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PROPERTY VALUATION

(BG3 ALT S6)

Section 7 –

Measurement

Real Estate Business Management Program

Year 3 – Work study program

Présenter: David Hourihan MSc Prop Inv FRICS

7 November 2023

Property Valuation (BG3 ALT S6)

Agenda

Introduction to:

1. Measurement Standards – Why are they needed?
2. Measurement Standards – Their Evolution.
3. Code of Measuring Practice 6th Edition.
4. RICS Property Measurement Professional Statement 2nd Edition 2018.
5. International Property Measurement Standards (IPMS).
6. Tools to use in carrying out measurements.
7. Watch out for errors in your measurements.
8. Surveying Safely.

1. Measurement Standards – Why are they needed?

Why is it important to have consistency?

- Measurement is a fundamental basis for valuation.
- It provides a tool for comparison.

A global standard gives:

- Consistency of reporting.
- Transparency of data.
- Comparability across different markets.
- Reduced distortion when analysing property measurements.

2. Measurement Standards – Their evolution

- **Code of Measuring Practice 6th edition.**

- **RICS Property Measurement 2nd Edition.**

- **International Property Measurement Standards**
  - IPMS: Office Buildings – published 2014.
  - IPMS: Residential Buildings – published 2016.
  - IPMS: Industrial Buildings – published – 2018.
  - IPMS: Retail Buildings – published 2019.
  - IPMS: All Buildings – published 2022.

3. Code of Measuring Practice 6th edition.

Core definitions

- **Gross External Area** (GEA):

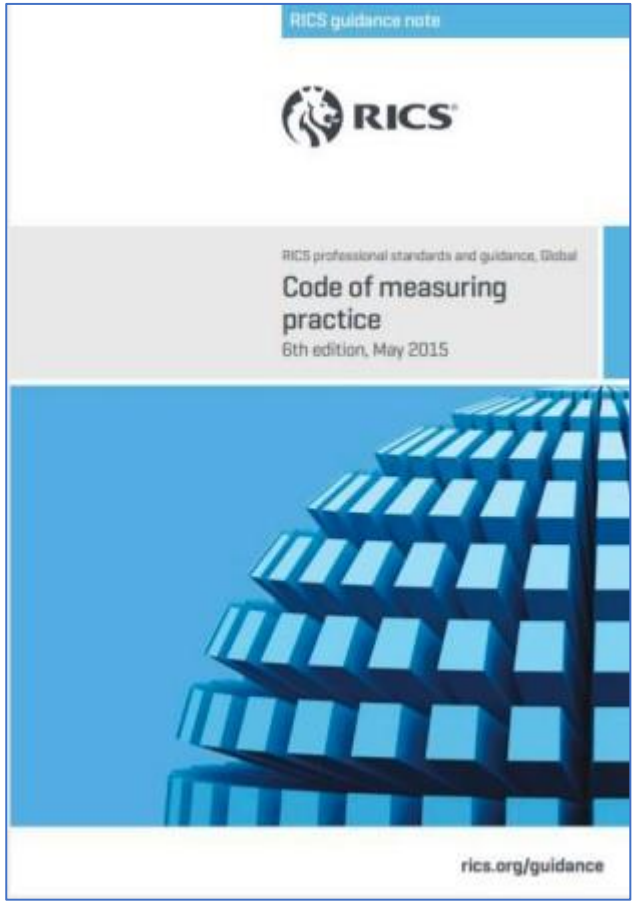
  Area of a building measured externally at each floor level.

- **Gross Internal Area** (GIA):

  Area of a building measured to internal face of the perimeter walls at each floor level.

- **Net Internal Area** (NIA):

  Area within a building measured to internal face of the perimeter walls at each floor level.



