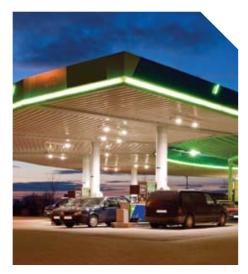
## Code of Measuring Practice

A guide for Property Professionals

6th Edition





















Code of Measuring Practice
6th edition



Published by the Royal Institution of Chartered Surveyors (RICS)

under the RICS Books imprint

Surveyor Court

Westwood Business Park

Coventry CV4 8JE

UK

www.ricsbooks.com

No responsibility for loss occasioned to any person acting or refraining from action as a result of the material included in this publication can be accepted by the author or RICS.

Produced by the RICS Property Measurement Group

First published 1979

Second edition 1987

Third edition 1990

Fouth edition 1993

Fifth edition 2001

ISBN 978 1 84219 332 7

© Royal Institution of Chartered Surveyors (RICS) August 2007. Copyright in all or part of this publication rests with RICS, and save by prior consent of RICS, no part or parts shall be reproduced by any means electronic, mechanical, photocopying or otherwise, now known or to be devised.

Typeset in Great Britain by Columns Design Ltd, Reading, Berks

Printed and Bound by the University Press, Cambridge



### **Contents**

Introduction	1
Applications reference	6
Core definitions and diagrams	8
Gross External Area	8
Gross Internal Area	12
Net Internal Area	16
Technical definitions and diagrams	22
Special use definitions and diagrams	26
Shops	26
Residential Agency Guidelines	30
Residential Valuations	32
Net Sales Area	32
Effective Floor Area	32
Leisure	34

#### Introduction

#### Purpose of the Code

The purpose of the Code is to provide succinct, precise definitions to permit the accurate measurement of buildings and land, the calculation of the sizes (areas and volumes) and the description or specification of land and buildings on a common and consistent basis. This may be required for valuation, management, conveyancing, planning, taxation, sale, letting, or acquisition purposes.

The Code is intended for use in the UK only.

#### Status of the Code

This Code is a Guidance Note. It provides advice to Members of the RICS on aspects of the profession. Where procedures are recommended for specific professional tasks, these are intended to embody 'best practice', i.e. procedures which in the opinion of the RICS meet a high standard of professional competence.

Members are not required to follow the advice and recommendations contained in the Note.

They should however note the following points. When an allegation of professional negligence is made against a surveyor, the Court is likely to take account of the contents of any relevant Guidance Notes published by the RICS in deciding whether or not the surveyor had acted with reasonable competence.

In the opinion of the RICS, a Member conforming to the practices recommended in this Note should have at least a partial defence to an allegation of negligence by virtue of having followed these practices.

However, Members have the responsibility of deciding when it is appropriate to follow the guidance. If it is followed in an appropriate case, the Member will not be exonerated merely because the recommendations were found in an RICS Guidance Note.

On the other hand, it does not follow that a Member will be adjudged negligent if he has not followed the practices recommended in this Note.

It is for each individual surveyor to decide on the appropriate procedure to follow in any professional task. However, where Members depart from the practice recommended in this Note, they should do so only for good reason. In the event of litigation, the Court may require them to explain why they decided not to adopt the recommended practice.

In addition, Guidance Notes are relevant to professional competence in that each surveyor should be up to date and should have informed himself of Guidance Notes within a reasonable time of their promulgation.

#### Responsibility to consumers (users of space)

Long established and understood professional responsibilities to clients are matched by statutory obligations to users of property. It is a criminal offence for those involved in estate agency or property development business to give false or misleading information about specified aspects of land (which includes buildings) that are offered for sale. In this context, the *Property Misdescriptions Act* 1991 and the *Property Misdescriptions (Specified Matters) Order* 1992 specifically refer to measurements and sizes. Those involved in the sale of residential and commercial property to the general public carry these statutory obligations.

The Property Measurement Group does not consider there to be a conflict between the statutory obligations to users and contractual responsibilities to clients. Users of the Code must not overlook these requirements, which underlie the approach adopted in this sixth edition.

#### A code of measurement, not a code of valuation

The Code deals only with standard measurement practice. Valuation techniques such as the zoning of shops for comparison purposes; the adoption of different rates of value for units into areas of limited headroom; special uses; particular forms of construction; whether a room is a basement room; and the like do not form part of the Code. These matters, and the value, if any, to be attributed to any particular floor areas because of their special characteristics, are part of the valuers', estate agents' or developers' judgement, having regard to their contractual and statutory obligations.

The Code is distinct from that relating to the Standard Method of Measurement of Building Works (SMM), which is commonly used in the construction industry and published by the Royal Institution of Chartered Surveyors and the Construction Confederation. It is hoped that the Code might be of value to those in the construction industry as a complement to SMM, but in using this Code its primary purpose must be borne in mind.

The Group has not attempted to define everyday words and phrases. To do so is to go beyond the purpose of the Code. The Group is of the view that most weight should be given to common-sense interpretations and less weight to reliance on semantics, when interpreting the meaning of the Code. The Group has however taken the opportunity to incorporate recent judicial guidance on the meaning of 'usable area'.

#### The core definitions and marketing issues

In order to make the Code easier to use, especially to those not involved in measuring on a regular basis, the Code contains a hierarchy of definitions. The core definitions are:

- GEA (Gross External Area)
- GIA (Gross Internal Area)
- NIA (Net Internal Area)

It is the advice of the Group that surveyors in their use of the Code, to satisfy their statutory obligations to consumers, rely principally upon NIA when marketing commercial property, or the Residential Agency Guidelines (RAG) when marketing residential property.

The core definitions GEA and GIA are suitable for specialist applications as identified in the Code. GIA can be used for marketing some forms of property, for example industrial. Those using GIA for marketing purposes are advised to

take particular care. The Code identifies some of the dangers (for example, GIA 2.12) that could mislead a consumer of space marketed on a GIA basis, should these not be clearly stated.

In its response to a previous draft consultation paper, the Institute of Trading Standards Officers pointed out the line likely to be adopted by the courts. This will be that it does not matter what the professionals may think and understand, it is what the average person thinks and believes that is important in deciding whether statements are misleading or not.

In addition to the core definitions, the Code provides various technical definitions suitable for use in a variety of particular circumstances, and three specialist use definitions for shops, residential and leisure properties.

There may also be accepted conventions for the measurement of specialist types of property. Those concerned with such properties should be aware of any guidance that is provided in the RICS Appraisal and Valuation Standards (the 'Red Book') (published by RICS Books).

#### State separately

Consideration should be given as to whether it would be of assistance to those using the results of measurement calculations to identify separately certain areas which, although included in GIA or NIA, may warrant having a differential value applied.

#### **Valuation Office Agency**

The Valuation Office Agency has for many years generally adopted the RICS Code as its basis for measuring property both for rating and council tax. This is subject to the following exceptions:

Gross External Area and Gross Internal Area – areas with a headroom of less than 1.5m are excluded rather than included.

Net Internal Area is used for the measurement of industrial and warehouse buildings in some parts of the country. The Agency hopes to be able to complete the substantial work necessary to change entirely to GIA for the planned 2010 rating revaluation.

