



# ROOM NUMBERING STANDARD

Massachusetts Port Authority  
March 2020



# **Massport Room Numbering Standard**

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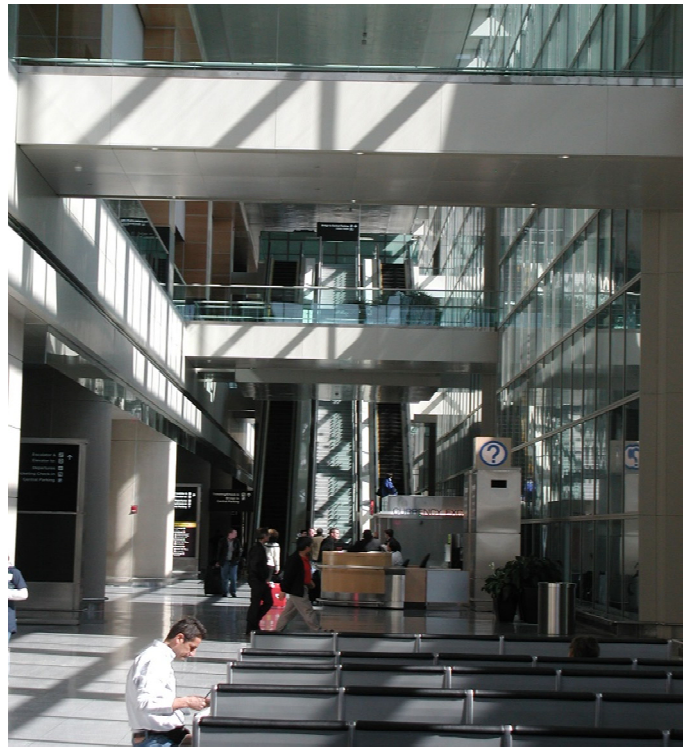
# Introduction

## Objective

This document establishes a standard for assigning numbers to rooms within Massachusetts Port Authority (Massport) buildings. The format and the selection of specific room numbers is specified. The flow of information relevant to assigning room numbers between Massport staff, tenants, and consultants is recommended and specific deliverable requirements are defined. Collectively, these requirements ensure that consistent room numbers are applied to all Massport rooms in a timely manner. Compliance with these requirements will provide all stakeholders including fire, police, life safety, operations, maintenance, and property managers share a common basis for referencing Massport rooms.

## Scope

This standard is to be applied to all rooms within buildings owned by Massport. These buildings include terminals, offices, maintenance facilities, and garages and include space used by Massport, as well as its tenants. Room numbers are to be applied to rooms at the 90% design phase of projects that construct or modify them. This standard does not establish requirements for creating and placing signs or applying visual, bar code, or radio frequency labels to rooms.



## Intended Audience

This document applies to all who assign numbers to Massport rooms. It is anticipated that designers, architects, and engineers hired by Massport or its tenants who are tasked with designing or constructing rooms will be the predominant readers of this standard. Massport Capital Programs Project Managers who oversee these projects are responsible for informing the designers, architects, and engineers they hire of the requirements in this document. Massport Airport Business Office (ABO) Lease Managers have a similar requirement to inform tenants who hire designers, architects, and engineers to carry out Tenant Alteration Application (TAA) projects. Massport's Design Technologies Integration Group (DTIG) is responsible for overseeing the review of room number assignments submitted to Massport and coordinating a Room Numbering Committee, who will approve these assignments.

Massport staff and consultants tasked with applying room numbers to signs or labels that identify rooms should also be familiar with this document. Fire, police, life safety, operations, maintenance, property managers, and other users of room numbers, may also wish to become familiar with this standard. Information Technology (IT) staff and consultants that design, implement, or support information systems that store or reference room numbers should become familiar with the room number format requirements in this standard even though they may not be responsible for assigning room numbers.

