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# PLANNING AND ENGINEERING GUIDELINES & STANDARDS (PEGS) SUPPLEMENT NUMBER: PEGS-21-006

**AUGUST 18, 2021** 

# BUILDING AND SPACE NAMING, IDENTIFICATION, ADDRESSING AND MEASUREMENT STANDARDS

Volume 1, Chapter 2 - Building and Space Naming, Identification, Addressing and Measurement Standards

Effective immediately, the following modification shall be made to the MDOT MAA 2021 PEGS Manual:

# **Volume 1, Chapter 2 – Building and Space Naming, Identification, Addressing and Measurement Standards**

Remove Chapter 2 in its entirety and replace with Chapter 2 Building and Space Naming, Identification, Addressing and Measurement Standards (attachment 1).

Consultants listed herein are required to distribute this PEGS standard supplement to their respective staff and subconsultants.

If you believe this standard supplement conflicts with any other codes or regulations or if you should have any questions regarding this matter, please contact the Manager, GIS & Engineering Technology Section at (410) 859-7768.

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## DISTRIBUTION

## Attachment:

1. Volume 1, Chapter 2 - Building and Space Naming, Identification, Addressing and Measurement Standards

PEGS Supplement: PEGS-21-006

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The changes in the text are formatted according to the following convention:

- Deleted passages are left in place, but formatted with a gray, overstrike font
- Entirely new passages are colored Green
- Changed passages are colored Red

## 2.1 Introduction

## 2.1.1 Purpose

This Building and Space Naming, Identification, Addressing, and Measurement Standard provides guidance for identifying Maryland Aviation Administration (MDOT MAA) owned, occupied, and/or managed properties so they can be uniquely and consistently referenced by personnel and information systems alike. The personnel who will use these identifiers include MDOT MAA staff, consultants, contractors, and emergency responders. This Standard establishes a consistent method for assigning location attributes to MDOT MAA properties, including building number, address, and unique identifiers for interior spaces. In addition, this Standard defines the methods by which interior spaces at MDOT MAA properties shall be measured for the purposes of including these spaces in MDOT MAA databases and computing space square footage. Unless otherwise noted, the implementation and enforcement of these standards is by the MDOT MAA Division of Planning and Engineering GIS and Engineering Technology Section (GETS).

#### 2.1.2 Definitions

This Standard is comprised of five hierarchical levels that define locations within MDOT MAA owned and/or occupied properties. Each level is a more detailed breakdown of its preceding level. The hierarchical levels follow:

- A. Campus
- B. Building
- C. Section
- D. Floor
- E. Unit

The first two levels, Campus and Building, define exterior locations. The Campus identifier is always either BWI or MTN, depending on if the property is located at either BWI Marshall or Martin State Airport, respectively. Buildings are assigned a building number and an address, as per Section 2.2 Addressing and Numbering Standard. Standards for Section, Floor, and Unit are all defined within Section 2.3 Interior Space Numbering. The Section level may refer to interior or exterior attributes depending upon the layout of the building. Floor and Unit refer to interiors. Units include locations that are rooms (spaces with doors) and interior open spaces, such as concourses, holdrooms, or open stairwells.

For each of the five levels, this Standard defines identifiers to be assigned, along with any labeling and database considerations. This Standard covers the numbering and labeling of doors associated with spaces at MDOT MAA properties as well. This Standard also defines the procedures by which unique identifiers are to be assigned to MDOT MAA properties.

# 2.2 Building Addressing, Numbering, and Naming

Each building on MDOT MAA property will be assigned an address, a unique identifier (building number) and a name whether the building is located on the airside or landside of airport operations. The building numbering conventions and procedures describe the process by which buildings are assigned numbers at BWI Marshall and Martin State Airports. GETS is responsible for assigning building numbers and addresses at BWI Marshall and Martin State Airports in coordination with the MDOT MAA Office of the Fire Marshall (OFM) as well as Anne Arundel and Baltimore counties, respectively.

For street addressing purposes, public roads are named by the surrounding county having jurisdiction over the road. Roads on MDOT MAA properties are named at the discretion of the MDOT MAA Executive Director, in coordination with GETS, Office of the Fire Marshal and the surrounding counties.

## 2.2.1 Building Addressing, Numbering, and Naming Coordination

Designers and consultants working with MDOT MAA will contact GETS to obtain building addresses, numbers, and names during the design and permitting process.

## 2.2.2 Assigning Building Addresses

## 2.2.2.1 Assigning Building Addresses at BWI Marshall

Street addresses at BWI Marshall shall be assigned with the closest accessible road that is used to access the building based on determination from GETS in coordination with Anne Arundel County and Office of the Fire Marshal.

- A. BWI Marshall Building Addressing Process
  - 1. Requests for a building address are made to GETS by an MDOT MAA employee from the Division of Planning and Engineering, Office of the Fire Marshall, another relevant MDOT MAA office, or a consultant firm doing business with MDOT MAA.
  - 2. When requesting an address, the request must include information about the building including an existing building name and number if available. If building number is not available, GETS will follow the building numbering process as outlined in Section 2.2.3 Assigning Building Numbers.

3. GETS will review the request, review current addressing data for the building (including nearby named streets and existing addresses), and coordinate with Anne Arundel County and OFM on the appropriate address. A building address consists of a street number and a street name (e.g., 7050 Friendship Rd). Determination of street number is based on nearby addresses and determination of street name is based on the closest accessible street to the building. GETS will confirm the new address with the requestor and notify relevant MDOT MAA offices.

#### 2.2.2.2 Assigning Building Addresses at Martin State

Building addressing at Martin State is carried out by GETS in coordination with the Martin State Airport Manager, Baltimore County, and Office of the Fire Marshal following similar procedures as at BWI Marshall.

## 2.2.3 Assigning Building Numbers

#### 2.2.3.1 Assigning Building Numbers at BWI Marshall

A. Types of Buildings that Receive Building Numbers

Any permanent building that is intended for occupancy shall receive a building number. For the purposes of these Standards, a building is defined as any structure that is utilized or intended for supporting or sheltering any occupancy. Structures that are in place for less than 180 days are considered temporary and are not assigned a building number.

- B. BWI Marshall Building Numbering Conventions
  - All buildings are assigned a 3-digit number based on the ownership and operation status of the building. The BWI Marshall Main Terminal is building 100. Buildings constructed, owned and/or operated by the FAA are assigned a number in the 2XX range in coordination with GETS. All other buildings at BWI Marshall are assigned a number in the 1XX range. In cases where a building is a part of a group of buildings, a letter identifier may be added to an existing building number to show that the related buildings are nearby. For example, a new building is being built adjacent to building 160. The next available building number is 191, however for the purposes of planning and dispatch, it is may be appropriate to number the new building 160A so that the adjacent buildings maintain a logical consistency in numbering.
- C. BWI Marshall Building Numbering Process
  - 1. Requests for a building number are made to GETS by an MDOT MAA employee from the Division of Planning and Engineering, Office of the Fire Marshall, another relevant MDOT MAA office, or a consultant firm doing business with MDOT MAA.
  - 2. When requesting a building number, the request must include information about the building including an existing building name and address, and information on building owner and tenant(s) if available. If the building address is not known, GETS will follow the building addressing process as outlined in Section 2.2.2 Assigning Building Addresses.
  - 3. GETS will review the request and determine the appropriate number for the building based on the next available number and nearby buildings.
  - 4. GETS will confirm the new number with the requestor and notify relevant MDOT MAA offices.
- D. Renumbering Buildings
  - If a building must be renumbered, all renumbering will be coordinated by GETS since the change will influence several datasets including interior space numbers, airport layout plans, computer aided dispatch GIS datasets, and other GIS layers. GETS will follow the procedures above for assigning a new building number and in doing so update all relevant datasets. Since changing a building number will have impacts on many MDOT MAA offices and datasets, this process should only be carried out under extreme circumstances and after exhausting other options for changing the identification of a building. For example, changing a building name will be easier and is preferred over changing its number.
- E. Demolishing Buildings
  - When a building is removed, GETS will record its number and history in the MAA GIS database and its number will become available again for use for another building.

