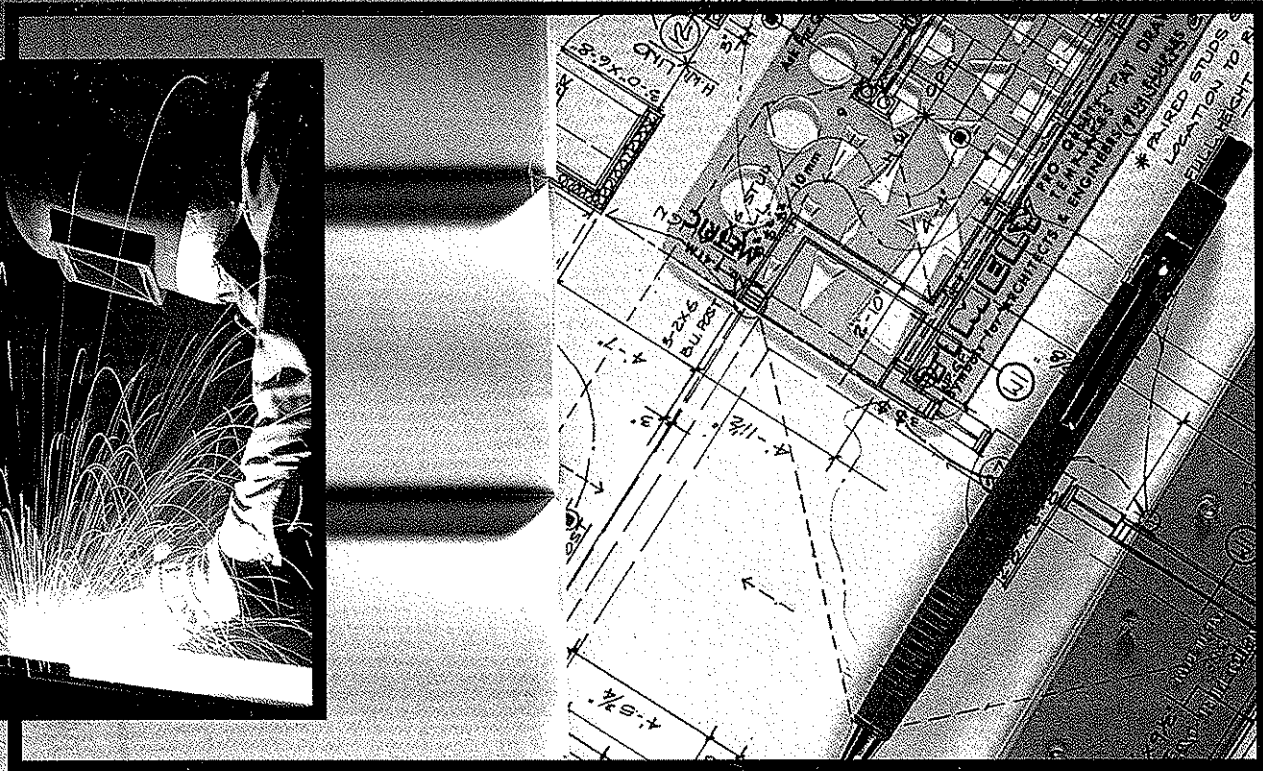




Standard Methods for Measuring Floor Area in

Industrial Buildings

BOMA International



Secretariat
Building Owners and Managers Association
(BOMA) International

SOCIETY OF INDUSTRIAL AND OFFICE REALTORS®

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FOREWORD

A standard's purpose is to permit communication and computation on a clear and understandable basis. Another important purpose is to allow comparison of values on the basis of a generally agreed upon method of measurement.

This Standard may be used to measure space in both existing and new industrial buildings. BOMA International and SIOR urge their members and other professionals in the industrial building industry to use the "Standard" to measure industrial space. The Standard is designed to be helpful when allocating building expenses to various cost centers, for comparing occupancy, and for benchmarking.

BACKGROUND

A portion of this Standard was borrowed from the March 1993 AIR Industrial Building Standards document. In 1999 the Board of Directors of AIR voted to make the original document available to BOMA and SIOR.

PREFACE

It is not uncommon for an area calculated from the building plans to differ from the area measured on site. It is also not uncommon for a site measurement and calculation by one party to differ from the same measurement and calculation by another party. The calculation for an area, resulting from site measurement by the building owner or manager, is deemed accurate if a re-measurement gives a result with a variance of two percent (2%) or less. If the variance is greater than two percent (2%), BOMA International and SIOR recommend that an unbiased, professional third party be sought to assist in resolving the matter.

BOMA recommends that when the occupancy of a building has 51 percent or more area devoted to offices the building owner/manager should utilize ANSI/BOMA Z65.1. When the occupancy of the building is 51 percent more dominated by non-office users (including ground floor retail) that the industrial standard be utilized.

Users of this Standard must clearly identify which measurement methodology is being employed - Exterior Wall (Method A - outlined in Section "A" on pages 5-15) or Drip Line (Method B - outlined in Section "B" on pages 17-27).

Introduction

This Standard is a voluntary standard that represents the dominant market practices observed in North America at the time of its publication.

The **Exterior Wall Methodology (Method "A")** described in this Standard originates from the need to measure fully enclosed industrial buildings that are typically heated or air-conditioned.

The **Drip Line Methodology (Method "B")** described in this Standard originates from the need in warm climates to measure industrial buildings that are essentially wall-less structures. The simplicity of this methodology has led to its application to some fully enclosed industrial buildings.

Building Common Areas:

Shall mean areas of the building that provide services to building tenants but which are not included in the Tenant's Area of any specific tenant. These areas may include, but shall not be limited to, corridors, the floor area interior atriums and enclosed walkways, lobbies, electrical vaults, electrical meter, garbage, telephone service, fire sprinkler valve and storage rooms and any other space used in common or for common benefit.

Columns:

As with ANSI/BOMA Z65.1 – No deductions shall be made for columns and projections necessary to the building.

Demising Wall:

Is any interior wall dividing one tenancy from another, Office Area from other areas, and/or Finish Mezzanine from Storage Mezzanine.

Drip Line:

Shall mean that point beyond the Exterior Wall lying within the same vertical plane as the outside edge of an overhang or portion of the building roof system.

Exterior Dimensions:

Are determined by measuring the distance from one Measure Line to the furthest Measure Line directly opposite.

Measure Line:

Are the lines that form the exterior perimeter for the building, used in determining Gross Building Area. The perimeter for the building is to be established in one of the two following ways: (Whichever method is utilized it must be clearly disclosed and identified.)

• Exterior Wall Methodology: (Method "A")

The Measure Line follows the Exterior Surface of each Exterior Wall of the Building and forms a perimeter for the building (See Section "A").

• Drip Line Methodology: (Method "B")

The Measure Line follows the most exterior Drip Line around the roof system of the building and forms a perimeter for the building (See Section "B").

Exterior Wall:

Refers to the outermost structural wall or architectural treatment which forms the external perimeter of the building.

Full Floor:

Is understood to be any floor of a building, other than a Mezzanine. The area for each Full Floor is determined by calculating the area inside the Measure Lines.

Gross Building Area:

The "Gross Building Area" of a building is the total area of all of the Full Floors of the building plus Rentable Mezzanine, based on the selected Measure Line methodology. If the Rentable Mezzanine includes any Storage Mezzanine area:

1. The exact square footage of the Storage Mezzanine area to be included must be clearly identified; AND
2. It must be clearly stated that the Storage Mezzanine area so identified is included as Rentable Mezzanine in the Gross Building Area.

Industrial:

Industrial real estate includes all land and buildings either utilized or suited for industrial activities. Industry is the gainful activity involved in producing, distributing and changing the form of raw materials, or of assembling components and parts, packing, warehousing, and transporting finished products. Therefore, industrial activities embrace all activities involved in production, storage and distribution of tangible economic goods rather than intangible services.

DEFINITIONS

Industrial Plant:

Refers to a single location where industrial operations are performed, including all fully-enclosed structures on the site provided all such structures are used for industrial activities. Fully enclosed accessory buildings such as power plants, repair shops, garages, warehouses, laboratories and other structures are considered part of the plant, again provided these are used primarily for such industrial activities and are included in the total floor area.

Major Vertical Penetrations:

Shall mean stairs, elevator shafts, flues, pipe shafts, vertical ducts, and the like, and their enclosing walls. Atria, lightwells and similar penetrations above the finished floor are included in this definition. Not included, however, are vertical penetrations built for the private use of a tenant and in excess to the existing Vertical Penetrations.

Mezzanines:

Are floor structures within the Exterior Walls capable of supporting offices, warehousing or manufacturing activities, as a function of load-bearing capacity and compliance with applicable building codes governing the purpose for which the Mezzanine was constructed.

