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All signage typography issues having to do with text size, fonts, capitalization, word spacing, letter spacing, and line spacing are discussed in this section of the document.

Acceptable Type Styles

All text on directional signs shall be set in Swiss 721 BT, unless otherwise specified.

Accepted specialized type styles used for identification and informational sign types are defined in the Specialized Type Style portion of this document (See section 2.2.4).

Capitalization

2.1.2

2.1.3

2.1.1

Aside from special decorative uses and certain regulatory signs, all sign word messages shall be in initial uppercase followed by lowercase. Examples of exceptions:

EXIT DO NOT ENTER ATM

- As required by the Americans with Disabilities Act, all tactile messages should be all upper case.
- For better legibility, lower case letters should have a lowercase "x" height that should be two-thirds the height of the uppercase letter.
- All words should be capitalized except for articles, prepositions and conjunctions.
- A consistent capital letter height will be maintained when signs are used in sequence.

Restrictions

Typefaces or weights not described above should not be used. Modification of letter shapes is prohibited unless specified in the graphic standards or on the sign type layout.

Condensed, extended, slanted, outlined or otherwise distorted type should not be used.

Language to this effect should be included in the specifications for all additional airport sign projects.



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2.1.4

2.1

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Type Style Application

The font used for all text messages on airport services buildings signs are to be a consistent version of Swiss. For all support Airport Services Buildings signs, text should appear as equal weight using the established hierarchy of fonts of Swiss. Swiss 721 BT Bold shall be the established font for all text used on directional sign types.

Specialized type style shall be used exactly as specified on each sign type layout. Do not vary from the sign type application provided in the layout (Refer to each respective sign type for the exact specifications).

Note: Type face size shall be regulated depending on sign type.

Swiss 721 BT Bold Type Face Sizes

Swiss 721 BT Bold shall be used at the cap height specified for each sign type in Section 3.5 (Sign Types-Layouts).

ABCDEFGHIJKLMN OPQURSTUVWXYZ abcdefghijklmnopqu rstuvwxyz12345678 90!@#\$%^&*()/?",.

Swiss 721 BT Bold Type Face

Figure 2.1.1



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Specialized Type Style

2.1.5

2.1

Swiss 721 BT Black Condensed Type Face

The specialized font "Swiss 721 BT Black Condensed" shall be used in the areas outlined as followed. Swiss 721 BT Black Condensed should be used for headers of building ID signs.

ABCDEFGHIJKLMNOPQ URSTUVWXYZ abcdefghijklmnopqurs tuvwxyz1234567890! @#\$% ^ &*()/?'",.

Swiss 721 BT Black Condensed Type Face

Figure 2.1.2

2.1.5

Specialized Type Style

Swiss 721 BT Black Type Face

The specialized font "Swiss 721 BT Black" shall be used in to identify the Airport Services Buildings numbers. See Section 3.5 - Sign Types Layouts for specific use on sign types.

1234567890

Swiss 721 BT Black Type Face

Figure 2.1.3

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2.1.6

2.1

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Letter Spacing

Unless otherwise indicated, all sign messages shall follow an approximate 10% kerning. In some circumstances, modification of spacing between individual letter pairs may improve the appearance of the sign message. Samples of messages are required for all sign projects for review; and spacing recommendation shall be made where they can be shown to be advantageous. In these instances, hand-kerning may be required on internally illuminated signs to prevent "halation." Reducing normal letter or word spacing (e.g. to fit a lengthy message within a restricted area) shall be prohibited. Letter spacing should match the following:



Letter Spacing Comparison

Figure 2.1.4



2.1.7

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Word Spacing

Word spacing between related words is normally $\frac{3}{4}$ (.75) times the cap letter height. For example, a message using 6" cap letters will have 4 1/2" between words (See Figure 2.1.5).

⁴□^{/2} • Logan Office center

Word Spacing

Figure 2.1.5

2.1.8

Line Spacing

Line spacing shall be $\frac{1}{2}$ (.50) times the cap letter height for words of a related message line. Spacing between unrelated message lines shall typically be 1 times the cap letter height (See Figure 2.1.6).



Line Spacing

Figure 2.1.6

2.0

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2.1



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The terminology/symbology has been divided into categories based on its function within the airport. These categories are as follows:

- A. Principal Airport Nomenclature
- B. Fundamental Airport Functions
- C. Parking Facilities
- D. Transportation Methods
- E. Building Circulation
- F. Services
- G. Safety and Regulation
- H. Concessions

Message Terminology



If a term is shown with a corresponding symbol, it shall always appear with its symbol unless otherwise noted.

Change Procedures for Terminology

Requesting changes for terminology shall require the same approval process as found in Large Scale - New Construction

Symbols - Basic Requirements

The symbols shown shall be used to reinforce and provide visual confirmation of sign messages for pedestrians, unless otherwise noted. These symbols were selected from those for the "Guidelines for Airport Signing and Graphics; Terminals and Landside; 'Third Edition'" developed by:

DOT - Department of Transportation AIGA - American Institute of Graphic Arts ATA - Air Transport Association of America AAAE - American Association of Airport Executives ACI-NA - Airports Council International-North America ACC - Airport Consultants Council

These symbols are in broad use around the world. They are readily identified by the international traveling public.