#### 2.2.3.2 Assigning Building Numbers at Martin State

Building numbering at Martin State follows similar processes as Section 2.2.3.1 Assigning Building Numbers at BWI Marshall under the coordination of GETS staff and the Martin State Airport management.

A. Assigning numbers to T-Hangars

T-hangars at Martin State are assigned a building number corresponding to a group of hangars installed near each other on the airfield. Individual T-hangars are assigned a unit number corresponding to the lease for that hangar. The unit number is posted on the outside face of the hangar.

#### 2.2.3.3 Building Number Signage

Signs for building numbers shall be 12" x 12" with yellow honeycombed reflective background. Building number characters shall have black background. Character height shall be 4-1/2 inches with 5/8-inch stroke. Mounting location will be determined by Office of the Fire Marshal. A sign shall be placed on the public side and airfield side of the building as applicable.

## 2.2.4 Assigning Building Names

Designers of a new building at BWI Marshall and Martin State Airports may suggest a name for the new building. GETS will coordinate with all relevant MDOT MAA stakeholders to approve the name of the new building.

# 2.3 Interior Space Numbering

#### 2.3.1 Introduction

Interior space numbers are unique codes that are used to identify individual interior spaces at BWI Marshall or Martin State Airports. Each space is represented by a single polygon in the MDOT MAA GIS database. These standards define space numbering conventions (i.e., how space numbers are formatted) and procedures (i.e., how spaces are assigned numbers) for BWI Marshall and Martin State Airports. The GETS office is responsible for maintaining and implementing the numbering standards at BWI Marshall and Martin State.

Each interior space is represented by a space polygon in the MDOT MAA GIS database. The attributes of these space polygons contain all components of the interior space number in separate fields, allowing interior space data to be queried, sorted, and analyzed according to any combination of those components, for example: querying the data for all spaces on a specific building, or all spaces on all levels within a specific building section, etc.

## 2.3.2 Interior Space Numbering Coordination

The designers of Capital and Building Permitted projects shall contact GETS to request space number assignments during the design or construction process when one or more spaces are to be created, removed, or modified as part of the project. Designers shall contact GETS at the following times depending on the project type:

- A. Capital Projects: Prior to each design submittal, beginning with the 30% design phase, and prior to any field changes or addenda
- B. Building Permitted Projects: As early as possible during design, prior to application for building permit.

GETS will assign space numbers for a project based on the following conventions and procedures described in <u>Section 2.3.4 Space Number Assignment</u> and will notify consultants via annotated PDF and/or text document of the newly assigned space numbers.

Designers are required to coordinate with GETS to adjust space number assignments as a project evolves, to accommodate expected design changes which may add, remove, or modify interior spaces. Although such communication is mandated at each design phase, it is also encouraged in between design phases as well.

## 2.3.3 Interior Space Numbering Conventions

Interior space numbers are built from the components defined below. <u>All components are required</u> to form a completely unique space number. Components are joined into a single-space number string separated by underscores to form the completed space number. By convention, space number components do not require leading zeros, e.g., 001, however those may be used at the discretion of GETS staff.

- A. Airport Campus: A code denoting the airport campus where the space is located.
- B. Building Number: The MDOT MAA-issued number of the building containing the space.
- C. Section Identifier: A code denoting subdivision of a building where the space is located.
- D. Floor Number: A code denoting the floor within a building where the space is located.
- E. **Unit Identifier:** An individual code assigned to each interior space.
- F. Function Designator (Optional): An optional single letter code denoting a specialty space's function.

#### 2.3.3.1 Space Numbering Examples

Component	Component Name	Examples
A	Airport Campus	BWI, MTN
В	Building Number	100, 112, 991
С	Section Identifier	AT, NTE, A, 1, 0
D	Floor Number	1, 1a, 3
E	Unit Identifier	1, 101, CST1, 203J, A111C
F	Function Designator (Optional)	P, K, U

Table 2.3.3.1-1 Space numbering component examples

Space Number	Space number component description
BWI_100_A_1_A111C	BWI Marshall Airport, Building 100 (Terminal), Section A (Concourse A), Floor 1, Unit A111C
BWI_991_0_1_203J	BWI Marshall Airport, Building 991 (Hock Office Complex), Section 0 (default section), Floor 1, Unit 203J
MTN_4-5-6_4_1_402B	Martin State Airport, Building 4-5-6 (Hangars), Section 4 (Hangar 4), Floor 1, Unit 402B

#### *Table 2.3.3.1-2 Space numbering examples*

In Figure 2.3.3.1-3 below, several rooms in the BWI Marshall B Terminal are shown with space identifiers for the primary spaces (in green) and identifiers for sub-rooms (in purple). All of these spaces will share many components in the space number, BWI\_100\_BT\_2, but have a unique space number when all components are combined: BWI\_100\_BT\_2\_BT254A, BWI\_100\_BT\_2\_BT254B, BWI\_100\_BT\_2\_BT254B1, etc. The purpose of the full space number (e.g., BWI\_100\_BT\_2\_BT254A) is to provide a unique value to represent the space in digital databases that contain features for all spaces at BWI Marshall and Martin State Airports.

In day to day operations, and on digital or printed plans, it is common to represent space numbers by using only the Unit Identifier component (e.g., BT254A) as highlighted in Figure 2.3.3.1-3.

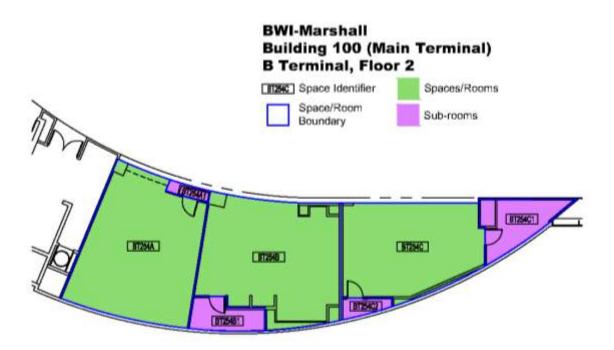


Figure 2.3.3.1-3 Space numbering at BWI Marshall showing different space identifiers for rooms and sub-rooms

Unit Identifiers and door numbers are closely related and are typically assigned at the same time. In general, a door number will match the Unit Identifier of the space into which it opens. Further description of how door numbers are assigned is found in Section 2.4 Door Number Assignment.

## 2.3.4 Space Number Assignment

This section describes the space numbering process for all MDOT MAA Marshall buildings for designating the campus, building, section, floor, and space identifier components of space numbers.

