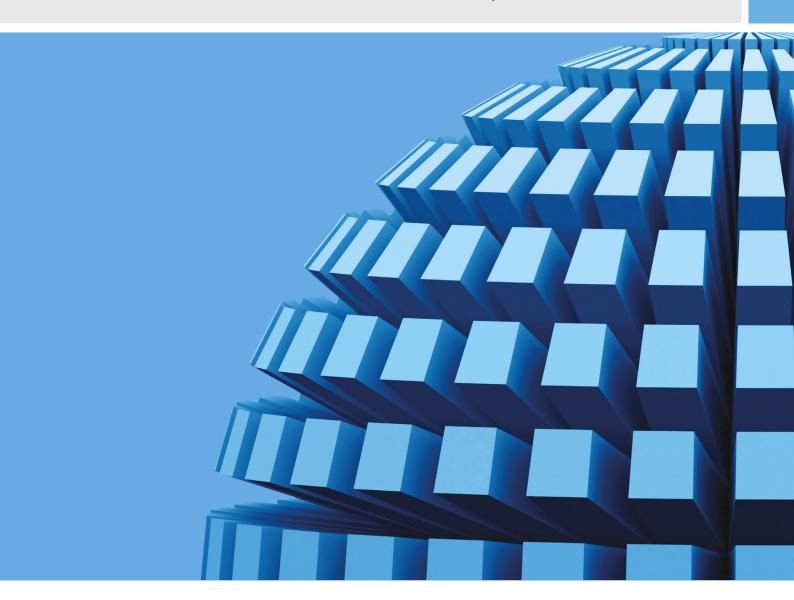


RICS professional standards and guidance, Global

Code of measuring practice

6th edition, May 2015



Code of measuring practice

Guidance note, global

6th edition, May 2015



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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. [With effect from 18 May 2015 this code became globally applicable.]

Status of the Code

This Code is a guidance note. It provides advice to members of 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 guidance 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 RICS in deciding whether or not the surveyor had acted with reasonable competence.

In the opinion of RICS, a member conforming to the practices recommended in this guidance 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 guidance 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' judgment, 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 RICSand 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 Valuation - Global Standards (the 'Red Book').

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:

- UK Residential real estate agency (the 'Blue Book')
- Measured surveys of land, buildings and utilities, 3rd edition.

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 Standards Team

RICS

Parliament Square

London

SW1P 3AD

UK

Applications reference

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Gross External Area	Sections 1.0-1.20	[6]
Gross Internal Area	Sections 2.0-2.22	[10]
Net Internal Area	Sections 3.0-3.21	[14]

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Building cost estimation			
Non residential all purpose	GIA	APP 4	[11]
Residential insurance	GEA	APP 3	[7]
Estate agency and valuation			
Business use (except those in APP 5)	NIA	APP 9	[15]
Department and variety stores	GIA	APP 5	[11]
Food superstores	GIA	APP 5	[11]
Industrial buildings	GIA or NIA	APP 5	[11]
Offices	NIA	APP 9	[15]
Residential - agency	RAG	APP 20	[29]
Residential - valuation	RV	APP 22	[31]
Retail warehouses	GIA	APP 5	[11]
Shops	NIA or RA	APP 9 or APP 19	[15] or [25]
Valuation of new homes for development purposes	GIA	APP 8 or APP 21	[11] or [31]
Warehouses	GIA or NIA	APP 5	[11]
Property management			
Service charge apportionment	GIA	APP 7	[11]
Service charge apportionment	NIA	APP 11	[15]
Rating			
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Composite hereditaments	NIA	APP 10	[15]
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Council Tax - flats and maisonettes	EFA	APP 22	[31]
Food supermarkets	GIA	APP 6	[11]
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Industrial - Scotland	GEA	APP 2	[7]
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Special hereditaments (cost valued)	GIA	APP 6	[11]
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Warehousing - Scotland	GEA	APP 2	[7]
Town planning	GEA	APP 1	[7]

