



# National Business Space Assignment Policy

GSA Public Buildings Service Office of Portfolio  
Management and Customer Engagement

September 2022 Edition



# Table of Contents

- Document Change History..... 5
- Preface ..... 6
- Implementation ..... 6
- History and Evolution of Spatial Data Management..... 7
- Measurement Guidance..... 9
- Developing Accurate Rent Bills..... 10
- SDM Program Overview ..... 11
- Purpose ..... 12
- Drawings and Terminology..... 14
  - SDM Assignment Drawings ..... 14
  - Terminology ..... 15
  - Diagram 1: PBS Space Assignment Diagram ..... 16
- Building Level Categories..... 17
  - Gross Area ..... 17
  - Gross Measured Area..... 20
  - Rentable Area ..... 21
  - Usable Area..... 22
  - Mezzanines and Interstitial Space ..... 23
- Office Areas..... 25
  - 01–Office ..... 25
  - Assignable Space ..... 25
  - Joint Use ..... 28
  - Shared Space ..... 29
  - Office Areas - Space Category and Space Type ..... 29
  - Assignable and Joint Use Space Categories ..... 29
  - Assignable and Joint Use Space Types ..... 30
- Common Area..... 38
  - 02–Building Common..... 39
  - 03–Floor Common ..... 40
  - Building and Floor Common Space Categories ..... 41
  - Building and Floor Common Space Types..... 41
- Vertical Penetrations..... 43
  - 04–Vertical Penetration..... 43
  - Vertical Penetration Space Category..... 45
  - Vertical Penetration Space Type ..... 45

PBS Specific .....	47
05–PBS Specific .....	47
10–Unmarketable .....	47
Construction Area .....	48
Structured Parking .....	49
Unsuitable for Occupancy.....	50
17–Excluded from Gross.....	51
Voids.....	51
14–Zero Square Feet .....	55
PBS Specific Space Categories .....	56
Structures .....	58
Space Assignment Room Name Application and Definitions .....	59
Appendices .....	65
A. Space Assignment Data Matrices .....	66
Space Type Assignment Data Matrix .....	66
Space Category Assignment Data Matrix.....	67
B. Methodology Used to Measure Space .....	71
Dominant Portion.....	71
Space Boundaries.....	74
Unique Cases .....	78
Excessive Column Sizes .....	78
Alcoves and Recesses .....	78
C. Examples of Special Architectural Situations.....	80
Areaway.....	80
Atriums, Enclosed Courtyards, Lobbies, and Voids .....	81
Attic Space and Restricted Head Room .....	83
Balconies and Terraces .....	85
Colonnades .....	87
Base Isolation Systems .....	88
Façade Elements .....	90
Skylights and Light Wells.....	91
Loading Docks.....	92
Parking Ramps.....	93
Rooms with Structural Bracing.....	93
D. Glossary and Acronyms .....	94
E. Calculations.....	98
F. Assignment Maintenance and Building Churn.....	99
G. Assign space by build out clarification.....	100

Addendums .....	101
References.....	102
Contacts .....	103

# Document Change History

May 2009 Edition	Updated information and explanation of Rentable/Usable Ratio and Joint Use space Introduced Nonassignable Space
Feb 2013 Edition	Changed Cover Photo Updated the PBS Space Assignment Diagram, Diagram 1 Reorganized entire document to correspond to Diagram 1 Introduced Space Type - Open to Below (Void) Updated Illustrations
July 2017 Edition	Changed Cover Photo Added Document Change History table Incorporated the 3 Clarifications into the document Added Measurement Guidance section Reintroduced Unsuitable for Occupancy (UFO) concurrence and related information Added 7 new Room Names Incorporated the Land Port of Entry (LPOE) Addendum
September 2022 Edition	Changed Cover Photo. Updated all references to the current ANSI-BOMA 2017 standards. Updated Tables 2 and 3. Added more information and photos on Mezzanines Added new content on Shared Space. Updated the Building Common section Updated the Vertical Penetration section Added information on Covered Parking Added new content for Structures. Updated section on Public Waiting Areas. Added definition of Shared Space and updated definitions of UFO and Useable. Clarified wording in various parts of the document. Added <a href="#">Appendix F - Assignment Maintenance and Building Common</a> Added <a href="#">Appendix G - Assign space by build out clarification</a>

# Preface

The National Business Space Assignment Policy (NBSAP) is the authoritative policy of how the General Services Administration (GSA), Public Buildings Service (PBS) assigns, classifies, and measures space in federally owned buildings. The NBSAP does not apply to leased space, except for buildings acquired as a portfolio lease. The Pricing Desk Guide defines a portfolio lease as a type of rental contract in which the leased space is priced as federally owned space using fair annual rent appraisals.

This document is a revision to the NBSAP dated July 2017. This version with its updated content and changes replaces all previous versions of this policy.

This document must be read in its entirety to fully understand GSA's principles and practices for accurately assigning and measuring space. The document also includes notes, examples, illustrations, definitions, specific examples, references, and a glossary of terms and acronyms to further assist the reader in understanding the concepts. While this document is intended for the Spatial Data Management (SDM) community of practitioners, others may find the information useful. When questions arise, please reach out to the regional SDM team for assistance and further explanation.

Exclusion from this policy as well as gaining clarifications and determinations on unique situations will be reviewed and determined by the Central Office SDM Team. When necessary, the Central Office SDM Team may include regional members and other business lines in these determinations.

# Implementation

This policy is effective immediately on release for all new SDM work. Use the current policy for any internal or contracted work involving any measurement, classification and assignment of space and cite on any contracts or task orders for such work this current policy. Any buildings currently or previously measured, classified, and assigned using the NBSAP July 2017 or older versions are valid. Regions are not required to go back and re-measure each building because of this update, simply cite and use the latest version of the NBSAP next time the building has a re-measurement action.

There are cases when a policy change must be implemented across the entire inventory within a certain timeframe, such as the introduction of Voids in 2013. This revision contains no such changes.

# History and Evolution of Spatial Data Management

While there are regional differences in the history and evolution of SDM, the following narrative is a broad overview of what generally took place:

Historically, hardcopy blueprints of individual tenant spaces were kept in large plan files. Plan files were typically identified by the building name with one drawer per floor. As changes to tenant spaces occurred, additional blueprints were added to the respective drawer. Square footages, necessary for the Occupancy Agreements (OA), were manually measured to scale on the actual blueprint.

The advent of Computer Aided Facilities Management (CAFM) changed this process. CAFM permitted building drawings to be created and stored electronically, eliminating the costly process of manually creating a new paper drawing every time there are changes made to any area in a building.

GSA made the decision then to employ CAFM and highly accurate electronic field measurement tools to measure the entire GSA-owned building inventory. GSA uses the portal-based electronic Spatial Management and Reporting Tool (eSMART) to create, manage, update and store spatial drawings and associated information. The original hardcopy construction documents and blueprints of building changes were used as the starting point in gathering information to create the CAFM drawings. Then each building was drawn using Computer Aided Drafting (CAD) software, floor by floor, in a manner that assured the buildings remained the same size per floor and that all of the elevator shafts, stair towers, and mechanical systems stacked correctly.

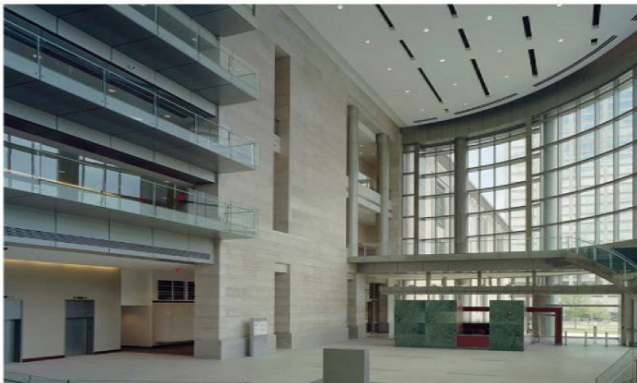
Today, using space boundaries in CAD or area boundaries in BIM all the spaces in a federally owned building are drawn/modeled and classified. Each space or area boundary is associated with metadata, reflecting the assignment of the space. The information remains in CAD or is converted to CAD and then stored in eSMART. The building assignment metadata includes: Agency Name, Agency Bureau Code, Agency Space Assignment number (Occupancy Agreement), Space Type, Space Category, Usable Square Footage, Building ID number, Building Name, Building Address, City, State, Floor, Space Identification Number (SPID), Room Name, ANSI-BOMA Category and Comments.

The metadata is validated and then published to the PBS space inventory system known as, Real Estate Across the United States (REXUS). The space information in REXUS is then entered into the OA Tool for OA Billing. The process from CAFM to REXUS to OA Billing assures accuracy and is key to GSA's accurate billing of Federal occupants.

SDM is an on-going process with three major phases:

1. Initial Measurement and Validation (IMV) – Measuring, classifying, and assigning the space within a building for the first time. Related to this, after a major remodel or modernization, we often perform something very similar, called a re-IMV or full re-measurement.
2. Maintenance – updating the drawings based on things that change frequently, sometimes daily, such as a space becoming vacant or someone moving into a previously vacant space, these changes are pushed to REXUS.
3. SDM Audits and Rewalks – Periodically verifying as-built conditions and assignments. The Audit process is contracted and performed in phases while the Rewalk process is contracted as one task. These re-measurements can vary in scope depending on anticipated changes and are not as extensive as an IMV.

Although the regions' SDM programs began differently, today all are part of a national program and the community is standardizing common processes and deliverables. Today, SDM maintains the spatial data for over 1,800 properties, which represents approximately 240 million gross square feet (GSF) nationwide.





# Measurement Guidance

It is our goal to conduct an IMV of every federally owned building. After an IMV, the building enters the maintenance phase and as noted above our SDM process is on-going. Here is some guidance to assist the regions on when a re-measurement action (re-IMV, SDM Audit or Re-walk) should be performed:

- After a major remodel or extensive renovation or after multiple small projects that in total changes the architecture moderately or significantly: Award or perform a re-IMV within one year of substantial completion of this significant project/remodel (pending availability of funds).

Best Practices: (1) If funding is available, complete re-IMV prior to final OA so it contains the best and most accurate SF numbers and (2) remember that for multiple projects, it is the culmination of projects that results in significant changes that triggers the re-IMV.

- For buildings with multiple small projects that in total have changed the architecture moderately or for buildings with a higher turn-over of tenants than the regional norm: An SDM Audit or Re-walk is recommended at the 10-year interval.
- For buildings with minimal small projects or improvements and where the tenants have very little turnover: An SDM Audit or Re-walk is recommended at the 10-year interval. In addition, SDM actions can be targeted or limited to one floor or one wing of the building.
- For the buildings that are not of significant value, such as kennels, or for support buildings (mechanical/electrical) that service another larger building or site: An SDM Audit or Re-walk is recommended at the 10-year interval.

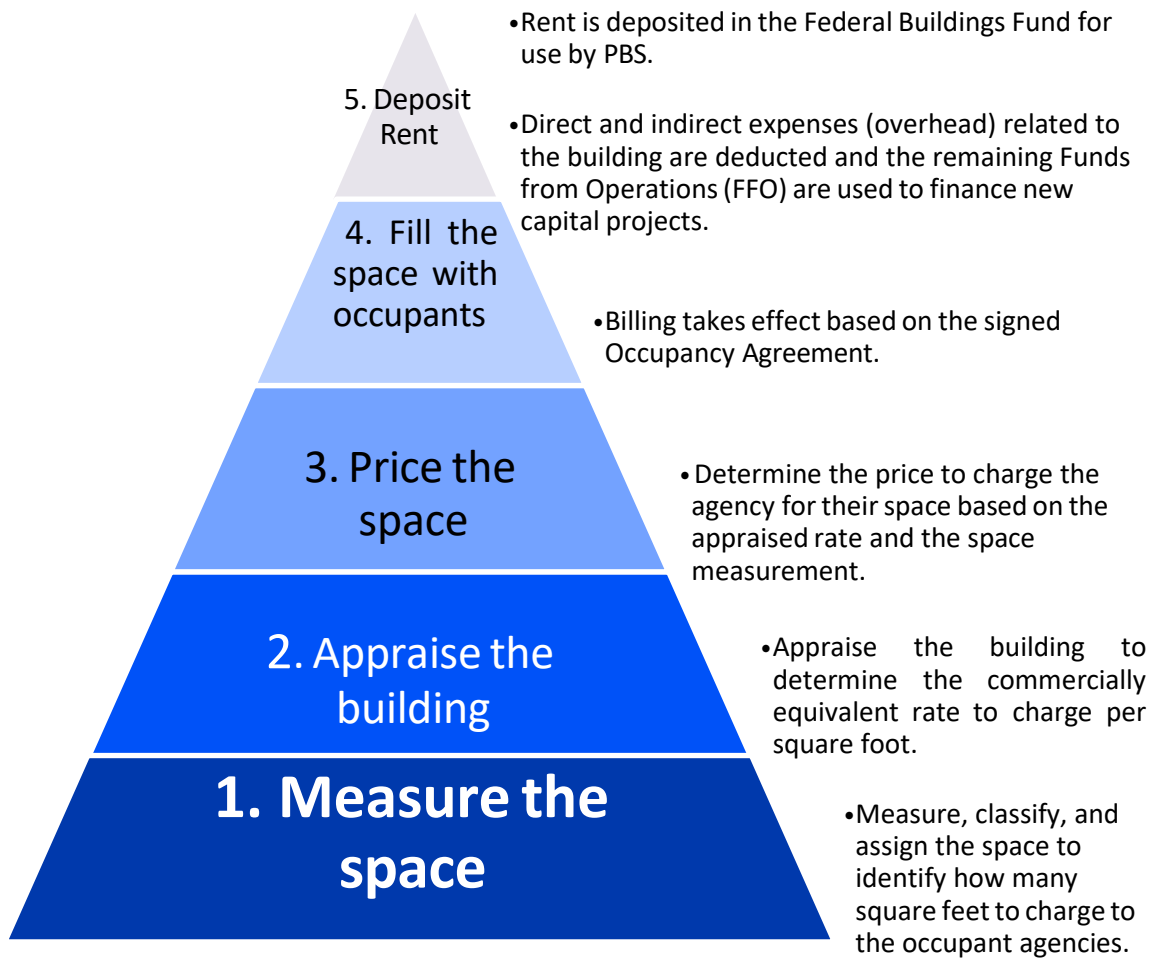
The regions have discretion to use reasonable judgment to either shorten or lengthen a re-measurement interval; however, we highly recommend some type of SDM action within 10 years for most buildings. SDM initial measurement and re-measurement work can be performed via the SDM national contract, an existing regional SDM contract and in some cases with the regional SDM team. Work referenced above is subject to availability of funds. This funding can be provided by the region or Central Office.



# Developing Accurate Rent Bills

While the following steps can vary, the figure below illustrates how SDM is the foundation of a process created by GSA to meet Congress' mandate that GSA charge rent to tenant agencies.

**Figure 1: SDM – The Foundation for Developing Accurate Rent Bills**



# SDM Program Overview

The General Services Administration, Public Buildings Service is mandated by Congress to charge rent to occupant (tenant) agencies. To accomplish this, PBS must first measure, classify and assign the space.

The SDM Program is GSA's national effort to create, update, and maintain its spatial data and associated information. We utilize both CAD drawings and Building Information Modeling (BIM) models as the foundation to capture the architecture of the buildings and both help us accurately reflect the national federally owned inventory.

The PBS CAD Standards and the PBS BIM Guide 02 - Spatial Program Validation are used in conjunction with the NBSAP to assist the A/Es and our measurement contractors in creating drawings and BIM models used by SDM and others.

The SDM Program data also aids in the performance and use of each asset by identifying the most efficient and cost-effective way to provide workspace for federal employees.

The PBS Office of Portfolio Management and Customer Engagement, through the Central Office SDM Team, provides national program support to the regional SDM programs by:

- Issuing the National Business Space Assignment Policy (NBSAP)
- Issuing the SDM Land Port of Entry (LPOE) Space Assignment Policy Addendum
- Maintaining SDM National Business Process Flows
- Coordinating significant SDM projects
- Establishing the national SDM contract
- Providing Clarifications and Determinations

GSA has 11 regions, each of which has an SDM Regional Program Manager. The regional SDM programs manage and control their respective GSA spatial data. Asset Managers, Realty Specialists, Property Managers, tenant customer agencies and others utilize the accurate inventory and assignment information from the SDM program. The drawings produced under the National SDM Program provide a record of the PBS building inventory and can also be used as planning tools and references for building projects.

# Purpose

The purpose of the NBSAP is to ensure consistent, accurate space assignment and measurement practices throughout GSA. This revision replaces all previous versions of the PBS NBSAP.

This policy document is to be used as the authoritative source for assigning space throughout PBS's federally owned and portfolio leased inventory, unless otherwise specifically requested and approved. It provides the practices, methodology, and information necessary for the correct assignment of space.

In addition, this policy provides details, examples and illustrations of how PBS measures space in both federally owned and portfolio leased inventory. Federally owned and portfolio leased buildings are measured using the standards in this policy, while leased buildings are measured using the commercial standards. See Table 1 for details.

**Table 1: NBSAP Application – Federally Owned Versus Leased Buildings**

<b>Building Type</b>	<b>Measurement Standard</b>
GSA Federally Owned & Portfolio Leases	NBSAP
Leased: Fully Government Occupied (entire building leased) or Partially Government Occupied (floor, room or other section leased)	Leases typically use the ANSI/BOMA standards. Many leases still refer to the 1996 version. Leasing is expected to transition to the 2017 version, Method A, in FY22 or FY23.

PBS uses the commercial American National Standards Institute (ANSI) and Building Owners and Managers Association International (BOMA) standards as a foundation for space measurement and classification. Specifically, PBS uses the following ANSI/BOMA standards:

1. **Office Buildings:** ANSI/BOMA Z65.1-2017, Standard Methods of Measurement. This standard is used as the starting point for identifying and measuring office space.
2. **Gross Areas of a Building:** ANSI/BOMA Z65.3-2018, Standard Methods of Measurement. This standard is used to identify and measure Voids.

The ANSI/BOMA commercial standards are the foundation for PBS' NBSAP. Beginning with the 1996 ANSI/BOMA standard, many of the commercial concepts and practices were adopted as well as much of the terminology. The terminology of that time was coded into our IT systems. While our policy evolves as new ANSI/BOMA standards are released, we find more differences in the terminology. It has become cost-prohibitive for GSA to change eSMART and other of its IT systems to match the latest terminology. So we instead retain terms and then use a cross-walk of terms.

We also have a very diverse inventory of properties, not just office buildings. NSBAP serves two purposes (1) it captures our implementation and use of the commercial standards and (2) it establishes policy for situations or building types not captured in the standards or where we differ from the commercial standards, along with our GSA terminology. While going through this document, the reader will find cases where PBS's policies are very similar (or identical) to the ANSI/BOMA principles and practices.

SDM measures space in usable square feet. PBS bills agencies on the basis of rentable square feet. Space classification is based on Space Type (build-out) and not Room Names (usage).

Some notable similarities and differences between the PBS and the ANSI/BOMA standards include the following:

### Similarities

- PBS' measurement and treatment of Voids is identical to the current ANSI/BOMA standards.  
**Note:** We began with buildings that were substantially completed on or after October 1, 2013; instructions were added into the NBSAP 2013 Edition to apply to all federally- owned buildings and continues today.
- Joint Use space is Usable space that houses building amenities (e.g., childcare, fitness, shared conference centers, cafeteria, etc.). For this type of space, GSA distributes the rental costs to all building tenants based upon their prorated share of the building occupancy.

### Differences

- In GSA for rent billing, there is no difference between Building Common and Floor Common. Both types of common areas are considered the same in calculating the Rentable/Usable (R/U) ratio or Load Factor.
- GSA uses term "PBS Specific" category to capture Nonassignable spaces that are measured and also to capture spaces that are not measured; referred to as Zero Square Feet items.
- Other terms and terminology. See [Table 2](#) for more information.

To the extent possible, PBS assigns space at unique facilities the same way it assigns space at other Federal Buildings. We recognize that Land Ports of Entry (LPOEs) have additional unique features; therefore, please refer to the PBS Pricing Desk Guide and the NBSAP LPOE Space Assignment Addendum for more information and guidance.

# Drawings and Terminology

## SDM Assignment Drawings

Assignment drawings or spatial validation BIMs are different than construction drawings/BIMs or as-built drawings/BIMs in that they contain space and area polygons to capture and track spatial data in a manner not done by other types of drawings/BIMs. SDM assignment drawings are the result of measuring, classifying, and assigning space. These drawings/models display space classifications, occupancy of space and the current square footage. The square footage is determined by using the methodology and calculations in this policy document.

GSA's PBS methods and definitions differ slightly from the ANSI/BOMA standards for the following reasons:

1. GSA uses specific terminology that is coded into various software systems (therefore, changing terms and definitions would have a significant financial impact).
2. PBS uses different building measures or considerations than commercial entities.
3. Some ANSI/BOMA terms are not used by PBS or are irrelevant to PBS.

Space in federally owned buildings is assigned using guidance found in this policy. This policy does not apply to space in leased buildings, except for space acquired as a portfolio lease. Please review the Pricing Desk Guide for the most current information on portfolio leases.

To produce the assignment drawings, the SDM measuring process begins by determining the Gross Area of the building and working down to the individual PBS space types. The sections that follow will provide further details on these procedures.

## Terminology

First, we must illustrate the difference in terminology that will be used throughout this policy.

Table 2 below is a comparison of commonly used terms. The table lists the GSA terms and compares them to ANSI/BOMA 2017 Office Standard and ANSI/BOMA 2018 Gross Standard terms and to the ANSI/BOMA 1996 terms. <sup>1</sup> This table is not all-inclusive and not all terms have direct match. For a more complete list of GSA's terms and definitions please refer to the glossary in [Appendix D - Glossary and Acronyms](#).

**Table 2: GSA Terms Compared to ANSI/BOMA Terms**

GSA Term	ANSI/BOMA: 2017 Office & 2018 Gross Standard Terms	1996 ANSI/BOMA Term
Gross Area	Similar to Gross Area 4 – Construction Method	Similar to “Gross Building Area”
Gross Measured Area	Boundary Area	Gross Measured Area
Rentable Area	Rentable Area	Floor Rentable Area or Basic Rentable Area
Usable Area	Floor Usable Area	Usable Area
Common Area	Service Area	Common Area (1)
Assigned Space	Occupant Area	Office Area
Joint Use Space	Amenity Area	Common Area (2)
Vertical Penetration	Major Vertical Penetration	Major Vertical Penetration (1)
Open to Below (Void)	Building Void	Major Vertical Penetration (2)
Tenant or Occupant	Occupant	Tenant
Tenant Floor Cut, e.g. double-heighted courtrooms or private stairs	Occupant Void	Private Vertical Penetration, e.g. double-heighted courtrooms or private stairs
R/U Factor	Load Factor	R/U Ratio

The PBS Space Assignment Diagram below (Diagram 1) shows how GSA categorizes space beginning at the Building Level and working down to the individual PBS Space Types.

The Gross Measured Area includes everything except Construction Area and Open to Below (OTB). The remaining areas of the building are rentable, and they are comprised of Usable, Building Common, and Floor Common areas which follow the ANSI categories with PBS implementation of Space Types.

GSA separates ANSI Category 01–Office Area into two subcategories: Assignable and Joint Use. Assignable spaces include spaces that are assigned, committed, and vacant. Joint Use spaces include spaces that are Building Joint Use, Facility Joint Use, Lease Joint Use, and Community Joint Use.

**Note:** PBS uses the term “Usable Area” to include Assignable and Joint Use space.

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<sup>1</sup> The table refers back to 1996 because PBS started its SDM program that year and based its methods on the ANSI/BOMA 1996 standards.

# Diagram 1: PBS Space Assignment Diagram

This diagram shows how GSA categorizes space from the Building Level to the individual PBS Space Types.

BUILDING LEVEL CATEGORY		SDM ANSI CATEGORY	PBS DESCRIPTION OF SPACE	PBS SPACE CATEGORY	usage note	PBS SPACE TYPE	
Gross Area	Gross Measured Area	Rentable Area	ANSI Usable	01-Office	Assignable Space	Space Types to right can be used with any Space Category to left.	ADP Automatic Data Processing
							AUD Auditorium
							CFT Conference/training
							CLD Child Care
							CRJ Courtrooms/Judiciary
							FDS Food Service
							FIT Fitness Center
							GNS General Storage
							HUT Health Unit
							INS Light Industrial
JCC Judicial Chambers							
JHR Judicial hearing room							
LAB Laboratory							
PTL Private Toilet							
QRR Quarters & Residence							
STC Structurally changed							
TFC Tenant Floor Cut							
TTO Office							
WRH Warehouse							
		02-Building Common	Common (not considered Usable, but measured via Usable SF)	02-Building Common	Space Types to right can be used with any Space Category to left.	CRH Circulation Horizontal	
		03-Floor Common		06-Facility Common		CST Custodial	
				08-Lease Common		MCH Mechanical	
		04-Vertical Penetration				TLT Toilet	
		05-PBS Specific	Nonassignable Space (not considered Usable, but measured via Usable SF)		Space Types to right can be used with Space Category to left.	CRV Circulation Vertical	
				10-Unmarketable		STP Structured Parking	
				17-Excluded From Gross	use only with	UFO Unsuitable For Occupancy	
						CON Construction	
						<b>OTB Open To Below (Void)</b>	
SF not counted		05-PBS Specific	n/a (not measured)	14-Zero Square Feet	Space Types to right can be used with Space Category to left.	ANT Antenna	
						BOK Boat Dock	
						BRG Bridge	
						KIS Kiosk	
						LND Land	
						OTH Other	
						RRC Railroad Crossing	
						WYD Wareyard	



# Building Level Categories

## Gross Area

Federally owned buildings are measured using the guidance contained in this policy. We begin by establishing the Gross Area of the building. The Gross Area is the total constructed area of a building measured to the outside of the exterior enclosing walls. Gross Area may include partially enclosed areas, but it does not include Voids.