Finished Mezzanine:

Refers to any portion of a Mezzanine which has either (i) been developed at least to the extent of the addition of the following improvements; or (ii) at least to the addition of the following list or other similar improvements:

- a) Frame and drywall partition fully separating the areas of the Finished Mezzanine from adjacent areas of the Mezzanine or the balance of the building, constructed at least to the height of an intersecting finished interior ceiling.
- b) Ducted heating and refrigerated air conditioning.
- c) Fully finished floor covering.
- d) Lighting at an intensity throughout of not less than 50 foot candles at desk height.
- e) Minimum electrical required by code for office use.

Rentable Mezzanine:

Is any Finished Mezzanine and/or Storage Mezzanine that is expressly agreed by the parties to be in the Gross Building Area.

Stand Alone Mezzanine:

Is any Finished Mezzanine and/or Storage Mezzanine that does not rest on any exterior wall.

Storage Mezzanine:

Is any Mezzanine constructed in accordance with applicable building codes, other than a Finished Mezzanine.

Office Area:

An area within the industrial building developed at least to the extent of the addition of the following improvements, or at least to the addition of the following list or other similar improvements, whether constructed on the ground floor or the Mezzanine:

- a) Frame and drywall partition fully separating the areas of the Office Area from adjacent areas of the industrial building, constructed at least to the height of an intersecting finished interior ceiling (not the underside of the exterior roof of the building).
- b) Ducted heating and refrigerated air conditioning.
- c) Fully finished floor covering.
- d) Lighting at an intensity throughout of not less than 50 foot candles at desk height.
- e) Minimum electrical required by code.

Rentable Area:

Comprises the Tenant's Area with its associated share of Common Areas.

Tenant's Area:

In the case of multiple occupancies, refers to an area measured for the purpose of calculating the RU Factor.

ANSI/BOMA Z65.1 (1996)

Users of this document are advised to consult ANSI/BOMA Z65.1 1996 for definitions of the following terms:

- R/U Factor
- Floor Rentable Area
- Floor Common Area
- Usable Area (Note: The interior face of the exterior perimeter walls is used instead of the Dominant Portion on fully enclosed buildings and a line parallel to the exterior face of exterior columns is used instead of the Dominant Portion on exterior wall-less structures.)

Determining the Area of an Industrial Building Using the EXTERIOR WALL METHODOLOGY

SECTION A

EXTERIOR WALL METHODOLOGY TO DETERMINE RENTABLE AREA IN INDUSTRIAL BUILDINGS

One Story Building

Single Occupancy

Rentable Area is the *Gross Building Area*.

Multiple Occupancy

Rentable Area is the *Tenant's Area* plus a proportionate share of *Building Common Areas*.

Multiple Story Building

Single Occupancy

An industrial building with two or more full floor areas (as distinct from a one-story building with a mezzanine). The *Gross Building Area* will be the sum of each *Gross Floor Area*.

Multiple Occupancy

A multi-tenant industrial building with two or more **Full Floor** areas (as distinct from a one-story building with a **Mezzanine**). The **Rentable Area** for each tenancy should be determined using ANSI/BOMA Z65.1-1996 using **Measure Line** to replace **Dominant Portion** to form the exterior perimeter of the building and in calculating *Gross Measured Area*.

Areas/Items to be Excluded in Floor Area Calculation (areas outside the Measure Line)

Projections beyond the **Measure Line** that do not extend vertically for the full floor height;

- Canopies and covered staging platforms;
- Unenclosed connecting links or area ways;
- Unenclosed exterior staircases or fire escapes;
- Exterior steps and landings if outside the "measure line"; and
- Unenclosed shipping/receiving platforms beyond the "measure line."

Special Conditions

- **Mezzanines**
The actual area of mezzanine floors may be excluded based upon the definition.

SECTION A

EXHIBIT 1

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE EXTERIOR WALL METHODOLOGY—ONE STORY, SINGLE OCCUPANCY

Determination of Areas

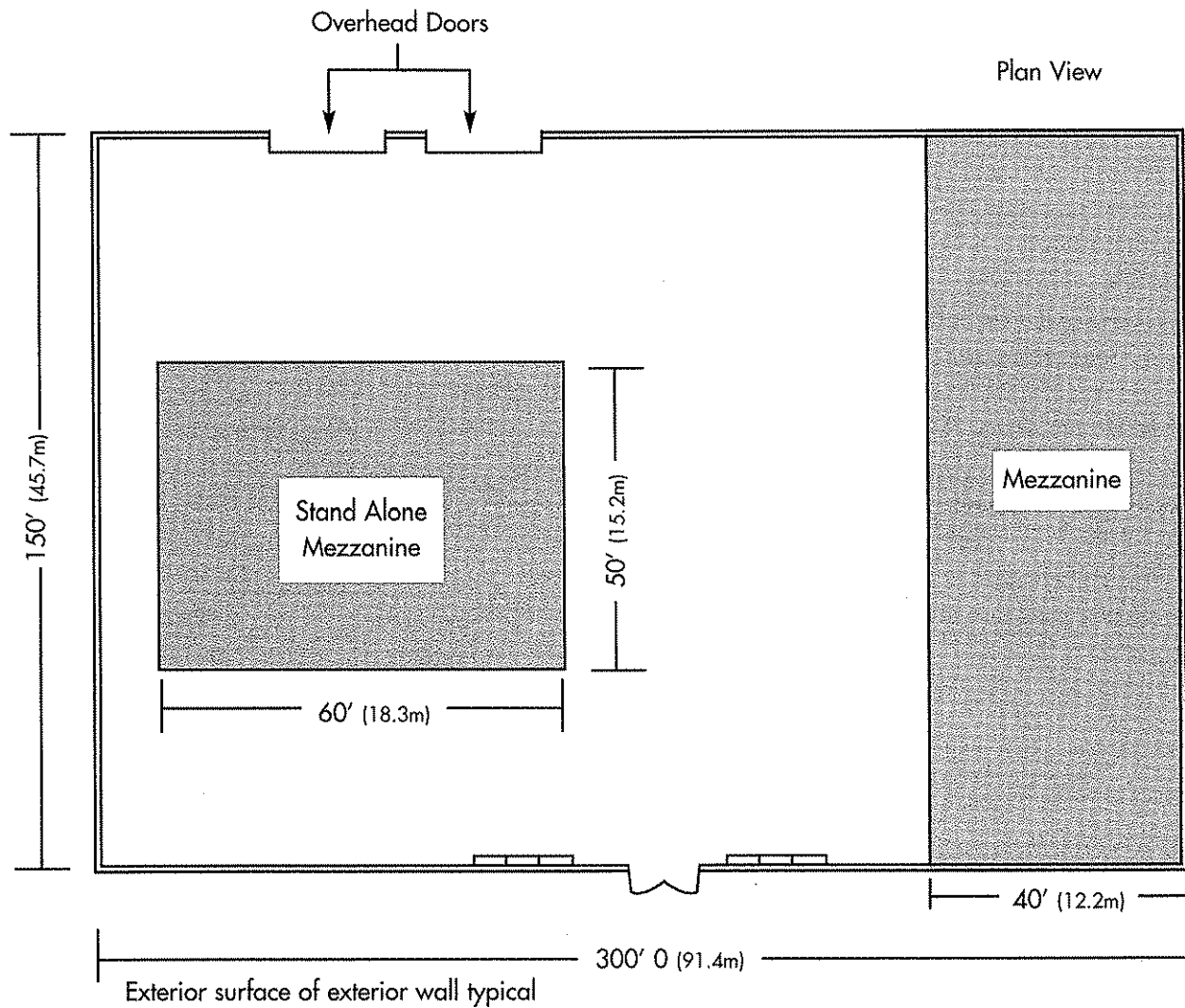
- *Full Floor* area of a one story, single occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the line of all the *Exterior Walls* of the building at floor level.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with an *Office Area*.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the face of an *Exterior Wall*.
- *Gross Building Area* of a one story, single occupancy building is the sum of the ground level *Full Floor* area plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*. The *Gross Building Area* is also the *Rentable Area*.

Calculation of RENTABLE AREA, ONE STORY, SINGLE OCCUPANCY

<i>Full Floor</i> Area, Ground level including <i>Office Area</i>	300' x 150' (91.4m x 45.7m)	=	45,000 SQ. FT.	(4180.5m ²)
Area of <i>Rentable Mezzanine</i>	150' x 40' (45.7m x 12.2m)	=	6,000 SQ. FT.	(557.4m ²)
Area of <i>Rentable Stand Alone Mezzanine</i>	50' x 60' (15.2m x 18.3m)	=	3,000 SQ. FT.	(278.7m ²)
<i>Gross Building Area = Rentable Area</i>		=	54,000 SQ. FT.	(5016.6m ²)

EXHIBIT 1

Determining **Rentable Area** in Industrial Building using the **EXTERIOR WALL METHODOLOGY**—
One Story, Single Occupancy.