Use	Definition	Application	Pages			
Technical definitions						
Building Frontage	BF	APP 18	[21]			
Ceiling Height	СН	APP 14	[21]			
Clear Internal Height	CIH	APP 13	[21]			
Cubic Content	CC	APP 12	[21]			
Eaves Height	EH	APP 14	[21]			
Gross Site Area	GSA	APP 17	[21]			
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Site Depth	SD	APP 18	[21]			
Site Frontage	SF	APP 18	[21]			
Special use definitions – shops						
Ancillary Area	AA					
Built Depth	BD					
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Net Frontage	NF					
Retail Area	RA	APP 19	[25]			
Shop Depth	ShD					
Shop Width	SW					
Storage Area	SToA					
Special use definitions – residential						
Effective Floor Area	EFA	APP 22	[31]			
Net Sales Area	NSA	APP 21	[31]			
Residential Agency Guidelines	RAG	APP 20	[29]			
Residential Values	RV					

Core definitions and diagrams

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 partitions	1.17	Canopies		
1.3	Columns, piers, chimney breasts, stairwells, lift-wells, and the like	1.18	Open vehicle parking areas, roof terraces, and the like		
1.4	Atria and entrance halls, with clear height above, measured at base level only	1.19	Voids over or under structural, raked or stepped floors		
1.5	Internal balconies	1.20	Greenhouses, garden stores, fuel stores, and the like in residential property		
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				

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Application	s	Notes		
(when to use GEA)		[how 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)	GEA 1	Diagrams – diagrams A and B illustrate how to apply GEA	
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	GEA 2	Party Walls – in shared ownership are to be measured to their central line	
APP 3	Building cost estimation – GEA is the preferred method of measurement for calculating building costs of residential property for insurance purposes			

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

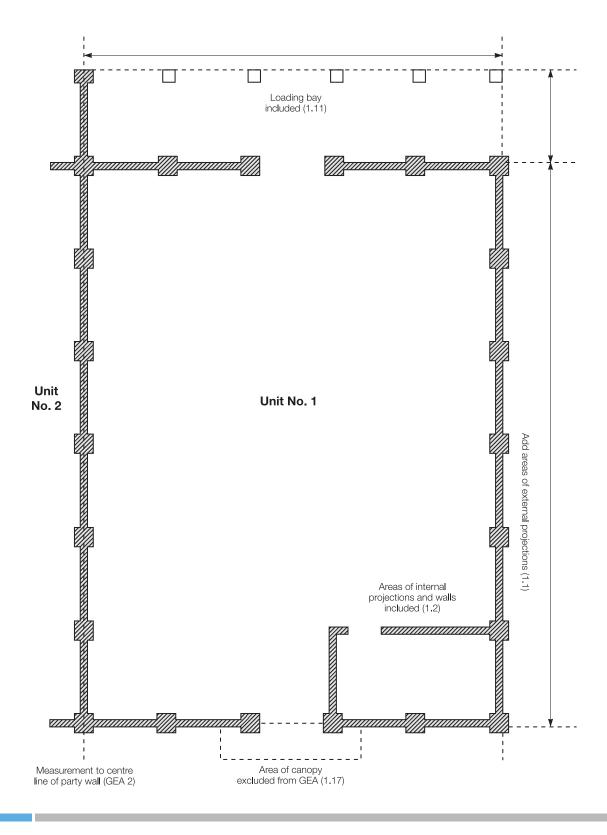
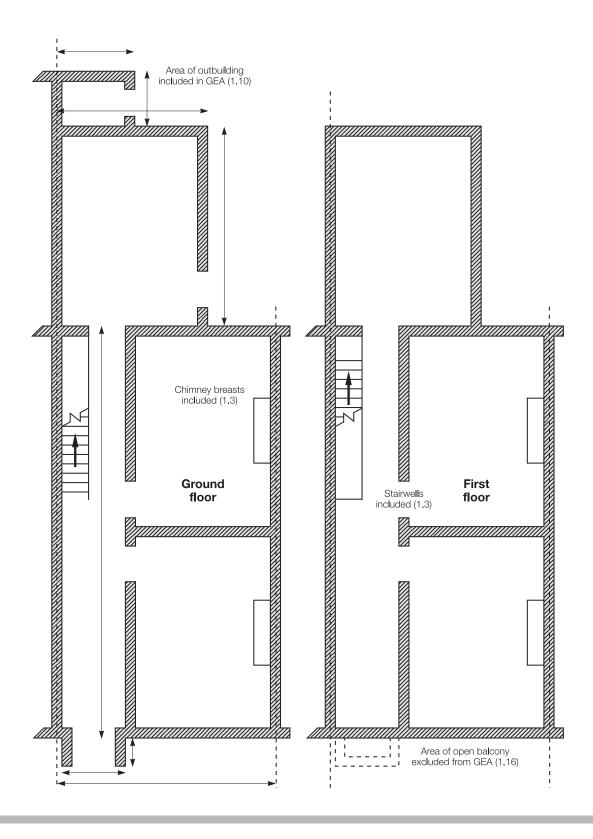