### Calculations:

***Gross Area = Rentable Area + Nonassignable Space – Open to Below (Voids)***

***Gross Measured Area = Gross Area – Construction (CON)***

***Rentable Area = Usable Area + Common Area***

The following enclosed areas are included in Gross Area:

- Office floors
- Atriums and lobbies only at the lowest floor level
- Basements and sub-basements
- Permanent Mezzanines
- Mechanical equipment floors
- Penthouses
- Structured parking and vehicular ramps
- Attic space
- Loading docks within the building line
- Tenant floor cut

The following partially enclosed areas are included in Gross Area:

- Parking structures (see [Structured Parking section](#))
- Loading docks within the building line
- Occupant (or multi-occupant) covered balconies
- Covered terraces (roof terraces)
- Exterior door setbacks
- Walkways or corridors (Unenclosed Occupant Circulation)

**Note:** To be included in the Gross Area calculation, partially enclosed areas must have a slab or roof above and a slab or foundation below, and they must be within the building line. To be considered Unenclosed Occupant Circulation, the walkways or corridors must meet the definition described in ANSI/BOMA Z65.1-2017. When a unique situation requires a determination, it will be reviewed and determined by the Central Office SDM Team.

The following areas are excluded from Gross Area and **not measured**:

- Unenclosed areaways
- Unenclosed walkways (sidewalks)
- Unenclosed stairs
- Unenclosed spaces
- Unexcavated spaces & Unexcavated basements
- Crawl spaces
- Top floor of a parking structure if it is uncovered and unenclosed
- Voids (where a floor might otherwise be expected or measured)

**Note:** On the assignment drawings, spaces excluded from Gross Area should be indicated with text to show how the space is used. When a unique situation may require an exception or ruling, it will be reviewed and determined by the Central Office SDM Team.

ANSI-BOMA no longer uses neither Construction Gross Area (CGA) nor Exterior Gross Area (EGA). Our GSA Gross Area remains consistent and is most similar to Gross Area 2 (International Comparison Method), however it differs slightly. Table 3 shows a summary of the differences between the two Gross Areas. An “X” indicates space type is measured and included in the Gross Area. The letter “P” means it is possible and must meet criteria; see further information in this document or the standard. Blank fields in the table below indicates the spaces are not measured and not included in Gross Area.

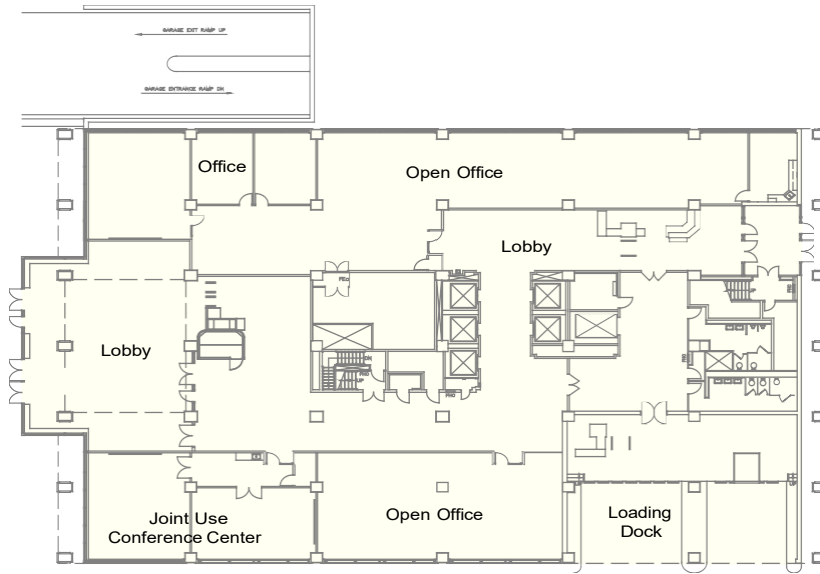
**Table 3: Gross Area Differences between GSA NBSAP (2022) and ANSI-BOMA Z65.3-2018 Standard**

GSA Gross Area	ANSI-BOMA Gross Area 2	Space Types
		<b>Partially Enclosed Areas</b>
X	X	Parking Structures
X	X	Loading docks within building line
X	X	Covered balconies - Occupant (or multi-Occupant)
X	X	Covered terraces (rooftop terraces)
X	P	Exterior Door Setbacks (possible in ANSI-BOMA)
P	P	Covered Walkways (* see note below)
	X	Covered arcades/galleries/shelter areas
		<b>Unenclosed &amp; Not Measured Areas</b>
		Unenclosed areaways
		Unenclosed stairs (structured part of building)
		Unenclosed spaces (structured or roofed)
		Unenclosed walkways (sidewalks, connectors)
		Unexcavated spaces (unexcavated basements)
		Crawl spaces
		Top floor of Parking Structure (if uncovered/unenclosed)
		Building Voids (refer to definition in this document)

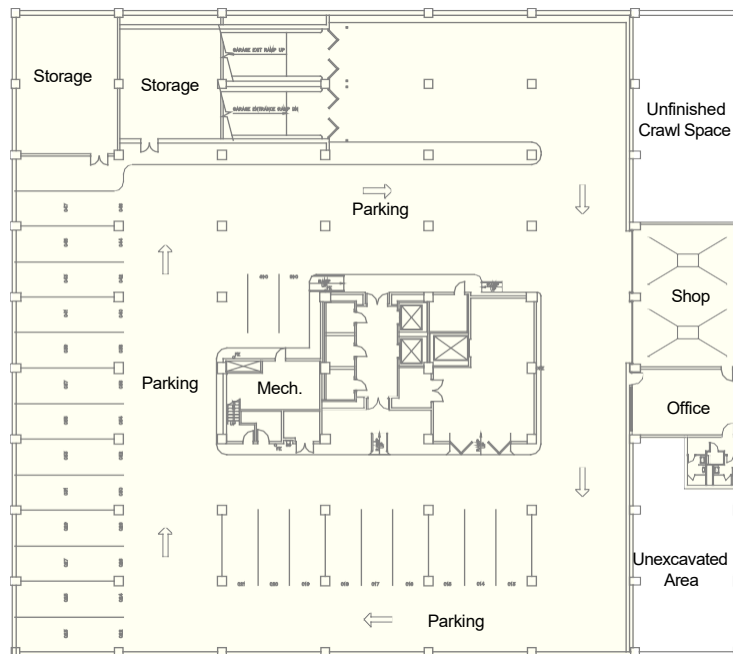
**\*Note:** Covered walkways may be included in both GSA’s Gross Area and BOMA’s Gross Area if they meet the definition of Unenclosed Occupant Circulation found in ANSI-BOMA Z65.1-2017.

**Illustration 1:** The coloring depicts the Gross Area of this floor plan. This floor layout illustrates the required elements that are included in the Gross Area.

**Note:** Only the lowest floor level of a multi-story space with a void, such as an atrium or lobby, is included in the Gross Area.



**Illustration 2:** The floor plan layout depicts a basement with unfinished crawl space and unexcavated space, which are excluded from the Gross Area. The coloring depicts the Gross Area of this floor plan.



## Gross Measured Area

Once the Gross Area of the building has been established, the Gross Measured Area is then calculated. The Gross Measured Area is the Gross Area of the building minus the Construction Area (CON).

### Calculations:

$$\begin{aligned} \text{Gross Area} &= \text{Rentable Area} + \text{Nonassignable Space} - \text{Open to Below (OTB) Voids} \\ \text{Gross Measured Area} &= \text{Gross Area} - \text{Construction Area (CON)} \end{aligned}$$

The following enclosed areas are included in Gross Measured Area:

- All Rentable Area
- Vertical Penetrations: Circulation Vertical (CRV)
- 2 cases of PBS-Specific Space
  1. Structured Parking (STP)
  2. Unsuited for Occupancy (UFO)

**Best Practice:** Refer to [Appendix C – Examples of Special Architectural Situations](#) to help determine what is or is not included in the construction area.

## Rentable Area

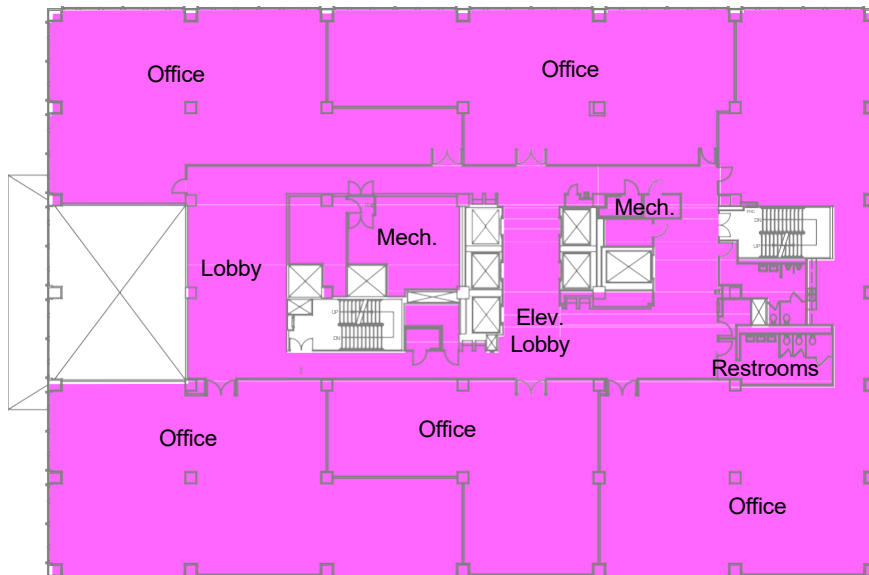
At the building level, Rentable Area is the total amount of Usable Area plus the total amount of Common Area. At a tenant level, Rentable Area is the amount of space an occupant can occupy or use within a building plus their respective share of Common Area represented by a Rentable/Usable (R/U) factor. Rentable Area is used to determine how much rent an occupant will pay. Refer to PBS' Pricing Policy for companion guidance.

### Calculations:

***Rentable Area = Common area + Usable area (Assignable space + Joint Use space)***

***Rentable Area = Usable area x Building R/U Factor***

**Illustration 3:** The colored space depicts the building's Rentable area in this floor plan. Refer to Illustration B-3 located in [Appendix B - Methodology Used to Measure Space](#) for placement polygon along current wall.



## Usable Area

A subset of Rentable area is Usable area. Usable area includes space that is Assignable to a specific Occupant and Joint Use areas that can be used by all occupants.

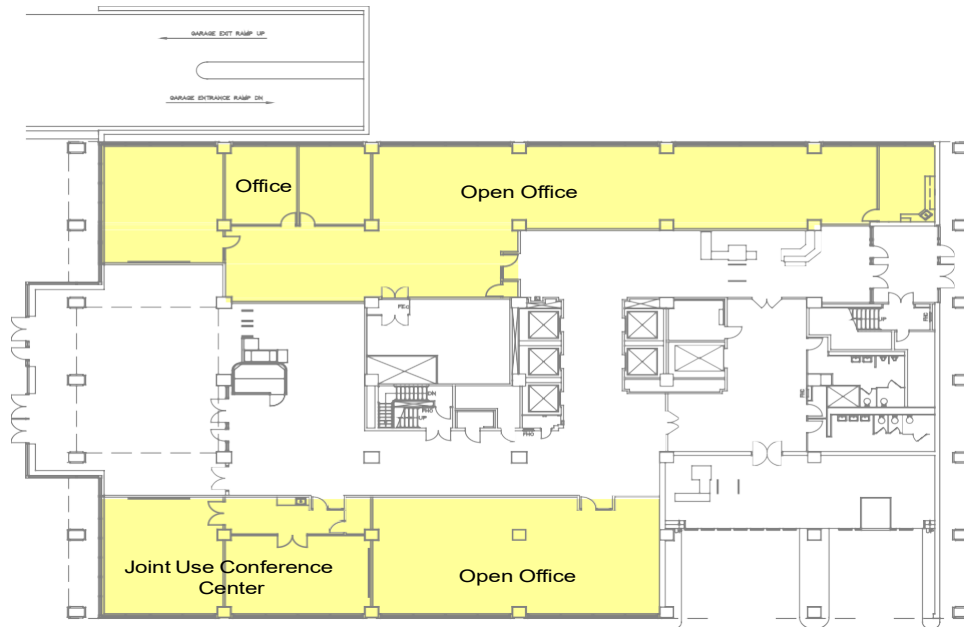
### Note:

1. PBS uses the term Usable area to include Assignable and Joint Use space
2. Useable area includes the wall hierarchy as explained in this policy under Space Boundaries.

### Calculation:

$$\text{Usable Area} = \text{Assignable space} + \text{Joint Use space}$$

**Illustration 4:** Colored areas depict the Usable area in this floor plan (Assignable space plus Joint Use space).



## Mezzanines and Interstitial Space

A mezzanine is an intermediate floor which is partly open to the double-height floor below. Interstitial space is located between regular use floors and used to accommodate building mechanical systems and or restricted tenant circulation.

**Temporary mezzanines** are non-permanent. They are built with the intention of being temporary and are normally supported upon the floor below but are not part of the building's structure. GSA does not count or assign these types of mezzanines.

**Photographs M1 and M2** show 2 different angles of the same structure. Notice the structure is constructed of wood, with wood walls, floor and stairs, which can easily be removed. For more illustrations, refer to the ANSI-BOMA standard.



**Photographs M1 and M2**  
Temporary mezzanines

**Permanent mezzanines** are built with the intention of remaining in place for the life of the building and connected to the building's services such as lighting and power. Access is provided by the building's permanent stairs and/or elevators.

The following components of Permanent Mezzanines and Interstitial levels are included in the Gross Area calculation:

- The load-bearing floor area of the Mezzanine or Interstitial Level
- The elevators that grant access to the load-bearing floor slabs
- The mechanical Vertical Penetrations that provide service to that level
- The enclosing walls of the Mezzanine or Interstitial Level are included in the Gross.
- All other space between the Mezzanine enclosing walls and exterior building shell wall is ignored.
- Classify and assign Mezzanine and or Interstitial Level using the same guidance regarding the Office Area, Common Area or Vertical Penetrations sections as appropriate.
- Both Mezzanines and Interstitial Levels usually have below building-typical ceiling heights. When the restricted headroom is less than 7 feet it is not assignable, more than 7 feet is assignable.

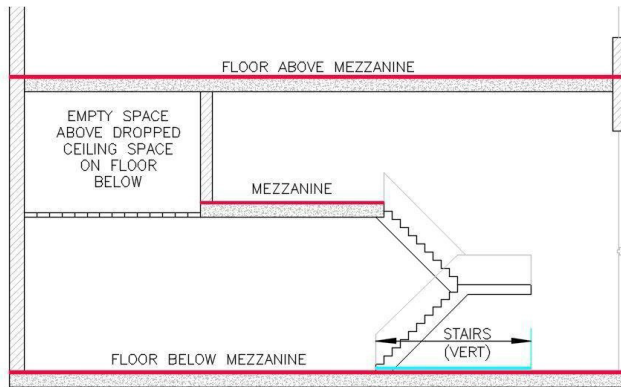
**Illustration 4A:** Colored areas depict Gross area of Mezzanine



- #1 - Stair that goes only to the mezzanine is not counted on mezzanine level. It is counted once on the floor below or above.
- #2 & 4 – These elevators grant access to the mezzanine, so they are included in Gross.
- #3 & 6 - Elevators do not open onto mezzanine thus are not included in Gross.
- #5 – This mechanical shaft does not service mezzanine and is not included in Gross.

- #7 - Mechanical room supports mezzanine so is included in Gross
- #8 - Stair goes to many floors in the building; accordingly, is counted as VERT on the mezzanine level.
- #9 & #10 - Construction is included in Gross when the mezzanine’s enclosing wall is also the building shell wall. See **Illustration 4C**.

**Illustration 4B:** Mezzanine section

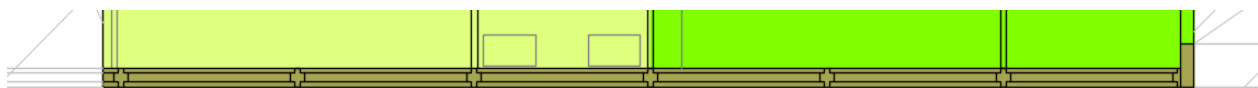


Red lines show the Floor Gross Boundary area.

Stairs that go only to the mezzanine are not counted on the mezzanine level; they are counted once on the floor below or above. In the section shown the stair vertical penetration space is counted on the FLOOR BELOW MEZZANINE because it goes to that level.

If the stairs only went up to the FLOOR ABOVE MEZZANINE the vertical penetration would be counted on that floor, and not on the mezzanine level.

**Illustration 4C:** Detail of mezzanine enclosing wall that is also a building shell wall



Construction is included in the mezzanine gross only when it is part of the mezzanine enclosing wall. See # 9 & 10 in Illustration 4A.



# Office Areas

**SDM ANSI CATEGORY: 01–Office**

**PBS DESCRIPTION of SPACE: Assignable or Joint Use Space**

**PBS SPACE CATEGORY: 01–Assigned, 04–Committed, 11–Vacant, 03–Building Joint Use, 07–Facility Joint Use, 15–Lease Joint Use, and 16–Community Joint Use**

**PBS SPACE TYPE: Multiple, see Diagram 1**

## 01–Office

The SDM ANSI Category 01–Office is equivalent to the square footage defined as Usable area. The SDM Category 01–Office includes space that is Assignable Space to a specific occupant and Joint Use Space areas that can be used by all occupants.

### Calculation:

$$01\text{--Office} = \text{Assignable space} + \text{Joint Use space}$$

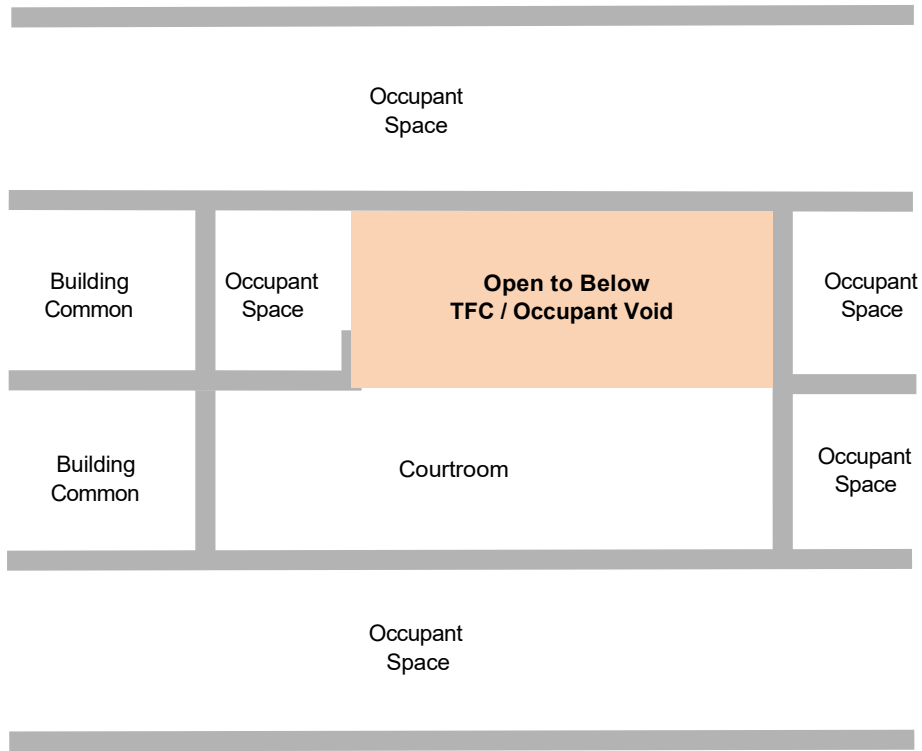
## Assignable Space

Assignable Space is space that can be used or leased for a variety of purposes. Some specific examples of Assignable Space are:

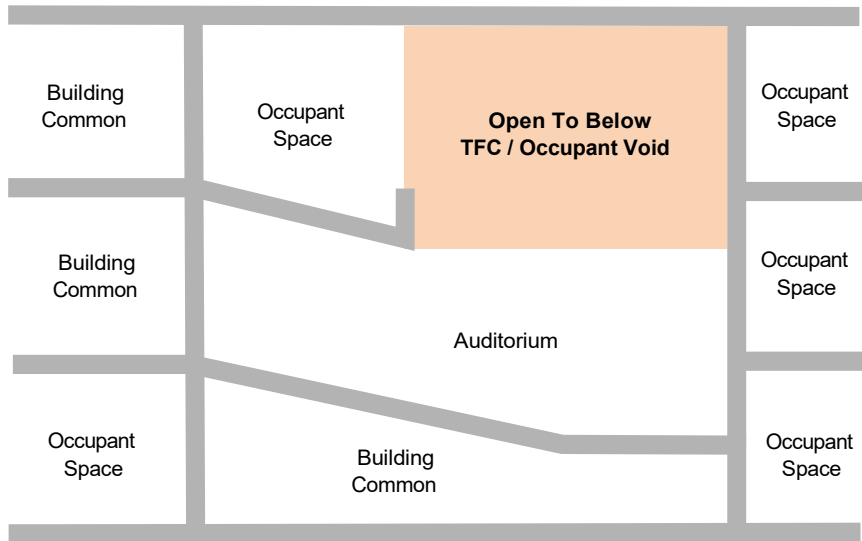
- Space used or leased by a single occupant as a primary office.
- Space used or leased by a single occupant as primary storage space.
- Space used or leased by a single occupant as private telephone closets, uninterrupted power supply rooms, or mechanical rooms.
- Private toilets that are part of a single occupant agency’s program requirements and not part of building shell.
- Private loading docks within the building line.
- A corridor designed or used for an occupant’s use and control.
- Tenant floor cuts designed for or used by a specific occupant that are assigned and measured as though the slab exists. These spaces include courtrooms, auditoriums, stages with fly-lofts, private elevators, private stairs, dumbwaiters, and air shafts for laboratory hood exhausts.
  1. **Note:** Please refer to Illustrations 5 and 6 for examples of Occupant Voids and the Tenant Floor Cut section (Page 24) for more information on Occupant Voids.
- Property Management Office (PMO)
  1. **Note:** Assign the space type according to build out. If the space is Assignable space, use AB Code 4766. If the space is classified as support for the building to function, the space is Floor Common or Building Common.
- Maintenance and contractor space used specifically to support or service the building.
  1. **Notes:** Items to consider in assigning additional maintenance, contractor and operations space to AB Code 4762.
    1. The use of AB Code 4762 is to be used to capture spaces for building support activities, above what is provided in the base building, that currently occupy Marketable/Assignable spaces built to office standards (not INS or GNS) and not part of the original Custodial (CST) and Mechanical (MCH) spaces.
    2. Buildings are designed with a certain amount of CST and MCH spaces. Descriptions of these spaces are found in the “Common Area” section of this document. The spaces that meet these criteria are to remain assigned as such.

3. When custodial, mechanical and/or facilities management personnel expand or work exclusively in areas previously classified as built to office standards space (not INS or GNS), then these spaces will be assigned to an agency code (typically AB 4762). See "Office Areas" section for descriptions and examples of Marketable/Assignable spaces built to office standards (not INS or GNS).
  - Examples for needing additional building support space could include: the need for more office space for building support personnel, need for more storage area for tools, manuals, replacement parts and other items used to service or repair the building (multiple buildings) above what is found in CST or MCH and finally need to place new building equipment into previous office standard areas when MCH space is not available.
4. When custodial, mechanical and/or facilities management personnel expand or work exclusively in areas not built to office standards, such as INS or GNS space, then these spaces will be assigned to one of the Building Common PBS Space Categories.
  - Examples of such spaces could include spaces that are not fully conditioned, have height restrictions and spaces that have been added or modified within Mechanical or Custodial space.
5. Construction contractor staging areas or office areas that will only be used on a temporary basis (i.e., the length of remodel or construction project) will remain assigned what they were before the project (for example if Vacant, then leave as Vacant). If there is a permanent designated staging area used for a variety of projects or personnel and the space meets office standard definition, assign to an agency code (AB Code 4762 if managed and controlled by GSA). While regions have some discretion on use of AB Code 4762 in semi-permanent staging areas, the use of this code was not meant to change frequently.

**Illustration 5:** TFC / Occupant Void Over Courtroom



**Illustration 6:** TFC / Occupant Void Over Auditorium



## Joint Use

Joint Use spaces are amenities available for use by all occupants of a building, community, facility, or lease. An amenity designed for, used by, or converted for use for a single occupant is considered an occupant-only amenity and is an occupant assignment and not Joint Use. There are exceptions to this rule: childcare centers, cafeterias, and vending stands operated under the Randolph-Sheppard Act in non-delegated owned buildings are assigned as Joint Use. If there are multiple occupant agencies (multiple agency bureau codes), the amenities are assigned as Joint Use.

**Note:** GSA's occupancy within a building or facility does not constitute an agency that would impact the assignment of an amenity to a single occupant.

There are four types of Joint Use:

1. **Building Joint Use:** Includes amenities that are housed in the building and are available only to the occupant agencies in the building. In the case of leased buildings with multiple leases, if the amenities are available to all the Federal occupants in the building, the space is assigned as Building Joint Use.
2. **Community Joint Use:** Includes amenities such as childcare centers or cafeterias housed in one building that are available to occupant agencies in neighboring buildings.
3. **Facility Joint Use:** Includes amenities that are shared among two or more buildings that are designated as a facility within the inventory system.
4. **Lease Joint Use:** Includes amenities housed in the lease that are available only to the occupant agencies in the lease. In the case of leased buildings with multiple leases, if the amenities area is available to only the Federal occupants in one lease, the space is typically assigned as Lease Joint Use.

Typical examples of Joint Use space include the following:

- Library
- Cafeteria
- Vending
- Fitness center
- Conference room/center
- Credit union
- Childcare
- Health unit
- Building Mail Room
- Leadership in Energy and Environmental Design (LEED) related spaces, such as Bike rack rooms and certain showers, etc.
- Wellness rooms
- Lactation rooms are assigned Joint use if accessible by all the tenants in the building.

## Shared Space

Shared space is space that is shared among only a small group of tenants. It is not a building amenity open to all tenants.