SECTION A

EXHIBIT 2

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE EXTERIOR WALL METHODOLOGY-ONE STORY, MULTIPLE OCCUPANCY

Determination of Areas

- *Full Floor* area of a one story, multiple occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the line of all the *Exterior Walls* of the building at floor level.
- *Tenant's Area* is measured without their enclosing walls when sharing a wall with a *Major Vertical Penetration*; to the *Measure Line* in the case of the exterior wall; and to the centerline of the *Demising Wall* when sharing a wall with another *Tenant's Area* or a *Building Common Area*.
- *Building Common Area* is measured without their enclosing walls when sharing a wall with a *Major Vertical Penetration*; to the *Measure Line* in the case of the exterior wall; and to the centerline of the *Demising Wall* when sharing a wall with another *Tenant's Area* or a *Building Common Area*.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with another *Tenant's Area* and *Office Area*. The area of *Rentable Mezzanine* is added to each *Tenant's Area* on the basis of exclusive occupancy.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the face of an *Exterior Wall*. The area of *Rentable Stand Alone Mezzanine* is added to each *Tenant's Area* on the basis of occupancy.
- *Gross Building Area* of a one story, multiple occupancy building is the sum of the ground level *Full Floor* area plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*. The *Gross Building Area* is also the *Rentable Area*.
- *Rentable Area* of each tenant is the sum of its *Tenant's Area* on the *Full Floor* plus its *Tenant's Area of Rentable Mezzanine* plus its *Tenant's Area of Rentable Stand Alone Mezzanine* plus its proportionate share of the *Building Common Area*.

Calculation of RENTABLE AREA, ONE STORY, MULTIPLE OCCUPANCY

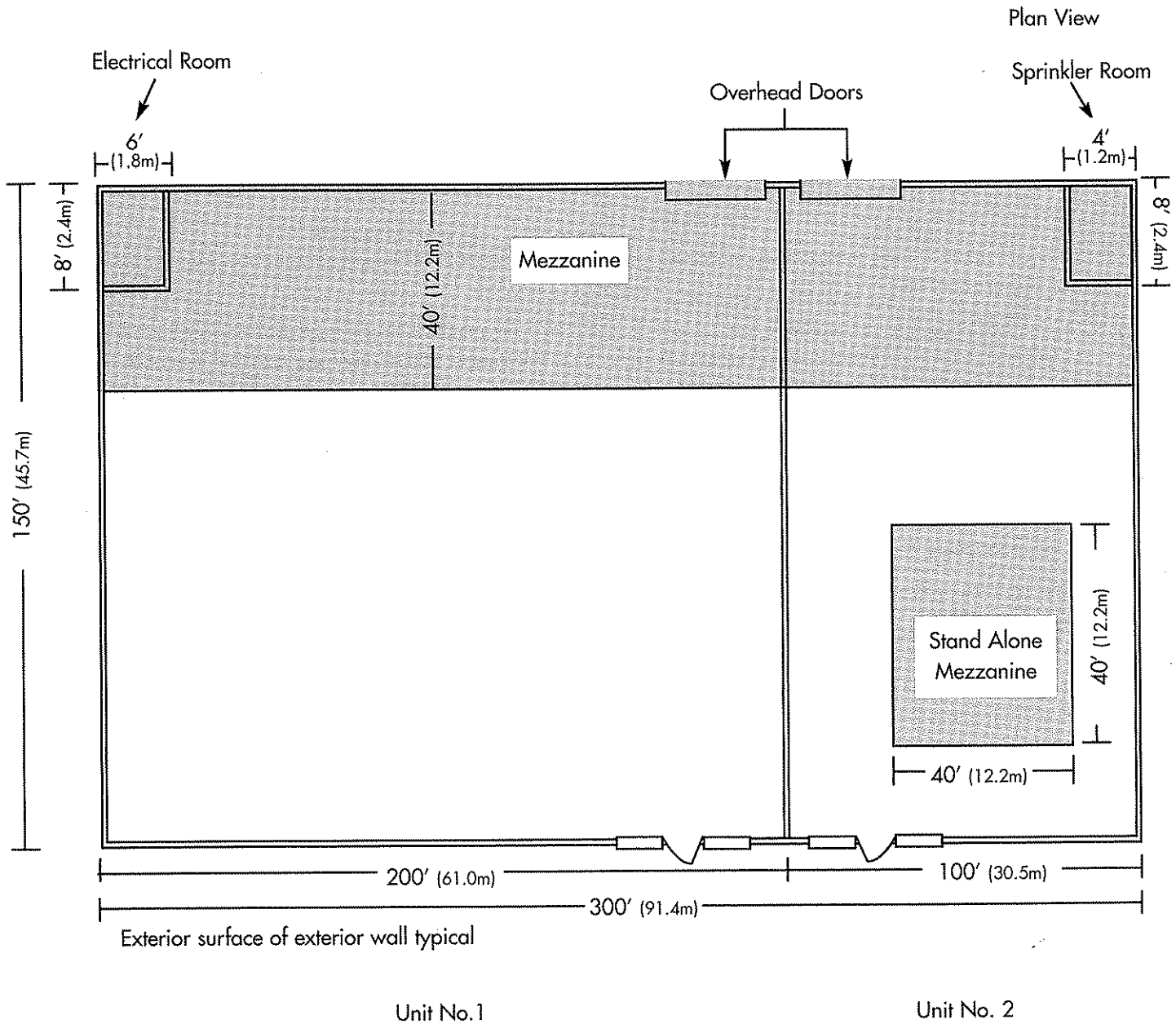
Full Floor Area, Ground level including Office Area		150' x 300'	(45.7m x 91.4m)	=	45,000 SQ. FT.	(4180.5m ²)
Total Rentable Mezzanine		40' x 300'	(12.2m x 91.4m)	=	12,000 SQ. FT.	(1114.8m ²)
Total Rentable Stand Alone Mezzanine		40' x 40'	(12.2m x 12.2m)	=	1,600 SQ. FT.	(148.6m ²)
Total Rentable Area				=	58,600 SQ. FT.	(5443.9m ²)
Full Floor Tenant's Area No. 1 including Office Area	[(150' x 200') (45.7m x 61.0m)] - [(6' X 8') (1.8m x 2.4m)]			=	29,952 SQ. FT.	(2782.5m ²)
Rentable Mezzanine Tenant's Area No. 1	40' x 200'	(12.2m x 61.0m)	=	8,000 SQ. FT.	(743.2m ²)	
Full Floor Tenant's Area No. 2 including Office Area	[(150' x 100') (45.7m x 30.5m)] - [(4' X 8') (1.2m x 2.4m)]			=	14,968 SQ. FT.	(1390.5m ²)
Rentable Mezzanine Tenant's Area No. 2	40' x 100'	(12.2m x 30.5m)	=	4,000 SQ. FT.	(371.6m ²)	
Rentable Stand Alone Mezzanine Tenant's Area No. 2	40' x 40'	(12.2m x 12.2m)	=	1,600 SQ. FT.	(148.6m ²)	
Building Common Area, Electrical room	6' x 8'	(1.8m x 2.4m)	=	48 SQ. FT.	(4.5m ²)	
Building Common Area, Sprinkler room	4' x 8'	(1.2m x 2.4m)	=	32 SQ. FT.	(3.0m ²)	
Total RENTABLE AREA		TENANT'S AREA				
RU Factor	=	58,600 SQ. FT. (5443.9m ²)	÷	58,520 SQ. FT. (5436.5m ²)	=	1.001367054
Total Tenant's Area No. 1	=	37,952 SQ. FT. (3525.7m ²)		X RU Factor 1.001367054		38,003.9 SQ. FT. (3530.6m ²)
						Rentable Area
Total Tenant's Area No. 2	=	20,568 SQ. FT. (1910.8m ²)		X RU Factor 1.001367054		20,596.1 SQ. FT. (1913.4m ²)
						Rentable Area

The application of the RU Factor to the *Tenant's Area* allows for a proportionate distribution of the *Building Common Area*.

SECTION A

EXHIBIT 2

Determining **Rentable Area** in Industrial Building using the **EXTERIOR WALL METHODOLOGY**—
One Story, Multiple Occupancy.



SECTION A

EXHIBIT 3

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE EXTERIOR WALL METHODOLOGY MULTIPLE STORY, SINGLE OCCUPANCY

Determination of Areas

- *Full Floor* area of a multiple story, single occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the line of all the *Exterior Wall* of the building at floor level. This measure is repeated for each additional *Full Floor*.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with an *Office Area*.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the face of an *Exterior Wall*.
- *Gross Building Area* of a multiple story, single occupancy building is the sum of the ground level *Full Floor* plus the *Full Floor* area of each additional floor plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*. The *Gross Building Area* is also the *Rentable Area*.