## Related Documents

The following documents are related to this standard. The requirements of these documents must be followed, where relevant, to fulfill the requirements of this standard. The latest versions of these documents should be used and can be obtained from Massport's Capital Improvements Important Documents web-page at <http://www.massport.com/massport/business/capital-improvements/important-documents> or by emailing a request to DTIG@massport.com.

- Massport's Geographic Information System (GIS) Standard
- Massport's Computer Aided Design (CAD) Site/Civil Standard
- Massport's Building Information Modeling (BIM) Guidelines for Vertical and Horizontal Construction
- AutoCAD Drawings (DWGs) indicating existing room numbers

## Revision History

This standard will be revised as needed to accommodate requested changes that are approved by the Room Numbering Committee. Readers of this document are responsible for applying the most recent copy of this document, which can be downloaded from Massport’s Capital Improvements Important Documents web-page at <http://www.massport.com/massport/business/capital-improvements/important-documents>.

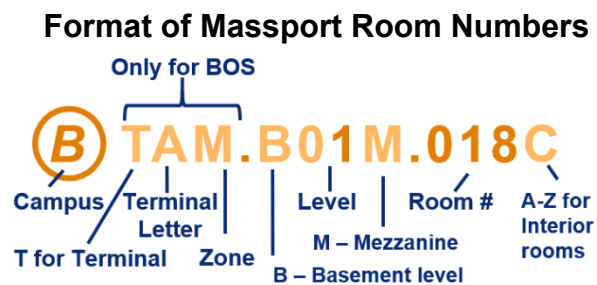
Readers of this standard are encouraged to request changes considered necessary to achieve the objectives defined above. Requested changes will be reviewed by the Room Numbering Committee and shall not be applied to room numbers prior to written approval from DTIG.

Version	Date	Changed By	Changes Made
0.0	2/4/2020	R. Murphy	Draft Outline Added
0.1	2/7/2020	R. Murphy	1 <sup>st</sup> Draft of Text Added
0.2	2/11/2020	G. Neumann	Internal Review of 1 <sup>st</sup> Draft
0.3	2/18/2020	E. Risner E. Copeland A. Smiley T. Smahel	Sub-Consultant Review of 2 <sup>nd</sup> Draft
0.4	3/24/2020	R. Murphy	Addressed DTIG’s comments
1.0	3/19/2021	M. Ricketson	Added Application of Room Numbers Appendix A



## Room Number Format

This section defines the format of the numbers to be assigned to Massport rooms. These numbers are made up of multiple components as shown in the figure below and defined in the subsections that follow. Characters that are only used in certain circumstances as explained below are lightly shaded in the figure below. Refer to Appendix A as a worksheet for the creation of the room numbers. Particular attention should be given to Corridors and Large Open Areas, Vestibules, Stairs, Elevators, Escalators and Mechanical Chases/Ancillary Spaces. Each of these spaces have a specific last number that should be applied.



### Campus

Massport owned property is geographically segregated into the following campuses.

- Boston’s Logan International Airport (to be indicated with a “B”)
- Lawrence G. Hanscom Field (to be indicated with an “H”)
- Worcester Regional Airport (to be indicated with a “W”)
- Maritime Industrial Properties, which include Massport’s sea terminal and park properties (to be indicated with an “M”)

The first component of a room number shall be the one-letter code that indicates the Massport campus at which the room is located. Only the characters indicated above are allowed. This character should be circled in signs and labels that visually display the room number.

### Terminal

Terminal buildings at Boston’s Logan International Airport (BOS) shall include a three-letter terminal code. This first letter shall be a “T” indicating that the room is within a BOS terminal building. The second character should be the one letter designator of that terminal building (i.e., A, B, C, or E). The third character should indicate the pier within the terminal building. Following is a list of acceptable letters for terminal piers with examples of the full three-letter code.

