



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Approved: 15-Feb-2014

Introduction The Floor Measurement Standards Committee of BOMA International has approved this Best Practice to provide clarification and guidance with respect to the BOMA Standard(s) disclosed herein. This Best Practice does not modify any of the BOMA publications but may be considered for inclusion in future updates.

Purpose To provide a consistent, detailed method of allocating inter-building service and amenity areas among different buildings that they serve in a multi-building set in accordance with general direction included in the BOMA 2010 Office Standard.

Discussion: The BOMA Office Standard states that it is a reasonable adaptation to allocate campus amenity areas shared among several buildings (such as a cafeteria or conference room) in the same manner as building amenity area. It also states that it is a reasonable adaptation to allocate campus service areas shared among several buildings (such as a physical plant) in the same manner as building service areas. Detailed direction of a consistent method of accomplishing these allocations is not part of The BOMA 2010 Office Standard but are offered in this Best Practice. In addition, the concept of campus service and amenity areas is modified herein to address allocation of inter-building service and amenity areas among any buildings that are part of a multi-building set as defined herein, not just buildings that are part of a campus as the term is commonly understood and defined in the BOMA 2012 Industrial Standard.

Because allocation of inter-building service and amenity area between buildings will effect the alloction of rental revenue and operating expenses among the buildings, BOMA suggests that, if all the buildings in a multi-building set are not under the same ownership, an agreement between the owners of the buildings should document the allocations between the buildings in a multi-building set.

Applicability This Best Practice is to be used in conjunction with the BOMA 2010 Office Standard Method A and/or B in order to calculate the rentable areas of two or more new or existing office buildings in a multi-building set that share inter-building service and amenity areas. It is not intended to be applied to an industrial campus because the BOMA Industrial Standard (ANSI/BOMA Z65.2-2012) contains a method for allocating campus common areas to buildings on an industrial campus. It is not intended for application to mixed-use properties because the BOMA 2012 Mixed-Use Standard contains a method for allocating mixed use common areas (MUCA) among buildings on a mixed use campus. It is not intended for use in retail or multi-unit residential properties.

Definitions Words that are underlined in this document have the same meaning as those defined in other BOMA measurement standards and the following additional definitions:



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Draft Issued: 15-Feb-2014

Building Rentable Area – The rentable area of a building excluding inter-building service and amenity areas, calculated using the BOMA 2010 Office Standard, Method A or B.

Effective Load Factor – The product of the load factor of a floor in a building and the Inter-building load factor.

Discussion: This best practice does not provide a method of making the effective load factor identical for all floors of all buildings in a multi-building set (except for appropriate application of a capped load factor). When using Method A of the BOMA 2010 Office Standard, the load factor A of each floor in each building in a multi-building set is calculated uniquely for that floor and is likely to vary among the floors of each building, so the effective load factor is also likely to vary among the floors of buildings in a multi-building set. When using Method B, the load factor B of each building in a multi-building set is calculated uniquely for that building, so the effective load factor is likely to vary between buildings in a multi-building set.

Inter-Building Amenity Area – a portion of a building that adds a convenience for the occupants of more than one building and that is not used exclusively by any one occupant.

Discussion: Examples of inter-building amenity areas include but are not limited to:

- *site conference and food service facilities*
- *exercise facilities*
- *similar amenity areas that serve or benefit multiple office buildings*

The boundaries of inter-building amenity areas are the same as amenity areas on the Wall Priority Diagram (Chart #2) in the BOMA 2010 Office Standard. Inter-building amenity areas are considered to be part of the usable area of a building and their rentable area is used to allocate their area among the buildings that they benefit. Refer also to discussion of inter-building service and amenity areas.

Inter-Building Load Factor – A fraction greater than one, the numerator of which is the sum of the building rentable areas and the inter-building service and amenity areas that are allocated to the building and the denominator of which is the building rentable areas of that building.

Discussion: If all inter-building service and amenity areas are all allocated to all buildings in a multi-building set based only upon the building rentable area of each building, then the inter-building load factor would be the same for all buildings in the multi-building set. However, if some inter-building service and amenities are allocated only to some but not all of the buildings in the multi-building set, or are allocated based upon factors other than building rentable area (such as usage), then the inter-building load factor will differ in some or all buildings in the multi-building set.

Inter-Building Service Area – a portion of a building that provides services to occupants of more than one building enabling occupants to work.



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Draft Issued: 15-Feb-2014

Discussion: Examples of inter-building service areas include but are not limited to:

- *physical plant (chillers, boilers, etc)*
- *site electrical transformers, emergency generators, etc.*
- *site equipment & materials storage*
- *site property management, engineering, security or parking offices*
- *site staff facilities (restrooms, locker rooms, break room, etc,)*
- *similar service areas that serve or benefit multiple office buildings.*

The boundaries of inter-building service areas are the same as building service areas on the Wall Priority Diagram (Chart #2) in the BOMA 2010 Office Standard. Their measured area (without any load factor applied) is used to allocate their area among the buildings that they serve or benefit. Refer also to discussion of inter-building service and amenity areas.

Inter-Building Service and Amenity Areas (IBSA) – The sum of inter-building service areas and inter-building amenity areas.

Discussion: Inter-building service and amenity areas can exist as part of any office building in a multi-building set, or in a separate building in a multi-building set (such as a physical plant or parking structure). If an inter-building service or amenity area is located in a separate building or parking structure, that building shall be measured using the BOMA 2010 Office Standard. There are three specific kinds of areas that shall not be classified or allocated as inter-building service or amenity areas:

- *Space classified as occupant area, base building circulation, occupant storage, major vertical penetrations or parking*
- *Any space that is leased, or that occupants or other pay to use, such as a health club whose members pay dues or usage fees*
- *Any space that provides services that are paid for by the building ownership and included in the operating expenses of a building, such as a plant that is owned or operated by an entity that is a utility provider that sells power, steam, chilled water or the like for which building owners pay based upon usage.*

Multi-Building Set – A set of buildings containing all those among which inter-building service areas and/or inter-building amenity areas are allocated.

Discussion: A multi-building set is different than campus (as defined in the BOMA 2012 Industrial Standard) in that it may contain buildings that are not part of a campus, or may contain fewer than all the buildings on a campus. However, it can mean the same thing as a campus if all the buildings on the campus share inter-building service and amenity areas.

Overview Of Method

Follow these steps to measure and allocate inter-building service and amenity area among office buildings in a multi-building set:



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Draft Issued: 15-Feb-2014

1. Determine which buildings are included in the multi-building set. Then measure the interior gross area of each building in the multi-building set, including any parking structures and physical plant buildings, using Chart 1, IGA Boundary Conditions in the BOMA 2010 Office Standard.
2. Within the IGA boundary of each floor of each building in the multi-building set, classify all areas into one of the nine classes of space listed in the BOMA 2010 Office Standard, identifying in addition, all inter-building service areas and inter-building amenity areas in each building in the multi-building set.
3. Determine the boundaries of each class of space using Chart #2 (Wall Priority Diagram) in the BOMA 2010 Office Standard. Inter-building service areas have the same wall priority as building service areas and inter-building amenity areas have the same wall priority as amenity areas.
4. Deduct the measured area of all inter-building service areas from the preliminary floor area of each building in which they are located and deduct the rentable area of all inter-building amenity areas from the rentable area of each the buildings in which they are located, and calculate the building rentable areas of each building (excluding inter-building service and amenity area). Enter the building rentable areas and the inter-building service and amenity areas of all buildings in the multi-building set into the ISBA Allocation Worksheet to compute allocate all inter-building service and amenity areas to all buildings in the multi-building set and uniquely calculate an inter-building load factor for each building. Then apply the inter-building load factor to the building rentable area (excluding inter-building service and amenity areas) of each office building in the multi-building set to compute the rentable area of each occupant, floor and office building in the multi-building set. In order to facilitate this step, modified Global Summary of Areas spreadsheets for both Method A and Method B are included in this Best Practices document, as well as a sample IBSA Allocation Worksheet that will work in Method A, Method B, or a combination of those methods, in the buildings in a multi-building set. Refer to the example below and the illustrations at the end of this document.
5. Within each class of space separately delineate and calculate rentable areas of any spaces that fall into any of the four disclosure categories listed in the BOMA 2010 Office Standard.

Optionally, if the Effective Load Factor is of concern in a building, apply a capped load factor to calculate capped rentable areas on a floor-by-floor basis in each building. The capped load factor is applied separately to each individual building in a multi-building set and may or may not be the same from building to building.

Example

The following pages present example Global Summary of Areas spreadsheets for a Multi-Building Set and example IBSA Allocation Worksheets illustrating an example of the required calculations under both Method A and Method B of the BOMA 2010 Office Standard. For a discussion of the spreadsheets themselves and the Excel™ formulas used to implement the calculations please refer to the Illustrations that follow this example.



