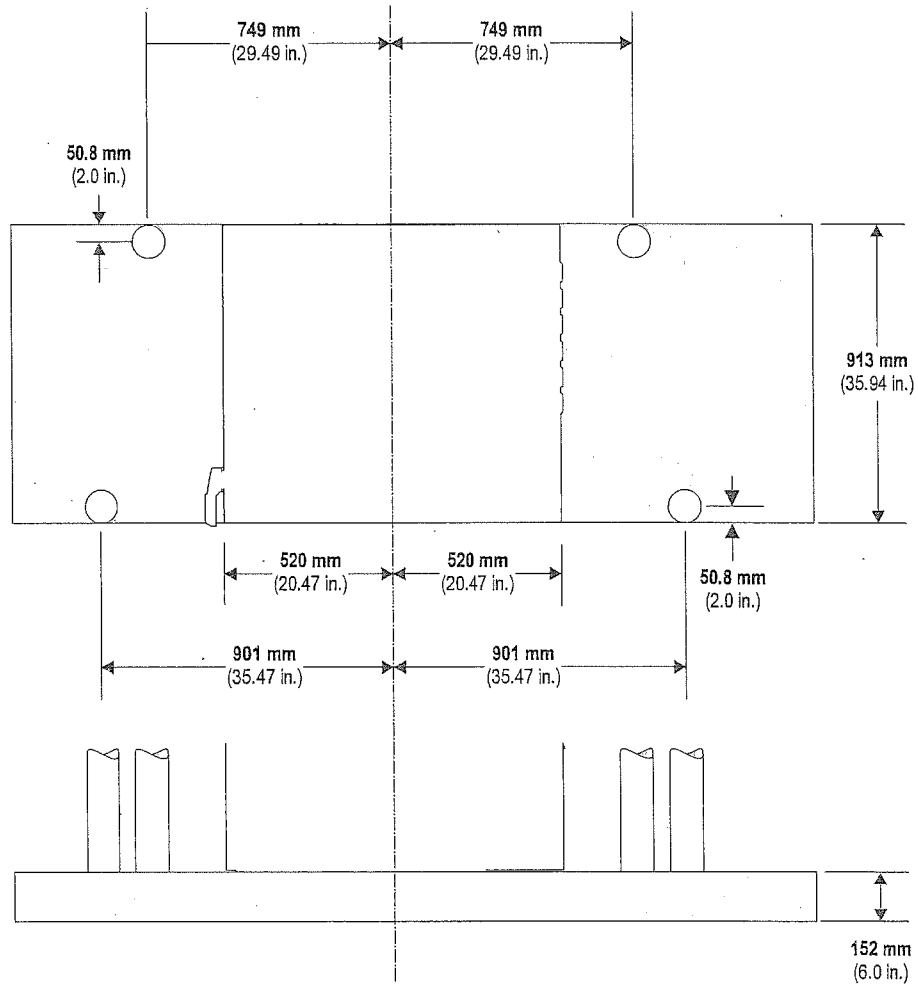
The ATM must be installed on an island, or base, capable of supporting the maximum weight. Only the maximum weight should be considered as additional options may be added after installation.

**Note:** The floor loading is calculated by dividing the maximum weight of the ATM by the surface area of the ATM base in contact with the floor.

	UL	CEN Grade I
Maximum weight	990 kg (2183 lb.)	1075 kg (2371 lb.)
Floor loading	1268 kg/m <sup>2</sup> (260 lb./ft <sup>2</sup> )	1377 kg/m <sup>2</sup> (282 lb./ft <sup>2</sup> )

## Island Dimensions and Bollard Locations

The illustration below shows the dimensions for the minimum island size. The front of the facia is aligned to the front of the island.



When fitting bollards, it is recommended that the rear bollards are **102 mm** (4.0 in.) in diameter, and positioned in line with the rear of the ATM. It is also recommended that the front bollards are **102 mm** (4.0 in.) in diameter and positioned as near to the curb as possible without overhanging the edge.