- Terminal A
  - Main building should be indicated with an “M” (e.g. “TAM”)
  - Tunnel that connects the main and satellite buildings should be indicated with a “T” (e.g. “TAT”)
  - Satellite building should be indicated with a “S” (e.g. “TAS”)
- Terminal B
  - Pier A should be indicated with an “A” (e.g. “TBA”)

- Pier B should be indicated with a “B” (e.g. “TBB”)
- Terminal C
  - Pier A should be indicated with an “A” (e.g. “TCA”)
  - Pier B should be indicated with a “B” (e.g. “TCB”)
  - Pier C should be indicated with a “C” (e.g. “TCC”)
  - Pier D should be indicated with a “D” (e.g. “TCD”)
- Terminal E
  - The main building should be indicated with an “M” (e.g. “TEM”)
  - Pier A should be indicated with an “A”

## Separator

A period (i.e., “.”) should separate the terminal code as defined above and the level number as defined below.

## Level

A two-digit number shall be applied to the floor level on which the room exists. The ground level, or arrival level in the case of terminal buildings, should be indicated with “01”. The next level up, or departure level in the case of terminal buildings, should be indicated with a “02”. Subsequent levels up, should be indicated with a “03”, “04”, “05”, etc. Floors between sequentially numbered levels shall be indicated with an “M” following the number assigned to the floor immediately below (e.g., “01M”). The floor level immediately below ground level should be indicated with a “B1”. Lower below ground levels should be indicated with “B2”, “B3”, etc.

## Separator

A period (i.e., “.”) should separate the floor level number as defined above and the sequential room number as defined below.

## Sequential Number

A three-digit number should be assigned to rooms starting with “001” assigned to the first room to the right when entering the main or right-most main entry door to the building. Main entry doors to terminal buildings are those allowing passengers to enter the building from the landside roadways and curbs. Rooms above or below room “001” on an entry level should be assigned “001” on levels that do not contain exterior doors. Room numbers should be assigned in a sequential manner increasing to “999” in a counterclockwise manner, subject to the following considerations.

## Subdivided Rooms

Some spaces have common entry points that provide access to multiple rooms within that space. In these cases, a sequentially assigned room number should be applied to the overall space. Individual rooms within that space should be assigned an additional capitalized letter at the end of the room number. The letter “A” should be assigned to the closest room to the right as entering the overall space. Subsequent rooms within that space should be assigned letters “B”, “C”, etc. An example of a subdivided space is a group of offices that are accessed through a common reception area or hallway. If the overall space is assigned the number



“101”, individual rooms within that space should be assigned “101A”, “101B”, “101C”, etc. in counterclockwise manner, starting at the right when entering the space.

### **Accommodating Future Rooms**

Massport buildings are frequently altered in a manner that may result in new smaller rooms being created within former larger rooms. Sequentially assigned room numbers should be skipped after assigning a room number to a large room or to a room that is likely to be split into smaller rooms in the future. Judgement should be applied when skipping room numbers, taking into consideration factors such as room size, use, area within the building, and known future project plans. In general, space used by tenants, particularly space intended for passenger access, is highly susceptible to change. As a guide, skip one sequential room number for every 1,000 square feet of space within that room. For example, the next room to be numbered after a 3,000 square foot room numbered “100”, would be “104”, leaving the three numbers “101”, “102”, and “103” for future use. While this guide may help, it is not a replacement for informed and experienced judgement applied by qualified architects, designers, and architects.

### **Rooms that Span Multiple Floor Levels**

Some rooms serve the purpose of conveying people, utilities, and other assets between two or more floor levels. Examples of such rooms include elevator shafts, stairwells, escalator enclosures, and utility chases. These rooms should be labeled on the corresponding floor level they are on, which will result in different room numbers for each floor level they pass between. If possible, the same sequential number should be assigned at each floor level on which the room is present. The identification and numbering of equipment, such as elevators and escalators, or utility assets that pass through such rooms is not within the scope of this standard.



## Process for Assigning Room Numbers

The process of assigning room numbers to existing, new, or renovated space within Massport buildings is described in this section. Project-specific requirements may necessitate deviations from this process, which should be discussed with and approved in writing by DTIG before the assignment of room numbers takes place.