#### Accuracy

During preparatory consultations for this sixth edition of the Code, consideration was given to comments received by the Group, both recently and since the time of the publication of the fifth edition, regarding the matter of accuracy.

The Group acknowledges that users of this Code, with the intention that the results are relied on by themselves or others, should all be termed 'professional measurers'. This is irrespective of the degree of technically sophisticated measuring equipment they might choose to employ so as to report 'accurately' on the task at hand. What professional measurers, or their customers, consider to be the required degree of accuracy in terms of the final reported figures is dependent upon the site-specific conditions and circumstances, across the wide spectrum of sites and properties for which the Code may be applied.

The examples given in the fifth edition were intended to illustrate the extremes of application that might be encountered by the professional measurers as they consider the question of 'fitness for purpose', and these examples are still illustrative.

They might pace out the extents of a tarmacadam car park when valuing an application for interim payment for building works undertaken, but use a hand-held laser measuring device or some technically advanced surveying equipment when measuring the net internal area of office space in a building in the City of London. In the first case, dependent upon circumstances, an accuracy requirement of say +/-10% of the total area may be acceptable, whereas in the second case a reported figure of better than +/-1% may be expected, again dependent upon circumstances.

So it is worth identifying the parameters for evaluating the level of accuracy that should be attained:

- What is the purpose of the measurement exercise?
- What is being measured?
- What are the site conditions at the time of measurement?
- What would be the ramifications should the level of accuracy be deemed insufficient for the purpose?

What is beyond question is the need for professional measurers not to mislead, intentionally or unintentionally. The former is obviously the foundation of all professional institutions, not just RICS. The latter is one of risk management, to reduce to a minimum the effect of errors when they occur. In this respect, professional measurers should introduce checking mechanisms to their procedures, processes and equipment as a means of delivering a final product to an agreed level of accuracy. Such mechanisms would include recognised equipment calibration techniques and software check routines, given this electronic age of working and reporting, and an appropriate regime whereby these checks are undertaken and audited.

Given the history of the published Code and the sequence of revisions that have been made since the first publication, it is hoped that these guidelines are sufficiently detailed for the avoidance of misinterpretation and misleading reporting.

There are other RICS publications that consider the topic of accuracy in such detail as deemed applicable to their particular fields of expertise:

- RICS Manual of Estate Agency Law and Practice (RICS Books 2004).
- Surveys of Land, Buildings and Utility Services at Scales of 1:500 and Larger, 2nd Edition (RICS Books 1996)

In respect of the application of guidelines contained within this Code, the Group considers that the matter of accuracy in measurement exercises be left to practitioners, the professional measurers.

#### Metrication

Users of the Code are advised that they should adopt metric units as the standard system of measurement. Wide acceptance of metrication will greatly assist a smooth change over for users of the Code and consumers of space alike. Where the client requires reference to imperial units these may be provided as supplementary information, e.g. in parenthesis.

The British Standard BS 8888: 2006 Technical Product Specification (for defining, specifying and graphically representing products) recommends the inclusion of a comma rather than a point as a decimal marker, and a space instead of a comma as a thousand separator. While the convention has not been adopted in this Code, users should take care to ensure that this does not conflict with client requirements.

#### Introduction and diagrams

The introduction and diagrams form part of the Code.

#### **Identity**

This Code is called the 'RICS Code of Measuring Practice, 6th edition'.

#### **Enquiries**

Enquiries concerning the Code should be made in the first instance to:

Professional Information Department

**RICS** 

12 Great George Street

Parliament Square

London

SW1P 3AD

UK

Any suggestions for future revisions are welcomed and should be sent to the Valuation Faculty at RICS.

## **Applications Reference**

Core definitions Gross External Area Gross Internal Area Net Internal Area		Sections 1.0–1.20 Sections 2.0–2.22 Sections 3.0–3.21	<b>Page</b> 8 12 16
Use	Definition	Application	Dagas
Building cost estimation	Definition	Application	Pages
Non residential all purpose	GIA	APP 4	13
Residential Insurance	GEA	APP 3	9
Estate agency and valuation			
Business use (except those in APP 5)	NIA	APP 9	17
Department and variety stores	GIA	APP 5	13
Food superstores	GIA	APP 5	13
Industrial buildings	GIA or NIA	APP 5	13
Offices	NIA	APP 9	17
Residential – agency	RAG	APP 20	31
Residential – valuation	RV	APP 22	33
Retail warehouses	GIA	APP 5	13
Shops	NIA or RA	APP 9 or APP 19	17 or 27
Valuation of new homes for development purposes	GIA	APP 8 or APP 21	13 or 33
Warehouses	GIA or NIA	APP 5	13
Property management			
Service charge apportionment	GIA	APP 7	13
Service charge apportionment	NIA	APP 11	17
Rating			
Business use (except those in APP 6)	NIA	APP 10	17
Composite hereditaments	NIA	APP 10	17
Council Tax – houses and bungalows	GEA	APP 2	9
Council Tax – flats and maisonettes	EFA	APP 22	33
Food supermarkets	GIA	APP 6	13
Industrial – England & Wales	GIA	APP 6	13
Industrial – Scotland	GEA	APP2	9
Offices	NIA	APP 10	17
Shops	NIA	APP 10	17
Special hereditaments (cost valued)	GIA	APP 6	13
Warehousing – England & Wales	GIA	APP 6	13
Warehousing – Scotland	GEA	APP 2	9

Town planning	GEA	APP 1	9
<b>Technical definitions</b>			
Building Frontage	BF	APP 18	23
Ceiling Height	CH	APP 14	23
Clear Internal Height	CIH	APP 13	23
Cubic Content	CC	APP 12	23
Eaves Height	EH	APP 14	23
Gross Site Area	GSA	APP 17	23
Maximum Internal Height	MIH	APP 14	23
Plot Ratio	PR	APP 18	23
Raised Floor Height	RFH	APP 14	23
Site Area	SA	APP 15	23
Site Depth	SD	APP 18	23
Site Frontage	SF	APP 18	23
Special use definitions – shops			
Ancillary Areas	AA		
Built Depth	BD		
Gross Frontage	CF		
	GF		
Net Frontage	NF		
		APP 19	27
Net Frontage	NF	APP 19	27
Net Frontage Retail Area	NF RA	APP 19	27
Net Frontage Retail Area Shop Depth	NF RA ShD	APP 19	27
Net Frontage Retail Area Shop Depth Shop Width	NF RA ShD SW StoA	APP 19	27
Net Frontage Retail Area Shop Depth Shop Width Storage Area	NF RA ShD SW StoA	APP 19 APP 22	33
Net Frontage Retail Area Shop Depth Shop Width Storage Area  Special use definitions – residential	NF RA ShD SW StoA		
Net Frontage Retail Area Shop Depth Shop Width Storage Area  Special use definitions – residential Effective Floor Area	NF RA ShD SW StoA	APP 22	33

## **Core definitions: Gross External Area**

#### 1.0 Gross External Area (GEA)

Gross External Area is the area of a building measured externally at each floor level.