GSA PBS will accommodate creating, splitting and showing such shared spaces on our drawings and capturing them on our OAs under the following conditions:

1. There is a written agreement among sharing agencies that if one agency moves out, GSA will re-apportion the space among the remaining agencies.
2. The request must be reasonable; GSA reserves the right to deny certain requests which would become too maintenance intensive to GSA (i.e., splitting spaces among too many AB Codes). In addition, the agencies accept that odd, shaped spaces, GSA SDM can use a percentage to allocate space.
3. The overall GSA regional team will make the final decision.

## Office Areas - Space Category and Space Type

All space assignments will have a Space Category and a Space Type.

Space Categories are used within the PBS inventory system to identify a room's status of occupancy. The two-digit Space Category numbers are recognized by the PBS inventory system.

Space Types are used within the PBS inventory system to identify a room's build-out. The three-letter Space Type acronyms are recognized within the PBS inventory system.

**Note:** Data matrices for the application of Space Categories and Space Types can be found in [Appendix A - Space Assignment Data Matrices](#).

## Assignable and Joint Use Space Categories

### 01–Assigned

Identifies Usable space within a building that is assigned to a specific client agency.

### 03–Building Joint Use

Amenities housed in the building that are available to only the occupant agencies in the building.

### 04–Committed

A Usable space or amenity identified for future use by a specific client agency.

### 07–Facility Joint Use

Amenities shared among two or more buildings designated as a facility within the inventory system.

### 11–Vacant

Unassigned Usable space.

### 15–Leased Joint Use

Amenities shared by all building occupants in the lease.

### 16–Community Joint Use

Amenities such as childcare centers or cafeterias housed in one building and shared by occupant agencies in neighboring buildings.

## Assignable and Joint Use Space Types

### ADP—Automatic Data Processing

Space that typically contains ADP equipment with the following features:

- Local area networking (LAN) cabling distribution
- Electrical upgrades
- Above-standard heating, ventilating, and air conditioning

(HVAC) **Note:** Normally includes a raised floor, but not all raised floors are

ADP space. **AUD—Auditorium**

Space that typically contains the following features:

- Stages
- Stadium seating
- Sloping floors
- Ceilings exceeding 10 feet (typically with tenant floor cuts or Voids) (see Illustration 6)
- Audiovisual equipment, increased floor loading, above-standard lighting and HVAC, and is larger than 400 square feet.

### CFT—Conference/Training

Space that contains several of the following features:

- Special audiovisual equipment
- Soundproofing
- Chair rails
- Paneling
- Marker boards
- Blackout curtains, supplemental lighting, and HVAC. Spaces can include conference rooms, training rooms, hearing rooms, and libraries.

**Note:** These spaces do not meet Judicial Hearing Room (JHR) requirements. CFT refers to the build out of the space, not the use of the space.

### CLD—Child Care

Space that is specifically built for childcare use and contains features such as:

- Above-standard flooring
- Indoor play area
- Above-standard toilet rooms
- Laundry facilities

**Note:** Spaces inside a childcare unit are classified by the build out of the space. All childcare space has a room name of Child Care for querying purposes.

## **CRJ–Courtroom/Judiciary**

Space with features such as:

- Ceilings that exceed 10 feet (typically with tenant floor cuts)
- Courtroom entry vestibule with or without sound lock
- Column spacing that exceeds 30 feet on center
- Above-standard lighting and HVAC
- Extensive millwork and cabinetry, or unique ceiling ornamentation/plane changes.

### **Notes:**

- (a) Spaces can include courtrooms for the U.S. District Court, U.S. Tax Court, U.S. Court of Federal Claims, U.S. Magistrate Judges, U.S. Court of Appeals, and U.S. Bankruptcy Court.
- (b) Use of the space may not always be by judicial agencies. Classification is based on build out.

## **FDS–Food Service**

Space dedicated to preparing, dispensing, and/or consuming food. Spaces include:

- Cafeterias
- Seating space in cafeterias
- Snack bars
- Vending machine areas
- Private kitchens with plumbing
- Break rooms with plumbing

**Note:** A food service area (if it is part of a larger room) is to be measured at 5 feet from the face of the counter or vending machine area.

## **FIT–Fitness Center**

Space with features such as increased floor loading, above-standard flooring, above-standard lighting and HVAC, ceiling fans, mirrors, and grab bars.

## GNS–General Storage

Space that is used for storage and has significant diminished use that prohibits the space from otherwise being used as standard office space, typically found in basements or attics and it meets the following characteristics:

- Space must have permanent conditions, obstructions, or protrusions below the ceiling height and into or within all or a portion of the space that do not allow for general office use and it would be cost prohibitive to build out the space to office standards, and
- Space is typically not within standard office space and the space is not completely built out to shell.

Space that is used by an occupant as storage and is built out to office standards is assigned a Space Type of Total Office (TTO). Storage space that is not built out to office standards may be assigned as either Space Type GNS or INS, according to the build out.

**Note:** Refer to PBS’ Pricing Policy for additional information. Consult with your regional SDM RPM on assignments. In cases where there is still ambiguity, contact the Central Office (SDM Team), who will consult with Pricing and make the final GNS classification decision.

**Table GNS-1:** This table compares features to assist in determining whether space is GNS versus INS. For a space to be classified as GNS it must meet both the “Protrusions and Obstructions” and “Ability to Convert to Office Standards” criteria in addition to at least one other feature criteria. For more information on building shell refer to the Pricing Desk Guide.

Feature	GNS	INS
<b>A GNS classification must meet <u>both</u> the “Protrusions &amp; Obstructions” and the “Ability to Convert to Office Standards (TTO)” criteria.</b>		
Protrusions & Obstructions	Can emanate from walls, floor or ceiling, they are permanent, and they render space unable to meet Office standards	None or very minimum
Ability to convert to Office standards (TTO)	Cost prohibitive	Not cost prohibitive
<b>And at least <u>one</u> of the following features.</b>		
Location	Space is typically not within standard office space	Space could be anywhere
Lighting & HVAC	Does not meet shell	Less than full Office features
Floor	Unfinished floors	Concrete, typically unfinished
Ceilings	Open or unfinished. Could not meet 7-ft minimum height requirement if they were to be finished	Open or unfinished. If finished, needs to meet 7-ft minimum height requirement



**Note:** There are some rare instances where a space can have no Protrusions and Obstructions and still be considered GNS space. These spaces will have permanent diminished conditions that are cost prohibitive to correct or convert. In these situations, they must meet the location criteria and have 2 of the additional features on table.

**Photograph GNS-1:** This photograph shows a typical example of GNS space; located in the basement, contains obstructions and protrusions and it would be cost-prohibitive to convert to office standards.



## HUT–Health Unit

Space built to accommodate medical equipment with plumbing. Spaces can include:

- Exam rooms
- Waiting rooms
- Wellness rooms
- Laundry facilities

## INS–Light Industrial

Space that is intended for or can be converted to office use, but it is not built to office standards. Light Industrial space may also be built out to provide a specific use for an occupant, and has the following characteristics:

- Less than full features for HVAC and lighting
- Unfinished concrete walls and/or floors
- Open or unfinished ceilings
- Not cost prohibitive to build out the space to office standards

Types of Light Industrial spaces that are within the building line include private loading docks, private elevator mechanical rooms (built to the specific needs of an occupant), and storage rooms.

The INS Space Type is not used for spaces that are built out as general office space.

**Note:** Light Industrial (INS) differs from Warehouse space (WRH).

- Warehouse space has large column spacing (30 feet on center or greater), typically includes large open areas such as bays, and is not easily converted to office space.
- Light Industrial space typically refers to rooms within office space (TTO).

**Photograph INS-1:** This photograph shows a typical example of INS space; note space has lighting, HVAC, walls, etc. It would not be cost prohibitive to build out the space to office standards. Space contains no significant protrusions or obstructions.



## **JCC–Judicial Chambers**

Space with features exceeding typical office space standards such as extensive wood millwork, wood base, chair rail, fabric wall covering, vinyl wall covering, sound board, speakers, closed-caption television (CCTV) monitors and/or cameras, panic buttons, recessed can lighting, ceiling fans, and cabinetry. Spaces can include chambers for Court of Appeals, District, Magistrate, Bankruptcy, Claims, and Tax judges. Space can include above-standard lighting, security systems, and/or HVAC. Classify spaces to build out. Included in the chamber's spaces are:

- Judge's private office
- Robing room
- Conference room
- Corridors
- Reception
- Closets
- Private toilet
- Judges' libraries
- Law clerk offices (when part of the judges' chambers)
- Service unit (break area)
- Secretarial area

## **JHR–Judicial Hearing Room**

Small court facilities that can include court facilities for Senior District Judges, Bankruptcy Judges, and Magistrate Court Judges. JHR is used for small courtrooms. Spaces typically have these features:

- Column spacing less than 30 feet on center
- Above-standard lighting such as recessed can lighting
- Above-standard HVAC such as separate air
- Built-in items, such as judge's bench, chair rail, sound system, podium, spectator railing
- Wall-to-deck crown molding, articulation in the ceiling
- Above-standard doors, sound lock entry
- Millwork and cabinetry, although smaller in scale than found in CRJ

## **LAB–Laboratory**

Space that has built-in equipment, plumbing, and/or utilities for experimentation, the qualitative and/or quantitative analysis of matter, the processing of materials, and photographic development, including wet, clean, and photographic laboratories.

A laboratory may have the following characteristics:

- Corrosion-resistant/stainless steel countertops
- Gas supply plumbing in the wall or the floor
- Special venting equipment
- Quarry tile flooring
- Floor drains
- Light lock doors for photo labs
- Above-standard electrical for testing equipment
- Special lighting
- Separate climate control systems

## **PTL–Private Toilet**

Restrooms or shower/locker rooms built for the private use of an occupant as part of their program of requirements.

**Note:** A private toilet is not provided as part of building shell. It is provided as a result of occupant requirements.

## **QRR–Quarters/Residence**

Space built for residential quarters in Government-controlled spaces.

**Note:** Spaces can include military barracks or remote land ports of

entry. **STC–Structurally Changed**

Space with features such as increased floor loading, above-standard wall construction, concrete or wire-mesh walls, and ballistic glass. Spaces can include:

- Vaults
- Holding cells
- Evidence rooms
- Secure sally ports within the exterior building line
- Target ranges

## **TFC–Tenant Floor Cut**

An opening in a floor above an occupant’s finished floor: (a) designed for or (b) exclusively used by or (c) controlled by a specific occupant, such as a multi-level courtroom. The floor cut eliminates otherwise Usable space. BOMA defines a tenant floor cut as an Occupant Void. This space may be part of the original building design or renovated by removing a portion of the slab or not installing a slab where could be expected. Spaces can include:

- Private elevators
- Dumbwaiters
- Private stairs
- Private air shafts
- Multi-level courtrooms
- Multi-level auditoriums

### **Notes:**

- (a) If the upper portion of an occupant’s multi-level space, such as a courtroom, penetrates mechanical space, a roof or unmarketable attic space, it must be tagged as a 05–PBS Specific, designated 17–Excluded from Gross, and given the Space Type OTB (Open to Below). See Illustration 16 (below) for example.
- (b) If there is occupant space: (a) adjacent to or (b) on the same floor as the upper level of the multi-level space on a floor, the space must remain TFC, despite the presence of mechanical space. Consider if TTO space could have been built where the TFC exists, would it have access to a corridor, etc.

## **TTO–Total Office**

An environment for office operation with features such as HVAC and lighting, finished floors, ceilings, and walls. Types of total office spaces include:

- An office or open office space housing personnel and furniture
- Closets within the general office space
- Private corridors
- Meeting and training rooms that do not meet criteria for conference/training (CFT)
- Storage in office space
- Reception space
- Health rooms without equipment
- File space without increased floor load
- Pedestrian processing space at land ports of entry
- Property Management Office (PMO)
- Maintenance and contractor space used specifically to support or service the building.

**Note:** Assign the space type according to build out. Use Room Name to capture how space is being used.

## **WRH–Warehouse**

Space built for materials storage and handling operations with features such as concrete floors, unfinished ceilings, industrial lighting, overhead doors, minimal HVAC, and large column spacing (30 feet on center or greater). This space typically includes large open areas such as bays, higher than normal ceiling heights, special floor load capacities, and it is not easily converted to office space.

**Note:** Warehouse space is generally not located in office buildings; however, both space types (WRH and TTO) may exist in the same building. WRH refers to a space type and not building class; refer to the PBS Pricing Policy for additional information on Predominant Use.

# Common Area

**SDM ANSI CATEGORY: 02–Building Common and 03–Floor Common**

**PBS DESCRIPTION of SPACE: Common**

**PBS SPACE CATEGORY: 02–Building Common, 06–Facility Common, and 08–Lease Common**

Common area is defined as the area of the building that provides services, support, and horizontal circulation to building occupants. Assignable space is not included in the calculation of Common area. Building services, support, or circulation for a specific occupant are assigned to that occupant.

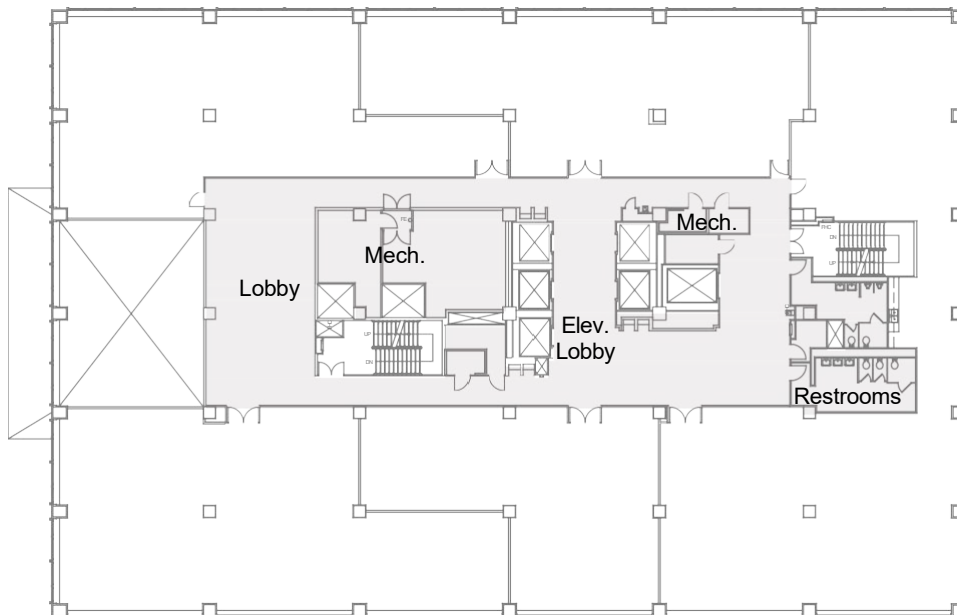
There are two types of Common areas: Floor Common and Building Common. Floor Common areas are spaces that pertain to a specific floor of a building, such as corridors. Building Common areas pertain to all floors of a building, such as elevator lobbies. PBS measures Building Common and Floor Common areas using the same guidelines as ANSI/BOMA. However, unlike ANSI/BOMA, PBS combines the two areas to determine the building's R/U Factor. The building's R/U Factor is used in calculating an occupant's prorated share of Common area.

The sum of all Common area (Floor + Building) within a building is included in the Rentable Area calculation. The R/U Factor is Rentable Area divided by Usable Area, which determines the Rentable to Usable ratio.

## Calculation:

$$R/U \text{ Factor} = \text{Rentable Area} \div \text{Usable Area}$$

**Illustration 7:** Colored space depicts Common area of a floor plan.



## 02–Building Common

Building Common areas provide services or circulation to all building occupants. Parking, vertical penetrations, and portions of loading docks that are outside the building line are not included in the definition of Building Common area. Examples of Building Common areas are:

- Atrium spaces at the finished floor level.
- Main and auxiliary lobbies that are used by all occupants in the building and that lead to the main entry-level elevator lobby.
- Mechanical service areas that support multiple floors.
- Mechanical service areas that support the entire building.
- Occupant support or security areas such as concierge, Kiosks, security desks, checkpoints, and fire suppression control rooms that support the entire building.
- Support areas such as custodial storage; custodial shop areas; janitorial closets; and electrical, telephone, mechanical, and equipment rooms that support multiple floors in the building; and storage for recyclables or dumpsters that serve the building.
- Additional examples include mechanical shops that service the building or multiple buildings, locker rooms and break rooms located within CST and MCH areas that are designated exclusively for use by the custodial and mechanical staffs.
- Fully enclosed courtyards at the finished floor level.
- Toilets and their associated vestibule and plumbing chases provided as part of the building shell.
- Spaces used for the sole purpose of supporting or servicing building operations.
- Guard and building monitoring stations that support the entire building, can include (U.S. Marshals Service (USMS), Federal Protective Service (FPS) and Contract Security.
  1. **Note:** Please contact your regional SDM Program Manager for issues related to assignment of guard and building monitoring stations or consult the PBS Pricing Desk Guide and the 2018 DHS/GSA Memorandum of Agreement (MOA) or latest version. This is typically assigned as Space Type CRH.
  2. FPS and GSA's Office of Mission Assurance (OMA) security equipment rooms – FPS handles exterior security and OMA also has equipment rooms usually on first floor that service the entire building; assign these spaces as Building Common. If there is a separate, monitoring or equipment room that provides redundant or extra security for an agency, these rooms are assigned to that agency.
  3. Security closets if used and controlled by an agency, they are assigned to that agency.

**Note:** In Courthouses this is typically a program area in the USMS requirements. We assign to USMS as it houses security equipment for Courts and USMS. Examples are security risers, typically one per floor, sometimes more.

- Telecom/IT closets spaces fall into 2 categories:
  1. spaces are agency assigned (whether located in the building core or another part of the building) if the space is controlled by the agency and
  2. spaces are Building Common (whether located in the building core or another part of the building) if multiple agencies have equipment in the space and all agencies who have equipment in the space have access to the space.
- Property Management Office (PMO)
  1. **Note:** Assign the space type according to build out. If the space is Assignable space, use AB Code 4766. If the space is classified as support for the building to function, the space is Floor Common or Building Common.

- Maintenance and Contractor space used specifically to support or service the building.
  1. **Note:** Assign the space type according to build out. If the office supports a single building and space cannot be used for or easily converted to Usable Space, the office should be assigned as Floor Common or Building Common. If the space supports a single building and is built to office standard, assign space to GSA using AB Code 4762. If space supports multiple buildings, the office is assigned to GSA (4762). For delegated buildings, space is assigned to the occupant agency with which GSA has the delegation agreement.
- Federal Executive Board (FEB) space – refer to OAS Order 4240.2 (or most current) for latest assignment information.

## 03–Floor Common

Floor Common areas provide services or circulation to occupants on that floor. ANSI Category 03–Floor Common includes PBS Building Common and Lease Common. Typical examples of Floor Common are:

- Public corridors
- Elevator lobbies
- Support areas such as custodial storage; janitorial closets; and electrical, telephone, mechanical and equipment rooms; and storage for recyclables or dumpsters that serve a floor
- Toilets and their associated vestibule and plumbing chases provided as part of the building shell

PBS measures Building Common and Floor Common using the same guidelines as ANSI/BOMA. However, unlike ANSI/BOMA, PBS combines the two to determine the building’s R/U Factor. The R/U Factor is used in calculating an occupant’s prorated share of Common area.

## Common Areas - Space Category and Space Type

All space assignments will have a Space Category and a Space Type.

Space Categories are used within the PBS inventory system to identify a room’s status of occupancy. The two-digit Space Category numbers are the entries recognized by the PBS Inventory system.

Space Types are used within the PBS inventory system to identify a room’s build-out. The three-letter Space Type acronyms are the entries recognized within the PBS inventory system.

**Note:** Data matrices for the application of Space Categories and Space Types can be found in [Appendix A - Space Assignment Data Matrices](#).



## Building and Floor Common Space Categories

### 02–Building Common

Square footage within a building for service and circulation to support that building and is prorated among all occupants in a building. This includes Circulation Horizontal, Custodial, Mechanical, and Toilets.

### 06–Facility Common

Square footage within a building, in a facility for service and circulation space to support that facility and is prorated among all occupants in the facility. This includes Circulation Horizontal, Custodial, Mechanical, and Toilets.

### 08–Lease Common

Square footage within a lease in a building for service and circulation space to support that lease and is prorated among all occupants in the lease. This includes Circulation Horizontal, Custodial, Mechanical, and Toilets.

## Building and Floor Common Space Types

### CRH–Circulation Horizontal

This is common space attributable to a building or particular floor. Types of circulation horizontal spaces include:

- Elevator lobbies
- Public lobbies
- Entrance lobbies
- Public corridors
- Public loading dock portions that are within the building line
- Guard and building monitoring stations

Corridor's housing personnel and furniture, private corridors, and private loading docks designed for or used by one occupant are not classified as Space Type CRH. These spaces are assigned to that particular occupant as Usable space.

#### **Note:**

Factors such as “designed for” and/or “control of” a corridor determine whether it is assigned to the tenant, or it is building common. Each situation is assessed individually. Contact your regional SDM team for more information.

### CST–Custodial

Space needed for general operation and maintenance of a specific building. Types of custodial spaces include:

- Custodial closets that house custodial sinks and/or floor drains
- Custodial storage of doors, ceiling tiles, light bulbs, paint, and supplies
- Storage for recyclables and/or dumpsters that serve the building

## **MCH–Mechanical**

Space providing service to the building or housing mechanical equipment, which can include but is not limited to:

- Boiler rooms
- Mechanical and electrical rooms
- Enclosed cooling towers
- Fuel rooms
- Elevator machine rooms
- Wire closets
- Telephone frame rooms
- Transformer vaults
- Incinerator rooms
- Motor closets
- Building automation/monitoring rooms
- Fire control rooms or fire command center
- Horizontal air plenums

A mechanical room platform (typically metal-mesh floor) that is constructed for the sole purpose of gaining access to mechanical equipment should not be counted as part of the total mechanical space (there may be numerous mechanical room platforms within one mechanical room). These areas are typically accessed by ladder or stairs.

### **Note:**

1. Mechanical rooms built to the specific needs of an occupant are assigned to the occupant as INS space, not MCH
2. See CRV section for assignment of upper portions of MCH space.

## **TLT–Toilets**

Toilets that are provided as part of building shell on a specific floor or lobby area.

**Note:** Toilets provided as part of the building shell behind an occupant-restricted corridor will still be assigned as TLT unless they are part of the occupant requirements under occupant improvements.

**Best Practice:** One way to determine if they should remain assigned TLT is if the space is unchanged. If modifications are done due to tenant requirements, such as converting toilet stalls into showers, etc., then they become assigned to the tenant as Private Toilet (PTL).

# Vertical Penetrations

**SDM ANSI CATEGORY: 04–Vertical Penetration**  
**PBS USABLE AREA CATEGORY: Nonassignable Space**  
**PBS SPACE CATEGORY: 10–Unmarketable**  
**PBS SPACE TYPE: Circulation Vertical (CRV)**

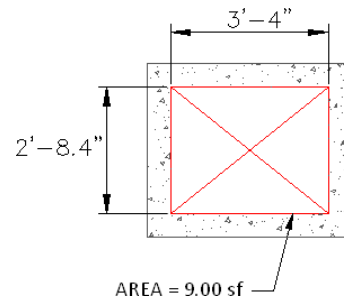
## 04–Vertical Penetration

Vertical penetrations are openings between floors, such as passageways for building services, supporting stairs, elevators, flues, pipes, and ducts. To be considered a vertical penetration, the opening must be at least 9 square feet. For vertical penetrations less than 9 square feet, the space should be included with the adjacent space.

**Note:** This size difference is another area where we differ from ANSI/BOMA.

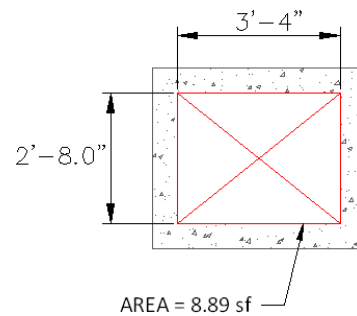
**Illustration 04-1:** (diagram to the right) Shows a floor opening with an area of 9 square feet; it is large enough to be assigned as a vertical penetration.

Any floor opening with an area equal to or greater than 9 square feet is large enough to be assigned as a vertical penetration.

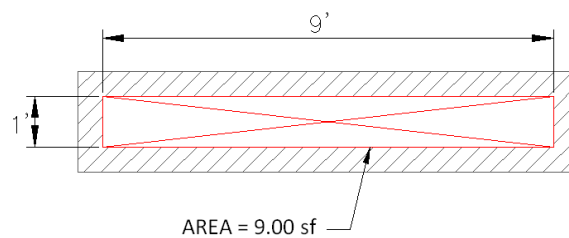


**Illustration 04-2:** (diagram to the right) Shows a floor opening with an area of 8.89 square feet; it is not large enough to be assigned as a vertical penetration.

Any floor opening with an area of less than 9 square feet is not large enough to be assigned as a vertical penetration.



**Illustration 04-3:** (diagram to the right) When determining whether a floor opening is large enough to be assigned as a vertical penetration, the configuration of the floor opening is not important; all that matters is its area.