Diagram B - Example of appropriate dimensions for GEA defined terrace house



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).

note on vije					
g	Excluding				
Areas occupied by internal walls and partitions	2.18	Perimeter wall thicknesses and external projections			
Columns, piers, chimney breasts, stairwells, liftwells, other internal projections, vertical ducts, and the like	2.19	External open-sided balconies, covered ways and fire escapes			
Atria and entrance halls, with clear height above, measured at base level only	2.20	Canopies			
Internal open-sided balconies, walkways, and the like	2.21	Voids over or under structural, raked or stepped floors			
Structural, raked or stepped floors are to be treated as a level floor measured horizontally	2.22	Greenhouses, garden stores, fuel stores, and the like in residential property			
Horizontal floors, with permanent access, below structural, raked or stepped floors					
Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies)					
Mezzanine floor areas with permanent access					
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					
Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like					
Projection rooms					
Voids over stairwells and lift shafts on upper floors					
Loading bays					
Areas with a headroom of less than 1.5m (see APP 6)					
Pavement vaults					
Garages					
Conservatories					
	Areas occupied by internal walls and partitions Columns, piers, chimney breasts, stairwells, liftwells, other internal projections, vertical ducts, and the like Atria and entrance halls, with clear height above, measured at base level only Internal open-sided balconies, walkways, and the like Structural, raked or stepped floors are to be treated as a level floor measured horizontally Horizontal floors, with permanent access, below structural, raked or stepped floors Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies) Mezzanine floor areas with permanent access 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 Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like Projection rooms Voids over stairwells and lift shafts on upper floors Loading bays Areas with a headroom of less than 1.5m (see APP 6) Pavement vaults Garages	Columns, piers, chimney breasts, stairwells, liftwells, other internal projections, vertical ducts, and the like Atria and entrance halls, with clear height above, measured at base level only Internal open-sided balconies, walkways, and the like Structural, raked or stepped floors are to be treated as a level floor measured horizontally Horizontal floors, with permanent access, below structural, raked or stepped floors Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies) Mezzanine floor areas with permanent access 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 Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like Projection rooms Voids over stairwells and lift shafts on upper floors Loading bays Areas with a headroom of less than 1.5m (see APP 6) Pavement vaults Garages			

Applications		Notes		
(when to use	GIA)	(how to use GIA)		
APP 4	Building cost estimation – GIA is a recognised method of measurement for calculating building costs	GIA 1	Diagrams – 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 Property Misdescriptions Act 1991 and Property Misdescriptions (Specified Matters) Order 1992 [see Introduction on page 1]	
APP 7	Property management – 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 [30]]	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 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