Calculation of RENTABLE AREA, MULTIPLE STORY, SINGLE OCCUPANCY

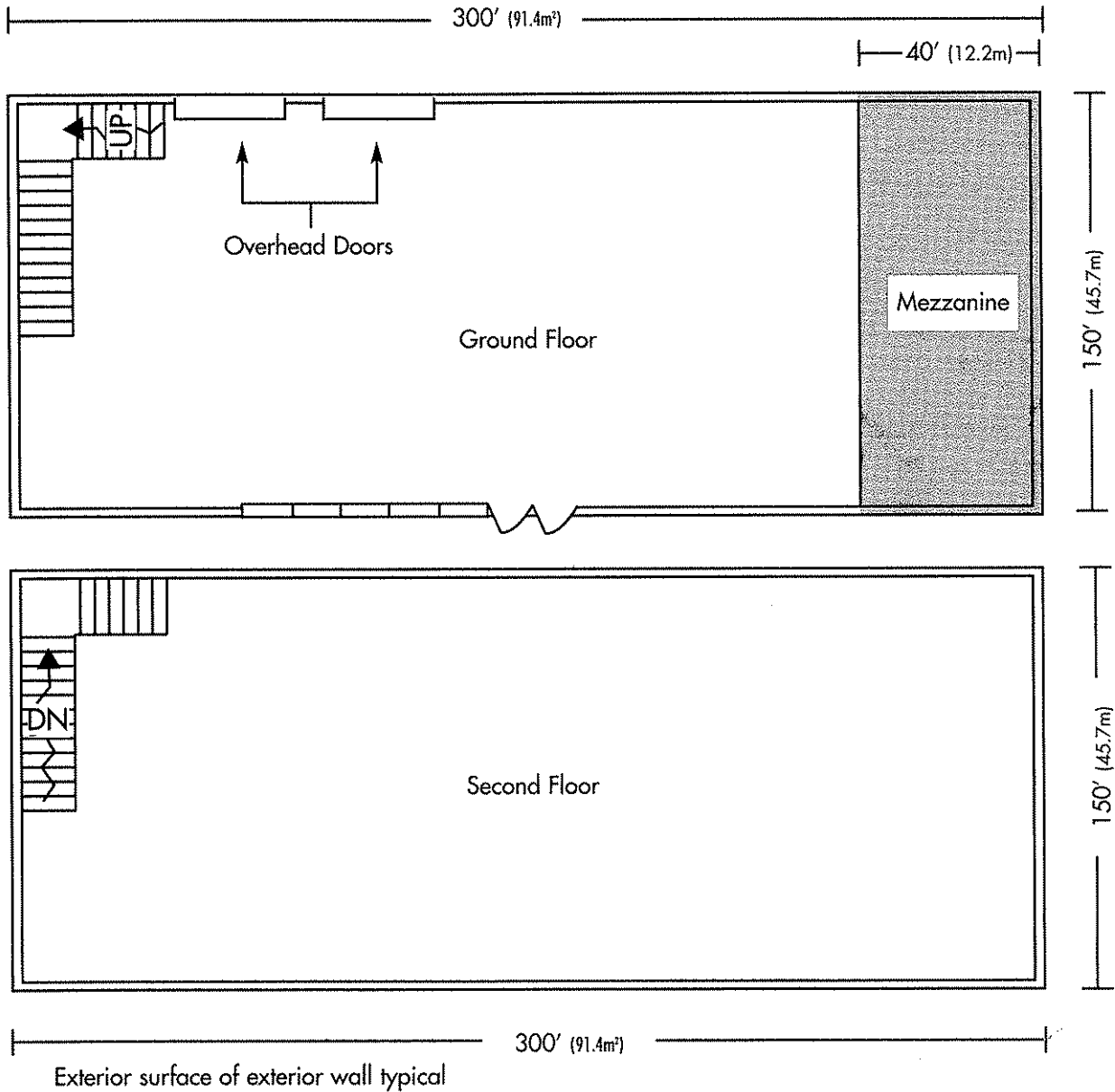
Area enclosed by Measure Line ground level	300' (91.4m) X 150' (45.7m)	=	45,000 SQ. FT. (4180.5m ²)
Area of Rentable Mezzanine	150' (45.7m) X 40' (12.2m)	=	6,000 SQ. FT. (557.4m ²)
Area enclosed by Measure Line second floor	300' (91.4m) X 150' (45.7m)	=	45,000 SQ. FT. (4180.5m ²)
Total Rentable Area		=	96,000 SQ. FT. (8918.4m ²)

SECTION A

EXHIBIT 3

Determining **Rentable Area** in Industrial Building using the **EXTERIOR WALL METHODOLOGY**—
Multiple Story, Single Occupancy.

Plan View



SECTION A

EXHIBIT 4

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE EXTERIOR WALL METHODOLOGY—MULTIPLE STORY, MULTIPLE OCCUPANCY

Determination of Areas

- **Full Floor** area of a multiple story, multiple occupancy building is measured by determining the area enclosed by the **Measure Line** such **Measure Line** following the line of all the **Exterior Walls** of the building at floor level and subtracting from this area the areas of **Major Vertical Penetrations**. This is repeated for each additional **Full Floor** and results in the determination of **Floor Rentable Area**.
- **Major Vertical Penetrations** are measured with their enclosing walls.
- **Tenant's Area** on each **Full Floor** is measured to the **Measure Line** in the case of the exterior wall and to the centerline of **Demising Wall** when sharing a wall with another **Tenant's Area**, **Building Common Area** or to the exterior face of the walls enclosing a **Major Vertical Penetration** or a **Floor Common Area**.
- **Floor Common Areas** are measured to the **Measure Line** in the case of the exterior wall and to the exterior face of the other walls enclosing them.
- **Building Common Areas** are measured as a **Tenant's Area**.
- **Rentable Mezzanines** are measured to the **Measure Line** on the side where the mezzanine is erected along the face of an **Exterior Wall**, and the end limits of the mezzanine floor on the interior sides or the centerline of the **Demising Wall** when sharing a wall with another **Tenant's Area**, **Office Areas**, or to the exterior face of the wall enclosing the **Floor Common Area**.
- **Rentable Stand Alone Mezzanines** are measured to the end limits of their floor, such limits not running along the face of an **Exterior Wall**.
- **Gross Building Area** of a multiple story, multiple occupancy building is the sum of the ground level **Full Floor** area plus the **Full Floor** area of each additional floor plus the total area of **Rentable Mezzanines** plus the total area of **Rentable Stand Alone Mezzanines**.
- **Rentable Area** of a tenant is the sum of that **Tenant's Area** on a (or many) **Full Floor** plus its proportionate share of **Floor Common Area** on that floor, plus that **Tenant's Area** of **Rentable Mezzanine** plus that **Tenant's Area** of **Rentable Stand Alone Mezzanine** plus the proportionate share of **Building Common Area** applied to all the previous areas.

Calculation of RENTABLE AREA, MULTIPLE STORY, MULTIPLE OCCUPANCY

Area Enclosed by Measure Line , Ground Level	150' (45.7m) x 300' (91.4m)	=	45,000 SQ. FT. (4180.5m ²)
Area of Rentable Mezzanine	40' (12.1m) x 300' (91.4m)	=	12,000 SQ. FT. (1114.8m ²)
Full Floor Area Ground Level		=	57,000 SQ. FT. (5295.3m ²)
Area Enclosed by Measure Line , Second Floor	150' (45.7) x 300' (91.4m)	=	45,000 SQ. FT. (4180.5m ²)
Minus Area of Major Vertical Penetration		=	1000 SQ. FT. (92.9m ²)
Full Floor Area Second Level		=	44,000 SQ. FT. (4087.6m ²)
Building Total Rentable Area		=	101,000 SQ. FT. (9382.9m ²)

To proceed further in allocating to each **TENANT'S AREA** its proportionate share of **FLOOR COMMON AREA** and **BUILDING COMMON AREA**, refer to ANSI/BOMA Z65.1 (1996).

- Identify for each floor and MEZZANINE its GROSS MEASURE AREA
- Identify for each floor and MEZZANINE its MAJOR VERTICAL PENETRATION
- Identify for each floor and MEZZANINE its FLOOR RENTABLE AREA
- Identify for each floor and MEZZANINE each TENANT'S AREA
- Identify for each floor and MEZZANINE each FLOOR COMMON AREA
- Identify for each floor and MEZZANINE each BUILDING COMMON AREA