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Draft Issued: 15-Feb-2014

The square footage data for the example buildings is the same under Method A and Method B to illustrate that the inter-building load factor is likely to be different depending upon which Method is chosen. It is also possible that some buildings in a multi-building set are measured using Method A and others using Method B, although this is not illustrated in this Best Practices document.

The four buildings in the multi-building set used for this example are as follows:

- B1 A 4-story office building with a basement and penthouse that includes limited inter-building service and amenity areas.
- B2 An 8-story office building with a penthouse that has no inter-building service and amenity areas.
- B3 An 8-story office building with a penthouse that has significant inter-building service and amenity areas.
- B3 A 3-story parking garage building that has inter-building service areas on the ground level as well as occupant storage areas on its upper levels.

The examples include 10 spreadsheets as follows. Because the Multi-Building Global Summary of Areas spreadsheets have a large number of columns, they are best viewed in Adobe Acrobat Reader or printed on tabloid (11" X 17") or A3 (420mm X 297mm) paper.

1. Building B1 Method A Multi-Building Set Global Summary of Areas
2. Building B2 Method A Multi-Building Set Global Summary of Areas
3. Building B3 Method A Multi-Building Set Global Summary of Areas
4. Building B4 Method A Multi-Building Set Global Summary of Areas)
5. IBSA Allocation Worksheet for Method A
6. Building B1 Method B Multi-Building Set Global Summary of Areas
7. Building B2 Method B Multi-Building Set Global Summary of Areas
8. Building B3 Method B Multi-Building Set Global Summary of Areas
9. Building B4 Method B Multi-Building Set Global Summary of Areas
10. IBSA Allocation Worksheet for Method B

In these examples, the spreadsheets are linked within the Excel™ workbook as follows:

- Totals building rentable areas of Multi-Building Set Global Summary of Areas spreadsheet for each building are linked to the IBSA Allocation Worksheet
- Total inter-building service and amenity areas of Multi-Building Set Global Summary of Areas spreadsheet for each building are linked to the IBSA Allocation Worksheet
- The inter-building load factor computed on the IBSA Allocation Worksheet is linked to the Rentable Area column in the Multi-Building Set Global Summary of Areas spreadsheet for each building.



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets Applicable to:
BOMA 2010 Office Standard (ANSI/BOMA Z65.1–2010)
Draft Issued: 15-Feb-2014

This linking assures that the total of the rentable areas of all the buildings in the multi-building set will be identical the sum of their building rentable areas and their inter-building service and amenity areas, a primary objective of this Best Practice document. However, the spreadsheet do not have to be linked, or even in the same workbook, so long as this primary objective is met.

1

A	Preliminary Calculations (not for leasing)						Intermediate Allocations (not for leasing)										Final Calculations			Optional Adjustment																					
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X																		
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	= I + J + K	Measure	= G - L - M	= (L+N)/L	= (I+K) * O	= ΣG/ΣP	= O * Q	= R * I	=R*K+F	=S *	=U * R	1.2500	= I * W																		
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Building Amenity Areas	Inter-Building Amenity Areas	Usable Area (U)	Building Service Areas	Floor Service & Amenity Areas	R/U Ratio	Occupant + Allocated Area (O)	R/O Ratio	Load Factor A	Building Rentable Area	IBSA Areas	1.068069823	Effective Load Factor	Capped Load Factor	Capped Rentable Area																		
Bsmt.				500.00	-		Occupant Storage A	-	-	-	-	-		-	-	1.0903	-	-	-	-	-	1.0000	-																		
				500.00	-		Occupant Storage B	-	-	-	-	-		-	-	1.0903	-	-	-	-	-	1.0000	-																		
				-	-		Building Storage	-	-	-	-	600.00		-	-	1.0903	-	-	-	-	-	1.0000	-																		
				-	1,000.00		Site Maint. Equip.	-	-	-	-	-		-	-	1.0903	-	-	1,000.00	-	-	1.0000	-																		
				-	-		Boiler, Main Electrical	-	-	-	-	1,000.00		-	-	1.0903	-	-	-	-	-	1.0000	-																		
Floor Totals	20,000.00	400.00	16,000.00	1,000.00	1,000.00	1,600.00		-	-	-	-	1,600.00	-	-	-	1.0903	-	-	1,000.00	-	-	1.0000	-																		
1				-	-		Suite 100	10,000.00	-	-	10,000.00	-		1.0245	10,245.40	1.0903	1.1171	11,171.04	-	11,931.45	1.1931	1.1931	11,931.45																		
				-	-		Suite 110	4,000.00	-	-	4,000.00	-		1.0245	4,098.16	1.0903	1.1171	4,468.41	-	4,772.58	1.1931	1.1931	4,772.58																		
				-	-		Suite 115	1,800.00	-	-	1,800.00	-		1.0245	1,844.17	1.0903	1.1171	2,010.79	-	2,147.66	1.1931	1.1931	2,147.66																		
				-	-		Vending area	-	500.00	-	500.00	-		1.0245	-	1.0903	1.1171	-	-	-	1.1931	1.1931	-																		
				-	-		Building lobby	-	-	-	-	1,000.00		1.0245	-	1.0903	1.1171	-	-	-	1.1931	1.1931	-																		
				-	-		Loading dock & trash	-	-	-	-	1,500.00		1.0245	-	1.0903	1.1171	-	-	-	1.1931	1.1931	-																		
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		15,800.00	500.00	-	16,300.00	2,500.00	400.00	1.0245	16,187.73	1.0903	1.1171	17,650.24	-	18,851.69	1.1931	1.1931	18,851.69																		
2				-	-		Suite 200	8,000.00	-	-	8,000.00	-		1.1029	8,823.53	1.0903	1.2026	9,620.71	-	10,275.59	1.2844	1.2500	10,000.00																		
				-	-		Suite 250	7,000.00	-	-	7,000.00	-		1.1029	7,720.59	1.0903	1.2026	8,418.12	-	8,991.14	1.2844	1.2500	8,750.00																		
				-	-		Conference Center	-	-	2,000.00	2,000.00	-		1.1029	2,205.88	1.0903	1.2026	-	2,405.18	-	2,844.00	1.2500	-																		
Floor Totals	19,550.00	800.00	-	-	-	18,750.00		15,000.00	-	2,000.00	17,000.00	-	1,750.00	1.1029	18,750.00	1.0903	1.2026	18,038.82	2,405.18	19,266.72	1.2844	1.2500	18,750.00																		
3				-	-		Suite 300	18,400.00	-	-	18,400.00	-		1.0408	19,150.00	1.0903	1.1348	20,880.14	-	22,301.45	1.2120	1.2120	22,301.45																		
				-	-			-	-	-	-		1.0408	-	1.0903	1.1348	-	-	-	1.2120	1.2120	-																			
				-	-			-	-	-	-		1.0408	-	1.0903	1.1348	-	-	-	1.2120	1.2120	-																			
Floor Totals	20,000.00	850.00	-	-	-	19,150.00		18,400.00	-	-	18,400.00	-	750.00	1.0408	19,150.00	1.0903	1.1348	20,880.14	-	22,301.45	1.2120	1.2120	22,301.45																		
4				-	-		Suite 400	11,000.00	-	-	11,000.00	-		1.1009	12,109.51	1.0903	1.2003	13,203.56	-	14,102.33	1.2820	1.2500	13,750.00																		
				-	-		Suite 400 Restr. Hdrm.	350.00	-	-	350.00	-		1.1009	385.30	1.0903	1.2003	420.11	-	448.71	1.2820	1.2500	437.50																		
				-	-		Suite 450	6,000.00	-	-	6,000.00	-		1.1009	6,605.19	1.0903	1.2003	7,201.94	-	7,692.18	1.2820	1.2500	7,500.00																		
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	-	17,350.00	-	1,750.00	1.1009	19,100.00	1.0903	1.2003	20,825.62	-	22,243.22	1.2820	1.2500	21,687.50																		
P.H.				100.00	-		Occupant Storage PH	-	-	-	-	-		-	-	1.0903	-	-	-	-	-	1.0000	-																		
				-	-		Mechanical	-	-	-	-	2,000.00		-	-	1.0903	-	-	-	-	-	1.0000	-																		
Floor Totals	2,500.00	400.00	-	100.00	-	2,000.00		-	-	-	-	2,000.00	-	-	-	1.0903	-	-	-	-	-	1.0000	-																		
Building Totals (Σ)	102,050.00	4,150.00	16,000.00	1,100.00	1,000.00	79,800.00		66,550.00	500.00	2,000.00	69,050.00	6,100.00	4,650.00		73,187.73	1.0903		77,394.82	3,405.18	82,663.08			81,590.63																		
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																																									
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																																									
																			To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor																				