Symbol Restrictions

Symbols not described in this section or not shown on the following pages shall not be used. New or customized symbols not described in this manual shall not be developed for use at BOS, unless authorized by the Massachusetts Port Authority.

Regulatory Symbols

Symbol shape, placement and color on all vehicular regulatory signs shall conform to the Manual on Uniform Traffic Control Devices (MUTCD).

Change Procedures for Symbols

Requesting changes for symbology shall require the same approval process as found in Large Scale - New Construction.



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This section defines a uniform hierarchy of messages and information to be used throughout the Boston-Logan International Airport (BOS) complex. By using the terminology set forth in this document, the designer shall be able to organize messages into three succinct categories: Primary, Secondary, and Tertiary.

Message Functions

2.3.1

Directional Messages

Directional messages are of great importance in the facility due to the fact that they are the main information source that enables passengers and visitors to choose the proper route to a specific destination point. This process involves selecting the correct path to a destination point and determining at which point a change of direction is required. Proper directional signing is necessary since the rapid movement of vehicles, visitors, employees, and passengers is essential for maximum utilization and efficiency of the facility.

Identification Messages

Identification messages mark terminals, gates, ticketing, and baggage claim locations, as well as, provide tenants' leasing space within the BOS complex with proper public exposure to their areas and other spaces governed by the airport authority.

Informational Messages

Informational messages typically provide specific and supplementary information about the airport services and functions. Also there are orientational messages that are often graphic, such as maps, so that visitors can develop a sense of the airport layout and their location within the airport.

Regulatory/Safety Messages

Regulatory/safety messages relate to Federal Aviation Administration (FAA) requirements and recommendations as well as other federal, state, and city regulations. In general, these messages provide passengers with travel advice, warnings and legal restrictions.

Temporary Messages

Temporary messages fall into a separate category of messages. Temporary signs shall be used on an interim basis while permanent signs are in the process of repair or maintenance and as tentative signs while permanent signs are under construction.

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2.3.2

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Message Hierarchy Relationships

Clear and concise information presented by Primary and Secondary signing systems ensures efficient passenger circulation. Tertiary signs must be coordinated with Primary and Secondary signs and interior design elements. This category of signs shall be distinguished from other signs by graphic methods.

Primary Messages

This information shall be the largest and most visible information on each sign. Primary information shall include:

Exterior direction to and identification of Airport services buildings, cargo areas and airport.

Secondary Messages

This information supplements or reinforces information already conveyed by the primary messages and signs listed above. It usually indicates the auxiliary services and support functions of the facility. Secondary information is to include:

 Exterior direction and identification of airport services buildings' number and tenants' names.

Tertiary Messages

Tertiary information supplements both the primary and secondary messages and is usually intended to inform visitors of regulations and warnings. All of the regulatory/ safety signs are generally considered to be tertiary. Tertiary information is to include:

- All "No Smoking" messages
- FAA required warning and information
- Other messages required by code

2.3



2.3.2

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Message Hierarchy Relationships cont'd.

Functions and Hierarchy Relationships (cont′d):

Critical to the smooth flow of pedestrian and vehicular traffic is the need for visual continuity amongst messages and information of the same hierarchy, thus eliminating any elements which may interrupt the scheme or confuse the visitors.

The relationship between message function and message hierarchy serves to create a foundation for the classification of and determination of basic sign types. The tables on the following pages illustrate this relationship for the exterior messages required for BOS.



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Message Hierarchy Relationships cont'd.

Figure 2.3.1 demonstrates the hierarchy in which the messages are organized when signing for airport services buildings areas. The message hierarchy is used to assist designers in grouping messages for directional, identification and information sign types. Primary messages should always be grouped with primary messages. If there is need for a secondary message on the same sign, its importance will always be secondary to all primary messages. The designer may have to place the secondary message on a secondary sign type.