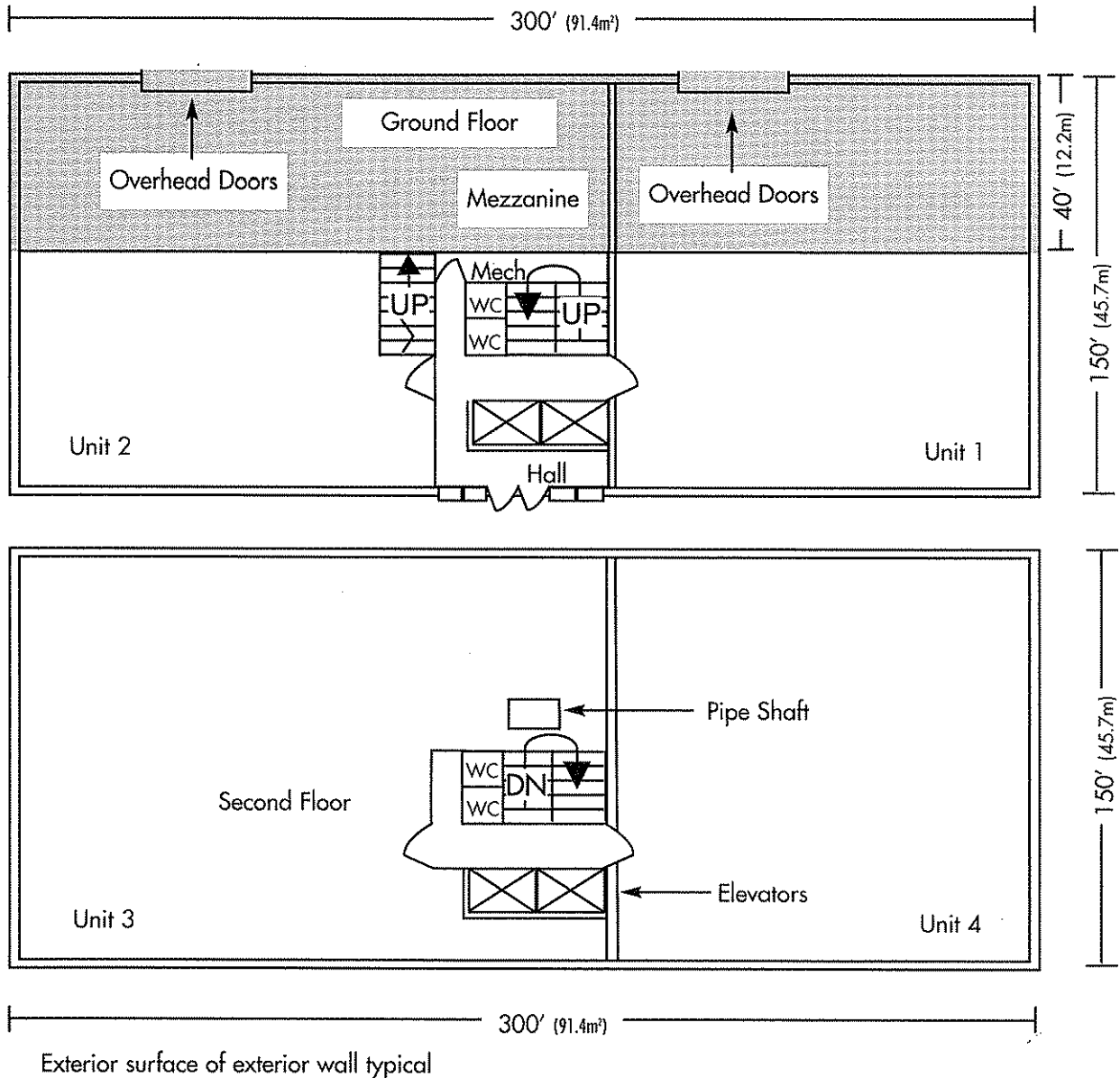
In using BOMA ANSI Z65.1 pay attention! A floor GROSS MEASURE AREA in a multi story industrial building is the total floor area enclosed by the **MEASURE LINE**. A floor GROSS MEASURE AREA in a multi story office building is the total floor area enclosed by the **DOMINANT PORTION**.

SECTION A

EXHIBIT 4

Determining **Rentable Area** in Industrial Building using the **EXTERIOR WALL METHODOLOGY**—
Multiple Story, Multiple Occupancy.

Plan View



METHOD B

**Determining the Area of an
Industrial Building Using the
DRIP LINE METHODOLOGY**

DRIP LINE METHODOLOGY TO DETERMINE RENTABLE AREA IN INDUSTRIAL BUILDINGS**One Story Building
Single Occupancy**

Rentable Area is the *Gross Building Area* as measured by the drip line.

Multiple Occupancy

Rentable Area is the *Tenant's Area* plus a proportionate share of *Building Common Areas*.

**Multiple Story Building
Single Occupancy**

An industrial building with two or more full floor areas (as distinct from a one-story building with a mezzanine). The *Gross Building Area* will be the sum of each Gross Floor Area.

Multiple Occupancy

A multi-tenant industrial building with two or more Full Floor areas (as distinct from a one-story building with a mezzanine). The area for each tenancy should be determined using ANSI/BOMA Z65.1-1996 using *Measure Line* to replace Dominant Portion to form the exterior perimeter of the building and in calculating Gross Measured Area.

Areas/Items to be Excluded in Floor area Calculation (areas outside the Measure Line)

Projections beyond the *Measure Line* that do not extend vertically for the full floor height;

- Canopies and covered staging platforms;
- Unenclosed connecting links or area ways;
- Unenclosed exterior staircases or fire escapes;
- Exterior steps and landings if outside the "measure line"; and
- Unenclosed shipping/receiving platforms beyond the "measure line."

Special Conditions

- Mezzanines
The actual area of mezzanine floors may be excluded based upon the definition.

SECTION B

EXHIBIT 1

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE DRIP LINE METHODOLOGY—ONE STORY, SINGLE OCCUPANCY

Determination of Areas

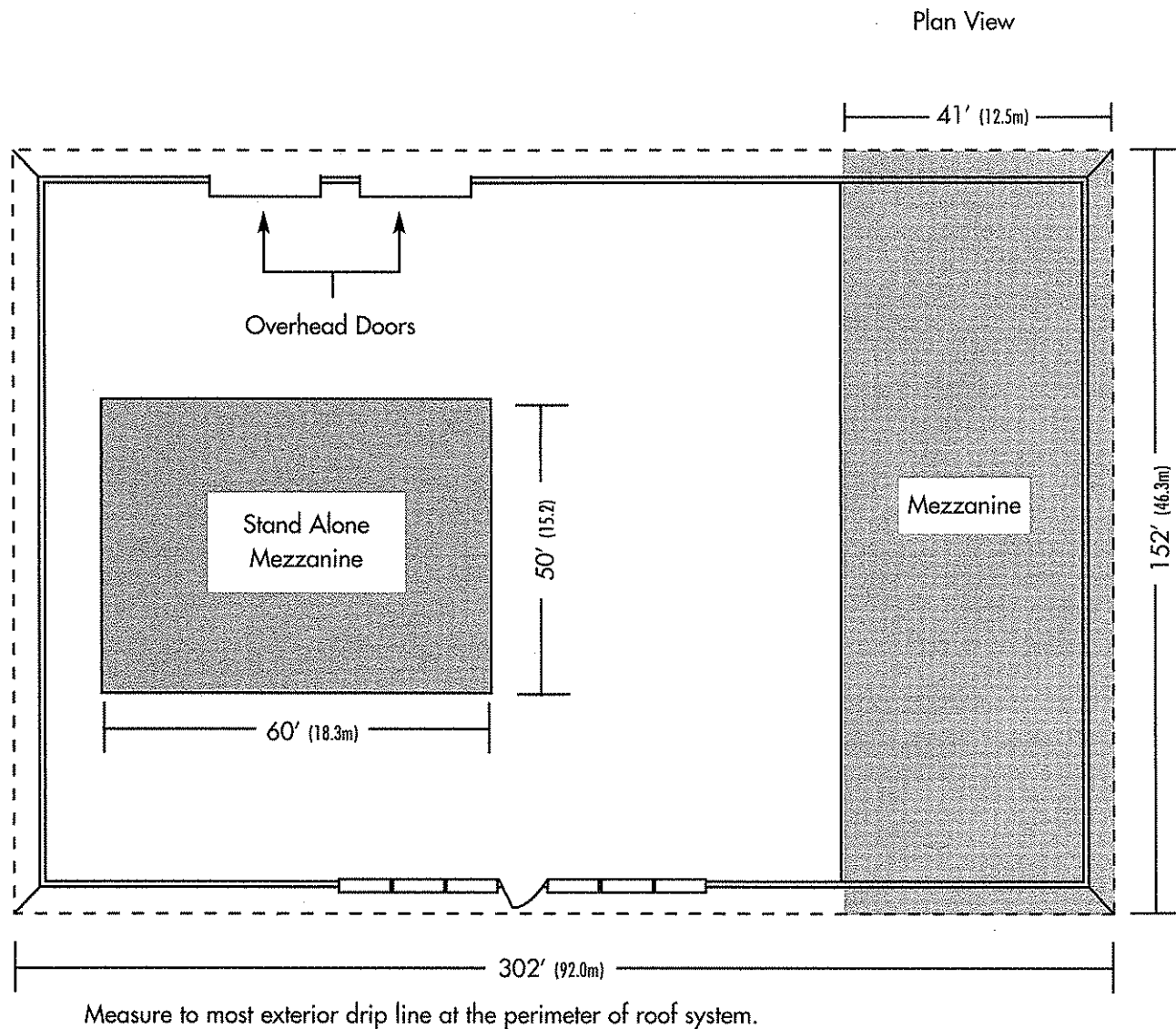
- *Full Floor* area of a one story, single occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the most exterior *Drip Line* at the perimeter of the roof system of the building at floor level.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with an *Office Area*.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the face of an *Exterior Wall*.
- *Gross Building Area* of a one story, single occupancy building is the sum of the ground level *Full Floor* area plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*. The *Gross Building Area* is also the *Rentable Area*.

