

Airport Standards Manual for Pedestrian Signing & Wayfinding

John F. Kennedy International Airport
Newark Liberty International Airport
LaGuardia Airport
Stewart International Airport
Teterboro Airport

Published by

The Port Authority of New York & New Jersey
Aviation Department
225 Park Avenue South, 9th Floor
New York, New York 10003

Prepared by

The Port Authority of New York & New Jersey, Aviation Department and Engineering Department
CDM Smith, Pittsburgh, Pennsylvania
Signs are based on research and recommendations of Bureau Mijksenaar, Amsterdam, The Netherlands

Copyright © 2013 The Port Authority of New York & New Jersey

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or database, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of The Port Authority of New York & New Jersey.



- ① OVERVIEW
- ① BASIC ELEMENTS
- ② SIGN TYPES
- ③ PROGRAMMING/PLACEMENT
- ④ NOMENCLATURE
- ⑤ LEGAL
- ⑥ MATERIALS/MAINTENANCE
- ⑦ FACILITIES SPECIFIC GUIDELINES
- ⑧ INDEX

① OVERVIEW

- 0.1 How to use this manual
- 0.2 Color-coding system
- 0.3 Wayfinding identity
- 0.4 Program management

Implementation and management of the sign standards program is outlined in this manual.

With each procedure, there is an explanation of required actions, along with page references for the corresponding data in this manual.

Reading the entire manual will provide an understanding of the principles of the Port Authority Aviation Signing and Wayfinding sign program. This understanding will be helpful in using the information and instructions outlined for each specific sign.

The sections in this manual have been carefully developed, reviewed, and approved for use in all Port Authority Aviation facilities. The purpose of developing a uniform system is to establish a cohesive look for signs at all Port Authority-owned and operated aviation facilities. This system discourages unique and one-of-a-kind type signs. It is important to consult the Port Authority Aviation Sign Program Manager when starting the process of all new terminal signage, adding signage, and/or replacing signage. The following section outlines the implementation process with page references for the various support materials contained in this manual.

Documentation of existing conditions:

1. All signs currently in place must be inventoried and located on a site map. A photograph or CAD drawing(s), showing each sign and its surrounding area, is recommended.
 - Explanation of documentation process: 0.4
 - Sign Inventory Worksheet: 3.11
 - Example of flow of traffic map: 3.20

Preparation of sign plan:

1. Evaluate the data collected to determine required signs, replacement signs, and unnecessary signs.
2. Schedule the removal of existing signs that are unnecessary or the replacement of non-complying signs.
 - The principles and guidelines governing the sign standards program: 3.0
 - Explanation of sign plan process: 5.0 - 5.1
 - Illustrations and descriptions of the signs approved for use: Section 2
 - Sign Inventory Worksheet: 3.11
 - Example of flow of traffic map: 3.20

Implementation of sign plan:

1. Upon approval of the Sign Program Manager, carry out the plan by removing unnecessary signs and replacing non-complying and missing signs.
2. Order and install new signs.
3. Update project sign inventory worksheet and flow of traffic map, as required.
 - Sign order worksheet: 3.11
 - Material specifications: Section 6

Maintenance of sign plan:

1. Inspect the signs on a regular basis to ensure that signs are in place and in good condition.
2. Continue to order and install new signs and replace non-complying signs.
3. Evaluate site conditions continually to determine if new signs are required, or if existing signs are no longer necessary.
4. Review and update project sign inventory worksheet and flow of traffic map annually, or as required.
5. Provide routine maintenance of signs.
 - Explanation of maintenance process: 6.5
 - Maintenance guidelines: 6.5

The airport wayfinding is based on a 'color-coding' system that, with proper support information, can easily be used by passengers and visitors.

Color specifications are located on pages 1.4-1.5.

Yellow Background Signs are used when directing passengers/visitors to flight services, such as ticket counters, baggage claim, and gates.

Green Background Signs are used when directing passengers/visitors to transportation services, such as taxis, buses, courtesy shuttles, and welcome centers that have ground transportation information.

Black Background Signs are used for directing passengers/visitors to services and conveniences, such as restrooms, telephones, elevators, escalators, shops, and restaurants.

Grey Background Signs are used for instructional or informational purposes, such as 'Take AirTrain to:' and general information signs regarding rules, regulations, and policies.

On instructions or directories, two colors of grey can be used to form rows or columns.

All sign layouts in this manual have a minimal grey band around the signs for reference to represent the dark grey sign box retainer frame, even in rare cases, if a sign is frameless.

The grey band around the signs is used to show the surface area for mounting a sign in the sign box. The actual dimensions of the sign must be coordinated with the sign box manufacturer.

This airport has a color coded signing system

Follow yellow signs when flying	Follow black signs for airport services	Follow green signs when leaving the airport
<ul style="list-style-type: none">• Ticketing• Arrivals• Gates• Check-in	<ul style="list-style-type: none">• Restrooms• Escalators• Phones	<ul style="list-style-type: none">• Ground Transportation• Parking

This sign system features its own family of related signs to help passengers easily distinguish all airports operated by the Port Authority. Besides the highly-conspicuous color-coding system for each category of information, these signs are recognizable by their arrow circle that is placed halfway into a grey band. This unique layout provides special emphasis for message direction.



Program management will be the responsibility of those managers assigned to coordinate the sign program at each airport, terminal, and other aviation facilities, as required. These managers will be responsible for the review of the signing process and planning at their respective facilities. The Sign Program Manager in the Directors Office of the Aviation Department of the Port Authority of New York & New Jersey will serve as the lead resource and final approver for all aviation facilities. The Sign Program Manager will also provide oversight of all sign program activities at all Port Authority-owned aviation facilities, including requests for new or replacement signs via Maintenance or Minor Work Application and Tenant Construction or Alteration Applications.

The Port Authority has developed Section 5 to further assist those managers to develop and understand the process, and to submit materials necessary for approval from the Port Authority Aviation Department Sign Program Manager.

The guidelines provided in this manual will be used to implement and maintain a viable sign program at each facility. All new and replacement signs will be designed and placed in accordance with this manual. Existing signs that do not conform to these guidelines should be scheduled for replacement on a priority basis.

For assistance or advice, contact the Port Authority Aviation Department Sign Program Manager:

The Port Authority of New York & New Jersey
225 Park Avenue South, 9th Floor
New York, NY 10003
(212) 435-3793

The current Sign Program Manager is Ms. Earlyne Alexander.

Because technology is constantly improving and the aviation industry is an ever-changing environment, this publication is presented in a three-ring binder, loose-leaf format. Revisions and updated information can be added easily, whenever necessary. Users are encouraged to make recommendations that they feel will improve the overall program effort. All recommendations should be forwarded to the Sign Program Manager at the Port Authority of New York & New Jersey.

① BASIC ELEMENTS

1.0 Type

- 1.1 spacing
- 1.2 letter heights

1.3 Color

- 1.4 palette - wayfinding signs
- 1.5 palette - terminal identification
- 1.6 hierarchy

1.7 Arrows

- 1.8 usage
- 1.9 spacing
- 1.10 - 11 placement
- 1.12 vertical circulation

1.13 Pictograms

- 1.13 general
- 1.14 - 15 transportation
- 1.16 - 20 services
- 1.21 regulatory
- 1.22 accessibility
- 1.23 - 25 parking
- 1.26 customs
- 1.27 enlarged pictogram

1.28 Symbols

- 1.28 usage
- 1.29 terminal identifier
- 1.30 AirTrain

1.31 Layout

- 1.31 overview - message hierarchy
- 1.32 1 line - arrow • pictogram • text relationship
- 1.33 2 lines - arrow • pictogram • text relationship
- 1.34 grey band use
- 1.35 grey band use - pedestrian pictogram use
- 1.36 blank side of signs

The typeface to be used throughout the signing system will be Frutiger. This typeface has been chosen for its optimum readability. Its open form makes it suitable for use on various media, including variable message signs and television monitors.

Two varieties of Frutiger are available:

Frutiger Bold - for light copy on a dark background.

- white on green, blue, and red
- yellow on black

Frutiger PA Bold Plus - for dark copy on a light background

- black on yellow, and grey

The Frutiger PA Bold Plus stroke is slightly heavier (thicker) than the standard Frutiger Bold stroke, so that both light and dark copy appear to have a similar weight.*

* Light copy on a dark background (Frutiger Bold) appears slightly bolder than dark copy on a light background.

By increasing the weight with $\pm 8\%$ of the dark copy (Frutiger PA Bold Plus), this optical illusion is corrected.

Frutiger Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Frutiger PA Bold Plus

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

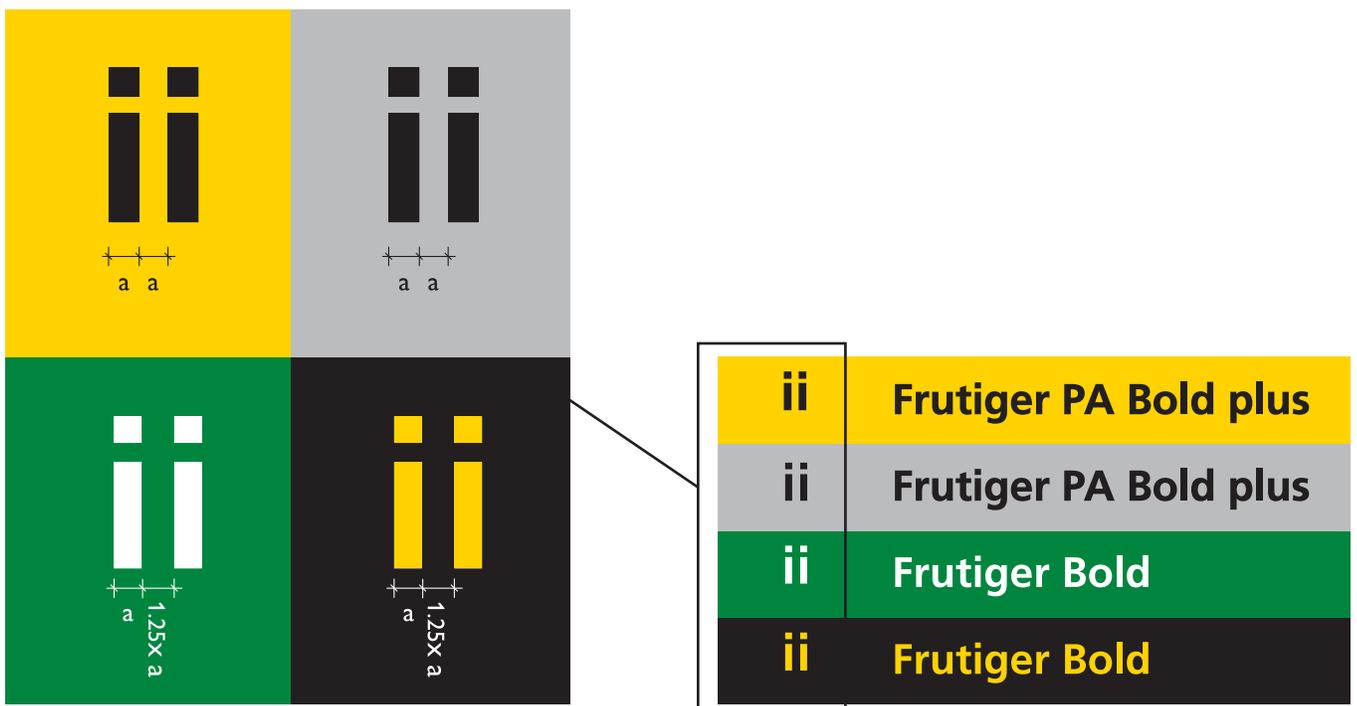
Signing needs a wide spacing to improve readability from long distances.

The spacing guidelines are based on the typeface stroke weight and not on the normal spacing, which layout design software or sign making equipment use, such as plotters and cutters. The spacing can easily be applied in every software program by making a test document with the correct spacing as stated below.

Frutiger Bold and Frutiger PA Bold Plus have their own spacing.

- Frutiger Bold 125 percent spacing
- Frutiger PA Bold Plus 100 percent spacing

(see page 1.0 for definition of Frutiger PA Bold Plus)



Note:
The spacing guidelines only apply for pedestrian signing.

The letter height is based on uppercase letters, such as E. Some letters, like 'k' and all rounded letters/ numbers like '5' and '9', will slightly exceed the guidelines. Standard letter height is 3" (capital/number height) with accompanying pictograms of 6"x 6". These are also the minimum requirements according to the ADA* rules for overhead signs.

For location signs and outdoor signs, larger heights for both letters and pictograms must be used.

For wall-mounted signs, such as directories, maps, door signs, etc., smaller letter heights can be used.

Rule of thumb is a reading distance of 30 feet for each one inch letter height (capitals/numerals).**

If a secondary line of text is needed, such as a bus stop, a slightly smaller letter height (approximately 60%) can be used, making sure it fits within the available space of the 6"x 6" pictogram. If two lines of text are required, a larger pictogram height can be used.

In the case of a series of interrelated signs (curbside bus stops, concourses, etc.), all signs should maintain the same letter height and layout for consistency and clarity.

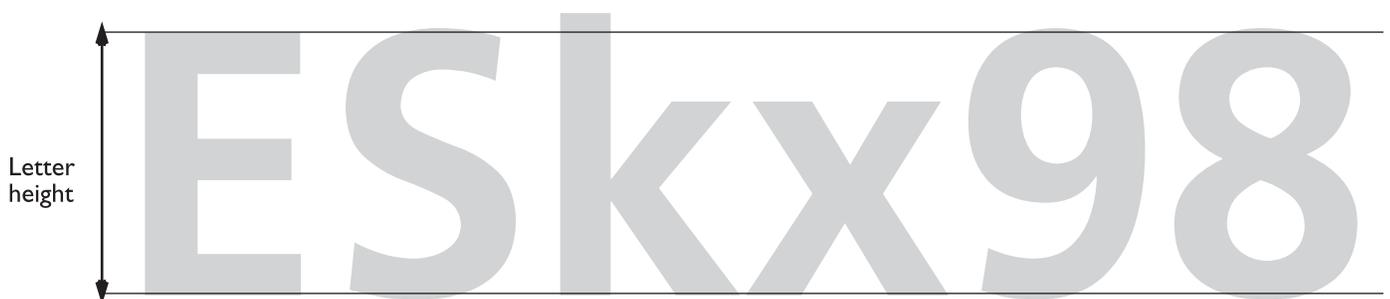
Example of recommended letter heights for signs:

Primary Text	Secondary Text	Pictogram	Reading Distance
3"	1.75"	6"	90'
4"	2.25"	8"	120'
6"	3.5"	12"	180'
8"	4.5"	16"	240'

* Americans with Disabilities Act (see pages 5.12-5.14)

** Rule of thumb is a reading distance of 15 feet reading distance for one inch pictogram height.

For vehicular signage, see Port Authority of New York & New Jersey Airport Roadway Sign Design Manual, January 2013 by the Port Authority of New York & New Jersey Traffic Engineering Department.



light grey (3M 3630-61) yellow (3M 3630-25/75)



light grey (3M 3630-61) green (3M 3630-26)



light grey (3M 3630-61) black (3M 3630-22)



light grey (3M 3630-61) dark grey to match Cool grey 9C (3M 7725-41)



On instructions (maps) or directories, both light grey (PMS Cool Grey 6C, 3M 3630-51) and dark grey (PMS Cool Grey 9C, 3M 7725-41) can be used to form rows or columns.

All sign layouts in this manual have a minimal grey band border on the signs as reference to represent the sign box retainer frame that is the dark grey color (PMS Cool Grey 9C).

Light Grey (3M 3630-61, Cool Grey 6C)

Is used for:

- placement for information and instructions
- the arrow field and arrow alignment
- as a separator for messages
- for alternating lines on a directory

Dark Grey (3M 7725-41, Cool Grey 9C)

Is used for:

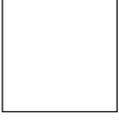
- alternating lines on a directory (see pages 2.21-2.22)
- the sign box and its sign retainer frame

Black text on grey background is now the standard.

When updating or replacing existing signs that use white text on grey backgrounds, black text will be substituted.

The dark grey band border on the signs, as shown in this manual, is used to show the surface area for mounting a sign in the sign box. The actual dimensions of the sign will be coordinated with the sign box manufacturer.

Signs without a physical box, such as special vehicular signs, shall retain the dark grey border.

Color		Use	Film translucent (illuminated signs)	Film opaque	PMS print
Yellow		Flight services Text and pictograms	3M 3630-25 or 75 *	3M 7725-25 or 75 *	116C
Green		Transportation services Pictograms	3M 3630-26	3M 7725-186	356C
Red		Emergency signs Regulatory signs Pictograms	3M 3630-33	3M 7725-13	485C
Black		Services and conveniences Text and pictograms	3M 3630-22	3M 7725-12	Black
White		Text and pictograms Arrow background	3M 3630-20	3M 7725-20	White
Light grey		Instructional signs Informational signs Sign message separator Arrow field and alignment	3M 3630-51	3M 7725-31	Cool Grey 6C
Dark grey		Sign retainer frame Alternating directory lines	-	3M 7725-41	Cool Grey 9C

* Note:

The color yellow has two specifications for translucent and opaque films. Both can be used, with the restriction that the one chosen must be used throughout an entire terminal.

The colors on this page can be used in addition to the color-coding system. They are to be used for accessible pictograms, terminal designations, etc.

Similar color-code colors will be used in other applications, i.e., yellow can be used for the color-code background, and also for JFK Terminal 5 background.

Color		Use	Film translucent	Film opaque	PMS print
Terminal Green		JFK Terminals 1, 2 JFK Green Parking LGA Terminal B EWR Terminal C EWR Parking C	3M 3630-156	CUSTOM 3M COLOR	354C
AirTrain/ Accessible Blue		Accessible pictograms AirTrain JFK AirTrain JFK Federal Circle AirTrain JFK Howard Beach AirTrain JFK Jamaica Station AirTrain JFK Lefferts Blvd	3M 3630-127 or 167 *	3M 7725-17	301C
Terminal Blue		JFK Terminal 4 JFK Blue Parking LGA Terminal A EWR Terminal B EWR Parking B	3M 3630-157	3M 7725-17	286C
Terminal Yellow		JFK Terminal 5 JFK Yellow Parking	3M 3630-25 or 75 *	3M 7725-25 or 75 *	116C
Terminal Orange		JFK Terminal 7 JFK Orange Parking LGA Terminal D	3M 3630-74	3M 7725-54	137C
Terminal Red		JFK Terminal 8 JFK Red Parking LGA Terminal C EWR Terminal A EWR Parking A Regulatory pictograms Safety pictograms	3M 3630-33	3M 7725-13	485C
AirTrain Burgundy		AirTrain Newark	3M 3630-83	3M 7725-63	207C

* Note:

The colors yellow and blue have two specifications for the translucent film. Both can be used with the restriction that the one chosen has to be used throughout an entire terminal. The two colors may not be used next to one another.

Follow the hierarchy of information. Yellow messages will always be at the top or first, followed by green, and then black. If there are no yellow messages, green messages will always go above or before black messages. If there is only one color in the scheme, a determination of the most important message at that decision point must be made.

Guidelines

Examples

Arrows and text are right aligned, encouraging users to keep right at all times. Arrow and text can be left aligned, if the passenger flow should keep to the middle or go to the left.

1. Straight ahead (keep right)



2. Straight ahead (keep left)

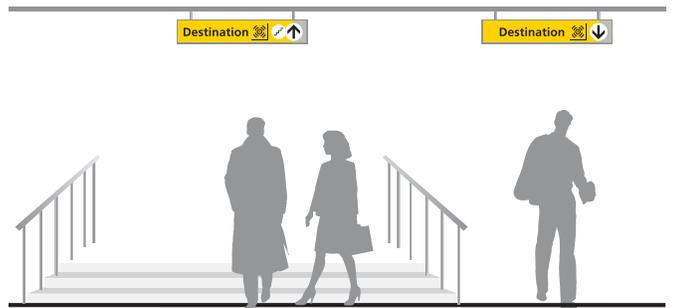


3. Straight ahead (stairs down)

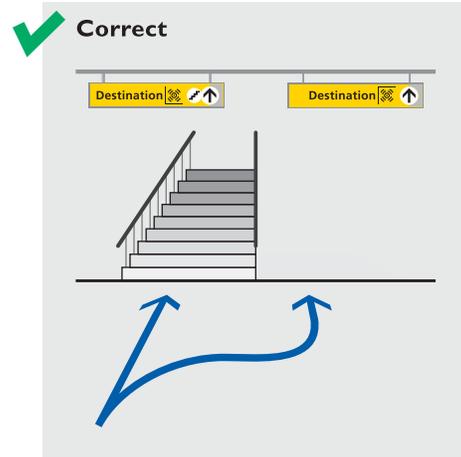
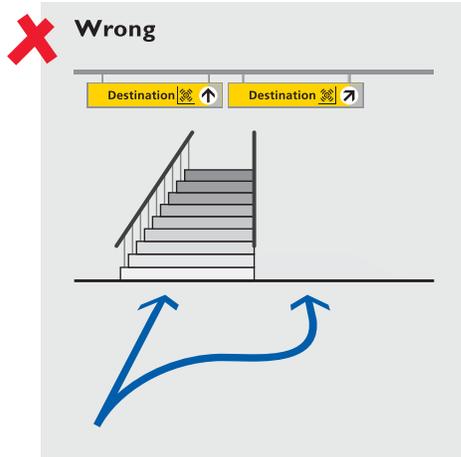


4. Straight ahead, stairs up. (keep left)

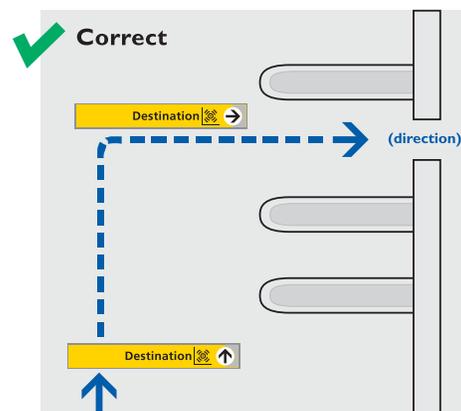
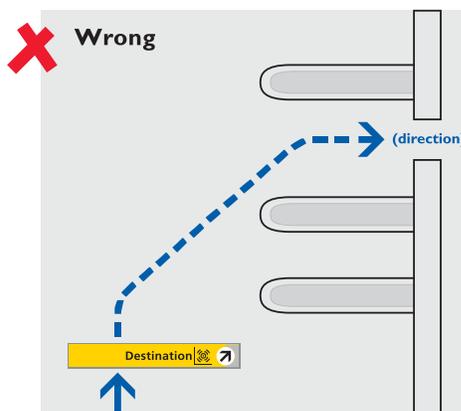
Straight ahead, same level. (keep right)



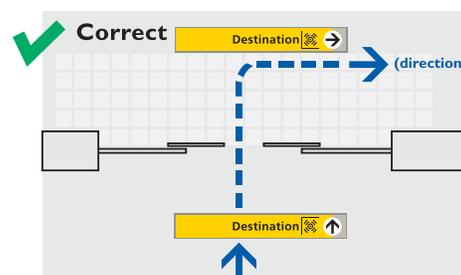
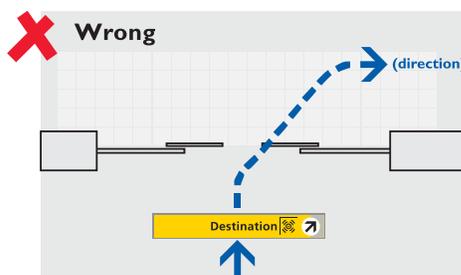
In certain circumstances, an arrow pointing down, indicating 'straight ahead', can be used when there is an upwards vertical circulation nearby.



1. Because slanted arrows meaning 'keep going left/right', they can easily be confused with 'going up' (to a level). This type of arrow should be avoided (* unless absolutely necessary).



2. Never combine two items of routing information on one sign by using a slanted arrow (45°) for continuing straight ahead for a short distance and then turning. In these cases, two signs should be used; one meaning 'straight ahead' and the other, at the decision point, for a right or left direction.



3. A similar situation occurs when a directional sign in front of an exit directs users to a destination point that is beyond the actual exit.

The pedestrian directional arrows shown were designed for maximum legibility under various viewing conditions. The standard black arrow is fixed within a white circle.

The colored background of the sign extends to half of the white circle of the arrow to make the direction more distinctive. The other half has a grey background.

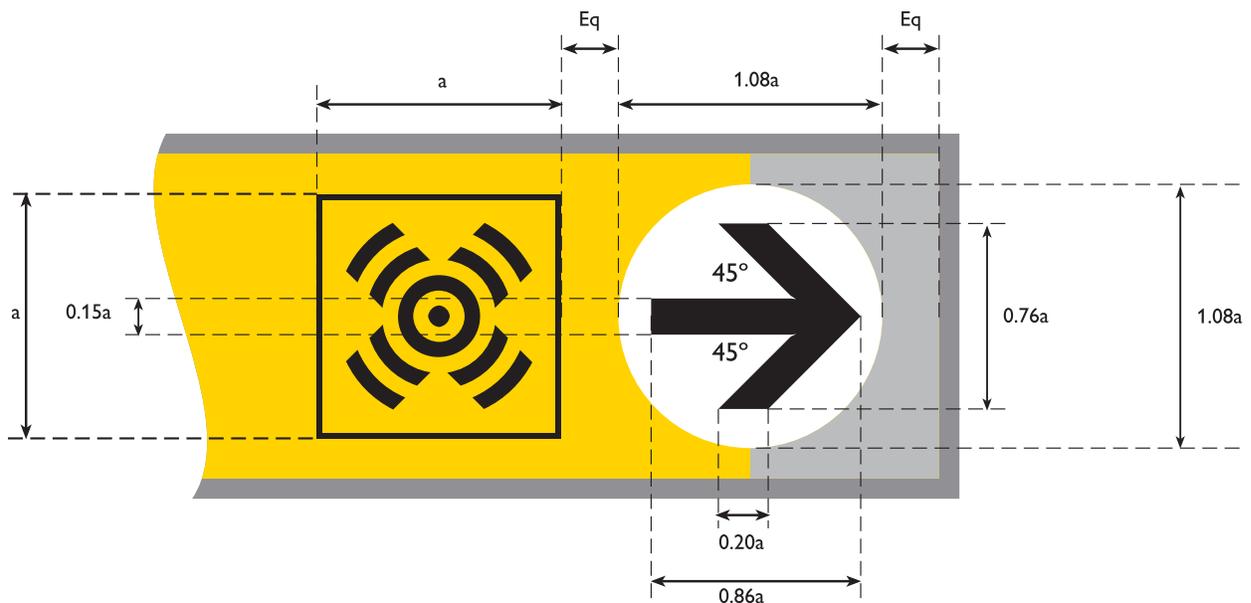
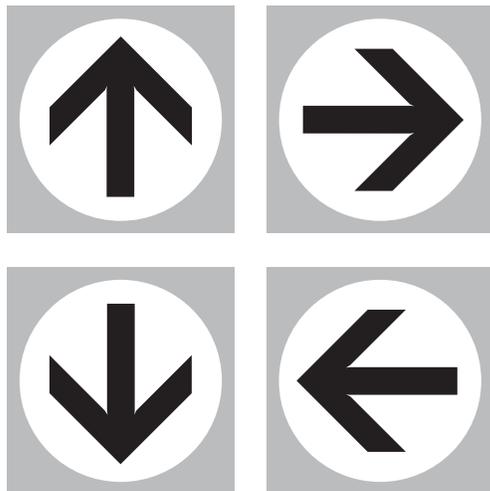
To point the arrow in a direction, the arrow is turned within the circle.

If the indicated direction includes the use of a vertical movement or a moving walkway, the appropriate pictogram in black should be added in a smaller circle, which overlaps the circle of the arrow (see page 1.12).

Sizes of arrows should not vary on the same sign.

The arrow with circle and additional pictograms can be obtained in digital file format from the Port Authority of New York & New Jersey Aviation Department.

Arrows are used to indicate the route towards the destination of the message, not the 'up/down' direction of vertical movement. Therefore, to eliminate confusion, only up, down, left, and right arrows may be used with all applicable sign types and icon use.



a = pictogram height

Layouts are always arranged beginning from the arrow side of the sign.

When the arrow is placed on the right side, the pictogram will be placed left of the arrow, followed by the text.

When the arrow is placed on the left side of the sign, the pictogram will be placed to the right of the arrow, followed by the text.

The arrow is always on the side closest to the destination it is pointing toward.

For consistency, the direction of pictograms should be used as indicated on page 1.9, regardless of the direction of the sign. Only when combined with an arrow can the pictograms for exit and moving walkway be flipped to match the indicated direction.

Special cases

As a rule, an elevator is a service and is signed as such with yellow type on a black background (see examples in the adjoining column). However, if an elevator is located in a direct vertical circulation flow in the terminal to a gate area or to departures, this elevator sign can be made in a yellow background with black type, since it exclusively services departing travelers. Similarly, if an elevator exclusively transports travelers to a transportation service, it can be changed to a green background with white type, since green is the color for transportation. The key is that an exclusive service is color coded to that function.



To the left

Straight ahead

To the right



(Keep to the right)



(Keep to the left)



Via stairs to the left



Via stairs straight ahead



Via stairs to the right



Via escalator to the left



Via escalator straight ahead



Via escalator to the right



Via elevator to the left



Via elevator straight ahead



Via elevator to the right



To the left



To the right



Left to stairs



Right to stairs



Left to escalator



Right to escalator



Left to elevator



Right to elevator



This location below



Via stairs down straight ahead



Via escalator down straight ahead



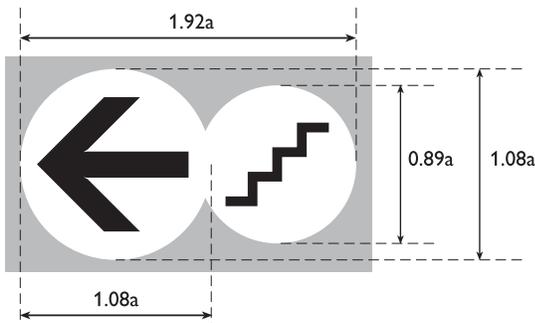
Via elevator down straight ahead



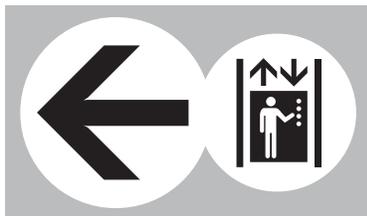
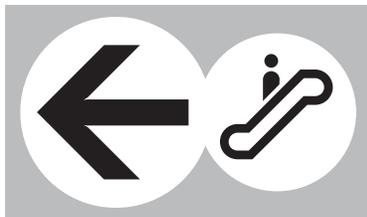
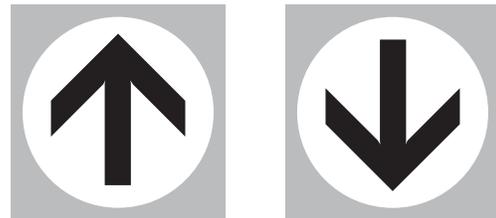
Arrows designating up or down should be accompanied by a pictogram illustrating the means of access, e.g., stairs.

Please note that the Port Authority does not encourage the use of slanted/ diagonal arrows. Directions can easily be marked with a corresponding arrow as shown on page 1.8.

If space is limited for placing a directional arrow at each destination, a single arrow can be used.



a = pictogram height





The pictograms shown in this manual were carefully designed to be easily recognized and understood; they correspond to accepted international standards. This sign system uses pictograms that are based on the standard developed by the U.S. Department of Transportation and the International Standardization Organization (ISO). No pictogram may be altered and/or added without formal approval. A request for a new pictogram must be initiated through the Port Authority Aviation Sign Manager.

6"x 6" is the minimum and standard size for pictograms on overhead signs. Larger sizes can be used for location signs and outdoor use. The rule of thumb of reading distance for a pictogram is 15 feet reading distance for one inch pictogram height. Therefore, a 6"x 6" pictogram can be read at a distance of 90 feet. Text should be used to supplement pictograms for greater clarity.

Pages 1.14 to 1.25 represent the basic set of pictograms to be used for any signage project. More pictograms will be developed, as required.

For consistency, the direction of pictograms should be used as indicated on pages 1.14 to 1.25, regardless of the direction of the sign. Only when combined with an arrow can the 'exit' and 'moving walkway' pictograms be flipped to match the indicated direction.

To produce sign layouts easily, the pictograms are available in electronic format from the Port Authority Aviation Department.

In most sign examples in this manual, the three placeholders shown below are used to represent a pictograms size, location, color, etc.



A pictogram not to be 'mirrored', regardless of the direction.



A pictogram should be 'mirrored', according to the direction.



