RICS Property Measurement incorporating International Property Measurement Standards: Office Buildings

Bilfinger GVA
19 October 2015
International Property Measurement Standards: Office Buildings - Consistency in an inconsistent world
IPMS – creating the standard

- Property measurement - the need
- Property measurement – separate standards
- International forces – the triggers
- Agreement and publication
- National implementation
Understanding IPMS

• Today, measurement standards are not consistent.
• Property is measured in many different ways around the world.
• Depending on the standard used, the floor area measurement can vary dramatically...
Understanding IPMS

■ The Challenge

• Difficult to compare like-with-like.
• Lack of transparency
• Difficult to compare cross-border transactions.
• Huge impact on financial reporting
• Can lead to inaccuracies with poor measurement.
Understanding IPMS
International Property Measurement Standards - the missing link!
Understanding IPMS
IPMS: Office Buildings
November 2014
RICS Property Measurement, 1st Edition
May 2015
RICS Property Measurement

RICS professional guidance, global
RICS property measurement
(Incorporating International Property Measurement Standards)

International Property Measurement Standards: Office Buildings
International Property Measurement Standards Coalition

t h e   t r u s t e d   n a m e   i n   m e a s u r e m e n t

Code of Measuring Practice
A guide for Property Professionals

8th Edition
RICS Property Measurement

- Response to IPMS: Office Buildings
- Consultation process
- Final Professional Statement published in May 2015 (mandatory from Jan 2016)
- Code of measurement not valuation
Limited Use areas

Example 1
Area difference from Internal Dominant Face

Example 2
Areas with limited height

Example 3
Areas with limited natural light

Example 4
Above and below ground

Example 5
Internal structural walls, columns
IPMS – Office Buildings

Classifications summary

- **IPMS 1** similar to GEA
- **IPMS 2 - Office** similar to GIA but more detailed by the identification of Component Areas (A to H)
- **IPMS 3 – Office** similar to NIA but with columns, internal walls included
**Definition**: The sum of the areas of each floor level of a building measured to the outer perimeter of external construction features and reported on a floor-by-floor basis.

**Application**: Planning purposes  
Costing of development proposals
IPMS 1 - Ins and Outs

- Balconies, terraces, basement structure
- Open light wells, upper atria levels, open stairs
Converting IPMS 1 to COMP

From IPMS 1 to GEA

► Covered galleries
► Uncovered balconies
► Accessible roof terraces
IPMS 2 – Office

**Definition:** The sum of the areas of each floor level of an office building measured to the Internal Dominant Face (and reported on a Component-by-Component basis for each floor of a Building)

**Application:** asset managers, Brokers, cost consultants, facility managers, occupiers, owners, property managers, researchers, valuers.
IPMS 2 – Office Component Areas

Area A - Vertical Penetrations
Area B - Structural Elements
Area C - Technical Services
Area D - Hygiene Areas
Area E - Circulation Areas
Area F - Amenities
Area G - Workspace
Area H - Other Areas
# IPMS 2 – Office Component Area Spreadsheet

**Sample spreadsheet for IPMS 2 – Office**

<table>
<thead>
<tr>
<th>Floor</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Area A: Vertical Penetration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: stairs, ventilation or stacks and shafts</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area B: Structural Walls, Columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: plant rooms, W/H/ chillers, motor rooms and maintenance rooms</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>* Limited use areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPMC total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area C: Technical Sanitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: toilet facilities, janitor’s cupboards, shower rooms and changing rooms</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>* Limited use areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPMC total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area D: Utility Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: all horizontal circulation areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>* Limited use areas</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>IPMC total</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area E: Circulation Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: all horizontal circulation areas</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>* Limited use areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPMC total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area F: Amenities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: canteens, day-care facilities, fitness areas, and prayer rooms</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>* Limited use areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPMC total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Sample spreadsheet for IPMS 2 – Office continued**

<table>
<thead>
<tr>
<th>Floor</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Area C: Workspaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workspace</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Material</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Component Area D: Other Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: lobbies, elevator galleries, internal car parking and storage rooms **</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>** Limited use areas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPMC total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL IPMS 2 – Office**

| Aggregate non-limited use Component Areas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Limited use areas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total IPMS 2 – Office | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Additional areas outside IPMS 2 – Office**

- **Internal car parking**: 0
- **Docks, loading/unloading areas of the building (e.g., porte cochere)**: 0
- **Any other areas (Examples: equipment yards, loading equipment, waste areas)**: 0

* *Limited areas, if any, are to be assessed separately.
** The areas of each component area to be stated separately.