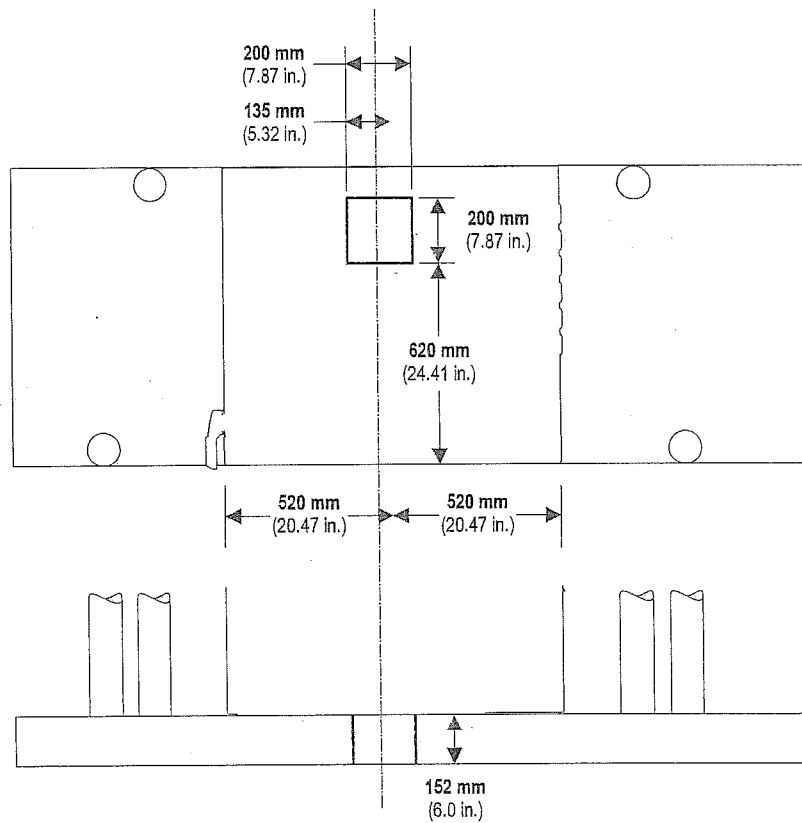
**Note:** When locating the bollards allow sufficient working space for servicing the air conditioning unit (if fitted).

## Cable Entry Island Conduit Hole

Cables enter the ATM through a hole in the base of the security enclosure. There should be a conduit hole in the island of sufficient size to allow the cables to be coiled ready to be brought into the security enclosure.

Make sure that the island conduit hole is free from any material that may impede the cables. The hole should not be sealed or filled with concrete.

The illustration below shows the minimum recommended dimensions of the island conduit hole.



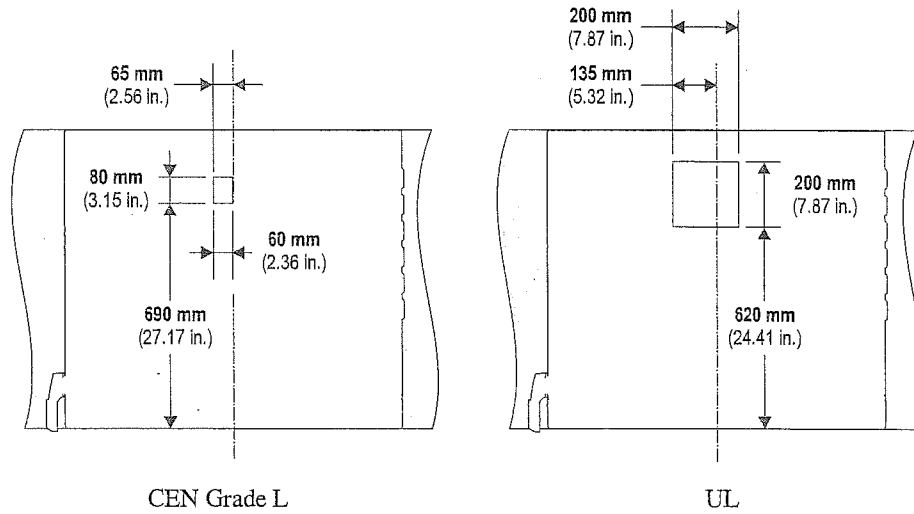
**Note 1:** The actual conduit hole may be larger than the that shown depending on the installation. Refer to "Cable Entry Hole Locations" on page 21 if specifying a larger hole.

**Note 2:** Distribution boxes and any power and wiring conduits must not protrude above the surface of the island.



## Cable Entry Hole Locations

The illustration below shows the size and location of the cable entry holes in the base of the security enclosure.