Property Valuation (BG3 ALT S6)

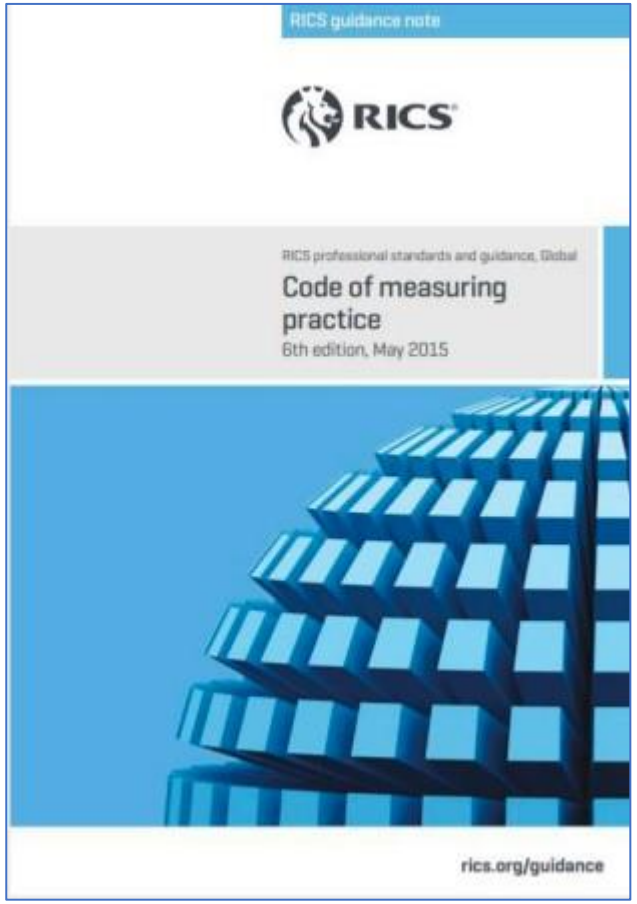
3. Code of Measuring Practice 6th edition.

Cost estimation

Non-residential all-purpose	GIA
Residential Insurance	GEA

Estate Agency and Valuation

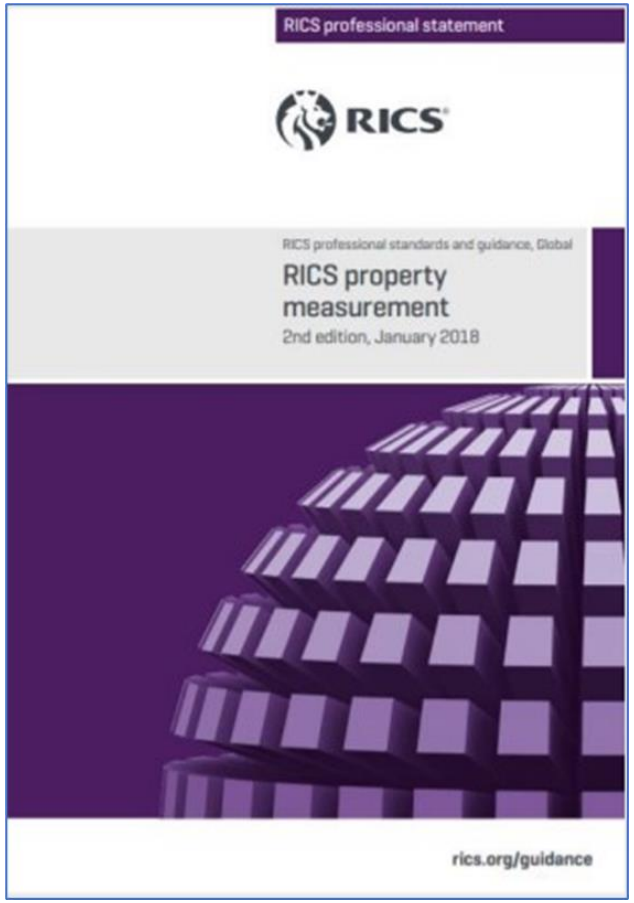
Business	NIA
Industrial	GIA
Offices	NIA
Department stores	GIA
Retail Warehouse	GIA
Food superstores	GIA



4. RICS Property Measurement 2nd Edition.

RICS Property Measurement 2nd ed. comprises:

- Professional Statement took effect from 1 May 2018.
- IPMS Measurements for Offices.
- IPMS Measurements for Residential Buildings.



IPMS 1 measurement includes the area of the building incorporating the external walls. The key differences between IPMS 1 and GEA are the inclusion of balconies under IPMS 1.