	Including		Excluding
1.1	Perimeter wall thickness and external projections	1.16	External open-sided balconies, covered ways and fire escapes
1.2	Areas occupied by internal walls and	1.17	Canopies
	partitions	1.18	Open vehicle parking areas, roof terraces, and the like
1.3	Columns, piers, chimney breasts, stairwells, lift-wells, and the like	1.19	Voids over or under structural, raked or stepped floors
1.4	Atria and entrance halls, with clear height above, measured at base level only	1.20	Greenhouses, garden stores, fuel stores, and the like in residential property
1.5	Internal balconies		
1.6	Structural, raked or stepped floors are to be treated as a level floor measured horizontally		
1.7	Horizontal floors, whether accessible or not, below structural, raked or stepped floors		
1.8	Mezzanine areas intended for use with permanent access		
1.9	Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above the main roof level		
1.10	Outbuildings which share at least one wall with the main building		
1.11	Loading bays		
1.12	Areas with a headroom of less than 1.5m		
1.13	Pavement vaults		
1.14	Garages		
1.15	Conservatories		

## **Applications**

(when to use GEA)

APP 1 **Town planning** – GEA is the basis of measurement for planning applications and approvals, i.e. site coverage (including plot ratio)

APP 2 Rating and council tax – GEA is the basis of measurement for council tax banding of houses and bungalows (areas with a headroom of less than 1.5m, integral garages and attached structures of inferior quality, e.g. porches, being excluded), and for the rating of warehouses and industrial buildings in Scotland

APP 3 **Building cost estimation** – GEA is the preferred method of measurement for calculating building costs of residential property for insurance purposes

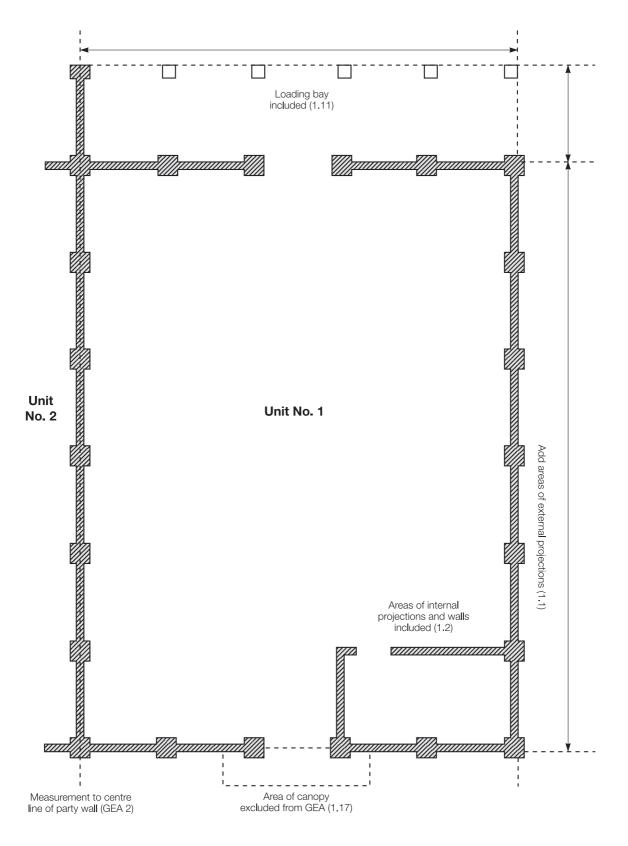
#### **Notes**

(how to use GEA)

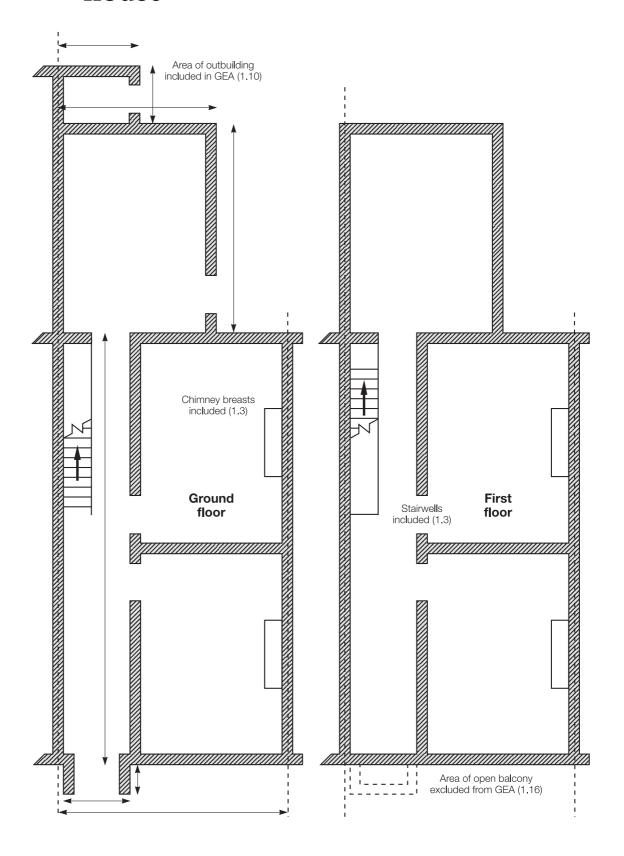
GEA 1 **Diagrams** – diagrams A and B illustrate how to apply GEA

GEA 2 **Party Walls** – in shared ownership are to be measured to their central line

# Diagram A – Example of appropriate dimensions for GEA defined industrial/warehouse end terrace unit



## Diagram B – Example of appropriate dimensions for GEA defined terrace house



### Core definitions: Gross Internal Area

#### 2.0 Gross Internal Area (GIA)

Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level (see note GIA 4).

	Including		Excluding
2.1	Areas occupied by internal walls and partitions	2.18	Perimeter wall thicknesses and external projections
2.2	Columns, piers, chimney breasts, stairwells, lift-wells, other internal	2.19	External open-sided balconies, covered ways and fire escapes
	projections, vertical ducts, and the like	2.20	Canopies
2.3	Atria and entrance halls, with clear height above, measured at base level only	2.21	Voids over or under structural, raked or stepped floors
2.4	Internal open-sided balconies, walkways, and the like	2.22	Greenhouses, garden stores, fuel stores, and the like in residential
2.5	Structural, raked or stepped floors are to be treated as a level floor measured horizontally		property
2.6	Horizontal floors, with permanent access, below structural, raked or stepped floors		
2.7	Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies)		
2.8	Mezzanine floor areas with permanent access		
2.9	Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above the main roof level		
2.10	Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like		
2.11	Projection rooms		
2.12	Voids over stairwells and lift shafts on upper floors		
2.13	Loading bays		
2.14	Areas with a headroom of less than 1.5m (see APP 6)		
2.15	Pavement vaults		
2.16	Garages		
2.17	Conservatories		