Combined pictograms





Arrivals



Baggage Claim



Baggage Exam



Connecting Flights



Document Review



Gates/Departures



Terminal/Airport



Ticketing/Check-in



Department of Homeland Security
Customs and Border Protection



Meeter/Greeter
International Arrivals Only



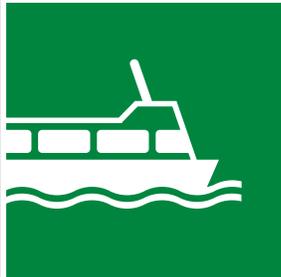
Bus



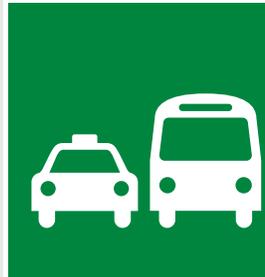
Exit
(International Facility / FIS only)



Exit
(International Facility / FIS only)



Ferry/Water Transport



Ground Transportation



Ground Transportation
Information



Heliport



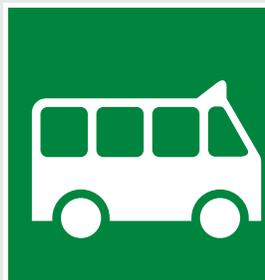
Passenger Pick Up
Passenger Drop Off



Rental Car Information



Rental Cars



Shuttle, Shared Ride Services



Subway



Taxi/Limousine



Train/Rail Transportation



Airline Lounge
(multiple airlines)



Bag Drop-off Area



Baggage Carts



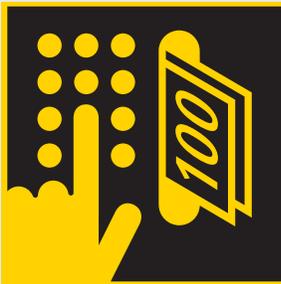
Baggage Service Office



Baggage Storage



Bar/Cocktails



Cash Machine/ATM



Change Machine



Changing Area



Chapel/Meditation



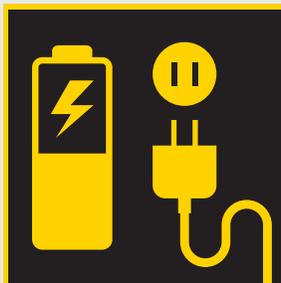
Children Play Area



Coffee Shop/Snack Bar



Currency Exchange



Data/Power Connection



Dentist



Duty Free Shop



Elevator



Elevator Down



Elevator Up



Escalator



Exit



Exit



Family Restroom



Fax/Business Center



Flight Information



Gifts/Books



Help Phone



Hotel Information



Hotel Reservations



Information



Internet Café



Lost and Found



Mail Box/Post Office



Medical Office



Meeter/Greeter



Moving Walkway



Newsstand



Nursery



Oversize Baggage



Pet Relief Area



Recycle



Restaurant



Restrooms



Restrooms Men



Restrooms Men (Accessible)



Restrooms Women



Restrooms Women (Accessible)



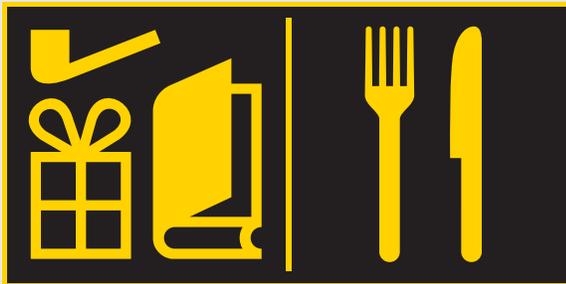
Self Service Bag Tag



Shoe Shine



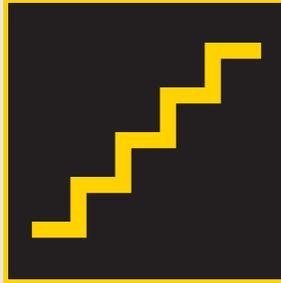
Shops



Shops and Restaurants



Smoking Area



Stairs



Telephone



Trash Disposal



Vending Machine



Waiting Area



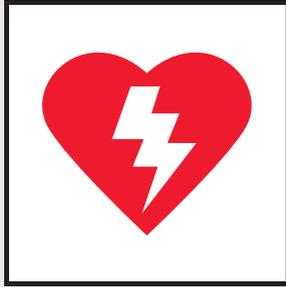
Water Fountain



WiFi



Rental Car Information *
*To be used only above service phones.
Not acceptable on directional signs.



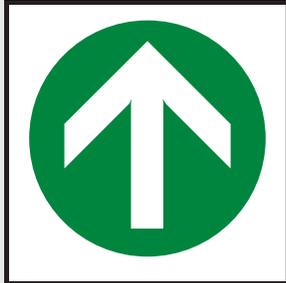
Defibrillator



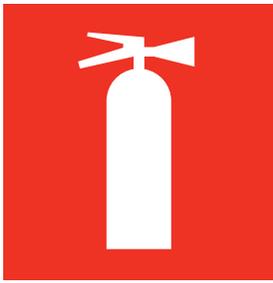
Emergency Exit



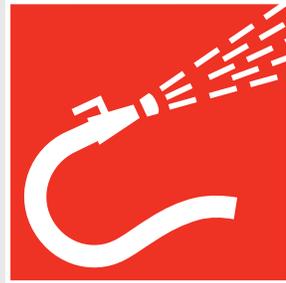
Emergency Exit (alternate)



Entry



Fire Extinguisher



Fire Hose



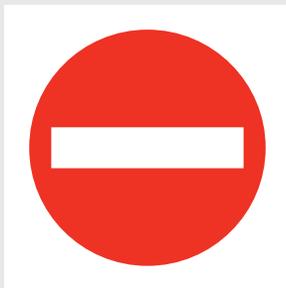
First Aid



In Case of Fire



No Carts



No Entry



No Pets



No Smoking



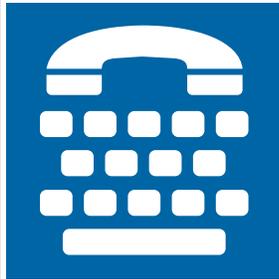
Accessible



Assistive Listening



Assistive Listening-T Coil Area



TDD Telephone



Volume Telephone



Cell Phone Lot



Express Pay Parking



Motorcycle Parking



Parking



Valet Parking

John F. Kennedy International Airport



Green Parking



Blue Parking



Yellow Parking



Orange Parking



Red Parking

LaGuardia Airport (used on roadway signs)

See Port Authority of New York & New Jersey Airport Roadway Sign Design Manual, January 2013 by PA Traffic Engineering Department



Newark Liberty International Airport



A Parking



B Parking



C Parking



(used on roadway signs only - see Port Authority of New York & New Jersey Airport Roadway Sign Design Manual, January 2013 by PA Traffic Engineering Department)



Baggage Carts
(Customs only)



Customs and Border Protection



Exit
(International Facility / FIS only)



No Cell Phones



No Photographs



No Strollers



Please Wait
(Customs only)



United States Department
of Homeland Security

Note: permission must be obtained from the Department of Homeland Security to use this logo. See Section 5 (Legal) for application form.



These flag-mounted signs are used for easy recognition from far distances for common and repetitive airport facilities, such as restrooms, bus stops, etc. The grey band is placed horizontally.

At the actual entrances of these facilities, a similar, but smaller, door sign should be placed. These door signs should comply with ADA regulations. (see pages 5.12 to 5.14)

- Text is uppercase and embossed; letter height is 0.625".

- Additional text in Braille.



extension for additional text lines



ADA wall mounted sign



The symbols shown in this manual were carefully designed to clearly identify airport terminal buildings and the AirTrain JFK and AirTrain Newark services. Requests for new symbols must be initiated through the Port Authority Aviation Sign Manager found on the front page of this manual.

6" x 6" is the minimum, standard size for symbols on overhead signs. Larger sizes can be used for location signs and outdoor use. The rule of thumb of reading distance for a symbol is 15 feet reading distance for one inch symbol height. Therefore a 6" x 6" symbol can be read at a distance of 90 feet. Text should be used to supplement symbols for greater clarity.

Pages 1.28 to 1.29 represent the set of symbols to be used for any signage project. More symbols will be developed as required.

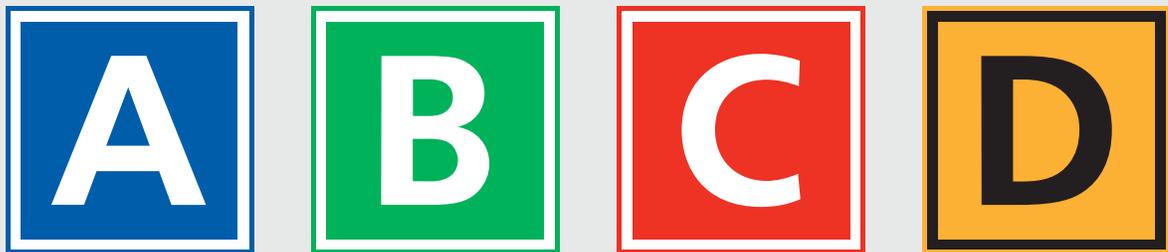
The symbols shown on pages 1.28 to 1.29 are direction neutral and should be used as shown only.

To produce sign layouts easily, the symbols are available in electronic format from the Port Authority Aviation Department.

John F. Kennedy International Airport *



LaGuardia Airport



Newark Liberty International Airport



* Terminals 3 and 6 currently not in use.



For PMS color, use specifications on page 1.5.

In cases of limited width, multiple directions, and/or color-coded categories, messages may be combined vertically in the same sign box, separated by a thin grey line of 0.6" (see page 2.1 for multiple line message allowable heights and widths) (see page 1.6 for color arrangement hierarchy).

While color is the primary factor in determining the placement of messages on a sign face, the directionality of arrows is the next determining factor of message placement on signs:

1. Arrow up 
2. Arrow right 
3. Arrow left 
4. Arrow down 

Next to the arrow, the pictogram of the destination is placed (if applicable), followed by the text.

Signs with arrows placed at the right side of the sign (straight ahead, to the right) will be right aligned and likewise for arrows on the left side of a sign.

Multiple categories



Multiple directions







On both directional and location signs, grey is used to highlight the directional arrow or the location pictogram from the other part of the information. Grey is also used on directories, instructions, etc. The grey color is the most distinguishable element of all Port Authority signs and contributes to the corporate identity of all its airports.





Pedestrian pictogram use

By adding a pictogram of a pedestrian on a sign, it indicates that the information is meant for pedestrians only.

This convention avoids confusion, especially when two signs, one meant for pedestrians and the other for cars, are close to one another.



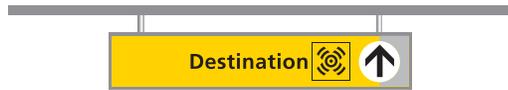
Pedestrians Only



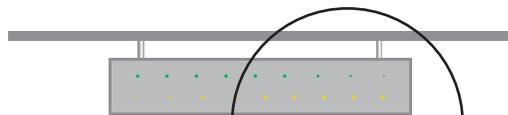
Pedestrians Only

In most cases, signs will be double-sided. Occasionally, signs will be single-sided leaving the opposite side blank. To avoid a dull and unattractive blank side, a neutral pattern may be applied, as shown here. This will help to identify a sign, which has information on the other side.

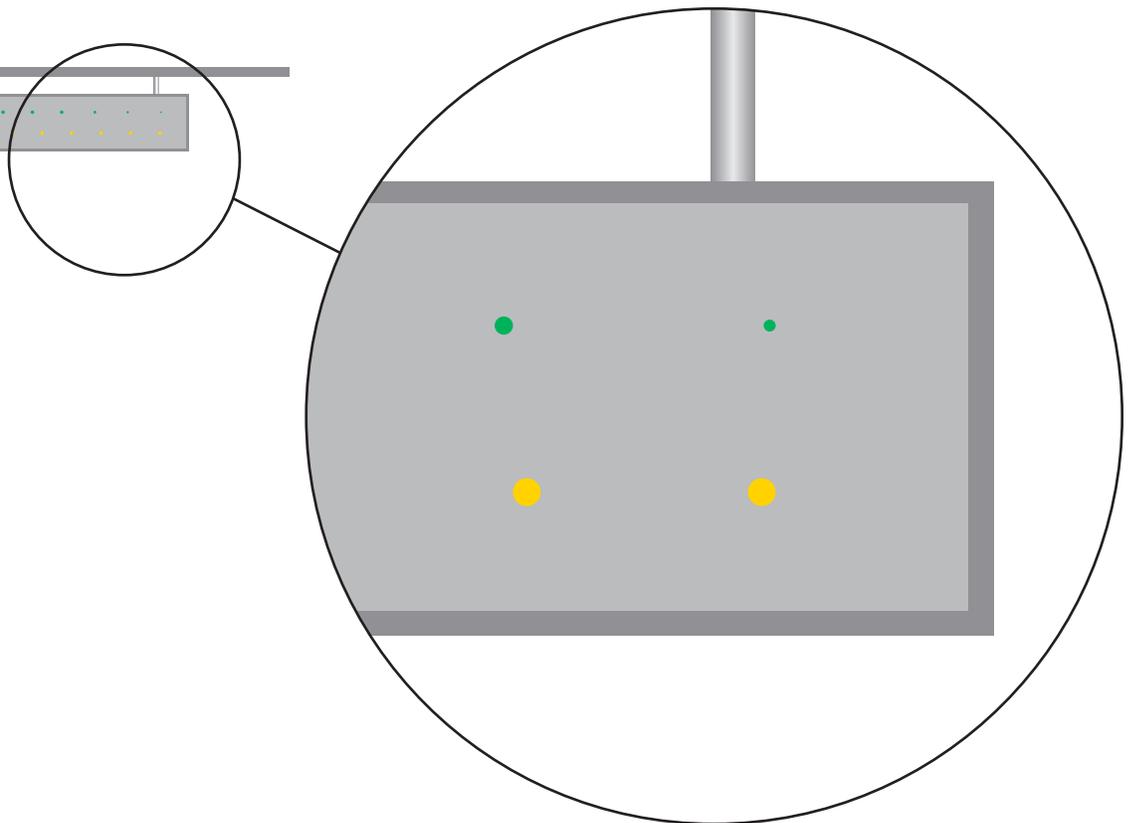
Welcoming or confirmatory messages may be considered to fill the blank side of a sign. *However, under no circumstances shall the blank side be used for advertising messages.*



Front side



Blank side



② SIGN TYPES

2.0 Directional

2.1 - 8 allowable heights and widths

2.9 secondary/double text lines

2.10 trailblazers

2.11 Identification

2.11 identification signs on directional signs

2.12 terminal

2.13 - 14 curb frontage - departures

2.15 curb frontage - arrivals

2.16 - 19 parking

2.20 Informational

2.20 directories

2.21 with directional arrow

2.22 route directories

2.23 Dynamic

2.23 Variable Message Displays (VMS)

2.24 - 26 Flight Information Displays - FIDs

2.27 Baggage Information Displays - BIDs

2.28 - 30 electronic sign specifications

2.31 Regulatory

2.32 instructions, regulations and warnings

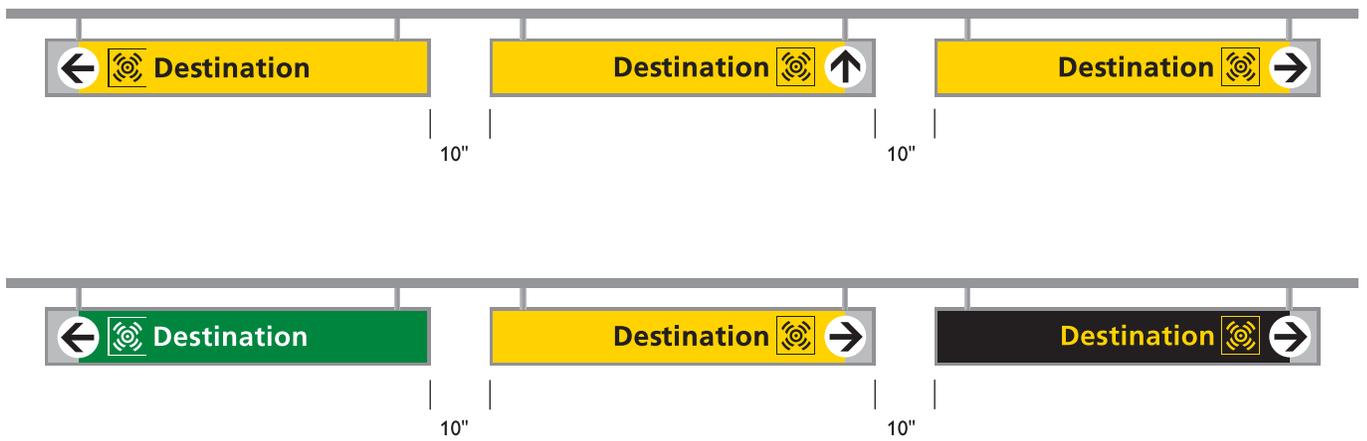
2.33 Emergency

2.34 stanchions

Directional signs use arrows to direct pedestrians to one or more destinations.

Each directional sign can contain one or more destination that is usually 'pulled' with one arrow. The arrow stands out halfway in a grey vertical band at left or right and serves as a 'brace' for all destinations.

As a guideline, each direction should have its own sign box; just as each (color-coded) category should have its own sign box. In the case where several sign boxes for different directions are placed at the same decision point, the boxes should line up within 10" of each other.



The Port Authority of New York & New Jersey prefers the use of standardized sizes for illuminated signs.

A set of extended sizes has been established for both illuminated and non-illuminated signs, including wall-mounted signs for instructions and notices. Length of signs shall be consistent within each category of sign types (for example, all gate location signs shall be of the same length).



Height limitation

If the sign height is limited, destinations can be grouped horizontally. Different directions on a horizontal sign can be divided by a grey divider (see example below).

Width limitation

In the case of extreme width limitation, the letters of a destination should never be placed one below the other in a vertical row. Instead (and only in exceptional cases) text rotated 90° can be considered (with the pictogram in the normal position at top). (See example to the left.)

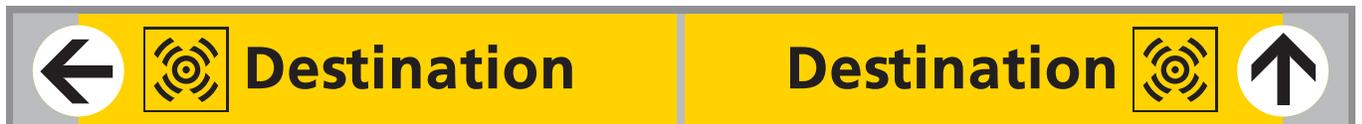
Most directional signs inside terminal buildings will have 3" text height with 6"x 6" pictograms. All signs can be proportionally enlarged, but the use of fixed letter height, as shown on page 1.2, should be maintained.

When two or more messages, with pictograms, on one line are used, spacing between grouped messages must maintain one pictogram width (see below).

Horizontally grouped destinations (exception only when space is limited)



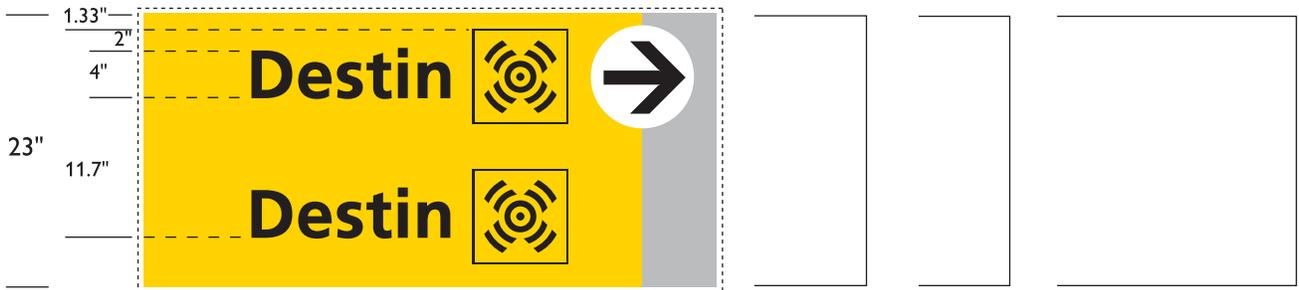
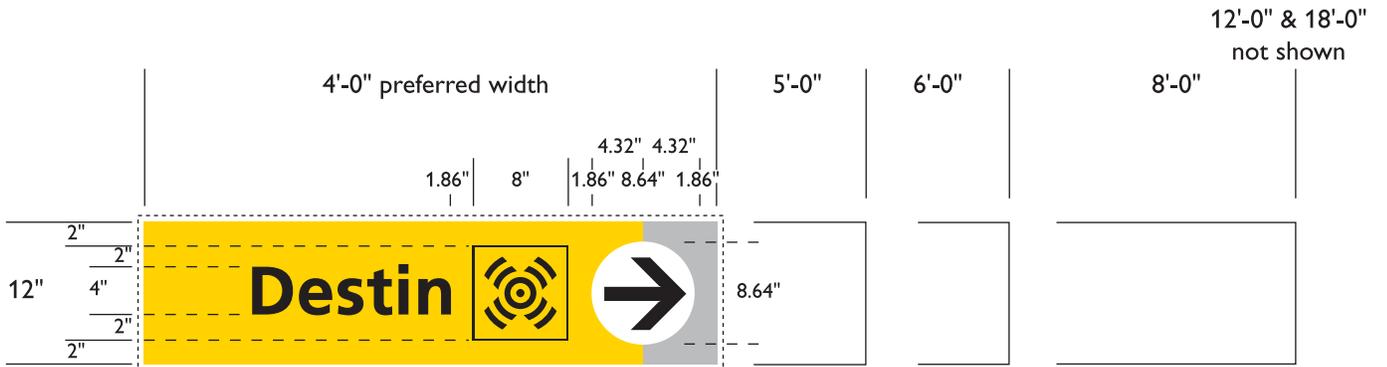
Horizontally divided directions (exception only when space is limited)



12'-0" & 18'-0"
not shown

	4'-0" preferred width	5'-0"	6'-0"	8'-0"
<p>8"</p> <p>1" - 1.5"</p> <p>3"</p> <p>1" - 1.5"</p>	<p>4.65" 4.65"</p> <p>1.4" 6" 1.4" 6.5" 1.4"</p>			
<p>(If an existing sign box must be used, the layout is centered vertically)</p> <p>Eq</p> <p>3"</p> <p>Eq</p>				
<p>17"</p> <p>1" - 2.5"</p> <p>3"</p> <p>8.8"</p>				
<p>2'-2"</p> <p>1" - 2.5"</p> <p>3"</p> <p>8.8"</p> <p>8.8"</p>				
<p>2'-11"</p> <p>1" - 2.5"</p> <p>3"</p> <p>8.8"</p> <p>8.8"</p> <p>8.8"</p>				

Note:
Dark grey border not shown for dimensioning purposes



Note:
Dark grey border not shown for dimensioning purposes

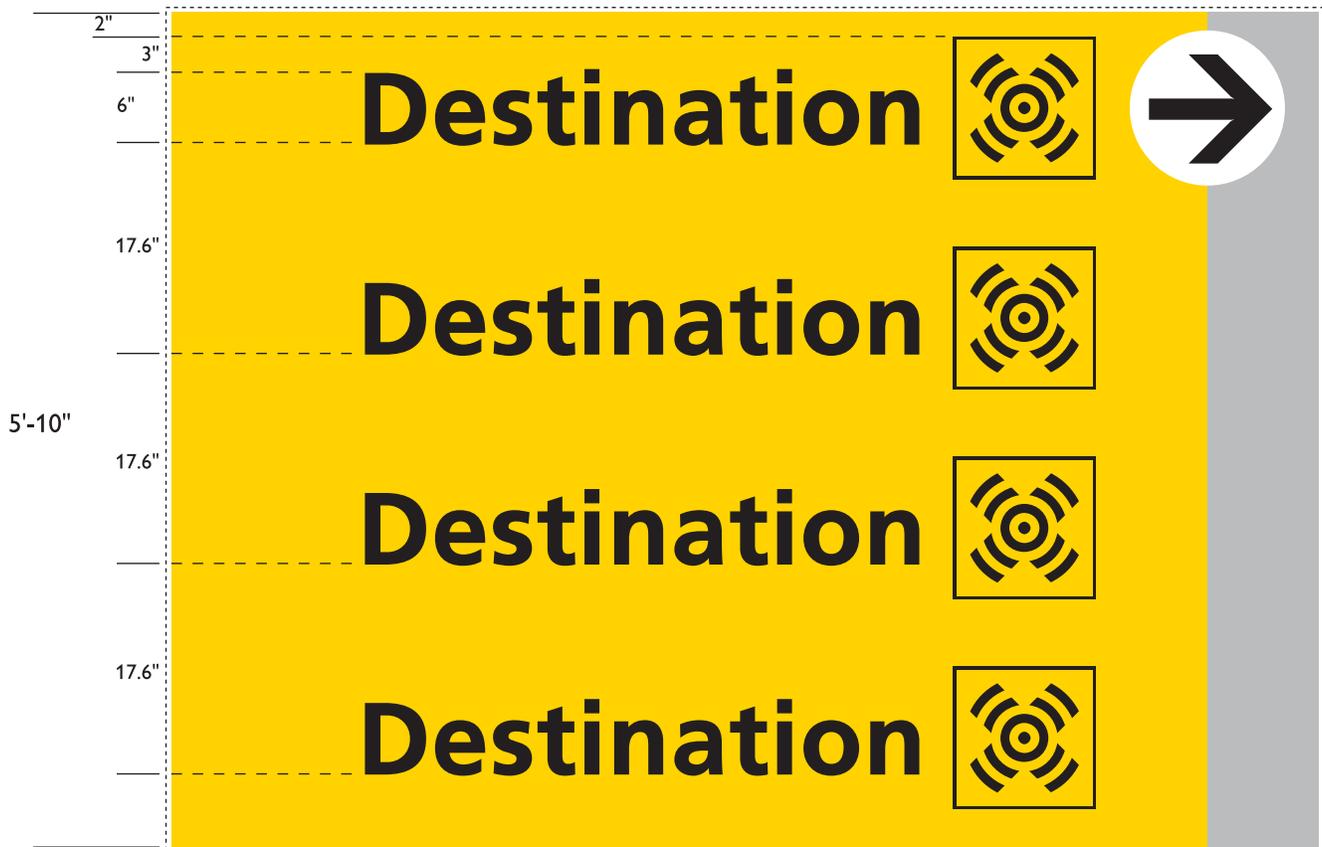
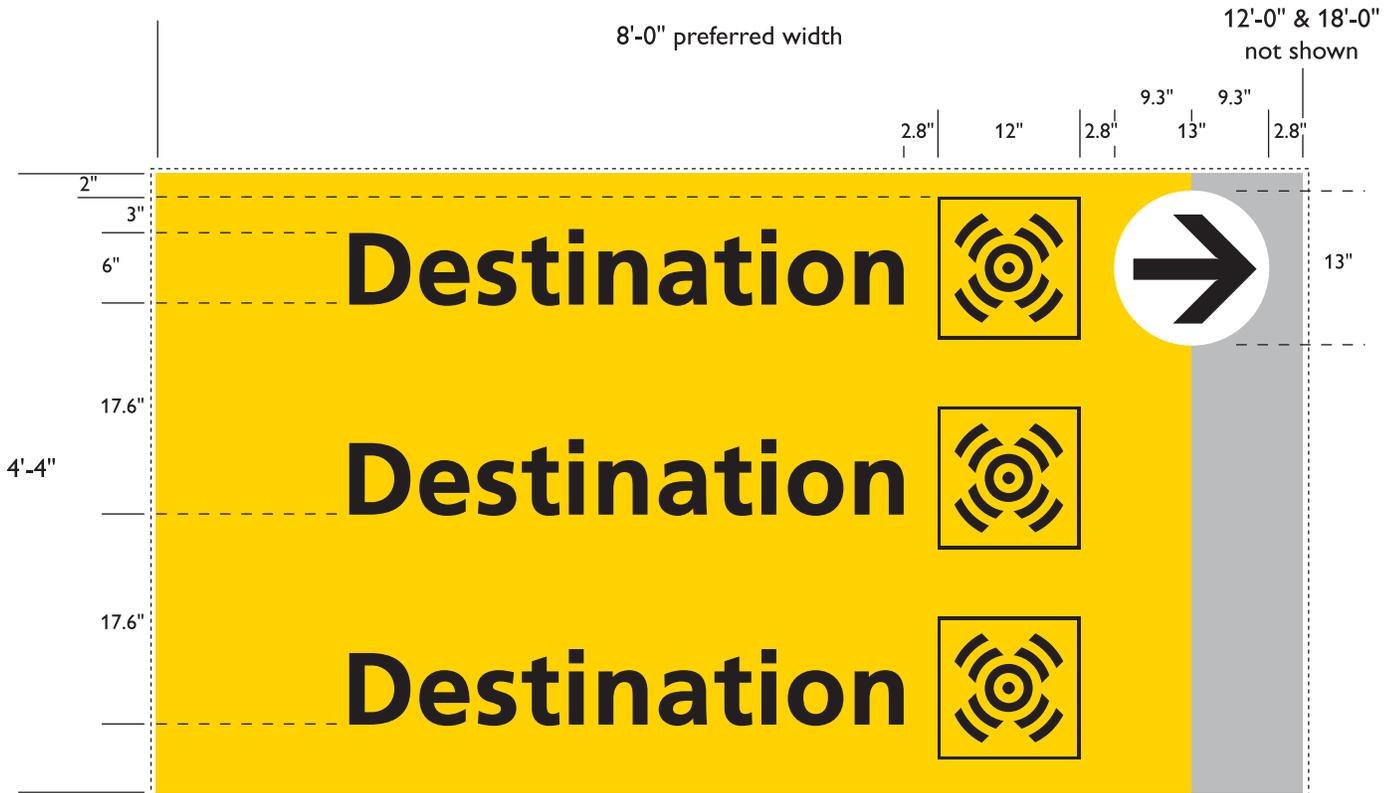
12'-0" & 18'-0"
not shown



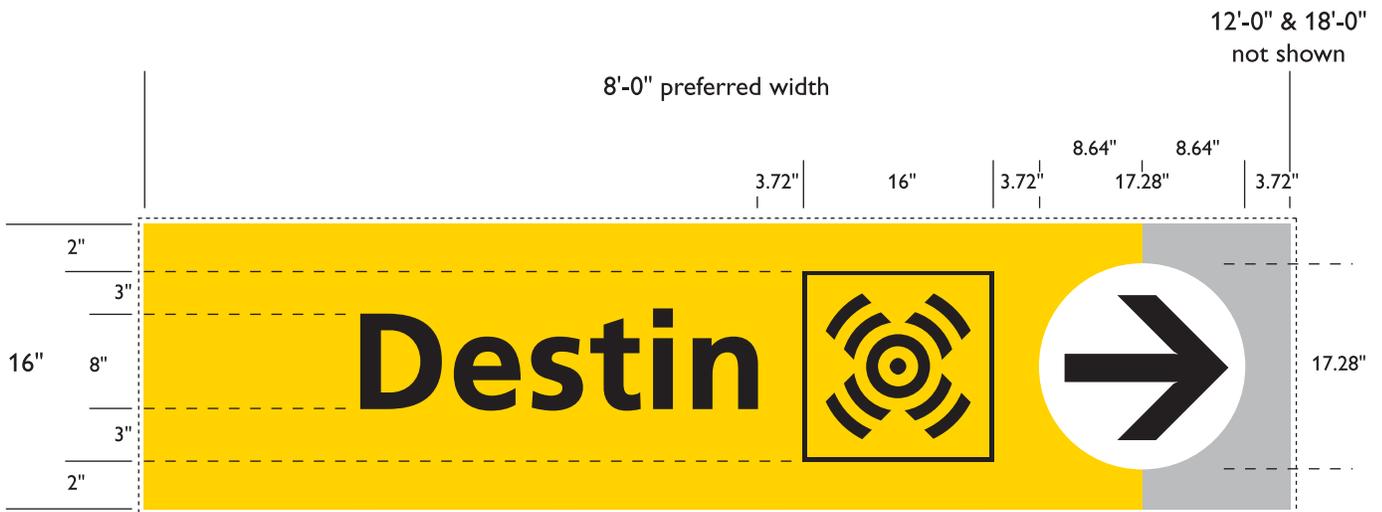
Note:
Dark grey border not shown for dimensioning purposes



Note:
Dark grey border not shown for dimensioning purposes



Note:
Dark grey border not shown for dimensioning purposes



Note:
Dark grey border not shown for dimensioning purposes



Note:
Dark grey border not shown for dimensioning purposes

If a secondary line of text is needed for additional information, such as bus stops, a slightly smaller letter height (ca. 3/5) can be used within the available space along with the 6"x 6" pictogram.

If two lines of text are required, a larger pictogram height should be used.