IPMS 2 measurements are taken to the 'Internal Dominant Face'. The internal dominant face is defined as the "surface comprising more than 50% of the surface area for each vertical section forming an internal perimeter". Covered galleries and balconies are included in the measurement and reported. **Similar to GIA.**

IPMS 3 measurements are perimeter measurements taken to the 'Internal Dominant Face', columns are included within the measurement (previously excluded). **Similar to NIA.**

The application of these are similar to the CoMP definitions they replace.

5. International Property Measurement Standards (IPMS)

1. IPMS 1 and IPMS 2 are external and internal measurements respectively for the whole or part of a Building.

2. IPMS 3.1 and IPMS 3.2 are external and internal measurements respectively required for exclusive occupation.

3. IPMS 4.1 and IPMS 4.2 are internal measurements required for selected areas respectively including Internal Walls and Columns and excluding External Walls and Columns.

For ease of reference the various standards are named using the IPMS prefix to make the nomenclature IPMS 1, IPMS 2, IPMS 3.1, IPMS 3.2, IPMS 4.1 and IPMS 4.2 more user friendly.

5. International Property Measurement Standards (IPMS)

IPMS adopts the following fundamental measurement and calculation practices:

1. Measurements and calculations should be in the unit of measurement commonly adopted in the relevant jurisdiction (i.e. Sq m or Sq Ft).
2. All measurements, apart from height, are to be taken horizontally.
3. IPMS measurement should be supported by computer-generated drawings if available but, where other drawings are used as a basis for measurement, annotated dimensions on drawings should be used in preference to a reliance on scaling alone.
4. Where possible, measurements should be independently verified on site.
5. Measurement and computing processes must be sufficiently accurate to satisfy the requirements and the purpose to which the measurement is to be used.
6. Buildings or selected areas are to be measured individually on a level-by-level basis.
7. When faced with situations not explicitly addressed by IPMS, the principles are to be extrapolated using a logical and consistent approach, based on these fundamental principles and supported by an explanation.

5. International Property Measurement Standards (IPMS)

Each measurement standard is broken down into 4 stages:

Stage 1 – Guidance to determine the Boundary of the measurement required e.g. whether to include Sheltered Areas, or External Floor Areas.

Stage 2 – Other considerations to take into account when calculating the area e.g. measurement of void/mezzanine extents.

Stage 3 – Measurement and calculation of the Boundary.

Stage 4 – Areas included in a measurement that must be reported separately. e.g. Limited Use Areas or External Floor Areas.

5. International Property Measurement Standards (IPMS)

IPMS 1 The Floor Area measured to the external extent of the external walls and to any notional boundaries, external floor areas or sheltered areas.

IPMS 2 The Floor Area measured to the internal extent of the internal dominant face (IDF) and to any notional boundaries and external floor areas.

IPMS 3.1 The Floor Area available on an exclusive basis to an occupier measured externally to any notional boundaries, external walls, demising walls and including any external floor areas, sheltered areas and secondary areas.

IPMS 3.2 The Floor Area available on an exclusive basis to an occupier measured internally to any notional Boundaries, the internal dominant face, demising walls and including any external floor areas, sheltered areas and secondary areas.

IPMS 4.1 and IPMS 4.2 are used for measuring Floor Areas of selected parts within a Building. Such measurements are directly linked to specific defined criteria. It may include all or some of the selected parts of the building.

IPMS 4.1 and IPMS 4.2 are measured to the finished surface. Examples: the size of a hotel suite, the ratio of different uses within a building. IPMS4.2 excludes all floor area occupied by walls and columns.

6. Tools to use in carrying out measurements

The use of relevant measurement instruments

Taking floor area or site area measurements is one of the most common activities carried out by surveyors. Three common tools surveyors use for this task are tape measures, laser measuring devices and measuring wheels.

Before any areas can be measured, you must:

- Choose the correct equipment for the job in hand.
- know how to use the equipment and be able to read the measurements correctly from it.
- The measurement of any distance, irrelevant of its magnitude, is always prone to errors, but you can minimise those errors by using the correct equipment and making certain that their equipment is calibrated on a regular basis (usually once a year, depending on the amount of use).

Tools
There are tools used for measuring areas, including:

- Tape measures.
- Laser measuring devices.
- Measuring wheels.