A	Preliminary Calculations (not for leasing)						Intermediate Allocations (not for leasing)										Final Calculations			Optional Adjustment			
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	= I + J + K	Measure	= G - L - M	= (L+N)/L	= (I+K) * O	= ΣG/ΣP	= O * Q	= R * I	=R*K+F	=S *	=U * R	1.1900	= I * W
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Building Amenity Areas	Inter-Building Amenity Areas	Usable Area (U)	Building Service Areas	Floor Service & Amenity Areas	R/U Ratio	Occupant + Allocated Area (O)	R/O Ratio	Load Factor A	Building Rentable Area	IBSA Areas	1.08553493	Effective Load Factor	Capped Load Factor	Capped Rentable Area
1				-	-		Suite 100	10,000.00	-	-	10,000.00	-		1.1013	11,012.66	1.0259	1.1297	11,297.47	-	12,263.80	1.2264	1.1900	11,900.00
				-	-		Suite 110	4,000.00	-	-	4,000.00	-		1.1013	4,405.06	1.0259	1.1297	4,518.99	-	4,905.52	1.2264	1.1900	4,760.00
				-	-		Suite 150	1,800.00	-	-	1,800.00	-		1.1013	1,982.28	1.0259	1.1297	2,033.54	-	2,207.48	1.2264	1.1900	2,142.00
				-	-		Building Lobby	-	-	-	-	600.00		1.1013	-	1.0259	1.1297	-	-	-	1.2264	1.1900	-
				-	-		Loading dock & trash	-	-	-	-	1,200.00		1.1013	-	1.0259	1.1297	-	-	-	1.2264	1.1900	-
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		15,800.00	-	-	15,800.00	1,800.00	1,600.00	1.1013	17,400.00	1.0259	1.1297	17,850.00	-	19,376.80	1.2264	1.1900	18,802.00
2				-	-		Suite 200	8,000.00	-	-	8,000.00	-		1.1029	8,823.53	1.0259	1.1315	9,051.72	-	9,825.96	1.2282	1.1900	9,520.00
				-	-		Suite 250	5,000.00	-	-	5,000.00	-		1.1029	5,514.71	1.0259	1.1315	5,657.33	-	6,141.23	1.2282	1.1900	5,950.00
				-	-		Suite 280	4,000.00	-	-	4,000.00	-		1.1029	4,411.76	1.0259	1.1315	4,525.86	-	4,912.98	1.2282	1.1900	4,760.00
	Floor Totals	19,550.00	800.00	-	-	-			17,000.00	-	-	17,000.00	-	1,750.00	1.1029	18,750.00	1.0259	1.1315	19,234.91	-	20,880.17	1.2282	1.1900
3				-	-		Suite 300	18,400.00	-	-	18,400.00	-		1.0408	19,150.00	1.0259	1.0677	19,645.26	-	21,325.61	1.1590	1.1590	21,325.61
				-	-			-	-	-	-		1.0408	-	1.0259	1.0677	-	-	-	1.1590	1.1590	-	
				-	-			-	-	-	-		1.0408	-	1.0259	1.0677	-	-	-	1.1590	1.1590	-	
	Floor Totals	20,000.00	850.00	-	-	-		18,400.00	-	-	18,400.00	-	750.00	1.0408	19,150.00	1.0259	1.0677	19,645.26	-	21,325.61	1.1590	1.1590	21,325.61
4				-	-		Suite 400	11,000.00	-	-	11,000.00	-		1.1009	12,109.51	1.0259	1.1293	12,422.69	-	13,485.26	1.2259	1.1900	13,090.00
				-	-		Suite 400 Restr. Hdrm.	350.00	-	-	350.00	-		1.1009	385.30	1.0259	1.1293	395.27	-	429.08	1.2259	1.1900	416.50
				-	-		Suite 450	6,000.00	-	-	6,000.00	-		1.1009	6,605.19	1.0259	1.1293	6,776.01	-	7,355.60	1.2259	1.1900	7,140.00
	Floor Totals	20,000.00	900.00	-	-	-		17,350.00	-	-	17,350.00	-	1,750.00	1.1009	19,100.00	1.0259	1.1293	19,593.97	-	21,269.93	1.2259	1.1900	20,646.50
5				-	-		Suite 500	11,350.00	-	-	11,350.00	-		1.1009	12,494.81	1.0259	1.1293	12,817.95	-	13,914.34	1.2259	1.1900	13,506.50
				-	-		Suite 550	6,000.00	-	-	6,000.00	-		1.1009	6,605.19	1.0259	1.1293	6,776.01	-	7,355.60	1.2259	1.1900	7,140.00
				-	-			-	-	-	-		1.1009	-	1.0259	1.1293	-	-	-	1.2259	1.1900	-	
	Floor Totals	20,000.00	900.00	-	-	-		17,350.00	-	-	17,350.00	-	1,750.00	1.1009	19,100.00	1.0259	1.1293	19,593.97	-	21,269.93	1.2259	1.1900	20,646.50
6				-	-		Suite 600	8,000.00	-	-	8,000.00	-		1.1105	8,883.72	1.0259	1.1392	9,113.47	-	9,892.99	1.2366	1.1900	9,520.00
				-	-		Suite 620	4,000.00	-	-	4,000.00	-		1.1105	4,441.86	1.0259	1.1392	4,556.74	-	4,946.50	1.2366	1.1900	4,760.00
				-	-		Suite 680	5,200.00	-	-	5,200.00	-		1.1105	5,774.42	1.0259	1.1392	5,923.76	-	6,430.45	1.2366	1.1900	6,188.00
	Floor Totals	20,000.00	900.00	-	-	-		17,200.00	-	-	17,200.00	-	1,900.00	1.1105	19,100.00	1.0259	1.1392	19,593.97	-	21,269.93	1.2366	1.1900	20,468.00
7				-	-		Suite 700	18,400.00	-	-	18,400.00	-		1.0380	19,100.00	1.0259	1.0649	19,593.97	-	21,269.93	1.1560	1.1560	21,269.93
				-	-			-	-	-	-		1.0380	-	1.0259	1.0649	-	-	-	1.1560	1.1560	-	
				-	-			-	-	-	-		1.0380	-	1.0259	1.0649	-	-	-	1.1560	1.1560	-	
	Floor Totals	20,000.00	900.00	-	-	-		18,400.00	-	-	18,400.00	-	700.00	1.0380	19,100.00	1.0259	1.0649	19,593.97	-	21,269.93	1.1560	1.1560	21,269.93
8				-	-		Suite 800	18,400.00	-	-	18,400.00	-		1.0380	19,100.00	1.0259	1.0649	19,593.97	-	21,269.93	1.1560	1.1560	21,269.93
				-	-			-	-	-	-		1.0380	-	1.0259	1.0649	-	-	-	1.1560	1.1560	-	
				-	-			-	-	-	-		1.0380	-	1.0259	1.0649	-	-	-	1.1560	1.1560	-	
	Floor Totals	20,000.00	900.00	-	-	-		18,400.00	-	-	18,400.00	-	700.00	1.0380	19,100.00	1.0259	1.0649	19,593.97	-	21,269.93	1.1560	1.1560	21,269.93
P.H.				-	-		Mechanical	-	-	-	-	2,100.00	-	-	-	1.0259	-	-	-	-	-	1.0000	-
				-	-			-	-	-	-	-	-	-	-	1.0259	-	-	-	-	-	1.0000	-
Floor Totals	2,500.00	400.00	-	-	-	2,100.00		-	-	-	2,100.00	-	-	-	1.0259	-	-	-	-	-	-	1.0000	-
Building Totals (£)	162,050.00	7,350.00	-	-	-	154,700.00		139,900.00	-	-	139,900.00	3,900.00	10,900.00		150,800.00	1.0259		154,700.00	-	167,932.25			164,658.48
	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																						
	No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																						
																		To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor			