## Applications (when to use GIA)

APP 4	<b>Building cost estimation</b> – GIA is a recognised method of measurement for calculating building costs	GIA 1	<b>Diagrams</b> – diagrams C and D illustrate how to apply GIA
APP 5	Estate agency and valuation – GIA is a basis of measurement for the marketing and valuation of industrial buildings (including ancillary offices), warehouses, department stores, variety stores and food superstores. For the avoidance of doubt the basis of measurement should be stated	GIA 2	Separate buildings – GIA excludes the thickness of perimeter walls, but includes the thickness of all internal walls. Therefore, it is necessary to identify what constitutes a separate building
APP 6	Rating – GIA is the basis of measurement in England and Wales for the rating of industrial buildings, warehouses, retail warehouses, department stores, variety stores, food superstores and many specialist classes valued by reference to building cost (areas with a headroom of less than 1.5m being excluded except under stairs)	GIA 3	Advice – apart from the applications shown, GIA tends to have specialist valuation applications only. Valuers and surveyors who choose this definition for marketing purposes must have regard to the provisions of the <i>Property Misdescriptions Act</i> 1991 and <i>Property Misdescriptions</i> (Specified Matters) Order 1992 (see Introduction on page 1)
APP 7	<b>Property management</b> – GIA is a basis of measurement for the calculation of service charges for apportionment of occupiers' liabilities	GIA 4	Internal face – means the brick/block work or plaster coat applied to the brick/block work, not the surface of internal linings installed by the occupier
APP 8	New homes valuation – a modified version of GIA is an accepted basis of measurement for the valuation and marketing of residential dwellings, particularly in new developments (see NSA on page 32)	GIA 5	Lift rooms, etc. – the items covered by 2.9 should be included if housed in a roofed structure having the appearance of permanence (e.g. made of brick or similar building material)
		GIA 6	Level changes – the presence of steps or a change in floor levels is to be noted
		GIA 7	Voids – attention is drawn to the exclusion of voids over atria at upper levels (see 2.3) and the inclusion of voids over stairs, etc. (see 2.12). Where an atrium-like space is formed to create an entrance feature and this also

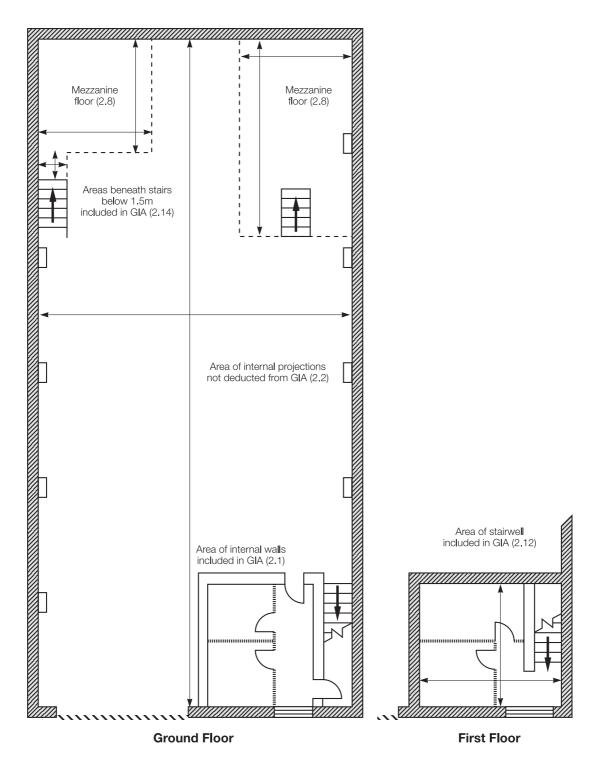
**Notes** 

(how to use GIA)

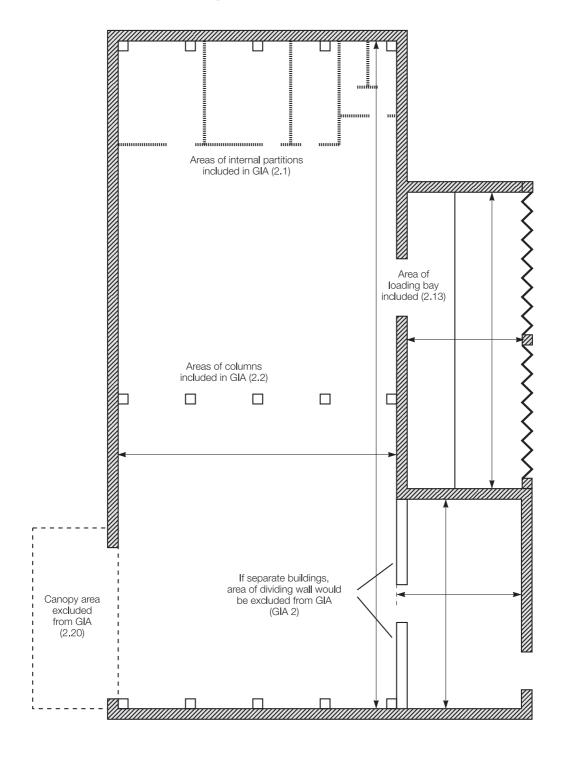
accommodates a staircase, this does not become a stairwell but remains an atrium measurable at base level

only

## Diagram C – Example of appropriate dimensions for GIA defined industrial/ warehouse unit



## Diagram D – Example of appropriate dimensions for GIA defined industrial/ warehouse unit



### Core definitions: Net Internal Area

#### 3.0 Net Internal Area (NIA)

Net Internal Area is the usable area within a building measured to the internal face of the perimeter walls at each floor level. (See note NIA 3)

	Including		Excluding
3.1	Atria with clear height above, measured at base level only (but see 3.11)	3.11	Those parts of entrance halls, atria, landings and balconies used in common (see 3.1 and 3.2)
3.2	Entrance halls (but see 3.11)	3.12	Toilets, toilet lobbies, bathrooms, cleaners' rooms, and the like
3.3	Notional lift lobbies and notional fire corridors	3.13	Lift rooms, plant rooms, tank rooms (other than those of a trade process nature), fuel stores, and the like
3.4	Kitchens	3.14	Stairwells, lift-wells and permanent lift lobbies
3.5	Built-in units, cupboards, and the like occupying usable areas	3.15(a)	Corridors and other circulation areas where used in common with other occupiers
3.6	Ramps, sloping areas and steps within usable areas	3.15(b)	Permanent circulation areas, corridors and thresholds/recesses associated with access, but not those parts that are usable areas
3.7	Areas occupied by ventilation/ heating grilles	3.16	Areas under the control of service or other external authorities including meter cupboards and statutory service supply points
3.8	Areas occupied by skirting and perimeter trunking	3.17	Internal structural walls, walls enclosing excluded areas, columns, piers, chimney breasts, other projections, vertical ducts, walls separating tenancies and the like
3.9	Areas occupied by non-structural walls subdividing accommodation in sole occupancy	3.18(a)	The space occupied by permanent and continuous air-conditioning, heating or cooling apparatus, and ducting in so far as the space it occupies is rendered substantially unusable
3.10	Pavement vaults	3.18(b)	The space occupied by permanent, intermittent air-conditioning, heating or cooling apparatus protruding 0.25m or more into the usable area
		3.19	Areas with a headroom of less than 1.5m
		3.20	Areas rendered substantially unusable by virtue of having a dimension between opposite faces of less than 0.25m. See diagram E
		3.21	Vehicle parking areas (the number and type of spaces noted)