### Roles and Responsibilities

The following roles are required to assign numbers to Massport rooms. Individuals who fulfil these roles take on the responsibilities as described below.

- **Designers, Architects, and Engineers** who define rooms at the 90% design phase of a project are required to assign room numbers that comply with the requirements of this standard to all rooms they create or modify as a part of their scope of work. They are required to submit the room numbers they assign in one of the formats described below to DTIG for review as a part of Massport's review of the 90% design DWGs or Building Information Models in Autodesk Revit (.RVT) format. Similar DWGs and/or RVTs depicting post-construction as-built conditions shall also be submitted as described below. Designers, Architects, and Engineers who submit designs that destroy existing rooms shall submit a list of the numbers previously assigned to rooms that will be destroyed. Immediately before assigning room numbers, those who assign room numbers must obtain and review the latest version of this standard and request DWGs depicting existing rooms in the areas impacted by their work.
- **Project Managers** and **Lease Managers** are required to inform hired designers, architects, and engineers (and tenants they represent) of the requirements of this standard. They are also required to provide DTIG with design and as-built drawings (produced under the contracts they oversee) that confirm compliance with this standard.
- **DTIG** will provide DWGs depicting existing rooms and assigned room numbers to Designers, Architects, and Engineers, upon request. As a prerequisite to Massport's acceptance of those deliverables, DTIG will review design and as-built deliverables for compliance with this standard.
- The **Room Numbering Committee** will consist of key stakeholders who use Massport room numbers, including police, fire, life-safety, operations, and maintenance personnel. The committee must approve room numbers assigned at the 90% design phase of a project as a prerequisite to Massport's acceptance of those design deliverables. If comments have not been provided by Massport within 30 days of receipt of the 90% design drawings, the proposed room numbers will be considered acceptable. The committee will also consider requested changes to the BOS Room Numbering Standard and oversee changes they judge necessary to enhance the Standard.



## Workflow

The activities of and flow of information related to the assignment of room numbers between individuals who fulfill the roles defined above (indicated in **bold**) is described below.

### 1. New Project

- a. Capital Programs **Project Managers** initiate new design projects that will result in interior construction and/or demolition that will impact the walls, windows, and doors that form rooms.
- b. **Lease Managers**, and in some cases representatives in Massport's Capital Programs and Environmental Affairs Department, will review and approve Tenant Alteration Applications (TAA) that will impact the walls, windows, and doors that form rooms.
- c. **Designers, Architects & Engineers** hired by Massport or Tenants to design and build interior space will kick off their new project. As a part of this kickoff, they should review the latest copy of this standard, which can be downloaded from Massport's Capital Improvements Important Documents web-page at <http://www.massport.com/massport/business/capital-improvements/important-documents>, as well as DWGs depicting current rooms and the room numbers assigned within the space they will be working. Their approach to room numbering and any questions or comments on this standard should be discussed during the project kick off meeting or a separate

- meeting specifically on room numbering (at the Project or Lease Manager's discretion), to which DTIG is invited. The purpose of requesting this information during the kickoff stage is to ensure that the scope, requirements, and level of effort required to comply with this standard are understood.
- d. **DTIG** will provide the latest copy of this standard, as well as DWGs depicting current rooms and the room numbers assigned within the space they will be working.

## 2. Design

- a. Interior space design will be carried out by **Designers, Architects & Engineers** who will apply room numbers to rooms they create and record existing room numbers of rooms they destroy. They should request any updates to the DWGs depicting current rooms and the room numbers assigned within the space they will be working from **DTIG**. The purpose of requesting these updates is to ensure that the latest information is applied when assigning room numbers.
- b. They will submit this information as described above to **Project Managers** or **Lease Managers**, who will provide a copy to **DTIG** for Review.
- c. **Designers, Architects & Engineers** may encounter situations in which they believe the requirements of this standard need to be altered to meet specific project requirements and the objectives of this standard. In these cases, they will submit their requested change via their **Project Manager** or **Lease Manager**, who will share the request with **DTIG**. **DTIG** will review the request and make a recommendation to the **Room Numbering Committee** for consideration. Changes approved by the **Room Numbering Committee** will be made by **DTIG** in a subsequent version of this document.