A	Preliminary Calculations (not for leasing)						Intermediate Allocations (not for leasing)											Final Calculations			Optional Adjustment			
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	= I + J + K	Measure	= G - L - M	=(L+N)/L	=(I+K) * O	=ΣG/ΣP	= O * Q	= R * I	=R*K+F	=S *	=U * R	1.1900	= I * W	
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Building Amenity Areas	Inter-Building Amenity Areas	Usable Area (U)	Building Service Areas	Floor Service & Amenity Areas	R/U Ratio	Occupant + Allocated Area (O)	R/O Ratio	Load Factor A	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	
1				-	-		Suite 100	3,000.00	-	-	3,000.00	-		1.0440	3,131.87	1.0353	1.0808	3,242.44	-	3,519.78	1.1733	1.1733	3,519.78	
				-	-		Suite 120	4,000.00	-	-	4,000.00	-		1.0440	4,175.82	1.0353	1.0808	4,323.25	-	4,693.04	1.1733	1.1733	4,693.04	
				-	-		Suite 130	6,500.00	-	-	6,500.00	-		1.0440	6,785.71	1.0353	1.0808	7,025.28	-	7,626.19	1.1733	1.1733	7,626.19	
				-	-		Suite 140	2,300.00	-	-	2,300.00	-		1.0440	2,401.10	1.0353	1.0808	2,485.87	-	2,698.50	1.1733	1.1733	2,698.50	
				-	-		Building lobby/lounge	-	-	1,500.00	1,500.00	1,500.00	-	1.0440	1,565.93	1.0353	1.0808	-	1,621.22	-	-	1.1733	1.1733	-
				-	-		Cafeteria	-	-	5,000.00	5,000.00	-	-	1.0440	5,219.78	1.0353	1.0808	-	5,404.06	-	-	1.1733	1.1733	-
				-	-		Health Club	-	-	5,000.00	5,000.00	-	-	1.0440	5,219.78	1.0353	1.0808	-	5,404.06	-	-	1.1733	1.1733	-
				-	-		Fire Command center	-	-	-	-	-	600.00	1.0440	-	1.0353	1.0808	-	-	-	-	1.1733	1.1733	-
				-	-	1,000.00	Property Mgmt. office	-	-	-	-	-	-	1.0440	-	1.0353	1.0808	-	1,000.00	-	-	1.1733	1.1733	-
				-	-	1,500.00	Trash & loading dock	-	-	-	-	-	1,500.00	1.0440	-	1.0353	1.0808	-	1,500.00	-	-	1.1733	1.1733	-
Floor Totals	35,000.00	400.00	-	-	2,500.00	32,100.00		15,800.00	-	11,500.00	27,300.00	3,600.00	1,200.00	1.0440	28,500.00	1.0353	1.0808	17,076.84	14,929.35	18,537.51	1.1733	1.1733	18,537.51	
2				-	-		Suite 200	10,000.00	-	-	10,000.00	-		1.1030	11,030.30	1.0353	1.1420	11,419.73	-	12,396.51	1.2397	1.1900	11,900.00	
				-	-		Suite 250	4,000.00	-	-	4,000.00	-		1.1030	4,412.12	1.0353	1.1420	4,567.89	-	4,958.61	1.2397	1.1900	4,760.00	
				-	-		Suite 280	2,500.00	-	-	2,500.00	-		1.1030	2,757.58	1.0353	1.1420	2,854.93	-	3,099.13	1.2397	1.1900	2,975.00	
				-	-			-	-	-	-	-		1.1030	-	1.0353	1.1420	-	-	-	1.2397	1.1900	-	
				-	-			-	-	-	-	-		1.1030	-	1.0353	1.1420	-	-	-	1.2397	1.1900	-	
				-	-			-	-	-	-	-		1.1030	-	1.0353	1.1420	-	-	-	1.2397	1.1900	-	
Floor Totals	19,000.00	800.00	-	-	-	18,200.00		16,500.00	-	-	16,500.00	-	1,700.00	1.1030	18,200.00	1.0353	1.1420	18,842.55	-	20,454.25	1.2397	1.1900	19,635.00	
3				-	-		Suite 300	8,000.00	-	-	8,000.00	-		1.1003	8,802.29	1.0353	1.1391	9,113.06	-	9,892.54	1.2366	1.1900	9,520.00	
				-	-		Suite 350	9,450.00	-	-	9,450.00	-		1.1003	10,397.71	1.0353	1.1391	10,764.80	-	11,685.57	1.2366	1.1900	11,245.50	
				-	-			-	-	-	-	-		1.1003	-	1.0353	1.1391	-	-	-	1.2366	1.1900	-	
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		17,450.00	-	-	17,450.00	-	1,750.00	1.1003	19,200.00	1.0353	1.1391	19,877.86	-	21,578.11	1.2366	1.1900	20,765.50	
4				-	-		Suite 400	18,400.00	-	-	18,400.00	-		1.0408	19,150.00	1.0353	1.0775	19,826.09	-	21,521.92	1.1697	1.1697	21,521.92	
				-	-			-	-	-	-	-		1.0408	-	1.0353	1.0775	-	-	-	1.1697	1.1697	-	
				-	-			-	-	-	-	-		1.0408	-	1.0353	1.0775	-	-	-	1.1697	1.1697	-	
Floor Totals	20,000.00	850.00	-	-	-	19,150.00		18,400.00	-	-	18,400.00	-	750.00	1.0408	19,150.00	1.0353	1.0775	19,826.09	-	21,521.92	1.1697	1.1697	21,521.92	
5				-	-		Suite 500	11,000.00	-	-	11,000.00	-		1.1009	12,109.51	1.0353	1.1397	12,537.04	-	13,609.39	1.2372	1.1900	13,090.00	
				-	-		Suite 530	2,350.00	-	-	2,350.00	-		1.1009	2,587.03	1.0353	1.1397	2,678.37	-	2,907.46	1.2372	1.1900	2,796.50	
				-	-		Suite 550	4,000.00	-	-	4,000.00	-		1.1009	4,403.46	1.0353	1.1397	4,558.92	-	4,948.87	1.2372	1.1900	4,760.00	
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	-	17,350.00	-	1,750.00	1.1009	19,100.00	1.0353	1.1397	19,774.33	-	21,465.72	1.2372	1.1900	20,646.50	
6				-	-		Suite 600	18,400.00	-	-	18,400.00	-		1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		18,400.00	-	-	18,400.00	-	700.00	1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
7				-	-		Suite 700	18,400.00	-	-	18,400.00	-		1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		18,400.00	-	-	18,400.00	-	700.00	1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
8				-	-		Suite 800	18,400.00	-	-	18,400.00	-		1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
				-	-			-	-	-	-	-		1.0380	-	1.0353	1.0747	-	-	-	1.1666	1.1666	-	
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		18,400.00	-	-	18,400.00	-	700.00	1.0380	19,100.00	1.0353	1.0747	19,774.33	-	21,465.72	1.1666	1.1666	21,465.72	
P.H.				-	-		Mechanical	-	-	-	-	2,100.00	-	-	-	1.0353	-	-	-	-	-	1.0000	-	
				-	-			-	-	-	-	-	-	-	1.0353	-	-	-	-	-	-	1.0000	-	
Floor Totals	2,500.00	400.00	-	-	-	2,100.00		-	-	-	-	2,100.00	-	-	-	1.0353	-	-	-	-	-	1.0000	-	
Building Totals (Z)	176,500.00	6,850.00	-	-	2,500.00	167,150.00		140,700.00	-	11,500.00	152,200.00	5,700.00	9,250.00		161,450.00	1.0353		154,720.65	14,929.35	167,954.67			165,503.59	
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																		To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor				
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																								

A	Preliminary Calculations (not for leasing)						Intermediate Allocations (not for leasing)											Final Calculations			Optional Adjustment			
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	= I + J + K	Measure	= G - L - M	= (L+N)/L	= (I+K) * O	= ΣG/ΣP	= O * Q	= R * I	=R*K+F	=S * 1	=U * R	1.1900	= I * W	
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Building Amenity Areas	Inter-Building Amenity Areas	Usable Area (U)	Building Service Areas	Floor Service & Amenity Areas	R/U Ratio	Occupant + Allocated Area (O)	R/O Ratio	Load Factor A	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	
1				-	500.00		Parking office	-	-	-	-	-	-	-	-	-	-	-	500.00	-	-	1.0000	-	
					800.00		Site security office	-	-	-	-	-	-	-	-	-	-	-	-	800.00	-	-	1.0000	-
					1,700.00		Maintenance office	-	-	-	-	-	-	-	-	-	-	-	-	1,700.00	-	-	1.0000	-
					9,500.00		HVAC (boiler , chillers...)	-	-	-	-	-	-	-	-	-	-	-	-	9,500.00	-	-	1.0000	-
					900.00		Emergency generator	-	-	-	-	-	-	-	-	-	-	-	-	-	900.00	-	-	1.0000
Floor Totals	30,000.00	600.00	16,000.00	-	13,400.00	-		-	-	-	-	-	-	-	-	-	-	-	13,400.00	-	-	1.0000	-	
2				1,200.00	-		Occupant Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000	-	
					-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000	-
					-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000
Floor Totals	30,000.00	600.00	28,200.00	1,200.00	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000	-	
3				1,200.00	-		Occupant Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000	-	
					-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000
Floor Totals	30,000.00	600.00	28,200.00	1,200.00	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0000	-	
Building Totals (Σ)	90,000.00	1,800.00	72,400.00	2,400.00	13,400.00	-		-	-	-	-	-	-	-	-	-	-	-	13,400.00	-	-	-	-	
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																		To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor				
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																								