The following are typical examples of vertical penetrations and spaces assigned as Circulation Vertical (CRV):

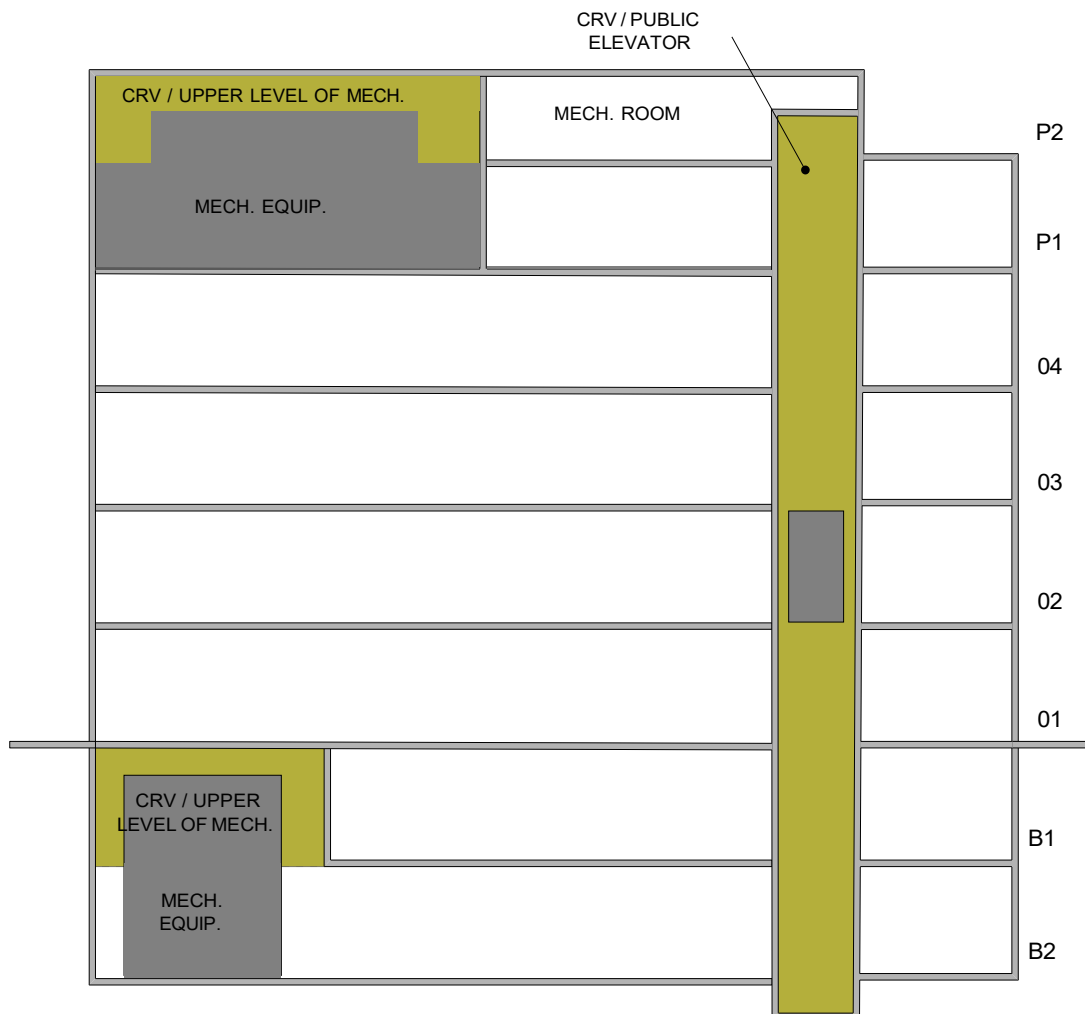
- Public stairs and stair landings
- Public elevator shafts and pits
- Chimneys
- Return/supply air chases
- Vertical ducts
- Pipe shafts

The following are examples of areas that are typically **not** defined as vertical penetrations because they are typically penetrations of less than 9 square feet:

- Sleeved slabs
- Plumbing lines
- Electrical cables
- Telephone distribution lines

**Illustration 8: Mechanical Room and Circulation Vertical (CRV)**

**Note:** The mechanical equipment in the figure below determines the height of this room; therefore, both areas are CRVs. This is different for GSA as compared to ANSI/BOMA Z65.1-2017.



## Space Category and Space Type

All space assignments will have a Space Category and a Space Type.

Space Categories are used within the PBS inventory system to identify a room's status of occupancy. The two-digit Space Category numbers are the entries recognized by the PBS inventory system.

Space Types are used within the PBS inventory system to identify a room's build-out. The three-letter Space Type acronyms are the entries recognized within the PBS inventory system.

**Notes:** Data matrices for the application of Space Categories and Space Types can be found in [Appendix A - Space Assignment Data Matrices](#). Refer to [Appendix B - Methodology Used to Measure Space for placement of space boundaries](#).

## Vertical Penetration Space Category

### 10–Unmarketable

This category identifies all space within the building that is not assignable. Circulation Vertical falls under the space category of Unmarketable.

## Vertical Penetration Space Type

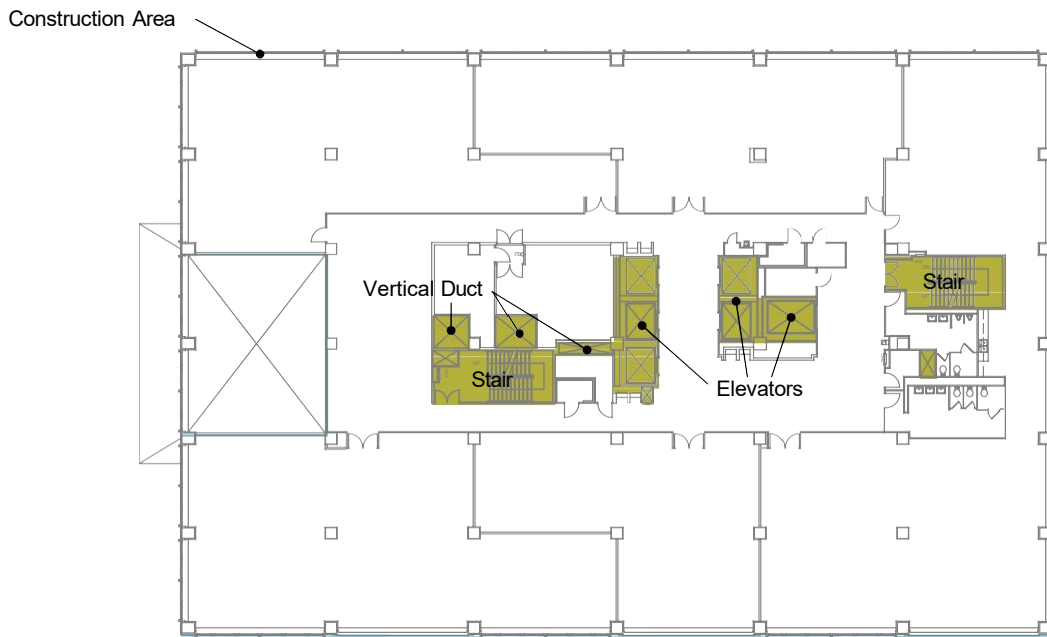
### CRV–Circulation Vertical

Slab opening that is 9 square feet or greater measured to the inside wall. Circulation Vertical spaces include the following:

- Public stairs and stair landings
- Public elevator shafts and pits
- Chimneys
- Return/supply air chases
- Vertical ducts
- Pipe shafts

**Note:** Vertical Penetrations not for the private use of an occupant must have the Space Category of 10–Unmarketable, with an AB Code of VERT.

**Illustration 9:** The colored areas depict Nonassignable Vertical Circulation space and Construction areas. Refer to Illustration 11 for the construction (current wall) details.



**Note:** Like Building Common Restrooms, common Vertical Penetrations designed to serve the entire building can become trapped in tenant space. In these rare cases, these elevators and stairs will still be assigned as CRV unless they are part of the occupant requirements under occupant improvements.

**Best Practice:** See more information under Unique Cases in [Appendix B – Methodology Used to Measure Space](#)

# PBS Specific

**SDM ANSI CATEGORY: 05–PBS Specific**

**PBS USABLE AREA CATEGORY: Nonassignable Space or N/A (not measured)**

**PBS SPACE CATEGORY: 10–Unmarketable, 17–Excluded from Gross, or 14–Zero Square Feet**

**PBS SPACE TYPE: Multiple—Refer to PBS Space Diagram (Diagram 1)**

## 05–PBS Specific

PBS Specific is an SDM category that PBS has created and defined to cover the areas defined as Nonassignable and N/A (not measured).

- 10 – Unmarketable (Nonassignable)
- 17 – Excluded from Gross (Nonassignable)
- 14 – Zero Square Feet (N/A – not measured)

**Note:** ANSI/BOMA does not use the SDM Category “PBS Specific”

Nonassignable Space is measured area that is not considered usable, categorized as Unmarketable within a building, and is included in the Gross Area. This includes the following PBS Space Types: Circulation Vertical (CRV); Structured Parking (STP); Unsuitable for Occupancy (UFO); and Construction (CON).

Open to Below is measured but not included in the Gross Area.

### Calculation:

***Nonassignable Space = Gross Area – Rentable Area + Open to Below (Void)***

N/A (not measured) Space refers to objects or items that are not measured.

### Notes:

1. Private elevators and stairs are assigned and charged to occupants. Public elevators and stairs are not assigned or charged to occupants.
2. Parking is assigned and charged based on the number of parking spaces an occupant uses and not by square footage. Refer to the PBS Pricing Desk Guide and GSA’s Parking Policy for more information.

## 10–Unmarketable

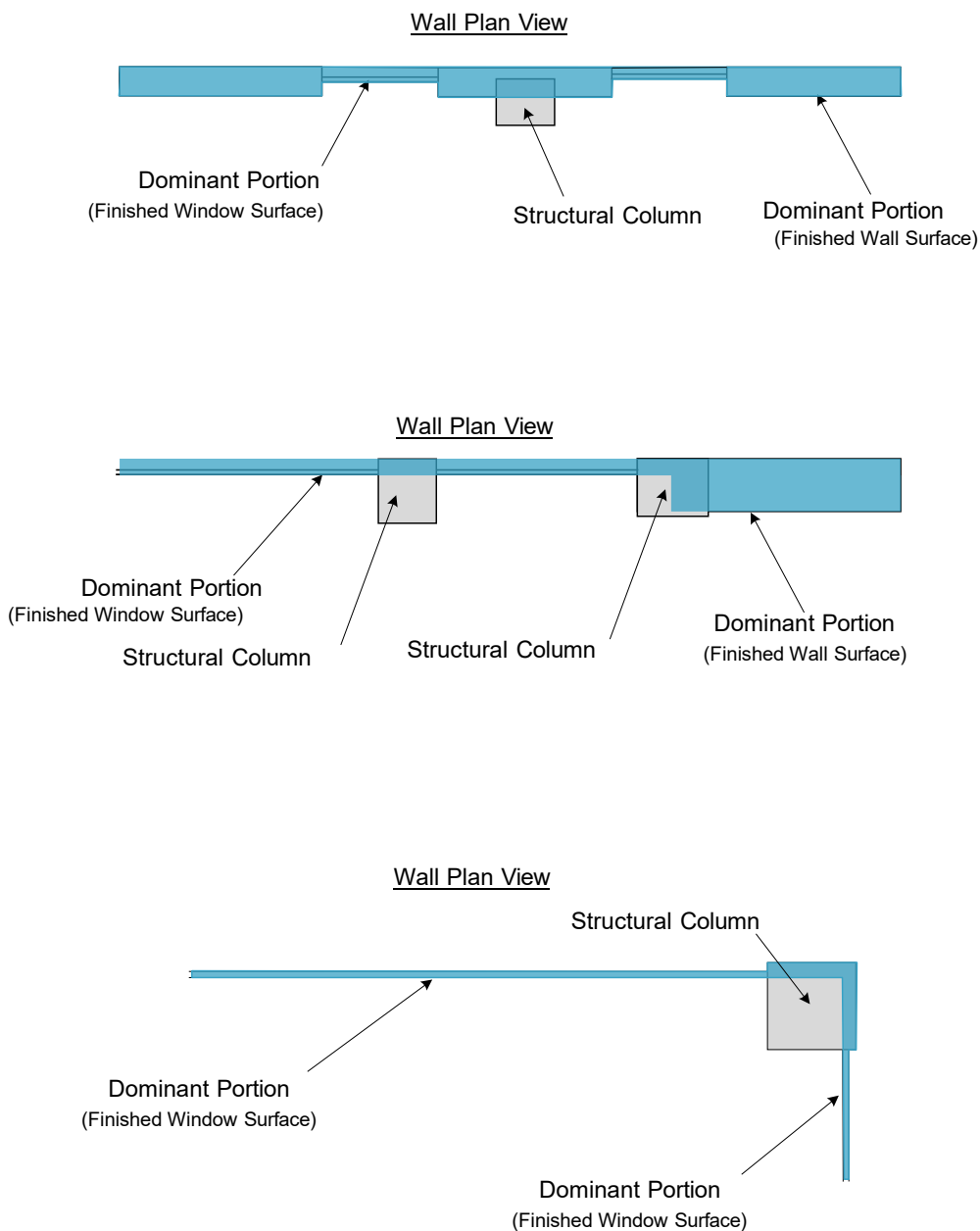
Unmarketable space is a category of space that cannot be marketed to building occupants because it falls into one of three areas:

- Construction
- Structured Parking
- Unsuitable for Occupancy

## Construction Area

Construction area (CON) is the thickness of the outside wall, measured from the interior dominant vertical portion to the exterior dominant vertical portion of the building.

**Illustration 10:** Three examples with shaded spaces in blue showing Construction area.





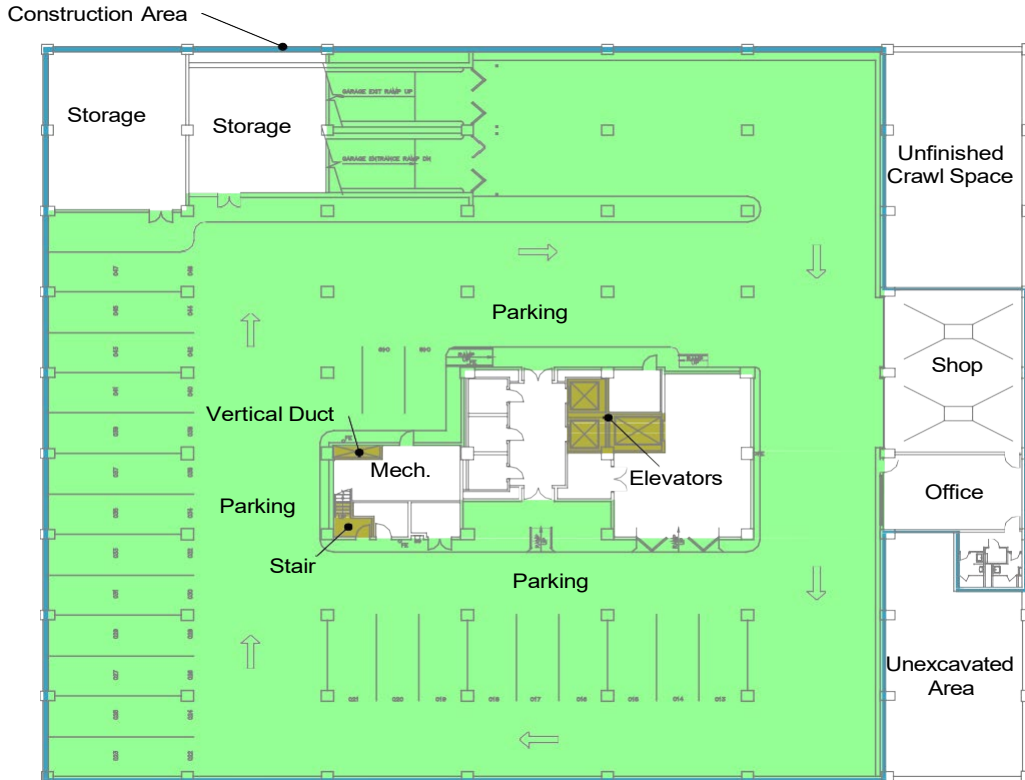
# Structured Parking

Structured Parking (STP) is a partially or fully enclosed parking area that resides within a building or as a standalone parking structure. Parking is counted by Square Feet and assigned to the tenant by parking stall as Structured Parking, while the top floor of a parking structure that does not have a roof is not counted by Square Feet but assigned to the tenant by parking stall as Structured Parking.

## Notes:

1. Parking is assigned and charged based on the number of parking spaces an occupant uses and not by square footage. Refer to GSA's Parking Policy and PBS' Pricing Desk Guide for more information.
2. If the top floor of a parking structure does not have a roof, it is treated like surface parking.

**Illustration 11:** Basement floor plan with Structured Parking. The coloring depicts Unmarketable space which includes Vertical Circulation, Parking and Construction.



**Note:** Covered parking or partially covered parking detached from a building that is open on multiple sides is not structured parking and treated as surface parking.

**Example (pictured below):** Parking covered or partially covered parking with roof and photovoltaic (PV) panels that are open on all sides are not structured parking.



## Unsuitable for Occupancy

Unsuitable for Occupancy (UFO) is space in a building that cannot be used for or easily converted to Usable space. If an occupant can use Unsuitable for Occupancy space, it cannot be assigned as UFO.

Types of Unsuitable for Occupancy space may include:

- Space where the ceiling height for the entire area is less than 7 feet. (See [Appendix C - Examples of Special Architectural Situations](#))
- Space that is structurally unstable
- Space where hazardous material has not been removed
- Space that is prone to water damage

UFO space must be approved by the building's regional Asset Manager and sent to SDM Central Office team for concurrence. Include a photo, description of the issue, and drawing showing location.

**Note:** A space not meeting the Architectural Barriers Act Accessibility Standards (ABAAS) is not automatically considered UFO and needs to be evaluated individually.

## 17–Excluded from Gross

Excluded from Gross are spaces that will be subtracted from the Gross Area calculation of a building. These areas are Voids and include the upper floor of an Atrium or Lobby.

The measurement and treatment of Voids to match the ANSI-BOMA standards started with buildings whose substantial completion dates were on or after October 1, 2011. For buildings built prior to that, Voids were gradually addressed over a 5-year period beginning with the NBSAP 2013 version. At this time, all building Voids are excluded from the Gross Area per both the ANSI/BOMA standards and the NBSAP.

**Note:** The following items will be assigned Excluded from Gross Area: ANSI Category 05–PBS Specific, Space Category 17–Excluded from Gross, Space Type–Open to Below (OTB), Agency Name–VOID, and Room Name–Atrium or Open to Below.

## Voids

Voids are areas where there is an absence of a floor within a building where a floor might otherwise be expected or measured. Voids are measured at 9 square feet or more (this is slightly different than ANSI/BOMA standards, which specify 10 square feet or greater). Voids are measured to the inside surface and do not include the wall thickness. Absences that are less than 9 square feet are not Voids and should be measured with their adjacent space.

The following areas are Voids:

- Upper floors of an atrium
- Upper floors of a lobby
- Areas adjacent to a mezzanine
- Open to Below areas/spaces (only above common spaces)
- Light wells
- Clerestories (full story or greater)

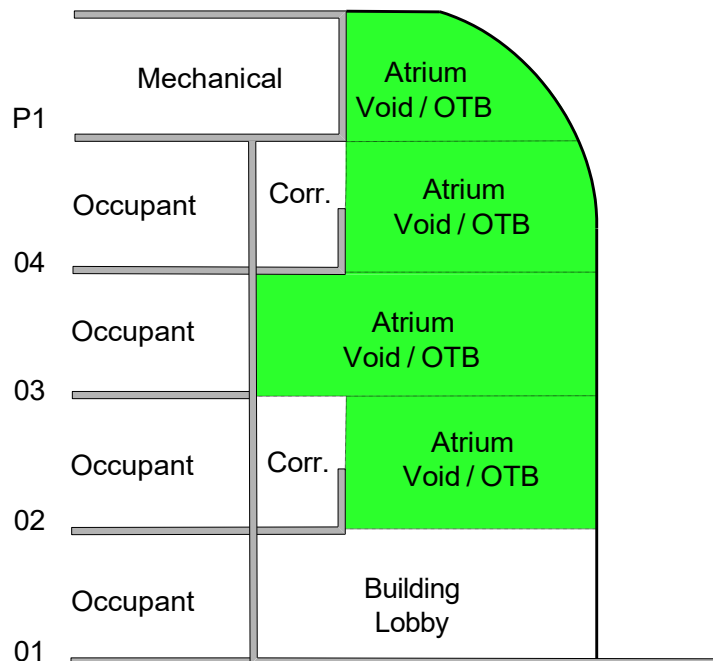
The ANSI/BOMA definition of Voids is: “Absence of a floor within the exterior enclosure of a building in excess of 10 square feet where a floor might otherwise be expected or measured, that is typically in the plane of the upper floors adjacent to the following Nonassignable spaces: multi-story atria or lobbies, light wells, auditoria or the area adjacent to a partial floor, permanent mezzanine, or unclassified mezzanine at a given floor level”.

**Note:** Only the lowest floor level of a multi-story space, such as an atrium or lobby is included in the Gross Area. If a stair extends into a Void, all associated levels will remain Circulation Vertical (CRV). GSA PBS uses 9 square feet or greater instead of 10 square feet.

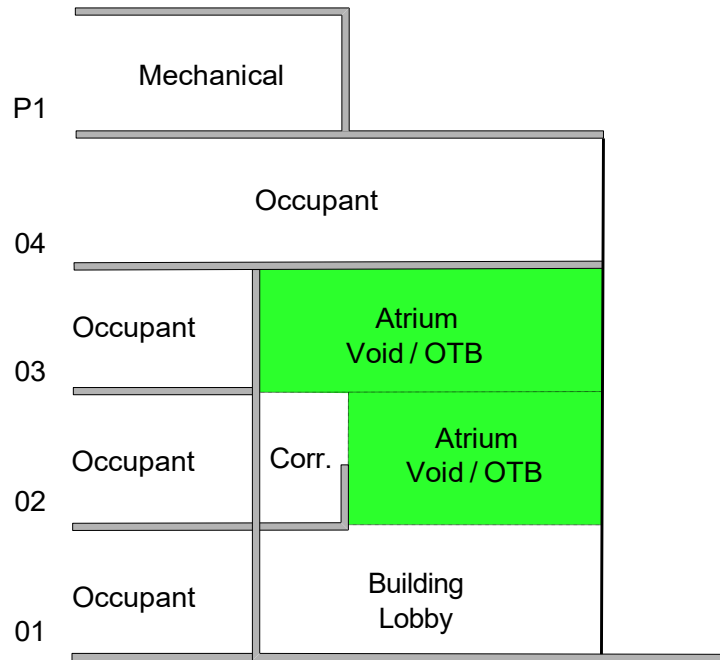
**Notes:** Voids are distinguished from major vertical penetrations as defined in ANSI/BOMA Z65.1-2010 in that:

1. Major vertical penetrations have a functional purpose, such as allowing passage of building services (HVAC ducts, flues, chutes, dumb-waiters, plumbing, electrical, etc.) or building access and egress (stairs, escalators, elevators, etc.). Whereas Voids only accommodate the need for certain spaces to be higher than adjacent floors.
2. Major vertical penetrations are included in construction gross area and exterior gross area, whereas Voids are excluded.
3. The areas of major vertical penetrations include their enclosing walls, whereas the areas of Voids exclude their enclosing walls. If there is no enclosing wall between a Void and an adjacent floor, the area of the Void extends to the edge of the adjacent floor.

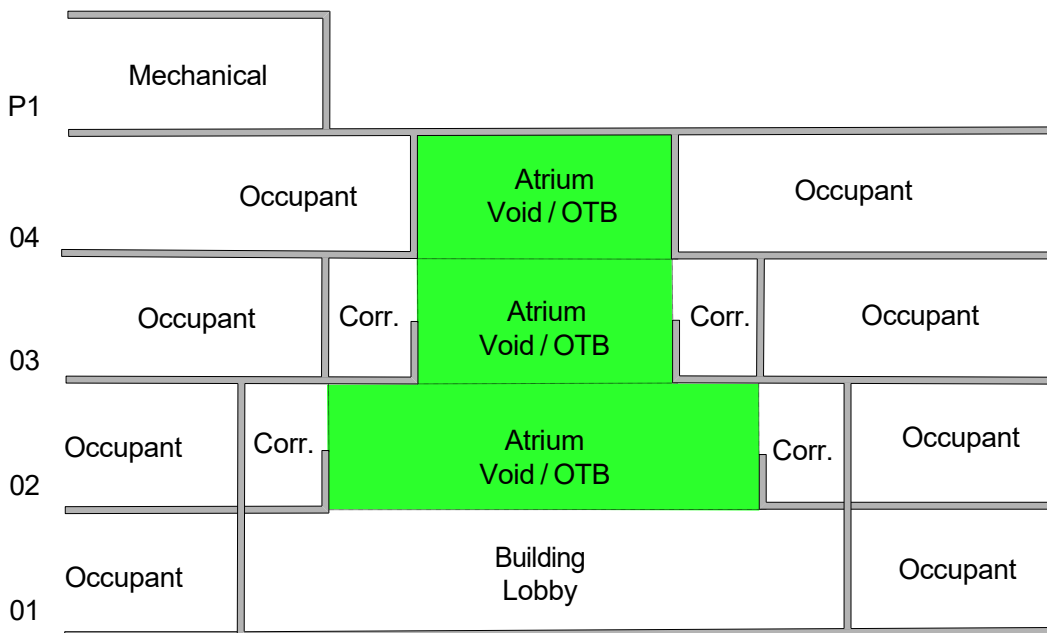
**Illustration 12:** Example of an atrium. The first floor is the Lobby, the remaining floors are Voids (Open to Below).



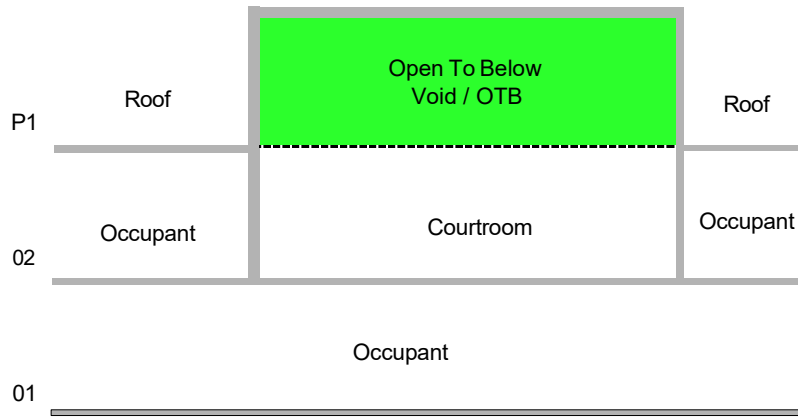
**Illustration 13:** Example of a multi-storied lobby showing areas considered Voids.