Calculation of RENTABLE AREA, ONE STORY, SINGLE OCCUPANCY

<i>Full Floor</i> Area, Ground level including Office Area	302' (92.0m) X 152' (46.3m)	=	45,904 SQ. FT. (4264.6m ²)
Area of <i>Rentable Mezzanine</i>	152' (46.3m) X 41' (12.5m)	=	6,232 SQ. FT. (579.0m ²)
Area of <i>Rentable Stand Alone Mezzanine</i>	50' (15.2m) X 60' (18.3m)	=	3,000 SQ. FT. (278.7m ²)
<i>Gross Building Area = Rentable Area</i>		=	55,136 SQ. FT. (5122.1m ²)

EXHIBIT 1

Determining **Rentable Area** in Industrial Building using the **DRIP LINE METHODOLOGY**—
One Story, Single Occupancy.



SECTION B

EXHIBIT 2

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE DRIP LINE METHODOLOGY—ONE STORY, MULTIPLE OCCUPANCY

Determination of Areas

- **Full Floor** area of a one story, multiple occupancy building is measured by determining the area enclosed by the **Measure Line**, such **Measure Line** following the most exterior **Drip Line** at the perimeter of the roof system of the building at floor level.
- **Tenant's Area** is measured without their enclosing walls when sharing a wall with a **Major Vertical Penetration**; to the **Measure Line** in the case of the exterior wall; and to the centerline of the **Demising Wall** when sharing a wall with another **Tenant's Area** or a **Building Common Area**.
- **Building Common Area** is measured without their enclosing walls when sharing a wall with a **Major Vertical Penetration**; to the **Measure Line** in the case of the exterior wall; and to the centerline of the **Demising Wall** when sharing a wall with another **Tenant's Area** or a **Building Common Area**.
- **Rentable Mezzanines** are measured to the **Measure Line** on the side where the mezzanine is erected along the face of an **Exterior Wall**, and the end limits of the mezzanine floor on the interior sides or the centerline of the **Demising Wall** when sharing a wall with another **Tenant's Area** and **Office Area**. The area of **Rentable Mezzanine** is added to each **Tenant's Area** on the basis of exclusive occupancy.
- **Rentable Stand Alone Mezzanines** are measured to the end limits of their floor, such limits not running along the face of an **Exterior Wall**. The area of **Rentable Stand Alone Mezzanine** is added to each **Tenant's Area** on the basis of occupancy.
- **Gross Building Area** of a one story, multiple occupancy building is the sum of the ground level **Full Floor** area plus the total area of **Rentable Mezzanines** plus the total area of **Rentable Stand Alone Mezzanines**. The **Gross Building Area** is also the **Rentable Area**.
- **Rentable Area** of each tenant is the sum of its **Tenant's Area** on the **Full Floor** plus its **Tenant's Area** of **Rentable Mezzanine** plus its **Tenant's Area** of **Rentable Stand Alone Mezzanine** plus its proportionate share of the **Building Common Area**.

Calculation of RENTABLE AREA, ONE STORY, MULTIPLE OCCUPANCY

Full Floor Area, Ground level including Office Area		152' x 302' (46.3m x 92.0m)	=	45,904 SQ. FT. (4264.6m ²)
Total Rentable Mezzanine		41' x 302' (12.5m x 92.0m)	=	12,382 SQ. FT. (1150.3m ²)
Total Rentable Stand Alone Mezzanine		40' x 40' (12.2m x 12.2m)	=	1,600 SQ. FT. (148.1m ²)
Total Rentable Area			=	59,886 SQ. FT. (5563.4m ²)
Full Floor Tenant's Area No. 1 including Office Area	[(152' x 201') (46.3m x 61.3m)] - (7' x 9') (2.1m x 2.7m)		=	30,489 SQ. FT. (2832.4m ²)
Rentable Mezzanine Tenant's Area No. 1	41' x 201' (12.5m x 61.3m)		=	8,241 SQ. FT. (765.6m ²)
Full Floor Tenant's Area No. 2 including Office Area	[(152' x 101') (46.3m x 30.8m)] - (5' x 9') (1.5m x 2.7m)		=	15,307 SQ. FT. (1422.0m ²)
Rentable Mezzanine Tenant's Area No. 2	41' x 101' (12.5m x 30.8m)		=	4,141 SQ. FT. (384.7m ²)
Rentable Stand Alone Mezzanine Tenant's Area No. 2	40' x 40' (12.2m x 12.2m)		=	1,600 SQ. FT. (148.6m ²)
Building Common Area , Electrical room	7' x 9' (2.1m x 2.7m)		=	63 SQ. FT. (5.9m ²)
Building Common Area , Sprinkler room	5' x 9' (1.5m x 2.7m)		=	45 SQ. FT. (4.2m ²)
Total RENTABLE AREA		TENANT'S AREA		
RU Factor	=	59,886 SQ. FT. (5563.41m ²)	÷	59,778 SQ. FT. (5553.1m ²) = 1.0018066873
Total Tenant's Area No. 1	=	38,730 SQ. FT. (3598.0m ²)	X RU Factor	38,800 SQ. FT. (3604.5m ²)
			1.00180	Rentable Area
Total Tenant's Area No. 2	=	21,048 SQ. FT. (1955.4m ²)	X RU Factor	20,086 SQ. FT. (1958.9m ²)
			1.00180	Rentable Area

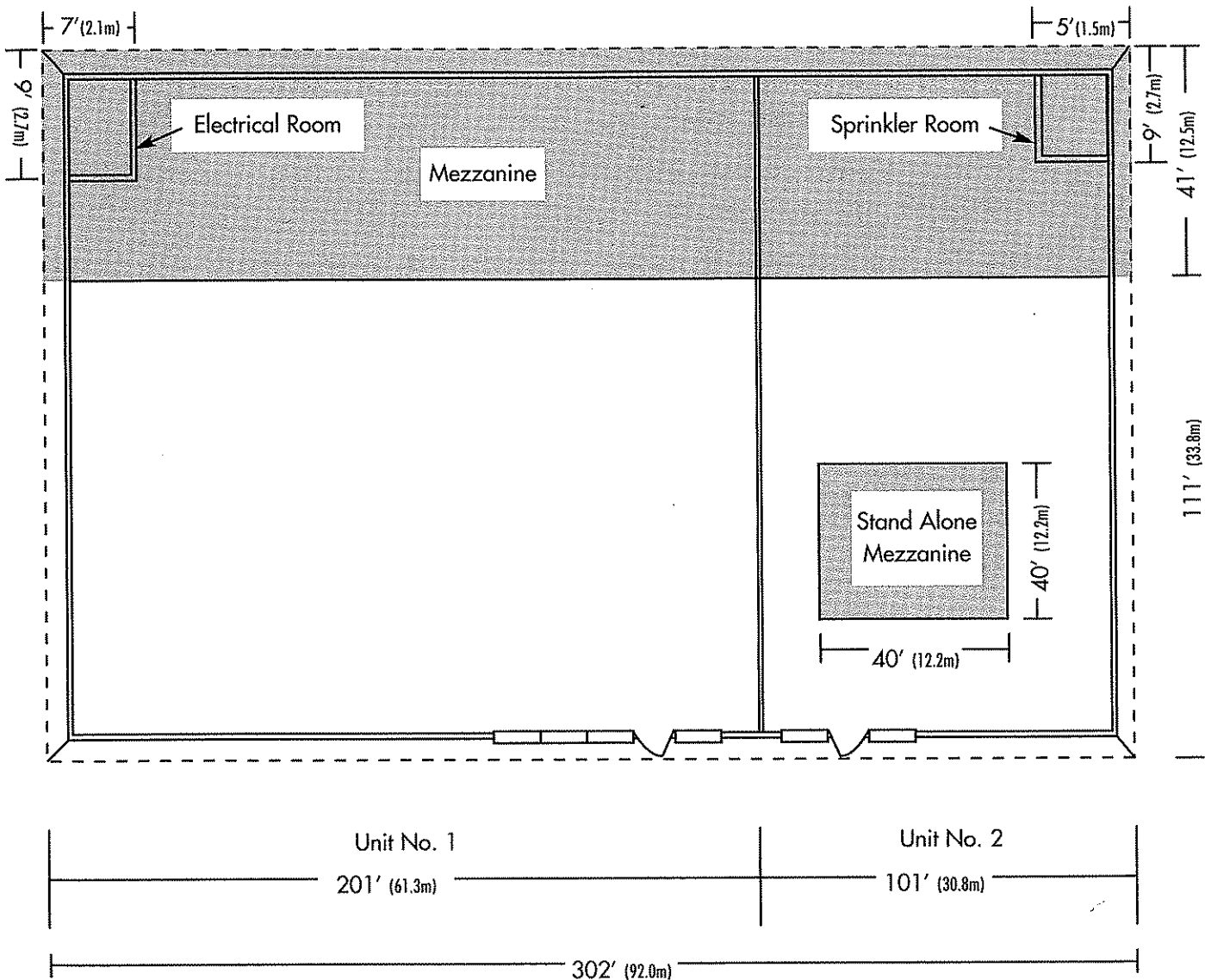
The application of the **RU Factor** to the **Tenant's Area** allows for a proportionate distribution of the **Building Common Area**.