## 3. 90% Review

- a. **DTIG** will review 90% design DWGs and RVTs to ensure that they comply with the requirements of this standard. If they do not, comments will be returned to the **Project Manager** or **Lease Manager** to share with the **Designers, Architects & Engineers** responsible so that they can make the necessary revisions before resubmitting the deliverables.
- b. 90% design DWGs and RVTs approved by **DTIG** will be forwarded along with a recommendation for acceptance to the **Room Numbering Committee**. The committee will review the assigned room numbers to ensure appropriate compliance and continuity. Any comments or changes requested will be collected by **DTIG** and provided to the **Project Manager** or **Lease Manager** to share with the **Designers, Architects & Engineers** responsible, so that they can make the necessary revisions before resubmitting the deliverables.
- c. 90% Design Deliverables must not be approved by Massport **Project Managers** or **Lease Managers** unless the deliverables have been approved by the **Room Numbering Committee**.

#### 4. Construction

- a. Construction will be carried out by contractors.
- b. Any changes during construction that affect the assignment of room numbers shall be discussed with **DTIG** immediately.
- c. **DTIG** will discuss the changes with the **Room Numbering Committee** as needed.
- d. The construction change and any associated change order is not approved until DTIG notifies the **Project** or **Lease Manager** that the corresponding room numbering changes are approved.

#### 5. As-Built Review

- a. **Designers, Architects & Engineers** will prepare as-built DWGs or RVTs reflecting the configuration of the interior space after construction is complete.
- b. These DWGs and RVTs will be submitted to the Massport **Project Manager** or **Lease Manager** who will share copies with **DTIG** for Review.



- c. **DTIG** will review as-built DWGs and RVTs to ensure that they match the room numbers approved during design or subsequent construction changes. If they do, DTIG will recommend that the Room Numbering Committee approve the as-built DWGs and RVTs. If they do not, comments will be returned to the **Project Manager** or **Lease Manager** to share with the **Designers, Architects & Engineers** responsible so that they can make the necessary revisions before resubmitting the deliverables. .
  - d. As-built Deliverables must not be approved by Massport **Project Managers** or **Lease Managers** unless the deliverables have been approved by the **Room Numbering Committee**.
6. **DTIG** will update the room number records to show the assigned room numbers as reflected in the approved as-built DWGs and RVTs. The authoritative records will also contain a list of room numbers applied to rooms that have now been destroyed. The manner in which the room is used and its occupant known at the time a new or destroyed room is recorded should be included as attributes of that room. Metadata elements should indicate the date of the change and the organization that submitted the deliverable.
  7. Room Number Users including terminal managers, police, fire, life safety, operations, facilities and maintenance personnel, as well as IT professionals who design, implement, or support information systems that contain room numbers should check at least monthly to ensure room numbers in their reference documents and systems match those in **DTIG**'s authoritative source.
  8. Massport's Sign Shop (or contractors they hire) will install signs, labels, RFIDs, or other physical identifiers to the rooms. This process is outside the scope of this document.

## Massport Review & Acceptance

Massport **Project Managers** and **Lease Managers** will provide **DTIG** with DWG and/or RVT files that depict room numbers assigned to rooms at the design and as-built phases of the projects they or their tenants oversee. **DTIG** will review the files and provide these deliverables, along with recommendations regarding changes or acceptance criteria, to the **Room Numbering Committee**. The **Room Numbering Committee** will review the deliverables, as well as **DTIG's** recommendations, and determine if the deliverables are acceptable or not. **DTIG** will respond to Massport **Project Managers** and **Lease Managers** as to whether the deliverables are acceptable or require changes.