#### 2.3.4.1 Airport Campus

All interior spaces at BWI Marshall are assigned the campus code BWI. All interior spaces at Martin State Airport are assigned the Airport Campus code MTN.

## 2.3.4.2 Building Number

All interior spaces are assigned the building number of their building. Building numbers are assigned as defined in <u>Section 2.2.3 Assigning Building Numbers</u> and are maintained by GETS in coordination with the Office of Planning, the Office of the Fire Marshal, the Office of Maintenance, and other MDOT MAA offices. Interior spaces at the BWI Marshall Terminal are assigned the building number 100. Refer to Section 2.3.2 Interior Space Numbering Coordination for additional information about building numbering and assigning building numbers.

## 2.3.4.3 Section Identifier

For buildings with multiple sections (e.g., wings, concourses, zones) interior spaces are assigned a Section Identifier based on their location within the building. Section Identifiers in the BWI Marshall Terminal are based on the building's terminals and concourses (Table 2.3.4.3-1, Figure 2.3.4.3-2). Section Identifiers for buildings consisting of multiple hangars generally indicate the hangar number. Sections Identifiers in cargo buildings and warehouses are typically single letters. GETS will delineate building sections and assign Section Identifiers as needed. If a building has no delineated sections, all spaces within building shall be assigned the default Section Identifier "0" (the number zero).

AT	Terminal A-B, Concourse A side	Α	Concourse A
ВТ	Terminal A-B, Concourse B side	В	Concourse B
ST	South Terminal	С	Concourse C
СТ	Center Terminal	D	Concourse D
NT	North Terminal	DX	Concourse DX
NTE	North Terminal Extended	DY	Concourse DY
SKY	Skywalks and associated towers	E	Concourse E
CTT	Pedestrian Tunnel (to Hourly Garage)	OBG	Terminal Observation Gallery

Table 2.3.4.3-1 BWI Marshall Terminal Section Codes

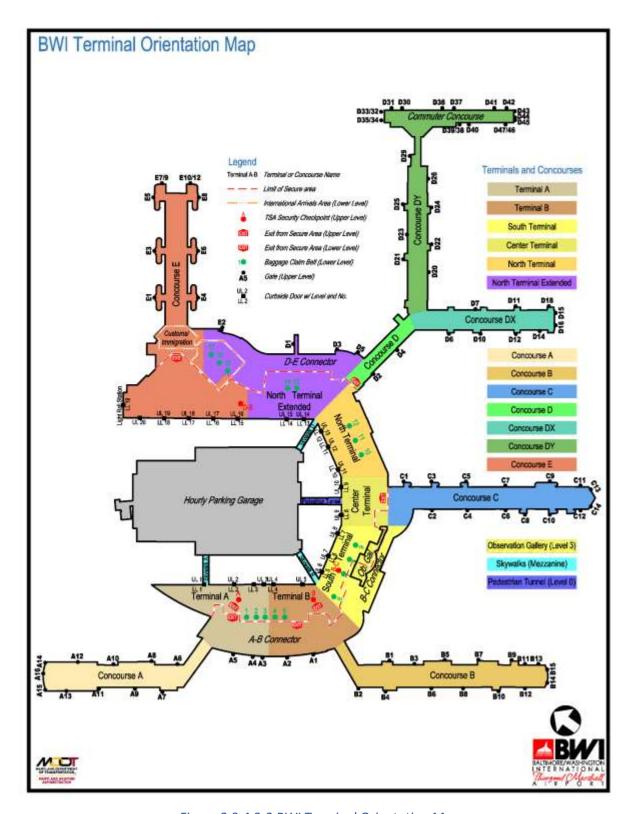


Figure 2.3.4.3-2 BWI Terminal Orientation Map

## 2.3.4.4 Floor Number

All interior spaces are assigned the floor number for the floor where they are located. This can be a number (e.g., 1, 2, 3) or an alphanumeric value (e.g., 1a, 3o) depending upon the layout of the building.

## A. BWI Marshall Terminal Floor Numbers and Names

Floors are divided by program at each level as defined in Table 2.3.4.4-1 below.

Floor Number and Name	Floor Name	Terminal Programs on Floor
Floor Number 0 Basement		Baggage Tunnels (Under A & B Concourse Ground Level)
		B Concourse Mechanical Space
Floor Number 1a	A/B Ground Floor	Baggage Make-up Concourse A & B
		Ground Level Concourse A & B
Floor Number 1	Lower Level	Arrivals/Baggage Claim Level of Domestic Concourses A & B
		Arrivals/Baggage Claim Level of Domestic Concourses C & D
		Arrivals/Baggage Claim Level of International Terminal Concourse E
Floor Number 2	Upper Level	Domestic and International Ticketing
		Departure Level (including all A & B Gates)
Floor Number 2i	International Sterile Corridor	International Terminal Pier E, Mezzanine Level, Sterile Corridor between Upper and Lower Levels
Floor Number 3o	Third Floor Offices	Offices Above the A & B Ticket Counters
		Center Terminal MAA Offices
		Third Floor Offices above Concourse DY
Floor Number 3s	Skywalk	Skywalks to the Hourly Parking Garage
Floor Number 3t	Observation Level	Observation Lounge
Floor Number 4	Fourth Floor Offices	Center Terminal FAA and Operations Offices
		Fourth Floor Offices above Concourse DY
Floor Number 5	Fifth Floor	Center Terminal FAA Space
Floor Number 6	Sixth Floor	Center Terminal FAA Space
Floor Number 7	Seventh Floor	Center Terminal FAA Space
Floor Number 8	Eighth Floor	Center Terminal FAA Air Traffic Control Tower (ATCT)
Floor Number 9	Ninth Floor	Center Terminal FAA Air Traffic Control Tower (ATCT)

Table 2.3.4.4-1 BWI Marshall Terminal Floor Levels

## B. Outbuildings

Buildings at BWI Marshall other than the Terminal, commonly referred to as Outbuildings, and all buildings at Martin State Airport, shall use a simplified numbering system for Floor Numbers as defined in Table 2.3.4.4-2 below.

Floor Number	Floor Name
В	Basement
1	First Floor
2	Second Floor
M	Mezzanine
3	Third Floor
4	Fourth Floor
5	Fifth Floor
6	Sixth Floor
7	Seventh Floor
8	Eighth Floor
9	Ninth Floor

	_
D	l Doot
I N	l Roof

Table 2.3.4.4-2 Floor Numbers in BWI Marshall Outbuildings and Martin State Buildings

#### 2.3.4.5 Unit Identifier

Unit identifiers are the individualized code assigned to each interior space. They are typically two to eight characters in length, include the Section Identifier, an optional Function Designator, the Floor Number, and may include alphanumeric suffixes in the case of sub-rooms. In buildings without delineated sections, the default Section Identifier "0" is omitted from the Unit Identifier and is only stored in the attributes of the building's space polygons.

#### A. Linear Buildings/Sections with a Central Corridor

For buildings or building sections whose rooms are arranged in a linear fashion along a central corridors, Unit Identifiers begin at the end or side closest to the main entrance and increment toward the opposite end or side, with spaces to the left of the main corridor receiving sequential odd numbers, and spaces to the right of the main corridor receiving sequential even numbers (e.g., 101, 103, 105 on the left and 102, 104, 106 on the right). If the central corridor runs perpendicular to the face containing the main entrance, numbering shall begin at the end of the corridor to the left of the main entrance. Spaces along corridors are to be numbered sequentially whenever possible. Determination of the main entrance to a building or section for the purposes of assigning Unit Identifiers is by GETS staff.