	A	B	C	D	E	F	G	H	I
1	Inter-Building Service & Amenity (IBSA) Areas				Building Rentable Areas and IBSA Area Allocations				
2	Building & Floor	Space ID	IBSA Area	IBSA Type	B1	B2	B3	B4	Totals
3					77,394.82	154,700.00	154,720.65	-	386,815.47
4	B1 - Fl. 00	Site Maint. Equip.	1,000.00	Service	200.08	399.93	399.99	-	1,000.00
5	B1 - Fl. 02	Conference Center	2,405.18	Amenity	481.23	961.91	962.04	-	2,405.18
6	B1 Subtotal		3,405.18		681.31	1,361.84	1,362.02	-	3,405.18
7	B3 - Fl. 01	Property Mgmt. office	1,000.00	Service	200.08	399.93	399.99	-	1,000.00
8	B3 - Fl. 01	Trash & loading dock	1,500.00	Service	300.12	599.90	599.98	-	1,500.00
9	B3 - Fl. 01	Building lobby/lounge	1,621.22	Amenity	324.38	648.38	648.46	-	1,621.22
10	B3 - Fl. 01	Cafeteria *	5,404.06	Amenity	-	2,701.85	2,702.21	-	5,404.06
11	B3 - Fl. 01	Health Club	5,404.06	Amenity	1,081.26	2,161.26	2,161.55	-	5,404.06
12	B3 Subtotal		14,929.35		1,905.84	6,511.32	6,512.19	-	14,929.35
13	B4 - Fl. 01	Parking office	500.00	Service	100.04	199.97	199.99	-	500.00
14	B4 - Fl. 01	Site security office	800.00	Service	160.07	319.95	319.99	-	800.00
15	B4 - Fl. 01	Maintenance office	1,700.00	Service	340.14	679.88	679.98	-	1,700.00
16	B4 - Fl. 01	HVAC (boiler , chillers...)	9,500.00	Service	1,900.78	3,799.36	3,799.86	-	9,500.00
17	B4 - Fl. 01	Emergency generator	900.00	Service	180.07	359.94	359.99	-	900.00
18	B4 Subtotal		13,400.00		2,681.10	5,359.09	5,359.81	-	13,400.00
19	Total IBSA Areas		31,734.53		5,268.25	13,232.25	13,234.02	-	31,734.53
20	Inter-Building Load Factor:				1.06806982	1.08553493	1.08553493	1.00000000	
21	Rentable Area:				82,663.08	167,932.25	167,954.67	-	418,550.00
22	Rentable Area Check:				82,663.08	167,932.25	167,954.67	-	418,550.00
23	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters								
24	No modification of shaded cell content is allowed. Copyright © 2013 by BOMA International. All rights reserved.								
25	Some formulas in this spreadsheet will vary depending on the number of buildings (columns) in the multi-building set, the number of inter-building service and amenity areas (rows) and the method of allocation of each of those IBSA areas among the buildings. However, it is essential that 100% of each IBSA area, no more and no less, is allocated to the buildings in the multi-building set.								
26	For each building in this example, the Building Rentable Area (row 3) is taken from the total of column S of the Method A Multi-Building Set Global Summary of Area Spreadsheet (Column N for Method B).								
27	Each IBSA Area (Column C) in this example is taken from column T of the Method A Multi-Building Set Global Summary of Area spreadsheet (column O for Method B). The subtotals (row 6, 12 & 18 in this example) are only for convenience and are not required.								
28	For each building in this example, the Total IBSA Areas (row 19) is the sum of the individual IBSA allocations in the column.								
29	For each building in this example, the Inter-Building Load Factor (row 20) is the sum of the Building Rentable Area (Row 3) and the Total IBSA Area (Row 19), divided by the Building Rentable Area (row 3). This value, which will always be equal or greater than one, is transferred to the top of Column T of the Method A Multi-Building Set Global Summary of Areas Spreadsheet (Column O for Method B).								
30	For each building in this example, the Rentable Area (row 21) is the product of its Building Rentable Area (Row 3) and its Inter-Building Load Factor (Row 20).								
31	For each building in this example, the Rentable Area Check (row 22) is its Rentable Area from the total of Column U of the Method A Multi-Building Set Global Summary of Areas spreadsheet (Column P for Method B). The vertically adjacent values in Rows 21 & 22 must be the same.								

A	Preliminary Calculations (not for leasing)						Preliminary Calculations							Final Calculations		Optional Adjustment			Information ONLY
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	=G-I-J-K	=ΣG / (ΣI+ΣJ)	= M * I	=M*J+F	= N *	= P * M	1.2500	= I * R	=S/(I+K)
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Inter-Building Amenity Areas	Base Building Circulation	Service & Amenity Areas	Load Factor B	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	Full Floor Equivalent Factor
Bsmt.				500.00	-		Occupant Storage A	-	-			1.1813	-	-	-	1.2626	1.2500	-	
				500.00	-		Occupant Storage B	-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	1,000.00		Site Maint. Equip.	-	-			1.1813	-	1,000.00	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	20,000.00	400.00	16,000.00	1,000.00	1,000.00	1,600.00		-	-	-	1,600.00	1.1813	-	1,000.00	-	1.2626	1.2500	-	-
1				-	-		Suite 100	10,000.00	-			1.1813	11,813.47	-	12,625.66	1.2626	1.2500	12,500.00	
				-	-		Suite 110	4,000.00	-			1.1813	4,725.39	-	5,050.26	1.2626	1.2500	5,000.00	
				-	-		Suite 150	1,800.00	-			1.1813	2,126.42	-	2,272.62	1.2626	1.2500	2,250.00	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		15,800.00	-	500.00	2,900.00	1.1813	18,665.28	-	19,948.54	1.2626	1.2500	19,750.00	1.2117
2				-	-		Suite 200	8,000.00	-			1.1813	9,450.78	-	10,100.52	1.2626	1.2500	10,000.00	
				-	-		Suite 250	7,000.00	-			1.1813	8,269.43	-	8,837.96	1.2626	1.2500	8,750.00	
				-	-		Conference Center	-	2,000.00			1.1813	-	2,362.69	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	19,550.00	800.00	-	-	-	18,750.00		15,000.00	2,000.00	1,000.00	750.00	1.1813	17,720.21	2,362.69	18,938.48	1.2626	1.2500	18,750.00	1.1719
3				-	-		Suite 300	17,400.00	-			1.1813	20,555.44	-	21,968.64	1.2626	1.2500	21,750.00	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	20,000.00	850.00	-	-	-	19,150.00		17,400.00	-	1,000.00	750.00	1.1813	20,555.44	-	21,968.64	1.2626	1.2500	21,750.00	1.1821
4				-	-		Suite 400	11,000.00	-			1.1813	12,994.82	-	13,888.22	1.2626	1.2500	13,750.00	
				-	-		Suite 400 Restr. Hdrm.	350.00	-			1.1813	413.47	-	441.90	1.2626	1.2500	437.50	
				-	-		Suite 450	6,000.00	-			1.1813	7,088.08	-	7,575.39	1.2626	1.2500	7,500.00	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	1,000.00	750.00	1.1813	20,496.37	-	21,905.51	1.2626	1.2500	21,687.50	1.1819
P.H.				100.00	-		Occupant Storage PH	-	-			1.1813	-	-	-	1.2626	1.2500	-	
				-	-			-	-			1.1813	-	-	-	1.2626	1.2500	-	
Floor Totals	2,500.00	400.00	-	100.00	-	2,000.00		-	-	-	2,000.00	1.1813	-	-	-	1.2626	1.2500	-	-
Building Totals (Σ)	102,050.00	4,150.00	16,000.00	1,100.00	1,000.00	79,800.00		65,550.00	2,000.00	3,500.00	8,750.00	1.1813	77,437.31	3,362.69	82,761.17	1.2626	1.2500	81,937.50	
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters													To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor				
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																			