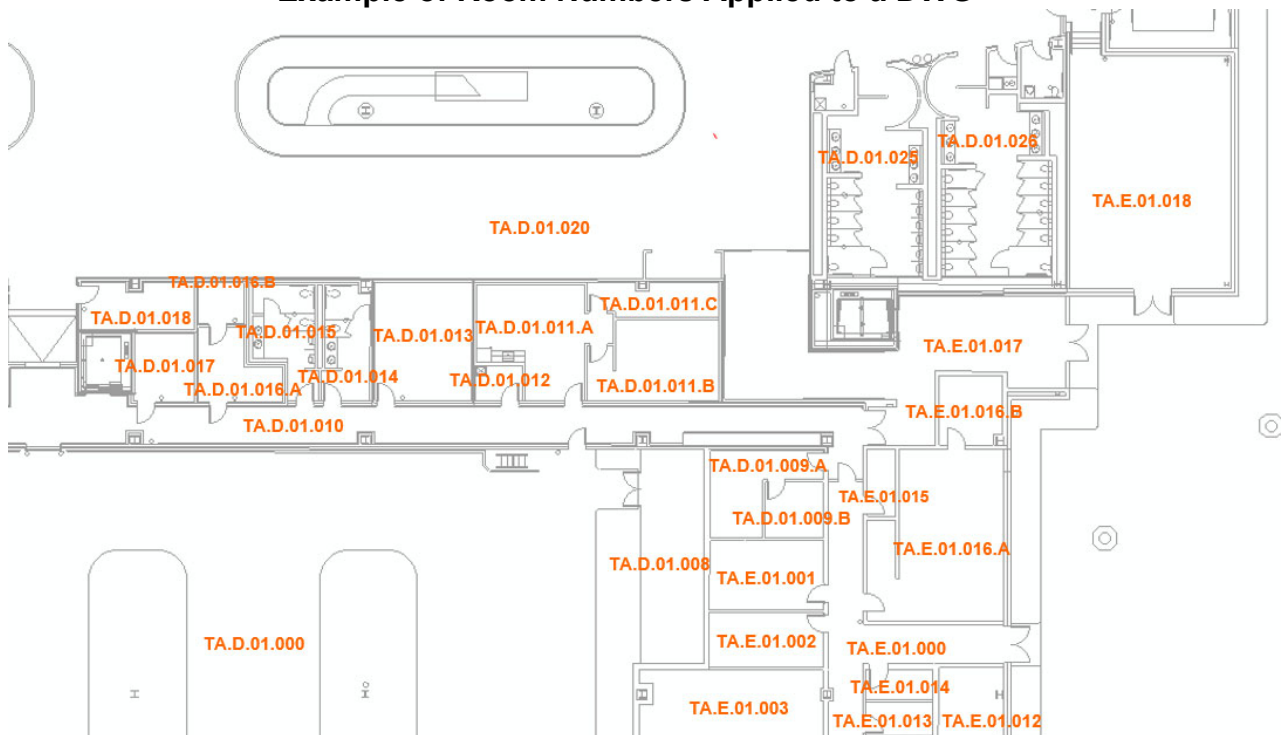


## Delivery of Room Numbers to Massport

Room numbers shall be delivered via DWGs and/or RVTs, as the project requires, at the 90% design and as-built phases of projects that design, construct, or alter interior space of Massport buildings. Following are the requirements of these deliverables.

- RVTs must contain room elements for all space(s) within the scope of the project. All room elements designed or created under the project must contain a room number property that is populated with a value that complies with this standard. All room elements that are to be destroyed should have a property that contains the existing room number if one has been assigned.
- DWGs must contain polylines that form closed polygons on an A-ROOM layer. These polyline objects should be associated with an AutoCAD Map or Civil 3D Object Data table that contains a field called “Room Number” that is populated with a value that complies with the requirements above. Annotations should be added on an A-ROOM-ANNO layer to display the assigned room numbers. Room number annotation should appear within the room polygon where possible. The room number annotation may be placed outside of the room polygon if placement within the polygon would cover or interfere with objects or other annotations in the DWG. All room objects that are to be destroyed should have an object data field called “Room Number” that contains the existing room number if one has been assigned.