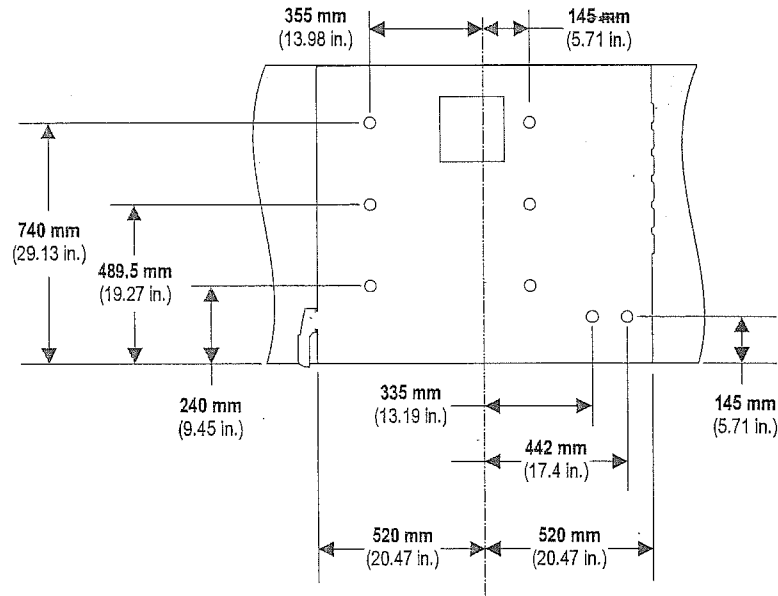


## Anti-theft Bollards

If anti-theft bollards (also known as anti lassoing bollards) are to be fitted there must be a minimum gap of 60 mm (2.36 in.) between the ATM and the bollard for panel access.

## Bolt Hole Locations

The illustration below shows the location of the security enclosure bolt holes.



## Security Bolts

To meet security standards the ATM must be bolted to the island, or base, using eight bolts with anchor washers as specified below. The floor must be capable of withstanding the loading imposed by the anchor points for the bolts. Bolts and anchor washers are to be supplied by the owning organisation.

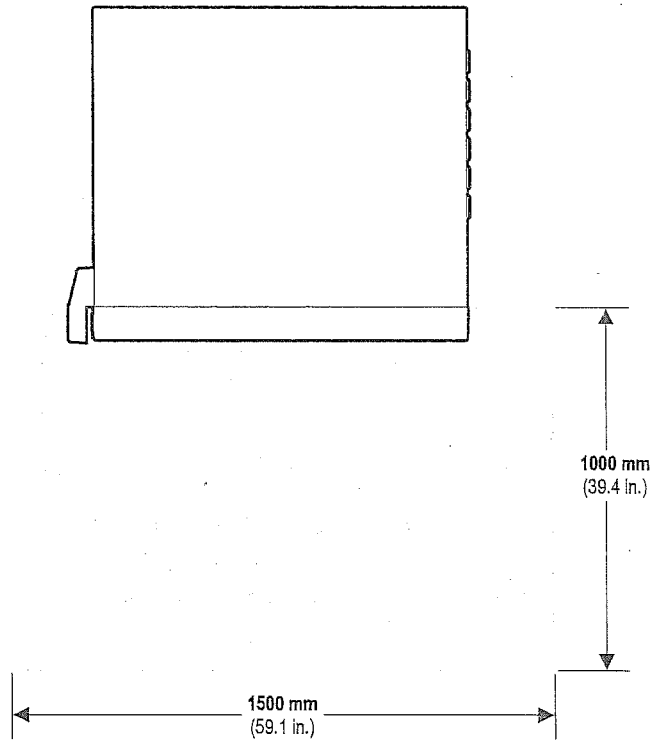
The minimum specification for bolts to secure the ATM to a concrete island, or base, and meet security standards, is high tensile **M16** (5/8 in.) bolts with appropriate anchor washers of **6 mm** (0.2 in.) minimum thickness. Bolts should be a minimum depth of **150 mm** (5.9 in.) and either resin anchor bolts or shield anchor type bolts.