A	Preliminary Calculations (not for leasing)						Preliminary Calculations							Final Calculations		Optional Adjustment			Information ONLY			
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T			
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	=G-I-J-K	=ΣG / (ΣI+ΣJ)	= M * I	=M*J+F	= N *	= P * M	1.2500	= I * R	=S/(I+K)			
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Inter-Building Amenity Areas	Base Building Circulation	Service & Amenity Areas	Load Factor B	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	Full Floor Equivalent Factor			
1				-	-		Suite 100	10,000.00	-			1.1300	11,300.22	-	12,283.07	1.2283	1.2283	12,283.07				
				-	-		Suite 110	4,000.00	-			1.1300	4,520.09	-	4,913.23	1.2283	1.2283	4,913.23				
				-	-		Suite 150	1,800.00	-			1.1300	2,034.04	-	2,210.95	1.2283	1.2283	2,210.95				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		15,800.00	-	-	3,400.00	1.1300	17,854.35	-	19,407.25	1.2283	1.2283	19,407.25	1.2283			
2				-	-		Suite 200	8,000.00	-			1.1300	9,040.18	-	9,826.46	1.2283	1.2283	9,826.46				
				-	-		Suite 250	5,000.00	-			1.1300	5,650.11	-	6,141.53	1.2283	1.2283	6,141.53				
				-	-		Suite 280	4,000.00	-			1.1300	4,520.09	-	4,913.23	1.2283	1.2283	4,913.23				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	19,550.00	800.00	-	-	-	18,750.00		17,000.00	-	500.00	1,250.00	1.1300	19,210.37	-	20,881.22	1.2283	1.2283	20,881.22	1.1932			
3				-	-		Suite 300	17,400.00	-			1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	20,000.00	850.00	-	-	-	19,150.00		17,400.00	-	1,000.00	750.00	1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54	1.1616			
4				-	-		Suite 400	11,000.00	-			1.1300	12,430.24	-	13,511.38	1.2283	1.2283	13,511.38				
				-	-		Suite 400 Restr. Hdrm.	350.00	-			1.1300	395.51	-	429.91	1.2283	1.2283	429.91				
				-	-		Suite 450	6,000.00	-			1.1300	6,780.13	-	7,369.84	1.2283	1.2283	7,369.84				
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	1,000.00	750.00	1.1300	19,605.88	-	21,311.12	1.2283	1.2283	21,311.12	1.1614			
5				-	-		Suite 500	11,350.00	-			1.1300	12,825.75	-	13,941.28	1.2283	1.2283	13,941.28				
				-	-		Suite 550	6,000.00	-			1.1300	6,780.13	-	7,369.84	1.2283	1.2283	7,369.84				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	1,000.00	750.00	1.1300	19,605.88	-	21,311.12	1.2283	1.2283	21,311.12	1.1614			
6				-	-		Suite 600	8,000.00	-			1.1300	9,040.18	-	9,826.46	1.2283	1.2283	9,826.46				
				-	-		Suite 620	4,000.00	-			1.1300	4,520.09	-	4,913.23	1.2283	1.2283	4,913.23				
				-	-		Suite 680	5,200.00	-			1.1300	5,876.11	-	6,387.20	1.2283	1.2283	6,387.20				
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,200.00	-	1,150.00	750.00	1.1300	19,436.38	-	21,126.88	1.2283	1.2283	21,126.88	1.1513			
7				-	-		Suite 700	17,400.00	-			1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,400.00	-	1,000.00	700.00	1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54	1.1616			
8				-	-		Suite 800	17,400.00	-			1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,400.00	-	1,000.00	700.00	1.1300	19,662.38	-	21,372.54	1.2283	1.2283	21,372.54	1.1616			
P.H.				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
				-	-			-	-			1.1300	-	-	-	1.2283	1.2283	-				
Floor Totals	2,500.00	400.00	-	-	-	2,100.00		-	-	-	2,100.00	1.1300	-	-	-	1.2283	1.2283	-	-			
Building Totals (Σ)	162,050.00	7,350.00	-	-	-	154,700.00		136,900.00	-	6,650.00	11,150.00	1.1300	154,700.00	-	168,155.21	1.2283	1.2283	168,155.21				
	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																					
	No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																					
													To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor							

A	Preliminary Calculations (not for leasing)						Preliminary Calculations						Final Calculations		Optional Adjustment			Information ONLY		
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	=G-I-J-K	=ΣG / (ΣI+ΣJ)	= M * I	=M*J+F	= N *	= P * M	1.2500	= I * R	=S/(I+K)	
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Inter-Building Amenity Areas	Base Building Circulation	Service & Amenity Areas	Load Factor B	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	Full Floor Equivalent Factor	
1				-	-		Suite 100	3,000.00	-			1.1279	3,383.60	-	3,677.90	1.2260	1.2260	3,677.90		
				-	-		Suite 120	4,000.00	-			1.1279	4,511.47	-	4,903.86	1.2260	1.2260	4,903.86		
				-	-		Suite 130	6,500.00	-			1.1279	7,331.14	-	7,968.77	1.2260	1.2260	7,968.77		
				-	-		Suite 140	2,300.00	-			1.1279	2,594.10	-	2,819.72	1.2260	1.2260	2,819.72		
				-	-		Building lobby/lounge	-	1,500.00			1.1279	-	1,691.80	-	-	1.2260	1.2260	-	
				-	-		Cafeteria *	-	5,000.00			1.1279	-	5,639.34	-	-	1.2260	1.2260	-	
				-	-		Health Club	-	5,000.00			1.1279	-	5,639.34	-	-	1.2260	1.2260	-	
				-	-		Property Mgmt. office	-	-			1.1279	-	1,000.00	-	-	1.2260	1.2260	-	
				-	-		Trash & loading dock	-	-			1.1279	-	1,500.00	-	-	1.2260	1.2260	-	
Floor Totals	35,000.00	400.00	-	-	2,500.00	32,100.00		15,800.00	11,500.00	-	4,800.00	1.1279	17,820.31	15,470.48	19,370.25	1.2260	1.2260	19,370.25	1.2260	
2				-	-		Suite 200	10,000.00	-			1.1279	11,278.68	-	12,259.65	1.2260	1.2260	12,259.65		
				-	-		Suite 250	4,000.00	-			1.1279	4,511.47	-	4,903.86	1.2260	1.2260	4,903.86		
				-	-		Suite 280	2,500.00	-			1.1279	2,819.67	-	3,064.91	1.2260	1.2260	3,064.91		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	19,000.00	800.00	-	-	-	18,200.00		16,500.00	-	950.00	750.00	1.1279	18,609.82	-	20,228.43	1.2260	1.2260	20,228.43	1.1592	
3				-	-		Suite 300	8,000.00	-			1.1279	9,022.94	-	9,807.72	1.2260	1.2260	9,807.72		
				-	-		Suite 350	9,450.00	-			1.1279	10,658.35	-	11,585.37	1.2260	1.2260	11,585.37		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	20,000.00	800.00	-	-	-	19,200.00		17,450.00	-	1,000.00	750.00	1.1279	19,681.29	-	21,393.10	1.2260	1.2260	21,393.10	1.1595	
4				-	-		Suite 400	17,400.00	-			1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	20,000.00	850.00	-	-	-	19,150.00		17,400.00	-	1,000.00	750.00	1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80	1.1593	
5				-	-		Suite 500	11,000.00	-			1.1279	12,406.55	-	13,485.62	1.2260	1.2260	13,485.62		
				-	-		Suite 530	2,350.00	-			1.1279	2,650.49	-	2,881.02	1.2260	1.2260	2,881.02		
				-	-		Suite 550	4,000.00	-			1.1279	4,511.47	-	4,903.86	1.2260	1.2260	4,903.86		
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,350.00	-	1,000.00	750.00	1.1279	19,568.51	-	21,270.50	1.2260	1.2260	21,270.50	1.1592	
6				-	-		Suite 600	17,400.00	-			1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,400.00	-	1,000.00	700.00	1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80	1.1593	
7				-	-		Suite 700	17,400.00	-			1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,400.00	-	1,000.00	700.00	1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80	1.1593	
8				-	-		Suite 800	17,400.00	-			1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	20,000.00	900.00	-	-	-	19,100.00		17,400.00	-	1,000.00	700.00	1.1279	19,624.90	-	21,331.80	1.2260	1.2260	21,331.80	1.1593	
P.H.				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
				-	-			-	-			1.1279	-	-	-	1.2260	1.2260	-		
Floor Totals	2,500.00	400.00	-	-	-	2,100.00		-	-	-	2,100.00	1.1279	-	-	-	1.2260	1.2260	-	-	
Building Totals (Σ)	176,500.00	6,850.00	-	-	2,500.00	167,150.00		136,700.00	11,500.00	6,950.00	12,000.00	1.1279	154,179.52	15,470.48	167,589.47	1.2260	1.2260	167,589.47		
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters													To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor					
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																				

A	Preliminary Calculations (not for leasing)						Preliminary Calculations							Final Calculations		Optional Adjustment			Information ONLY
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	=G-I-J-K	=ΣG / (ΣI+ΣJ)	= M * I	=M*J+F	= N *	= P * M	1.2500	= I * R	=S/(I+K)
Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Inter-Building Amenity Areas	Base Building Circulation	Service & Amenity Areas	Load Factor B	Building Rentable Area	IBSA Areas	Rentable Area	Effective Load Factor	Capped Load Factor	Capped Rentable Area	Full Floor Equivalent Factor
1				-	500.00		Parking office	-	-			-	-	500.00	-	-	1.0000	-	
				-	800.00		Site security office	-	-			-	-	800.00	-	-	1.0000	-	
				-	1,700.00		Maintenance office	-	-			-	-	1,700.00	-	-	1.0000	-	
				-	9,500.00		HVAC (boiler , chillers...)	-	-			-	-	9,500.00	-	-	1.0000	-	
				-	900.00		Emergency generator	-	-			-	-	900.00	-	-	1.0000	-	
Floor Totals	30,000.00	600.00	16,000.00	-	13,400.00	-		-	-	-	-	-	-	13,400.00	-	-	1.0000	-	
2				1,200.00	-		Occupant Storage	-	-			-	-	-	-	-	1.0000	-	
				-	-			-	-			-	-	-	-	-	1.0000	-	
				-	-			-	-			-	-	-	-	-	1.0000	-	
				-	-			-	-			-	-	-	-	-	1.0000	-	
				-	-			-	-			-	-	-	-	-	1.0000	-	
Floor Totals	30,000.00	600.00	28,200.00	1,200.00	-	-		-	-	-	-	-	-	-	-	-	1.0000	-	
3				1,200.00	-		Occupant Storage	-	-			-	-	-	-	-	1.0000	-	
				-	-			-	-			-	-	-	-	-	1.0000	-	
Floor Totals	30,000.00	600.00	28,200.00	1,200.00	-	-		-	-	-	-	-	-	-	-	-	1.0000	-	
Building Totals (Σ)	90,000.00	1,800.00	72,400.00	2,400.00	13,400.00	-		-	-	-	-	-	-	13,400.00	-	-	1.0000	-	
Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters													To IBSA Allocation Worksheet	To IBSA Allocation Worksheet	With IBSA Load Factor				
No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																			

