Floor Area Measurement Best Practices #2

Major Vertical Penetration Area at IGA Boundary

Approved: 04-Feb-2014

Introduction: The Floor Measurement Standards Committee of BOMA International has approved this Best Practice to provide guidance in addition to that included in the BOMA 2010 Office Standard. This Best Practice does not modify the BOMA 2010 Office Standard published as ANSI/BOMA Z65.1-2010 but may be considered for inclusion in future updates of that publication. The provisions in section of the Legal Notice page of ANSI/BOMA Z65.1-2010 are included herein by reference.

Question: The BOMA Office Standard has always stated that the area of a Major Vertical Penetration includes the thickness of its enclosing walls. Is that true even when a Major Vertical Penetration is next to an exterior building wall? How about other classes of space listed in the Wall Priority Diagram (Chart #2) of the BOMA 2010 Office Standard?

Answer: The Interior Gross Area (IGA) of a building is determined using Chart #1, IGA Boundary Conditions, of the BOMA 2010 Office Standard without regard to whether interior area class. Because no areas may be measured outside the IGA Boundary, the area of a Major Vertical Penetration would not include the thickness of the exterior enclosure of a building.

There are three exceptions to this rule:
1. Any class of space that is adjacent to a Public Pedestrian Thoroughfare extends to the Enclosure Limit, which is the IGA Boundary for that condition (See IGA Condition #2, Chart #1).
2. Any class of space that is adjacent to a Property Line between two different owners extends to that Property Line. (See IGA Condition #9, Chart #1).
3. Major Vertical Penetrations and Building Service Areas that are adjacent to External Circulation generally include the thickness of exterior enclosing walls because External Circulation is inside the IGA Boundary and is generally classified as Floor Service Area or Base Building Circulation in Method B, which has lower wall priority than Floor Service Area on Chart #2.

Support: Section 3: Overview of Measurement Methods.

Examples: Illustration 10.6 page #49 of ANSI/BOMA Z65.1-2010
Illustration 11.6 page #55 of ANSI/BOMA Z65.1-2010
Illustration 12.4 page #59 of ANSI/BOMA Z65.1-2010

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Illustration 10.6
LEVEL 8 FLOOR PLAN

Note 1: IGA Boundary is at Dominant Porion, shown here at a vertical exterior enclosure at the inside face of glass where window system comprises 50% or more of the vertical floor-to-ceiling dimension.

Note 2: IGA Boundary is at Dominant Porion, shown here at a vertical exterior enclosure at the inside finished surface of non-glass material where such material comprises 50% or more of the vertical floor-to-ceiling dimension.

Refer to Chart 1, IGA Boundary Conditions
Illustration 11.6 Method A
LEVEL 8 SPACE CLASSES

- Major Vertical Penetrations
- Occupant Area
- Floor Service Area

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