### **Applications**

(when to use NIA)

APP 9	Estate agency and valuation – NIA
	is the basis of measurement for the
	valuation and marketing of the
	following types of buildings:
	<ul> <li>Shops and supermarkets;</li> </ul>
	– offices; and
	– business use (except those in APP
	5)
APP 10	Rating – NIA is the principal basis
	of measurement for rating of shops
	including supermarkets, offices,

APP 11 **Property management** – NIA is a basis of measurement for the calculation of service charges for apportionment of occupiers' liability

and composite hereditaments

business use (except those in APP 6),

#### Notes

(how to use NIA)

NIA 1	Usable area – an area is usable if it
	can be used for any sensible
	purpose in connection with the
	purposes for which the premises are
	to be used

NIA 2 **Diagrams** – diagrams E, F, G, H, K, and L illustrate how to apply NIA

NIA 3 Internal face – means the brick/block work or plaster coat applied to the brick/block work, not the surface of internal linings installed by the occupier

NIA 4 **Full-height glazing** – where there is full-height glazing, measurements should be taken to the glazing unless elements of the window structure or design render the space substantially unusable.

NIA 5 Advice – when dealing with rent reviews or lease renewals, the exclusions are generally intended to relate to the premises as demised. Unless otherwise indicated by statutory provision or the terms of the lease, it will not normally be appropriate to exclude demised usable space which has been subsequently converted by a tenant to any of the exclusions listed

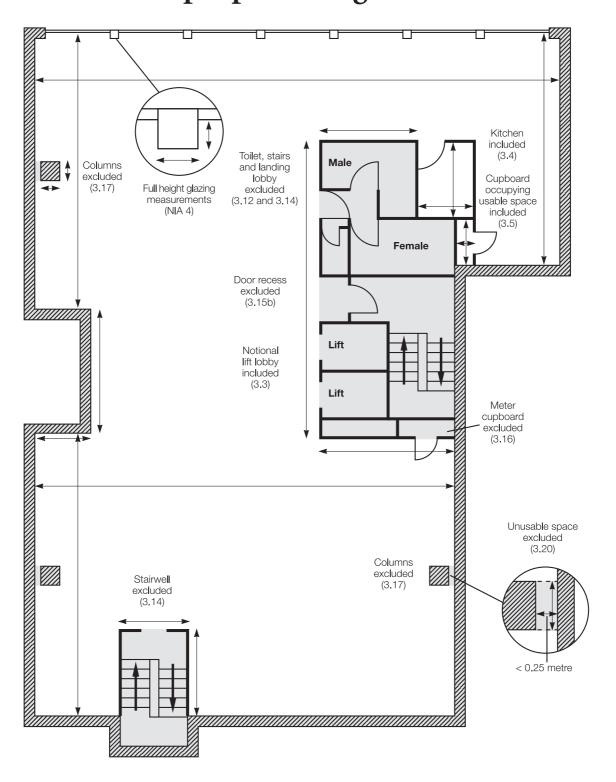
NIA 6 Level changes – the presence of steps or a change in floor levels is to be noted for valuation and marketing purposes

NIA 7 **Restricted headroom** – when marketing on an NIA basis it may be appropriate to identify floor areas below full height but above 1.5m

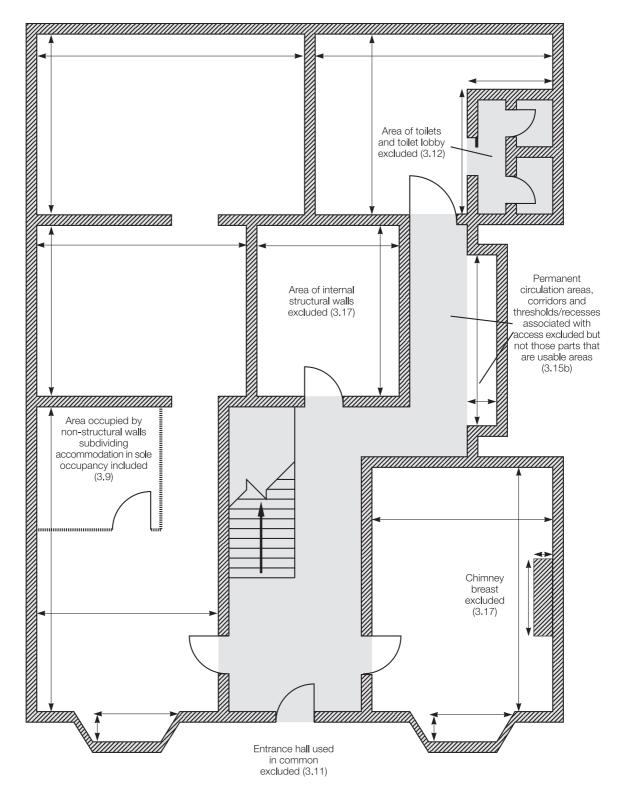
NIA 8 **Perimeter trunking** – when marketing on an NIA basis reference to the inclusion of perimeter trunking may be appropriate in order not to mislead

NIA 9 Corridors – whether or not a wall defining a corridor is structural or permanent (see 3.15 and 3.17), is a matter of fact. It depends upon the circumstances of the particular case. When marketing on an NIA basis reference to the inclusion of corridors may be appropriate

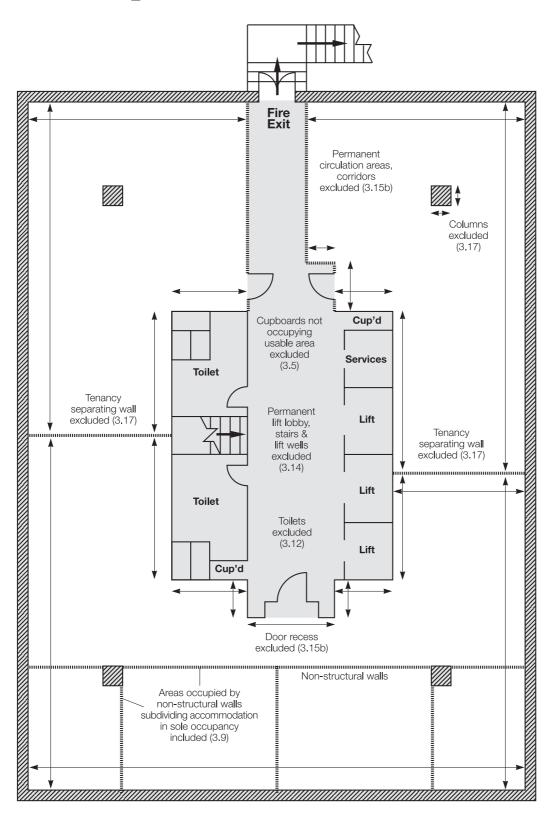
## Diagram E – Example of appropriate dimensions for NIA floor area defined purpose designed offices