#### B. Non-Linear Buildings/Sections without a Central Corridor

For non-linear buildings or sections without a central corridor, such as hangars and warehouses, Unit Identifiers begin at the main entrance and increment in a clockwise spiral from the exterior of the building towards the interior. When possible, spaces along corridors are numbered sequentially. Determination of the main entrance to a building or section for the purposes of assigning Unit Identifiers is by GETS staff.

#### C. Sub-rooms

Rooms may have one or more sub-rooms and on occasion there can be multiple levels of sub-rooms, such as in a suite containing open offices, private offices, and other rooms, or rooms wholly contained within another room, such as a closet. Sub-rooms are assigned Unit Identifiers that consist of the parent space's Unit Identifier plus an alphabetical suffix, always starting with the letter A, increasing by a letter suffix clockwise from the main entrance of the space. Occasionally, sub-rooms will also have sub-rooms. In those circumstances, an additional numeric suffix is added: room 201A, which is a sub-room of 201.

#### **D.** Public Interior Spaces

Public interior spaces (public spaces) are typically open spaces (spaces without doors) that are accessible to airport patrons. Public spaces are found at the BWI Marshall Terminal and may be in the secured (concourses) and non-secured (street side terminal) parts of the airport. Public spaces typically include concourses, walkways and terminal areas that are delineated by GETS staff based on structural features and practical understanding of the terminal. Space identifiers for public spaces include the Section code (Refer to Section 2.3.4.3 Section Identifier) and the prefix "P" followed by increasing numeric values based on the criteria defined in Sections 2.3.4.5.A Linear Buildings/Sections with a Central Corridor (e.g., DYP202 for public corridors in the DY concourse).

#### E. Unleasable. Dead Spaces

Unleasable or "dead spaces" represent interstitial spaces throughout the airport that might be voids, shafts, or "open to below" architectural spaces. As these spaces typically do not have doors it is more straightforward to number them separately from other spaces. Space identifiers for unleasable spaces include the Section code (Refer to Section 1.3.4.3 Section

#### F. Kiosks

Kiosks are found throughout the BWI Marshall Terminal and are most common in the ticketing areas. Kiosks represent a leasable area of open space that may include ticketing, queueing, and baggage claim areas. As these spaces typically do not have doors, it is more straightforward to number them separately from other spaces. Space identifiers for kiosks include the Section code (Refer to Section 2.3.4.3 Section Identifier) and the prefix "K" followed by increasing numeric values based on the criteria defined in Sections 2.3.4.5. Linear Buildings/Sections with a Central Corridor and 2.3.4.5.B Non-Linear Buildings/Sections without a Central Corridor (e.g., NTEK203, NTEK205, NTEK207 for ticketing and queueing kiosks in the NTE terminal).

#### D. Ad Hoc Space Identifiers

GETS staff will assign Unit Identifiers that deviate from theses procedures in cases where strictly following the procedures results in confusion in the field. For example, if the standard procedure would result in Unit Identifiers 124 and 146 being placed together, the second space may instead be assigned a Unit Identifier 124A to maintain a logical sequence along a corridor.

#### E. Curbside Entry Vestibules

Curbside entry vestibules along the BWI Marshall Terminal roadway are numbered 1-19 on the Lower Level and 1-20 on the Upper Level, starting on the Terminal A-B side. The vestibules are assigned a Unit Identifier based on a prefix of either LL indicating Lower Level (Floor Number 1), or UL indicating Upper Level (Floor Number 2), and the entry number. For example: curbside entry vestibule #2 on the Lower Level is assigned Unit Identifier LL2.

#### F. Holdrooms

Holdrooms are open public spaces at Gates where passengers wait to board their flights. Unit Identifiers for holdrooms include the prefix "HR" followed by the Gate number of the holdroom. For example, the Unit number HRE6 refers to the holdroom at Gate E6.

#### G. Restrooms, Nursing Rooms, and Adult Changing Rooms

All projects involving renovation or reconstruction of restrooms at BWI Marshall and Martin State Airport shall include numbering of each restroom, as well as numbering of each stall within the restrooms. The stall numbers should be affixed to the outside and inside door of each stall. The positioning and esthetics of the signs affixed on the stall doors shall be at the discretion of the Director of the MDOT MAA Office of Architecture. The designers shall contact the GETS to request restroom and stall numbers prior to 60% design and anytime during the design or construction process that a door number(s) is added, deleted, or modified.

Public Restrooms, Nursing Rooms, and Adult Changing Rooms at BWI Marshall are each assigned a unique MDOT MAA Identifier. The Unit Identifier for these rooms and their sub-rooms will match the room's MDOT MAA Identifier. The MDOT MAA Identifier includes the Section Identifier, a dash, the Function Designators "F", "M", "G", or "N", the Floor Number, and an alphanumeric identifier assigned by GETS. For example: Family Assist Restroom C-F2A, Men's Restroom C-M2A, and Women's restroom C-W2A are located in the C Concourse on Level 2, resulting in Space Numbers BWI 100 C 2 C-F2A, BWI 100 C 2 C-W2A.

Non-public restrooms, such as those located within MDOT MAA occupied space or a tenants leased space, shall be issued standard Unit Identifiers.

Toilet stalls within a restroom are not represented in the MDOT MAA GIS by unique space polygons, but are incorporated as part of the parent restroom. However, each stall be assigned a sequential stall number, beginning with "1" at the first stall to the right of the entrance and counting up in a counter-clockwise direction.

#### H. Escalators, Elevators, Open Stairs, Stairwells, Moving Walkways

Escalators, Elevators, Open Stairs, and Stairwells are features with spaces that span multiple levels and thus may have duplicate Unit Identifiers from level to level. Additionally, the Maryland Department of Labor, Licensing and Regulation issues each Elevator, Escalator, and Moving Walkway a unique identifier consisting of two letters representing the Maryland county, and a four-digit number. The letters in state-owned facilities, such as BWI Marshall and Martin State Airports, are always "ST". This identifier is recorded the MDOT MAA GIS database for reference, but is not part of the space number or MDOT MAA Identifier.

#### 1. Escalators and Open Stairs

Escalators have a space polygon on each level through which they pass. Escalators at BWI Marshall are each assigned a unique MDOT MAA Identifier. The Unit Identifier for an escalator's two space polygons will match its MDOT MAA Identifier. The MDOT MAA Identifier includes the Section Identifier, the Function Designator "L", the Floor Number of the unit's bottom level, and an alphanumeric identifier assigned by GETS. For example: Escalator DYL1A is located in the DY Concourse, spanning levels 1 and 2, resulting in two space polygons with the Space Numbers BWI\_100\_DY\_1\_DYL1A and BWI\_100\_2\_DYL1A.

#### 2. Elevators

Elevators have a space polygon on each level through which they pass. Elevators at BWI Marshall are each assigned a unique MDOT MAA Identifier. The Unit Identifier for an elevator's multiple space polygons will match its MDOT MAA Identifier. The MDOT MAA Identifier includes the Section Identifier and an alphanumeric identifier assigned by GETS. (NOTE: Elevators lack a Function Designator). Alphanumeric identifiers in the Concourses will generally correspond to the number of the nearest Gate. For example: Elevator B7 is located on Concourse B, nearest Gate B7, spanning Levels 1a and 2, resulting in two space polygons with the Space Numbers BWI\_100\_B\_1a\_B7 and BWI\_100\_B\_2B7.