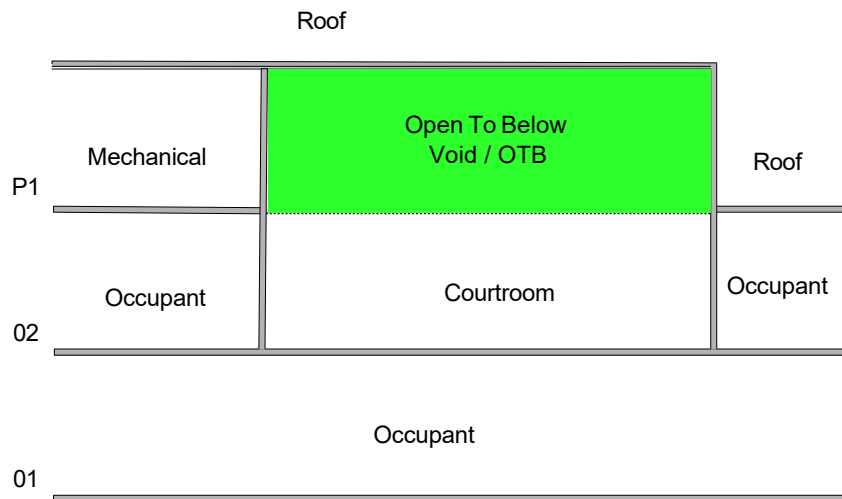
**Illustration 14:** Example of a multi-storied interior lobby.



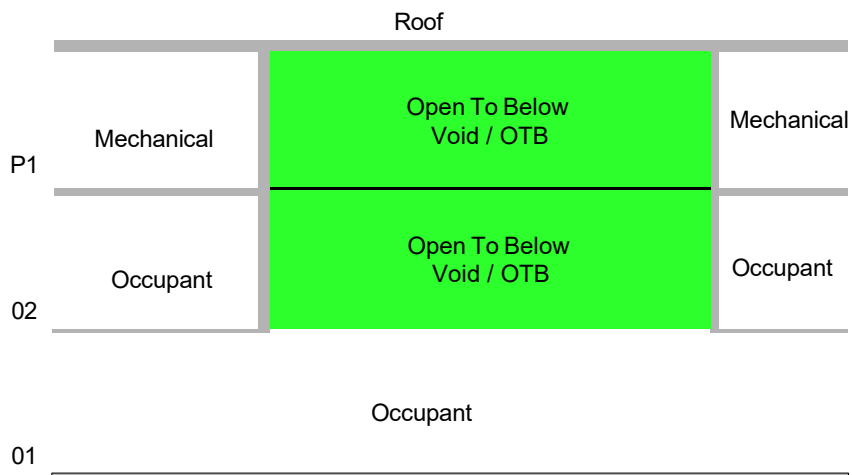
**Illustration 15:** Example of a clerestory (translucent walls not shown).



**Illustration 16:** Example of a Void (spaces on all sides above the Courtroom are non-usable).



**Illustration 17:** Example of a Light Chamber. The highlighted light chamber is not included in Gross Area and would be Void (Open to Below).



## 14–Zero Square Feet

Zero Square Feet items are not measured and have no square footage associated with them. They are identified on drawings with a symbol or text for informational purposes only. An occupant can be assigned Zero Square Feet items and will be charged a fee for those specific Zero Square Foot items.

Examples of items with Zero Square Feet:

- Antenna (ANT)
- Boat Dock (BDK)
- Bridge (BRG)
- Kiosk (KIS)
- Land (LND)
- Other (OTH) – Can include rooftop-mounted wind turbines, solar panels, etc.
- Railroad Crossing (RRC)
- Wareyard (WYD)

### Space Category and Space Type

All space assignments will have a Space Category and a Space Type.

Space Categories are used within the PBS inventory system to identify a room's status of occupancy. The two-digit Space Category numbers are the entries recognized by the PBS Inventory system.

Space Types are used within the PBS inventory system to identify a room's build-out. The three-letter Space Type acronyms are the entries recognized within the PBS inventory system.

**Notes:** Data matrices for the application of Space Categories and Space Types can be found in [Appendix A - Space Assignment Data Matrices](#). Refer to [Appendix B - Methodology Used to Measure Space](#).

## **PBS Specific Space Categories**

### **10–Unmarketable**

Unmarketable identifies all space within a building that is not assignable. Unmarketable Space Types are Construction area, Structured Parking, and Unsuitable for Occupancy.

**Note:** Circulation Vertical is also an Unmarketable Space Type but is associated with Space Category 04–Vertical Penetration.

#### **Unmarketable Space Types:**

##### **CON–Construction Area**

Construction area (CON) is the thickness of the outside wall, measured from the interior dominant vertical portion to the exterior dominant vertical portion of the building.

##### **STP–Structured Parking**

Structured Parking (STP) is a partially or fully enclosed parking area that resides within a building or is a standalone parking structure. It includes a slab and roof.

##### **UFO–Unsuitable for Occupancy**

Unsuitable for Occupancy (UFO) is space in a building that cannot be used for or easily converted to Usable space. If an occupant can make use of Unsuitable for Occupancy space, it cannot be assigned as UFO.

### **17–Excluded from Gross**

Excluded from Gross identifies all space within the building that is not included in the Gross Area. Excluded from Gross Space Type is Open to Below.

#### **Excluded from Gross Space Types:**

##### **OTB–Open to Below (Void)**

Voids are areas where there is an absence of a floor within a building where a floor might otherwise be expected or measured. Voids are measured at 9 square feet or more (this is slightly different than ANSI/BOMA standards, which uses over 10 square feet). Absences that are less than 9 square feet are not Voids and should be measured (included) with their adjacent space.

### **14–Zero Square Feet**

Special designations for space assignments **not** measured or billed in terms of square feet, such as: antennas, boat docks, bridges, land, railroad crossings, and ware yards. These items are typically not within the building line.



## **Zero Square Feet Space Types:**

### **ANT–Antenna**

Any device located on a Federally owned or leased building or on PBS-controlled land which can be used to transmit and/or receive electromagnetic signals. Included are devices for transmission relay or reception of television, AM/FM radio, or microwave signals. A tower located on PBS-controlled land is **not** an antenna. However, equipment attached to that tower which fits the description (above) is considered an antenna for pricing purposes. We identify the antenna type in our system, the options are dish, whip, satellite, beam, and ground plane.

### **BDK–Boat Dock**

Platform built over water with one end secured to the shore. The platform is used to board and offload small boats, synonymous with a pier or wharf.

### **BRG–Bridge**

Structure built to span a gorge, valley, road, railroad track, river, body of water, or any other physical obstacle. Designs of bridges vary depending on the function of the bridge and the nature of the terrain where the bridge is constructed.

### **KIS–Kiosk**

Located within Common area, a kiosk is a booth with an open window. Some vendors operate from kiosks, selling small, inexpensive consumables such as newspapers, magazines, street maps, and confections.

An information kiosk (or information booth) dispenses free information in the form of maps, pamphlets, other literature, and/or advice offered by an attendant.

An electronic kiosk, computer kiosk, or interactive kiosk houses a computer terminal. Some computer kiosks provide free, informational public service, while others serve a commercial purpose. Touch screens, trackballs, computer keyboards, and push-button input devices are typical for interactive computer kiosks.

### **LND–Land**

Undeveloped areas of property associated with the specific facility or building. These assets may be part of a larger development or may stand alone, but the boundaries must be clearly defined.

### **OTH–Other**

Any element for which an agency must be charged and does not meet the definition of Antenna, Boat Dock, Bridge, Kiosk, Land, Railroad Crossing, or Wareyard. Examples can include rooftop-mounted wind turbines, solar panels, roof gardens, aviaries, etc.

### **RRC–Railroad Crossing**

A crossing, on one level at-grade intersection, without a bridge or tunnel, of a railway line by a road, path, or another railroad. It also applies to a light rail line with separate rights-of-way (or a reserved track tramway) that crosses a road.

### **WYD–Wareyard**

Land assigned to an occupant that is adjacent to a building within a fenced or secured area.

## Structures

Structures are not buildings, rather large antennas, platforms, weather station equipment, etc. that sit on a site and are located within the boundary of the site. Sometimes a structure, such as an antenna tower, will hold multiple antennas so there are multiple point objects on or near the structure, this is because GSA charges by the number of individual antennas as detailed above under zero square feet spaces.

For antennas or such other types of equipment an antenna charge will be assessed if it sits on the property site and the surface covers 100 sq. ft or less and its removal would not cause any damage. If any type of equipment operations structure is additionally involved and is attached to the surface with a footing or foundation, or any constructed accessory extends below the surface of the property, land rent will be charged.

A small 8' x 8' tool/storage shed (usually on skids) that can be picked up with a forklift and moved is personal property and putting each tool/storage shed in GSA's parking lot is equivalent to the rent charge for one surface parking space per shed.

### Examples of Structures:



Photograph STR-1: This photograph is an example of tide monitoring station.



Photograph STR-2: This photograph is an example of an antenna tower which holds multiple antennas.



Photograph STR-3: This photograph is an example of a large stand-alone antenna with its associated communications building in the foreground

**Note:** The dedicated Communications Building is a building because it has a roof and a slab.

# Space Assignment Room Name Application and Definitions

## Application of Room Names for Assignment Drawings

SDM uses room names to indicate how the rooms are being used. The following room names are the only valid entries for use with assignment drawings. Room names must represent the predominant use of the space.

### Notes:

1. Abbreviated room names are spelled out at the beginning of the definition.
2. Business decisions should not be based solely on room name eSMART queries.
3. Room names are independent of Space Type.

Room Name	Room Name Definition
AQUARIUM	Space for the public exhibition of live, aquatic animals and plants for exhibit, study, and/or display. The associated rooms for the aquarium, such as a separate room for aquarium equipment or machinery, would also be named "Aquarium".
ATM	<b>Automatic Teller Machine.</b> If there is a separate room for customer access to the ATM, that room must be named ATM. If an ATM is in a lobby or corridor, no square footage (or area) is assigned to the ATM on the customer side. The room behind the ATM that is used to house ATM equipment is also named ATM. The ATM equipment space needs to be greater than 9 square feet (measured to inside wall face) to be counted.
ATRIUM	Multi-story, enclosed space in a building that has access to natural light. The upper floors of the atrium must be named ATRIUM except the lowest floor, which must be named LOBBY.
ATTIC SPACE	Space can have sloped or low ceilings, with no elevator access to the floor. Generally, consists of unfinished floors, walls, and ceilings. Space boundary line for sloping ceilings in an attic is located where there is 7 feet or less of headroom. Use the room name ATTIC SPACE only when the space is Unmarketable, UFO space.
AUDITORIUM	Stages, audience seating areas, and platforms must be named auditoriums. Auditoriums have structurally changed floors and/or ceilings. These spaces generally have above-standard air conditioning and are larger than 400 square feet. Upper parts of auditorium are also named AUDITORIUM (in the same way as a set of stairs is named STAIR on every level).
AVIARY	Space where birds or fowl are kept for inspection, quarantine or treatment purposes. Typically found in a Port of Entry.
BALCONY	A platform that projects from the wall of a building and is enclosed by a parapet or railing, or it is an interior projecting gallery in a public building (such as a theater). Use this room name only with SDM coordinator approval.
BARBER SHOP	Space used by barber or hair stylist to conduct their business.
BOX LOBBY	Lobby with post office-type boxes. Usually assigned to U.S. Postal Service.
BREAK	Room or area used by employees during break times. This may include a service unit and can also contain miscellaneous storage, localized mail stop facilities, and other miscellaneous office amenities.
CAFETERIA	Restaurant in which the customers serve themselves or are served at a counter and take the food to tables. Usually contains serving and seating area.
CANOPY	Structure that covers something, sometimes attached to a building. Use this room name only with SDM coordinator approval.

CHILD CARE	Area specifically used for childcare or day care, located in Federally owned or leased property. Includes open activity area, activity area for infants, toddlers, preschoolers, and school-aged children. Also included are diapering stations and sleeping/napping areas. <b>Note:</b> Spaces within a Child Care are classified by build-out, but all receive the room name Child Care for query purposes.
CLASSROOM	Rooms used for instruction, with supplemental HVAC and/or built-in special equipment such as blackout curtains, lighting controls, projection booths, and sound conditioning, in addition to office furnishings like desks and chairs. Note the difference between a classroom and a training room is the training room has no special build-out.
CLOSET	Small room used for containment of work-related items.
COMPUTER	Room used for computers, servers, and their related electronic functions and activities.
CONFERENCE	Any office room used primarily as a conference room by a single occupant. There are certain qualifications a room must meet to receive the Space Type CFT (Conference/Training). A room that is named and used as a conference room does not necessarily mean it has a Space Type CFT.
CONSTRUCTION	Thickness of the outside shell wall, measured from the interior Dominant Portion (vertical) to the exterior finished surface of the building.
CONTROL BOOTH	Booth not covered by a canopy that is used to control vehicular and pedestrian access at a Land Port of Entry (LPOE) property only.
COPY	Room used exclusively or primarily for photocopy machines. Room can also contain files, storage, supplies, and other typical office items. Predominate use of room must be to photocopy.
CORR.	<b>Corridor.</b> Passageway within a building into which rooms and other corridors become accessible. They can also provide means connect two buildings.
COURTROOM	Room in which a court of law is held. Room needs the appropriate build-out to be named COURTROOM.
CRAWL SPACE	Horizontal access space in a building that is either minimally finished or unfinished and gives access to plumbing, wiring, ductwork, or base isolation systems.
CREDIT UNION	Enterprise that offers banking services. The room name CREDIT UNION should be applied to the open area in front of the teller counter. All other rooms in a credit union suite receive room names determined by use.
CUST.	<b>Custodial Room</b> that contains a one or more standard sink or mop sink and is used by custodial services for their related activities. A janitorial storage room would have the room name STORAGE and Space Type CST, not room name CUST.
DUMBWAITER	Small elevator or transportation device used to move goods vertically between floors of a building.
ELEC.	<b>Electrical Room</b> used to house electrical equipment, panels, and/or meters.
ELEV. LOBBY	<b>Elevator Lobby.</b> Waiting area for elevators.
ELEV. PIT	<b>Elevator Pit.</b> Space at the bottom of an elevator shaft.
ELEV. VEST.	<b>Elevator Vestibule.</b> Small room or hall in front of elevators.
ELEVATOR	Platform or an enclosure raised and lowered in a vertical shaft used primarily to transport people.
ENTRY LOBBY	A large entrance area or hall that serves as a foyer.
ENTRY VEST.	<b>Entry Vestibule.</b> An enclosed entrance between the outer door and the interior of a building.
EQUIP. RM.	<b>Equipment Room.</b> Audio/Visual equipment rooms associated with conference rooms, courtrooms, and auditoriums. Room used to house radio equipment and/or conduct associated activities. Not to be used as building support mechanical rooms. Rooms housing machinery for courtroom lifts are named MECH.
ESCALATOR	Set of moving steps attached to a continuously circulating belt that carries people up or down between levels in a building.
EVIDENCE	Room used to secure legal evidence, usually near a courtroom.

EXAM	<b>Medical Examination Room.</b> Room used by medical personnel to determine health or condition.
EXERCISE RM.	<b>Exercise Room.</b> Room used for physical wellness but does not include improvements to accommodate weight-lifting equipment.
FILE	Room used primarily for hardcopy files. Room can also contain storage, supplies, and other typical office items. Predominant use of room must be to house hardcopy files.
FIRING RANGE	Enclosed space specifically designed for firearms practice, including the testing and certifying of staff required to carry firearms.
FPS CONTROL ROOM	Location of the Fire Protection System (FPS) Control Room. This room should not be confused with DHS FPS equipment room.
FRT. ELEV.	<b>Freight Elevator.</b> Device for vertical transportation of freight to different floors or levels in a building.
FRT. ELEV. VEST.	<b>Freight Elevator Vestibule.</b> Small room or hall in front of freight elevators.
FULL SERV. CNTR.	<b>Full-Service Center.</b> Specific to the U.S. Postal Service (USPS). Post office space that provides all the services made available by the USPS.
FUR.	<b>Furring.</b> Furred-out space is created when the floor layout must accommodate irregular wall surfaces or conceal mechanical obstructions (e.g., piping and electrical conduits). Furred-out spaces usually have no access but from a space assignment position are absorbed by and assigned the Space Type of the adjacent spaces, if less than 9 square feet. Spaces over 9 square feet must be assigned like any other space. Furred spaces greater than 9 square feet (measured to inside wall face) that accommodate mechanical equipment (such as a pipe enclosure) must be assigned Space Type MCH (Mechanical) and receive room name MECH.
GARAGE	Shelter or repair shop for vehicles. Also includes enclosed inspection bays for vehicles. Space Type is typically STP (Structured Parking).
GUARD STATION	Booth or room within the building line used to house security personnel for the building or occupant.
HAZ. MAT. FCTY. CANOPY	<b>Hazardous Material Facility Canopy.</b> Canopy which covers the hazardous material inspection facility at a LPOE only.
HEARING	Hearing Room used by courts as the location to which evidence is taken for the purpose of determining an issue of fact.
HLDG.	<b>Holding Room or Cell.</b> Space used to detain persons suspected of violating laws. Includes associated chase for plumbing.
HUB RM.	<b>Hub Room.</b> Space used as a computer hub room. Contains server and/or electronic equipment racks.
HUB/TELE.	<b>Hub/Telephone.</b> Room is a combined computer hub room and telephone equipment room.
IMPOUND LOT	Area where impounded items such as vehicles are stored. Use this room name only with SDM coordinator approval.
INSPECTION BOOTH	A small, typically stand-alone booth or similar structure used to perform inspections or monitoring.
INTERVIEW	Room in which interviews are conducted.
JUDGES CHAMBER	A judge's private office and rooms outside the Judge's Office that comprise his/her overall chamber. This name is only used in court spaces.
JURY ASSEMBLY	Room where prospective jurors gather to wait or assemble before being selected for jury duty. Includes seating area and may include TV, workstations, and tables. Break area or room within jury assembly must be assigned BREAK.
JURY ROOM	Room where jury deliberates to reach a verdict.
KENNEL	Facilities (enclosed rooms) provided for the boarding, veterinary care, and/or training of animals.
KITCHEN	Room used to prepare food in a cafeteria or residence (a microwave oven and refrigerator alone do not make a space a "kitchen").

LAB.	<b>Laboratory.</b> Space equipped for experimental study in a science, or space for testing and analysis.
LACTATION ROOM	A private room for nursing mothers. Space must be private, clean and include a shelf/table and a seat. Often, they include other provisions such as electrical outlets, refrigerator, etc. Lactation rooms can be assigned three ways depending on who has access to the room. <ul style="list-style-type: none"> <li>• Joint use - If used by all the tenants in the building</li> <li>• Building Common - If available to the public</li> <li>• Tenant assignment - If part of tenant requirements and/or within their space</li> </ul>
LAW CLERK	<b>Law Clerk Office</b> – Individual office for each law clerk. Alternatively, clerks can be provided with semi-private workstations in alcoves or separated by modular partitions, bookcases, etc., based on the judge's preference. *Use Space Type JCC if the law clerk office is within the Judicial Chambers, if not within the envelope of the judge's chambers or suite use TTO. This name is usually used only in court spaces.
LIBRARY	Space in which literary, musical, artistic, or reference materials (as books, manuscripts, recordings, or films) are kept for use but not for sale.
LOADING DOCK	Architectural structure designed for efficient loading and unloading of trucks.
LOBBY	Entranceway or foyer within the building line.
LOCKERS	Room containing lockers or small lockable cupboards or compartments in which people secure possessions.
LOG	<b>Lookout Gallery.</b> Space used to observe employees in work areas performing work-related functions. Typically used by USPS. This includes the ladder rooms to access the lookout gallery.
MAIL RM.	<b>Mail Room.</b> Space in which activities related to handling incoming and outgoing mail occur. If one occupant requests and uses the mailroom, it must be assigned to the occupant. It is assigned as Joint Use space when the mail room is used by all occupants.
MECH.	<b>Mechanical.</b> HVAC, plumbing, and/or elevator machinery, and any combination of these items. Rooms that accommodate a small amount of machinery are usually named MECH. Pipe enclosures lacking a vertical penetration that are 9 square feet or greater (measured to inside wall face) also are labeled MECH. if not associated with another room.
MEN	Toilets used exclusively by men.
MONITOR RM.	<b>Monitor Room.</b> Space that houses the consoles for the building automation or mechanical systems. Building Common monitor rooms are assigned the Space Type MCH. Space that houses monitoring equipment involving Guards and Security can use this room name also, if the space is used for these security-related services.
NEWS RM.	<b>Newsroom.</b> Room used by media. Typically assigned to an occupant agency, not Building common.
OFFICE	Room that houses personnel and/or furniture in which occupant conducts business (as compared to a room in which multiple occupants conduct business, which is an OPEN OFFICE).
OPEN OFFICE	Large, general, office space. An area that houses personnel and/or furniture and the space is open to an adjacent corridor. Typically, an OPEN OFFICE contains system furniture. The egress or contiguous corridors through an open office are included in the OPEN OFFICE space and not separated.
OPEN TO BELOW	This room name applies only to areas or space where there is an absence of a floor within a building where a floor might otherwise be expected or measured, with no access to natural light.
OUTBOUND INSP. CANOPY	<b>Outbound Inspection Canopy.</b> Canopy over outbound inspection booths only at a LPOE.
PARKING	Space in which to park vehicles, as at a place of business. Enclosed parking includes enclosed roadways on parking levels as well as stalls and pedestrian walkways.

PEDESTRIAN PROCESSING	Pedestrian processing space encompasses both the pedestrian primary and pedestrian secondary inspection areas. The pedestrian primary inspection is for processing pedestrian traffic entering the U.S. Pedestrian secondary inspection areas are where a more thorough inspection of pedestrians and their belongings is performed. Name is used only at LPOEs.
PEDESTRIAN WALKWAY	A passageway for pedestrians that is typically uncovered or only partially covered. <b>Note:</b> Refer to CORR. (Corridor) and Pedestrian Processing to ensure correct name is selected.
PRE-PRIMARY	The pre-primary area is located in front of the primary inspection booth(s). This is the area of the LPOE that provides vehicular access from a foreign country.
PRIMARY CANOPY	This canopy covers the main entry area for border crossings and is similar to toll booth canopies. Term is used only at LPOEs.
PRINT RM.	<b>Print Room.</b> Room in which document printing or plotting occurs.
PROP. MGR. OFFICE	<b>Property Manager's Office.</b> Space for the property manager.
RECEPTION	Room or area where receptionist is located.
RESIDENCE	Rooms used as living space by an occupant and may include living room, bedroom, study, dining room, bathroom, and kitchen.
RETAIL	Space or room including window display spaces, used by retail store.
ROBING	<b>Robing Room</b> is an area usually adjacent to a courtroom and is considered part of a judge's chambers suite. Usually this name is used only in court spaces.
ROOF 1-7 (ETC)	A roof designated by the numbers 1 through 6 followed by 7 (ETC) for all others.
SALLY PORT	A fortified space used by legally armed personnel transferring restrained individuals from a vehicle or elevator into a room, corridor, or courtroom.
SECONDARY INSP. CANOPY	<b>Secondary Inspection Canopy.</b> Canopy above secondary inspection area. The Secondary Canopy is for vehicle inspection after passing through the Primary Canopy. Use only at LPOEs.
SHOP	Room devoted to building operations and maintenance related to the following fields: carpentry, electrical, mechanical, general maintenance, paint, plumbing, or any combination of these fields.
SNACK BAR	Food counter, room, or area where food, beverages, and light meals are sold.
SNDLK.	<b>Sound Lock.</b> Room that provides an acoustical buffer to eliminate the transfer of sound to adjoining space.
STAIR 1-99	Stairs designated by the numbers one through ninety-nine.
STAIR A-Z	Stairs designated by the letters A through Z. Some A/E's use letters, other numbers, we tend to match what the A/E uses.
STORAGE	Room used primarily for storage. Predominant use of room must be storage. This name includes cold storage rooms such as walk-in freezers or coolers used for food service or by laboratories. A trash or recyclables room used to store Building Common trash, recyclables or dumpsters are also named storage.
SUPPLY	Room used to contain/store consumable office supplies and other typical office items. Can also be used to designate a room that contains/stores lab supplies and other consumable items that may be associated with labs, medical or law enforcement.
SWITCH RM.	<b>Switch Room.</b> Contains electrical switch gear and equipment.
TELE.	<b>Telephone.</b> Room or closet containing telephone equipment and/or panels.
TELLER	Room where a teller conducts business. A teller station within an open office setting, such as in a credit union, is usually not assigned as a separate space. A room within the building line such as a room for a drive-up window teller is assigned the room name TELLER.
TOILET	Toilets available to either men or women.
TRAINING	Room used to conduct training. Note the difference between a classroom and a training room is the training room has no special build-out.