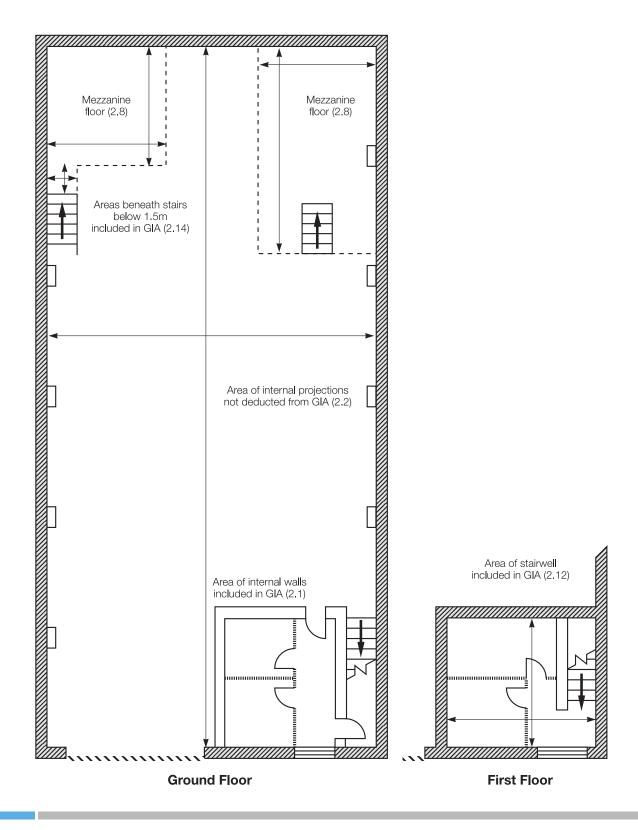
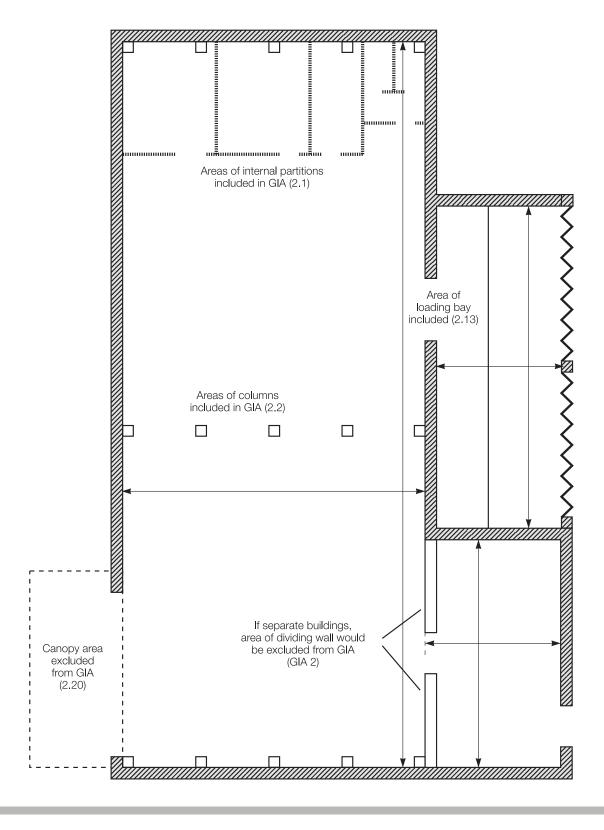


Diagram D - Example of appropriate dimensions for GIA defined industrial/ warehouse unit



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)

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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)	

Application	s	Notes		
(when to us	e NIA]	(how 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:	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	
	- Shops and supermarkets;			
	- 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, business use (except those in APP 6), and composite hereditaments	NIA 2	Diagrams – diagrams E, F, G, H, K, and L illustrate how to apply NIA	
APP 11	Property management – NIA is a basis of measurement for the calculation of service charges for apportionment of occupiers' liability	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