#### 3. Enclosed Stairwells

Stairwells have a space polygon on each level through which they pass. Stairwells are enclosed by walls, unlike open stairs, and are typically restricted from public use except in case of emergency. Stairwells at BWI Marshall are each assigned a unique MDOT MAA Identifier. The Unit Identifier for a stairwell's multiple space polygons will match its MDOT MAA Identifier. The MDOT MAA Identifier includes the Section Identifier, the Function Designator "S", and an alphanumeric identifier assigned by GETS. Alphanumeric identifiers in the Concourses will generally correspond to the number of the nearest Gate. For example: Stairwell DYS21 is located at Gate D21, spanning Levels 1 and 2, resulting in two space polygons with the Space Numbers: BWI\_100\_DY\_1\_DYS21 and BWI\_100\_DY\_2\_DYS21.

#### 4. Open Stairs

Open Stairs have a space polygon on each level through which they pass. Open stairs are not enclosed by walls and are considered public spaces. Open stairs are not assigned unique MDOT MAA Identifiers, and so their Unit Identifiers will correspond to the standard format for interior spaces and will not match from level to level. Open stairs are given a Function Designator of "P", as they are considered public spaces. For example: a stair in Concourse DY spanning Levels 1 and 2, resulting in two space polygons with the Space Numbers BWI\_100\_DY\_1\_DYP101 and BWI\_100\_DY\_1\_DYP244.

#### 5. Moving Walkways

Moving walkways are pieces of equipment having a single space polygon. Moving Walkways are each assigned a unique MDOT MAA Identifier. The Unit Identifier for a moving walkway's space polygon will match the MDOT MAA Identifier includes the Section Identifier, the Function Designator "V", the Floor Number, and an alphanumeric identifier assigned by GETS. For example: Walkway BV2A is located in the B Concourse on Level 2, resulting in Space Number BWI\_100\_B\_2\_BV2A.

#### 2.3.4.6 Function Designator

For certain spaces with dedicated functions, a Function Designator code is included in the Unit Identifier. Function Designators are assigned by GETS staff as part of the Unit Identifier.

Designator	Description
F	Family Assist Restroom
G	Adult Changing Room
K	Kiosk
L	Escalator
M	Men's Restroom
N	Nursing Room
Р	Public Space
S	Stairwell
U	Unleasable Space
V	Moving Walkway
W	Women's Restroom

Table 2.3.4.6-1 Function Designators

- F. **Family Assist Restrooms:** Unisex facilities designed to be more accommodating to families with small children or those with special physical needs who might find it uncomfortable or impractical to use standard restrooms. One Family Assist Restroom is typically provided at or near each grouping of public restrooms. Family Assist Restrooms are assigned the Function Designator "F" in their Unit Identifier.
- G. **Adult Changing Rooms:** Toilet and change facilities provided for those with high support needs and their caregivers, who may require more space, assistance, and specialized equipment than is available in a standard restroom. One Adult Changing Room is typically provided at or near each grouping of public restrooms. Adult Changing Rooms are assigned the Function Designator "G" in their Unit Identifier.
- K. **Kiosks:** Found throughout BWI Marshall Terminal. Kiosks represent leasable area of open space, typically contained within a larger public space, which may include information, ticketing, queueing, or concession areas. Kiosks are assigned the Function Designator "K" in their Unit Identifier.
- L. Escalators: Escalators may be found in public areas throughout the BWI Marshall Terminal. Escalators are assigned the Function Designator "L" in their Unit Identifier.
- M. Men's Restrooms: Public Men's Restrooms in the BWI Marshall Terminal are assigned the Function Designator of "M" in their Unit Identifier.
- N. **Nursing Rooms:** Facilities provided to allow mothers to nurse or pump in privacy and comfort. One Nursing Rooms is typically provided at or near each grouping of public restrooms. Nursing Rooms are assigned the Function Designator "N" in their Unit Identifier.
- P. **Public Spaces:** Typically open spaces (spaces not enclosed by walls) accessible to airport patrons, located in either the secured or non-secured areas. Public spaces typically include concourses, walkways, Open Stairs, and other terminal areas delineated by GETS based on structural features, usage, or occupancy. Public Spaces are assigned the Function Designator "P" in their Unit Identifier.
- S. Stairwells: Stairs enclosed by walls, typically not accessible to the public except in an emergency, when they provide emergency egress from the building. Stairwells are assigned the Function Indicator "S" in their Unit Identifier.
- U. Unleasable Spaces: Those spaces in a building that are not normally human-accessible, such as dead spaces, shafts, or "open to below" spaces. Unleasable Spaces are assigned the Function Indicator "U" in their Unit Identifier.
- V. **Moving Walkways:** Slow-moving conveyors within a public space, not enclosed by walls, that transport people across horizontal or inclined planes to shorten walking times. Moving Walkways are assigned the Function Indicator "V" in their Unit Identifier.

W. Women's Restrooms: Public Women's Restrooms in the BWI Marshall Terminal are assigned the Function Designator of "W" in their Unit Identifier.

#### 2.3.4.7 Construction and Renovation

Designers for both Capital and Permitted projects shall coordinate with GETS staff for the assignment of space numbers, beginning at the earliest possible time and continuing throughout the design phase of a project (see Section 2.3.2 Interior Space Numbering Coordination). Spaces may receive a completely new space number or an existing space number if the space layout is being rearranged, depending upon the nature of construction and as outlined below.

#### A. Additions and New Spaces

When an addition is made to an existing building, GETS staff will assign numbers to the new spaces following these space numbering procedures. New numbers follow the sequence from the existing building, for example when an extension is added to the end of a concourse.

#### B. Splitting of Spaces

When a space is split, and new spaces are created, GETS staff will review all new spaces to ensure a proper number is assigned in accordance with these space numbering procedures. The first space closest to the main entrance of the area will retain the original space number. For subsequent spaces created from the split, new numbers will be assigned based on availability to maintain logical sequencing, including alphanumeric suffixes as need, as defined in Section 2.3.4.5.C Sub Rooms.

#### C. Combining or Merging of Spaces

When multiple spaces are combined or merged into a new single space, for example when several subdivisions in a suite are removed during construction, GETS staff will review current space numbers and reassign numbers so that the renovated space matches the numbering conventions. The space number of the new larger space is based on the primary space number prior to the merge or the lowest sequential space number. For example, an office is made up 3 spaces: the main space from the entrance, AT200, and two subdivision offices, AT200A and AT200B. During a renovation, the subdivisions are removed, creating a single space, the new space has the number AT200 and the numbers AT200A and AT200B are no longer in use.

#### 2.3.4.7 BWI Marshall Terminal Curbside Entry Vestibules

Curbside entry vestibules along the BWI Marshall Terminal roadway are numbered 1-19 (lower level), starting on the Terminal A-B side, with a suffix for level (LL or UL). The vestibules are assigned the space identifier based on level and number, UL1, UL2, LL1, LL2. Complete space numbers for curbside vestibules contain the same components as other numbers: BWI\_100\_AT\_1\_LL2, BWI\_100\_AT\_2\_UL2, etc. Curbside entry vestibules at BWI Marshall Terminal have multiple sets of doors, but these doors are not assigned additional identifiers, all doors associated with a vestibule space are considered a single entity.