TRUCK PRIMARY	Canopy area in which the initial inspection of commercial vehicular traffic (primarily trucks) entering the U.S. takes place. The Truck Primary is also the entry way into further commercial inspection and/or passage through the LPOE for commercial vehicles. It usually includes booths and canopies over booths.
TRUCK SECONDARY	Area for a more thorough examination of the contents of commercial vehicles. The secondary commercial area and docks are used for inspection of commercial vehicles, control of material goods, collection of duties, and confiscation of contraband. Docks are used to load and unload materials for inspection. Areas can include the commercial lot, commercial dock, commercial building, truck scale, empty vehicle inspection, truck radiographic inspection, Non-Invasive Inspection (NII), bulk material inspection, bird quarantine area. Often associated with Customs and Border Patrol (CBP) and Animal and Plant Health Inspection Service (APHIS) facilities.
TUNNEL	A tunnel is an underground or underwater passageway, dug through the surrounding soil/earth/rock and enclosed except for entrance and exit, commonly at each end.
TV STUDIO	<b>Television Studio.</b> Rooms where television broadcasts are produced. This includes associated rooms.
VAULT	Room for the safekeeping of valuables that typically is above standard build-out.
VEHICLE RAMP	For vehicular roadway traffic only. A fully enclosed vehicular ramp (leading to or inside Structured Parking) that fits the requirements of a vertical penetration is named Vehicle Ramp.
VENDING	Room or area set aside for machines dispensing food or beverages.
VERT. PEN.	<b>Vertical Penetration.</b> Vertical penetrations and their enclosing walls are design elements that penetrate the slab between floors and must be 9 square feet or greater.
VEST.	<b>Vestibule.</b> A small passage, hall, or room between a door or room and another room, corridor, or lobby.
WAITING	Area for patron/clientele traffic. Can include seating. Also, can include drivers' waiting rooms at a LPOE.
WAREHOUSE	Space used to store, accumulate, or collect house goods or wares. Spaces with industrial lighting, unfinished flooring, above-standard floor loading, ceiling open to structure, large column spacing, overhead doors, and/or minimal (or no) HVAC.
WEIGHT RM.	<b>Weight Room.</b> Room used for physical wellness that includes improvements to accommodate weight-lifting equipment.
WET AREA	Use WET AREA for a shower room, a dishwashing room, and a sink area in a conference room. Do not use WET AREA for a break area or room, exam room, toilet, laboratory, custodial closet, holding cell, kitchen, or water fountain.
WOMEN	Toilets used exclusively by women.
WORK RM.	<b>Work Room.</b> An open room or area used by many people performing various work-related tasks. Different from OPEN OFFICE because there are no office-related workstations.
Z PORTAL MONITOR	A high-throughput screening gateway used to inspect trucks and cargo for threats. Name is typically used on the booth or control room associated with the screening station.



# Appendices



## A. Space Assignment Data Matrices

### Space Type Assignment Data Matrix

The following matrix depicts the relationship between PBS Space Type, PBS Space Category, and ANSI category.

PBS Space Type	PBS Space Category			ANSI Category
	Assigned	Unassigned	Joint Use	
CRV–Circulation Vertical	n/a	10–Unmarketable	n/a	04–Vert. Penetration
CON–Construction	n/a	10–Unmarketable	n/a	05–PBS Specific
STP–Structured Parking				
UFO–Unsuitable for Occupancy				
OTB – Open to Below		17 – Excluded from Gross		
ADP–Automated Data Processing	01–Assigned	04–Committed 11–Vacant	03–Building Joint Use 07–Facility Joint Use 15–Lease Joint Use 16–Community Joint Use	01–Office
AUD–Auditorium				
CFT–Conference/Training				
CLD– Child Care				
CRJ–Courtroom/Judiciary				
FDS–Food Service				
FIT–Fitness Center				
GNS–General Storage				
HUT–Health Unit				
INS–Light Industrial				
JCC–Judicial Chambers				
JHR–Judicial Hearing Room				
LAB–Laboratory				
PTL–Private Toilet				
QRR–Quarters and Residence				
STC–Structurally Changed				
TFC–Tenant Floor Cut				
TTO–Total Office				
WRH–Warehouse				
CRH–Circulation Horizontal	n/a	02–Building Common	n/a	02–Building Common
TLT–Toilet		06–Facility Common		
CST–Custodial		08–Lease Common	n/a	03–Floor Common
MCH–Mechanical				
ANT–Antenna	n/a	14–Zero Square Feet 11 – Vacant (LND – Land Only)	n/a	05–PBS Specific
BDK–Boat Dock				
BRG–Bridge				
KIS–Kiosk				
LND–Land				
OTH–Other				
RRC–Railroad Crossing				
WYD–Wareyard				

## Space Category Assignment Data Matrix

The following matrix shows the relationship between PBS Space Categories, Agency Bureau Codes, and Agency Space Assignment (ASA).

**Notes:**

1. Effective July 5, 2011, Client Billing Record (CBR) is now Agency Space Assignment (ASA)
2. For Space Categories where the ASA is not applicable (n/a), the space label is blank.

<b>PBS Space Category</b>	<b>Agency Bureau (AB) Code</b>	<b>Agency Space Assignment (ASA)</b>
<b>01–Assigned</b>	Agency	ASA – Draft or Final
<b>04–Committed</b>	Agency	Null
<b>14–Zero Square Feet</b>	Agency or Null	ASA or Null
	For Active Antenna Only – Agency	ASA
	For Vacant Antenna Only – Null	Null
	For Committed Antenna Only – Agency	Null
<b>10–Unmarketable</b>	VERT or BLDG or PRKN or CONS	n/a
<b>11–Vacant</b>	VCNT	n/a
<b>02–Building Common 06–Facility Common 08–Lease Common</b>	BLDG	n/a
<b>03–Building Joint Use 07–Facility Joint Use 15–Lease Joint Use 16–Community Joint Use</b>	JNTU	n/a
<b>17–Excluded from Gross</b>	VOID	n/a

**A.3 - PBS Space Type and Space Category Relationship Matrix**

Space Type	Abbrev.	Assigned New	Vacant	Committed	Bldg. Joint Use	Facility Joint Use	Lease Joint Use	Community Joint Use	Bldg. Common	Facility Common	Lease Common	Unmarketable	Zero Square Feet
AUTOMATIC DATA PROCESSING	ADP	Y	Y	Y	Y	Y	Y	Y					
AUDITORIUM	AUD	Y	Y	Y	Y	Y	Y	Y					
CONFERENCE/TRAINING	CFT	Y	Y	Y	Y	Y	Y	Y					
CHILD CARE	CLD	Y	Y	Y	Y	Y	Y	Y					
COURTROOMS/JUDICIARY	CRJ	Y	Y	Y	Y	Y	Y	Y					
FOOD SERVICE	FDS	Y	Y	Y	Y	Y	Y	Y					
FITNESS CENTER	FIT	Y	Y	Y	Y	Y	Y	Y					
GENERAL STORAGE	GNS	Y	Y	Y	Y	Y	Y	Y					
HEALTH UNIT	HUT	Y	Y	Y	Y	Y	Y	Y					
LIGHT INDUSTRIAL	INS	Y	Y	Y	Y	Y	Y	Y					
JUDICIAL CHAMBERS	JCC	Y	Y	Y	Y	Y	Y	Y					
JUDICIAL HEARING ROOM	JHR	Y	Y	Y	Y	Y	Y	Y					
LABORATORY	LAB	Y	Y	Y	Y	Y	Y	Y					
OFFICE	TTO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
PRIVATE TOILET	PTL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
QUARTERS AND RESIDENCE	QRR	Y	Y	Y	Y	Y	Y	Y					
STRUCTURALLY CHANGED	STC	Y	Y	Y	Y	Y	Y	Y					
TENANT FLOOR CUT	TFC	Y	Y	Y	Y	Y	Y	Y					
WAREHOUSE	WRH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
CIRCULATION HORIZONTAL	CRH											Y	
CUSTODIAL	CST								Y	Y	Y		
MECHANICAL	MCH								Y	Y	Y		
TOILET	TLT								Y	Y	Y		
CIRCULATION VERTICAL	CRV											Y	
CONSTRUCTION	CON											Y	
STRUCTURED PARKING	STP											Y	
UNSUITABLE FOR OCCUPANCY	UFO											Y	
ANTENNAS	ANT												Y
BOAT DOCK	BDK												Y
BRIDGE	BRG												Y
KIOSK	KIS												Y
LAND	LND												Y
OTHER	OTH												Y
RAILROAD CROSSING	RRC												Y
WAREYARD	WYD												Y

## B. Methodology Used to Measure Space

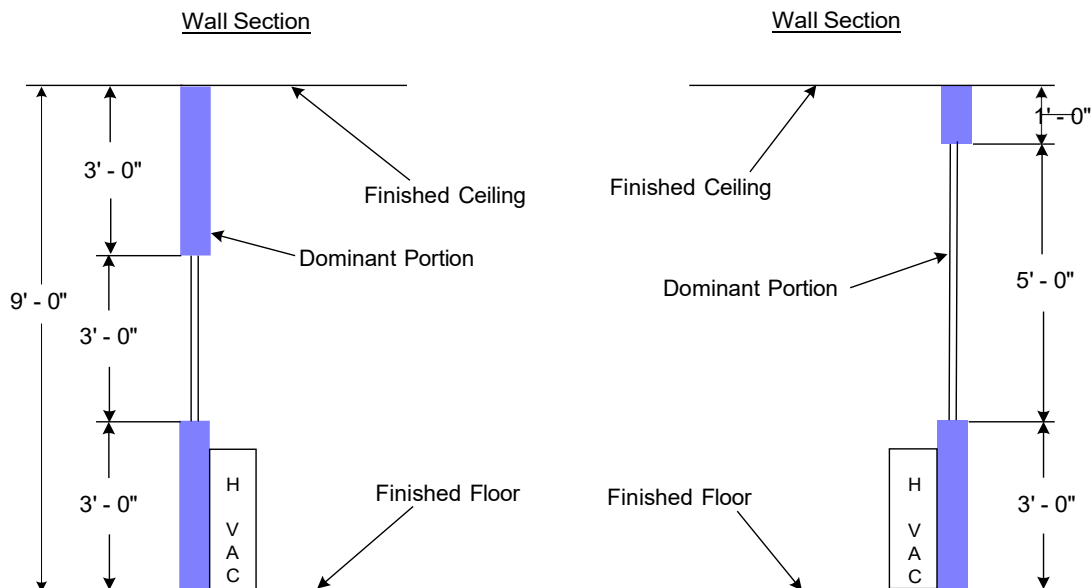
### Dominant Portion

Dominant Portion is defined by ANSI/BOMA as, “the portion of the inside, finished surface of the permanent, outer, building wall, which is 50% or more of the vertical floor-to-ceiling dimension at the given point being measured horizontally along the wall.” PBS uses the ANSI/BOMA definition of Dominant Portion without deviation.

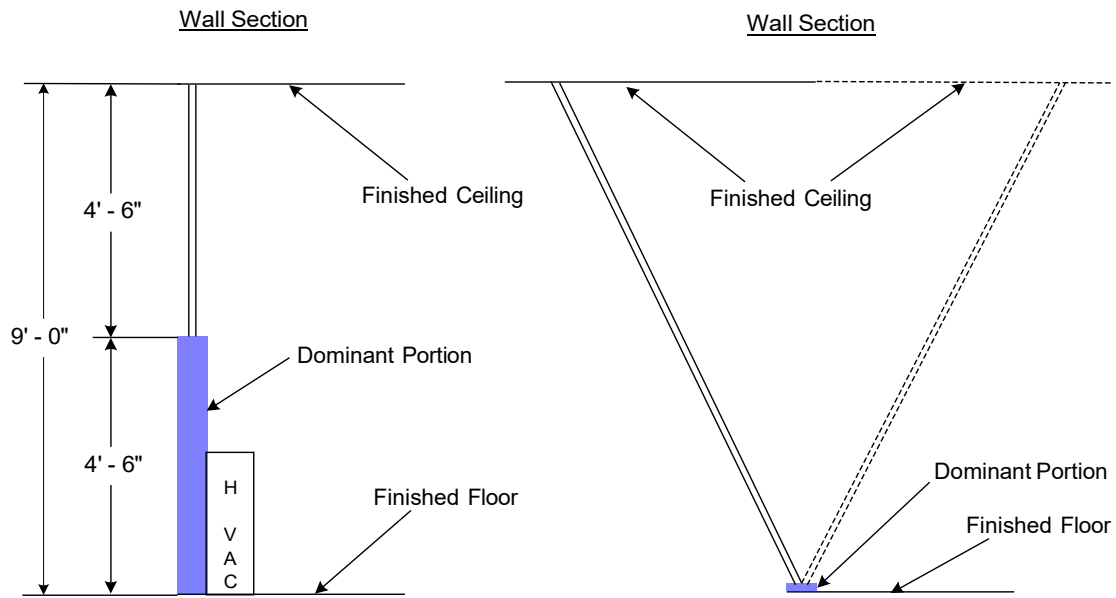
The area inside the Dominant Portion is defined as the Gross Measured

Area. To determine the Dominant Portion, refer to the following examples.

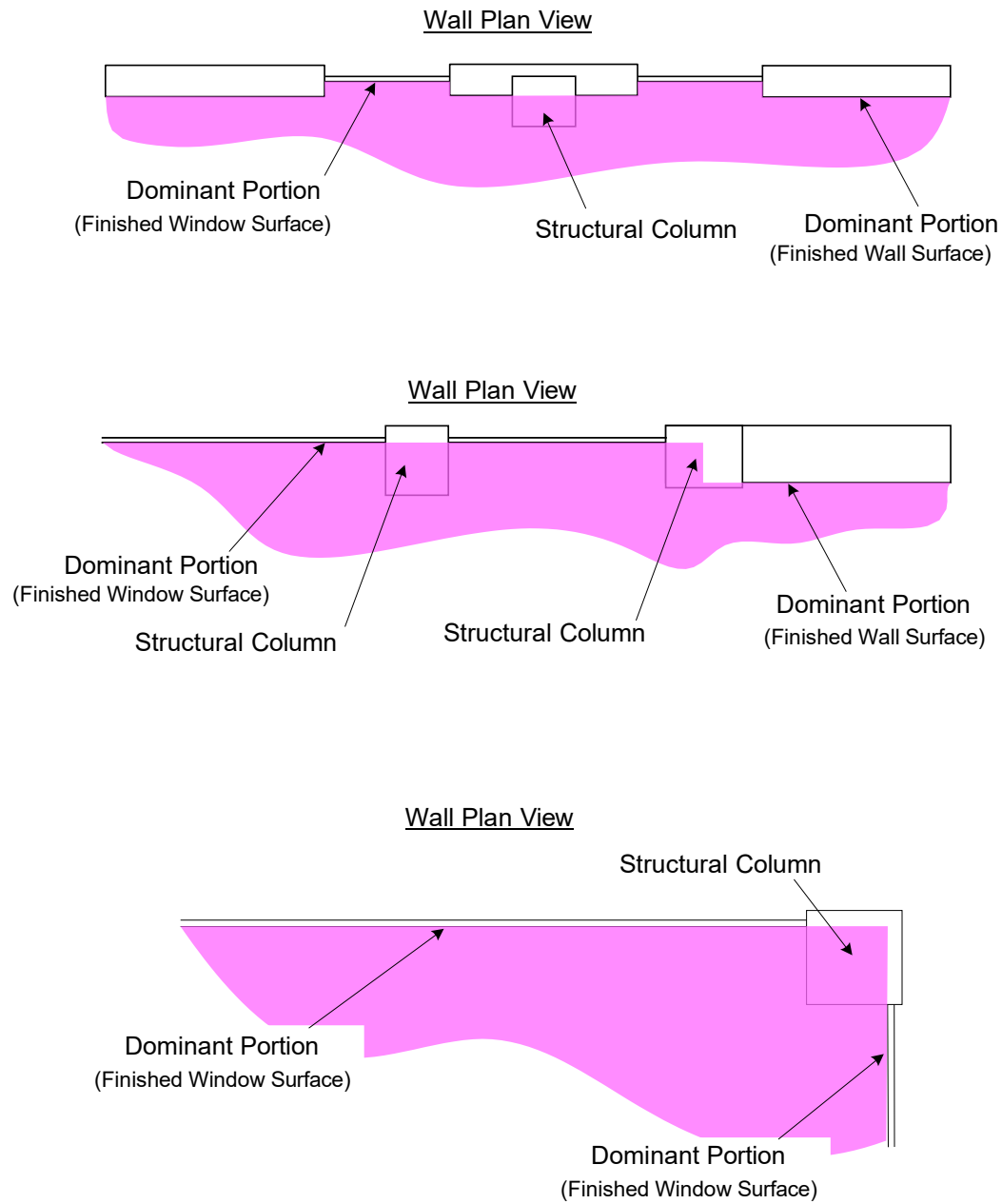
**Illustration B-1:** Dominant Portion is the section of the inside, finished surface of the permanent, outer, building wall which makes up 50% or more of the vertical floor-to-ceiling dimension.



**Illustration B-2:** If no finished surface of the permanent, outer building wall is 50% or more of the vertical floor-to-ceiling dimension (as shown in the left diagram), or if the permanent, outer building wall is not vertical, the Dominant Portion is the inside, finished surface of the wall where the wall intersects the finished floor (as shown in the right diagram).



**Illustration B-3:** In the three examples below, if an alternating window system results in the Dominant Portion moving from the finished surface of the wall to the face of the glass, the space boundary moves in and out as often as conditions dictate and the structural columns are ignored.



## Space Boundaries

Space boundaries determine a space's area in square footage and are created in a CAD file using area lines known as polylines. Space boundaries (or space polygons) can be used to graphically display precisely where one space or room begins and another ends. Space boundaries are the most basic component of any Computer Aided Facilities Management (CAFM) system.

Space boundaries (space polygons) are used in three ways by SDM:

1. To measure area (in usable square feet) by room (a physical construction) or by a space (a theoretical area)
  - o A room can contain multiple spaces
  - o A space can contain multiple rooms
2. To graphically display where a space or room begins and another ends.
3. To graphically display an occupant's suite of space, or any available thematic of the user's choice.

The placement of space boundaries is done according to the following hierarchy which is also found in ANSI-BOMA under section titled "Wall Priority." (This hierarchy is presented as if one were adding area lines to a drawing).

1. The floor boundary is located on the outside building line (the floor boundary indicates the Gross Floor Area with Voids included). The Gross Measured Area line is then located on the Dominant Portion on the interior side of the exterior wall. These two lines form the Construction area of the building shell. The Construction area takes precedence over all other area lines.
2. ANSI 04–Vertical Penetration lines are drawn next. The Vertical Penetration lines include the wall thickness of the enclosing walls except for the outside building wall Construction area.
3. ANSI 02–Building Common and ANSI 03–Floor Common lines are drawn after all lines for Vertical Penetrations have been drawn. The Building and Floor Common lines envelop the wall thickness of all enclosing walls except for the outside building wall Construction area and Vertical Penetrations.

**Note:** For the purpose of placing area lines, ANSI Category 02–Building Common areas and ANSI Category 03–Floor Common, both areas are treated the same.

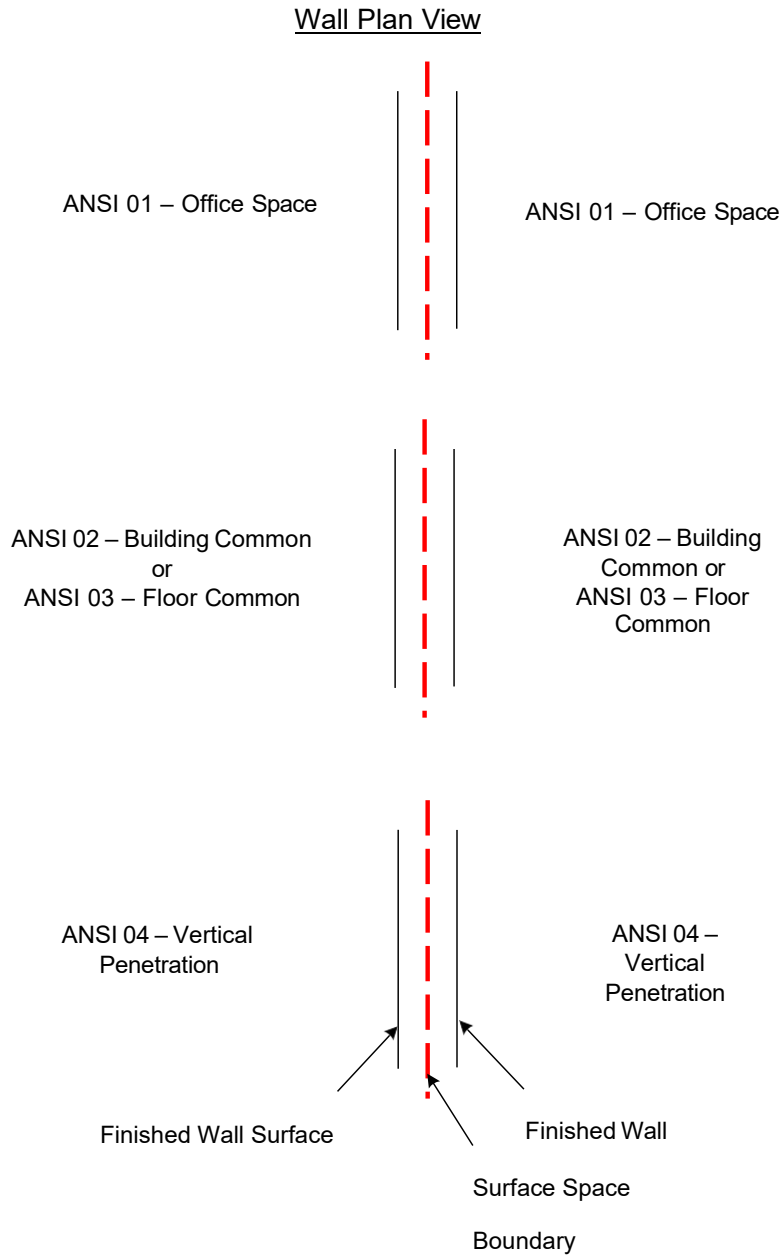
4. ANSI 01–Office area lines are drawn after all lines for Building and Floor Common have been drawn. Adjoining office spaces split (or share) the wall equally between the spaces.
5. ANSI 05–PBS Specific is assigned in special circumstances.  
When ANSI 05–PBS Specific is assigned to Unsuitable for Occupancy (UFO) the line is placed where the space was originally constructed. For example, if the space is constructed as Office Space, the area line is drawn as ANSI Category 01–Office Space. Further, if the space was constructed as Building Common space, the area line is drawn as ANSI categories 02–Building Common or 03–Floor Common.

**Note:** When ANSI 05–PBS Specific is assigned to Structured Parking (STP) the area line includes the enclosing wall when adjacent to ANSI Categories 01–Office Space, 02–Building Common, and 03–Floor Common. When Structured Parking is adjacent to 04–Vertical Penetration, the wall is split between Structured Parking and the Vertical Penetration.

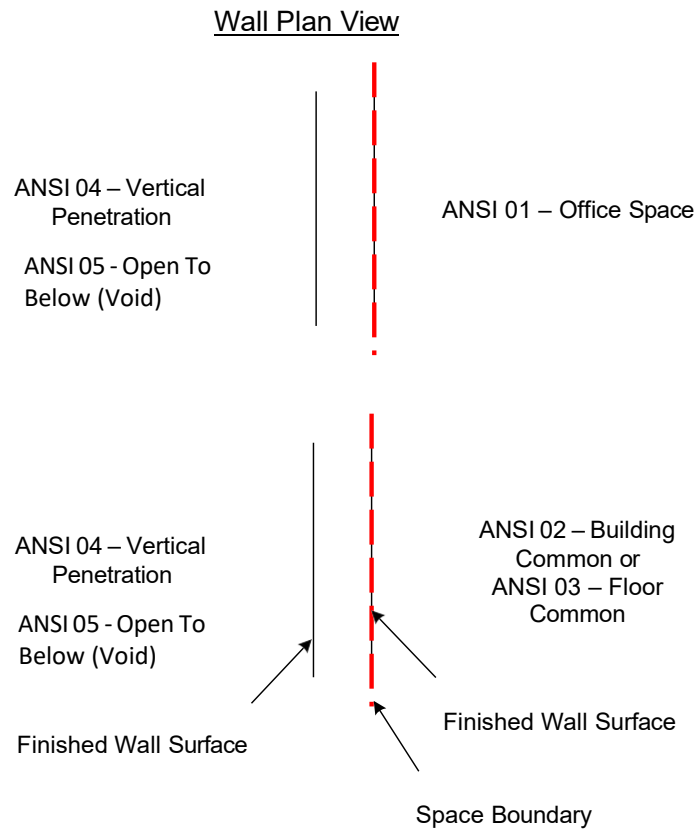


To determine the placement of space boundaries, refer to the following examples.

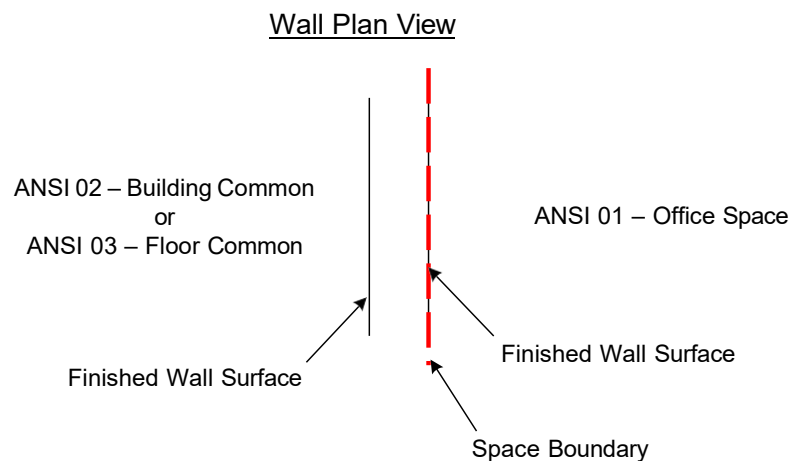
**Illustration B-4 (Wall Plan View):** If two adjoining spaces have the same ANSI classification, the wall is shared equally between the spaces.



**Illustration B-5 (Wall Plan View):** If one space is ANSI 04 (CRV) or ANSI 05 (OTB) and the adjoining space is ANSI 01, ANSI 02, or ANSI 03, the ANSI 04 and ANSI 05 space includes the wall thickness represented as the space between the parallel lines.



**Illustration B-6 (Wall Plan View):** If one space is ANSI 02 or ANSI 03 and the adjoining space is ANSI 01, the ANSI 02 or ANSI 03 space includes the wall thickness represented as the space between the parallel lines.

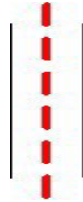


**Wall Plan View B-7 (Wall Plan View):** If one space is ANSI 04 CRV or ANSI 05 STP or ANSI 05 OTB and the adjacent space is any of the same ANSI 04 CRV or ANSI 05 STP or ANSI 05 OTB, the wall thickness will be split.

**Note:** In general, treat OTB (Open to Below) Voids in the same manner as Vertical Penetrations when placing space boundaries.