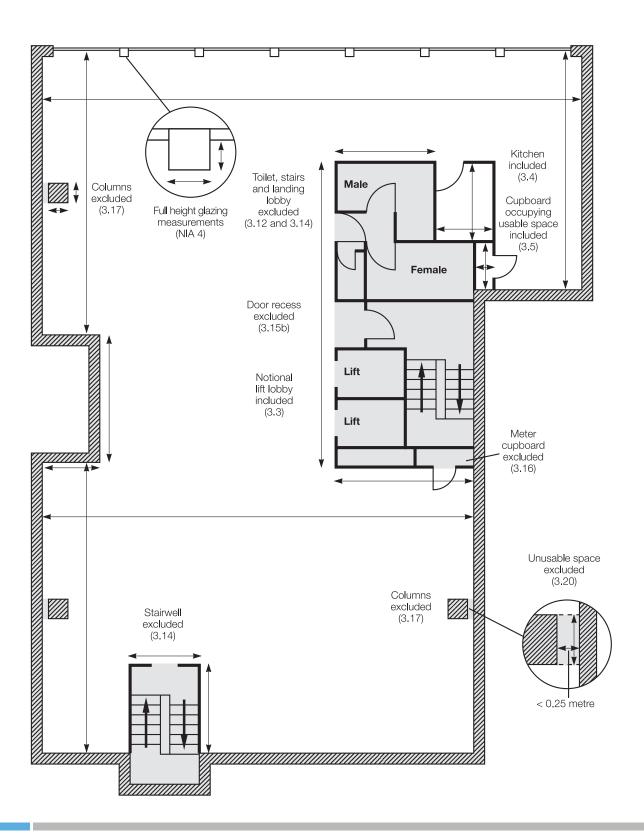


Diagram F - Example of appropriate dimensions for NIA floor area defined offices converted from dwelling house

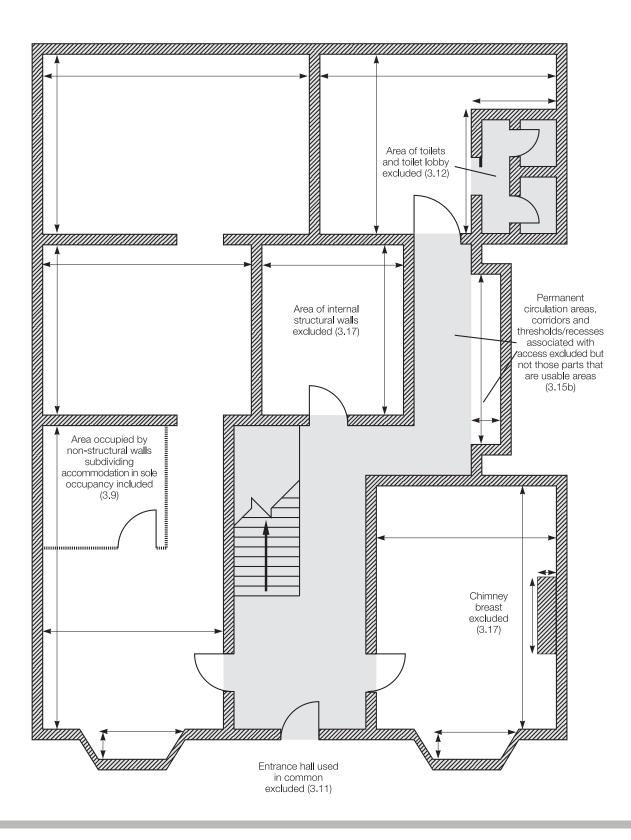


Diagram G – Example of appropriate dimensions for NIA floor areas defined offices (open plan) multiple occupation