Recommended letter heights for signs:

Primary Text	Secondary Text	Pictogram	Reading Distance
3"	1.75"	6"	90'
4"	2.11"	8"	120'
6"	3.5"	12"	180'
8"	4.67"	16"	240'

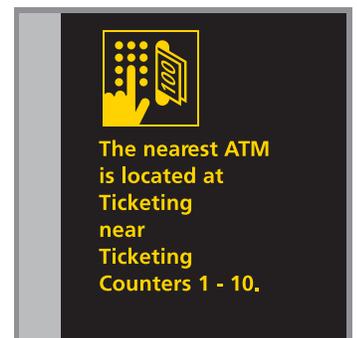
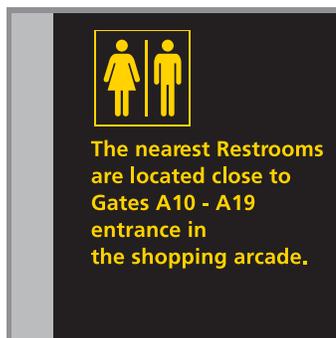
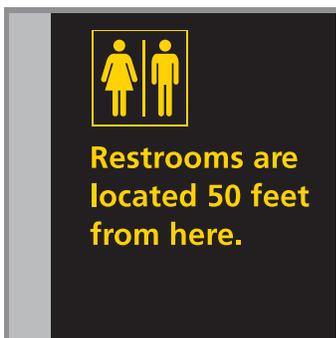
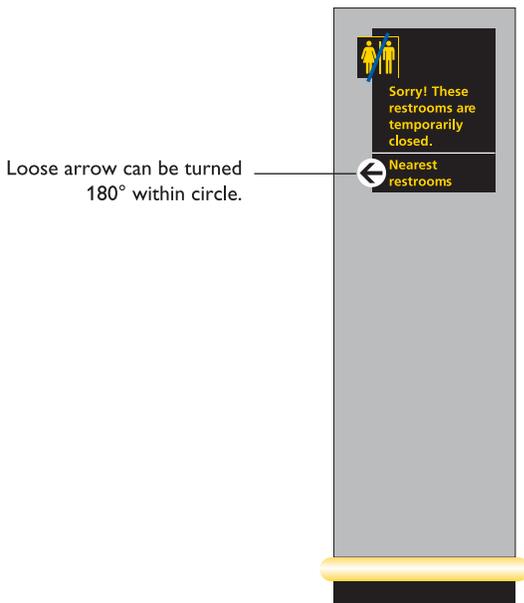


Location signs



Trailblazer type signs can be used in circumstances where it is difficult to provide good directions for a service due to architectural barriers or building design restrictions.

An arrow can be added, if appropriate.



Location signs without an arrow are placed above or in front of destinations for identification of the facility.

If a pictogram is applicable, it is placed halfway in the grey band at the left. If only text is used, the grey band is left blank.

Location signs are left aligned, except if a location sign is based on the use of a single and enlarged pictogram.

Location signs can be substantially larger than directional signs to be readable from a far distance.



Each terminal building should be recognizable from far distances and from all sides; this especially applies for parking patrons.

Buildings exterior introduction

How buildings are signed on their exterior is equally as important as their interior signage. Uneven, too much, too little, or overpowering signage can prevent the public in locating their appropriate airline terminals, cargo buildings, or a myriad of other ancillary buildings. The objective of this section is to provide signage guidelines so that the exterior of buildings are signed in a manner that is easy for the public to read, especially in a complex airport environment where many terminals and other support buildings are positioned relatively close to each other.

Building exterior general requirements

1. Each terminal may implement building identification signage placed in a prominent location so that it is visible to passengers accessing from roadways or AirTrain.
2. The general scale for determining the height of sign letters and logos will be one foot for every 600 feet of viewing distance, or one inch for every 50 feet, measured perpendicular from the sign face to the spot of observation.
3. The location/position of signs, except for building numbers, is the decision of the client/tenant. However, such signing must be contained within the building elevation (facade) and also must face either a roadway or apron from which the sign is viewed.
4. Signs shall display the corporate name with the inclusion of the logo as the only optional item. If the logo is utilized, it shall not exceed one and one-half times the height of the letters of the corporate name.
5. The style of letters and logo is optional for the tenant/client.
6. Signs must utilize direct lighting (neon, or approved equal, built into the letter strokes) of approximately 200-foot lamberts maximum light intensity.
6. The Port Authority must review and approve all signage on the exterior of buildings.

Airline unit terminals general requirements

1. Number of signs: Each terminal's primary airline(s) shall display two signs, one on the roadside and one on the apron side of the terminal building. Subtenants may display two signs as specified above but at half the height as defined below.
2. Size: Airline name must not exceed in height:
Roadside - 5 feet
Apron Side - 3 feet



While there is not a lot of need, in most cases, to place directional signs on a departures curbside, airline entrance identity and door signs are an important tool to help passengers easily and quickly locate an entry from a vehicle or on the curb.

Airline identity signs should be located near or above the doors or entrances into the buildings. The airline(s) listed above the entry should correspond with the location of the check-in counters located nearest the door inside the building. The signs should not identify exterior airline curbside check-in counters. (These signs may also be placed on the arrivals curbside to identify airline baggage claim locations.)

The Port Authority suggests using either VMS units or static backlit signs to identify airlines.

VMS signs can be useful for displaying non-permanent airlines and multiple ticket counter use. Additionally, more than one airline may be indicated on the VMS sign. Airline branding may also be placed on VMS signs. However, where airline branding is used, the layout on the VMS unit should be consistent with all VMS signs on the same curb front. (See page 2.23 for electronic sign information.)

Static backlit signs may also be used to indicate an entrance to airline services from the curbside. These signs follow the color-code standards more so than the VMS units do. The sign face layout provides an area for airline branding logos; however, the primary text used will remain Frutiger PA Bold Plus.

Both the VMS signs and the static backlit signs may be larger than typical directional signs. This will allow the text size to be increased. Eight-inch cap heights are recommended for maximum readability of the sign.



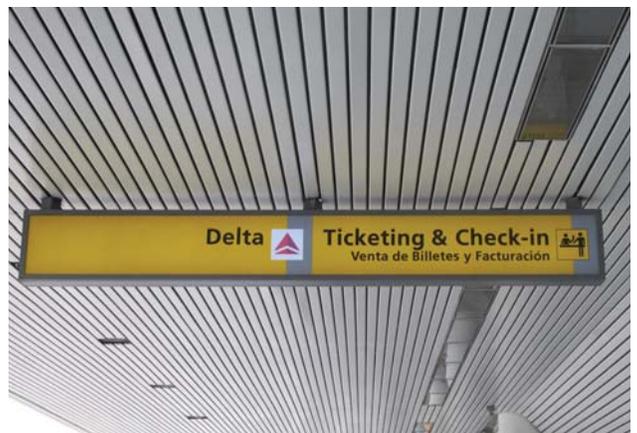
Departures curbside sign

Each entrance into a terminal from both the arrivals and departures curbside will be identified with an alpha or numeric identification sign. These signs should be located near or above entrances for identification purposes. Whether using the alpha or numeric system to identify entrances, the Port Authority recommends using the opposite system from that used to identify the terminal, i.e., if the terminal(s) are numbered, then conversely the identification signs should use an alphabetic system. Or, if the terminal(s) are labeled A, B, C, etc., then the entrance identification signs should use a numeric system. The system should be applied terminal wide in chronological order, encompassing both the arrivals and departures curbside; this will reduce the likelihood of repeating signs, which could lead to confusion.



Curbfront door identification sign

If door identification is placed on black surface, then a grey border may be applied.



Departures curbfront sign

Directional sign examples



Location sign examples



When space is limited, the horizontal space between the double text lines can be reduced on directional signs for bus stops. For curb frontage signs, a larger pictogram size of 8"x 8" is preferred for greater visibility.

This series of signs is made of changeable sign panels for each type of ground transportation. Notice the different use of pictograms in both signs.

Note:

All curb frontage location signs are 'curb aligned' (see page 3.7).

Minimum text / pictogram size = 4" / 8" (see page 1.2).



Bus stop



Pick up areas





Parking garages and parking lots should be uniquely identified with letters, numbers, or with a specific term, i.e., 'Long Term Parking', 'Terminal Parking', 'Valet Parking', 'Passenger Drop Off Parking', 'AirTrain Parking', etc., if applicable.

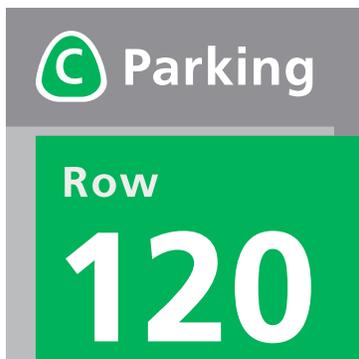
Parking garages

Levels of parking garages should be numbered, starting from 1 (ground level) and up. Explanatory terminology can be added, such as 'Rooftop Level', 'Terminal Level'.

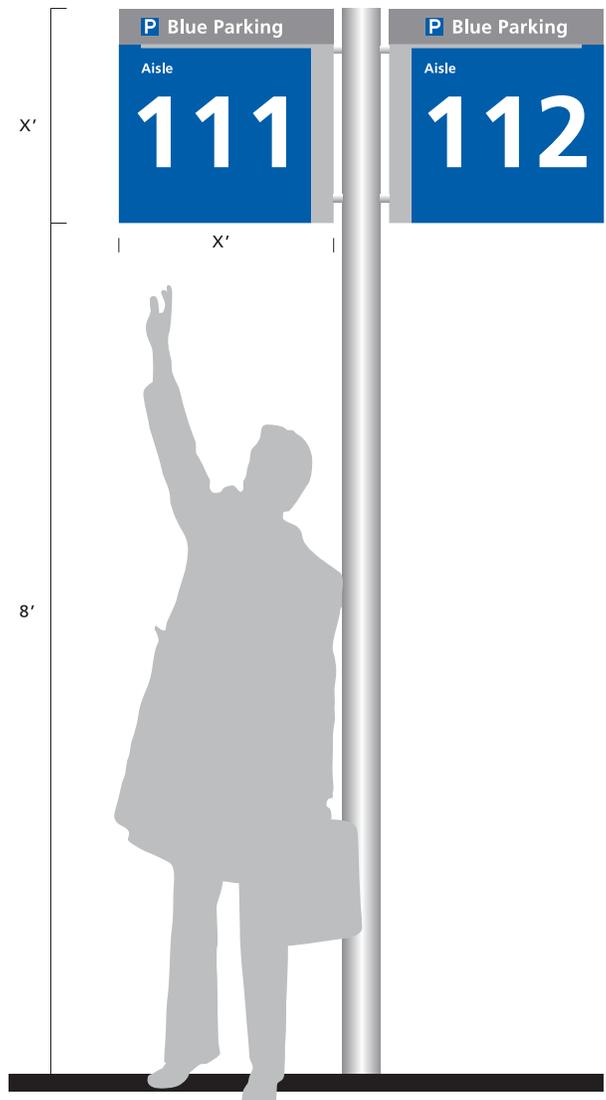
Instead of individual aisles, parking lots and garages can also use sections in the case of very large garages or at-grade lots. The use of 'row' is an option to identify parking locations, if necessary.

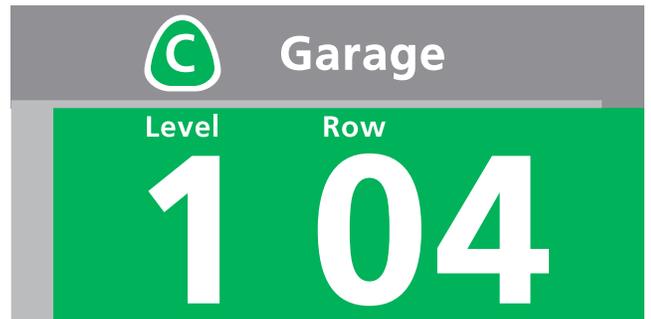
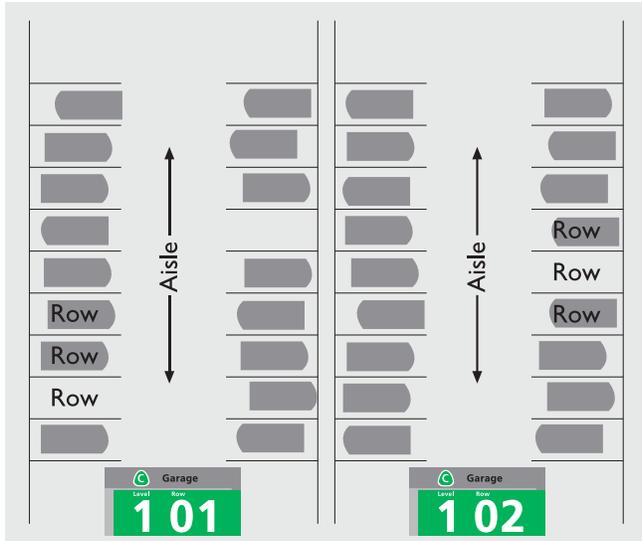


At-grade parking lot section identifier examples (EWR)



At-grade parking lot identifier example (JFK)





Parking garage aisle identifier example (EWR)

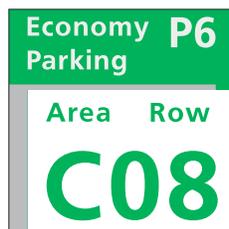
Aisle identifier examples (EWR)



Parking P1
at-grade aisles

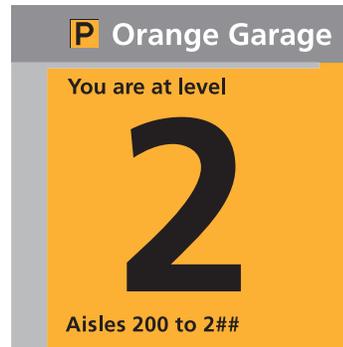


Parking P3
at-grade aisles



Parking P6
parking garage
aisles

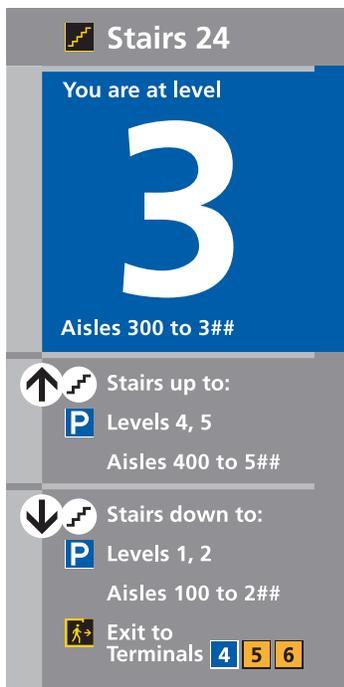




Parking garage level indicators



Parking garage elevator signs



Parking garage staircase signs

Repeating row identification

Aisle location signs need to be repeated sufficiently. The primary problem in parking garages (and lots) is that users forget where they parked their vehicle. Signs should be located at the end of aisles, at the connection of an aisle to a walkway, or a staircase. Often the supporting columns are the appropriate locations to place these repetitive signs.

For parking signs, clear information should be given for level, section, and aisle number. The type of parking should also be confirmed on this signing.

Color coding for row markers

Parking signs should be color-coded green. However, all signs inside a parking garage (or lot) will be superseded by any current terminal quadrant or color coding. Some parking garages already bear the name of those quadrant color codes, such as the Blue and Green Parking at JFK (other colors are yellow, orange, and red) and the Terminals A (red), B (blue), and C (green) parking at Newark.

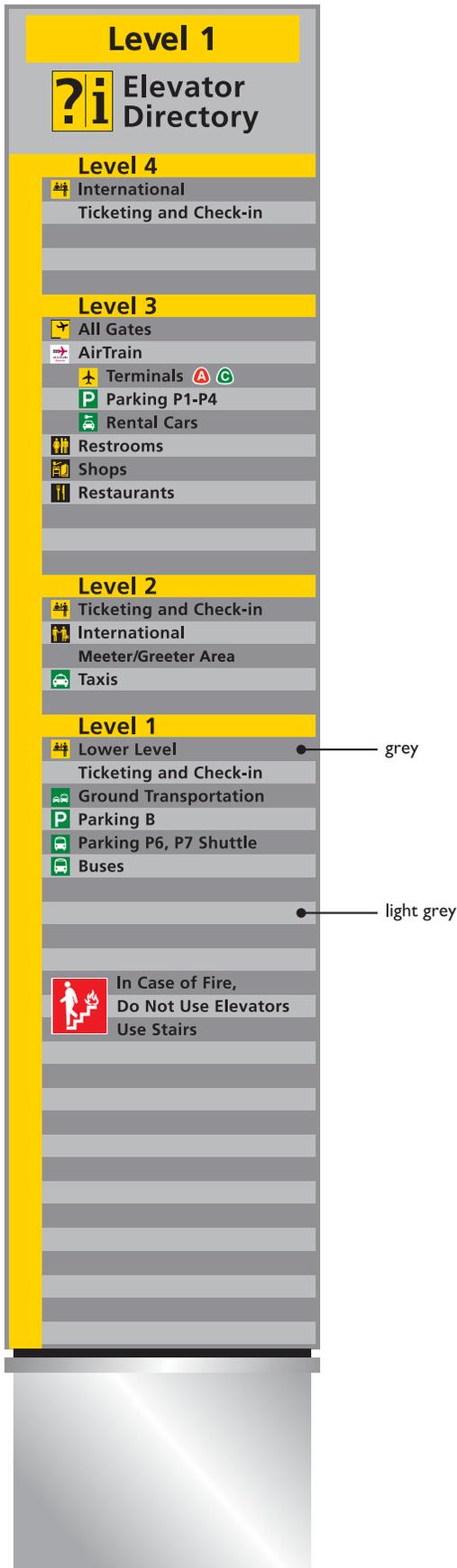
These colors shall be used as the background color with white letters (on dark colors) or black letters (on light colors).

If there is no color coding applicable for lots (long term parking or AirTrain lots), row numbers will be black type on a white background.

Visual themes (optional)

For easy memorizing, visual themes can be added. Each parking garage or lot should have its own unique theme. The advantage of visual themes, instead of letter and number coding, is that passengers only have to memorize one item. Finding appropriate symbols might take some time, but one can think in different categories; aviation-related, travel-related, or even non-related to make them stand out even better.





General directories

Directories are used to provide an overview of destinations at major decision points, e.g., which airline can be found at specific check-in and ticketing counters, gates, etc.

Directories also can be used to indicate bus stops, airline clubs, elevator levels, etc.

The background is grey. Light grey bands can be added for easier reading of columns.



Wall-mounted Services Directory

Take Airtrain to:

Other Terminals

Long Term Parking A & B

Leave at Lefferts Boulevard Station (Lot A) or Howard Beach Station (Lot B)

Rental Cars

Leave at Federal Circle Station

Jamaica Station

- Long Island Rail Road to Long Island and Manhattan
- NYC Subway E J Z to Queens and Manhattan

Howard Beach Station

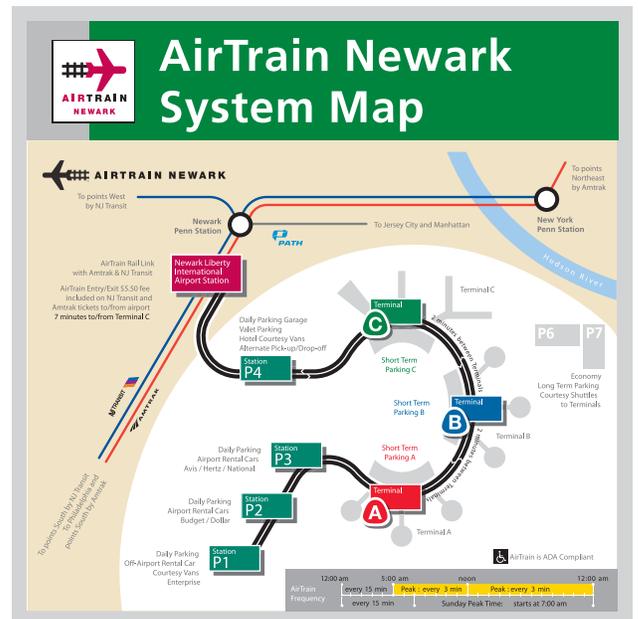
- NYC Subway A to Manhattan

You are at Terminal 2 3

Route directories

Route directories indicate the directions reached by means of vertical movement (elevators) or other means of transportation (shuttle buses, JFK and Newark AirTrain).

The background color can be black for airport services, such as elevators, or grey, such as AirTrain directories. (The directional signs to the AirTrain facility are green as part of the ground transportation category.)



Dynamic variable message signage can be used to provide passengers with real-time information while providing flexibility to terminal operators and tenants.

Currently, the marketplace offers three current forms of VMS units: LEDs, LCDs, and plasma displays. This manual strongly recommends the use of multicolored LEDs or LCDs for use throughout the Port Authority of New York & New Jersey airport facilities.

While plasma offers a better resolution, the screens are glass, creating reflectivity that can greatly reduce the readability of the units. Additionally, static messages burn on the the screens quickly and the displays fade rapidly due to light absorption. Therefore, this manual does not recommend the use of plasma displays in any of the Port Authority facilities.

There should be sufficient contrast between text and background (70% minimal).

The greatest readability is usually achieved through the use of light-colored characters (text and numerals) on a dark background. Effective examples (suitable within the Port Authority color-coding system) are:

Text	Background	Contrast
yellow/amber	black	89%
white	green	80%
black	yellow	89%

Contrast in percent shall be determined by:

$$\text{Contrast} = [(B1-B2) / B1] \times 100$$

Where B1 = light reflectance value (LRV) of the lighter area and B2 = light reflectance value (LRV) of the darker area.

(Code of federal regulations)

Note:

Red (text) on black background (contrast 38%) should not be used.

According to the Port Authority of New York & New Jersey Graphic Standards, lower case text with uppercase initials should be used. Though the use of the Frutiger Bold is preferred, typefaces that have a similar appearance may also be accepted (see page 1.0).

Fixed text



3 min. Jamaica Station
6 min. Howard Beach

LED contrast

The layout for all variable flight information systems, such as television screens, preferably follows the general layout guidelines of this sign manual (see page 2.28).

The departing and arriving flights for one terminal should be displayed on all variable message screens FIDs in that terminal. The departures and arrivals FIDs units may be placed side-by-side in a terminal as an information area. Each set of departures and arrivals VMS units should clearly identify departures or arrivals to clearly distinguish between the two separate functions. This will reduce confusion between units that carry the same type of information. Additionally, the colors of each unit displaying the information should differ to reinforce the difference between the departures and arrivals information (see page 2.25).

- The order of information and content layout for all FIDs units should be consistent from unit-to-unit throughout the terminal and displayed in the order of the passenger's knowledge base.
- For example, passengers are familiar with their destination; therefore, the destination (in alphabetical order) should show first in the listing. (If a city, such as New York, has multiple airports, the airport code should also be listed beside the city name.) The next piece of information that passengers typically know is the airline name. To help distinguish airlines, a white horizontal bar, with the airline's corporate (horizontal) branding, may be used next on the FID. The flight number should then be listed next to the airline name; this is the last piece of information that does not change. The time of the flight (in standard time) followed by the gate number (allow for one alpha character and three numeric characters) will be next. Finally, the remarks area will indicate the flights status, such as 'on time', 'delayed' (new time may be displayed and highlighted instead), 'canceled' or 'gate change' (new gate number may be used and highlighted instead). Additional remarks may be 'now boarding' or 'departed', which would replace the 'on time' remark.
- At the entrance to the satellites or concourses, FIDs located in one terminal, identifying flight in another terminal, may be used. However, they must be separate units from those displaying the flight information for the terminal in which they are located. Where possible, no more than one terminal's flight information should be listed on a FIDs unit. In the event that flight information for multiple terminals is placed on the same VMS unit, an additional information column may be added to the order of information, indicating the terminal letter or number where the flight is originating.
- FIDs identifying flights at another terminal should be externally identified as Terminal X Arrivals or Departures. FIDs identifying flight information for more than one terminal should be externally identified as 'Other Terminals Departures', and may be located in the concourses or satellites (see page 2.26).
- Although ADA does not govern the cap heights or the information that is placed on the displays, the contrast ratio should be near 90%.
- Due to spatial limitations in certain areas, the FIDs units may be turned 90° to allow for vertical mounting.
- The displays shown in this section are based on a 40-inch monitor with a 9:16 ratio. The recommended text cap height for the horizontal display is 1/2" and 3/8" for the vertical display. The cap height is smaller on the vertical display due to the limited horizontal space. The vertical layout allows more airlines to be placed on a single unit.
- The monitors of the FIDs should be clearly identified and labeled as 'Departures' and 'Arrivals'.

Horizontal arrangement

ARRIVALS	AIRLINE	FLIGHT	TIME	GATE	REMARKS
Ft. Myers	Continental Airlines	376	7:15A	C113	On Time
Grand Rapids	Continental Airlines	2783	7:05A	C114	On Time
Greensboro, NC	Continental Airlines	2851	8:45A	C105	On Time
Greenville, SC	Continental Airlines	2342	6:40A	C82	On Time
Hartford	Continental Airlines	2496	8:35A	C100	Delayed
Hong Kong	UNITED	853	7:05A	A17	On Time
Houston, IAH	Continental Airlines	611	5:55A	C73	On Time
Huntsville, AL	Continental Airlines	3130	New Time 6:35A	C110	On Time
Indianapolis	Continental Airlines	2952	6:40A	C105	On Time
Kansas City, MO	Continental Airlines	2399	8:40A	New Gate C111	On Time
Kingston, Jamaica	American Airlines	1169	6:00A	A33	On Time
Knoxville	Continental Airlines	2999	6:55A	C103	On Time
Las Vegas	Continental Airlines	768	7:30A	C98	On Time
London/Heathrow	BRITISH AIRWAYS	186	8:15A	B67	On Time
London/Heathrow	virgin atlantic	918	8:20A	B55	On Time
Los Angeles	Continental Airlines	816	6:35A	A16	Cancelled
Los Angeles	UNITED	1992	7:00A	A31	On Time
Louisville	Continental Airlines	92	7:35A	C70	On Time

4:30 AM 04 JUNE 2008

Arrivals FID (flights in same terminal)

DEPARTURES	AIRLINE	FLIGHT	TIME	GATE	REMARKS
Ft. Myers	Continental Airlines	376	7:15A	C113	On Time
Grand Rapids	Continental Airlines	2783	7:05A	C114	On Time
Greensboro, NC	Continental Airlines	2851	8:45A	C105	On Time
Greenville, SC	Continental Airlines	2342	6:40A	C82	On Time
Hartford	Continental Airlines	2496	8:35A	C100	Delayed
Hong Kong	UNITED	853	7:05A	A17	On Time
Houston, IAH	Continental Airlines	611	5:55A	C73	On Time
Huntsville, AL	Continental Airlines	3130	New Time 6:35A	C110	On Time
Indianapolis	Continental Airlines	2952	6:40A	C105	On Time
Kansas City, MO	Continental Airlines	2399	8:40A	New Gate C111	On Time
Kingston, Jamaica	American Airlines	1169	6:00A	A33	On Time
Knoxville	Continental Airlines	2999	6:55A	C103	On Time
Las Vegas	Continental Airlines	768	7:30A	C98	On Time
London/Heathrow	BRITISH AIRWAYS	186	8:15A	B67	On Time
London/Heathrow	virgin atlantic	918	8:20A	B55	On Time
Los Angeles	Continental Airlines	816	6:35A	A16	Cancelled
Los Angeles	UNITED	1992	7:00A	A31	On Time
Louisville	Continental Airlines	92	7:35A	C70	On Time

4:30 AM 04 JUNE 2008

Departures FID (flights in same terminal)

DEPARTURES	AIRLINE	FLIGHT	TIME	TERMINAL	GATE	REMARKS
Ft. Myers	Continental Airlines	376	7:15A	C	C113	On Time
Grand Rapids	Continental Airlines	2783	7:05A	C	C114	On Time
Greensboro, NC	Continental Airlines	2851	8:45A	C	C105	On Time
Greenville, SC	Continental Airlines	2342	6:40A	C	C82	Delayed
Hartford	Continental Airlines	2496	8:35A	C	C100	On Time
Hong Kong	UNITED	853	7:05A	A	A17	On Time
Houston, IAH	Continental Airlines	611	5:55A	C	C73	On Time
Huntsville	Continental Airlines	3130	New Gate 6:35A	C	C110	On Time
Indianapolis	Continental Airlines	2952	6:40A	C	C105	On Time
Kansas City, MO	Continental Airlines	2399	8:40A	C	C111	On Time
Kingston, Jamaica	American Airlines	1169	6:00A	A	New Gate A33	On Time
Knoxville	Continental Airlines	2999	6:55A	C	C103	On Time
Las Vegas	Continental Airlines	768	7:30A	C	C98	On Time
London/Heathrow	BRITISH AIRWAYS	186	8:15A	B	B67	Cancelled
London/Heathrow	virgin atlantic	918	8:20A	B	B55	On Time
Los Angeles	Continental Airlines	816	6:35A	A	A16	On Time
Los Angeles	UNITED	1992	7:00A	A	A31	On Time
Louisville	Continental Airlines	92	7:35A	C	C70	On Time

4:30 AM 04 JUNE 2008

Departures FID (flights in separate terminals)

Vertical arrangement

DEPARTURES	AIRLINE	FLIGHT	TIME	GATE	REMARKS
Ft. Myers	Continental Airlines	376	7:15A	C113	On Time
Grand Rapids	Continental Airlines	2783	7:05A	C114	On Time
Greensboro	Continental Airlines	2851	8:45A	C105	On Time
Greenville	Continental Airlines	2342	6:40A	C82	On Time
Hartford	Continental Airlines	2496	8:35A	C100	Delayed
Hong Kong	UNITED	853	7:05A	A17	On Time
Houston, IAH	Continental Airlines	611	5:55A	C73	On Time
Huntsville	Continental Airlines	3130	New 6:35A	C110	On Time
Indianapolis	Continental Airlines	2952	6:40A	C105	On Time
Kansas City, MO	Continental Airlines	2399	8:40A	New C111	On Time
Kingston, Jamaica	American Airlines	1169	6:00A	A33	On Time
Knoxville	Continental Airlines	2999	6:55A	C103	On Time
Las Vegas	Continental Airlines	768	7:30A	C98	On Time
London/Heathrow	virgin atlantic	918	8:20A	B55	On Time
Los Angeles	UNITED	816	6:35A	A16	Cancelled
Los Angeles	Continental Airlines	1992	7:00A	A31	On Time
Louisville	Continental Airlines	92	7:35A	C70	On Time
Manchester, NH	Continental Airlines	2319	8:20A	C93	On Time
Memphis	Continental Airlines	1921	8:00A	B58	On Time
Mexico City	Continental Airlines	8470	6:05A	B51	On Time
Miami	Continental Airlines	45	7:25A	C102	Delayed
Minneapolis	Continental Airlines	6342	7:15A	B66	On Time
Montreal	UNITED	8307	8:10A	A3	Cancelled
Nashville	Continental Airlines	6805	5:00A	New B11	On Time
Norfolk	Continental Airlines	3224	5:15A	C111	On Time
Orlando	Continental Airlines	392	8:00A	C104	On Time
Panama City	Continental Airlines	6555	8:15A	B77	On Time
Phoenix	Continental Airlines	1635	6:55A	C135	On Time
Pittsburgh	Continental Airlines	3236	8:00A	C121	On Time
Portland, OR	Continental Airlines	3115	6:45A	A6	On Time
Raleigh/Durham	American Airlines	4657	6:00A	New A1	Delayed
Richmond	DELTA	3142	8:50A	B60	On Time
Rome	Continental Airlines	40	8:20A	C105	On Time
San Francisco	Continental Airlines	6472	New 6:35A	B65	On Time

4:30 AM 04 JUNE 2008

Departures FID (flights in same terminal)

ARRIVALS	AIRLINE	FLIGHT	TIME	GATE	REMARKS
Ft. Myers	Continental Airlines	376	7:15A	C113	On Time
Grand Rapids	Continental Airlines	2783	7:05A	C114	On Time
Greensboro	Continental Airlines	2851	8:45A	C105	On Time
Greenville	Continental Airlines	2342	6:40A	C82	On Time
Hartford	Continental Airlines	2496	8:35A	C100	Delayed
Hong Kong	UNITED	853	7:05A	A17	On Time
Houston, IAH	Continental Airlines	611	5:55A	C73	On Time
Huntsville	Continental Airlines	3130	New 6:35A	C110	On Time
Indianapolis	Continental Airlines	2952	6:40A	C105	On Time
Kansas City, MO	Continental Airlines	2399	8:40A	New C111	On Time
Kingston, Jamaica	American Airlines	1169	6:00A	A33	On Time
Knoxville	Continental Airlines	2999	6:55A	C103	On Time
Las Vegas	Continental Airlines	768	7:30A	C98	On Time
London/Heathrow	BRITISH AIRWAYS	186	8:15A	B67	On Time
London/Heathrow	virgin atlantic	918	8:20A	B55	On Time
Los Angeles	UNITED	816	6:35A	A16	Cancelled
Los Angeles	Continental Airlines	1992	7:00A	A31	On Time
Louisville	Continental Airlines	92	7:35A	C70	On Time
Manchester, NH	Continental Airlines	2319	8:20A	C93	On Time
Memphis	Continental Airlines	1921	8:00A	B58	On Time
Mexico City	Continental Airlines	8470	6:05A	B51	On Time
Miami	Continental Airlines	45	7:25A	C102	Delayed
Minneapolis	Continental Airlines	6342	7:15A	B66	On Time
Montreal	UNITED	8307	8:10A	A3	Cancelled
Nashville	Continental Airlines	6805	5:00A	New B11	On Time
Norfolk	Continental Airlines	3224	5:15A	C111	On Time
Orlando	Continental Airlines	392	8:00A	C104	On Time
Panama City	Continental Airlines	6555	8:15A	B77	On Time
Phoenix	Continental Airlines	1635	6:55A	C135	On Time
Pittsburgh	Continental Airlines	3236	8:00A	C121	On Time
Portland, OR	Continental Airlines	3115	6:45A	A6	On Time
Raleigh/Durham	American Airlines	4657	6:00A	New A1	Delayed
Richmond	DELTA	3142	8:50A	B60	On Time
Rome	Continental Airlines	40	8:20A	C105	On Time
San Francisco	Continental Airlines	6472	New 6:35A	B65	On Time

4:30 AM 04 JUNE 2008

Arrivals FID (flights in same terminal)

(Under development)

The examples on this page are placeholders only. Development will take place in cooperation with all related parties.