#### 2.3.4.8 Updating Legacy Space Numbers

Many existing spaces in MDOT MAA buildings have legacy space numbers which do not comply with this standard. Un-numbered or non-compliant spaces will be numbered or re-numbered to comply with this standard when a space is to be modified by a Capital or Permitted project, or when a building is discovered to have been incorrectly or incompletely numbered and must be completely numbered to comply with this standard.

#### 2.3.4.9 BWI Marshall Space Names and Additional Identifiers

Along with the above criteria for assigning space identifiers and space numbers, many spaces at BWI Marshall have additional identifying information including State of Maryland identifiers and common space names. For example, the mechanical room MER #1 has a space identifier of NTE100 and the space number BWI\_100\_NTE\_1\_NTE100. This space also as the widely known name "Mechanical Room 1" or MER #1 which is displayed prominently on signs outside the room. Both the space number and the space name are recorded in the MDOT MAA GIS database.

#### 2.3.4.10 Martin State Space Numbering

Space numbering at Martin State Airport follows the process outlined above, with the campus code MTN, and under the coordination of GETS staff and the Martin State Airport management.

# 2.4 Door Number Assignment

Numbers are assigned to all doors to facilitate wayfinding and dispatching. As a number is assigned to a space, door(s) associated with that space are numbered at the same time. The door number is derived from the Unit Identifier of the space into which the door leads. In general, this is based on the space into which a door swings, however GETS staff can override this determination as needed. Since door numbers are assigned along with space numbers, consultants shall follow the procedures as outlined in Section 2.3.2 Interior Space Numbering Coordination for contacting GETS during design and construction. Spaces may have more than one door or different door configurations, and specific door numbering conventions and procedures are outlined below.

## 2.4.1 Door Numbering Coordination

The designers of Capital and Permitted projects shall contact GETS to request door number assignments during the design process, when one or more doors are to be installed, removed, or relocated as part of the project. Designers shall contact GETS at the following times depending on the project type:

- A. Capital Projects: Prior to each design submittal, beginning with the 30% design phase, and prior to any field changes or addenda
- B. Permitted Projects: As early as possible during design, prior to application for building permit

GETS will assign door numbers for a project based on the following conventions and procedures and will notify consultants via annotated PDF and/or text document of the newly assigned door numbers.

Designers are required to coordinate with GETS to adjust door number assignments as a project evolves, to accommodate expected design changes which may add, remove, or modify doors. Although such communication is mandated at each design phase, it is also encouraged in between design phases as well.

For Capital and Permitted projects, contractors are responsible for installing door number plates as defined in <u>Volume 2, Chapter 14, Section 14.2 Interior Signage</u>. Contractors are required to replace any door number plates damaged, lost, or removed during construction per these standards. During day-to-day maintenance outside of a construction project, the MDOT MAA Office of the Fire Marshall (OFM) is responsible for installing missing door number plates, and replacing incorrect or non-compliant door number plates, after coordination with GETS

## 2.4.2 Spaces with Multiple Doors

If a space has multiple doors opening into it, the primary door will be assigned a number based on the space number and succeeding doors will be assigned the space number with an alphabetical suffix (e.g., primary door into space 100 would be door number 100 and additional doors into space 100 would be 100a, 100b, etc.). However, curbside entry vestibules in the BWI Marshall terminal each have multiple doors opening into them which are not assigned additional identifiers; all doors associated with a curbside entry vestibule are considered a single entity, and assigned the same door number, consistent with the Unit Identifier of the vestibule.

## 2.4.3 Door Numbers for Space Subdivisions

As above, door numbers are assigned based on the Unit Identifier of the space the door leads into, including if the space is a subdivision of a larger space. If a subdivided space has multiple doors opening into it, the primary door will be assigned the space number including its alphabetical suffix and succeeding doors will be numbered with the space number and its alphabetical suffix, plus an additional numerical suffix.

## 2.4.4 Numbering Roll-up Doors

As with other doors, roll-up or overhead doors are assigned the space identifier of the room they are associated with along with suffix of "R" plus an increasing letter character, e.g., RA, RB, RC, etc. For example, for space CT100, there may be a standard door, CT100A, and two roll-up doors, CT100RA and CT100RB. For spaces with only one roll-up door, the suffix "RA" is used. Numeric suffixes may be used along with alphabetical suffixes at the discretion of GETS. For example, cargo buildings with multiple roll-up doors on both sides may use numeric on one side, and alphabetical on the other, such as C100R01 thru C100R12, and C100RA thru C100RL. Security grates at concession entrances are considered roll-ups for numbering purposes.

## 2.4.5 Doors at BWI Marshall Passenger Terminal Aircraft Boarding Gates

Doors at aircraft boarding gates are numbered corresponding with their Gate number, e.g., "Gate D4".

#### 2.3.5.5 Assignment and Installation of Door Numbers

For construction that creates new doors, or modifies or replaces existing doors, designers and contractors will coordinate with GETS staff for the assignment of door numbers as defined in Volume 1, Chapter 1, Section 1.3.4.4 Assignment of Door Numbers. For those projects, contractors are responsible for installing door number plates as defined in Volume 2, Chapter 14, Section 14.2 Interior Signage. Door number plates damaged or lost during construction are also required to be replaced by contractors during the construction project per these standards. Outside of construction, and during day-to-day maintenance, the MAA Office of the Fire Marshall (OFM) is responsible for installing missing or wrong door number plates after coordination and instruction from GETS.

#### 2.3.6 Martin State Space Numbering

Space numbering at Martin State follows similar processes as Section 2.3.4 BWI Marshall Space Numbering, with the campus code MTN, and under the coordination of GETS staff and the Martin State Airport management.

#### 2.4.6 Martin State Door Numbering

Doors are not numbered at Martin State Airport and instead only space numbers are assigned. Any signage for spaces may be on or adjacent to door portals at the discretion of the Martin State Airport management.

Space use codes are assigned to spaces in coordination with the Office of Commercial Management to support interior space management. Spaces are assigned a "general" and a "specific" use and styled as defined in the Tables 2.3.8-1 and 2.3.8-2.

General Use	RGB	Hex	Sample
Airlines Common Use	<del>184, 43, 0</del>	B82B00	
Airlines Leased	<del>255, 127, 127</del>	<del>FF7F7F</del>	
Circulation	<del>255, 255, 127</del>	FFFF7F	
Concession	<del>127, 255, 160</del>	7FFFA0	
Cute Joint Use	184, 161, 91	B8A15B	
Federal Inspection Site	77, 134, 154	4D869A	
Federal SP Leased	<del>222, 0, 165</del>	DE00A5	
MAA Occupied	0, 222, 222	OODEDE	
MAA Support	<del>255, 127, 191</del>	<del>FF7FBF</del>	
MAA Vacant	<del>127, 160, 255</del>	7FA0FF	
Misc. Tenants	221, 221, 221	DDDDDD	
Restrooms	<del>127, 255, 255</del>	<del>7FFFF</del>	
Unleasable	<del>255, 191, 0</del>	FFBF00	
Utilities	255, 191, 127	FFBF7F	