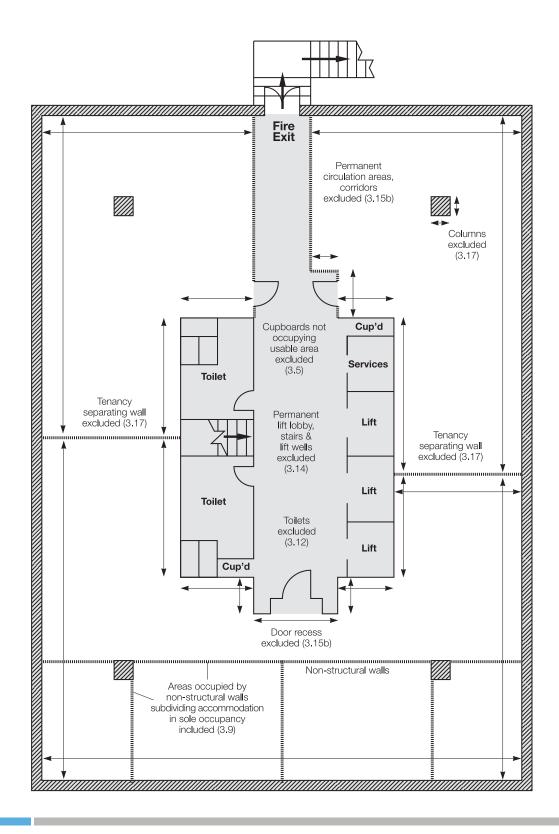
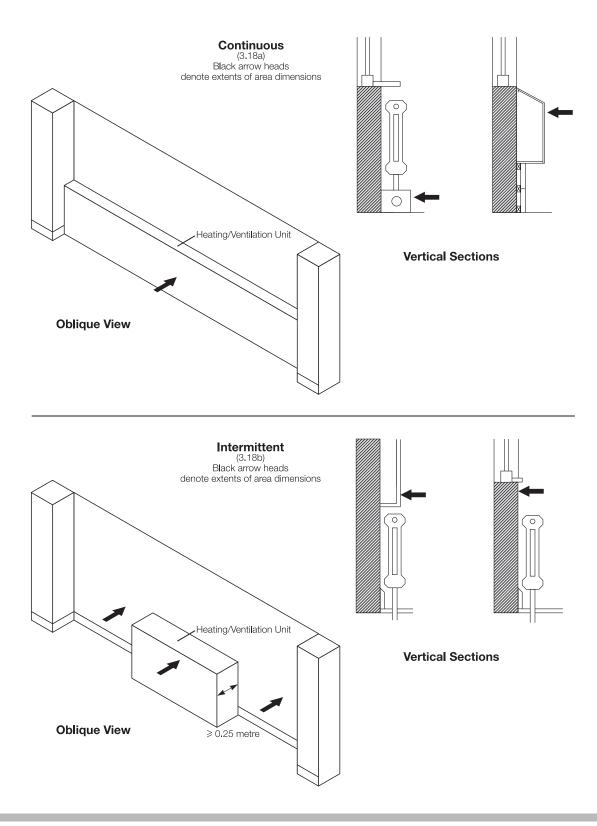


Diagram H - Net Internal Area (NIA) - Examples of appropriate points from which to measure in respect of various types of heating installations



Technical definitions and diagrams

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		Notes		
(when to use)		(how to use)		
APP 12	Estate agency and valuation – CC is used in the measurement of warehouses	CC 1	Town planning – 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	EH1	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	Land measurement – 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	Usage – GSA is for general use, mainly industrial and warehouse buildings			
APP 18	Usage – SD, BF, SF and PR are for general application			