?i Flight Information Other Terminals

DEPARTURES	AIRLINE	FLIGHT	TIME	TERMINAL	GATE	REMARKS
FL Myers	MyersJet	376	7:55A	C113		On Time
Grand Rapids	Delta	2783	7:55A	C	C114	On Time
Greensboro, NC	Delta	2851	8:00A	C	C105	On Time
Greenville, SC	Delta	2342	6:40A	C	C82	Delayed
Hartford	Delta	2496	8:35A	C	C100	On Time
Hong Kong	United	853	7:55A	A	A17	On Time
Houston, IAH	United	811	5:55A	C	C73	On Time
Huntsville, AL	United	3130	Next Tues 7:55A	C	C110	On Time
Indianapolis	United	2952	8:00A	C	C105	On Time
Kansas City, MO	United	2399	8:00A	C	C111	On Time
Kingston, Jamaica	American	1165	6:00A	A	A31	On Time
Knoxville	American	2999	8:55A	C	C103	On Time
Las Vegas	American	766	7:35A	C	C98	On Time
London/Heathrow	American	186	8:15A	B	B57	Cancelled
London/Heathrow	American	816	8:30A	B	B55	On Time
Los Angeles	American	816	8:55A	A	A16	On Time
Los Angeles	United	1992	7:00A	A	A31	On Time
Louisville	United	92	7:35A	C	C70	On Time

DEPARTURES	AIRLINE	FLIGHT	TIME	TERMINAL	GATE	REMARKS
FL Myers	MyersJet	376	7:55A	C	C113	On Time
Grand Rapids	Delta	2783	7:55A	C	C114	On Time
Greensboro, NC	Delta	2851	8:00A	C	C105	On Time
Greenville, SC	Delta	2342	6:40A	C	C82	Delayed
Hartford	Delta	2496	8:35A	C	C100	On Time
Hong Kong	United	853	7:55A	A	A17	On Time
Houston, IAH	United	811	5:55A	C	C73	On Time
Huntsville, AL	United	3130	Next Tues 7:55A	C	C110	On Time
Indianapolis	United	2952	8:00A	C	C105	On Time
Kansas City, MO	United	2399	8:00A	C	C111	On Time
Kingston, Jamaica	American	1165	6:00A	A	A31	On Time
Knoxville	American	2999	8:55A	C	C103	On Time
Las Vegas	American	766	7:35A	C	C98	On Time
London/Heathrow	American	186	8:15A	B	B57	Cancelled
London/Heathrow	American	816	8:30A	B	B55	On Time
Los Angeles	American	816	8:55A	A	A16	On Time
Los Angeles	United	1992	7:00A	A	A31	On Time
Louisville	United	92	7:35A	C	C70	On Time

4:30 AM 04 JUNE 2008

Multiple terminal departures

?i Flight Information

ARRIVALS	AIRLINE	FLIGHT	TIME	GATE	REMARKS
FL Myers	MyersJet	376	7:55A	C113	On Time
Grand Rapids	Delta	2783	7:55A	C114	On Time
Greensboro, NC	Delta	2851	8:00A	C105	On Time
Greenville, SC	Delta	2342	6:40A	C82	On Time
Hartford	Delta	2496	8:35A	C100	Delayed
Hong Kong	United	853	7:55A	A17	On Time
Houston, IAH	United	811	5:55A	C73	On Time
Huntsville, AL	United	3130	Next Tues 7:55A	C110	On Time
Indianapolis	United	2952	8:00A	A31	On Time
Kansas City, MO	United	2399	8:00A	Next Tues C111	On Time
Kingston, Jamaica	American	1165	6:00A	A31	On Time
Knoxville	American	2999	8:55A	C103	On Time
Las Vegas	American	766	7:35A	C98	On Time
London/Heathrow	American	186	8:15A	B57	On Time
London/Heathrow	American	816	8:30A	B55	On Time
Los Angeles	American	816	8:55A	A16	Cancelled
Los Angeles	United	1992	7:00A	A31	On Time
Louisville	United	92	7:35A	C70	On Time

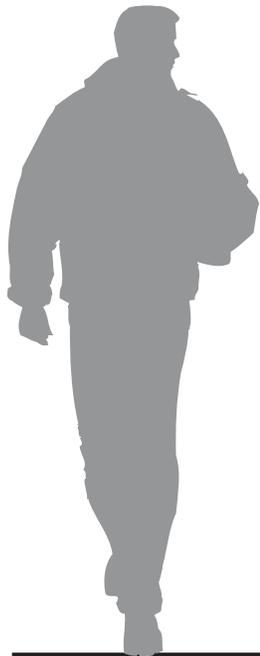
DEPARTURES	AIRLINE	FLIGHT	TIME	GATE	REMARKS	
FL Myers	MyersJet	376	7:55A	C	C113	On Time
Grand Rapids	Delta	2783	7:55A	C	C114	On Time
Greensboro, NC	Delta	2851	8:00A	C	C105	On Time
Greenville, SC	Delta	2342	6:40A	C	C82	On Time
Hartford	Delta	2496	8:35A	C	C100	On Time
Hong Kong	United	853	7:55A	A	A17	On Time
Houston, IAH	United	811	5:55A	C	C73	On Time
Huntsville, AL	United	3130	Next Tues 7:55A	C	C110	On Time
Indianapolis	United	2952	8:00A	C	C105	On Time
Kansas City, MO	United	2399	8:00A	Next Tues C111	On Time	
Kingston, Jamaica	American	1165	6:00A	A	A31	On Time
Knoxville	American	2999	8:55A	C	C103	On Time
Las Vegas	American	766	7:35A	C	C98	On Time
London/Heathrow	American	186	8:15A	B	B57	On Time
London/Heathrow	American	816	8:30A	B	B55	On Time
Los Angeles	American	816	8:55A	A	A16	Cancelled
Los Angeles	United	1992	7:00A	A	A31	On Time
Louisville	United	92	7:35A	C	C70	On Time

4:30 AM 04 JUNE 2008

ARRIVALS	AIRLINE	FLIGHT	TIME	GATE	REMARKS
FL Myers	MyersJet	376	7:55A	C113	On Time
Grand Rapids	Delta	2783	7:55A	C114	On Time
Greensboro, NC	Delta	2851	8:00A	C105	On Time
Greenville, SC	Delta	2342	6:40A	C82	On Time
Hartford	Delta	2496	8:35A	C100	Delayed
Hong Kong	United	853	7:55A	A17	On Time
Houston, IAH	United	811	5:55A	C73	On Time
Huntsville, AL	United	3130	Next Tues 7:55A	C110	On Time
Indianapolis	United	2952	8:00A	A31	On Time
Kansas City, MO	United	2399	8:00A	Next Tues C111	On Time
Kingston, Jamaica	American	1165	6:00A	A31	On Time
Knoxville	American	2999	8:55A	C103	On Time
Las Vegas	American	766	7:35A	C98	On Time
London/Heathrow	American	186	8:15A	B57	On Time
London/Heathrow	American	816	8:30A	B55	On Time
Los Angeles	American	816	8:55A	A16	Cancelled
Los Angeles	United	1992	7:00A	A31	On Time
Louisville	United	92	7:35A	C70	On Time

4:30 AM 04 JUNE 2008

In-terminal arrivals and departures



At the entrance to a baggage claim area, a general Baggage Information Display (BID) should be provided. This display should indicate to passengers the correct belt to pick up their baggage. The BIDs system should utilize a third color-coding system to differentiate between a FIDs system and the BIDs system. Primarily, the information provided is similar to the FIDs system-in the order of information known to the passenger. The difference of the BIDs system is the carousel number and remarks column, which indicates baggage status, such as bags 'waiting', 'on carousel', or "delivered".

DEPARTING CITY	AIRLINE	FLIGHT	FLIGHT TIME	CAROUSEL	REMARKS
Ft. Myers		376	7:15A	1	Waiting
Grand Rapids		2783	7:05A	3	On Carousel
Greensboro, NC		2851	8:45A	4	Delivered
Greenville, SC		2342	6:40A	5	On Carousel
Hartford		2496	8:35A	6	Waiting
Hong Kong	UNITED	853	7:05A	2	Waiting
Houston, IAH		611	5:55A	7	On Carousel
Huntsville		3130	6:35A	8	Delivered
Indianapolis		2952	6:40A	5	Waiting
Kansas City, MO		2399	8:40A	1	Waiting
Kingston, Jamaica		1169	6:00A	2	Delivered
Knoxville		2999	6:55A	8	Delivered
Las Vegas		768	7:30A	6	Delivered
London/Heathrow		186	8:15A	5	Delivered
London/Heathrow		918	8:20A	7	On Carousel
Los Angeles		816	6:35A	4	On Carousel
Los Angeles	UNITED	1992	7:00A	3	On Carousel
Louisville		92	7:35A	1	On Carousel

9:10 AM 04 JUNE 2008

Baggage Claim BID (horizontal arrangement)

DEPARTING CITY	AIRLINE	FLIGHT	TIME	CAROUSEL	REMARKS
Ft. Myers		376	7:15A	2	On Carousel
Grand Rapids		2783	7:05A	4	On Carousel
Greensboro		2851	8:45A	5	Delivered
Greenville		2342	6:40A	8	Delivered
Hartford		2496	8:35A	1	Waiting
Hong Kong	UNITED	853	7:05A	7	Waiting
Houston, IAH		611	5:55A	3	Waiting
Huntsville		3130	6:35A	10	On Carousel
Indianapolis		2952	6:40A	5	On Carousel
Kansas City, MO		2399	8:40A	6	Delivered
Kingston, Jamaica		1169	6:00A	3	Delivered
Knoxville		2999	6:55A	3	On Carousel
Las Vegas		768	7:30A	9	On Carousel
London/Heathrow		186	8:15A	7	Waiting
London/Heathrow		918	8:20A	3	Waiting
Los Angeles	UNITED	816	6:35A	6	Waiting
Los Angeles		1992	7:00A	1	On Carousel
Louisville		92	7:35A	10	On Carousel
Manchester, NH		2319	8:20A	C93	On Carousel
Memphis		1921	8:00A	5	On Carousel
Mexico City		8470	6:05A	1	On Carousel
Miami		45	7:25A	2	Waiting
Minneapolis		6342	7:15A	6	On Carousel
Montreal	UNITED	8307	8:10A	3	Waiting
Nashville		6805	5:00A	7	On Carousel
Norfolk		3224	5:15A	1	On Carousel
Orlando		392	8:00A	4	Delivered
Panama City		6555	8:15A	7	Delivered
Phoenix		1635	6:55A	5	Waiting
Pittsburgh		3236	8:00A	1	Delivered
Portland, OR		3115	6:45A	6	On Carousel
Raleigh/Durham		4657	6:00A	1	On Carousel
Richmond	DELTA	3142	8:50A	3	Waiting
Rome		40	8:20A	9	On Carousel
San Francisco		6472	6:35A	2	Waiting

9:10 AM 04 JUNE 2008

Baggage Claim BID (vertical arrangement)

(Under development)

The examples on this page are placeholders only. Development will take place in cooperation with all related parties.

Dynamic Variable Message Sign (VMS) types

LED signs

The most common technologies used for dynamic variable message signage are Light Emitting Diode (LED) signs and Liquid Crystal Display (LCD) flat panel displays.

LED signs are used when the frequency of message changes is high and to augment static wayfinding signage systems, provide baggage information, or serve as visual paging signs. LED signs have some graphic display capability, but they are primarily text-based systems.

LED signs consist of an array of LED pixels displayed within a housing or enclosure. This type of sign is available in a variety of sizes from as small as six inches high to several feet in height with varying lengths in 'stock' sizes with limited custom sizes available as well.

LED sign resolution, the number and spacing of the LED pixels, varies based on the intended application. The common dimension cited in determining LED sign resolution is the center-of-pixel to center-of-pixel measurement. This dimension is cited in millimeters, for example, 6mm, 8mm, 14mm, or 22mm. In the case of LED pixel arrays, the lower the number the higher the resolution. For interior or exterior applications, where pedestrians are the audience, 6mm or 8mm displays should be used. It should be noted that, as a general rule, the higher the resolution of an LED sign the higher the cost.

LED signs are available with the capability to display one color (monochrome red or amber), tri-color (red, green, and amber), or full color. In most cases, the tri-color capability display will offer adequate flexibility for terminal applications. It should be noted that the more color-display capability an LED sign has the higher the cost.

LED sign text messaging display capabilities are quite flexible, allowing for multiple type sizes and fonts, as well as message cycle time flexibility. Graphic-display capability is more limited, either by sign resolution or color-display capability.

LED sign housings or enclosures can be specified as 'off-the-shelf' or custom. An 'off-the-shelf' LED sign is the LED sign manufacturer's standard housing or enclosure of an LED pixel array and the supporting operational components for an interior or exterior application. A custom housing or enclosure can be produced by the LED sign manufacturer or a second party. Custom housings or enclosures are most often specified when there is a desire to match the LED sign appearance with other sign systems in a facility. In addition, custom housings or enclosures allow for the integration of static and dynamic sign elements on a sign.

LED sign programming and control options are local and remote or centralized. Local control requires the programmer to connect directly to each individual sign via hardwire or a wireless hand-held device to program messaging and display cycles. Remote or centralized control allows all LED signs on a network to be controlled and programmed from a central location on a standard PC. Connection to each sign from the remote or central control center will be either hardwire or wireless. In the case of a terminal type facility, hardwiring is the most practical and reliable method of connection.

LED sign programming software is offered by each LED sign manufacturer. This standard software is generally very flexible in terms of interfacing with other programs. However, custom software may be required in some cases, such as integrating a visual paging display system and baggage information system on the same network.

LCD signs

LCD flat panel displays are used when the frequency of message changes is lower, such as flight information displays, providing information at security checkpoints, and identifying airline ticketing and check-in locations. LCD flat panel displays allow for high-resolution graphics, such as airline logos, as well as photo or video display.

LCD signs are similar to flat panel LCD televisions with the primary exception that there is no tuner. LCD signs are available in stock sizes only, ranging from 19 inches measured diagonally up to 52 inches measured diagonally. Generally for terminal application, sizes in the 30-inch to 32-inch range measured diagonally are adequate.

LCD sign display resolution is equal to high-definition television.

LCD signs are capable of displaying an almost unlimited number of colors.

LCD sign text and graphic-display capability is limited only by the size of the display. Multiple file types, such as JPEG, VGA, HTML, and MPEG, can be displayed on an LCD sign.

LCD sign housings or enclosures are available only in 'off-the-shelf' options. The 'off-the-shelf' options are generally black or silver in color and are designed by the manufacturer to be aesthetically pleasing but non-obtrusive in appearance. Custom housings or enclosures are not generally available from the manufacturer; however an LCD sign may be incorporated into a custom display housing or enclosure.

LCD sign programming and control options are local and remote or centralized. Local control requires the programmer to connect directly to each individual sign via hardwire or a wireless hand-held device to program messaging and display cycles. Remote or centralized control allows all LCD signs on a network to be controlled and programmed from a central location on a standard PC. Connection to each sign from the remote or central control center will be either hardwire or wireless. In the case of a terminal type facility, hardwiring is the most practical and reliable method of connection.

LCD sign programming software is offered by some LCD sign manufacturers and by second-party software developers. The standard software offered by either source is generally very flexible in terms of interfacing with other programs. However, custom software may be required in some cases, such as integrating a ticketing and check-in counter display system and flight information system on the same network.

Uses

LED signs may be used to provide passengers with information at many locations within a terminal or intermodal transportation facility.

Augmentation of static wayfinding signage systems.

- Provide information for areas that may have flexible use or have variable hours of operation.
- Allow terminal operators to adjust airline gate assignments and provide this information to passengers without costly static sign changes.

Visual paging displays.

- Provide visual paging messages to accompany audio paging messages.

Baggage information display systems.

- Allow for real-time posting of airline and flight number information.

Transit information displays.

- Allow for real-time display of transit mode schedule information.

LCD signs may be used to provide information at many locations within a terminal or intermodal transportation facility.

Ticketing and check-in counter displays.

- Provide airline and flight information at each ticketing and check-in station to passengers while allowing the terminal operator flexibility in airline station assignment.

Flight information display systems.

- Allow for real-time posting of airline, flight number, gate number, and arrival and departure information.

Security check-point information systems.

- Allow for the posting of important passenger information at security check points.

Sign locations

LED signs

Augmentation of static wayfinding signage systems.

- Signs should be located at or near decision points along pathways and coordinated with the placement of static signs to avoid visual conflicts. Signs shall be mounted at the same floor to bottom of sign height as static signs, where possible.

Visual paging displays.

- Signs should be located along pathways and in gathering points, such as food courts, and coordinated with the placement of static signs to avoid visual conflicts. Signs shall be mounted at the same floor to bottom of sign height as static signs, where possible.

Baggage information display systems.

- Signs should be placed at the entrance to baggage claim areas, as well as at the carousels, and coordinated with the placement of static signs to avoid visual conflicts. If space allows, signs can be placed on gate concourses to provide information to arriving passengers as soon as possible. Signs shall be mounted at the same floor to bottom of sign height as static signs, where possible, or placed directly on top of carousels, where possible.

Transit information displays.

- Signs should be located at the point of access to the mode of transportation and coordinated with static signs to avoid visual conflicts. Signs shall be mounted at the same floor to bottom of sign height as static signs, where possible.

LCD signs

Ticketing and check-in counter displays.

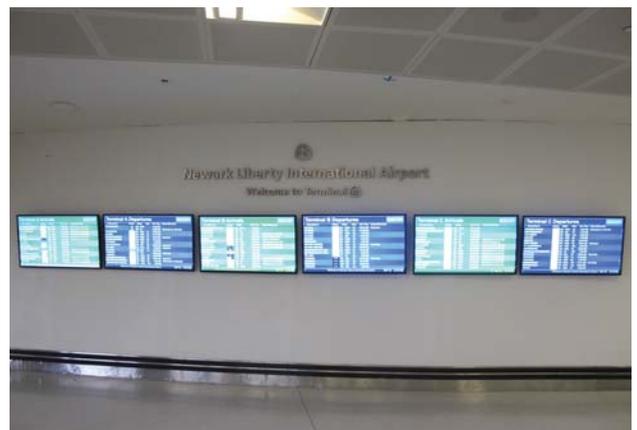
- Signs should be placed above each ticketing and check-in station.

Flight information display systems.

- Signs should be located in ticketing and check-in areas, baggage claim areas, retail areas, security check points, in gate concourses, and in gate satellites.

Security check-point information systems.

- Signs should be located in and near security check point queuing areas.



Appropriate communication through safety signs is a vital component to a sign program, whether the signs are permanent or temporary. Throughout all facilities, especially construction areas, safety signs should be used to warn visitors and employees of dangers and other possible hazardous conditions.

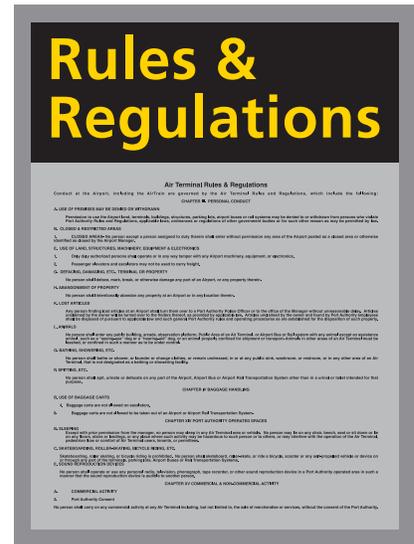


Fire safety sign types include: evacuation route maps, fire alarm pull station location identification and emergency exit signage.



Regulatory sign types include all signage that provides information for rules and regulations applicable to a facility.

For example, (Baggage Claim) instruction text should be coordinated with airport staff, customs, etc.



After Baggage Claim

After Baggage Claim proceed to Customs Inspector.
You must declare to the Inspector.

- Residents: All articles acquired abroad.
- Visitors: Articles which are being brought into this country for others, either as gifts or as a favor to others, and all articles to be left in the United States.

- Any currency or monetary instruments (checks, money orders, transfer checks, etc.) that total \$10,000 or more, either individually or added together.
- Any commercial articles, carpets, temporary importations, registrations, business samples, couriers.
- Any fruit, vegetable, plant, flowers seeds, live birds, or meat products being transported, or if you have been on a farm.

Oversized Baggage

Oversized articles, skis, and live animals will be handled at the oversized baggage desk; follow the yellow signs.

Check your baggage

Many bags look alike. Please match the claim stub number on your ticket to the tag on your bag.

US Customs & Border Protection

What you need to do while waiting for your luggage.

- Review your customs declaration to make certain it is completed.
- Keep your customs declaration and your passport ready and go to the nearest exit (follow the yellow signs).
- If you are approached by a customs officer, please cooperate fully. This will speed processing.



Appropriate communication through emergency signs is a vital component to a sign program, whether the signs are permanent or temporary. Throughout all facilities emergency signs should be used to alert visitors and employees of facilities or services that will be vital for their use in emergencies. These include dedicated emergency telephones, exits, defibrillators, fire alarms and extinguishers.



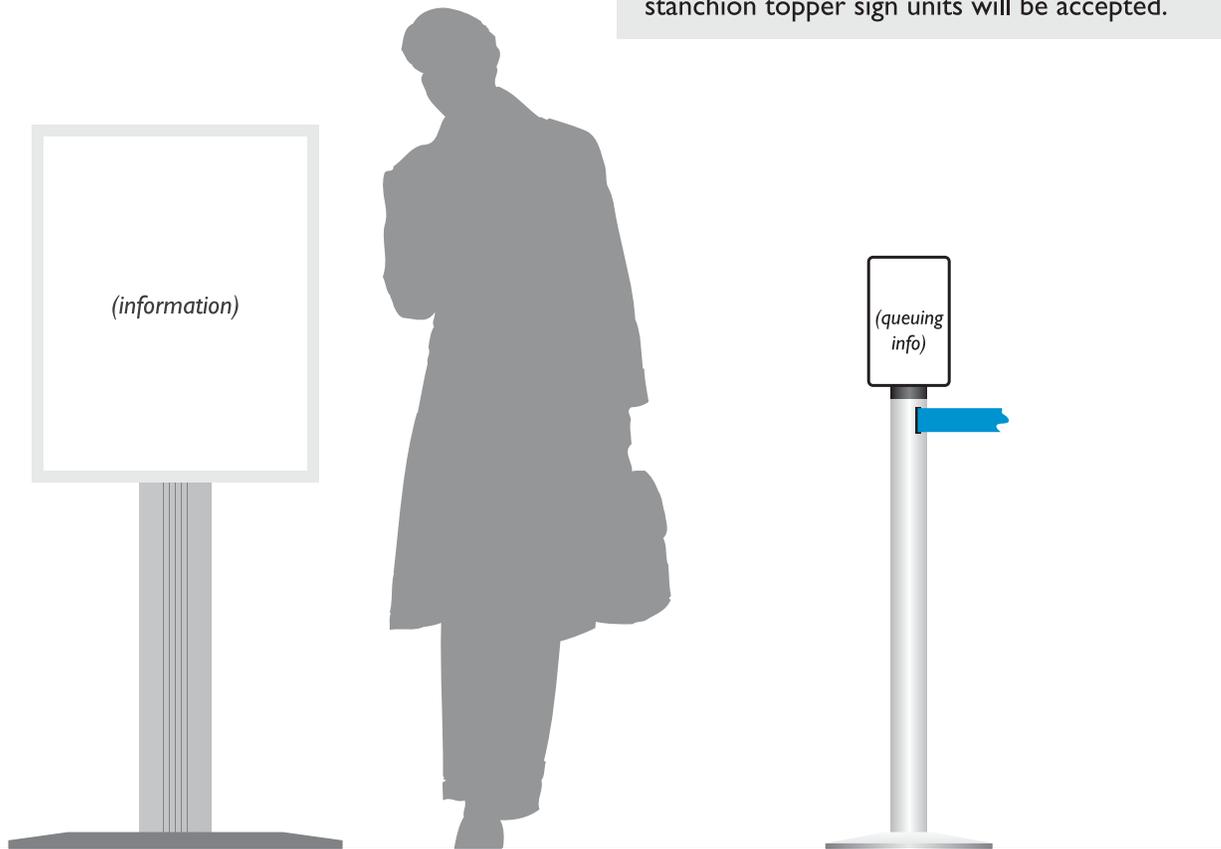


The Port Authority recommends using stanchion signs to indicate information that is non-color-coded or regulated, such as regulations, warnings, branding, security checkpoint information, queuing lane information, maps, trailblazing information, etc.

The standalone stanchion sign has a slim profile and a double-sided face in which information can be posted on both sides.

Queuing stanchions can be topped with smaller sign panels with information, such as first class, please remove shoes, have ID ready, branding information, etc. These should be used in lieu of the larger stanchions, whenever possible, to reduce the number of signs in circulation pathways.

The examples shown below are Lavi Industries™ models. For consistency throughout the airport or terminals, the Port Authority recommends using these models. However, as long as the intent is the same, any companies providing similar stanchion and stanchion topper sign units will be accepted.



Frame Display Stanchion
Standalone, two-sided viewing area

Queuing Stanchion
With retractable belt
and 7"x 11" vertical-fixed mount frame

③ PROGRAMMING/PLACEMENT

3.0 Introduction

- 3.1 - 7 * sign plan process
- 3.8 existing conditions survey
- 3.9 inventory
- 3.10 existing sign inventory guide
- 3.11 existing sign inventory form
- 3.12 new terminal sign checklist guide
- 3.13 - 17 new terminal sign checklist
- 3.18 inventory process
- 3.19 - 20 how to inventory
- 3.21 - 22 information tree - departures
- 3.23 information tree - arrivals

* See Section 5 - Legal
for TAA forms

The standards listed in this section should not be viewed as a complete inventory of design recommendations. If a certain design recommendation is not included in this section, it does not necessarily mean that the recommendation is unacceptable.

The guidelines are divided into five sections:

- 3.1 Sign positioning
- 3.2 Implementation of signs
- 3.3 Layout of signs
- 3.4 Information content
- 3.5 Airport signing

The following elements are to be taken into consideration when designing and locating each sign face.

- Legibility: typography and panel size must be appropriate for the distance and should include pure legibility, glance legibility, and target value.
- Pure legibility is the maximum distance at which a sign copy can be read under optimum conditions, with no distractions.
- Glance legibility is the distance at which a sign can be read swiftly and accurately.
- Target value is the characteristic by which a sign stands out as different from background objects.

Advertising, concession location signs, and all other non-directional signs should not be in the same viewing distance as wayfinding signs. No banners or ads shall be placed on, under or next to any directional sign.

- A1 Signs should be positioned perpendicular to the centerline of the main passenger flow. The location of the sign should be in the passenger's functional visual field. This field is determined by the normal cone of vision. Its apex is defined by the point from where a sign should be visible.
- A2 A location sign should confirm the arrival at a destination, even if this destination is an area that is not clearly delineated, such as Arrivals Hall.
- A3 Destinations that are not positioned in the functional visual field should be referred to by a directional sign at the decision point that is positioned perpendicular to the line of movement of the users.
- A4 Signs should be positioned in the area where they are expected; they should be visible when entering a decision area. As a general rule, signs should never be positioned past the physical points where paths divert or where a route choice should have already been made. Route choice confirmation signs are an option when the situation around a decision point is confusing.
- A5 Define 'virtual zones' in a building - one zone for routing signage and one zone for commercial signs. The virtual zone for the signage forms a corridor around all paths intended for users. See 'Advertisements and directional signing' below.
- A6 Signs should be positioned so that architectural elements do not block the sightline or view of a sign.
- A7 Signs should be positioned at all facilities that have vertical movement (elevator, escalator, stairs), especially if they are standalone elevators or stairs. The facility should be identified as such, and it should also be signed for what it gives access to.
- A8 Signing that instructs users to make a U-turn for a service is difficult to understand. This type of sign should ONLY be used if no other options are available.
- A9 To avoid glare, signs should not be installed too close to bright luminaries.
- A10 Even if there are no decision points on long paths, such as lengthy corridors and concourses, signs should be repeated for confirmation purpose.

Advertisements and directional signing

To avoid confusion between advertising and signing, three general guidelines should be followed:

1. At the centerline of the main passenger flow (the line of movement), only Port Authority wayfinding signs are permitted within the 'functional visual field'.
2. Outside the centerline of the main passenger flow, advertisements can be placed but always parallel to that flow.
3. It is also recommended that advertisements will not duplicate color schemes and layouts that are similar to the airport sign system.

See page 3.6 for placement and page 1.6 for color configuration.

- B1 Once a specific destination is mentioned on a sign (e.g., Terminal A), the destination must be used on all consecutive directional signs up to reaching the destination. At the destination, a location sign should be displayed. (Do not switch from 'Restrooms' to 'Men/Women' or from 'Terminal 4' to '4'.)
- B2 Color coding should always be used in a redundant way. If a directional sign reads 'Park in Red Area', the parking area should be identified by a sign saying 'Red Parking'.
- B3 Just like color coding, visual-form coding in geometric forms, such as circles, diamonds, rectangles, etc., is experienced as an informative aspect of a sign by the passenger and should only be used as a redundant element.
- B4 Each in-terminal destination should be identified by a location sign. This rule should also be applied for airport terminal buildings. Readability of the building signs requires special attention because users can approach a building from different angles, not only at a perpendicular angle.
- B5 Different color-coding systems can be used in the same complex. It should, however, be verified that the codes do not conflict because of the similarity between two or more facilities (never use the same color code for parking lots as a color code for the different levels in a parking garage, i.e., the yellow garage should not have a yellow level).
- B6 In areas where different users merge (parking areas where cars mix with pedestrians), the signs intended for each of the different groups should be clearly identifiable (e.g., by adding a car or a pedestrian pictogram).
- B7 The majority of the signs used at Port Authority airport facilities, by way of this manual, have been standardized. The intent is to show a strong family resemblance. All visual means to present information, such as color coding, pictograms, color scheme, and shape of signs, should be the same at all airports.
- B8 If standard directional signs lead to commercially-operated facilities (e.g., baggage trolley pick-up point), the commercial logo should not be used without the standard location sign (the logo could be combined with the sign message).
- B9 Apart from signs belonging to the signage system, there are many instructional signs in and outside of buildings, such as security and safety instructions. Special care should be taken to avoid confusion and visual overload.
- B10 The presentation of routing information should be based on the identification of different user groups and their need for information. Sometimes there might be more than just one (main) user group. 'Rental Cars' will be a destination mainly for arriving passengers. 'Meeting Point', on the other hand, will be a destination for arriving passengers, meeter/ greeters, as well as departing passengers. This means that, in the latter case, the signage has to cover the needs of three groups of users instead of just one.

- C1 Location/identification signs should be readable from a long distance. This way, additional directional signs can be reduced. A large size also makes identification signs more conspicuous. The size chosen should be in balance with the dimensions of the space where the signs are located and the size of the facade of the facility or building.
- C2 Different directions at a decision point should be placed on different signs. If different directions are combined on one sign, clearly display these different directions.
- C3 If two destinations are mentioned on the same line of a sign, meaning that for both destinations the same direction has to be chosen, the sign layout should clearly include an 'and'. Solutions might be a bullet, a comma, or a vertical line. A slash should not be chosen because this notation has the meaning 'one or the other' but not 'both'.
- C4 A pictogram and its accompanying text should always be perceived by users as belonging together, not as two separate elements.
- C5 Pictograms can be used in two ways.
1. Redundant use:
A pictogram with its reference in text (a restroom pictogram with the word 'Restrooms' next to it).
 2. Specifying use:
A pictogram indicates the facility in general and the accompanying text adds a specific meaning (a bus pictogram with the words 'to long term parking' next to it).
- C6 A pictogram's unique identity and color should not be adapted or modified to produce messages that are different from the pictogram.
- C7 Overhead directional signing should be illuminated. See page 6.3 for illumination.
- C8 If a color code is used on a sign, relate the color to the message. Do not color the whole sign.
- C9 Temporary signs need special attention. If they are used during construction work, they have to function in and out of the ordinary environment and should therefore be highly noticeable. The same requirements should be met if there is a change in a normal operation or if a facility is out of use. The standards for these signs should be the same as regular signs. Some of these guidelines are detailed in Section 2 of this manual.

Some situations require special interpretation of the graphic standards in this manual. Architectural details, operational demands, technical specifications, and clearance restrictions can all be significant to the actual design of signs. The Port Authority airport sign standards are sufficiently flexible to accommodate these special requirements. It is the policy of the Port Authority to create sign designs that are applicable for all airport terminals. Any sign designs that deviate in any way from the airport signing standards manual must be approved in writing by the Port Authority Aviation Sign Manager.