### Example of Room Numbers Applied to a DWG





In addition to the requirements above, a list in a Microsoft Excel (XLS) file named “Destroyed Rooms.XLS[X]” shall be provided at the 90% design and as-built stages of projects that will destroy existing rooms. Cell A1 of the first tab of this spreadsheet shall contain the value “Rooms Destroyed”. Subsequent rows of the A column shall contain a list of all rooms to be or ultimately destroyed by the project.



## Glossary

The following acronyms have been used in this document.

ABO	Massport's Airport Business Office
BIM	Building Information Modeling
BOS	Boston's Logan International Airport
CAD	Computer Aided Design
DTIG	Design Technologies Integration Group
DWG	AutoCAD Drawing
GIS	Geographic Information System
IT	Information Technology
RVT	Autodesk Revit Model
TAA	Tenant Alteration Application
XLS	Microsoft Excel Spreadsheet

The following terms are used in this document.

Room	An area within a building bounded by full height (i.e., floor to ceiling) walls, doors, and/or barricades to holes within a floor that provide access to other floor levels.
Room Number	A unique number that conforms to this standard, which is applied to a room within Massport property.
Space	An area within a building used for a common purpose. Spaces need not be bound by walls, doors, or other physical features. Spaces can contain or be contained by rooms.
Floor Level	A portion of a building where structural elements, architectural features, assets, and amenities generally fall on the same horizontal plane.

# Appendix A

## Application of the Room Numbering Standards

### INTRODUCTION:

**MPA Room Numbering Standard utilized:** Version 1.0, issued March 23, 2020.

The following table identifies methodology utilized when assigning numbers to building areas, rooms, vertical circulation and building zones.

### APPLICATION:

*Room number standard applied.*

Component	Description	# Applied for Terminal A
Campus	Boston Logan International	<b>B</b>
Terminal	<u>T</u> erminal <u>A</u> ; Zone - <u>M</u> ain Building	<b>TAM</b>
Separator	Period	.
Level	Two digit number (ground level)	<b>01</b>
Separator	Period	.
Sequential Number	See description below.	___ ___ <u>#</u>
- Subdivided Rooms		___ ___ <u>#</u> <u>Letter</u>

### *Sequential Number application:*

Applying a simple logic to common building components one should reserve the use of certain digits starting with “0” through “9” for the third digit in each number. Logic applied is as follows:

Description of building component	# Applied
Corridors and Large Open areas	___ ___ <u>0</u>
Vestibules & Airside Access	___ ___ <u>1</u>
Stairs	___ ___ <u>3</u>
Elevators	___ ___ <u>5</u>
Escalators	___ ___ <u>7</u>
Mechanical chases/Ancillary Spaces	___ ___ <u>9</u>
Individual rooms	___ ___ <u>even numbers</u> (2, 4, 6, 8)

### *Additional Notes on Applying Sequential numbers:*

Starting at the door farthest to the right of the building facing from public access and moving counterclockwise individual room numbers were assigned. For example in Terminal A because the Main building is essentially set up in three larger

zones, room numbering is done within each zone and then moves to the next two zones: zone one being pre-security spaces; zone two post security; and zone three airside areas. Also note, the application intends to skip numbers to allow for future reconfiguration of space which potentially could add rooms.

The use of letters for subdivided rooms should help when an area is subdivided. Subdivided rooms are accessed off a corridor or large open area and then is divided into smaller rooms. Letters are added in the same fashion as sequential numbering with the letter "A" the initial space you enter from the corridor or large open area and moving counterclockwise for sequential letters for the spaces that are accessed primarily from the initial space numbered with letter "A".



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