SECTION B

EXHIBIT 2

Determining **Rentable Area** in Industrial Building using the **DRIP LINE METHODOLOGY**—
One Story, Multiple Occupancy.

Plan View



Measure to Most Exterior Drip Line at the Perimeter of Roof System.

SECTION B

EXHIBIT 3

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE DRIP LINE METHODOLOGY—MULTIPLE STORY, SINGLE OCCUPANCY

Determination of Areas

- *Full Floor* area of a multiple story, single occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the most exterior *Drip Line* at the perimeter of the roof system of the building at floor level. This measure is repeated for each additional *Full Floor*.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with an *Office Area*.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the face of an *Exterior Wall*.
- *Gross Building Area* of a multiple story, single occupancy building is the sum of the ground level *Full Floor* plus the *Full Floor* area of each additional floor plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*. The *Gross Building Area* is also the *Rentable Area*.

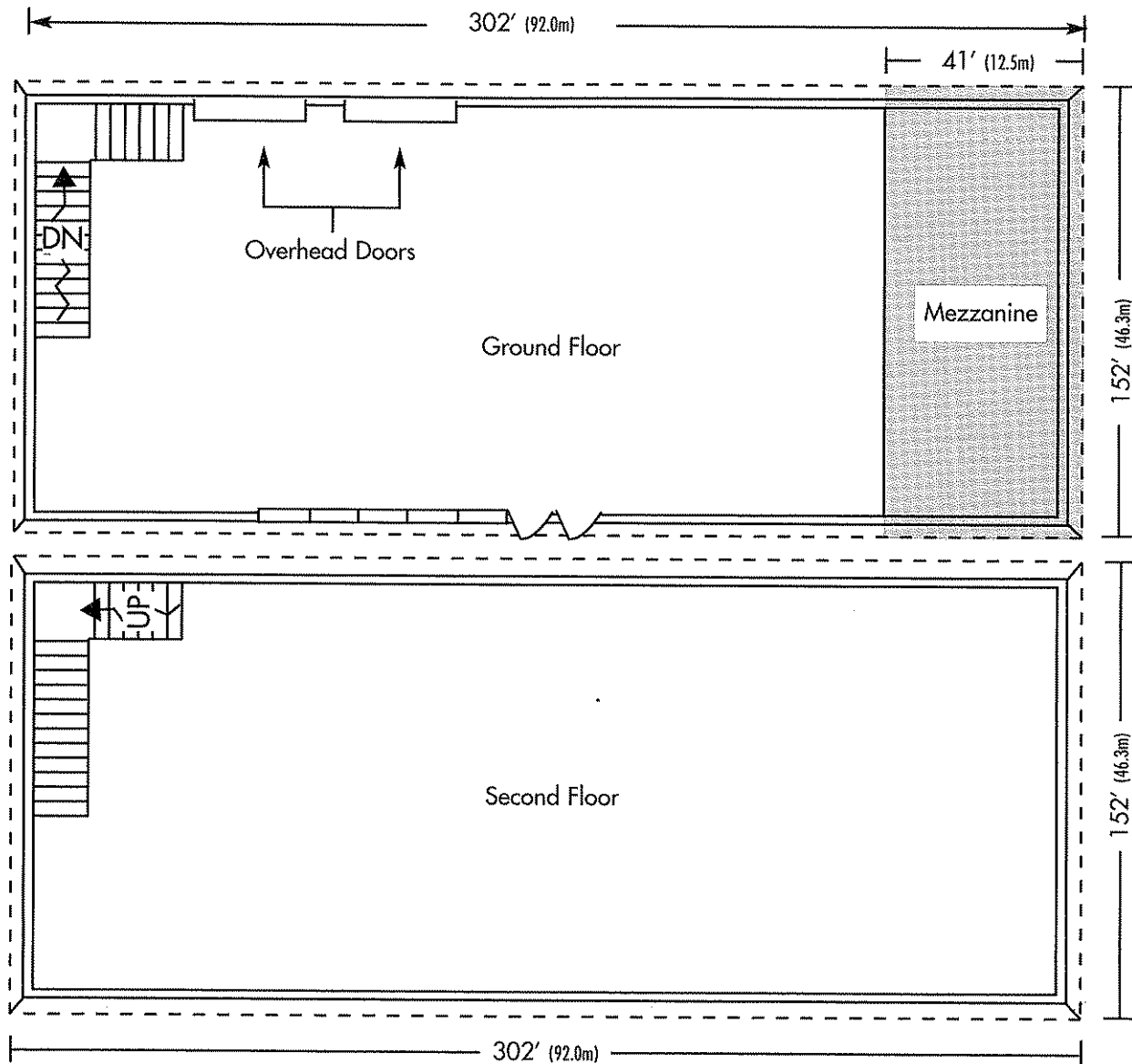
Calculation of RENTABLE AREA, MULTIPLE STORY, SINGLE OCCUPANCY

Area enclosed by <i>Measure Line</i> ground level	152' (46.3m) X 302' (92.0m)	=	45,904 SQ. FT. (4264.6m ²)
Aea of <i>Rentable Mezzanine</i>	152' (46.3m) X 41' (12.5m)	=	6,232 SQ. FT. (579.0m ²)
Area enclosed by <i>Measure Line</i> second floor	152' (46.3m ²) X 302' (92.0m)	=	45,904 SQ. FT. (4264.6m ²)
Total <i>Rentable Area</i>		=	98,040 SQ. FT. (9107.9m ²)

SECTION B

EXHIBIT 3

Determining **Rentable Area** in Industrial Building using the **DRIP LINE METHODOLOGY**—
Multiple Story, Single Occupancy.



Measure to Most Exterior Drip Line on the Perimeter of Roof System

SECTION B

EXHIBIT 4

DETERMINING RENTABLE AREA IN INDUSTRIAL BUILDING USING THE DRIP LINE METHODOLOGY—MULTIPLE STORY, MULTIPLE OCCUPANCY

Determination of Areas

- *Full Floor* area of a multiple story, multiple occupancy building is measured by determining the area enclosed by the *Measure Line*, such *Measure Line* following the most exterior *Drip Line* at the perimeter of the roof system of the building at floor level and subtracting from this area the areas of *Major Vertical Penetrations*. This is repeated for each additional *Full Floor* and results in the determination of *Floor Rentable Area*.
- *Major Vertical Penetrations* are measured with their enclosing walls or the *Measure Line*.
- *Tenant's Area* on each *Full Floor* is measured to the *Measure Line* in the case of the exterior walls and to the centerline of the *Demising Wall* when sharing a wall with another *Tenant's Area*, a *Building Common Area* or to the exterior face of the walls enclosing a *Major Vertical Penetration* or a *Floor Common Area*.
- *Floor Common Areas* are measured to the *Measure Line* in the case of the exterior walls and to the exterior face of the other walls enclosing them.
- *Building Common Areas* are measured as *Tenant's Area*.
- *Rentable Mezzanines* are measured to the *Measure Line* on the side where the mezzanine is erected along the face of an *Exterior Wall*, and the end limits of the mezzanine floor on the interior sides or the centerline of the *Demising Wall* when sharing a wall with another *Tenant's Area*, *Office Areas* or to the exterior face of the wall enclosing the *Floor Common Area*.
- *Rentable Stand Alone Mezzanines* are measured to the end limits of their floor, such limits not running along the inside face of an *Exterior Wall*.
- *Gross Building Area* of a multiple story, multiple occupancy building is the sum of the ground level *Full Floor* area plus the *Full Floor* area of each additional floor plus the total area of *Rentable Mezzanines* plus the total area of *Rentable Stand Alone Mezzanines*.
- *Rentable Area* of a tenant is the sum of that *Tenant's Area* on a (or many) *Full Floor* plus its proportionate share of *Floor Common Area* on that floor, plus that *Tenant's Area* of *Rentable Mezzanine* plus that *Tenant's Area* of *Rentable Stand Alone Mezzanine* plus the proportionate share of *Building Common Area* applied to all the previous areas.