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*IPMS Office Buildings*

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**the trusted name in measurement**
Internal Dominant Face Definition

‘The inside finished surface comprising 50% or more of the surface area for each Vertical Section forming an internal perimeter.’
Vertical Section Definition

‘Each part of a window, wall or external construction feature of an office building, where the inside finished surface area varies from the inside finished surface area of the adjoining window, wall or external construction feature, ignoring the existence of any columns.’
Internal Dominant Face and Vertical Section Guidelines

- Skirting Columns
- Window Frames
- Cornices
Internal Dominant Face example
Internal Dominant Face example
Converting IPMS 2: Office to COMP

Difference between GIA and IPMS 2: Office

- **Inclusions/exclusions**
  - Covered galleries and balconies
  - Accessible roof terraces

- **Space perimeter**
  - IDF versus wall-floor junction
IPMS 3 – Office

Definition

IPMS 3 – Office:

- Exclusive use floor space
- Excluding standard building facilities
Standard Facilities

Shared or common facilities that typically do not change over time.
Examples:
Stairs, escalators, lifts/elevators and motor rooms, toilets, cleaners’ cupboards, plant rooms, fire refuge areas and maintenance rooms.
IPMS 3 – Office

Inclusions and Exclusions

- Inclusions
- Measurements included but stated separately
- Exclusions
Converting IPMS 3 - Office to COMP

Difference between IPMS 3 - Office and NIA

- Internal structure
- Dividing (party) walls
- IDF adjustments
- Exclusive use ‘ancillary’ areas
Conversion NIA to IMPS 3 - Office
Conversion NIA to IMPS 3 - Office
Conversion NIA to IMPS 3 - Office
## Conversion NIA and IPMS 3 - Office

### Analysis – single sample

<table>
<thead>
<tr>
<th>RICS NIA</th>
<th>IPMS 3 Including Balconies</th>
<th>IPMS 3 Excluding Balconies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA</td>
<td>AREA</td>
<td>AREA</td>
</tr>
<tr>
<td>sq m</td>
<td>sq ft</td>
<td>sq m</td>
</tr>
<tr>
<td>1542.8</td>
<td>16607</td>
<td>1559.8</td>
</tr>
<tr>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
</tr>
<tr>
<td><strong>sq m</strong></td>
<td><strong>sq ft</strong></td>
<td><strong>sq m</strong></td>
</tr>
<tr>
<td>1641.9</td>
<td>17673</td>
<td>16790</td>
</tr>
<tr>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
</tr>
<tr>
<td><strong>sq m</strong></td>
<td><strong>sq ft</strong></td>
<td><strong>sq ft</strong></td>
</tr>
<tr>
<td>99.1</td>
<td>1066</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
<td><strong>AREA</strong></td>
</tr>
<tr>
<td><strong>sq m</strong></td>
<td><strong>sq ft</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>6.419</td>
<td>6.102</td>
<td></td>
</tr>
</tbody>
</table>

The trusted name in measurement
IPMS 3 – Office to NIA
IPMS 3 – Office to NIA

- Engaged column
- Island column
- Half party wall width
- Limited use
Summary of the changes from COMP

- Redefinition of office area extents and content
- Less “drill-down” progression IPMS 1 to IPMS 3
- Larger reported area figures
- More comprehensive survey
- More standardization in reporting
And finally

► New property measurement code for office space measuring and reporting is here
► New codes for residential, industrial and retail will follow www.ipmsc.org
► IPMS for Residential Buildings - consultation period recently completed
► Dual reporting will facilitate a smooth transition from COMP to IPMS
► Website address: www.rics.org

Thank you