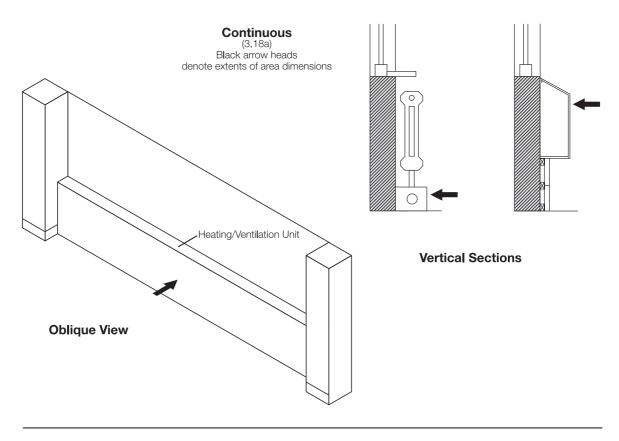
# Diagram F – Example of appropriate dimensions for NIA floor area defined offices converted from dwelling house

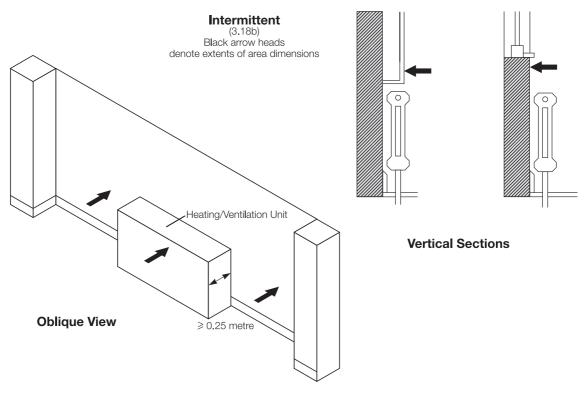


# Diagram G – Example of appropriate dimensions for NIA floor areas defined offices (open plan) multiple occupation



# Diagram H – Net Internal Area (NIA) – Examples of appropriate points from which to measure in respect of various types of heating installations





#### **Technical definitions**

#### 4.0 Cubic Content (CC)

The product of the Gross Internal Area and the internal height (maximum, clear or average to be specified)

#### 5.0 Clear Internal Height (CIH)

The height between the structural floor surface and the underside of the lowest point of the structural ceiling or roof. See diagram I.

#### 6.0 Eaves Height (EH)

**A. Internal** the height between the floor surface and the underside of the roof

covering, supporting purlins or underlining (whichever is lower) at

the eaves on the internal wall face

**B. External** the height between the ground surface and the exterior of the roof

covering at the eaves on the external wall face ignoring any parapet

#### 7.0 Ceiling Height (CH)

The height between the topmost floor surface and the underside of the ceiling. See diagram J.

#### 8.0 Raised Floor Void (RFV)

The minimum clearance between the structural floor surface and the underside of the raised floor or its supporting structure, where this is materially intrusive. See diagram J.

#### 9.0 Maximum Internal Height (MIH)

The height between the structural floor surface and the underside of the highest point of the structural ceiling or roof. See diagram J.

#### 10.0 Site Area (SA)

The total area of the site within the site title boundaries, measured on a horizontal plane.

#### 11.0 Gross Site Area (GSA)

The Site Area (SA), plus any area of adjoining roads, enclosed by extending the boundaries of the site up to the centre of the road, or 6m out from the frontage, whichever is less.

#### 12.0 Site Depth (SD)

The measurement of a site from front to rear boundaries (maximum, minimum or average, to be specified)

#### 13.0 Building Frontage (BF)

The measurement along the front of building from the outside of external walls or the centre line of party walls.

#### 14.0 Site Frontage (SF)

The measurement of a site along its frontage between two flank boundaries.

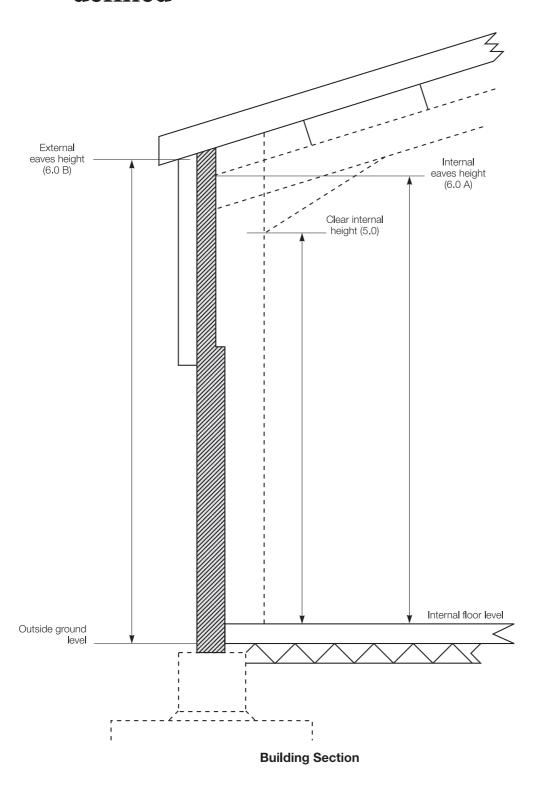
#### 15.0 Plot Ratio (PR)

Ratio of Gross External Area to Site Area where Site Area is expressed as one, e.g. 3:1

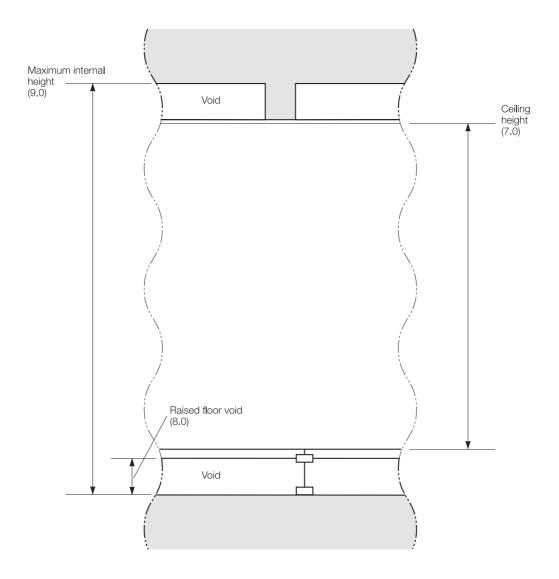
## Applications (when to use)

(when to	use)	(now to use)	
APP 12	Estate agency and valuation – CC is used in the measurement of warehouses	CC 1	<b>Town planning</b> – for planning purposes there are particular statutory definitions of cubic content
APP 13	Estate agency and valuation – CIH is used in the measurement of industrial and warehouse buildings	EH 1	Predominant eaves height – this term may be used where there are small changes in the level of the ground surface at the foot of the outside wall
APP 14	Estate agency and valuation – EH, CH, RFV and MIH have general use applications	EH 2	Minimum eaves height – this term may be used where there are significant changes in the level of the ground surface at the foot of the outside wall and materially reduced dimension occurs
APP 15	<b>Land measurement</b> – SA is a basis of measurement used for calculating land areas	CH 1	False ceilings – if a false ceiling is installed, the ceiling height to the underside of the structural ceiling may also be quoted
APP 16	Planning – SA is a basis for commercial and residential development density computations		
APP 17	<b>Usage</b> – GSA is for general use, mainly industrial and warehouse buildings		
APP 18	<b>Usage</b> – SD, BF, SF and PR are for general application		