A sign should be designed for the first-time viewer and be brief and easy to read with as few words as possible to communicate the desired message. To decide what words should be placed on the sign, the sign coordinator should:

- D1 Evaluate what information is needed at a specific point and only provide the information necessary to make a decision at that particular location. As the viewer moves through the terminal, the information should progress from general to specific. If there is more than one facility with the same function, do not use the term 'All' if no choice has to be or can be made. Use 'Gates' not 'All Gates'. Combine the direction for a specific facility with the direction for the other by being specific ('Gates 10-50') and by using the term 'Other' ('Other gates') for the remainder. If there is more than one facility with the same function, each facility should always have an identifier (letter, number, or name). The naming should be systematic in such a way that it provides information with regard to the location of one of the facilities to the other (e.g., consecutive numbers).
- D2 Use standardized Port Authority of New York & New Jersey (PANYNJ) nomenclature for sign messaging. Information should be consistently presented throughout the PANYNJ wayfinding system.
- The PANYNJ standardized list of nomenclature is located in Section 4.
- The PANYNJ standardized list of pictograms is located on pages 1.14 to 1.25.
- D3 Check the comprehensibility of all terms used on the signs. If new terms or seldom-used terms have to be introduced, add explanatory text. Whenever possible, choose national or international conventional terms for facilities. Avoid airport and local jargon and abbreviations.
- D4 Always specify a term, if more than one variant is possible. Do not use 'Exit' if it is possible to use 'Airport Exit', 'Parking Exit', 'Exit to Ground Transportation', or 'Exit to Terminal'.
- D5 Avoid more than one piece of information on a dynamic sign in an 'alternating' display. People can easily miss it and it contributes to their insecurity.
- D6 If large parts of a facility are identified by a letter or number code, never leave out the identifying space. Do not use 'A' and 'B', but use Gates A and Gates B.
- D7 Install signs (e.g., maps) with an overview of all pictograms used and their meaning in areas where people have to wait. This should be done, at least, in all main waiting areas.
- D8 Whenever possible, messages should be presented using positive wording. For example, instead of 'Do Not Enter' state 'No Entry'.
- D9 Repeat important information.

Typical Port Authority of New York & New Jersey airport sign standards

- E1 All Departures and Arrivals signs, including Baggage Claim, should be in black type on a yellow background.
- E2 Except emergency exits, building exits are not signed as such. They are signed only if other destinations in the terminal can be reached through them. If there is a need to identify building exits, the use of 'Door #' is preferred.
- E3 In the concourses, arriving passengers receive directions to Baggage Claim and Ground Transportation (and AirTrain, if appropriate). At arrivals level, this general information will be more specific, such as Ground Transportation Information, Taxis, Buses, Free Shuttles, Parking, Hotel, and Rental Car Reservations, etc. At departures level, transferring passengers will be directed via 'Departures' to 'Check-in' and 'Ticketing'.
- E4 Concourses will not be signed as such but as 'Gates' or with the appropriate gate series numbers, e.g., 'Gates A', 'Gates A1-A20', etc. However, concourses may be identified on maps, etc.
- E5 The color grey is not only used as a supporting color for instructions, warnings, etc., but also for directories. There are:
- Airline Directories
 - Ground Transportation Directories
 - (e.g., Buses)
 - AirTrain Directories•
 - Elevator Directories•
 - Flight Information Displays (FIDs)

However, signs that identify or provide directions to a destination should have the color of their appropriate color coding. Therefore, elevator to gates signs are yellow type on a black background and AirTrain signs to subway and other transportation venues are white on green. Examples can be found in this manual.

- E6 In certain signing situations, 'trailblazer-type' signs can be used to provide better information for users. Examples of trailblazer signs can be found on page 2.10.

All overhead signs (suspended, floor mounted poles, flag signs, over portal signs, FIDS, VMS, etc.) are required to have a standard clearance of 8'-0" from the finished floor to the bottom of the sign box. Overhead signs grouped together should be organized by size. Signs placed next to each other should be similar in height and width.

While the width of the sign boxes may vary, where possible, the same width is recommended. If signs placed next to each other do not have the same width, signs with similar height should be placed next to each other.

When multiple signs are needed to indicate directional changes, where possible, signs should be grouped horizontally and must be separated by a 10" space between each sign box regardless of the sign box width or height.

Sign boxes that can not be placed on the same horizontal line due to sight line issues, should be located so that, the sign is primarily at a 90° angle to other signs that are nearby or at a 90° angle to a pedestrians sightline.

Exception:

Location or identity signs and outdoor signs may be mounted higher than the 8'-0" clearance due to extended and unobstructed sightlines. However, the height of the lettering and pictograms should be adjusted to compensate for a greater reading distance. See page 1.2.

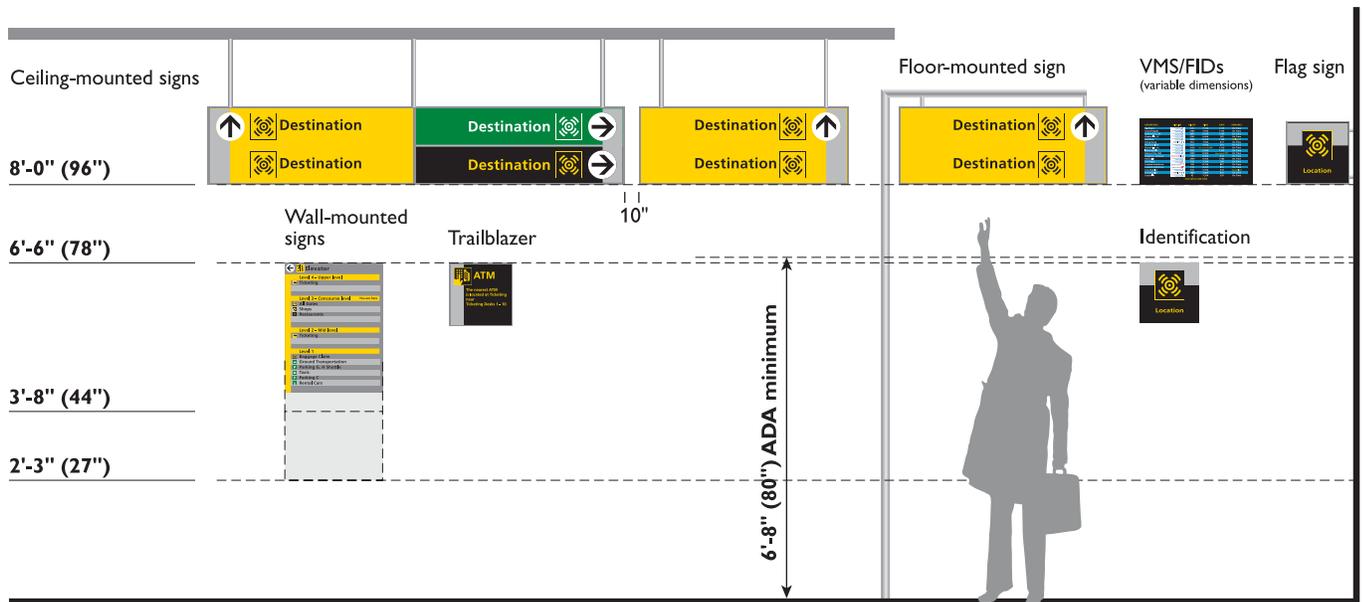
Low or restricted ceiling heights

In the case of low or restricted ceiling heights, a minimum clearance of 8'-0" between the finished floor and the installed sign box is required (see pages 2.2 to 2.8 for minimum allowable graphic layout sizes) (does not include sign box). Where low ceilings limit the vertical height of the sign messages to one line, messages may be grouped together on one sign, as long as they are in the same direction (see page 1.1 for message spacing guidelines).

No sign shall be permitted or installed in a location that exceeds (is lower than) the minimum 6'-8" clearance height. Trailblazing signs may be used in lieu of a ceiling suspended sign box for ceiling heights that do not accommodate standard size sign boxes (see page 2.10 for trailblazing signs).

Wall-mounted signs, notices, and warnings are fixed at 6'-6" from top of the sign to the floor with a minimum distance of 27" from bottom of the sign to the floor.

All placements of interior signs must meet any ADA regulations that apply, see pages 5.12 to 5.14.



Signs without an arrow, such as location signs and directories, should be left aligned, starting at the top left. The alignment of signs with arrows (directional signs) is discussed on pages 1.7 to 1.12.

Exceptions are flag type signs, such as curbside bus stop signs on poles and signs on walls above doors, where the alignment corresponds with the actual location of the facility. This exception also applies to each side of double-sided signs.

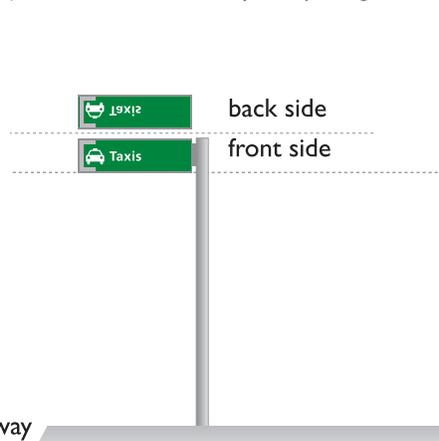
Location signs, with a large single pictogram and only a small space available for text, can also have centered text. Flag type signs are only used if the available space for signs is limited.



Location sign

Ground mounted sign

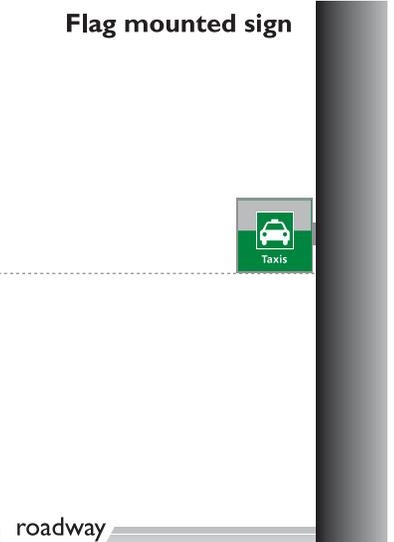
All signs at the curb frontage are justified to the road by the pictogram



Suspended overhead sign



Flag mounted sign



Some situations require special interpretation of the graphic standards in this manual. Architectural details, operational demands, technical specifications, clearance restrictions, etc., can all be significant to the actual design of signs. The Port Authority of New York & New Jersey Aviation Sign Standards are sufficiently flexible in order to accommodate these special requirements.

In this chapter, some examples are given as a visual guideline on how to deal with specific sign problems. All examples follow the dimensions as set in the graphic standards (Section 1).

It is the policy of the Port Authority to create sign designs that are applicable to all airport terminals. Any sign design that deviates in any way from the Airport Signing Standards Manual must be approved in writing by the Port Authority Aviation Department Sign Manager. See page 0.4 for more details.

The first step in the programming/placement process for the design and implementation of new wayfinding signs along a pathway for a facility to conduct an inventory of existing signs and conditions to note the functional relationship of the signs with existing conditions.

This process will determine sign location and messaging requirements for wayfinding and identification of services and amenities that are ancillary to visitor wayfinding. This in turn will guide the designer through the process of selecting the appropriate sign types, symbols and text necessary to properly sign the facility.

To assist with the programming and placement process, the checklist shown on page 3.11 is to be used to record all information for existing signs and to develop information for new signs or to revise existing signs. This checklist will guide the user in recording all relevant information necessary for the design process.

The checklist provides guidance in evaluating sign type, function, location, messaging and mounting method for existing signs for the purpose of updating and can be used to develop these requirements for new sign needs as well.

The checklist can be used to assist the evaluation of existing signs and needs for updates during site visits to facilities and can also be used when working from plans.

When using the checklist to develop an inventory of existing signs, a corresponding photographic record should be developed as well. The "Additional Comments" section of the checklist may be used to record digital photo numbers from the camera for this purpose.

The checklist provided on page 3.11 is reproducible either by printing the page from the provided .PDF file or by photocopying a hard copy if already printed.

The following checklist of signs provides a general outline for the typical types of wayfinding signs that may be needed in a new terminal. This list may not encompass all possibilities for signs; however, it provides a core set of signs that will be necessary to guide 'departing' passengers from the curbside through the terminal to the jetways and 'arriving' passenger from the jetways through the terminal to the curbside. Additionally, the checklist provides for information or services provided by the terminal, such as shops, restaurants, restrooms, baggage claim, etc., that a typical terminal will provide.

The checklist begins with the designation of primary areas in a terminal, such as arriving curbsides, departing curbsides, ticketing check-in, etc. Each area may contain up to five primary sign type categories (as found in this manual): directional signs, identification signs, information signs, directory signs, and electronic signs. Each category contains messages that may be necessary for each area and from one area to the next.

When used in conjunction with inventory sheets (see page 3.11) and current building plans, circulation pathways (see page 3.14) can be constructed using the sign type/message checklist. Once the pathways are designated and signs (generally) located, the survey sheets can be used to create sign and message reference information or actual graphic layouts derived from each section of the manual.

CURBFRONT - DEPARTURES

Directional Signs

- To Terminal _____
- Arrivals _____
- Ticketing/Check-in _____
- Baggage Claim _____

Identification Signs

- Airline Listing _____
- Arrivals _____
- Baggage Carts _____
- Terminal _____
- Door #'s _____
- Smoking Area _____
- Ticketing/Check-in _____
- Emergency Exit _____

Information Signs

- No Smoking _____

Directory Signs

- Information _____

Electronic Signs

- VMS _____

CURBFRONT - ARRIVALS

Directional Signs

- Transportation Information _____
- Bus Directory _____
- Parking _____

Curbside Pick up

Ground Transportation Services

- Shuttles _____
 - Rental Cars _____
 - Airport _____
 - Parking _____
 - Off-airport _____
- Buses _____
 - Public _____
 - Inter-airport _____
 - Express Buses _____
- Rail _____
 - Share Ride Service _____

- AirTrain _____
- Limousines _____
- Ticketing/Check-in _____
- To Other Terminals _____
- Elevators _____
- International Arrivals _____

Identification Signs

- Bus Directory _____
- Parking _____

Curbside Pickups

Ground Transportation Services

- Shuttles _____
 - Rental Cars _____
 - Airport _____
 - Parking _____
 - Off-airport _____
- Buses _____
 - Public _____
 - Inter-airport _____
 - Express Buses _____
- Rail _____
 - Share Ride Service _____
- AirTrain _____
- Limousines _____
- International Arrivals _____
- Airlines _____
- Arrivals _____
- Smoking Area _____
- No Smoking _____
- No Entry _____
- Staff Only _____
- Door Number _____
- Terminal _____
- Emergency Exit _____

Information Signs

- Parking _____

Directory Signs

- Airport Directory _____

Electronic Signs

- VMS _____

TICKETING/CHECK-IN

Directional Signs

- Airlines _____
- Gates _____
- Restrooms _____
- To Other Terminals _____
- Baggage Claim _____
- Oversize Baggage _____
- Baggage Screening _____
- Elevator/Escalator _____
- Escalator _____
- International Check-in _____

Identification Signs

- Airlines _____
- Restrooms _____
- Oversize Baggage _____
- Baggage Screening _____
- Staff Only _____
- Exit _____
- Elevator/Escalator _____
- Stairs _____
- No Entry _____
- International Check-in _____
- Emergency Exit _____

Information Signs

- No Smoking _____
- Exit _____

Directory Signs

- Terminal Information _____
- Airline Information _____

Electronic Signs

- FIDS _____
- Visual Paging _____
- VMS _____

SECURITY

Directional Signs

- Gates _____

Identification Signs

- No Entry _____
- Staff Only _____
- Security Checkpoint _____
- Emergency Exit _____

Information Signs

- Security Information _____

Electronic Signs

- Security Information _____
- FIDS _____
- VMS _____

AIRSIDE - ARRIVALS & DEPARTURES

Directional Signs

- Gates _____
- Restrooms _____
- Family Restrooms _____
- Shops/Restaurants _____
- Airline Lounges _____
- Currency Exchange _____
- Duty Free _____
- Business Services _____
- First Aid _____
- Baggage Claim _____
- To Other Terminals _____
- AirTrain _____

Identification Signs

- Restrooms _____
- Family Restrooms _____
- Airline Lounges _____
- Currency Exchange _____
- Business Services _____
- ATM _____
- First Aid _____
- Telephones (TDD) _____
- Defibrillator _____
- WiFi _____
- Help Phone _____
- Security Checkpoint _____
- Airline Passenger Service _____
- Staff Only _____
- Connecting Flights _____
- No Entry _____
- Ground Transportation _____
- Water Fountain _____
- No Smoking _____
- Emergency Exit _____

Information Signs

- Moving Walkway _____
- ATM _____

Electronic Signs

- FIDS _____
- VMS _____

Directory Signs

- Information (Travelers Aid) _____

CONCOURSE - DEPARTURES

Directional Signs

- Gates _____
- Restrooms _____
- Shops/Restaurants _____

Identification Signs

- Restrooms _____
- Gate(s) _____
- Jetway _____
- Staff Only _____
- No Entry _____
- WiFi _____
- Water Fountain _____
- Emergency Exit _____

Information Signs

- Moving Walkway _____
- No Smoking _____

Directory Signs

- Information _____

Electronic Signs

- FIDS _____
- VMS _____

CONCOURSE - ARRIVALS

Directional Signs

- Baggage Claim _____
- Ground Transportation _____
- Rental Cars _____
- ATM _____
- AirTrain _____
- Gates _____
- Airline Lounges _____

Identification Signs

- Welcome _____
- ATM _____
- Airline Lounges _____
- Emergency Exit _____

Electronic Signs

- FIDS _____
- VMS _____

International Arrivals

Directional Signs

- US Customs & Border Protection _____
- Int'l Baggage Claim _____
- Passport Control _____
- Restrooms _____
- Baggage Carousel _____
- Baggage Recheck _____
- International Arrivals _____
- To Other Terminals _____
- Ground Transportation _____
- Ticketing/Check-in _____
- Connecting Flights _____
- Exit _____
- ATM _____
- Currency Exchange _____

Identification Signs

- US Customs & Border Protection _____
- Passport Control _____
- No Entry _____
- Staff Only _____
- Restrooms _____
- Baggage Carousel _____
- Baggage Recheck _____
- International Arrivals _____
- Exit _____
- Police _____
- ATM _____
- Currency Exchange _____

Information Signs

- Baggage Carousel _____

Directory Signs

- Information _____

Electronic Signs

- FIDS _____
- BIDS _____
- VMS _____

Stanchions

- Information _____

BAGGAGE CLAIM

Directional Signs

- Ticketing/Check-in _____
- Elevators _____
- To Other Terminals _____
- Currency Exchange _____
- Baggage Carts _____
- Lost & Found _____
- Exit _____
- Parking _____
- Waiting Area _____

Ground Transportation Services

- Shuttles _____
- Rental Cars _____
- Airport _____
- Parking _____
- Off-airport _____
- Buses _____
- Public _____
- Inter-airport _____
- Express Buses _____
- Rail _____
- Share Ride Service _____
- AirTrain _____
- Limousines _____
- Baggage Claim _____
- Baggage Carousel _____
- Hotel Information _____
- Oversize Baggage _____
- Restrooms _____
- ATM _____
- Rental Cars _____

Identification Signs

- Ticketing/Check-in _____
- Elevators _____
- Baggage Carts _____
- Lost & Found _____
- Exit _____
- No Entry _____
- Staff Only _____
- Waiting Area _____
- Baggage Carousel _____
- Hotel Information _____
- Meeter/Greeter _____
- Oversize Baggage _____
- Restrooms _____
- ATM _____
- Rental Cars _____
- Emergency Exit _____

Information Signs

- Baggage Carousel _____
- BIDS _____

Directory Signs

- Information (Travelers Aid) _____

Electronic Signs

- BIDS _____
- FIDS _____
- Visual Paging _____
- VMS _____

The inventory process consists of field surveys or evaluation of plans to analyze a facility, the locations of destinations, amenities and services and the pathways visitors will follow to reach their destination either as an arriving or departing passenger or as a person dropping off or meeting a passenger.

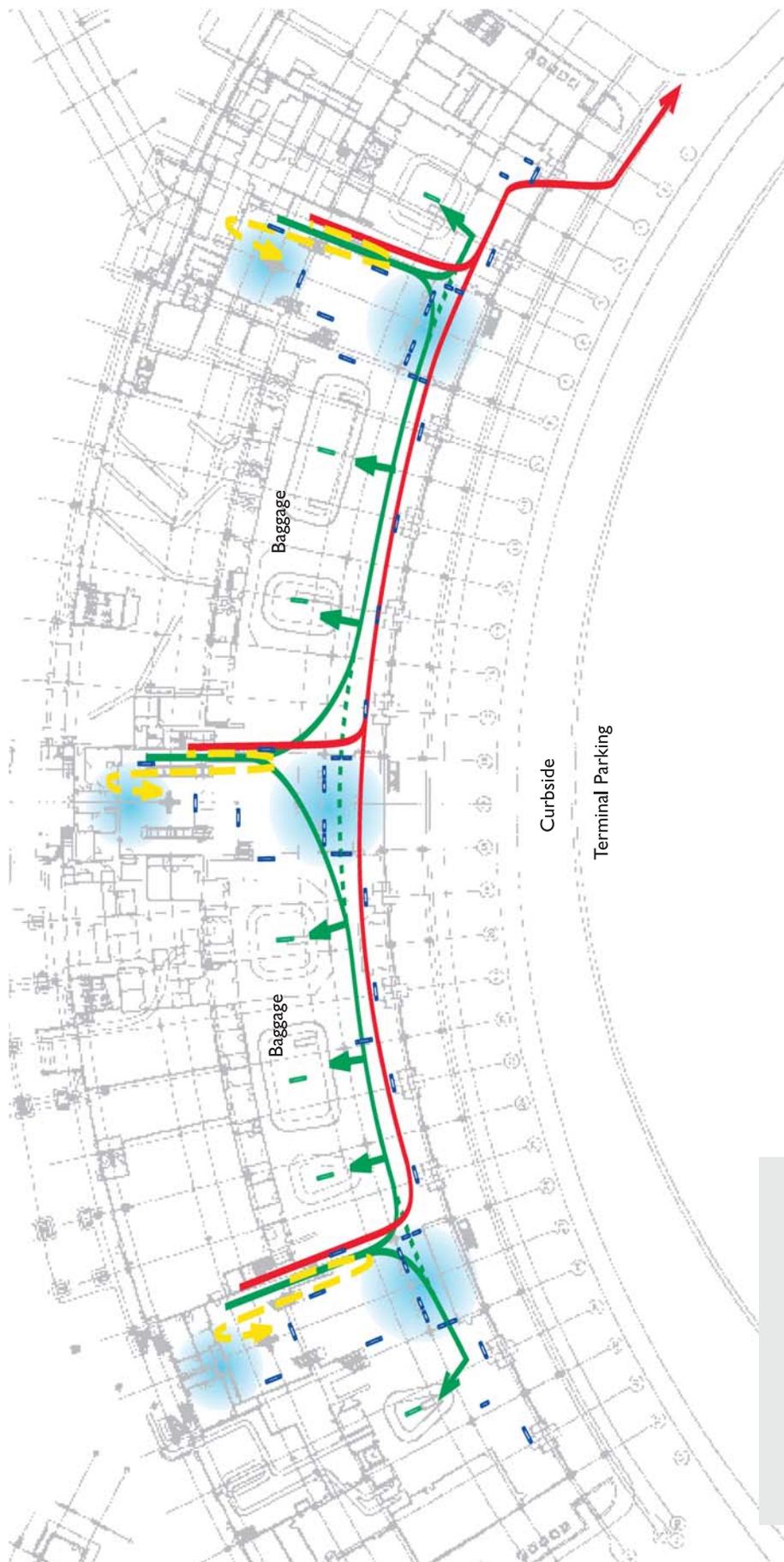
This process must be conducted so that all signage, including wayfinding directional and destination / amenity / service identification is programmed into a plan to create complete wayfinding pathways that can be easily and intuitively followed by visitors as well as locate destinations, amenities and services. Additionally all requirements for emergency and regulatory signage should be recorded.

The thought process to be used during the inventory process that will support the programming / placement process whether conducting a field survey of a facility or evaluating plans should be that of a first time visitor who is unfamiliar with the facility and is an infrequent traveler.

When evaluating a facility and pathways, accessibility for all types of visitors must be considered and as necessary, additional accessible pathways for handicapped visitors are to be developed.

Sign inventory method

1. The following map shows a sample inventory of all passenger flows and a sample method of passenger flow throughout a terminal facility. A flow is drawn from starting point to final destination. This example shows three passenger flows.
2. A passenger flow map must be reviewed by airport facility staff to ensure that the information is accurately presented.
3. The passenger flow map will be the main reference document to determine the placement of signs.
4. At the decision points, as identified by the passenger flow map, sign locations are established. In some cases, the sign locations can be positioned immediately after or ahead of the decision points. At long distances, or at locations where the architecture may make the placement of signs difficult due to very high ceiling heights or other factors, more directional signing (in repetitive fashion) may be required to confirm a destination route.
5. After having determined all destinations (and the direction of each destination) that will appear at a decision area, definitive sign arrangements can be made. All signs get a unique number which is then entered into a database. After approval of the sign inventory by the airport staff, the final sign layouts are made.
6. Signs should be placed at every decision point and reassuring intervals within a 'captive' corridor.
7. A reasonable range of 75 to 125 feet between major directional overhead signs is acceptable and complies with general ADA regulations. For a 'confined' corridor (i.e., a long 'people mover' corridor), signs placed at 100 to 300 feet are appropriate for a smooth traffic flow.
8. Thought must be given to the flow of pedestrian traffic. Signs must be located with respect to other signs so that a group of signs is placed without creating a cluttered appearance.



Legend

- arriving passengers to parking lot 
- arriving passengers to buses 
- arriving passengers to baggage claim 
- decision area 
- sign 

All main routes

It is important for passengers and visitors to access all information with ease and accuracy. Therefore, the entire route must be fitted with a consistent sign system. This way, passengers can get from highway to gate and vice versa.

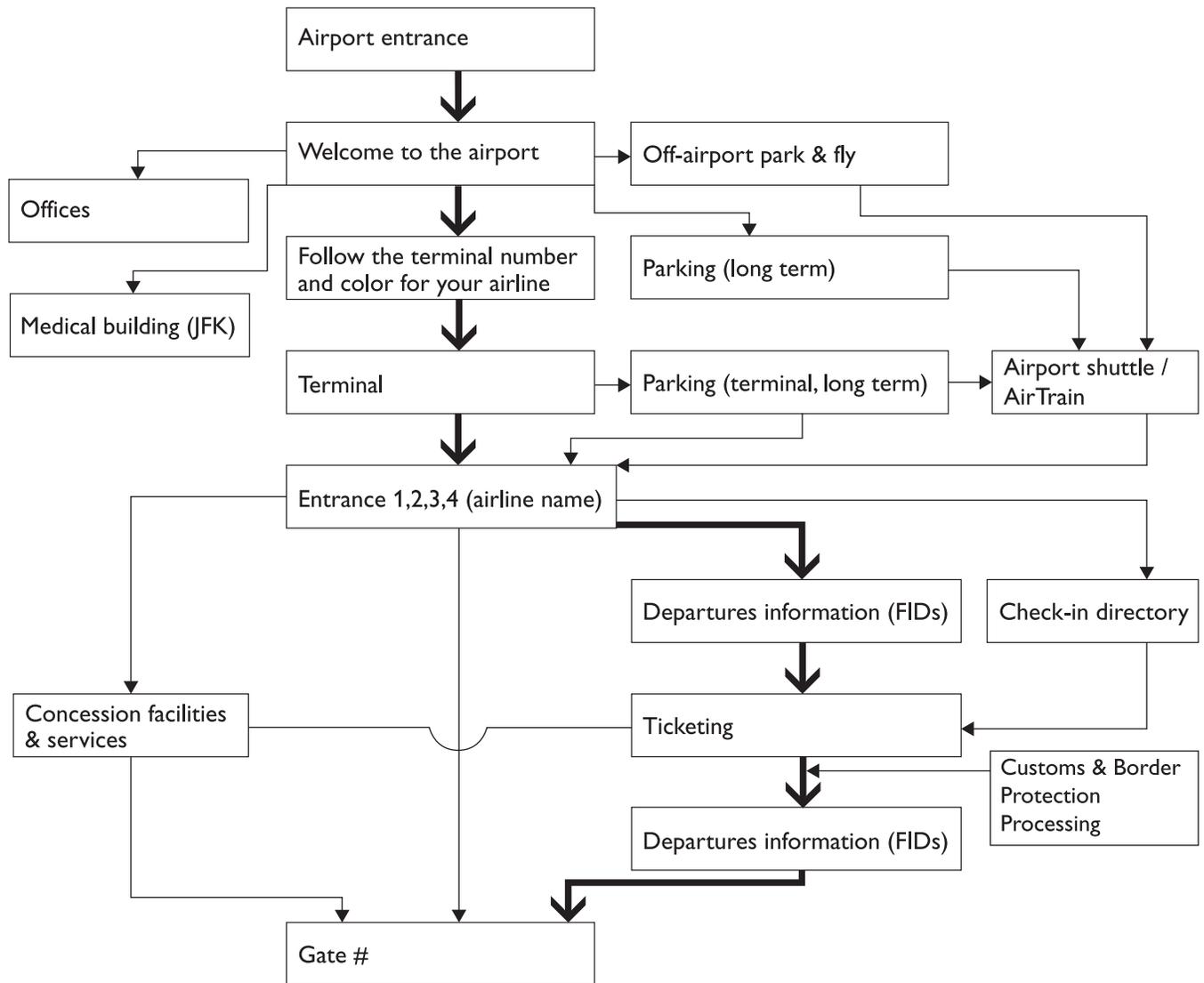
To make sure the right information is given at all decision areas, all possible routes have to be drawn into an information tree. Different routes will start at the same location and split along the path. Different routes will pass the same area at the airport.

Passenger profiles

Every type of passenger has their own information needs. According to their needs, the passenger might take a different route to go from the same starting point to the same destination.

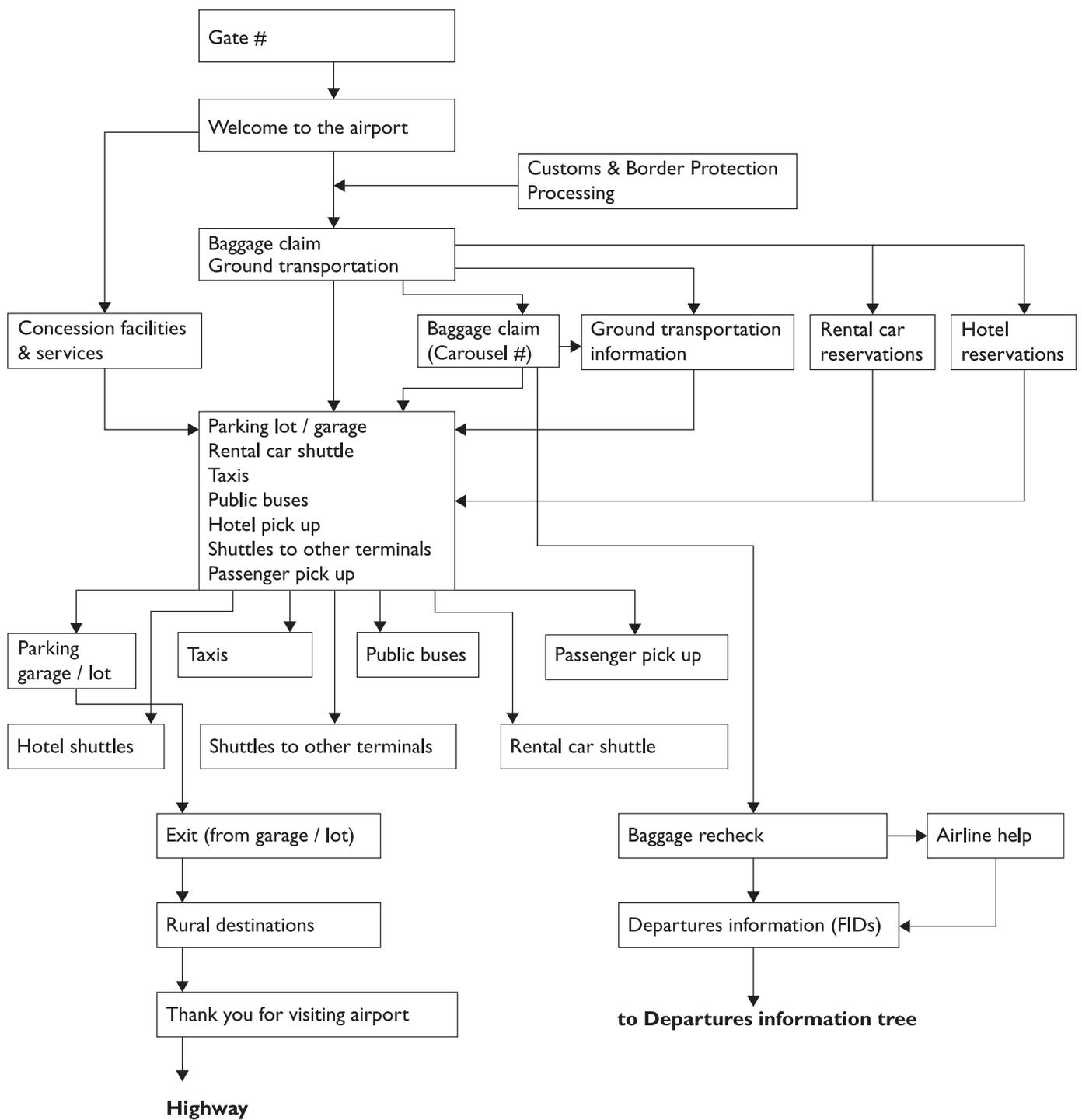
Secondary destinations

Facilities like restrooms and telephones are not shown in the information tree. These facilities may nevertheless be the main goal at a certain stage. For all facilities, the guidelines are according to which destinations must be signed.



Standard route

Highlighted is the route for a passenger who is brought to the airport by car and goes through a regular check-in procedure.



Connecting flights are considered to be re-entering the departures flow, following 'Departures'.