	Airport Se	Airport Services Buildings - Message Hierarchy			
		PRIMARY	SECONDARY	TERTIARY	
	Directional Roadside (General Terminology)	Terminals Airport Exit Rental Cars Parking Economy Lot Hotels Fuel			
MESSAGE FUNCTION	Directional Roadside (Facilities)	Logan Office Center General Aviation North Cargo South Cargo MPA Wood Island Substation MPA Facilities II MPA Facilities II MPA Facilities II MPA Pumping Station UPS Cargo Temporary Signature General Aviation Terminal MPA Facilities I/ Heating Plant MPA Facilities I/ Heating Plant MPA Facilities I/ Heating Plant MPA Administration Building Electrical Maintenance Stockroom Porter Street Substation BOS Fuel Farm/ Fuel Operation & Control Building MTA Response Sta./Elec. Substation B.U. Office Building Fire Dept. Boat House General Aviation Hangar/ Continental Maintenance Amella Earhart Bldg. Support Northwest Cargo Post Office Staging Area U.S. Postal Facility U.S. Air/ United/ Continental Cargo Cargo Bldg. #63 Field Lighting Yoult BIF Electric Substation Massport Fire-Rescue Headquarters Satelite Fire Station Station Police K-9 Facility Vent Building #7 Fire-Rescue Boat Dock Central Stockroom Batch Plant and Trailers United GSE Facility	Property Name (i.e. Logan Office)		
	Identification	Property Number (i.e, 58)	Tenants within building Non-Cargo buildings functions Tenant name and logo (<i>i.e.</i> FedEx)		
	Information or Orientation				
	Regulatory or Safety	No Parking No parking Tow Zone No Parking Fire Lane No Parking Authorized Vehicle only Access Parking Exit	Emergency Exit Only ENTER DO NOT ENTER No Smoking Smoking Permintted No Pedestrians Beyond this point	Pedestrians use Caution when crossing All FAA notices and required signs AUTHORIZED PERSONNEL ONLY	

Airport Services Buillings - Message Hierarchy



2.4.1

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The arrow standards and applications portion of this document shall define the standards for arrow orientation, sizes, application and placement on directional signage at Boston-Logan International Airport (BOS).

Arrow symbols used as directional elements are more flexible and require less sign layout space than messages. Careful review of sign layouts must be done in order to produce proper proportioning between arrows, messages, symbols and sign panel dimensions (See Arrow Placement Figure 2.4.4 for placement examples).

Arrow Orientations

The orientation and directional information that arrow symbols intend to convey is of equal importance to the consistent use of the recommended single style arrow. The arrow orientation to convey "straight ahead" is of particular interest. Either "up arrow" or the "down arrow" can be used for pedestrian specific traffic. However, Vehicular specific traffic typically uses only the "down arrow" to convey "straight ahead" information. Once a method has been selected for the "straight ahead" arrow orientation, consistent application should be continued throughout the signage system. The following are a few guidelines for the use of arrows:

- The standard arrow can be rendered in five (5) different orientations for vehicular specific traffic. No alternate orientations are acceptable, unless approved by Massport.
- Vehicular Signs: Arrow orientation should follow the guidelines provided in this section. Straight-ahead vehicular movement should be indicated by downward facing arrows, unless an upward facing arow can be shown to be clearly advantageous in a specific circumstance (See figure 2.4.1).

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2.4

	Arrow Orientations cont	d.	2.4.1
Revision	Straight Ahead on the Left	Straight Ahead	Straight Ahead on the Right
	To the Left		To the Right

Vehicular Roadside Arrow Orientation N.T.S.

Figure 2.4.1



2.4.2

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Arrow Sizes

These figures define the arrow sizes that shall be used throughout Airport Services Buildings areas. All vehicular primary signs shall utilize a 6" arrow(See Section 3.5 for Sign Type Layouts).

Vehicular - Primary









<u>A</u>			Arrow Application/Oriente	ation	2.4.3
<u>/#</u>	Revision	Date	APPLICATION/ ORIENTATION	LOCATION PLAN	INTERPRETATION
					Straight Ahead
					Ahead on Left
					Ahead on Right
					Left
					Right

Vehicular Arrow Application	
N.T.S.	Figure 2.4.3

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Arrow Placement

The placement of arrows on sign faces should conform to the standard guidelines provided. Arrows may not be positioned in any other location on the sign face.

The following are placement guidelines and restrictions:

- Arrows should NOT point into text.
 - Left-facing arrows should be located on the left side of signs, and right-facing arrows should be located on the right side of signs.
 - Upward-facing arrows are normally located closest to the flow of traffic.



Arrow Placement N.T.S.

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2.5.1

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This section of the document shall specify colors and applications that are to be used in the Airport Buildings Services areas.

Color Specifications

Sign Color System - Airport Services Buildings

Color Application	Color	Pantone Equivalent	Vinyl Equivalent	Paint Equivalent
Sign Face	Black	Process Black	3M Black Opaque* Film #7725-12	MAP Paint* 41-335 Black Anodic
Text	White	White	3M Translucent White* Film #3630-20	MAP Paint* 42-202 Natural White
Arrows	White	White	3M Translucent White* Film #3630-20	MAP Paint* 42-202 Natural White
Neutral Identification	70% Black	Color to match 70% Process Black	N/A	MAP Paint* to match 70% Process Black
Channel Letter Other Sign Support Structures	Aluminum Finish	N/A	N/A	N/A

*or approved equal

Color Specification N.T.S.

Figure 2.5.1

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2.5



Sign Color Application - Airport Services Building

Color Application	Color
Arrow Background	70% Black
2 Arrows	White
3 Sign Face	Black
4 Text	White



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Color Application Examples-ST 501

Figure 2.5.2