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## CAMERA

### Ambient Lighting

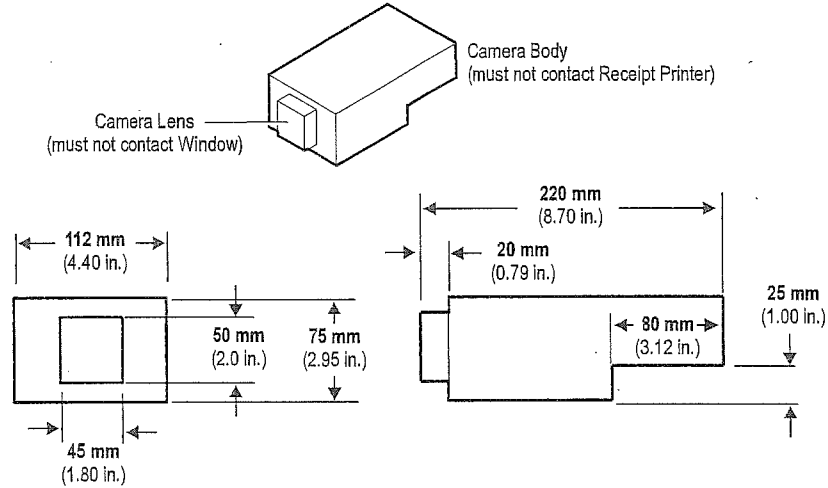
If the ATM is fitted with a camera, it is strongly recommended that there is a minimum of 50 LUX lighting at floor level within the area illustrated below.



## Internal Space Constraint for Fitting a Third-Party Camera

If a third-party camera is to be installed, there is a space constraint to consider. The following illustration shows the space constraint dimensions.

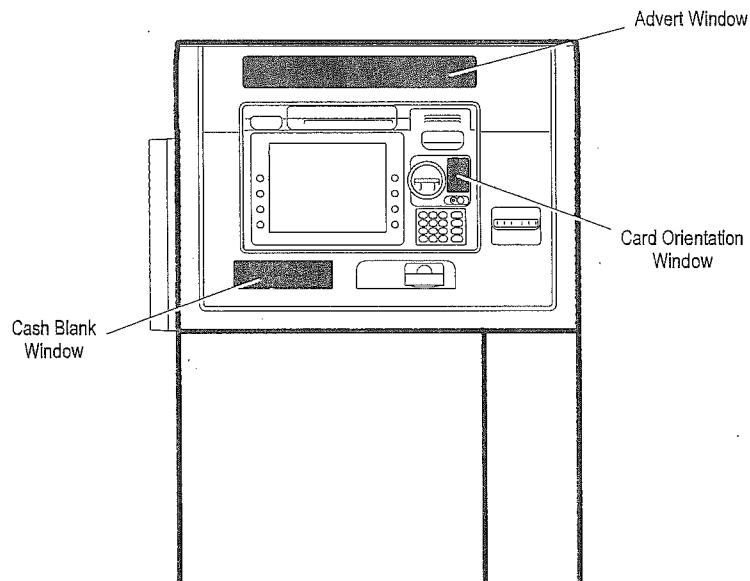
A list of cameras that will fit within this space constraint can be found in the *ATMs Feature Descriptions* (B006-6584) book.



**Note:** When installing the camera cables, follow the same route as the main harness. Ensure there are no loose cables and that all modules are free to rack in and out. Secure the camera cables with cable ties - Do NOT over tighten.

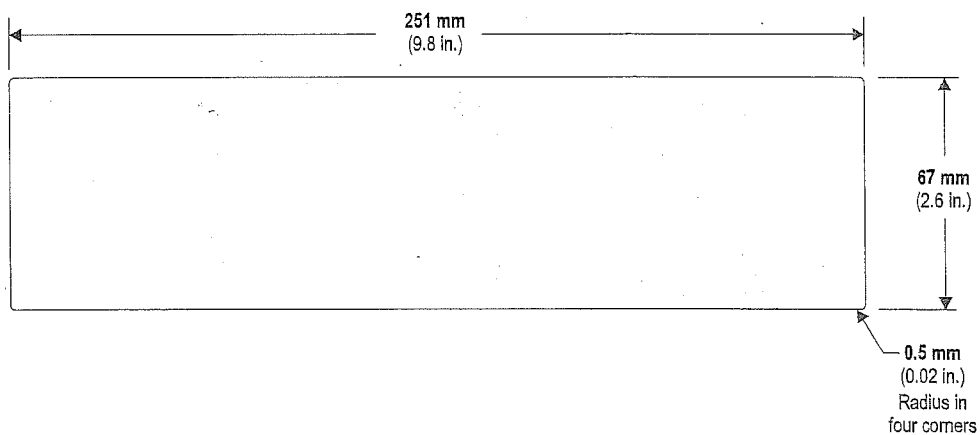
## DECALS

Decals can be fitted to the advert window, card orientation window and the entry/exit slots using the following specifications.