7. Watch out for errors in your measurements

Potential sources of error from use of instruments

Measurement of distances will always be prone to errors due to the continuous nature of the data being produced. The surveyor must be aware of where errors can occur and importantly how to avoid them.

There are three basic classifications of errors:

Gross or human errors
These errors can be very large and can occur at any stage in the survey. If not picked up early on, the survey may need to be abandoned and redone. Avoid making mistakes of this type by developing a clear method of reading and booking the results.

Systematic errors or biases
These are inbuilt errors which will have a gradual cumulative effect on the result of the survey. The only way to confirm this type of error is to compare the tape against ‘standard’ steel tapes designs for that specific purpose. If an error is found after the survey has been completed, the distances can be corrected by applying a suitable correction to the measured dimensions, so no information is lost.

Random errors
These are generally small errors that are due to the limitations of the surveyor or the equipment. They tend to be compensatory and have relatively little significance to the overall survey.

7. Surveying Safely

Read the RICS guidance note Surveying Safely (RICS 2019). Be aware that surveying safely means not only your own personal safety but also that of others for whom you may be responsible.

According to RICS 'Appropriate management of health and safety is a requirement for all RICS-regulated firms and RICS members, including property-related businesses. The requirement for such management has been put in place in many countries across the globe and across industry sectors and governmental organisations in order to protect individuals from harm.

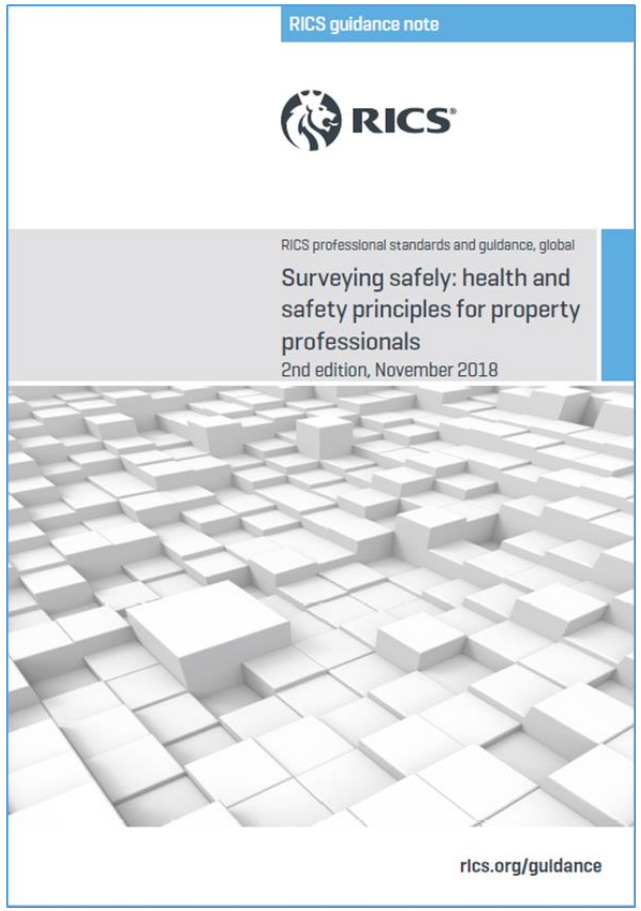
This guidance note sets out basic, good practice principles for the management of health and safety for RICS-regulated firms and RICS members. It sets out principles for those engaged in the built environment as property professionals and includes health and safety responsibilities:

- at a corporate level (whether the RICS-regulated firm is large or small) and
- at the level of the individual RICS member.

It covers property-related businesses and identifies the moral, ethical and practical issues that confront RICS-regulated firms and RICS members everywhere, in all the work that they undertake.

This guidance note came into effect on 1 February 2019.

Personal safety
The Suzy Lamplugh Trust (https://www.suzylamplugh.org/) offers some useful personal safety tips, particularly relating to lone working. Note down some ideas that you might use to ensure the safety of yourself and colleagues when inspecting property.



Source: https://www.rics.org/profession-standards/rics-standards-and-guidance/sector-standards/building-surveying-standards/surveying-safely

Next Lecture

Section 8 – Analysing Rental Evidence