④ NOMENCLATURE

4.0	language
4.1	airport
4.2	general
4.3	transportation
4.4	services
4.5	parking
4.6	customs
4.7 - 8	spelling guide
4.9 - 16	spanish

In most airports outside the USA and England, bi-lingual signs are used. The native language is used plus English for all foreign travelers. English is the international language of transportation. However, to assist travelers who do not understand English, a special series of international pictograms has been created and tested. Most of these pictograms comply with worldwide standards. The following principles will be followed:

1. An English-only sign system

is preferred throughout all Port Authority airports.

2. Instructional handouts (optional)

Instructional leaflets (e.g., with maps) in a foreign language can be distributed to arriving passengers and near the entrances on the arrivals level for meeter/greeters.

3. Display signs at key decision points (optional)

Display instructions at main decision points (by the entrance of terminals, customs, baggage claim, and concourses). Also, provide informational wall signs that explain the common airport terms, including the pictograms in the most frequently used languages. This can easily be combined with a simplified diagram of the airport layout.

4. Second language

The Port Authority does not recommend the use of a second language on signs per its English-only policy. Any exceptions to this policy must be reviewed and authorized by the Port Authority. Any such authorization that is granted shall be limited to only one other language in addition to English.



For the proper spelling of standardized airport terminology, a list of airport nomenclature is available, which should be applied in all cases (see pages 4.1 to 4.6). This list is based on the common grammatical rules that also can be found on pages 4.7 to 4.8.

Should a phrase need translating into Spanish, please contact the sign manager for the appropriate translation.

Nomenclature for all Port Authority of New York & New Jersey airports

List of standardized terminology to be used on public signing, directories, information displays, etc.

Airline Directory	Offices
Airline Lounge	Oversize Baggage
Airport Exit	Rental Car Return
Airport Information	Rental Cars
Airport Services	Return to Airport
AirTrain	Return to Parking
All Gates	Return to Terminal
Arrivals	Secondary Area
Arrivals Hall	Security Checkpoint
Arriving Flights (FIDS)	Terminal (A, B, C, etc., and 1, 2, 3, etc.)
Baggage Carousel	Terminal (building)
Baggage Carts (Smart carts)	Ticketing
Baggage Check-in	Ticketing & Check-in
Baggage Claim	To Other Terminals
Baggage Information (BIDS)	Travelers Aid
Baggage Recheck	Waiting Area
Baggage Storage	Welcome to xxx Airport
Cargo Area	Wing (e.g., West Wing)
Check-in	
Connecting Flights	
Crew/APEC	
Crosswalk (pedestrian crossing)	
Departing Flights (FIDS)	
Departure Lounge	
Departures	
Domestic Arrivals	
Domestic Baggage Claim	
Flight/Gate Information (FIDS)	
Gas Station	
Gate (A1, B1, C2; 1, 2, 3, etc.)	
Gates (A, B, C; 1-9, 10-19, etc.)	
Highway Entrance	
Hotel Information	
Hotel Reservation	
International Arrivals	
International Baggage Claim	
Meeter/Greeter Area	
Meeting Point	
NSEERS	

Connector
Elevator
Emergency Exit
Entry
Escalator
Exit
Fire Extinguisher
Fire Hose
Level (1, 2, 3, 4, etc.)
Moving Walkway
No Carts
No Entry
No Parking
No Pets
No Smoking
Parking Entrance
Staff Only
Stairs
Terminal Entrance

Terms NOT to be used

Courtesy Van	but	Free Shuttle
Floor A, B, etc.	but	Level 1, 2, etc.
Free Buses	but	Free Shuttle or (Public) Buses
Ground Floor	but	Level 1

Airport Buses
Airport Information
Airport Shuttle
AirTrain Pick-Up
Arriving Flights (FIDS)
Bus
Buses
Cargo Area
Cell Phone Lot
Door(s) (Exit)
Express Buses (to ...)
Ferry
Free Shuttle
Ground Transportation
Ground Transportation Information
Heliport
Hotel Information
Hotel Pick Up
Hotel Reservation
Hotel Shuttle Information
Inter-airport Buses
Limousines
Passenger Drop Off
Passenger Pick Up
Porter Service
Public Buses (to ...)
Public Transportation
Rental Car Information
Rental Car Pick Up
Rental Car Reservation
Rental Car Returns
Rental Cars
Rental Cars Shuttle
Return to Terminal
Return to Terminals
Shared Ride Services
Shuttle
Subway
Taxis
To Other Terminals
Train/Rail Transportation
Water Transport

Airline Lounges (or 'Clubs')
Airport Directory
Airport Information
Airport Map
Assistive Listening
Baggage Carts
Baggage Service Office
Baggage Storage
Bar/Cocktails
Barber Shop
Business Services
Cash Machine/ATM
Change Machine
Changing Area
Chapel/Meditation
Coffee Shop/Snack Bar
Currency Exchange
Defibrillator
Dentist
Duty Free
Family Restroom
Fax/Business Center
First Aid
Food
Food Court
Gifts/Books
Help Phone
Information
Internet Café
Lost and Found
Mail Box
Medical Office
Newsstand
Nursery
Offices
Pet Relief Area
Police
Post Office
Recycle
Restaurants
Restroom Men
Restroom Women

Restrooms
Service Animal Relief Area
Shoe Shine
Shopping Area
Shops
Shops & Restaurants
Smoking Area
TDD Telephone
Telephones
Travelers Aid
Trash Disposal
Volume Telephone
Water Fountain
WiFi

Accessible Parking
Express Pay Parking
Motorcycle Parking
Off-airport Parking
Off-airport Parking Shuttle
Parking (with proper names)
Parking Shuttle
Premium Parking
Prepay Parking
Reserved Parking
Return to Parking
Valet Parking

Agriculture Exam
Automated Passport Control
Baggage Exam
Baggage Re-check
Cashier
CDC Quarantine Station
Connecting Flights
Department of Homeland Security Customs and Border Protection
Department of Homeland Security Transportation Security Administration
Document Review
Global Entry
Mobile Passport Control
Passport Control
US Citizens, Permanent Residents and Diplomats

1. All text is spelled in lower case letters except:

- **The first word (initial) of a sentence.**
Thank you for visiting (LaGuardia Airport).
Take the AirTrain to...

USE:

Thank you for visiting our airport.

NOT:

Thank You For Visiting Our Airport!

- **The initial of each word of a proper name or noun, e.g.:**
Newark Liberty International Airport

also:

Holiday Inn
Marketplace

- **The initial of standard airport terminology, e.g.:**

Shops
Restaurants
Restrooms
Elevator
Gates
Exit

- **Each noun of compound airport terminology:**

Automatic Cash Machine
Baggage Claim
Ground Transportation
Ground Transportation Information
Car Rental
Car Rental Return
Passenger Pick Up
Passenger Drop Off
Ticketing Check-in
Rental Car Information
All Gates

- **Alphabetical names of sections, areas, etc.:**

(Parking) A, B, C, etc.
(Terminal) A, B, C, etc.
(Gates) A, B, C, etc.

2. All capitals are used for abbreviated names:

LGA
JFK
ATM
TDD
KLM

Airlines:

Delta
American Airlines
British Airways

3. Abbreviations:

Abbreviations are to be avoided, especially for international signage. However, if certain abbreviations are required because of space limitations (e.g., EWR, JFK, LGA, SWF, LIRR, Lefferts Blvd, etc.), they will be added according to the Standard Airport Nomenclature.

4. Hyphens are sometimes used to bind a preposition to a specific verb:

Check-in (counter)
Baggage Check-in (counter)
Off-airport Parking

But NOT:

(Passenger) Pick-up
Drop-off

If a hyphen is used, the second word has no initial capital.

There are no specific rules for the use of hyphens in compound words. If it is not included in the list of standard airport terminology, consult the dictionary for guidance.

5. Ampersand and punctuation marks:

The ampersand (&) can only be used to indicate two combined related services:

- Ticketing & Check-in

For a continuous series, the use of 'to' should be used:

- Gates 1 to 20

If more than two services are combined or for enumerations, a comma should be used:

- Gates A, B
- Check-in 1, 6, 12

In all other cases, 'and' should be used:

- Lost and Found

The use of dashes (Gates 1-20) and slashes (Check-in/Ticketing) should be reserved for specific applications where space is limited.

A. Roads**English**

Airport Exit
AirTrain Parking
Cargo Area
Crosswalk (pedestrian)
Gas Station
Highway Entrance
Offices
Rental Car Returns
Rental Cars
Return to Airport
Return to Parking
Return to Terminal
Terminal (building)
To Other Terminals
Welcome to xxx airport

Spanish

Salida del aeropuerto
Estacionamiento AirTrain
Zona carga aérea
Paso de peatones
Gasolinera
Entrada autopista
Oficinas
Devolución coches alquiler
Alquiler de coches
Regreso al aeropuerto
Regreso al estacionamiento
Regreso a la terminal
Terminal
Hacia otras terminales
Bienvenido al aeropuerto xxx

B. Departing and arriving

English	Spanish
Agriculture Exam	Control de agricultura
Airline Directory	Directorio de Lineas Aéreas
Airline Lounge	Salón VIP
Airport Information	Información del aeropuerto
Airport Services	Servicios del aeropuerto
AirTrain	AirTrain
All Gates	Todas las puertas de embarque
Arrivals	Llegadas
Arrivals Hall	Sala de llegadas
Arriving Flights (FIDs)	Vuelos de llegada
Baggage Carousel	Cinta de equipajes
Baggage Carts (Smarte Carts)	Carrito de equipaje
Baggage Check-In	Facturación de equipaje
Baggage Claim	Reclamo de equipaje
Baggage Exam	Inspección de equipaje
Baggage Information (BIDs)	Información del equipaje
Baggage Recheck	Segunda facturación del equipaje
Baggage Storage	Depósito de equipaje
Cashier (customs)	Caja
Check-in	Facturación
Connecting Flights	Conexión de vuelos
Crew/APEC	Tripulación/APEC
Departing Flights (FIDs)	Vuelos de salida
Departure Lounge	Sala de espera
Departures	Salidas
Document Review	Control de documentos
Domestic Arrivals	Llegada de vuelos nacionales
Domestic Baggage Claim	Reclamo de equipaje
Flight/Gate Information (FIDS)	Información vuelo/puerta de embarque
Gate (A1, B1, etc.)	Puerta de embarque
Gates (1-9, A, B, etc.)	Puertas de embarque
Hotel Information	Información hoteles
Hotel Reservation	Reservación hoteles
International Arrivals	Llegadas de vuelos internacionales
International Baggage Claim	Recogida de equipaje internacional
Meeter/Greeter Area	Zona de encuentro
Meeting Point	Punto de encuentro
NSEERS (National Security Entry / Exit Registration System)	NSEERS (Sistema de Seguridad Nacional de Registro de Entradas y Salidas)
Oversize Baggage	Equipaje sobredimensionado
Secondary Area	Area secundaria
Security Checkpoint	Control de seguridad
Terminal (A, B, etc.)	Terminal
Ticketing	Venta de boletos
Ticketing & Check-in	Venta de boletos y facturación
To Other Terminals	A las otras terminales
Travelers Aid	Ayuda al viajero

B. Departing and arriving (continued)**English**

US Citizens, Permanent Residents, and Diplomats
US Customs and Border Protection
US Department of Homeland Security
Waiting Area
Wing
 West Wing
 East Wing
 North Wing
 South Wing
Welcome to the United States

Spanish

Ciudadanos de EEUU
Aduanas y Protección Fronteriza de los EEUU
Departamento de Seguridad Nacional de los EEUU
Sala de espera
Ala
 Ala oeste
 Ala este
 Ala norte
 Ala sur
Bienvenidos a los Estados Unidos

C. Airport services

English	Spanish
Airline Lounges (or 'Clubs')	Salones VIP
Airport Directory	Directorio del aeropuerto
Airport Information	Información del aeropuerto
Airport Map	Mapa del aeropuerto
Assistive Listening	Ayuda auditiva
Baggage Carts	Carrito de equipaje
Baggage Service Office	Oficina de servicio de equipaje
Baggage Storage	Depósito de equipaje
Bar/Cocktails	Bar/cócteles
Barber Shop	Peluquería
Business Services	Servicios empresariales
Cash Machine/ATM	Cajero automatico
Change Machine	Cajero automatico de cambio
Changing Area	Área cambiante
Chapel/Meditation	La capilla/meditación
Coffee Shop/Snack Bar	Cafetería
Courtesy Phones	Teléfonos de cortesía
Currency Exchange	Cambio de moneda
Defibrillator	Desfibrilador
Dentist	Dentista
Duty Free	Tiendas libres de impuestos
Family Restroom	Baño para familia
Fax/Business Center	Centro de negocios/fax
First Aid	Primeros auxilios
Food	Comida
Food Court	Plaza de comidas
Gifts/Books	Los regalos/libros
Help Phone	Teléfono de asistencia
Information	Información
Lost and Found	Objetos perdidos
Mail Box	Buzón de correos
Medical Office	Servicio médico
Newsstand	Puesto de periódicos
Nursery	Guardería
Offices	Oficinas
Pet Relief Area	Área de mascotas relief
Police	Policía
Post Office	Correo
Recycle	Reciclaje
Restaurants	Restaurantes
Restrooms Men	Baños Caballeros
Restrooms Women	Baños Damas
Restrooms	Baños
Service Animal Relief Area	Área de alivio de animal del servicio
Shoe Shine	Lustrado de zapatos
Shopping Area	Área de compras
Shops	Tiendas
Shops & Restaurants	Tiendas y restaurantes
Smoking Area	Área de fumar

C. Airport services (continued)**English**

TDD Telephone
Telephones
Travelers Aid
Volume Telephone
Water Fountain
WiFi

Spanish

Teléfono TDD
Teléfonos
Ayuda al viajero
Teléfono de volumen ajustable
Agua potable

D. Ground transportation and parking

English	Spanish
Accessible Parking	Estacionamiento discapacitados
Airport Bus/Buses	Autobús del aeropuerto/Autobuses del aeropuerto
Airport Exit	Salida del aeropuerto
Airport Information	Información del aeropuerto
Airport Shuttle	Servicios de traslado
Arriving Flights (FIDs)	Vuelos de llegadas
AirTrain Pick Up	Estación de AirTrain
Blue Parking	Aparcamiento Azul
Bus	Autobús
Buses	Autobuses
Cell Phone Lot	Parking de teléfono celular
Door(s) (Exit)	Puerta(s) (salida)
Express Buses (to...)	Autobuses directo (a...)
Express Pay Parking	Aparcamiento express
Ferry	Ferry
Free Airport Bus	Autobús gratuito del aeropuerto
Free Shuttle	Transporte gratuito
Green Parking	Aparcamiento Verde
Ground Transportation	Transporte terrestre
Ground Transportation Information	Información de transporte terrestre
Heliport	Helipuerto
Hotel Information	Información de transbordador de hotel
Hotel Pick Up	Parada de autobuses hoteles
Hotel Reservation	Reservación hoteles
Hotel Shuttle Information	Información de transbordador de hoteles
Inter-airport Buses	Autobuses entre aeropuertos
Limousines	Limusinas
Limousines (car service)	Taxis privados
Motorcycle Parking	Estacionamiento de motocicleta
Off-airport Parking	Estacionamiento fuera del aeropuerto
Off-airport Parking (long term)	Estacionamiento largo plazo
Off-airport Parking Shuttle	Traslado al estacionamiento fuera del aeropuerto
Off-airport Parking Shuttle (long term)	Traslado al estacionamiento largo plaza
Orange Parking	Aparcamiento Naranja
Parking/Parking Lot	Estacionamiento
Passenger Drop Off	Desembarque de pasajeros
Passenger Pick Up	Recogida de pasajeros
Porter Service	Servicio de maleteros
Prepay Parking	Estacionamiento prepago
Public Buses (to...)	Autobuses públicos (a...)
Public Transportation	Transporte público
Rail Transportation	Transporte ferroviario
Red Parking	Aparcamiento Rojo
Rental Car Information	Información alquiler de vehículos
Rental Car Pick Up	Recogida vehículos de alquiler
Rental Car Reservation	Reserva vehículos de alquiler
Rental Car Returns	Devolución vehículos de alquiler
Rental Cars	Vehículos de alquiler
Rental Cars Shuttle	Traslado a alquiler de vehículos
Return to Parking	Regreso al estacionamiento

D. Ground transportation and parking (continued)**English**

Return to Terminal
Return to Terminals
Shared Ride Services
Shuttle
Subway
Taxis
To Other Terminals
Valet Parking
Water Transport
Xpress Pay Parking
Yellow Parking

Spanish

Regreso a la terminal
Regreso a las terminales

Transbordador
Metro
Taxis
Hacia otras terminales
Estacionamiento valet
Transporte acuático
Estacionamiento Xpress Pay
Aparcamiento Amarilla

E. General

English	Spanish
Connector	Ascensor
Elevator	Salida de emergencia
Emergency Exit	Entrada
Entry	Escalera automática
Escalator	Salida
Exit	Extintor de fuego
Fire Extinguisher	Manguera incendios/bomberos
Fire Hose	Piso
Level (1, 2, 3, 4, etc.)	Andén automático
Moving Walkway	Prohibido carritos
No Carts	Prohibido entrar
No Entry	Prohibido estacionar
No Parking	Mascotas prohibidas
No Pets	Prohibido fumar
No Smoking	Entrada al estacionamiento
Parking Entrance	Puente peatonal
Skywalk	Solo personal autorizado
Staff Only	Escaleras
Stairs	Entrada a la terminal
Terminal Entrance	Pasaje peatonal
Walkway	pasaje peatonal a la terminal
Walkway to Terminal	

⑤ LEGAL

- 5.0 - 1 ** Sign plan process
- 5.2 Sign request procedures
- 5.3 - 4 TAA - Form PA 531
- 5.5 Project Initiation Form - TAA-MWA Ph 1 01
- 5.6 - 7 TAA Project Tracking Checklist - TAA Ck 01
- 5.8 Minor Works Application
Project Tracking Checklist-MWA CK 01
- 5.9 - 10 Minor Works Application - Form Ph 1 02
- 5.11 DHS Official Seal Usage Approval form
- 5.12 Maintenance letter guide
- 5.13 - 15 Americans with Disabilities Act compliance

** See Section 3 - Programming/Placement

The following pages are meant to instruct individual sign managers in the proper procedure for developing a sign plan. They include:

- Inventory of existing conditions
- Analysis of sign requirements
- Preparation of sign plan
- Implementation program

A sample worksheet for written documentation along with sample site plans has been provided as a reference.

The sign plan is a written record identifying each sign by type, along with a site plan for its placement and location. Preparing a sign plan should be the first step for each sign project. The sign plan provides the framework for managing an effective sign program. It can also track signs and help the sign managers make better decisions on new installations, replacements, removals, maintenance, and budget items. Once the sign plan has been prepared, it should become a part of the sign manager's operational management plan.

The following steps outline the process to develop a sign plan.

1. Conduct an inventory of existing signs. If it is a new terminal, this will be an inventory of signs that are necessary to go into the terminal.
2. Complete a sign inventory worksheet. This worksheet requires each sign to be numbered. The worksheet has columns for 'sign number', 'sign type', 'text on sign', 'sign location' (which may include drawings), 'sign measurements', 'notes', and an option to attach a photo of the sign.
3. Evaluation of the sign inventory. Once the sign inventory has been completed, evaluate the following:
 - A. Are there any signs missing?
 - B. Are the signs in good condition?
 - C. Are the signs in compliance with the standards?
 - D. Are there any signs that are no longer necessary or appropriate?
 - E. Are the signs in the proper place?

Based on this evaluation, the sign manager can identify new signs required and signs that can be removed, repaired, or replaced.

4. For the sign location aspect, especially for a new terminal, it may be necessary to develop a site plan with a detailed placement drawing. The site plan and detailed placement drawing must include the sign and sign number that corresponds to the sign information on the worksheet.

As sign evaluations take place and it is determined that new or replacement signs are necessary, it is the sign coordinator/manager's responsibility to request the new or replacement signs. A Tenant Alteration Application or a Maintenance or Minor Work Application must initiate this process, as outlined in the 'Aviation Department Tenant Alteration Procedures and Standards Guide'.

As many passenger terminal and cargo operators have contracts with architect and graphic companies, once approval has been given the operators may ask these companies to design the new or replacement signs. Once the design is completed, the sign package, indicating a graphic of the new or replacement signs and the signs they are replacing, must be sent to the Port Authority Aviation Signing Manager for review before fabrication and installation. The Aviation Signing Manager will coordinate with the Port Authority Redevelopment and/or Traffic Engineering staff to provide accurate feedback and comments to move the project forward as quickly as possible.

THE PORT AUTHORITY OF NY & NJ

PA 531

Tenant Alteration Application

APPLICANT MUST READ THE TERMS AND CONDITIONS INCLUDED WITH THIS FORM

The Applicant shall not commence performance of any of the said work prior to the receipt by Applicant of a copy of this application duly signed in Part Three hereof on behalf of the Port Authority of New York and New Jersey. Upon receipt thereof, the Applicant agrees to perform said work in accordance with the following "Information to be Furnished by Applicant" and to comply with and be bound by all requirements and conditions set forth below under the remarks, if any, in Part Three hereof and the terms and conditions set forth in this form.

Tenant Name _____

Facility & Location _____

TAA Number _____

Date _____

Part One: Information to be furnished by Applicant (Refer to your lease or permit for required information)
Permission is hereby requested to perform the following described work on the space occupied by the Applicant.

At (Facility)	Pursuant to (Lease, Space, Permit) No.	Location (Building No. or Area) of Space to be Altered
---------------	----------------------------------------	--------------------------------------------------------

Description of Work and Reason

Estimated Cost of Work \$	Estimated Time to Complete (Days)	Starting Date	Completion Date
---------------------------	-----------------------------------	---------------	-----------------

Plans: Prints of each drawing must be submitted with copies of application. Include plan showing area affected by proposed work.

Title of Plan Drawing	Drawing No.	Dated
-----------------------	-------------	-------

Contractor: Name and Address (If Not Known, Submit Later)	Engineer or Architect Name and Address
-----------------------------------------------------------	----------------------------------------

Phone No.	License No.	Phone No.	License No.
Email		Email	

Send Correspondence To: (Name and Address of Employee in Charge of Work)	<p align="center">ENGINEER OR ARCHITECT CERTIFICATION</p> <p>I have supervised the preparation of plans and specification for the entire work represented herein and hereby certify that they conform to the requirements of the respective enactments, ordinances, resolutions and regulations of the City, town or municipality in regard to construction and maintenance of buildings and structures and in regard to health and fire protection which should be applicable if the Port Authority were a private corporation.</p>
Phone No.	

Email	Signature of Licensed Professional Engineer or Architect	Date
-------	----------------------------------------------------------	------

Applicant's Name (As It Appears on Lease or Permit)	Signature of Licensed Professional Engineer or Architect	Date
-----------------------------------------------------	----------------------------------------------------------	------

By (Signature of Authorized Rep.)	Title	Date
-----------------------------------	-------	------

Part Two: M/WBE Program Information

A Minority/Women Business Enterprise (M/WBE) Plan is attached hereto for PA approval. The Tenant's contact person responsible for this project's M/WBE Program is named below.

M/WBE Contact Person (Name and address):

Phone No. _____ Email _____

Part Three: Design Approval (FOR PA USE ONLY)

The above Application Status is: Full Approval Withheld. Subject to the following conditions Conditional Approval

Signature _____ Reference Letter By _____

Prepared By	Date	Title	Date
-------------	------	-------	------

December 2011

TERMS AND CONDITIONS

1. In the performance of work covered hereunder the Applicant shall, unless otherwise directed in writing by the Port Authority, conform to the requirements of the respective enactments, ordinances, resolutions and regulations of the city, town or municipality in which the Facility is located in regard to the construction and maintenance of buildings and structures and in regard to health and fire protection which would be applicable if the Port Authority were a private corporation. The Applicant's obligations to comply with the above governmental requirements is for the purpose of assuring proper safeguards for the protection of persons and property at the Facility and is not to be construed as a submission by the Port Authority to the applications to itself of such requirements or any of them.
2. The Applicant shall comply also with such federal, state and municipal laws, statutes, orders and regulations, if any, as may be legally applicable to the work or the performance thereof or its employees therein. The Applicant shall consult with the Facility Manager, represented by the Tenant Coordinator, with respect to the applicability of any and all laws, statutes, enactments, ordinances, resolutions and regulations and as to the procedures to be followed before taking any other action with respect thereto, and shall follow the instructions and procedure prescribed by said Facility Manager with respect thereto.
3. The Applicant shall also observe and obey (and compel its officers, employees, agents and contractors to observe and obey) the rules and regulations of the Port Authority now in effect which are applicable to the performance of the work and such further applicable rules and regulations which may from time to time during the said performance be promulgated by the Port Authority for reasons of safety, health, preservation of property or maintenance of a good and orderly appearance of the Facility, or for the safe and efficient operation of the Facility.
4. The Applicant shall procure and maintain bodily injury and property damage liability insurance in its own name in at least the limits specified in the preamble to this Application and Workmen's Compensation insurance; or if the work is to be done by an independent contractor, the Applicant shall require such contractor to procure and maintain such insurance in the contractor's name. A certificate evidencing such insurance shall be furnished to the Port Authority Facility prior to the commencement of the work.
5. The Applicant shall indemnify and hold harmless the Port Authority, its Commissioners, officers, agents and employees, against and from (a) the risk of injuries (including wrongful death) or damage direct or consequential, to it or them or to its or their property, arising out of or in connection with the performance of the work, and (b) the risk of claims and demands by third persons arising or alleged to arise out of the performance of the work, whether such risks arise out of acts or omissions of the Applicant, its contractors, the Port Authority, or otherwise.
6. The Applicant shall pay all claims lawfully made against it by contractors, subcontractors, materialmen and workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of the work, and shall cause all contractors and subcontractors to pay all such claims lawfully made against them.
7. Only first-class materials and workmanship shall be used in the performance of the work, which shall be done in accordance with the drawings described in Part 1 of this Application and to the satisfaction and subject to the inspection of the Facility Manager (as represented by the Tenant Coordinator); the Applicant shall re-do or replace at its own expense any work not approved by him.
8. The Applicant shall notify the Facility Manager (as represented by the Tenant Coordinator) no less than two days prior to the commencement of the work, and shall complete the same within the number of days specified in Part 1 of this Application; and upon completion shall notify the Facility Manager.
9. In the performance of the work, (a) the Applicant shall not do or permit to be done any act affecting the operation of the existing plumbing, heating, fire-protection, fire-alarm, sewerage, drainage, water supply, electrical, sprinkler, ventilating, refrigerating, fuel or communication system at the Facility, or other such service system thereat, including all pipes, tubes, lines, mains, wires, conduits, equipment and fixtures, except with the express written approval of the Facility Manager (as represented by the Tenant Coordinator), or the Port Authority REO (b) the Applicant shall obtain a Port Authority permit from the Facility Manager (as represented by the Tenant Coordinator) prior to any cutting or welding and shall comply with the conditions which form a part of said permit, a sample of which may be examined in the office of the Facility Manager (as represented by the Tenant Coordinator).
10. (a) Prior to the commencement of the work and throughout the performance thereof, the Applicant shall erect and maintain at its own expense in or about the space such barriers, shields and other suitable protective devices for the protection of the public and others and their property as in the opinion of the Facility Manager (as represented by the Tenant Coordinator) may be necessary or desirable for the purpose. The work shall be performed in such manner as will cause the minimum inconvenience to members of the public and others at the Facility. During the performance of the work, the Applicant shall not permit the accumulation in or about the space of any debris, rubbish, or litter, of any sort resulting from such performance and shall make such arrangements for the frequent removal thereof from the Facility, by means of facilities to be furnished by the Applicant, as may in the opinion of the Facility Manager (as represented by the Tenant Coordinator) be necessary to prevent such accumulations. (b) In the performance of the work covered by this permit, the Applicant shall not employ any contractor nor shall the Applicant or any of its contractors employ any persons or use or have any equipment or materials or allow any condition to exist if any such shall, or in the opinion of the Port Authority, may cause or be conducive to any labor troubles at the Facility which interfere, or in the opinion of the Port Authority, are likely to interfere with the operations of the Facility by the Port Authority or with the operations of others at the Facility or with the progress of other construction work thereat. The determinations of the Port Authority shall be conclusive on the Applicant and, upon notice from the Port Authority, the Applicant shall immediately remove such contractor or withdraw or cause its contractors to withdraw from the Facility the persons, equipment or materials specified in the notice and replace them with unobjectionable contractors, persons, equipment and materials and the Applicant shall or shall cause it contractor to immediately rectify any conditions specified in the notice in the event of failure by the Applicant or any of its contractors to immediately comply with the requirements of this paragraph (whether or not such failure is due to the Applicant's fault) the Port Authority shall have the right to suspend this permit and the permission thereby granted, without prior notice when the labor troubles shall be so settled that such interference or the danger thereof no longer exists, the Port Authority, by notice to the Permittee, shall reinstate this permit on all the same terms and conditions as before the suspension. "Labor troubles" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns, complaints, disputes, controversies or any other type of labor trouble, regardless of the employer of the person involved or their employment status, if any. (c) Notwithstanding the approval of this permit by the Port Authority, the Applicant shall not perform or permit to be performed any work hereunder, the performance of which or the subsequent use or occupancy of which will (1) invalidate or conflict with any insurance covering the Facility or any part thereof, or in any property located therein or thereon, or (2) increase the rate of any fire insurance, extended coverage, rental insurance or other insurance on the Facility, or any part thereof or upon any property located therein or thereon. The Applicant shall promptly observe, comply with and execute the provisions of any and all present and future rules, regulations, requirements, orders, directions and standards of the National Board of Fire Underwriters as interpreted by the New York Fire Insurance Rating Organization as to work performed in New York State, or as interpreted by the Fire Insurance Rating Organization of New Jersey as to work performed in New Jersey, or of any other board or organization exercising or which may exercise similar functions, which may pertain or apply to the performance of the work or to the completed work (including use or operation (hereof) and the Applicant shall make any and all structural and non-structural improvements, alterations or repairs of the work that may be required at any time hereafter by any such present or future rule, regulation, requirement, or order or direction. If because of the work done or by reason of any failure on the part of the Applicant to comply with the provisions of this paragraph any such insurance shall at any time be limited, cancelled or invalidated, then the Applicant shall immediately remove the work, or if the rate of premium for any such insurance shall be higher than it otherwise would be, then the Applicant shall pay to the Port Authority on demand that part of all premiums which shall have been charged because of such work or by reason of such failure by the Applicant. The Applicant shall furnish to the Port Authority evidence of approval of the work by the insurance authority having jurisdiction.
11. Title to any installation, improvement, alteration, modification, addition, repair or replacement resulting from work done pursuant hereto shall immediately upon completion vest in the Port Authority (or in the Port Authority's lessor, if any and if the agreement between such lessor and the Port Authority so provides) without execution of any further instrument. The Applicant shall not remove or change the same unless the Port Authority, on or prior to the expiration or termination of the lease or permit described in Part 1 of this Application or within sixty (60) days after such expiration or termination, shall give notice to the Applicant requiring removal or restoration, in which case the Applicant (on or prior to the expiration or termination date or, if the notice is given after such date, then immediately after receipt of the notice) shall complete the removal of all of the same (or as much thereof as may be required by the notice) and the restoration (to the extent required by the notice) of the space affected by the work to the same condition as it was in prior to the commencement of the said work. If the Applicant shall fail to comply with such notice, the Port Authority may effect the removal and restoration and the Applicant shall pay the cost thereof to the Port Authority upon demand.
12. A Certificate of Authorization to Occupy or Use shall be issued to the Applicant by the Facility Manager (as represented by the Tenant Coordinator) upon request of the Applicant on completion of the work hereunder in accordance with the Terms and Conditions hereof and inspection thereof by the Facility Manager. Issuance of such certificate shall not preclude the Port Authority from showing that Applicant has failed to comply with his obligations hereunder nor shall it release Applicant from such obligations.
13. Processing of the Application by the PA is subject to the receipt of applicable fees as advised by the Facility Manager as represented by the Tenant Coordinator.

December 2011

THE PORT AUTHORITY OF NY & NJ

TAA-MWA Ph 1 01

Project Initiation Form

Tenant Name _____

Facility & Location _____

Project _____

A. Scope Description (Indicate the number of submission packages)

Emergency Works Application Phased Occupancy Sustainability Design Elements

Square Footage (Approximate)	Cost Estimate	Schedule Estimate (MM/DD/YY)	
SF	\$	From	To

Are there any:

	Yes	No
Code Issues	<input type="checkbox"/>	<input type="checkbox"/>
Impacts on life safety systems	<input type="checkbox"/>	<input type="checkbox"/>
Impacts on fire protection systems	<input type="checkbox"/>	<input type="checkbox"/>
Impacts on ventilation systems	<input type="checkbox"/>	<input type="checkbox"/>
Egress changes	<input type="checkbox"/>	<input type="checkbox"/>
Structural integrity impacts	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous materials present / used	<input type="checkbox"/>	<input type="checkbox"/>

B. Project Team (if known) Are team members licensed in State where work is being performed? (check below as applicable)
NOTE: Tenants are required to comply with the PA's M/WBE Program goals.

Design consultant _____

Contractor(s) _____

Other _____

C. Requested By

Contact _____

Firm Name _____

Signature _____ Date _____

Copies To _____

Project Determination (FOR PA USE ONLY)

Tenant Alteration Application Approved as Emergency Works Application

Minor Works Application Emergency Works No. _____

Tenant Coordinator _____

Signature _____ Date _____

To be submitted under cover letter from Tenant.