## Diagram I – Illustration of appropriate dimensions for heights defined



## Diagram J – Illustration of appropriate dimensions for heights defined



**Internal Section (part)** 

### Special use definitions: Shops

#### 16.0 Retail Area (RA)

The retail area of the shop is the Net Internal Area (NIA)

	Including	Excludi	ng
16.1	Storerooms and ancillary accommodation formed by non-structural partitions, the existence of which should be noted	16.3	Storerooms and ancillary accommodation formed by structural partitions
16.2	Recessed and arcaded areas of shops created by the location and design of the window display frontage	16.4	Display cabinets which should be identified separately

#### 17.0 Storage Area (StoA)

The NIA of a shop which does not form part of the RA (see 16.0) and which is usable exclusively for storage purposes

#### 18.0 Ancillary Areas (AA)

All NIA not included in RA and StoA but capable of beneficial use

#### 19.0 Gross Frontage (GF)

The overall external measurement in a straight line across the front of the building, from the outside of external walls, or the centre line of party walls

#### 20.0 Net Frontage (NF)

The overall external frontage on the shop line measured between the internal face of the external walls, or the internal face of support columns

	Including	Excludir	ng
20.1	The display window frame and shop entrance	20.2	Recesses, doorways or access to other accommodation

#### 21.0 Shop Width (SW)

Internal width between inside faces of external walls at front of shop or other point of reference

#### 22.0 Shop Depth (SD)

Measurement from the notional display window to the rear of the retail area

#### **Including**

22.1 The thickness of the display window (or any support structure)

#### 23.0 Built Depth (BD)

Maximum external measurement from front to rear walls of a building at ground level

### **Applications**

(when to use)

APP 19 **Estate agency and valuation** – RA is the basis of measurement for the valuation and marketing of shops and supermarkets

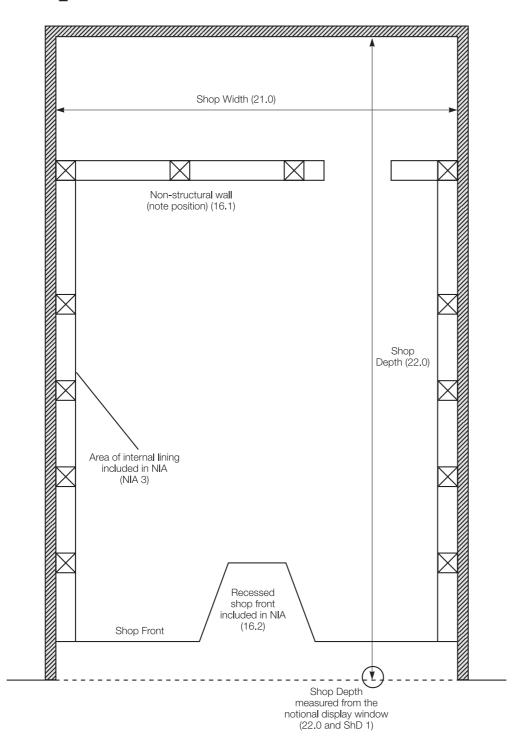
#### Notes

(how to use)

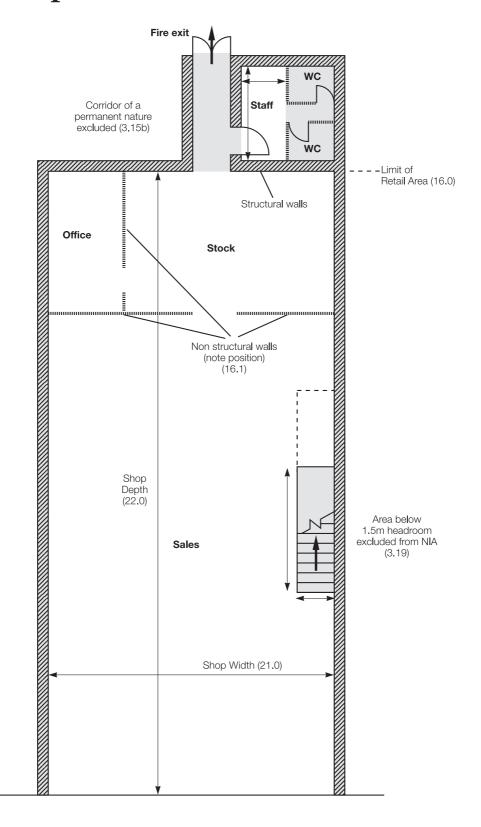
RA 1	<b>Diagrams</b> – diagrams E to H, K
	and L illustrate how to apply NIA;
	diagrams K and L are specific to
	shops

- RA 2 **Zoning** the use of zones when assessing the values of shops is a valuation, not a measurement, technique. Consequently it is not part of this Code. Market custom shall prevail
- RA 3 **Display window** location for the purpose of assessing GEA, GIA or NIA, in the case of shop property where the display window forms the non-structural 'fourth wall', its location should be assumed to be at the forward-most point at which a shop display window could be installed
- AA 1 Ancillary areas include staff rooms, kitchens, training rooms, offices, and the like
- GF 1 **Return gross frontage** to be measured in the same way as Gross Frontage
- NF 1 Return net frontage to be measured in the same way as Net Frontage
- NF 2 **Display windows** the existence and nature of display windows and integral shop fronts are to be noted
- SW 1 Shop width if the shop width is not reasonably constant throughout the whole sales area, then this should be stated and additional measurements may need to be provided
- ShD1 **Notional display window** the notional display window is to be assumed placed at the forward-most point at which a shop (see RA 3) display window could be installed
- ShD2 Shop depth if the depth is not reasonably constant throughout the whole sales area, then this should be stated and additional measurements may need to be provided
- ShD3 **Building line** the position of the building line is to be noted

## Diagram K – An example of NIA in practice in a retail context



## Diagram L – An example of NIA in practice in a retail context



### Special use definitions: Residential

#### 24.0 Residential Agency Guidelines (RAG)

Normal market practice is to describe residential property by linear measurement, not on a floor area basis. Where floor areas are adopted they are commonly measured to GIA. It is recommended that these Residential Agency Guidelines be followed for marketing, sale or letting of residential property.