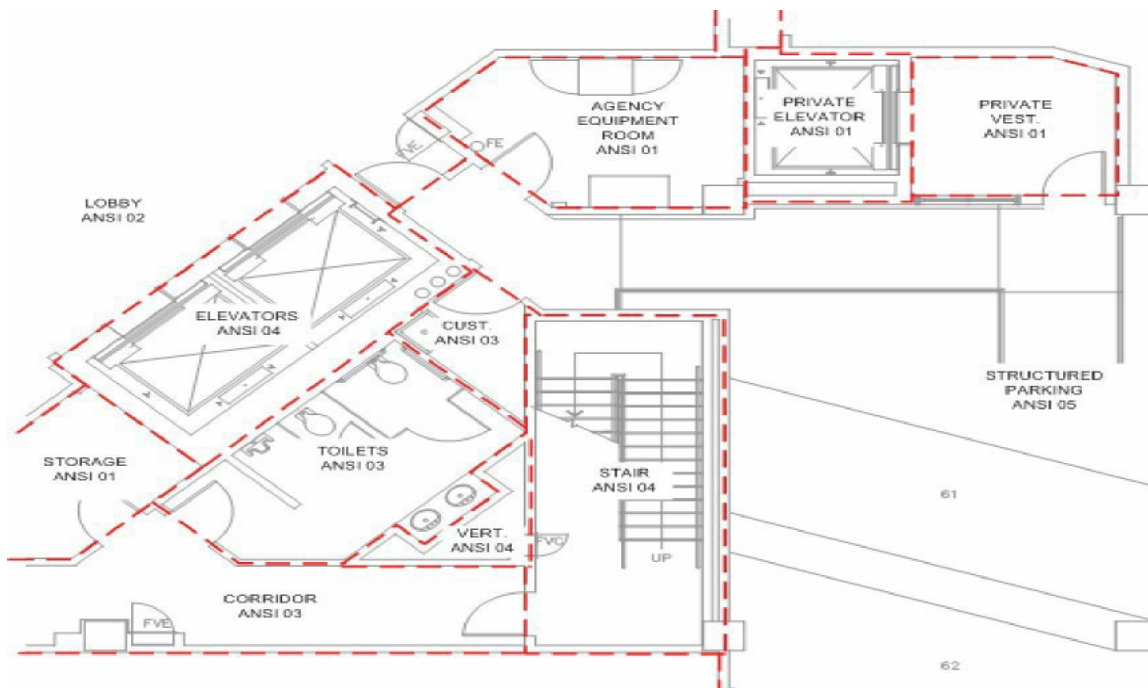
Wall Plan View

ANSI 04 Vertical Penetration, ANSI 05 Structured Parking or ANSI 05 Open To Below (Void)



ANSI 04 Vertical Penetration, ANSI 05 Structured Parking or ANSI 05 Open To Below (Void)

**Illustration B-8:** This is an example of common adjacencies in a standard floor plan with regard to area line placement when creating space boundaries.



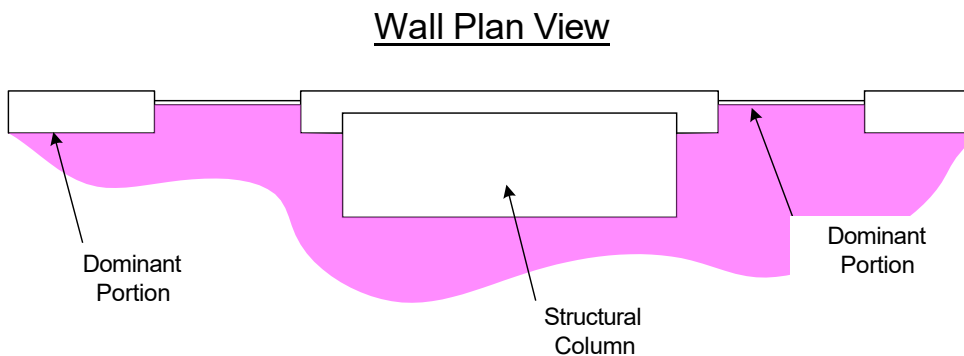
## Unique Cases

The following unique cases are treated as exceptions to the criteria defined in this section.

### Excessive Column Sizes

If the perimeter columns are greater than 25 square feet, whether due to the era of construction or seismic upgrades, the Dominant Portion is defined as the finished surface of the column enclosure and area lines are drawn to include the area of the columns with the Construction area. This exception applies only to columns at the outer perimeter of the building.

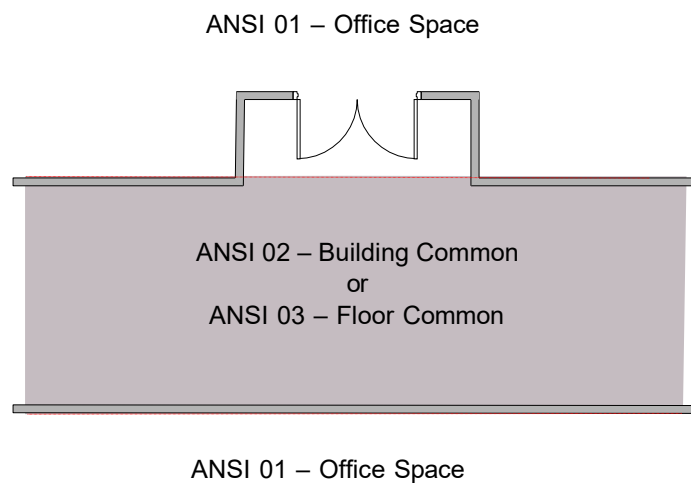
**Illustration B-10 (Wall Plan View):** Example of a wall plan view showing placement of area lines to demonstrate Dominant Portion interrupted by a structural column.



### Alcoves and Recesses

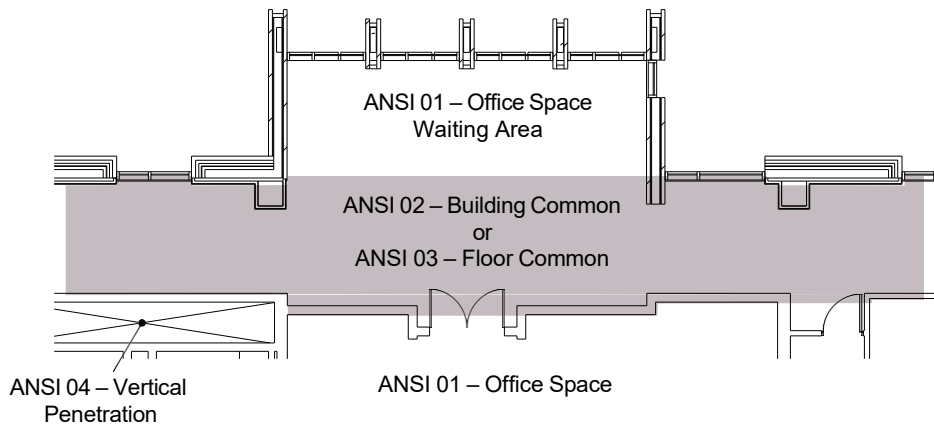
If occupant entries are recessed from the corridor, creating an alcove or recess (typically to accommodate the swing of the entry door), the area lines are drawn to continue straight across the recess and to include the area of the recess with the assigned occupant space.

**Illustration B-11 (Plan View):** If an alcove or recess exists from the common corridor, the area line is drawn straight across so the area of the recess is included in the occupant space.



**Illustration B-12 (Plan View):** If a recess exists from the common corridor, the area line is drawn straight across so the area of the recess is included in the occupant space.

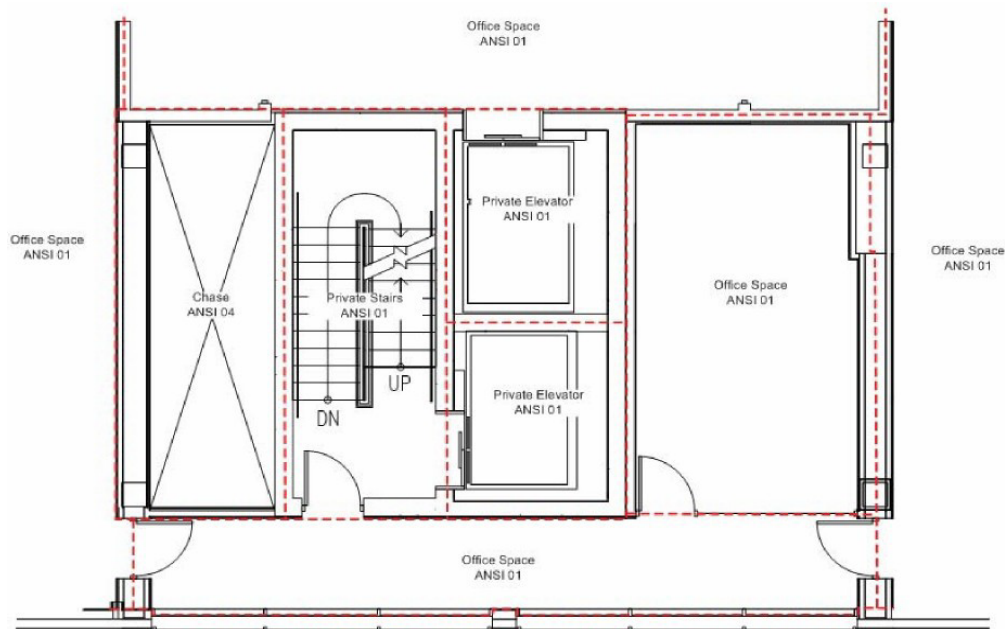
**Note:** Public Waiting Areas are frequently found in Courthouses. They are assigned to the tenant under the following conditions: if they are architecturally distinct such as a recessed or alcove area or if features and/or other fixtures are added that make the space distinct and distinguishable or exhibit some control by the tenant, or Public Waiting Areas are called out in the tenant's Program of Requirements. Contact your regional SDM team for more information.



### Private Stairs and Elevators

Private stairs and elevators are classified as ANSI 01–Office Space and treated as ANSI 04–Vertical Penetrations. They typically include the enclosing walls unless the adjacent space is also ANSI 04–Vertical Penetration. The resulting spaces are then assigned to the occupant as Tenant Floor Cut (TFC).

**Illustration B-13:** The area lines for private stairs and private elevators are drawn the same as for public stairs and public elevators.



## C. Examples of Special Architectural Situations

### Areaway

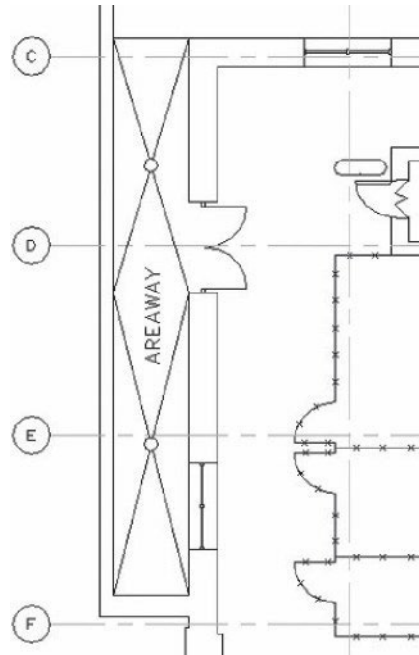
Many Federal buildings have areaways. They are small sunken areas that allow access or light and air to basement doors or windows.



Example of an unenclosed areaway.

If this areaway were covered with steel grating, it would still be considered unenclosed.

If this areaway were covered with steel panels and/or a door or a roof, it would be considered enclosed and it would be included in the Gross Area.



Example of a floor plan showing an areaway.

Initially it may appear the areaway is part of the total constructed area of this building.

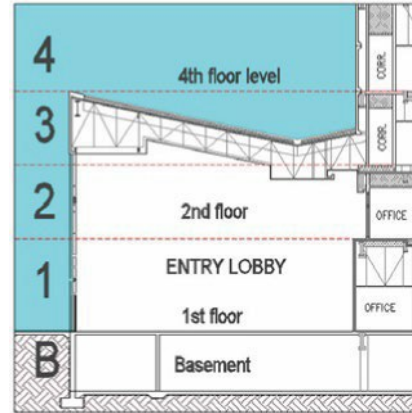
However, since the areaway is not enclosed and is open to the sky, it must not be included in the Gross Area.

## Atriums, Enclosed Courtyards, Lobbies, and Voids

The following examples give a pictorial view of what these spaces may look like and how these types of spaces can be treated. Other names for these types of spaces include: central hall with skylight, enclosed courtyard, court, quad, large interior patio, quadrangle, open space, or gallery.



Example of a lobby entrance with an atrium.



Drawing section of the picture above:

- B** = Basement
- 1** = Ground floor entry lobby (CRH)
- 2** = 2nd floor atrium (OTB)
- 3** = 3rd floor atrium (OTB)

*(B and 1 are included in Gross Area) (2 & 3 are excluded from Gross Area)*

**4** = Exterior of the building and not included in Gross Area.



Example of an enclosed courtyard. If used by one occupant, the 1st level is assigned TTO, while the 2nd and 3rd floors would be assigned as TFC. If used by all the occupants, the 1st level is assigned CRH, while the 2nd and 3rd floors would be assigned as OTB.



Example of a skylight above an enclosed courtyard.

## Atria, Enclosed Courtyards, Lobbies, and Voids (continued)



Example of an entry lobby with atrium, sloped walls, and structural columns. Floors above the lowest-level entry lobby would be measured as if the slab exists and excluded from the Gross calculation.



Example: View looking up through an atrium to skylight. Balconies in this Common area are included in the Gross calculation as CRH because they exist within an enclosed space.



## Attic Space and Restricted Head Room

Attic space is usually found in historic buildings with hip roofs. Attic space can be Rentable area if it meets the requirements of a typical office floor.

**Note:** If attic space is built out as office space (TTO), it must be named OFFICE. If attic space is built out as storage, it must be named STORAGE. Use the room name ATTIC SPACE only when the space is Unmarketable UFO space.



Example of a building that has attic space.

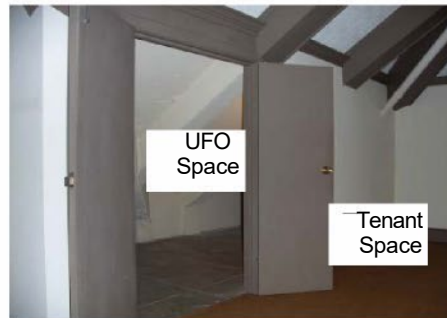


Example of a building that has no attic space. This is a roof with a mechanical penthouse.



Example of attic space.

This attic space has been built out as rentable office space. The tenant space begins where the finished wall meets the sloped wall.



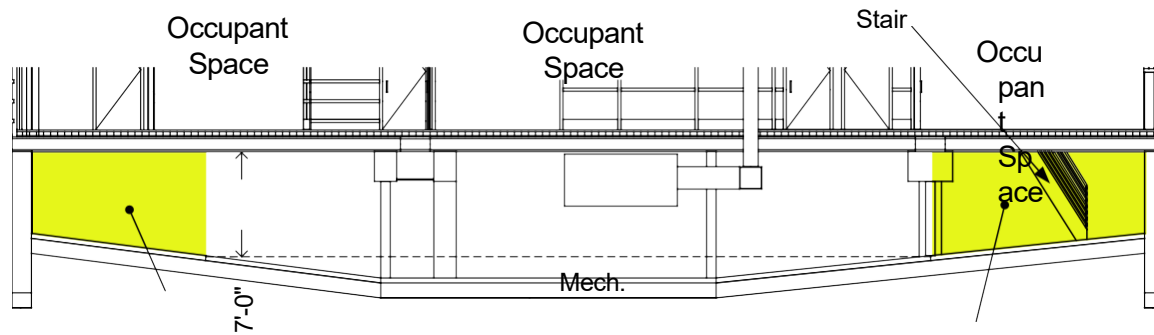
Example of attic space that has been built out as rentable office space. The tenant space begins where the finished wall meets the sloped ceiling.

The doors lead into a space that is actually Unsuitable for Occupancy (UFO). The UFO space goes to the exterior of the building to line up with the Dominant Portion of the floor below.



Example of unfinished attic space. This space is included in the Gross Area.

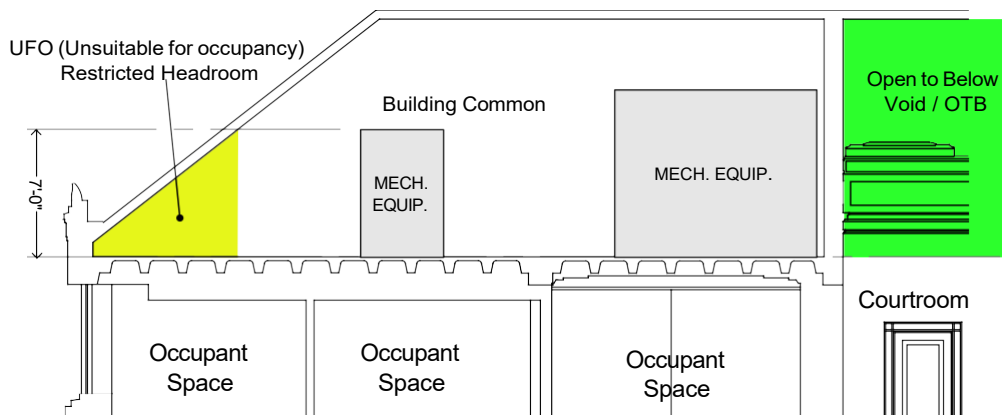
**Illustration C-1:** This is an example of a space with restricted headroom. Restricted headroom is less than 7 feet high; more than 7 feet is assignable.



UFO (Unsuitable for occupancy)  
Restricted Headroom

UFO (Unsuitable for occupancy)  
Restricted Headroom

**Illustration C-2:** This is an example of a sloping enclosure with restricted headroom. The yellow shaded area is UFO (Unsuitable for Occupancy). The areas that do not have coloring are assignable space.

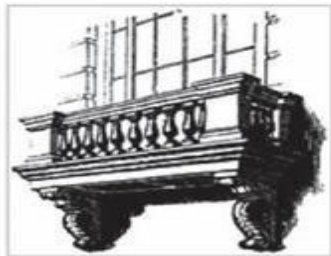
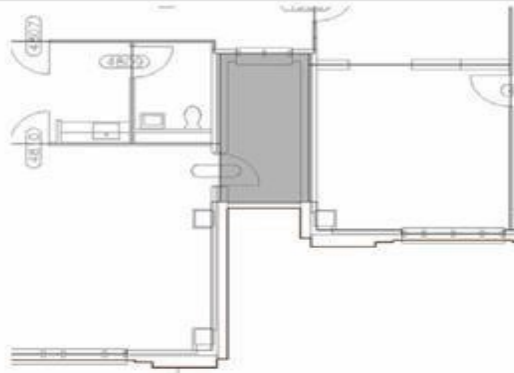
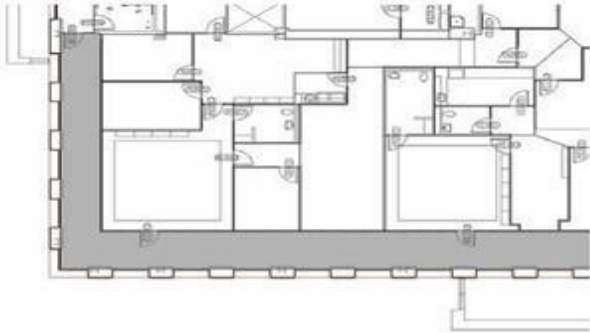


**Note:** If an occupant can make use of **Unsuitable for Occupancy** space, it cannot be assigned as UFO. In other words, if a space is being used by an occupant or for building support services it cannot be UFO and should be assigned the appropriate Usable classification. When space is less than 7' high *and* is Nonassignable (unusable), then it can be assigned as UFO.

## Balconies and Terraces

PBS includes occupant or multiple occupants covered balconies when calculating the Gross Area. They must have a slab or roof above and a slab or foundation below, and they must be within the building line. For exceptions or determinations, contact the Central Office SDM Team.

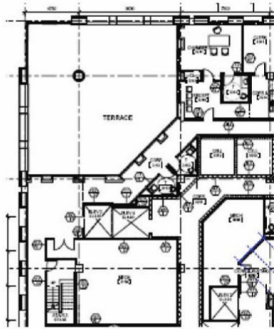
**Balconies are highlighted in grey on floor plans below:**



## Balconies and Terraces (continued)



Partially covered upper-level terrace used as a Seating area for a Joint Use cafeteria. In this example, the terrace would be included in the Gross Area.



The diagram on the left shows a terrace that is within a tenant's space and was designed and used by one tenant. This terrace would be included in the Gross Area.

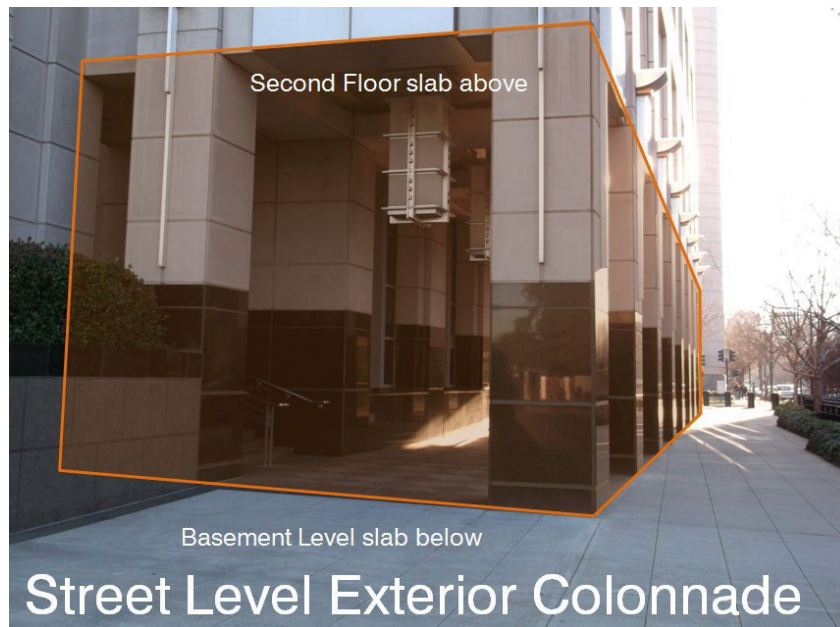


An example of covered balconies which would be included in the Gross Area.

Note they have a slab and are covered above.

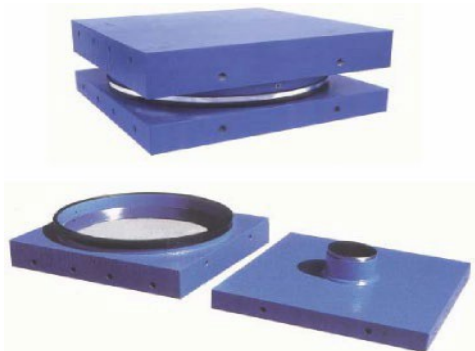
## Colonnades

Colonnades such as the one depicted below are not part of the Gross Area due to the substantial cost to build out.



## Base Isolation Systems

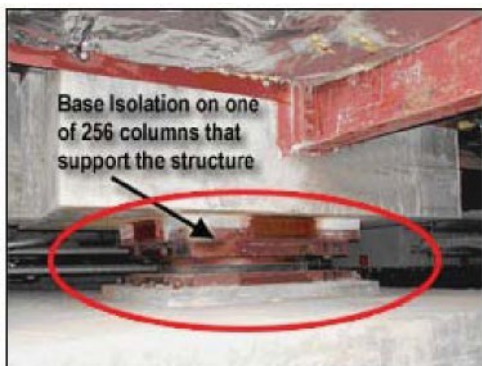
Base isolation systems are located in the sub-basement or crawl space of a building. Unexcavated crawl space is not included in the Gross Area calculation unless it contains a base isolation system.



Picture of a base isolation system.

Base isolation is a structural system that literally isolates the base of the foundation from the top or the rest of the buildings with a ball- or socket-type connection made of incredibly high-strength steel and Teflon so it can slide.

## Base Isolation Systems (Continued)



In 1993, the San Francisco Court of Appeals Building was seismically retrofitted to make the building more earthquake-resistant by using an innovative technique called base isolation.

All 256 columns were sliced through, and this connection was inserted. This system allows the building to move as a single unit in an earthquake.



Exterior view of the Pioneer Courthouse being retrofitted with a base isolation system.



Interior view of the base isolation system being installed at the Pioneer Courthouse.

This illustration shows the removal of dirt under the existing building to install the base isolators.

## Exterior Structural Bracing and Columns

Many Federal buildings have exterior structural bracing. Sometimes it is part of the building's original design and sometimes it is added later as part of a seismic upgrade.



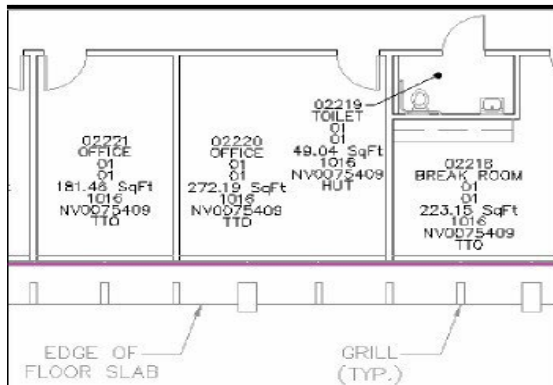
Example of an older building with exterior structural bracing added to improve earthquake resistance.

The square footage covered by this bracing is not included in the Gross Area.



Example of exterior structural bracing that is part of the building's original design.

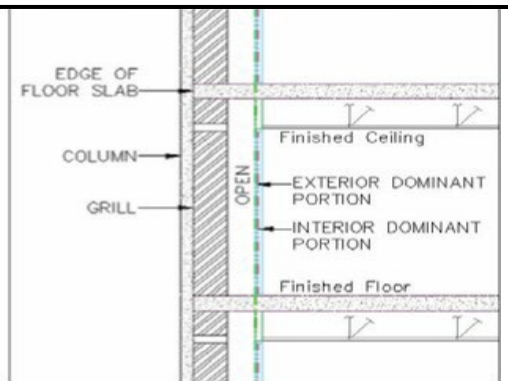
The square footage outside the window wall is not included in the Gross Area.