Calculation of RENTABLE AREA, MULTIPLE STORY, MULTIPLE OCCUPANCY

Area Enclosed by <i>Measure Line</i> , Ground Level	152' (46.3m) x 302' (92.0m)	=	45,904 SQ. FT. (4264.6m ²)
Area of <i>Rentable Mezzanine</i>	41' (12.5m) x 302' (92.0m)	=	12,382 SQ. FT. (1150.3m ²)
<i>Full Floor</i> Area Ground Level		=	58,286 SQ. FT. (5414.8m ²)
Area Enclosed by <i>Measure Line</i> , Second Floor	152' (46.3m) x 302' (92.0m)	=	45,904 SQ. FT. (4264.5m ²)
Minus Area of <i>Major Vertical Penetration</i>	—		225 SQ. FT. (20.9m ²)
<i>Full Floor</i> Area Second Level		=	45,679 SQ. FT. (4243.6m ²)
Building Total <i>Rentable Area</i>		=	103,965 SQ. FT. (9658.3m ²)

To proceed further in allocating to each **TENANT'S AREA** its proportionate share of **FLOOR COMMON AREA** and **BUILDING COMMON AREA** you need to refer to ANSI/BOMA Z65.1 (1996).

- Identify for each floor and MEZZANINE its GROSS MEASURE AREA
- Identify for each floor and MEZZANINE its MAJOR VERTICAL PENETRATION
- Identify for each floor and MEZZANINE its FLOOR RENTABLE AREA
- Identify for each floor and MEZZANINE each TENANT'S AREA
- Identify for each floor and MEZZANINE each FLOOR COMMON AREA
- Identify for each floor and MEZZANINE each BUILDING COMMON AREA

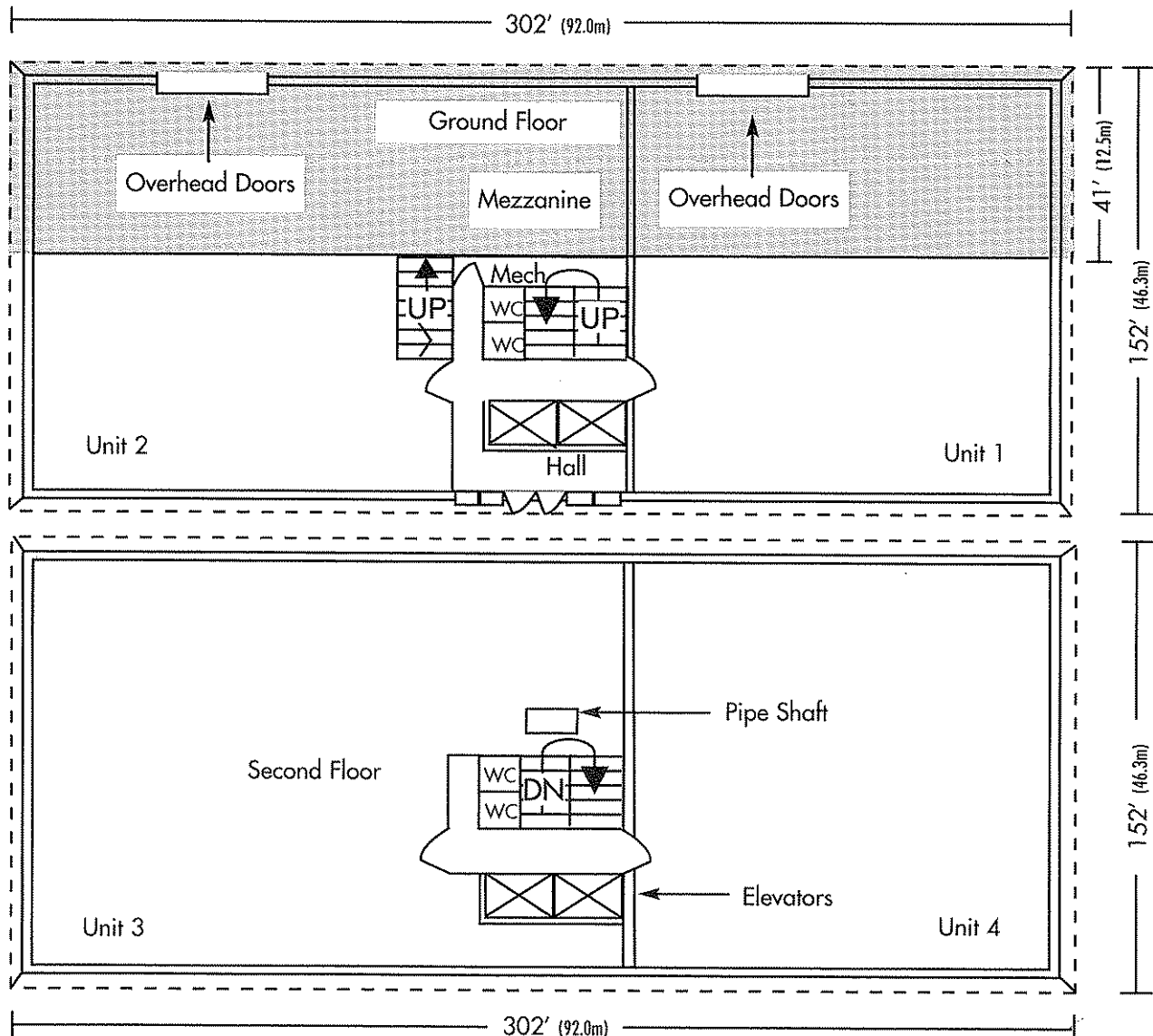
In using BOMA ANSI Z65.1 pay attention! A floor GROSS MEASURE AREA in a multi story industrial building is the total floor area enclosed by the **MEASURE LINE**. A floor GROSS MEASURE AREA in a multi story office building is the total floor area enclosed by the **DOMINANT PORTION**.

SECTION B

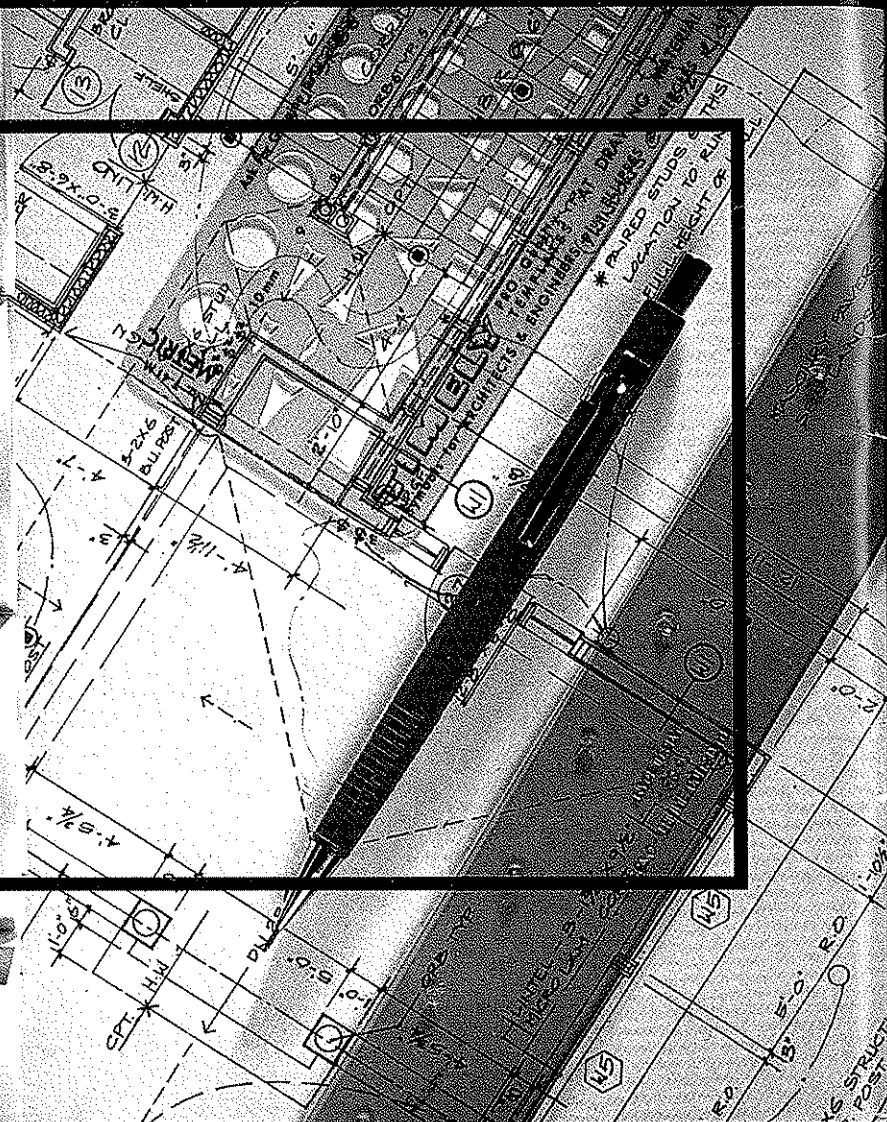
EXHIBIT 4

Determining **Rentable Area** in Industrial Building using the **DRIP LINE METHODOLOGY**—
Multiple Story, Multiple Occupancy.

Plan View



Measure to Most Exterior Drip Line on the Perimeter of Roof System



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