	A	B	C	D	E	F	G	H	I
1	Inter-Building Service & Amenity (IBSA) Areas				Building Rentable Areas and IBSA Area Allocations				
2	Building & Floor	Space ID	IBSA Area	IBSA Type	B1	B2	B3	B4	Totals
3					77,394.82	154,700.00	154,720.65	-	386,815.47
4	B1 - Fl. 00	Site Maint. Equip.	1,000.00	Service	200.08	399.93	399.99	-	1,000.00
5	B1 - Fl. 02	Conference Center	2,362.69	Amenity	472.73	944.92	945.04	-	2,362.69
6	B1 Subtotal		3,362.69		672.81	1,344.85	1,345.03	-	3,362.69
7	B3 - Fl. 01	Property Mgmt. office	1,000.00	Service	200.08	399.93	399.99	-	1,000.00
8	B3 - Fl. 01	Trash & loading dock	1,500.00	Service	300.12	599.90	599.98	-	1,500.00
9	B3 - Fl. 01	Building lobby/lounge	1,691.80	Amenity	338.50	676.61	676.70	-	1,691.80
10	B3 - Fl. 01	Cafeteria *	5,639.34	Amenity	-	2,819.48	2,819.86	-	5,639.34
11	B3 - Fl. 01	Health Club	5,639.34	Amenity	1,128.33	2,255.35	2,255.65	-	5,639.34
12	B3 Subtotal		15,470.48		1,967.03	6,751.27	6,752.17	-	15,470.48
13	B4 - Fl. 01	Parking office	500.00	Service	100.04	199.97	199.99	-	500.00
14	B4 - Fl. 01	Site security office	800.00	Service	160.07	319.95	319.99	-	800.00
15	B4 - Fl. 01	Maintenance office	1,700.00	Service	340.14	679.88	679.98	-	1,700.00
16	B4 - Fl. 01	HVAC (boiler , chillers...)	9,500.00	Service	1,900.78	3,799.36	3,799.86	-	9,500.00
17	B4 - Fl. 01	Emergency generator	900.00	Service	180.07	359.94	359.99	-	900.00
18	B4 Subtotal		13,400.00		2,681.10	5,359.09	5,359.81	-	13,400.00
19	Total IBSA Areas		32,233.17		5,320.95	13,455.21	13,457.01	-	32,233.17
20	Inter-Building Load Factor:				1.06875070	1.08697618	1.08697618	1.00000000	
21	Rentable Area:				82,715.77	168,155.21	168,177.66	-	419,048.65
22	Rentable Area Check:				82,663.08	167,932.25	167,954.67	-	418,550.00
23	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters								
24	No modification of shaded cell content is allowed. Copyright © 2013 by BOMA International. All rights reserved.								
25	Some formulas in this spreadsheet will vary depending on the number of buildings (columns) in the multi-building set, the number of inter-building service and amenity areas (rows) and the method of allocation of each of those IBSA areas among the buildings. However, it is essential that 100% of each IBSA area, no more and no less, is allocated to the buildings in the multi-building set.								
26	For each building in this example, the Building Rentable Area (row 3) is taken from the total of column S of the Method A Multi-Building Set Global Summary of Area Spreadsheet (Column N for Method B).								
27	Each IBSA Area (Column C) in this example is taken from column T of the Method A Multi-Building Set Global Summary of Area spreadsheet (column O for Method B). The subtotals (row 6, 12 & 18 in this example) are only for convenience and are not required.								
28	For each building in this example, the Total IBSA Areas (row 19) is the sum of the individual IBSA allocations in the column.								
29	For each building in this example, the Inter-Building Load Factor (row 20) is the sum of the Building Rentable Area (Row 3) and the Total IBSA Area (Row 19), divided by the Building Rentable Area (row 3). This value, which will always be equal or greater than one, is transferred to the top of Column T of the Method A Multi-Building Set Global Summary of Areas Spreadsheet (Column O for Method B).								
30	For each building in this example, the Rentable Area (row 21) is the product of its Building Rentable Area (Row 3) and its Inter-Building Load Factor (Row 20).								
31	For each building in this example, the Rentable Area Check (row 22) is its Rentable Area from the total of Column U of the Method A Multi-Building Set Global Summary of Areas spreadsheet (Column P for Method B). The vertically adjacent values in Rows 21 & 22 must be the same.								



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets
Applicable to: BOMA 2010 Office Standard (ANSI/BOMA Z65.1-2010)

Illustrations There are three spreadsheets illustrated below as follows:

1. Method A Multi-Building Set Global Summary of Areas showing Excel™ formulas in each cell of the worksheet
2. Method B Multi-Building Set Global Summary of Areas showing Excel™ formulas in each cell of the worksheet
3. IBSA Allocation Worksheet showing Excel™ formulas that can be used for either Method A or Method B

The Multi-Building Set Global Summary of Areas spreadsheets are modifications of the Global Summary of Areas spreadsheets included in the BOMA 2010 Office Standard. The specific modifications are:

- A new column F to list inter-building service areas in each building
- A new column K in Method A (column J in Method B), to list inter-building amenity areas in each building
- Re-labeling of column S in Method A (column N in Method B) as building rentable area (excluding inter-building service and amenity area). The total of this column is exported to the IBSA Allocation Worksheet.
- A new column T in Method A (column O in Method B) that includes the measured area of all inter-building service areas in a building and the rentable area of all inter-building amenity areas in the building. For each building in a multi-building set, each IBSA area listed in column T of the Method A spreadsheet (column O in Method B) is exported to column C of the IBSA Allocation Worksheet.
- A new column U in Method A (column P in Method B) entitled Rentable Area. The unshaded cell at the top of this column contains the inter-building load factor that is computed for that building in the IBSA Allocation Worksheet. On each row below, that inter-building load factor is applied to the building rentable area in column S for Method A (column N in Method B) to calculate the rentable area of each occupant area listed in column H. Please note that the total rentable area of a building is NOT the sum of the totals of building rentable area and inter-building service and amenity area.
- A new column V in Method A (column Q in Method B) that calculates the effective load factor on each floor of a building. This value is the one that is capped when the option of applying a capped load factor is elected as directed in the BOMA 2010 Office Standard.

The IBSA Allocation Worksheet may be used with either Method A or Method B, or in multi-building sets that employ a mix of Method A & B in the measurement of the buildings therein. It calculates the inter-building load factor from the building rentable areas and inter-building service and amenity areas of each building in a multi-building set. The inter-building load factor is entered at the top of the rentable area column in the multi-building set global summary of areas spreadsheet for each building in order to calculate the rentable area of each suite and floor in each building.



Floor Area Measurement Best Practices #3

Inter-Building Service and Amenity Areas in Campuses & Multi-Building Sets
Applicable to: BOMA 2010 Office Standard (ANSI/BOMA Z65.1-2010)

In addition the IBSA Allocation Worksheet performs a check sum of rentable areas of all the buildings in a multi-building set to ensure that their total equals the totals of the building rentable areas and inter-building service and amenity areas. This is a primary requirement for this Best Practice.

Some formulas in this spreadsheet will vary depending on the number of buildings (columns) in the multi-building set, the number of inter-building service and amenity areas (rows) and the method of allocation of each of those IBSA areas among the buildings.