- 24.1 Measurements should be taken at a point above skirting board level no higher than 1.5m above the floor
- Where rooms include bays, recesses, alcoves, etc., these should be included or excluded in the measurements quoted, as may be considered reasonable (see RAG 2) in order to give a fair description of the subject room, and the measurement qualified by such words as 'into bay' or 'excluding alcove' as appropriate
- 24.3 Kitchen units, built-in cupboards, wardrobes, and the like occupying usable area should be measured and included as part of the room area but identified separately
- 24.4 'L'-shaped rooms are to be measured and expressed in two parts
- 24.5 For irregular-shaped rooms, either no dimensions should be given or they should be related to a proportionate sketch plan with lined dimensions to give an accurate description of the accommodation
- 24.6 In rooms with sloping ceilings measurements should be taken 1.5m above floor level and the presence of the sloping ceiling noted
- 24.7 Where there is a stepped change in floor level, each section should be measured and expressed separately
- 24.8 Where annexes or additions are of significantly different construction from the main accommodation, or are self-contained, they should be measured and described separately
- Garage measurements should be taken overall internally between the main wall faces. Projecting piers and door reveals should normally be ignored unless unusually restrictive when the minimum width should also be stated

## **Applications**

(when to use)

APP 20 **Residential estate agency** – RAG is for marketing, sale and letting of residential property

#### **Notes**

(how to use)

- RAG 1 Accuracy measurements must be accurate. They must not mislead (see Introduction on page 1)
- RAG 2 **'Reasonable' defined** the word 'reasonable' in 24.2 is defined according to the court's test (see Introduction: Core definitions on page 2)
- RAG 3 Inclusive measurements when measurements are given inclusive of fitted units (see 24.3) descriptions require clarity in order not to mislead
- RAG 4 Basements where the floor level of part of a building is below ground level it may be necessary for marketing purposes to call it a basement in order not to mislead. Circumstances vary, but the extent of natural light or restricted internal height are examples of the kind of tests which can be applied

## Special use definitions: Residential

#### 25.0 Residential Valuations (RV)

There is no single accepted practice for measurement of residential property for valuation purposes. It is suggested that the guidelines at 24.0 (see page 30) are adopted where linear dimensions are expressed. If reference to property area is required then the alternative approaches are GEA (see APP2 and APP3), GIA (see APP4, APP8), NSA (APP21) or EFA (see APP22). The basis of those areas should be stated in the valuer's report

#### 26.0 Net Sales Area (NSA)

Net Sales Area is the GIA of a new or existing residential dwelling, subject to the following conditions

	Including	Exclud	Excluding	
26.1	Basements	26.5	Areas with headroom less than 1.5m where the dwelling does not have usable space vertically above	
26.2	Mezzanines	26.6	Garages	
26.3	Galleries	26.7	Conservatories (state separately)	
26.4	Hallways	26.8	External open-sided balconies	
		26.9	Greenhouses, garden stores, fuel stores and the like in residential property	
		26.10	Terraces	

#### 27.0 Effective Floor Area (EFA)

Effective Floor Area is the usable area of the rooms within a building measured to the internal face of the walls of those rooms

	Including	Excluding	
27.1	Living rooms, dining rooms, bedrooms, kitchens, and the like	27.5	Bathrooms, showers and toilets
27.2	Areas occupied by fitted cupboards within those rooms	27.6	Stairwells, lift-wells, halls, landings and balconies
27.3	A floor area which contains a ventilation/ heating grille	27.7	Corridors and the like, whether formed by structural walls or not
27.4	Areas occupied by skirting	27.8	Internal walls whether structural or not, columns, piers, chimney breasts, vertical ducts, and the like
		27.9	Areas with a headroom less than 1.5m
		27.10	Fuel stores, lift rooms, tank rooms, plant rooms, cupboards, etc.
		27.11	Areas under the control of service or other external authorities including meter cupboards and statutory service supply points

## Applications (when to use)

APP 21 Net Sales Area – NSA is used in the valuation and marketing of residential dwellings, particularly in new developments

APP 22 **Effective Floor Area** – EFA is used for council tax banding of flats and maisonettes

#### **Notes**

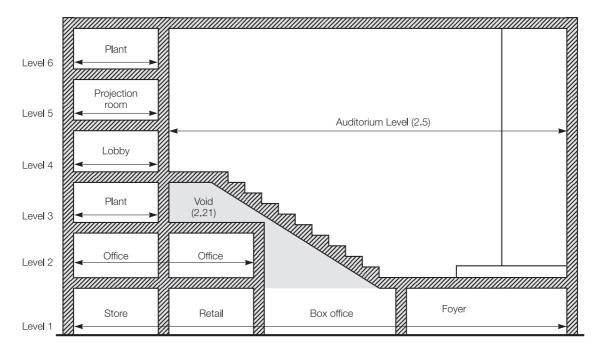
(how to use)

EFA 1 Effective Floor Area – is measured as for NIA assuming all walls are structural

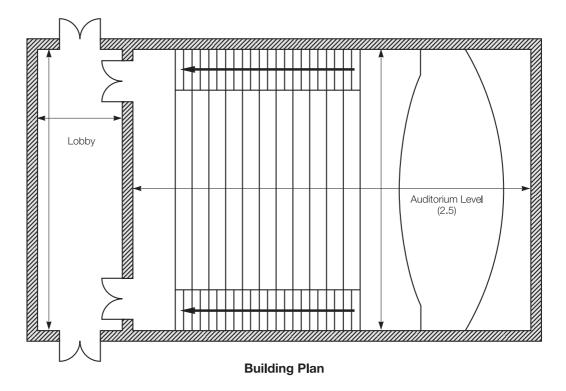
### Special use definitions: Leisure

- As stated in the Introduction this is a code of measurement, not valuation. Many properties used for leisure are valued having regard to trading potential. In these circumstances the area of the premises may not be a factor used directly in the assessment of value. There are, however, occasions where the value is assessed, or the price paid is analysed, by reference to area. This will depend on market practice and the judgement of the valuer, estate agent or developer
- 29.0 Where the area is considered to be relevant it will be of assistance if a consistent approach is adopted to the basis of measurement. It is recommended that the Gross Internal Area is stated
- 30.0 Market practice suggests that it may be helpful for some areas within GIA to be stated separately:
  - 30.1 Internal load-bearing walls and columns
  - 30.2 Fire escape stairs and corridors
  - 30.3 In the measurement of purpose-built multiplex cinemas the floor levels providing raised projection boxes and the stepped flooring providing the auditoria seating
  - 30.4 For restaurant premises the public seating areas, kitchens, cellars and stores
- Where the effective drinking area of licensed premises is required by licensing justices or similar bodies, the trading accommodation area must exclude the area of the servery (bar counters)

# Diagram M – Example of appropriate dimensions for GIA floor area defined at each level – Leisure facilities



**Building Section** 







Long established and understood professional responsibilities to clients are matched by statutory obligations to users of property. It is a criminal offence for those involved in estate agency or property development business to give false or misleading information about specified aspects of land (which includes buildings) that are offered for sale.

This sixth edition of the Code provides succinct, precise definitions to permit the accurate measurement of buildings and land, the calculation of the sizes (areas and volumes) and the description or specification of land and buildings on a common and consistent basis.

Widely accepted as the industry standard, the Code enables measurement to be undertaken in a common and consistent fashion.

#### The RICS Code of Measuring Practice:

- provides a clear explanation of each definition
- explains exactly what is included in each definition
- shows which definition to use in a particular circumstance
- offers practical advice on using the definitions
- puts forward suggestions for good practice
- includes fully updated illustrations as examples for each definition.