### Cash Blank Window

A cash exit blank is available and a decal, of the following dimensions, can be placed behind it.

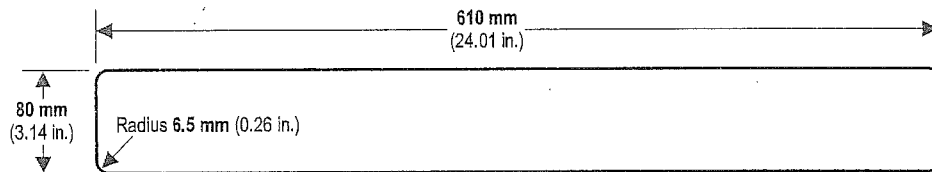


The card/decal should be a maximum of **0.75 mm** (0.029 in.) thick.

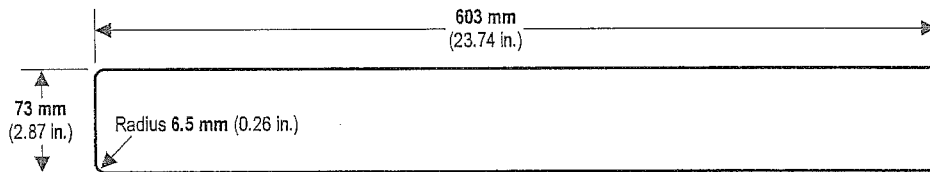
## Advert Window

The following illustrations show dimensions for an advert decal that can be placed on the front or the inside of the window, depending on whether the window is opaque or clear.

### Opaque Window



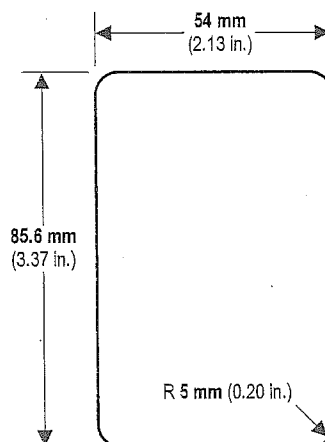
### Clear Window



**Note:** This advert decal window can be illuminated from behind.

## Card Orientation Window

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



The card/decal should be a maximum of **0.75 mm** (0.029 in.) thick.

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**Note 1:** An industry standard credit card can be placed behind the card orientation window.

**Note 2:** Not suitable for use with the contactless card reader.

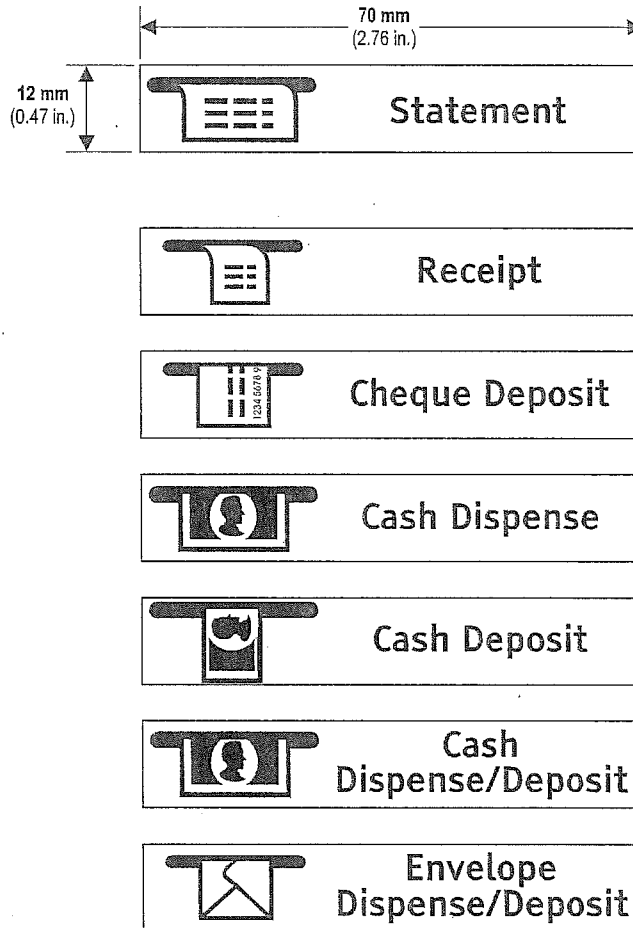
## Entry/Exit Decals

### Decal Design

The decals should be a maximum of **0.5 mm** (0.02 in.) thick and it is recommended that they be made from textured polycarbonate with 3M 467 High Performance MP adhesive.