Contributed William Tracy, AIA, MBA / Building Area Measurement LLC

By:

2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Preliminary Calculations (not for leasing)						Preliminary Calculations						Final Calculations				Optional Adjustment			Information ONLY
2	Input	Measure	Measure	Measure	Measure	Measure	=B-C-D-E-F	Input	Measure	Measure	Measure	=G-I-J-K	=ΣG/(ΣI+ΣJ)	= M * I	=M*J+F	= N *	= P * M	INPUT	= I * R	=S/(I+K)
3	Floor Level	Interior Gross Area	Major Vertical Penetrations	Parking	Occupant Storage	Inter-Building Service Areas	Preliminary Floor Area	Space ID	Occupant Area	Inter-Building Amenity Areas	Base Building Circulation	Service & Amenity Areas	Load Factor B	Building Rentable Area	IBSA Areas	RENTABLE AREA	Effective Load Factor	Capped Load Factor	Capped Rentable Area	Full Floor Equivalent Factor
4					INPUT	INPUT		INPUT	INPUT	INPUT			=M6*M6	=M6*J6+F6	=IF(ISBLANK(\$P\$4),1,MAX(\$P\$4,1)*N6)	=SQS33	=SR\$533	=R6*I6		
5	Bsmt.				INPUT	INPUT		INPUT	INPUT	INPUT			=M7*M7	=M7*J7+F7	=IF(ISBLANK(\$P\$4),1,MAX(\$P\$4,1)*N7)	=SQS33	=SR\$533	=R7*I7		
6	Floor Totals	INPUT	INPUT	INPUT	=SUBTOTAL(9,E6:E9)	=SUBTOTAL(9,F6:F9)	=B10-C10-D10-E10-F10	INPUT	INPUT	INPUT	INPUT		=M8*M8	=M8*J8+F8	=IF(ISBLANK(\$P\$4),1,MAX(\$P\$4,1)*N8)	=SQS33	=SR\$533	=R8*I8		
7													=M9*M9	=M9*J9+F9	=IF(ISBLANK(\$P\$4),1,MAX(\$P\$4,1)*N9)	=SQS33	=SR\$533	=R9*I9		
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				
32																				
33	Building Totals (\$)	=SUM(B10:B32)	=SUM(C10:C32)	=SUM(D10:D32)	=SUBTOTAL(9,E6:E32)	=SUBTOTAL(9,F6:F32)	=SUM(G10:G32)						=IF((G33+J33)>0,\$G\$33/(\$I\$33+\$J\$33),0)	=SUBTOTAL(9,N6:N32)	=SUBTOTAL(9,O6:O32)	=SUBTOTAL(9,P6:P32)	=IF(I33>0,P33/I33,0)	=IF(ISBLANK(R\$3),Q33,MAX(MIN(Q33,R\$3),1))	=SUBTOTAL(9,S6:S32)	
34	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters																			
35	No modification of shaded cell content is allowed. Preliminary Calculations and Intermediate Allocations are not for leasing. Copyright © 2013 by BOMA International. All rights reserved.																			

	A	B	C	D	E	F	G	H	I
1	Inter-Building Service & Amenity (IBSA) Areas				Building Rentable Areas and IBSA Area Allocations				
2	Building & Floor	Space ID	IBSA Area	IBSA Type	INPUT or LINK	INPUT or LINK	INPUT or LINK	INPUT or LINK	Totals
3					INPUT or LINK	INPUT or LINK	INPUT or LINK	INPUT or LINK	=SUM(E3:H3)
4	B1 - Fl. 00	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C4	=F\$3/\$I\$3*\$C4	=G\$3/\$I\$3*\$C4	=H\$3/\$I\$3*\$C4	=SUM(E4:H4)
5	B1 - Fl. 02	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C5	=F\$3/\$I\$3*\$C5	=G\$3/\$I\$3*\$C5	=H\$3/\$I\$3*\$C5	=SUM(E5:H5)
6	B1 Subtotal		=SUBTOTAL(9,C4:C5)		=SUBTOTAL(9,E4:E5)	=SUBTOTAL(9,F4:F5)	=SUBTOTAL(9,G4:G5)	=SUBTOTAL(9,H4:H5)	=SUBTOTAL(9,I4:I5)
7	B3 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C7	=F\$3/\$I\$3*\$C7	=G\$3/\$I\$3*\$C7	=H\$3/\$I\$3*\$C7	=SUM(E7:H7)
8	B3 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C8	=F\$3/\$I\$3*\$C8	=G\$3/\$I\$3*\$C8	=H\$3/\$I\$3*\$C8	=SUM(E8:H8)
9	B3 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C9	=F\$3/\$I\$3*\$C9	=G\$3/\$I\$3*\$C9	=H\$3/\$I\$3*\$C9	=SUM(E9:H9)
10	B3 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	0	=F3/(\$F3+\$G3)*\$C10	=C10-F10	=H\$3/\$I\$3*\$C10	=SUM(E10:H10)
11	B3 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C11	=F\$3/\$I\$3*\$C11	=G\$3/\$I\$3*\$C11	=H\$3/\$I\$3*\$C11	=SUM(E11:H11)
12	B3 Subtotal		=SUBTOTAL(9,C7:C11)		=SUBTOTAL(9,E7:E11)	=SUBTOTAL(9,F7:F11)	=SUBTOTAL(9,G7:G11)	=SUBTOTAL(9,H7:H11)	=SUBTOTAL(9,I7:I11)
13	B4 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C13	=F\$3/\$I\$3*\$C13	=G\$3/\$I\$3*\$C13	=H\$3/\$I\$3*\$C13	=SUM(E13:H13)
14	B4 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C14	=F\$3/\$I\$3*\$C14	=G\$3/\$I\$3*\$C14	=H\$3/\$I\$3*\$C14	=SUM(E14:H14)
15	B4 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C15	=F\$3/\$I\$3*\$C15	=G\$3/\$I\$3*\$C15	=H\$3/\$I\$3*\$C15	=SUM(E15:H15)
16	B4 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C16	=F\$3/\$I\$3*\$C16	=G\$3/\$I\$3*\$C16	=H\$3/\$I\$3*\$C16	=SUM(E16:H16)
17	B4 - Fl. 01	INPUT or LINK	INPUT or LINK	INPUT or LINK	=E\$3/\$I\$3*\$C17	=F\$3/\$I\$3*\$C17	=G\$3/\$I\$3*\$C17	=H\$3/\$I\$3*\$C17	=SUM(E17:H17)
18	B4 Subtotal		=SUBTOTAL(9,C13:C17)		=SUBTOTAL(9,E13:E17)	=SUBTOTAL(9,F13:F17)	=SUBTOTAL(9,G13:G17)	=SUBTOTAL(9,H13:H17)	=SUBTOTAL(9,I13:I17)
19	Total IBSA Areas		=SUBTOTAL(9,C4:C18)		=SUBTOTAL(9,E4:E18)	=SUBTOTAL(9,F4:F18)	=SUBTOTAL(9,G4:G18)	=SUBTOTAL(9,H4:H18)	=SUBTOTAL(9,I4:I18)
20	Inter-Building Load Factor:				=IF(E3>0,(E3+E19)/E3,1)	=IF(F3>0,(F3+F19)/F3,1)	=IF(G3>0,(G3+G19)/G3,1)	=IF(H3>0,(H3+H19)/H3,1)	
21	Rentable Area:				=E20*E3	=F20*F3	=G20*G3	=H20*H3	=SUM(E21:H21)
22	Rentable Area Check:				=B1-Method A!U34	=B2-Method A!U43	=B3-Method A!U51	=B4-Method A!U19	=SUM(E22:H22)
23	Values in this table represent (check one) <input type="checkbox"/> square feet <input type="checkbox"/> square meters								
24	No modification of shaded cell content is allowed. Copyright © 2013 by BOMA International. All rights reserved.								
25	Some formulas in this spreadsheet will vary depending on the number of buildings (columns) in the multi-building set, the number of inter-building service and amenity areas (rows) and the method of allocation of each of those IBSA areas among the buildings. However, it is essential that 100% of each IBSA area, no more and no less, is allocated to the buildings in the multi-building set.								
26	For each building in this example, the Building Rentable Area (row 3) is taken from the total of column S of the Method A Multi-Building Set Global Summary of Area Spreadsheet (Column N for Method B).								
27	Each IBSA Area (Column C) in this example is taken from column T of the Method A Multi-Building Set Global Summary of Area spreadsheet (column O for Method B). The subtotals (row 6, 12 & 18 in this example) are only for convenience and are not required.								
28	For each building in this example, the Total IBSA Areas (row 19) is the sum of the individual IBSA allocations in the column.								
29	For each building in this example, the Inter-Building Load Factor (row 20) is the sum of the Building Rentable Area (Row 3) and the Total IBSA Area (Row 19), divided by the Building Rentable Area (row 3). This value, which will always be equal or greater than one, is transferred to the top of Column T of the Method A Multi-Building Set Global Summary of Areas Spreadsheet (Column O for Method B).								
30	For each building in this example, the Rentable Area (row 21) is the product of its Building Rentable Area (Row 3) and its Inter-Building Load Factor (Row 20).								
31	For each building in this example, the Rentable Area Check (row 22) is its Rentable Area from the total of Column U of the Method A Multi-Building Set Global Summary of Areas spreadsheet (Column P for Method B). The vertically adjacent values in Rows 21 & 22 must be the same.								