December 2011

THE PORT AUTHORITY OF NY & NJ

TAA CK 01
Page 1 of 2

TAA Project Tracking Checklist

This is a document submittal tracking tool - by project activity, by phase - for use by the Tenant, the A/EOR and other project team members.

Required
Submitted

Tenant Name _____

Facility & Location _____

Project _____

TAA Number _____

Project Initiation	Date Issued to PA	Date Received from PA
Project Initiation Form/Project Determination (TAA-MWA Ph 1 01)		
Phase I – Design	Date Issued to PA	Date Received from PA
Kick-off Meeting		
Tenant's Form Identifying A/EOR		
Acceptance of TAA Process		
Tenant's Form Accepting TAA process		
A/EOR's Form Accepting TAA process		
Site Visits		
Existing Conditions Survey		
Asbestos and HAZMAT Survey		
Preliminary Review (if required)		
Conceptual Review Submittal (if required)		
Architectural Review Submittal (if required)		
Sustainable Design Review Submittal (if required)		
Contract Document Submittal		
TAA Application (Form PA-531)		
Phasing Plan (as applicable)		
A/EOR Declaration (Form TAA Ph 1 06)		
Contract Documents List (TAA Ph 1 07) and Design Documents		
List of Special Inspections		
Asbestos Certification Form, or Abatement Permit Application		
Sustainable Design Form and Documentation (if required)		
Draft M/WBE Plan		
Tenant Alternation Application Fees (as applicable)		
PA Review and Rider Comments		
Rider A		
Rider A Response Form with updated Contract Documents List (TAA Ph 1 07) and Design Documents		
Rider B		
Rider B Response Form with updated Contract Documents List (TAA Ph 1 07) and Design Documents		
PA Full Approval - 'NFC' Letter		
Pre-Construction Submittal Package		
Contractors Insurance Certificates		
M/WBE Participation Plan		
Tenant's Identification Form		
A/EOR's Identification Form		
Health and Safety Plan		
Environmental Management Plan (as applicable)		

December 2011

THE PORT AUTHORITY OF NY & NJ

TAA CK 01
Page 2 of 2

TAA Project Tracking Checklist (continued)

This is a document submittal tracking tool - by project activity, by phase - for use by the Tenant, the A/EOR and other project team members.

Tenant Name _____

Facility & Location _____

Project _____

TAA Number _____

Required
Submitted

Phase II – Construction	Date Issued to PA	Date Received from PA
Pre-Construction Meeting		
Prime Contractor Name and Emergency Contact		
List of Sub-Contractors		
List all Special Inspections Required		
Construction schedule		
Hours of work		
Health and Safety Plan		
Security plan		
Approved drawings highlighting staging areas, haul routes, delivery routes		
Construction Permit		
Construction		
M/WBE Monthly Reporting Plan		
Cutting and welding permits <i>(if applicable)</i>		
Hot Work permits <i>(if applicable)</i>		
Electric arc welding permit <i>(if applicable)</i>		
Special Inspection documentation		
Partial Inspection (no occupancy)		
Certification Form		
Non-Conformance report		
Phase III – Close-out & Occupancy	Date Issued to PA	Date Received from PA
Partial Inspection (for occupancy)		
Certification Form		
Special Inspection Documents		
Non-Conformance report		
Re-certification Form		
Response to Non-Conformance Report		
Temporary Certificate of Authorization to Occupy		
Final Inspection		
Record Documents		
Certification Form		
Special Inspection Documents		
Non-Conformance report		
Re-certification Form		
Response to Non-Conformance Report		
Certificate of Authorization to Occupy and Use		

December 2011

THE PORT AUTHORITY OF NY & NJ

MWA CK 01

**Minor Works Application
Project Tracking Checklist**

This is a document submittal tracking tool - by project activity, by phase - for use by the Tenant and other project team members.

Tenant Name _____

Facility & Location _____

Project _____

MWA Number _____

Required
Submitted

Project Initiation	Date Issued to PA	Date Received from PA
Project Initiation Form / Project Determination		

Phase I – Design	Date Issued to PA	Date Received from PA
Minor Works Application Submission		
1. Minor Works Application Form (MWA Ph 1 02)		
2. Drawings showing the location and extent of proposed work		
3. Safety, data sheets or other documents		
4. Catalog cuts for equipment in food establishments		
5. Contractor's Insurance Certificate		
6. M/WBE Participation Plan (if applicable)		
7. Documentation of code compliance such as finishes (if required)		
Approval to Install		

Phase II – Installation	Date Held
Pre-Installation Meeting	

Phase III – Close-Out & Occupancy	Date Issued to PA	Date Received from PA
Minor Works Completion Form		
Inspection (as required)		
Non-Conformance Response Form (as required)		
PA Close-Out Form		

December 2011

THE PORT AUTHORITY OF NY & NJ

MWA Ph 1 02
Page 1 of 2

Minor Works Application
Refer to Checklist MWA CK 02

Tenant Name _____

Facility & Location _____

Project _____

MWA Number _____

A. Scope Description (location, materials, etc.)

Square Footage (Approximate)	Cost Estimate	Schedule Estimate (MM/DD/YY)
SF	\$	From To

Please find the following attached documents as per TCAP Manual Section 1.7 and Section 5.2.

Quantity	Description	Revision No.	Dated	By

B. Project Team

	Check if	M/WBE	License or Registration #
Consultant (if any)		<input type="checkbox"/>	
Contractor		<input type="checkbox"/>	
Other		<input type="checkbox"/>	

C. Requested By

Contact _____

Firm Name _____

Date _____ Signature _____

Copies To

Approval to Install (FOR PA USE ONLY)

Approval to Install subject to Facility Notes/PA Requirements in Section D Not Approved

Tenant Coordinator _____

Date _____ Signature _____

To be submitted under cover letter from Tenant.
Approval to Install to be displayed at the work location.

December 2011

THE PORT AUTHORITY OF NY & NJ

MWA Ph 1 02
Page 2 of 2

Minor Works Application
Refer to Checklist MWA CK 02

Tenant Name _____

Facility & Location _____

Project _____

MWA Number _____

D. Facility Notes/PA Requirements

SAMPLE

U.S. Department of Homeland Security
DHS OFFICIAL SEAL USAGE APPROVAL
 MD No. 0030

Read carefully before filling out this form.

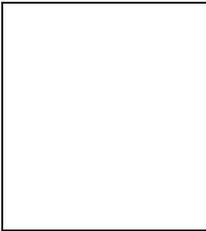
- Any use of the DHS seal must be approved by the Secretary or his designee.
- Any permission granted by the Secretary will apply only to the specific use outlined on this form and should not be construed as permission for any other use.
- The DHS Seal shall not be used in any manner which implies DHS endorsement of commercial products or services, the user's policies or activities, or on any article that may discredit the seal or reflect unfavorably on the U.S. Department of Homeland Security.

REQUESTORS INFORMATION	
<input type="checkbox"/> DHS/DHS COMPONENT <input type="checkbox"/> OTHER GOVERNMENT AGENCY <input type="checkbox"/> PRIVATE SECTOR	
NAME:	TITLE/POSITION:
AGENCY/COMPANY:	
ADDRESS:	PHONE NUMBER:
	FAX NUMBER:
REQUESTED USE OF THE DHS SEAL:	
CHECK ALL THAT APPLY:	
A.	<input type="checkbox"/> PROGRAMS <input type="checkbox"/> CERTIFICATES <input type="checkbox"/> DIPLOMAS <input type="checkbox"/> INVITATIONS
B.	<input type="checkbox"/> OTHER OFFICIAL IDENTIFICATION FOR DHS EMPLOYEES
C.	<input checked="" type="checkbox"/> DHS APPROVED <input type="checkbox"/> TRAINING FILMS <input type="checkbox"/> PUBLIC RELATIONS FILMS <input type="checkbox"/> OFFICIAL DHS MOTION PICTURES <input type="checkbox"/> OFFICIAL DHS TELEVISION PROGRAMS
D.	<input type="checkbox"/> DISPLAY WITH AN OFFICIAL DHS EXHIBIT
E.	WALL PLAQUES: <input type="checkbox"/> DHS HEADQUARTERS <input type="checkbox"/> ORGANIZATIONAL ELEMENTS <input type="checkbox"/> FIELD INSTALLATIONS
F.	<input type="checkbox"/> PROTOCOL GIFTS HANDED OUT BY SENIOR DHS OFFICIALS
G.	<input type="checkbox"/> MANUFACTURE OF ITEMS FOR DISTRIBUTION (BY ORGANIZATIONAL ELEMENTS, INCLUDING DHS HEADQUARTERS)
H.	<input type="checkbox"/> PLAQUES <input type="checkbox"/> PRESENTATION ITEMS FOR EMPLOYEES (FOR DHS EMPLOYEES OR OTHERS FOR SERVICES RENDERED)
I.	<input type="checkbox"/> OTHER OFFICIAL FEDERAL GOVERNMENT <input type="checkbox"/> PUBLICATIONS <input type="checkbox"/> WEBSITES <input type="checkbox"/> DISPLAYS
J.	OTHER (SPECIFY):
COMMENTS:	
DO NOT WRITE BELOW THIS LINE	
YOUR REQUEST HAS BEEN : <input type="checkbox"/> APPROVED <input type="checkbox"/> DENIED	
REASON FOR DENIAL (IF APPLICABLE):	
APPROVING OFFICIAL	
APPROVING OFFICIAL'S NAME: KAREN BIEHL	TITLE: PRINTING OFFICER
SIGNATURE:	DATE:

DHS Form 0030-01 (08/03)

Sample Maintenance or Minor Work Letter Application

Figure V-26


 ACME AIRLINES
 Building 100
 John F. Kennedy International
 Airport
 Jamaica, NY 11430

June 2, 2005
 Mr. Tin
Resident Engineer
 JFK Resident Engineers Office
 JFK Bldg. 14
 JFK International Airport
 Jamaica, NY 11430

Re: ACME Airline, Inc.
 Building 100

Subject: Maintenance Letter
 Existing Tenant Office
 Carpet Installation

Dear Mr. _____

Our Tenant, XYZ Cargo, Located in room #217 at the above referenced property hereby requests Port Authority approval to install carpet within their Leased Premises. The cost of this job is \$3,100 and is expected to take two (2) days to complete.

We are enclosing herewith a plan of the proposed work and a copy of the Independent Test Reports on Smoke Density and Radiant Flux for the carpet that they wish to install for your review and approval.

Our Tenant wishes to install this carpet by the end of the month.

Thanking you in advance for your prompt reply and approval.

Very truly yours,

/s/ Christopher Biggs
 Christopher Biggs
 President

Enc: As Noted

Sample letter Application for Maintenance or Minor Work.

V-34

On September 16, 1991, the United States Department of Transportation issued its version of compliance with the Americans with Disabilities Act (ADA), including provisions on signage at airports and other public transportation facilities.

All Port Authority facilities must comply with 2010 ADA Regulations and Design Standards.

2010 ADA Standards for Accessible Design

This Sign Manual is ADA* compliant, especially when it concerns the minimum height of letters and pictograms and satisfactory contrast between text and background colors.

All Port Authority of New York & New Jersey terminal buildings and standard airport facilities are designed to be wheelchair accessible by way of ramp entrances or elevators. Therefore, no facilities or routes are indicated as such.

* Compliance with the requirements of the Uniform Federal Accessibility Standards (UFAS), or a substantially equivalent standard, shall be deemed in compliance with this requirement. These facilities shall also provide the following additional accessibility features:

14 CFR 382.23 – (c)

Signing requirements are listed 14 CFR 382.23 (c) (1) through (6), 49 CFR 27.71 (c) (1) through (7), and UFAS 4.31.9

FIDS, BIDS, and queuing instructions are not specifically addressed in the regulations; however, the following requirements may apply:

14 CFR 382.23 (c) (5)

49 CFR 27.71 (c) (5)

ADA regulations require:

Overhead wayfinding/directional signs

Directional and wayfinding signs typically refer to overhead signage leading passengers to a destination by using repetitive messages. The signs must display information in a clear, concise, and consistent manner to a majority of passengers in the airport. The ADA requirement for all overhead signs, suspended or projecting, is that they be mounted at least 80 inches from the ground to eliminate potential clearance hazards for visually-impaired people. The ADA guidelines also require a 3" minimum cap height for interior overhead signs with a 6" pictogram.

Maximum mounting height for wall-mounted tactile-Braille signs is 60 inches from floor to center of sign.

Directional wall signs

The location of text telephones in each terminal must be identified at each telephone bank, using the TDD (Telcommunication Devices for the Deaf) pictogram. Directional signs indicating the location of the nearest public TDD shall be provided at all banks of public pay telephones not containing a public TDD. In addition, signs providing direction to public pay telephones shall also provide direction to public TDDs. Directional signs shall include the international pictogram of TDD. See page 1.21.

Area of rescue assistance

These signs are primarily overhead signs and do not require tactile characters, but they must be illuminated where exit signs are required to be illuminated.

However, if a wall/plaque sign is used, it should be identified with the international pictogram and the words 'Area of Rescue Assistance' along with tactile characters and grade 2 Braille.

Directions to the nearest accessible entrance must be posted at all non-accessible exterior building entrances, using the international access pictogram. See page 1.21.

Signs identifying permanent spaces (plaque signs):

Interior and exterior signs, identifying rooms, and spaces that are not likely to change over time are subject to ADA guidelines. Examples include, but are not limited to, signs for elevators, restrooms, floor numbers, room and floor numbers or letters, room names (chapels, meeting rooms, smoking rooms), emergency exit stairwells, exit passageways, and possible areas of temporary assistance (depending on the space and where the sign is located).

These signs have specific requirements that must also be taken into consideration:

- **Raised characters**

The text shall be raised 1/32" minimum from surface. The characters shall be uppercase and be sans serif.

- **Height above finished floor**

Tactile characters on signs shall be located 48 inches above the finished floor (measured from the baseline of the lowest tactile character) and 60 inches maximum above the finished floor or ground surface (measured from the baseline of the highest tactile character) (see Fig. 2.1, page 5.14).

EXCEPTION: Tactile characters for elevator car controls shall not be required.

- **Location**

Where a tactile sign is provided at a door, the sign shall be located on the latch side of the door 3" away from the door frame. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leaves, the sign shall be located to the right of the right-hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (by 18 inches, centered on the tactile characters) is provided beyond the arc of any door swing between the closed position and 45° open position (see Fig. 2.3, page 5.14).

EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.

- **Character height**

The character height measured vertically from the baseline of the character shall be 5/8 inches minimum and 2 inches maximum based on an uppercase letter 'I' (see Fig. 2.2, page 5.14).

- **Stroke thickness**

The stroke thickness of the uppercase letter 'I' shall be 15% maximum height of the character (see Fig. 2.2, page 5.14).

- **Finish and contrast**

Characters shall be non-glare on a non-glare finish.

- **Braille position**

Grade 2 Braille shall be positioned below corresponding one-line or multi-lined text. Any Braille used on a sign shall have a minimum of 3/8 inches space above and below Braille (see Fig. 2.2, page 5.14).

- **Pictograms**

Pictograms shall have a field height of six inches. Characters and Braille shall not be located in the field. Tactile text descriptors are required for plaque signs with pictograms. No smoking, occupant logos, and accessible pictograms are not required to have a text descriptor.

For specific information to design and to manufacture tactile-braille information and all other ADA* compliancy that is not part of this manual, please contact the Aviation Department of The Port Authority of New York & New Jersey.

* Americans with Disabilities Act, July 26, 1990.

See page 1.21 for international pictograms associated with ADA.



FIG. 2.1

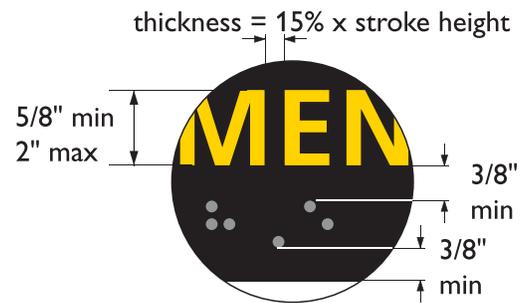


FIG. 2.2

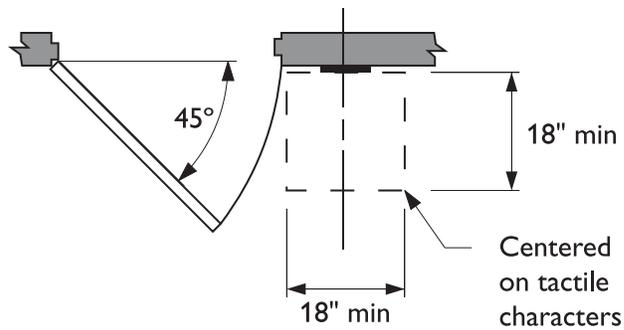


FIG. 2.3

⑥ MATERIALS/MAINTENANCE

- 6.0 sign box design
- 6.1 materials
- 6.2 lens
- 6.3 illumination
- 6.4 supports
- 6.5 maintenance
- 6.6 technology

Illuminated sign boxes

The internally-illuminated sign box shall have a retainer frame to hold the sign face.

The sign face retainer frame is represented in this manual as an outer border in dark grey.

The dimensions of the retainer frame may vary between manufacturers from 1/2" to 1-3/8". For this reason, no dimensions are given for the retainer frame for illustrations in this manual.

The actual sign face panel size will be larger than the visible face when installed in the sign box. The overall increase in sign panel size will vary between 1/2" and 1-3/8", depending upon the retainer frame size being used. The sign face color and graphic material must extend beyond the visible face to the extreme edge of the sign box to prevent light leaks. The sign face retainer frame and the sign box should match Pantone Matching System™ (PMS), Cool Grey 9C.

Basic performance criteria

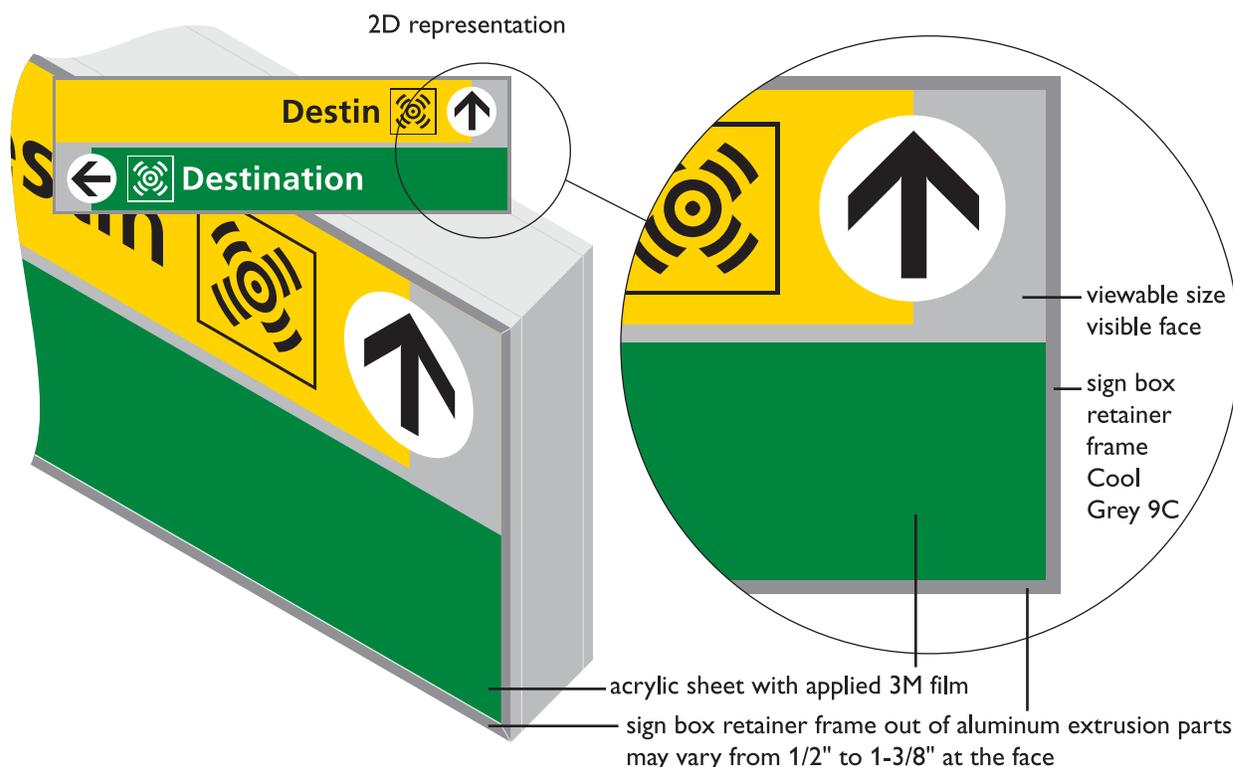
Box mounting and/or support may be by round or square tube armatures.

Sign box profile shall be of the overlapping type to insure the absence of light leaks.

The design of the box must allow for the following: access and propping of the access panel for re-lamping and servicing of the box; a mechanical latching mechanism for box closure; and provision for ventilation to prevent condensation and heat build-up.

Illuminated graphics shall be obtained by placing translucent vinyl graphics on white acrylic (#7328 - dense milk white for even light transmission). Even illumination shall be an absolute requirement.

Illumination of signs adds a substantial value to the conspicuousness of key passenger signing. To obtain true and brilliant color, the sign boxes must be fitted with TL80 tube lights or Light Emitting Diode (LED) lamps having a color rendering index (CRI) of at least 85.



The Port Authority airport sign program uses a variety of sign materials. The selected materials will depend on the intended function of the sign.

Generally, higher grade materials have a longer life span; whereas, lower grade materials tend to deteriorate faster due to sunlight (UV rays), environmental factors, and wear and tear.

When determining the budget for a sign or sign program, the cost should include design, fabrication, installation, and typical yearly maintenance costs. Because of the expense and environmental impact, unnecessary illumination of signs should be avoided.

Note:

The Port Authority encourages the use of more natural and environment-friendly lighting in all passenger terminals and cargo facilities.

The recommended materials for signs are as follows:

Sign cabinets:

Aluminum Extrusion: Cabinet frames, face frames, support poles, mounting poles, and support angles.

Aluminum Sheeting: Non-illuminated sign skins.

Aluminum Plate: Leveling plates and mounting bolt plates.

Stainless Steel Extrusion: support poles, mounting poles, and support angles.

Stainless Steel Sheeting: Non-illuminated sign skins.

Stainless Steel Plate: Leveling plates and mounting bolt plates.

Galvanized Steel: Substitute for stainless and/or aluminum.

Sign face materials (vinyl) (see pages 1.4 to 1.5):

Opaque: Interior and exterior non-illuminated signs.

Translucent: Interior and exterior illuminated signs.

Reflective: Exterior non-illuminated signs.

Sign face materials (plastics):

Translucent Acrylic: Interior and exterior illuminated signs, directory face cover.

Expanded Polystyrene: Directory face backer.

Sign cabinet finishes:

Grey, semi-gloss finish on aluminum cabinets and face frames only.

Directional brush polish on certain directories.

Metal finish for galvanized steel use.

Sign cabinet illumination:

Fluorescent tubes (minimum 60 watts).

Directory faces:

Opaque: Scotchprint mounted to aluminum, plastic, or steel (do not mount Scotchprint to plastic in an exterior application).

Translucent: Duratrans 7 mil translucent film, with additional 7 mil UV resistant overlamine; mounted inside illuminated cabinet.

The use of internally illuminated signs is preferred wherever possible to most effectively attract the attention of visitors and convey vital information. To achieve this, the proper substrate and decoration media must be used and properly executed.

The sign face or lens is translucent white acrylic, color number 7328, the industry standard used by acrylic manufacturers. The thickness of this material is 3/16" (.1875). This color and thickness combination provides the proper level of light transmission.

The sign face or lens must be positioned from the light source, (fluorescent tube or light emitting diode) to allow proper diffusion to create an even appearance, free of "hot" spots.

Sign messages are made with 3M translucent vinyl self-adhesive films applied to the first surface (outer surface) of the acrylic sheet material. All translucent vinyl self-adhesive film is to be applied with proper overlaps between colors and is to be free of gaps which create white light leaks in colored areas per the manufacturers written instructions.

Illumination

Illuminated signs significantly increases the readability of signing. The following standards for illumination apply:

Overhead, key wayfinding signs must be illuminated.

These include directional signs that are mounted 8'-0" from the floor (ceiling mounted, flag mounted to the wall, or floor mounted on a pole). Identification signs confirm/identify destinations, such as gate numbers in a jetway, terminal identifiers, train station identifiers, or platform numbers (inside or outside the terminal).

The categories of non-illuminated signs usually include wall-mounted signs, i.e., directories, parking row identifiers, stair numbers, or door signs. There are different cases for sign illumination. For example, a non-illuminated airline directory in a terminal may have to be illuminated in a parking garage, if there is insufficient ambient light for travelers to see a directory to determine the route to a terminal or airline.

If there is enough ambient light, signs may not have to be illuminated. Ambient lighting has to be at least 30 foot candles minimum in daylight or night conditions. Any exceptions to the illumination standard must be approved by the Port Authority.

See page 2.23 for illumination contrast ratios.

In low light areas where non-illuminated signage serves vehicular operators, reflective sign decoration media must be used. For all roadway and curb frontage signage, appropriate 3M reflective materials are to be used (see Port Authority of New York & New Jersey Airport Roadway Sign Design Manual, January 2013 by PA Traffic Engineering Department).

All sign mounting methods must be properly designed and engineered to ensure that all signs are mounted securely and do not pose a safety hazard to the public.

All sign mounting designs are to be properly analyzed, with structural calculations conducted by an engineer licensed in the states of New York or New Jersey as required by the facility location.

All final design drawings and calculations must be signed and sealed by an engineer licensed in the states of New York or New Jersey as required by the facility location.

Design Requirements

1. Wall mounted signs must utilize the proper mounting fastener or anchor for the wall material to support the shear load and minimum 300 pounds of force pull-down resistance.
2. Post mounted signs must utilize the proper post structure and anchorage (excavated concrete foundation or mechanical anchor to concrete surface) to resist wind loading of 90 MPH with a 120 MPH gust factor as well as meet the minimum 300 pounds of force pull-down resistance.
3. Overhead or ceiling mounted signs must meet the minimum 300 pounds of force pull-down resistance as well as meet an interior wind load gust factor of 15 MPH and an exterior wind load of 90 MPH with a 120 MPH gust factor as well as meet the minimum 300 pounds of force pull-down resistance.

A comprehensive sign management program includes regular maintenance. Sign maintenance is an ongoing process of keeping the signs clean and in near-new repair, seeing that the system continues to display accurate information, and conforming new or revised signs to the original design standards.

This is comprised of inspecting, repairing, replacing, removing, cleaning, and refinishing.

In order to keep maintenance program costs down, it may be best to establish an 'in-house' maintenance system for signs compared to contracting with a sign vendor to clean, inspect, and maintain the signage.

Signs should be cleaned periodically to maintain their clarity and effectiveness. Proper cleaning solutions should be used and an inspection should be performed at the same time the cleaning is done to determine that proper cleaning was performed.

Suggested sign maintenance procedure

1. Set up a monthly visual inspection of all signs. A visual inspection consists of checking for burnt out bulbs, sign face damage, scratches to sign cabinet, graffiti, obvious structural damage, and incorrect/not-to-standard/temporary sign face updates.
2. Set up a quarterly sign cleaning schedule. Cleaning should consist of exterior surfaces and support structures. Twice a year, the cabinet interior should be visually inspected for dust, dirt build up, and cleaned as necessary.
3. Replacement parts, such as bulbs, hardware, and even vinyl, in some cases, should be on hand so that immediate 'band-aid' fixes can be done immediately.
4. Determine if light-to-medium sign damage or replacements can be handled by an in-house sign shop.
5. Determine how damaged signs shall be handled. If the vinyl needs to be replaced, can it be done 'in-house'? If the cabinet structure is damaged, will a sign vendor be needed?
6. So that the standards are properly maintained, sign vendors must be fully aware of this manual and its contents before they install, repair, or replace any signs.

A comprehensive wayfinding signage system may include dynamic communication and display media technology such as Liquid Crystal Display (LCD) flat panel displays or Light Emitting Diode (LED) dot matrix variable message signage to convey real-time information such as, visual pages or emergency information, or provide a rotating display of messaging and graphics to support a static wayfinding signage system.

In addition to selecting the proper dynamic signage media and developing programming and control, electrical power and data communication infrastructure to program and support the dynamic signage media, long term maintenance of the dynamic signage media must be considered.

As a key component of the development of a dynamic signage media system, a maintenance plan that details requirements for specific elements, must be included.

Maintenance Considerations for Dynamic Signage Media

1. Warranty requirements (material and labor) for hardware and software (the longer the better)
2. Initial programming and control software development and integration into new or existing communication networks.
3. Initial programming and control software operator training and on-going support.
4. System self-diagnostic capabilities.
5. Items that may be self-serviceable.
6. Spare parts inventory requirements for self-serviceable items.
7. Items that require manufacturer service.
8. Spare parts inventory requirements for items that require manufacturer service.
9. Required regular maintenance service and cleaning interval schedule (self- or manufacturer service).
10. Spare parts inventory requirements for regular maintenance service and cleanings.
11. Service response and turnaround requirements for required manufacturer service calls to limit system down time.
12. Complete backup dynamic signage media unit inventory requirements.

⑦ FACILITIES SPECIFIC GUIDELINES

7.0 Basics of sign applications

7.1 Terminals

7.1 emergencies

7.2 regulations

7.3 customs

7.4 meeting point

7.5 Parking

7.5 vertical circulation

7.6 lot identification

7.7 Curb Frontage

7.7 - 8 arrivals

7.9 Cargo

7.9 - 11 interior

7.12 - 13 exterior

7.14 AirTrain

Operational issues at each of the airports and at facilities at each of the airports are varied based on multiple factors including physical conditions, airport access, and airline flight schedules. This will require the implementation of signage to address facilities specific issues.

This section provides guidance in planning facilities specific signage for the issues and elements that are most likely to vary between airports or even between facilities at one airport.



In addition to standard emergency signage such as emergency exit identification, fire extinguisher location identification, or defibrillator location identification; facility specific emergency messaging including descriptive and instructional information or warnings such as emergency exit pathway maps, warnings for hazard, identification or alarm equipped doors, or instructions on how to contact the Port Authority Police is likely to be required

All emergency signage, including signage with facility specific messaging is to be consistent in design and placement. All facility specific emergency signage designs must be submitted to the Authority for review prior to implementation.

Facility specific regulatory signage is likely to be required to convey information including hours of operation for services, limits of access to areas, and terminal curbside access for picking up or dropping off passengers, etc.

All regulatory signage, including signage with facility specific messaging is to be consistent in design and placement. All facility specific regulatory signage designs must be submitted to the Authority for review prior to implementation.



Wayfinding signage located in Customs and Border Protection service areas are to be designed to follow the standards as described in this manual, by specific sign type where possible, utilizing Customs and Border Protection specific pictograms.

All sign designs and plans for Customs and Border Protection service areas must be coordinated with, reviewed, and approved by the Transportation Security Administration prior to implementation. The Port Authority Aviation Department will assist with this coordination and review process.



In each terminal, a meeting point is recommended to accommodate arriving passengers and their meeters-greeters.

To avoid any misunderstanding, only one meeting point is preferred, most likely at the center of the building. If more meeting points are required, e.g., one at Departures level and one at Arrivals level, they can be identified as:

- Meeting Point Departures
- Meeting Point Arrivals

- Meeting Point (Terminal) A, 1
- Meeting Point (Terminal) B, 2
- Meeting Point (Terminal) C, 3

- Meeting Point Baggage Area A
- Meeting Point Baggage Area B, etc.

All meeting points will be signed within the terminal building and also be listed on the Airport Directory, maps, etc.

It is also recommended that meeting points should be conspicuous in their surroundings and be well lit.

An example is given in this manual. Also, certain amenities can be added at the meeting point, such as a passenger message board, clock, arriving flight information, seating area, etc.

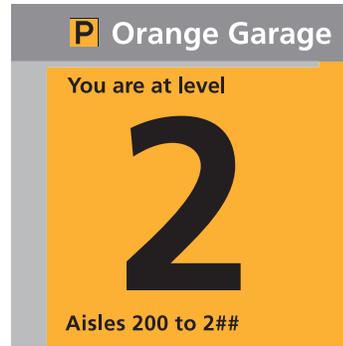


— Circular LED or LCD dynamic display which displays time and possible messages to arriving passengers.

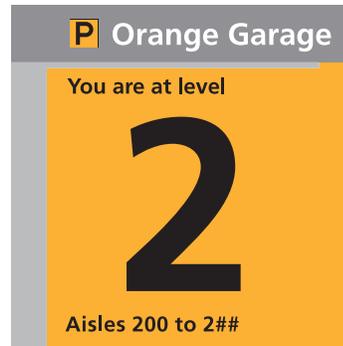


— Circular sign, possibly with a large clock at the side facing the door.