Table 2.3.8-1 General Use Space Codes

HONEY	Constitution (Constitution)	AutoCAD Hatab Dattom	Commis
ACAD_ISO04W100  Baggage-Makeup  ACAD_ISO02W100  Concession-Food and Beverage  CROSS  Concession-Retail  STARS  Dead-Space  Dead-Space  Dead-Space  Dead-Space  Dead-Space  Institution  Histly  Lounge/Meeting-Room  ACAD_ISO14W100  STARS  Dead-Space  DOS  STARS  DOS  STARS	<del>Specific Use</del>	AutoCAD Haten Pattern	Sample
ACAD_ISO04W100  Baggage Makeup  ACAD_ISO02W100  Concession-Food-and-Beverage  CROSS  Concession-Retail  STARS  Dead-Space  DOS  Liectrical  CIGZAG  Linguistan  Li	Airline VIP Lounge	HONEY	KS 9 S 1
ACAD_ISO04W100  Baggage Makeup  Concession Food and Beverage  CROSS  Concession Retail  STARS  Dead-Space  DOS  Electrical  Holdroom  DASH  Lounge/Meeting Room  ACAD_ISO14W100  SQUARE	All mile vir Louinge	HONET	(XXX)
ACAD_ISO04W100  Baggage Makeup  Concession Food and Beverage  CROSS  Concession Retail  STARS  Dead-Space  DOS  Electrical  Holdroom  DASH  Lounge/Meeting Room  ACAD_ISO14W100  SQUARE			0828084
ACAD_ISO02W100  Concession Food and Beverage  CROSS  Concession Retail  STARS  Dead-Space  DOS  Clectrical  Clidroom  Closk  INSUL  Counge/Meeting Room  ACAD_ISO14W100  SQUARE	Baggage Claim	ACAD ISO04W100	
ACAD_ISO02W100  Concession Food and Beverage  CROSS  Concession Retail  STARS  Dead Space  DOS  Electrical  Holdroom  DASH  Lounge/Meeting Room  ACAD_ISO14W100  SQUARE	240040	7.6.15_16.66.71	
Concession Food and Beverage  CROSS  Cencession Retail  Cead Space  DOS  Electrical  Ididroom  Glosk  INSUL  Counge/Meeting Room  Mechanical  SQUARE			
Concession Food and Beverage  CROSS  Concession Retail  STARS  Dead Space  DOS  Electrical  Folddroom  Folddro	Baggage Makeup	ACAD ISO02W100	
Concession Food and Beverage  Concession Retail  STARS  Dead Space  DOS  Electrical  Loldroom  ACAD_ISO14W100  SQUARE  STARS  ST			
STARS Dead Space DOS Electrical Aloldroom DASH Clock INSUL Lounge/Meeting Room Mechanical SQUARE SQUARE			
STARS Dead Space DOS Electrical Aloldroom DASH Clock INSUL Lounge/Meeting Room Mechanical SQUARE SQUARE	Concession Food and Beverage	<del>CROSS</del>	+ + +
Dead Space			+ + +
Dead Space		271.00	* * * *
DOS	Concession Retail	STARS	
DOS			P3743743
Electrical  Foldroom  Closk  Lounge/Meeting Room  Mechanical  ACAD_ISO14W100  SQUARE  SQUARE	Dond Cross	DOC	
ZIGZAG Holdroom DASH  Kiosk INSUL  Counge/Meeting Room ACAD_ISO14W100 SQUARE  SQUARE	<del>Dead Space</del>	903	
Electrical  Holdroom  DASH  INSUL  Lounge/Meeting Room  ACAD_ISO14W100  SQUARE			
Holdroom  Kiosk  Lounge/Meeting Room  Mechanical  SQUARE	Flortrical	716746	
Kiosk Lounge/Meeting Room ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100	<del>Lieuthiai</del>	<del>ZIOZAO</del>	
Kiosk Lounge/Meeting Room ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100			
Kiosk Lounge/Meeting Room ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100 ACAD_ISO14W100	Holdroom	DASH	
Counge/Meeting Room  ACAD_ISO14W100  SQUARE  SQUARE	Hotaroom	DISTI	
Counge/Meeting Room  ACAD_ISO14W100  SQUARE  SQUARE			
Lounge/Meeting Room  ACAD_ISO14W100  SQUARE	Kinsk	INSLIL	
Ounge/Meeting Room  ACAD_ISO14W100  SQUARE  SQUARE	NON	114302	F
Wechanical SQUARE			
Wechanical SQUARE	Lounge/Meeting Room	ACAD_ISO14W100	
Vechanical SQUARE	Louise/ Meeting Noon	7.07.0_1001.171100	
<del>Viecnanical</del> SQUARE			
TOO	Mechanical	SOLIARE	
	Medianical	SQUINE	00000

Office Public	ANSI33	7/2
Office Restricted	ANSI36	
Office/Shop (Non-A/C)	ANSI34	11///
<del>Open to Below</del>	SACNCR	1/1/2
Public Circulation	NONE	
Restricted	ANGLE	
Semi-Improved	CORK	
Telecom	TRIANG	A A A A A A A A A A A A A A A A A A A
<del>Ticket Counter</del>	ANSI31	1///
Ticket Counter Queuing	PATIO1	
TSA Screening	NET3	
Unfinished/Unimproved	ANSI38	
Warehouse/Hangar (Non-A/C)	ANSI32	1///

Table 2.3.8-2 Specific Use Space Codes

## **2.5 Space Measurement Procedures**

Interior spaces are delineated by enclosed polygons that are maintained in the MDOT MAA GIS spatial database. These polygons are used for mapping purposes and for critical square footage calculations used for many aspects of design and interior space management. These polygons are defined not only by measurable physical boundaries such as walls and windows, but also by virtual boundaries such as corridor junctions, tenant lease area limits, and the divisions between building sections. The process of delineating such polygons is commonly known as "space measurement". The following procedures shall be used for space measurement at BWI Marshall and Martin State Airports.

#### 2.5.1 General Room Measurement Procedures

#### 2.5.1.1 Room Measurement Procedures

### A. Demising walls:

- 1. Demising walls separate interior spaces between two tenants or separate a tenant and a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room).
- 2. Room polygons shall be delineated to the centerline of the demising wall separating two tenants or a tenant and a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room, etc.).
- 3. Wall coverings, wainscoting and other attachments to the wall shall not be included in determining the centerline of the demising wall. See Section 2.5.4 Figures, Figures 2.5.4-1 and 2.5.4-2.

#### B. Exterior walls:

- 1. Exterior walls separate a tenant or a common area (i.e. access corridor) or non-lease area (i.e. electrical room, mechanical room) and the outside of the building.
- 2. Room polygons shall be delineated to the interior face of the exterior wall. See Section 2.5.4 Figures, Figures 2.5.4-1.
- 3. Where there are glass curtain walls or large expanses of glass that are generally not surrounded by other wall construction, room polygons shall be delineated to the interior face of the glass. See Section 2.5.3 Figures, Figures 2.5.4-2 and 2.5.4-3.
- 4. Where windows are set within exterior walls and are generally surrounded on all sides by the wall construction, room delineations shall be measured as though the wall plane extends across the window. See Section 2.5.3 Figures, Figures 2.5.4-1 and 2.5.4-2.
- C. Demising walls, exterior walls, or glass curtain walls not constructed at 90-degrees to the floor shall be calculated at a point measured 4'-0" above the floor. See Section 2.5.3 Figures, Figure 2.5.4-2.
  - 1. Room polygons must be topologically correct: Polygons must not overlap with adjoining polygons.
  - 2. Polygons must not have gaps with adjoining polygons.
  - 3. Polygons must not self-intersect.