Decals should provide good contrast of at least 70% between foreground (text/icon) and background. A sans serif typeface should be used (Tiresias is recommended). The text size should be at least 14 point, and larger where possible. Where tactile decals are required they should be designed in line with specific country requirements.

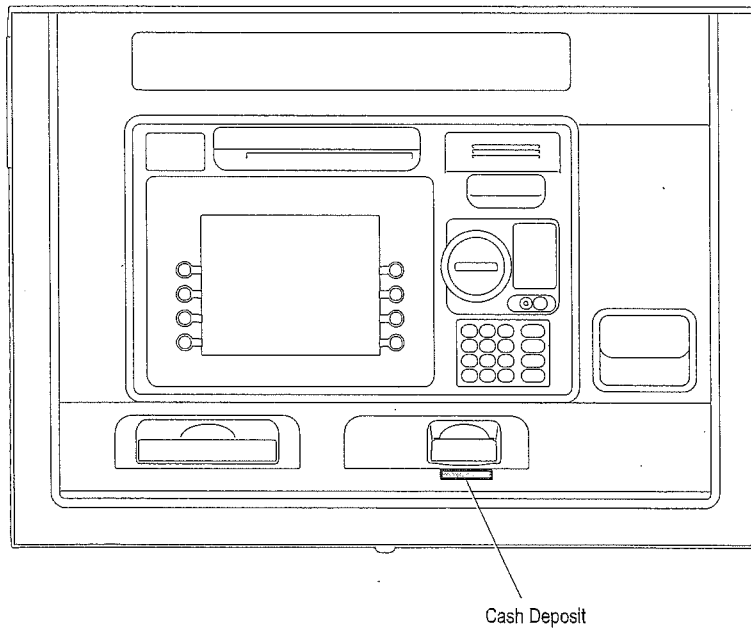
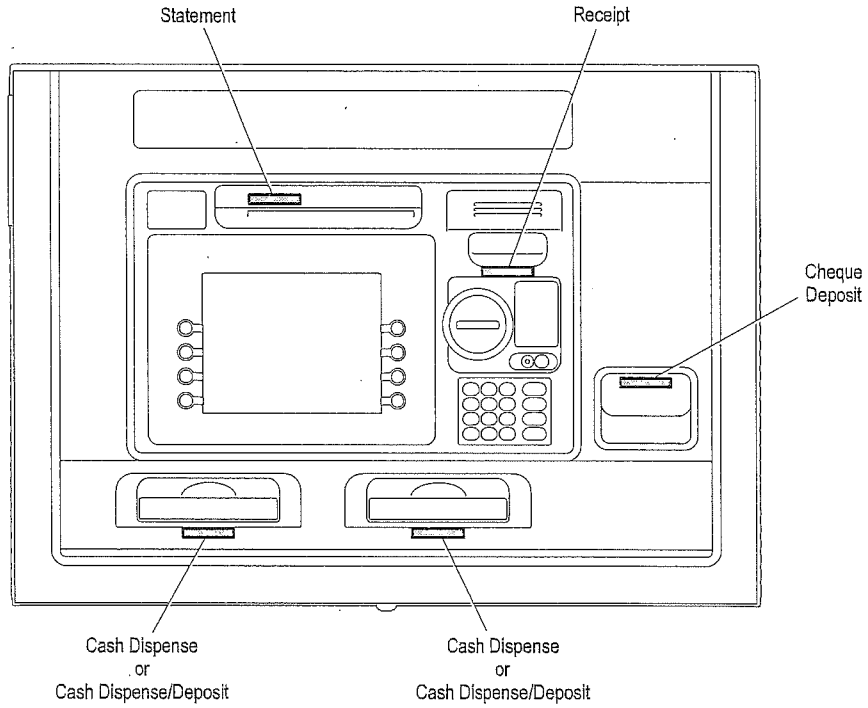
Suggested icon designs and wording are illustrated below:





## Decal Placement

The recommended placement of the decals is above or below the entry/exit slots, determined by the space available near the slot.



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