Second floor plan of building above.

The magenta line shows the floor boundary. The floor boundary for the typical floors is located at the window wall, not at the edge of the floor slab, grill, or exterior columns.

**Note:** The column is not part of the shell wall. It is actually outside the floor boundary line and is not included in the Gross Area.



Recessed curtain walls. The curtain wall in the drawing above is termed a "grill." Curtain wall is a type of building facade that has no or structural function.

The floor boundary for the first and second floors is located at the window wall, not at the edge of the floor slabs or exterior structural bracing.

**Note:** The column is not part of the shell wall. It is actually outside the floor boundary line and is not included in the Gross Area.



Exterior structural bracing. Part of the building's original design acts as a design feature as well as a structural component.

The columns are structural and the lattice work or grill between columns is decorative and not structural.

## Façade Elements

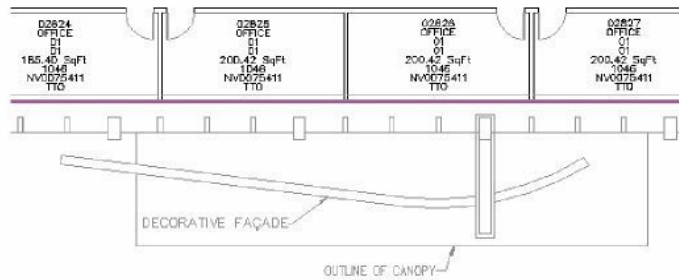
Any Federal building can have façade elements that are either part of the building's original design or added later as part of a building renovation.

These façade elements are not included in the Gross Area calculation because they are outside the building line.



Façade element added as part of a building renovation. It is purely a design feature and has no structural importance. Façade elements are not included in the Gross calculation.

Below is the second-floor plan of the building on the left. The magenta line shows the floor boundary.



South side of the San Francisco Federal Building sheathed with an undulating, perforated metal screen.

Items such as sunscreens and scrims are not included in the Gross calculation. The floor boundary is defined by the all-glass building wall.



North side of the San Francisco Federal Building. This façade element is not included in the Gross Area.

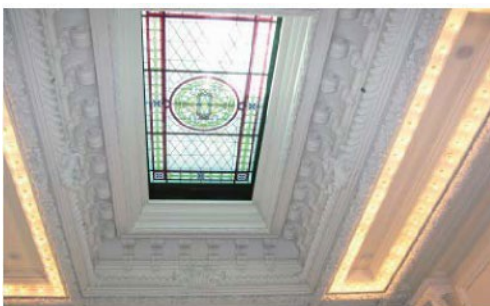


## Skylights and Light Wells

Many Federal buildings have skylights as an architectural element. However, in some buildings, skylights can be a complicated assignment if they occur in space on different levels, raising the question of whether they are tenant floor cuts.

A light well shaft within a building that is open to the outside at the top to allow daylight and fresh air through windows set into the sides of the shaft is not included in the Gross Area calculation when it is open to the sky above. However, when the light well shaft is enclosed by a skylight, it is included in the Gross Area calculation.

Federal buildings can contain a specialized form of light chamber/skylight architectural arrangement in which there is a room (such as a courtroom) which has a skylight in the ceiling that opens to another room above, which is used exclusively to augment or enhance natural sunlight from above or outside. There are also situations in which the skylight is actually on the roof and not in the ceiling. Such spaces are sometimes annotated as a clerestory.



A typical skylight in a courtroom of a historic building. It may appear that this skylight is open to the sky above and is illuminated by natural sunlight.

See photograph to the right for what is actually above this skylight.

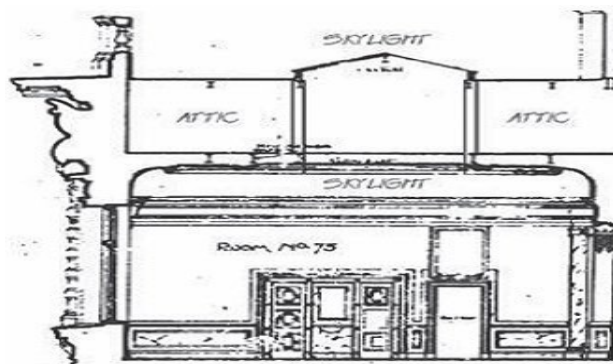


A specialized light chamber/skylight sometimes found above a courtroom or any other type of room. This type of space is known as a "light well" or "light chamber".

This room is included in the Gross Area and is assigned to the occupant as TFC.



Clerestory: If a clerestory is penetrating through the roof, it is a Void. This is labeled with text on the construction drawings as clerestory above a special-proceedings courtroom.



A specialized skylight found above a conference room. The skylight in the ceiling of Room No. 75 receives light from a skylight mounted on the roof of Unmarketable attic space and does not penetrate any Rentable area. This enclosed light chamber skylight is not included in Gross Area and would be a Void.

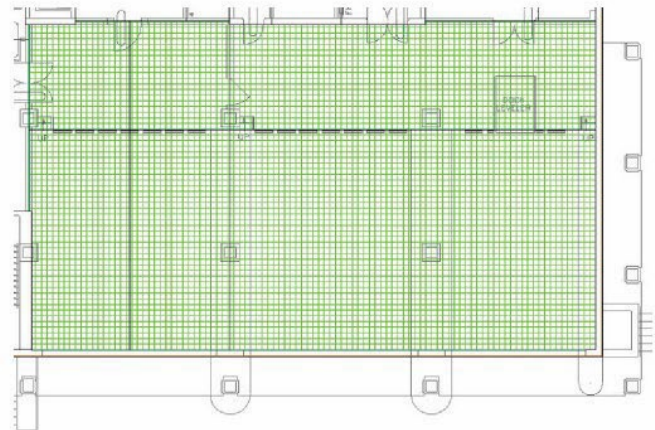
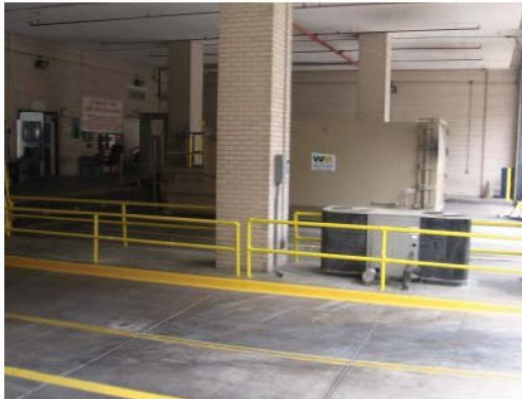
## Loading Docks

Receiving areas, such as loading docks within the building line, should be included in the Gross Area calculation. Any part of a loading dock that is outside the building line is excluded from the Gross Area.

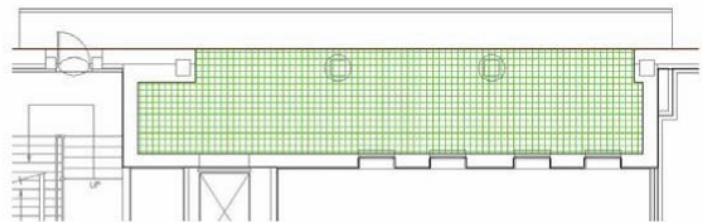
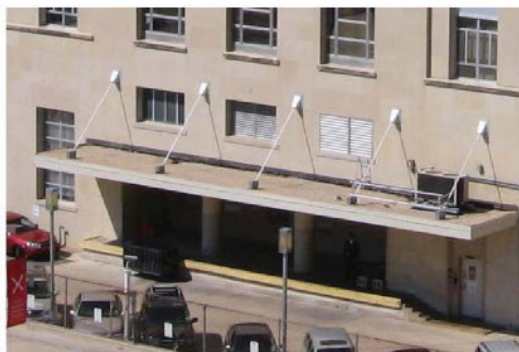


The area in front of an enclosed loading dock platform is known as the truck maneuvering area and is assigned with the loading dock space.

Even if there was no roll-up door, this space would be assigned as loading dock because it is within the building line.



The loading dock pictured below is covered. However, not all of the loading dock is included in the Gross Area of the building. Only the area that falls within the building line is counted as square footage in the building; therefore, the portion under the overhang is not included in the Gross Area of the building.



## Parking Ramps

Enclosed vehicular ramps leading into parking levels are included in the Gross Area. There may be a roll-up door where the ramp enters the building.

A fully enclosed vehicular ramp leading to or inside Structured Parking that fits the requirements of a vertical penetration is considered a Vertical Penetration and named RAMP.

If an enclosed vehicular RAMP does not go from one level to another level, it is part of the Structured Parking. Sometimes ramps only go a few feet to a slightly higher or lower part of a parking level. In these cases, it is not a full floor height change. Just like a stair, it needs to go from one level to another level to be CRV, not a few feet.

## Rooms with Structural Bracing

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Example of an exterior parking ramp. On the outside of the roll-up door (photo shown), the unenclosed ramp is not included in the Gross calculation.

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These rooms are less-than-ideal spaces, and other times these rooms are adequate for occupancy.

The ANSI/BOMA guidance regarding columns is, “No deduction shall be made for columns and projections necessary to the building.” PBS considers structural bracing to be a column or a projection necessary to the building that is included in Gross Area as rentable.

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Space with a structural brace. This room meets the requirements of Assignable Space and is assigned as TTO.



Space with a structural brace. This room is basement storage that is built out and is assigned as GNS.

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## D. Glossary and Acronyms

<b>Amenity</b>	A space that provides comfort, convenience, or pleasure.
<b>ANSI</b>	American National Standards Institute
<b>Area Line</b>	A line segment that divides two adjacent spaces.
<b>Areaway</b>	Small sunken areas that allow access or light and air to basement doors or windows.
<b>Attic</b>	A space immediately below the roof of a building.
<b>Atrium</b>	A public space typically associated with the entrance of a building, usually a monumental architectural glass wall that is often different in design from the body of the building, extends several stories, has skylights or a glass roof, and/or has open balconies on the upper stories to facilitate increasing the amount of natural light into the space—a building trend established around 1985.
<b>BIM</b>	Building Information Modeling
<b>BOMA</b>	Building Owners and Managers Association International
<b>Building Common Area</b>	Areas that provide services or circulation to all building occupants.
<b>Building Line</b>	The exterior surface of the building that provides (full or partial) enclosure with a slab or roof immediately above and a slab or foundation immediately below.
<b>CAD</b>	Computer Aided Design
<b>CAFM</b>	Computer Aided Facility Management
<b>Circulation</b>	The areas on a floor necessary for access to egress stairs, elevator lobbies, public toilets, refuse area, building lobbies, and entrances. It is based on the actual layout of a floor and may vary over time or as space configurations change, and from floor to floor depending on the number of occupants on a floor.
<b>Clerestory</b>	A clerestory is an upper portion of a wall containing windows for supplying natural light to a building.
<b>Closed Polygon</b>	A polygon is a two-dimensional shape that is bounded by a closed path and composed of a finite sequence of straight- and curved-line segments. These segments are called “edges,” and the points where two edges meet are the polygon's “vertices” (singular: vertex). A polygon's area determines the Usable SF, which is the basis for the rent bill.
<b>Common Area</b>	Common area is defined as the area(s) of the building that provide services, support, or horizontal circulation to building occupants.
<b>Community</b>	A group of Federal buildings within a specific geographic area.
<b>Community Joint Use</b>	Amenities such as childcare centers or cafeterias housed in one building and available to occupant agencies in neighboring buildings.
<b>Construction Area</b>	The thickness of the outside wall measured from the interior dominant vertical portion to the exterior dominant vertical portion of the building.

<b>Crawl Space</b>	Horizontal access space: a low unfinished space under a floor or above a ceiling in a building that gives access to plumbing, wiring, and ductwork.
<b>Dominant Portion</b>	ANSI/BOMA defines it as the portion of the inside, finished surface of the permanent, outer, building wall, which is 50% or more of the vertical floor-to-ceiling dimension at the given point being measured as one moves horizontally along the wall.
<b>Excluded from Gross</b>	Space category associated with space type Open to Below (OTB) or Voids
<b>External Circulation</b>	Typically found in warm climates, these are partially enclosed walkways which function as multi-occupant corridors only when there is no fully enclosed means to provide access to or egress from the offices or wing of a building. Refer to ANSI-BOMA 2010 for more complete description and examples.
<b>Finished Surfaces</b>	A wall, ceiling, floor, or surface, including glass, as prepared for occupant use, excluding the thickness of any special surfacing materials such as paneling, furring strips, and/or carpet.
<b>Floor Boundary</b>	An enclosed area that defines a floor.
<b>Floor Common Area</b>	Areas that provide services or circulation to occupants on that floor.
<b>Floor Plan</b>	An electronic or paper drawing of a horizontal section of a building at a given level.
<b>Fully Enclosed</b>	A space with four walls, a ceiling, and floor that is protected from outside elements. Also known as “Enclosed.”
<b>Gross Area</b>	This is the total floor area contained within the measure line, generally the outside surface of the exterior enclosure of a building. In other words, it is the total constructed area of a building; it is the sum of all spaces on all floors of a building measured to the exterior enclosing walls.
<b>Gross Measured Area</b>	All spaces within the interior dominant portion of the building minus from Construction space.
<b>GSA</b>	General Services Administration
<b>Hip Roof</b>	A roof with sloping ends or sides.
<b>Interstitial Space</b>	An intermediate space located between regular-use floors.
<b>Joint Use Space</b>	Shared amenities in a building available for use by all occupants of that building or facility.
<b>Judge’s Chambers Suite</b>	Included in the chamber’s suite are the judge’s private office, conference room, corridors, reception, office, closets, private toilet, judges’ libraries, law clerk offices (when part of the judge’s chambers), service unit, and secretarial area.
<b>LEED</b>	Leadership in Energy and Environmental Design (LEED) is a rating system devised by the United States Green Building Council (USGBC) to evaluate the environmental performance of a building and encourage market transformation towards sustainable design.
<b>Lobby Mezzanine</b>	Space used as an entranceway or foyer in a building. An intermediate or partial floor between two main floors of a building, it often projects in the form of a balcony, corridor, or similar feature.

<b>Nonassignable Space</b>	Unmarketable, measured areas within a building.
<b>Occupant</b>	Interchangeable with Tenant, the person or persons who occupy and use the space in either federally owned or leased buildings.
<b>Partial Floor</b>	A feature commonly associated with atriums or voids, it refers to space in a floor that is missing, where a floor would be expected due to empty space created by an atrium or void.
<b>PBS</b>	Public Buildings Service
<b>PBS Specific</b>	A space category PBS has devised for addressing Unmarketable areas of a building.
<b>PMO</b>	Property Management Office
<b>Portfolio Lease</b>	The Pricing Desk Guide defines this as a type of rental contract in which the leased space is priced as federally owned space using fair annual rent appraisals. (Link to the Pricing Desk Guide is in References section of this document.)
<b>Rentable Area</b>	The total amount of space an occupant can occupy or use within a building and the respective share of Common Area related to the Usable area.
<b>RPAM</b>	Real Property Asset Management
<b>SDM</b>	Spatial Data Management
<b>Service Area</b>	Areas of a building that provide services (mechanical and equipment rooms, lobbies, building storage, etc.) that enables occupants to work in a building. Without service areas, it is impossible to accommodate occupants within a building without violating existing building codes and/or occupancy controls.
<b>Service Unit</b>	A service unit has upper and lower cabinets, a refrigerator without water or an ice maker, sink with disposal, and a microwave.
<b>Shell</b>	Due to length of definition, refer to the PBS Pricing Desk Guide for definition of shell. (Link to the Pricing Desk Guide in References section of this document.)
<b>Skylight</b>	An overhead window, usually on a roof, that admits daylight.
<b>Space Boundary</b>	A sequence of straight and or curved line segments creating a Closed Polygon. Space Boundaries are a standard component of most CAD software programs, as well as a basic concept of real estate space assignment.
<b>Special Space</b>	This term is found various places, such as the Standard Form 81 (SF-81), Request for Space form. It refers to space that has unique architectural/construction features, requires the installation of special equipment or requires varying sums to construct, maintain and/or operate as compared to office and storage areas. SDM defines all the spaces encompassed by the term through the use of specific space types defined in this document.
<b>Substantial Completion</b>	“Substantial completion” and “substantially complete” mean that the work, in the common and other areas of the building, and all other things necessary for the Government’s access to the premises and occupancy, possession, use and enjoyment thereof, have been completed or obtained, excepting only such minor matters as do not interfere with or materially diminish such access, occupancy, possession, use or enjoyment. (Excerpt from the General Services Administration Acquisition Manual (GSAM)).

<b>Tenant Floor Cut</b>	An opening in a floor above an occupant's finished floor designed for or used by a specific occupant, such as an upper level of a double-height courtroom. The floor cut eliminates otherwise Usable space. BOMA defines a tenant floor cut as an occupant void.
<b>Unexcavated Space</b>	Space that has not been constructed or built-out for occupant use.
<b>Unmarketable Space</b>	Space that cannot be marketed to building occupants.
<b>Unsuitable for Occupancy</b>	Space in a building that cannot be used for or easily converted to Usable Space. Assigned due to spaces with conditions like low ceiling height, structural damage and/or hazardous conditions.
<b>Usable Area</b>	Spaces in a building that can be assigned to a specific occupant (Assignable Space) plus amenity areas (Joint Use Space). It includes the wall hierarchy as explained in this policy under Space Boundaries section.
<b>Vending</b>	Spaces where food and drink can be found for sale. The space may also include small seating area.
<b>Vertical Penetrations</b>	Openings that penetrate the slabs between floors for the use of supporting stairs, elevators, flues, pipes, and ducts, and it must be 9 square feet or greater.
<b>Void</b>	<p>Per ANSI/BOMA: "Absence of a floor within the exterior enclosure of a building in excess of 10 square feet (GSA-PBS uses 9 square feet or greater) where a floor might otherwise be expected or measured, that is typically in the plane of the upper floors adjacent to the following Nonassignable spaces: multi-story atria or lobbies, light wells, auditoria or the area adjacent to a partial floor, permanent mezzanine, or unclassified mezzanine at a given floor level. Voids are distinguished from major vertical penetrations as defined in ANSI/BOMA Z65.1-2010 in the following ways:</p> <ol style="list-style-type: none"> <li>1. Major vertical penetrations have a functional purpose, such as allowing passage of building services (HVAC ducts, flues, chutes, dumb-waiters, plumbing, electrical, etc.) or building access and egress (stairs, escalators, elevators, etc.), whereas voids only accommodate the need for certain spaces to be higher than adjacent floors.</li> <li>2. Major vertical penetrations are included in construction Gross Area and exterior Gross Area, whereas voids are excluded; and</li> <li>3. The areas of major vertical penetrations include their enclosing walls, whereas the areas of voids exclude their enclosing walls. If there is no enclosing wall between a void and an adjacent floor, the area of the void extends to the edge of such adjacent floor."</li> </ol>
<b>Wellness Rooms</b>	Spaces dedicated to the health and well-being of occupants in a building.

## E. Calculations

This section contains all calculations contained throughout the document. Refer to Diagram 1: PBS Space Assignment Diagram, for further information.

- $\text{Gross Area} = \text{Rentable Area} + \text{Nonassignable space} - \text{Open to Below (Void)}$
- $\text{Gross Measured Area} = \text{Gross Area} - \text{Construction}$
- $\text{Usable Area} = \text{Assignable space} + \text{Joint Use space}$
- $\text{Rentable Area} = \text{Common area} + \text{Usable area}$
- $\text{Rentable Area} = \text{Usable area} \times \text{Building R/U Factor (Load Factor)}$
- $\text{01-Office Area} = \text{Assignable space} + \text{Joint Use space}$
- $\text{Building R/U Factor (Load Factor)} = \text{Rentable Area} \div \text{Usable Area}$
- $\text{Nonassignable Space} = \text{Gross Area} - \text{Rentable Area} + \text{Open to Below (Void)}$



## F. Assignment Maintenance and Building Churn

After an IMV the building enters the GSA SDM inventory and moves into the maintenance phase. See [History and Evolution of SDM](#) and [Measurement Guidance](#) in this document for more information and note the following:

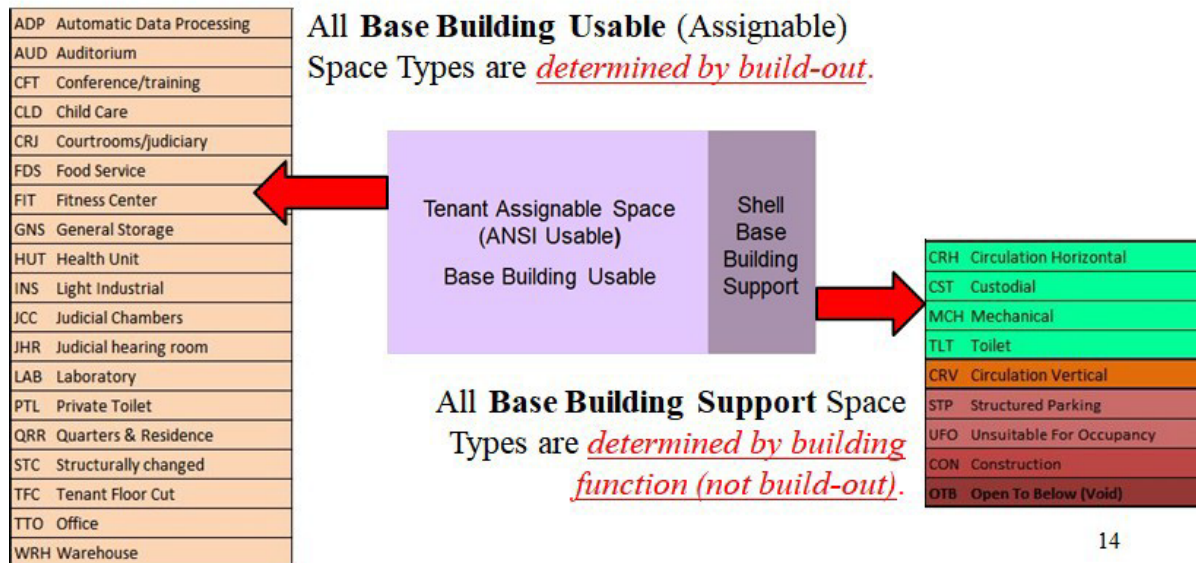
- Projects that include rearranging walls and changing the floor plan should be reviewed by the SDM team as early in the project as possible.
- Major remodels should be reviewed by SDM in the Design Phase to ensure NBSAP compliance and provide correct area calculations for Draft OAs.
- Often new designs will alter the R/U of a building by changing the amount of Common space.
- Assignment problems often occur when a design converts Common and Public space to Usable area, and vice versa.
- Common areas and Public vertical circulation spaces are fixed in a building and should not change constantly.
- Common types of space are not equal, nor should they be treated equally.
- Space should not move back and forth from Tenant to Shell. A certain amount of Shell space is needed for operational efficiency.

The table below provides assignment assistance; however, it is in the nature of office design and building maintenance to encounter problematic architectural situations which have to be resolved according to the projects and tenant's operational requirements.

Space Type	Description	Can be landlocked by Usable	Occupant can enter	Notes
CRH	Circulation Horizontal	Very rare	Yes	This can change as the layout of floor changes. Changing assignable space to CRH (and vice versa) is not really difficult.
CST	Custodial & some Property Management Offices (PMO)	Yes, sometimes	No	Custodial space generally does not change unless there is a substantial reconfiguration. Changing assignable space to CST is not easy.  PMO assigned 4762 is Usable space and easy to convert to tenant space.
MCH	Mechanical & BLDG Security	Yes, frequently	No	Unless there is a reconfiguration of space/walls creating a new floor layout mechanical room usually do not change. Considered a cost prohibitive design option. Mechanical space generally does not change. Changing assignable space to MCH is not easy.
TLT	Toilets (Shell)	Yes	Yes	A certain number of "floor common shell restrooms" are provided on every floor, just as a certain number of "building common shell restrooms" are provided in every federal building. Those shell restrooms remain Common even if they become landlocked by a tenant. Changing assignable space to TLT, and or vice versa, is not easy.
CRV	Circulation Vertical	Yes, frequently	Yes	Public elevators and public stairs should never change. Changing public CRV to private TFC is difficult and might be impossible due to shell and core requirements.

## G. Assign space by build out clarification

The first thing you need to think about when assigning space is not Space Type, but Space Classification in terms of being **Base Building Support** or **Base Building Usable**.



# Addendums

This section identifies the Addendums that are companions to this NBSAP policy. At this time there is only one Addendum. When any Addendums are published, they will be listed here so that the reader is aware of them and uses them as appropriate. They are not attached to this document so that both the Addendums and the NBSAP can be updated independently. GSA associates and external readers can use general SDM link in the reference section to see any Addendums as well as any Clarifications to this policy.

## 1. **Land Port of Entry (LPOE) Space Assignment Policy Addendum**

This document covers specific situations and spaces found only on LPOEs.



# References

## **PBS Spatial Data Management**

<http://www.gsa.gov/sdm>

## **Building Information Modeling (BIM) Guides**

<http://www.gsa.gov/bim>

- (1) BIM Guide 02, Spatial Program Validation

## **Building Owners and Managers Association (BOMA)**

<http://www.boma.org/>

- (1) Office Buildings: ANSI/BOMA Z65.1-2017, Standard Methods of Measurement
- (2) Gross Areas of a Building: ANSI/BOMA Z65.3-2018, Standard Methods of Measurement

## **Pricing Desk Guide**

<http://www.gsa.gov/rentpricingpolicy>

## **CAD Standards**

<http://www.gsa.gov/cad>

## **PBS Facilities Standard (P-100)**

[http://www.gsa.gov/pGood to go!100](http://www.gsa.gov/pGood%20to%20go!100)

## **U.S. Courts Design Guide**

<http://www.gsa.gov/courthouseprogram>

## **Land Ports of Entry**

<http://www.gsa.gov/lpoe>

**Note:** If a GSA URL changes or the link becomes unusable, use a text string search on <https://www.gsa.gov/> or another capable search engine.

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- The entire SDM community for their review and suggestions.
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