Vertices of polygons must match vertices of adjoining polygons.

#### 2.5.1.2 Space Measurement Procedures

Some interior spaces are contained within other spaces and are delineated by features other than walls. Such space polygons must be topologically correct, as defined in <a href="Section 2.5.1.1.C">Section 2.5.1.1.C</a>. Several other physical and virtual characteristics may be used to delineate a space:

- A. Space polygons may be aligned to the program associated with a space: e.g., public walkways in a concourse, holdrooms, queueing areas, food courts, etc.
- B. Space polygons may follow existing finishes or structural features such as carpet-tile transitions, or divisions between building sections.
- C. Space polygons may be delineated without strict correspondence to physical features, which requires coordination with GETS.

## 2.5.2 Measurement of Lease Areas

Tenant lease areas are delineated by enclosed polygons in a manner identical to that used for delineating interior rooms/spaces. However, an individual lease area may consist of multiple rooms or spaces, or even partial spaces. The process of delineating such lease area polygons is commonly known as "lease measurement".

The following procedures shall be used for measuring lease areas at BWI Marshall and Martin State Airports.

#### 2.5.2.1 General Lease Area Procedures

- A. Columns and other structural elements within the lease area or projecting into the lease area (e.g., columns or pilasters engaged in a wall) shall be included in lease area calculations and measurements.
- B. Areas occupied by raised floors, furniture, appliances and/or equipment for a tenant's use shall be included in lease areas. See Section 2.5.4 Figures, Figures 2.5.4-1 and 2.5.4-2.

#### 2.5.2.2 Tenant and Public/Common Use Spaces

- A. Utility chases serving common use and airport systems that pass through a lease area shall not be included in lease area calculations and measurements.
- B. Utility chases for a tenant's use shall be included in lease area calculations and measurements.
- C. Elevators, stairways, fire stairs, emergency exits, hallways, corridors, locker rooms, restrooms, etc. for common and/or public use shall not be included in lease area calculations and measurements. See Section 2.5.4 Figures 2.5.4-1 and 2.5.4-2.
- D. Elevators, stairways, fire stairs, emergency exits, hallways, corridors, locker rooms, restrooms, etc. for tenant's exclusive use shall be included in lease area calculations and measurements.

#### 2.5.2.3 Accessory Spaces

- A. Mezzanine areas approved for use by the MAA Office of the Fire Marshall (OFM) shall be included in lease area calculations and measurements.
  - 1. Mezzanine areas that are accessible from a tenant lease area but have not been approved for use by the OFM, shall not be permitted to be used by the tenant, may be physically sealed from access by the tenant, and shall not be included in the lease area calculations and measurements.
  - 2. If, after occupancy, a tenant constructs a mezzanine floor (complying with the Airport's permitting procedures), this additional space shall be included in the lease area calculation and shall be added to lease area.
- B. Catwalks, defined as pathways to provide access for the maintenance of mechanical equipment, baggage handling systems or similar building systems, shall not generally be included in lease area calculations and measurements.

#### 2.5.2.4 Calculating Lease Area

- A. Delineation of lease areas follows the procedures for delineating rooms as outlined here: Lease areas are computed by adding the square footage of the spaces that make up the lease. Lease areas are delineated relative to demising walls, exterior walls, and glass curtain walls as described in Section 2.5.1.1 Room Measurement Procedures.
- B. Walls separating two or more contiguous lease areas rented by one tenant shall be included in the lease area. See Section 2.5.4 Figures, Figures 2.5.4-1 and 2.5.4-2.

#### 2.5.2.5 Lease Exhibits

- A. Lease exhibits shall be prepared following the procedures herein for measuring and calculating tenant lease areas.
- B. Lease exhibits shall indicate the total aggregate square footage for the entire lease area. See Section 2.5.4 Figures, Figures 2.5.4-1.
- C. Tenant lease areas consisting of more than one room shall indicate the square footage of each room, space or component (such as a tenant's exclusive-use stair, utility chase, etc.) within the lease area. The sum of all such spaces within the lease area shall equal the total aggregate square footage for the entire lease area.

#### 2.5.3 Measurement of Areas for Occupant Capacity

Procedures used for measuring spaces for occupant capacity differ from those used for measuring lease areas. Refer to Volume 3, Chapter 2, Section 2.8.5 Occupant Capacity Calculations for standards on measuring spaces for occupancy.

## 2.5.4 Figures

The following figures illustrate the appropriate room polygon delineation and lease line placement for various interior space conditions.

Figure 2.5.4-1 illustrates typical interior space conditions in plan view, including interior and exterior walls, windows, and doors.

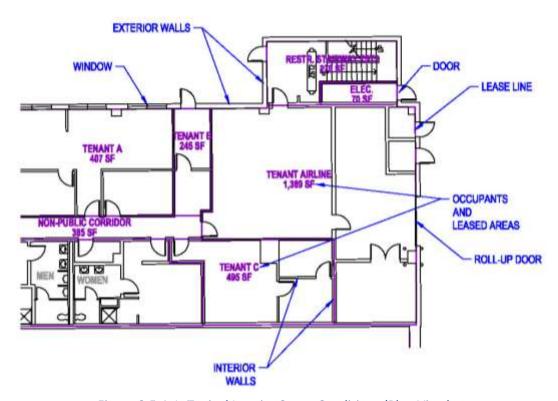


Figure 2.5.4-1: Typical Interior Space Conditions (Plan View)

Figure 2.5.4-2 illustrates typical holdroom conditions in plan view, including interior and exterior walls, exterior curtain walls, and non-wall lease boundaries such as carpet/floor treatment transitions.

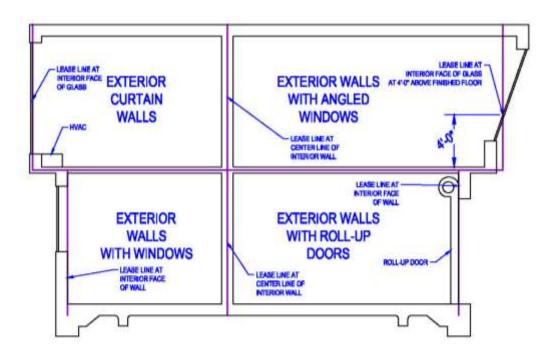


Figure 2.5.4-2: Typical Holdroom Conditions (Plan View)

Figure 2.5.4-3 illustrates typical interior space conditions in cross-section view, including interior and exterior walls, exterior curtain walls, overhead doors, windows, and angled windows.

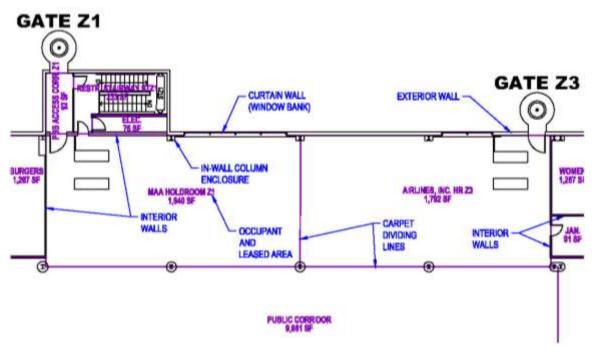


Figure 2.5.4-3: Typical Wall and Window Conditions (Section view)