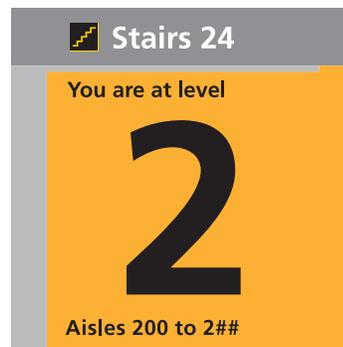
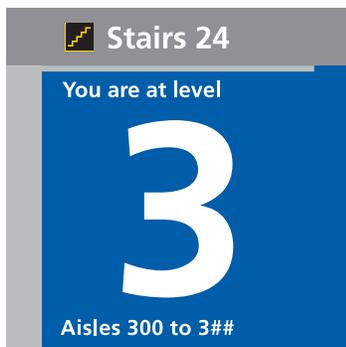
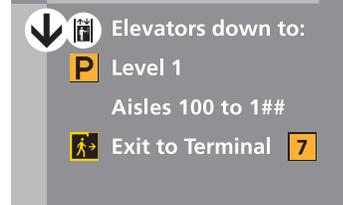
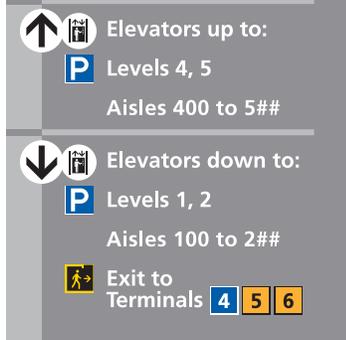




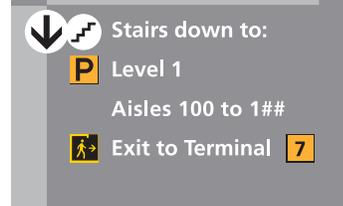
Parking garage level indicators



Parking garage elevator signs



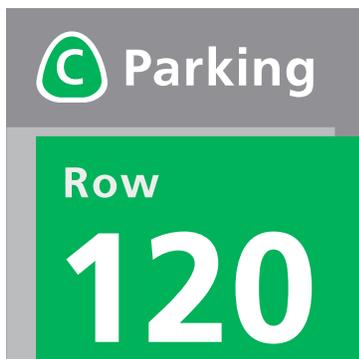
Parking garage staircase signs



Parking garages and parking lots should be uniquely identified with letters, numbers, or with a specific term, i.e., 'Long Term Parking', 'Terminal Parking', 'Valet Parking', 'Passenger Drop Off Parking', 'AirTrain Parking', etc., if applicable.



At-grade parking lot section identifier examples (EWR)



At-grade parking lot identifier example (JFK)



Directional sign examples



Location sign examples



When space is limited, the horizontal space between the double text lines can be reduced on directional signs for bus stops. For curb frontage signs, a larger pictogram size of 8"x 8" is preferred for greater visibility.

This series of signs is made of changeable sign panels for each type of ground transportation. Notice the different use of pictograms in both signs.

Note:

All curb frontage location signs are 'curb aligned' (see page 1.2).



Bus stop



Pick up areas

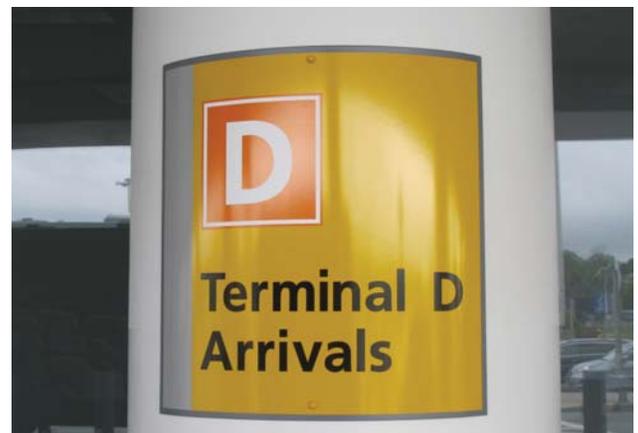


Each entrance into a terminal from both the arrivals and departures curbside will be identified with an alpha or numeric identification sign. These signs should be located near or above entrances for identification purposes. Whether using the alpha or numeric system to identify entrances, the Port Authority recommends using the opposite system from that used to identify the terminal, i.e., if the terminal(s) are numbered, then conversely the identification signs should use an alphabetic system. Or, if the terminal(s) are labeled A, B, C, etc., then the entrance identification signs should use a numeric system. The system should be applied terminal wide in chronological order, encompassing both the arrivals and departures curbside; this will reduce the likelihood of repeating signs, which could lead to confusion.



Curbside door identification sign

If door identification is placed on black surface, then a grey border may be applied.



Departures curbside sign

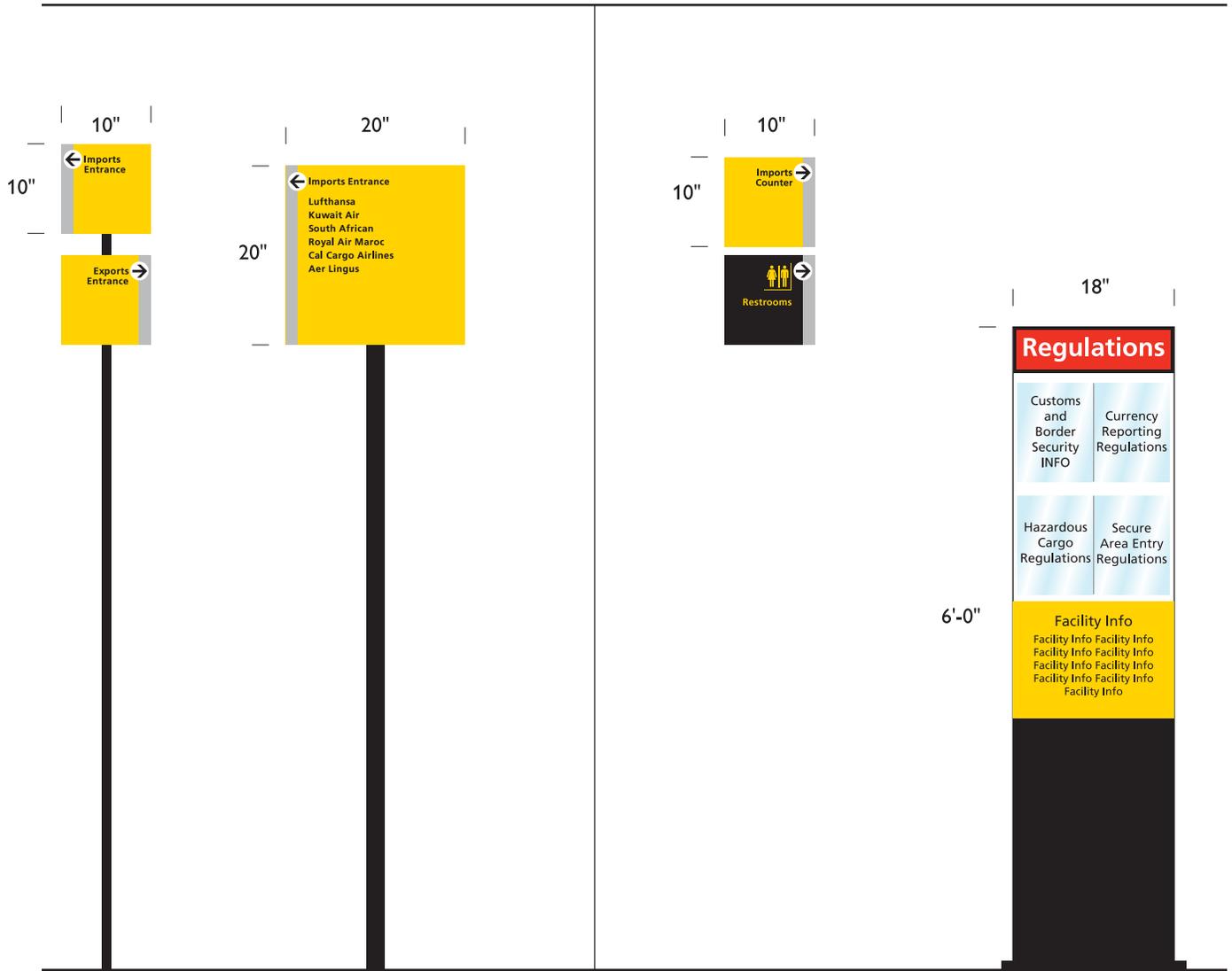
Public and private industry alike use the cargo facilities at the Port Authority of New York & New Jersey airports. These facilities should demonstrate a continuous effort to provide organized and comprehensive signage, recognizable from one cargo facility to the next.

Signs used to display cargo operator logos shall have a white background color field to maximize logo visibility.

A few directional signs were developed to assist with simple directions throughout a building or around parking lots and driveways.

1. Location/identification signs should be readable by drivers from a distance. Most signs should be located so that they are not blocked by parked trucks. When a sign is located in an area, where it could be blocked by a truck, additional or repetitive signs may be necessary to convey the message. The size of the signs should be in balance with the dimensioning of the space and the size of the facade of the facility or building.
2. Pictograms are not recommended for use within the cargo facility sign program.
3. Logo use: Where corporate branding on signs is suggested or needed, full branding logos, colors and/or color fields, or backgrounds may be used.
4. Glass doors/panels: Limited sign/logo use on glass doors and windows is suggested. This manual recommends that logos with background fields not be used on glass as they block sightlines into a facility. Where it is necessary to indicate an entrance into a facility by use of a logo, no more than one logo may be placed on a glass panel and primary tenant logos only should be used. Additional signs are available to indicate the facility tenants (see page 7.13).
5. Illuminated signs: Any high wall building (branding) signs that are visible from the primary entrance or roadway may be backlit or illuminated. Full branding colors and background fields are acceptable.

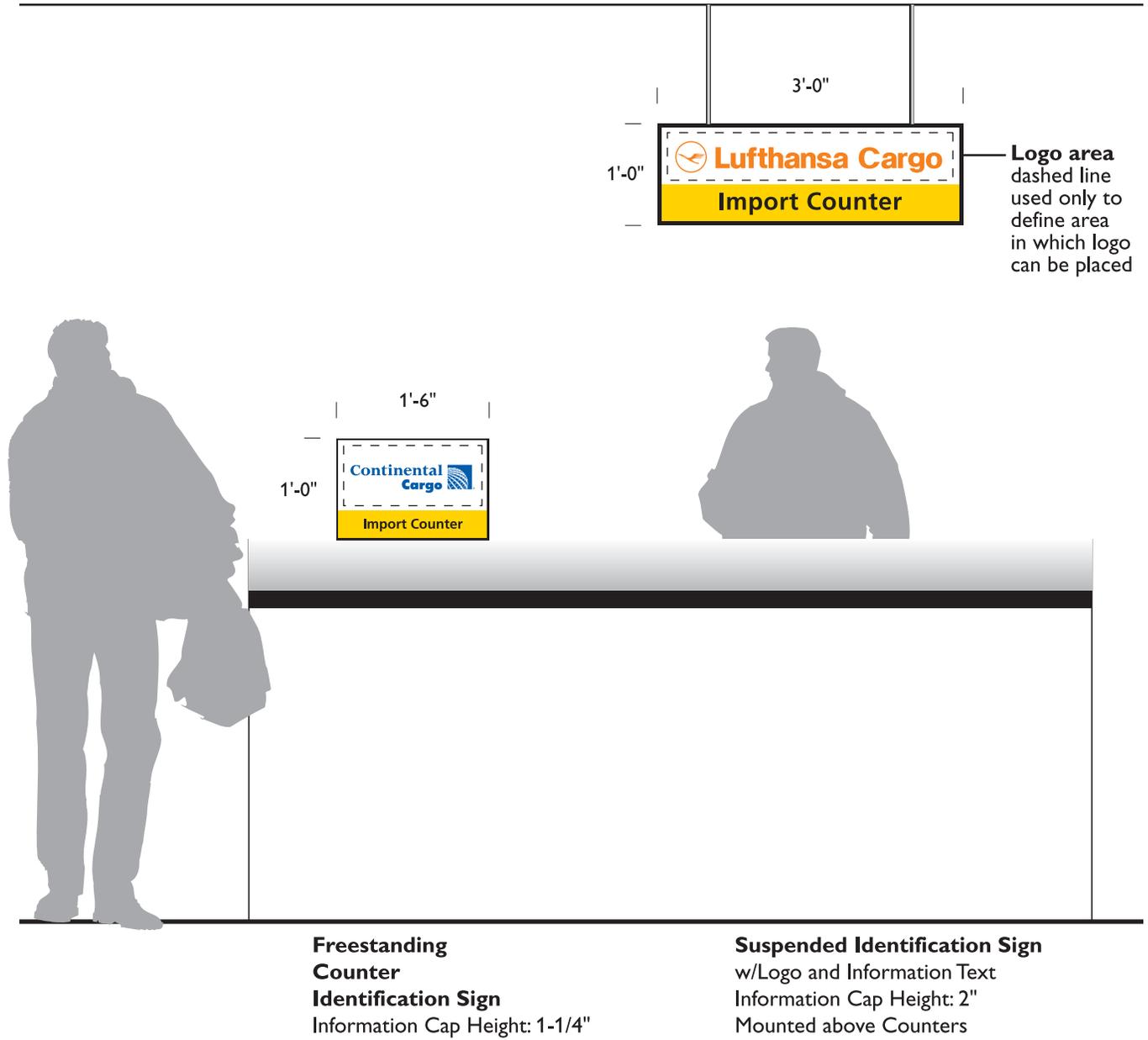
6. Non-illuminated signs: Any signs below 8'-0" shall not be illuminated. All exterior non-illuminated signs may utilize white or black reflective vinyl to enhance the signage visibility at night. It is recommended that one or the other of the reflective vinyls be used. Do not use both.
7. Directional signs: Exterior and interior directional signs may be needed to guide visitors to certain entrances or locations. Directional signs should be located so that they are visible from a 180° radius of the sign face and have a 25' unobstructed sightline. Where directional signs indicate a turn, the sign should be located at or as close to the turning point as possible. (See arrow use on page 1.8). Logo use shall be discouraged on directional signs due to space and organization purposes. The standard font for Port Authority signs should be used (see page 1.0). These signs incorporate a grey band as used in the terminals directional signs.
8. Regulation signs: All information, such as TSA bulletins, customs and border security information, hazardous cargo regulations, currency reporting regulations, etc., which are displayed inside cargo facilities, should be centrally located. As these tend to be printed copies distributed and posted or taped up by the facility itself, 8½"x 11" acrylic paper inserts may be specified for use on a wall or on a freestanding kiosk.
9. Counter signs: Where multiple tenants are located within one building, at or near the same counter, each operator's logo and service should be listed for drivers to identify.



**Interior/Exterior
Post-mounted
Cargo Directional Sign**
Cap Height: 3/4"
Mounting Height: 6'-0" A.F.F.

**Interior/Exterior
Wall-mounted
Cargo Directional Sign**
Cap Height: 3/4"
Mounting Height: 6'-0" A.F.F.

**Freestanding or
Wall-mounted
Information Sign**
w/8-1/2" x 11" Insert Panels
for Regulatory Information
Header Cap Height: 1"

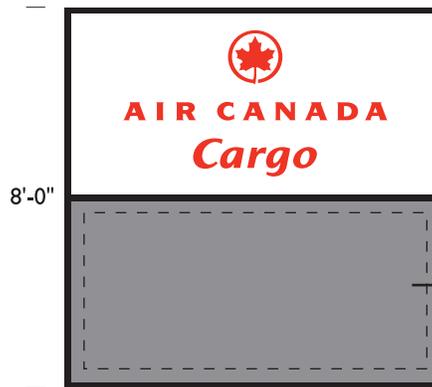


**Wall-mounted
Tenant Identity Signs**
Internally-Illuminated



1 Tenant

8'-0"



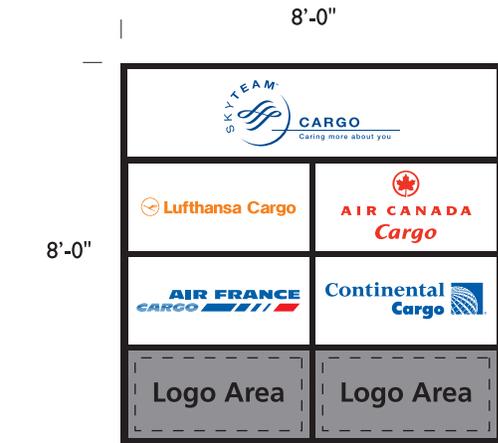
2 Tenants

Logo area dashed line used only to define area in which logo can be placed

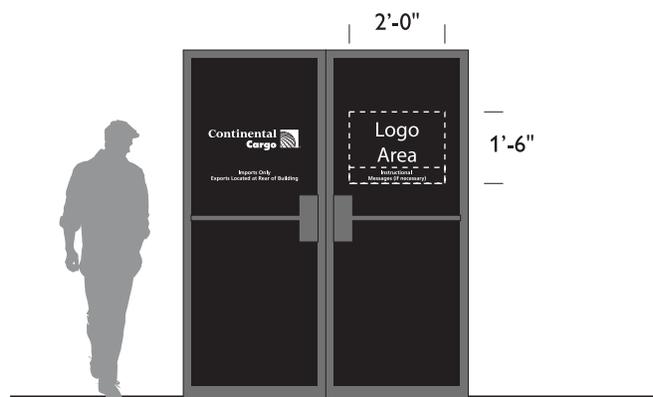


3 Tenants

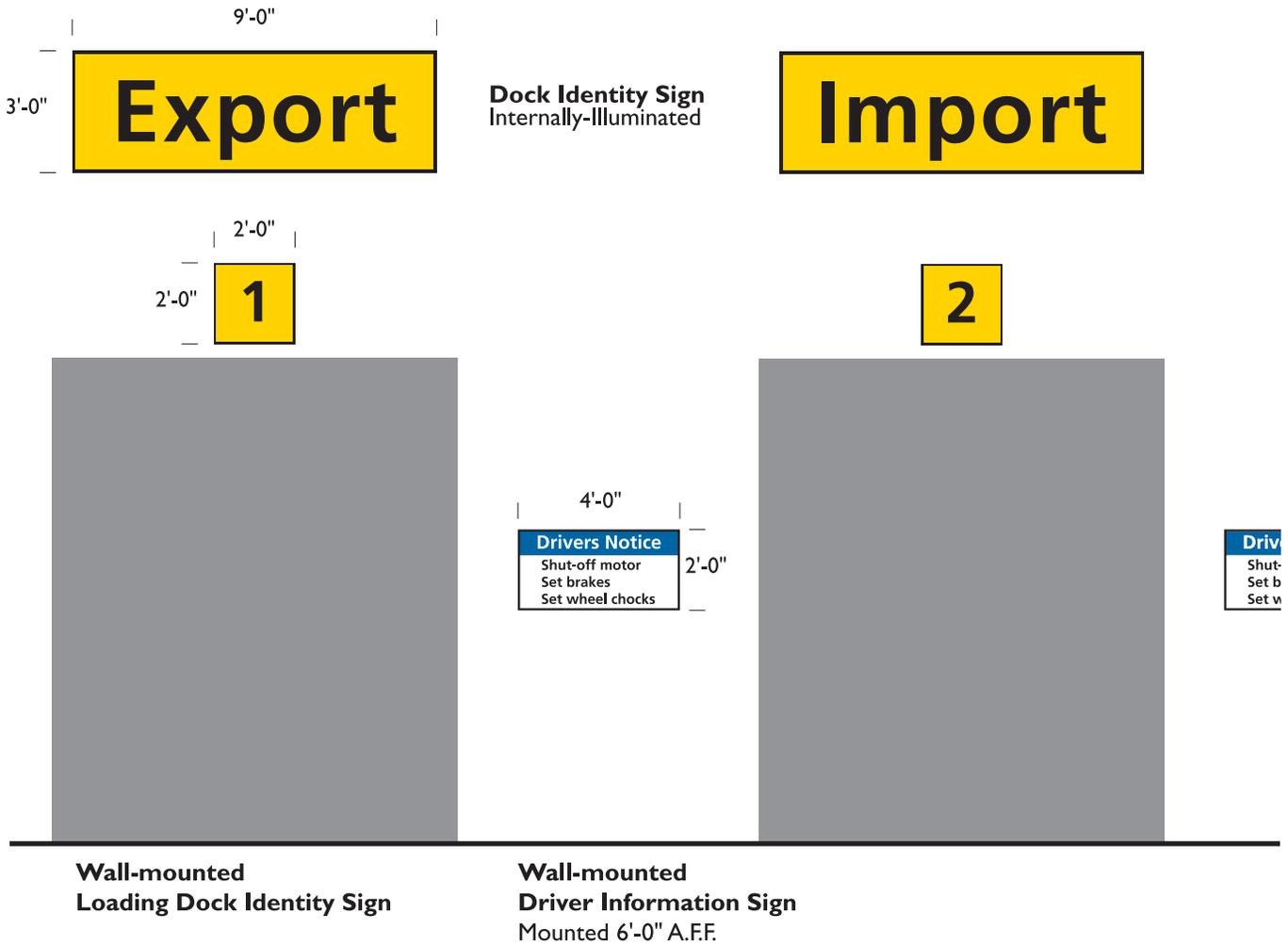
Blank signs or unused slots shall receive an opaque grey panel



Multiple Tenant Identity Sign



**Primary Tenant Logo
Door Identification Sign**





Pictograms can be used as identification signs

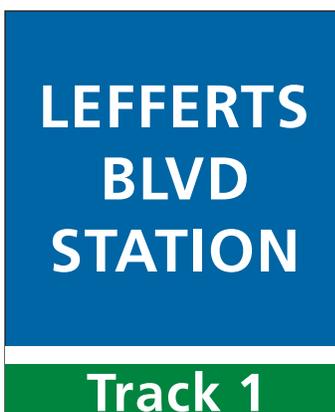
AirTrain station identification signs are used to help passengers identify where they are and where they need to go. Therefore, both interior and exterior signs should be located with clear sightlines from the trains, terminals, curbside, and in some cases, parking lots. While AirTrain systems operate independently of each other at both Newark Liberty and John F. Kennedy airports, the station identification signs will be determined either by the existing name of the standalone station or by the terminal (symbol) at which the train stops. (See page 1.28 for terminal symbol and page 1.29 for AirTrain pictogram use.)

Identification signs may be integrated into the AirTrain 'stainless steel checkered pattern units' or may be placed over the entry doors to the train on the platform level.

The AirTrain pictogram should only be used alone on directional signs to direct to an AirTrain station, and the terminal identifier should only be used on identification signs.



AirTrain JFK Station Identification Pylon four-sided



AirTrain Station Identification

⑧ **INDEX**

A

Accessible	1.22
Advertising.....	1.36, 3.1
Agriculture exam	1.14
Airline lounge.....	1.16
Airport signing.....	3.0
AirTrain	1.5, 1.27, 1.29, 2.19, 2.12, 2.22, 3.5, 7.6, 7.15
Alignment (sign)	3.7, 7.7
Allowable sign heights and widths	2.1 - 2.8
Americans with Disabilities Act compliance (ADA).....	1.2, 1.27, 2.24, 3.6, 3.19, 5.13 - 5.15
Arrivals	1.14, 2.24 - 2.26, 3.5, 3.23, 7.4, 7.7, 7.8
Arrows	0.3, 1.7 - 1.12, 1.31 - 1.34, 2.0, 2.10, 2.21
Assistive listening	1.22

B

Bag drop-off area.....	1.16
Baggage carts.....	1.16, 1.26
Baggage claim	1.14, 2.27, 2.32, 3.5
Baggage exam.....	1.14
Baggage Information Display (BID)	2.27, 2.29, 2.30, 5.13
Baggage service office	1.16
Baggage storage.....	1.16
Bar/cocktails.....	1.16
Basic elements	1.0 - 1.36
Basics of sign applications	7.0
Blank side of signs	1.36
Bus(es)	1.15, 3.5

C

Cargo facilities exterior signage	7.12, 7.13
Cargo facilities interior signage.....	7.9 - 7.11
Cash machine/ATM.....	1.16
Cell phone lot.....	1.23
Change machine	1.16
Changing area	1.16
Chapel/meditation	1.16
Children play area	1.16
Coffee shop/snack bar	1.16
Color hierarchy	1.6
Color-coding colors	0.2, 1.3, 1.4
Color-coding system	0.2, 2.19, 2.23, 2.27, 3.2, 3.3
Colors (additional).....	1.5
Complete checklist of signs.....	3.13 - 3.17
Connecting flights	1.14
Curbfronts (arrivals)	2.15, 7.7, 7.8
Curbfronts (departures).....	2.13, 2.14
Currency exchange.....	1.16

D

Data/power connection.....	1.16
Defibrillator.....	1.21, 2.33
Dentist.....	1.16
Department of Homeland Security	
Customs and Border Protection	1.14, 1.26, 7.3, 7.9
Departures	1.14, 2.24 - 2.26, 3.5, 3.21, 3.22
Deviation (from color code)	3.3, 7.4
DHS Official Seal Usage Approval form.....	5.11
Directional signs.....	2.0-2.10, 7.9
Directional signs (heights/widths)	2.1 - 2.8, 3.6
Directional signs message (heights/widths)	1.2, 2.2 - 2.8
Directories	2.20 - 2.22, 3.5, 3.7, 6.1, 7.4
Document review	1.14
Door identification signs	2.14, 7.8
Duty free shop.....	1.17
Dynamic (signs)	2.23 - 2.30, 3.4, 6.6

E

Electronic sign specifications	2.28 - 2.30
Elevator(s).....	1.10, 1.17, 2.18, 2.22, 3.1, 5.14, 7.5
Emergency exit.....	1.21, 2.33, 3.5, 5.14, 7.1
Emergency signs	2.33, 7.1
Entry	1.21
Escalator(s)	1.17, 3.1
Exit	1.10, 1.13, 1.15, 1.17, 1.26, 3.4, 3.5, 5.14
Express pay parking	1.23

F

Facilities specific guidelines	7.0 - 7.14
Family restroom	1.17
Fax/business center.....	1.17
Ferry/water transport.....	1.15
Fire extinguisher.....	1.21, 2.33
Fire hose	1.21
First aid.....	1.21
Flag mount signs	1.27, 3.6, 3.7
Flight information.....	1.17
Flight Information Display (FID)	2.24 - 2.27, 2.29, 2.30, 3.5, 3.6, 5.13
Frutiger (typeface)	1.0, 1.1, 2.13, 2.23

G

Gate(s).....	1.14, 3.4
Gifts/books	1.17
Grey band use.....	0.2, 0.3, 1.9, 1.27, 1.34, 1.35, 2.0, 2.11, 2.20
Ground transportation.....	1.15, 2.22, 3.5
Ground transportation information	1.15, 3.5

H

Heliport.....	1.15
Help phone.....	1.17
Hotel information	1.17
Hotel reservations.....	1.17, 3.5
How to inventory.....	3.19, 3.20
How to use this manual.....	0.1

I

Identification signs (directional sign).....	2.11, 3.3
Identification signs (enlarged pictogram).....	1.27
Identification signs (heights/widths).....	1.27, 2.9
Identification signs.....	2.11 - 2.19, 7.6, 7.11, 7.12, 7.14
Illumination.....	3.3, 6.0, 6.1, 6.3
Implementation of signs.....	3.0, 3.2, 5.0
In case of fire.....	1.21
Information.....	1.17
Information content.....	3.0
Information tree.....	3.21 - 3.23
Informational (signs).....	2.20 - 2.22
Instructions (signs).....	2.32
Internet café.....	1.18
Inventory.....	3.9, 3.18, 5.0, 5.1
Inventory sheet (signs).....	3.12, 5.1

J

John F. Kennedy International Airport (JFK)	1.5, 1.24, 1.29, 2.16, 2.19, 2.22, 7.6, 7.14
---------------------------------------------------	----------------------------------------------

K

L

LaGuardia Airport (LGA).....	1.5, 1.24, 1.29
Language	4.0
Layout of signs	1.31-1.36, 3.0
Legal	5.0 - 5.15
Legibility.....	3.1
Lens	6.2
Letter heights.....	1.2, 2.9, 2.12, 2.13, 2.15, 2.24, 5.14
Letter spacing.....	1.1
Light Emitting Diode (LED) signs	2.23, 2.28 - 2.30, 6.0, 6.6, 7.4
Limousine(s).....	1.15
Liquid Crystal Display (LCD) signs	2.23, 2.28 - 2.30, 6.6, 7.4
Logos.....	7.9, 7.11, 7.12
Lost and found.....	1.18
Low or restricted ceiling heights.....	3.6

M

Mail box/post office	1.18
Maintenance letter guide (sample).....	5.12
Maintenance (signs)	0.1, 6.0 - 6.6
Materials (signs).....	0.1, 6.0 - 6.6
Medical office	1.18
Meeter/Greeter.....	1.14, 1.18, 3.2
Meeting point.....	2.1, 3.2, 7.4
Message hierarchy.....	1.31
Minor Works Application (MWA Ph 1 02).....	5.2, 5.9, 5.10
Minor Works Application Checklist (MWA CK 01)	5.8
Motorcycle parking.....	1.23
Moving walkway	1.10, 1.13, 1.18, 2.32
Multiple messages & directions.....	1.31

N

Newark Liberty International Airport (EWR).....	1.5, 1.25, 1.29, 2.16, 2.17, 2.19, 7.6, 7.14
Newsstand.....	1.18
No carts.....	1.21
No cell phones.....	1.26
No entry.....	1.21, 2.32, 3.4
No pets.....	1.21
No photographs.....	1.26
No smoking.....	1.21, 2.32
No strollers.....	1.26
Nomenclature.....	3.4, 4.0 - 4.16
Nursery.....	1.18

O

Oversize baggage.....	1.18
Overview.....	0.1-0.4

P

Parking (garages/lots).....	1.23 - 1.25, 2.16 - 2.19, 3.2, 3.5, 4.5, 7.5, 7.6
Passenger pick up/drop off.....	1.15
Pedestrian.....	1.35
Pet relief area.....	1.18
Pictograms.....	1.4, 1.5, 1.10, 1.13-1.23, 1.26, 1.27, 1.31 - 1.35, 2.1, 2.9, 2.11, 2.15, 3.2 - 3.4, 5.14, 7.3, 7.7
Please wait.....	1.26
Pole signs.....	3.6, 6.4, 7.10
Port Authority of New York & New Jersey (PANYNJ).....	0.1, 0.3, 0.4, 1.2, 1.9, 1.12, 1.13, 1.24, 1.25, 1.28, 1.34, 2.1, 2.12, 2.13, 2.14, 2.23, 2.34, 3.2 - 3.5, 3.8, 4.0, 4.1, 5.2, 5.13, 5.14, 6.1, 6.3, 7.3, 7.9
Program management.....	0.4
Programming/placement.....	3.0 - 3.23
Project Initiation Form (TAA-MWA Ph 1 01).....	5.5
Project Tracking Checklist (MWA CK 01).....	5.8

Q

R

Recycle	1.18
Regulatory (signs)	2.31, 2.32, 7.2
Regulations (signs)	2.32, 7.2, 7.9
Rental car information	1.15, 1.20
Rental cars	1.15, 3.2, 3.5
Replacing signs	0.1, 1.3, 5.0, 6.0
Restaurant(s)	1.18, 1.19
Restroom(s)	1.18, 3.2, 3.3, 5.14
Restroom(s) men	1.18
Restroom(s) women	1.19
Route directories	2.22

S

Secondary/double text lines 2.9

Security check point..... 2.29, 2.30

Self service bag tag..... 1.19

Shared ride services 1.15, 4.3, 4.15

Shoe shine..... 1.19

Shops..... 1.19

Shuttle(s) 1.15, 2.22

Sign box..... 3.6, 6.0

Sign checklist..... 3.10, 3.11

Sign heights and widths (allowable) 2.2 - 2.8

Sign Inventory Worksheet..... 0.1

Sign Order Worksheet..... 0.1

Sign plan process 0.1, 3.1 - 3.7, 5.0, 5.1

Sign positioning..... 3.0, 3.1

Sign program manager 0.4, 1.28, 3.3, 3.8, 5.2

Sign request procedures..... 5.2

Sign types 2.0-2.34

Signage guidelines 3.0

Smoking area..... 1.20, 2.32

Spanish nomenclature for all PANYNJ airports..... 4.9 - 4.16

Spelling guidelines 4.7 - 4.8

Stairs 1.20, 2.18, 3.1, 7.5

Stanchion signs..... 2.34

Subway..... 1.15

Supports..... 6.4

Suspended signs..... 3.6, 3.7, 6.4, 7.11

Symbol signs (for identification) 1.28 - 1.30, 2.19, 7.14

T

TAA Project Tracking Checklist (TAA Ck 01)	5.6, 5.7
Taxi(s)	1.15
TDD.....	1.22, 5.13
Technology.....	6.6
Telephone(s).....	1.20
Temporary signs	3.3
Tenant Alteration Application (PA 531)	5.2 - 5.4
Terminal identification (signs).....	1.29, 2.12
Terminal symbols	1.14, 1.29
Ticketing & check in	1.14, 2.29, 2.30, 3.5
Trailblazers	2.10, 3.5, 3.6
Train/rail transportation	1.15
Transportation Security Administration (TSA)	7.3, 7.9
Transit information displays	2.29, 2.30
Trash disposal.....	1.20
Typeface	1.0, 1.1

U

United States Department of Homeland Security	1.26
-----------------------------------------------------	------

V

Valet parking.....	1.23, 7.6
Variable message signs (VMS).....	2.13, 2.23, 2.28, 3.6
Vending machine.....	1.20
Vertical movement (elevators/escalators/stairs).....	1.10, 7.5
Virtual zone	3.1
Visual paging displays.....	2.29, 2.30
Volume telephone.....	1.22

W

Waiting area	1.20
Wall-mounted signs	1.2, 3.6, 6.4, 7.10, 7.12
Warning (signs).....	2.32
Water fountain	1.20
Wayfinding identity	0.3
WiFi.....	1.20

X - Z