Diagram I – Illustration of appropriate dimensions for heights defined

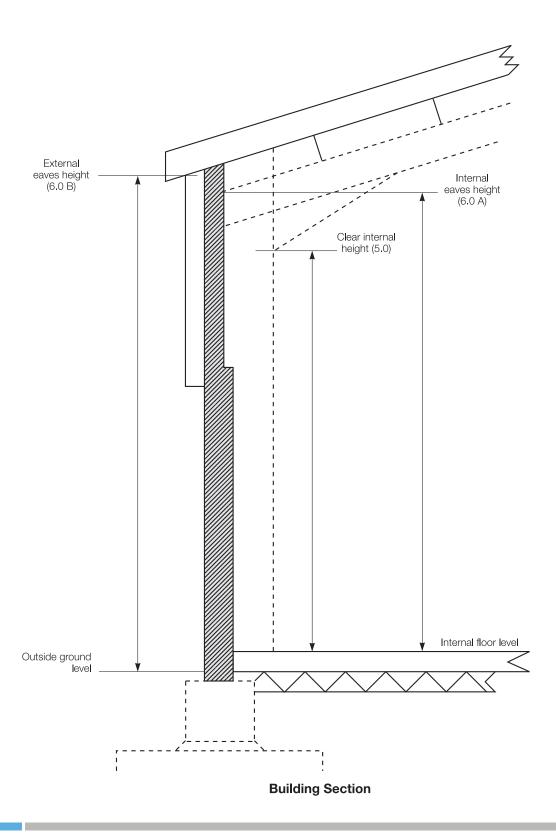
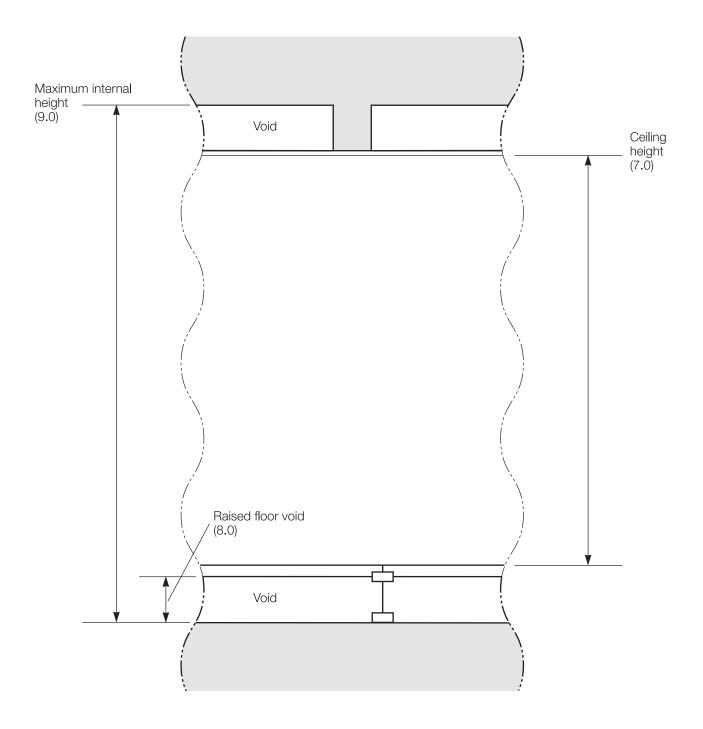


Diagram J - Illustration of appropriate dimensions for heights defined



Internal Section (part)

Special use definitions and diagrams

Shops

16.0	Retail A	Retail Area (RA)			
	The reta	ail area of the shop is the Net Internal Area (NIA)			
	Includi	ng	Excluding	Excluding	
	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	e Area (StoA)			
	The NIA	of a shop which does not form part of the RA (see 16.0es)) and which	is usable exclusively for storage	
18.0	Ancilla	y Areas (AA)			
	All NIA not included in RA and StoA but capable of beneficial use				
19.0	Gross F	rontage (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			e building, from the outside of external	
20.0	Net Fro	ntage (NF)			
		rall external frontage on the shop line measured betwoeld face of support columns	een the inte	rnal face of the external walls, or the	
	Includi	ng	Excluding		
	20.1	The display window frame and shop entrance	20.2	Recesses, doorways or access to other accommodation	
21.0	Shop W	idth (SW)			
	Interna	width between inside faces of external walls at front (of shop or ot	her point of reference	
22.0	Shop Depth (SD)				
	Measurement from the notional display window to the rear of the retail area				
	Includi	ng			
	22.1	The thickness of the display window (or any support s	tructure)		
23.0	Built De	pth (BD)			
	Maximu	Maximum external measurement from front to rear walls of a building at ground level			

Applications (when to use)		Notes (how to use	e)
APP 19	Estate agency and valuation – RA is the basis of measurement for the valuation and marketing of shops and supermarkets	RA1	Diagrams – 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
		RA3	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
		AA1	Ancillary areas – include staff rooms, kitchens, training rooms, offices, and the like
		GF1	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

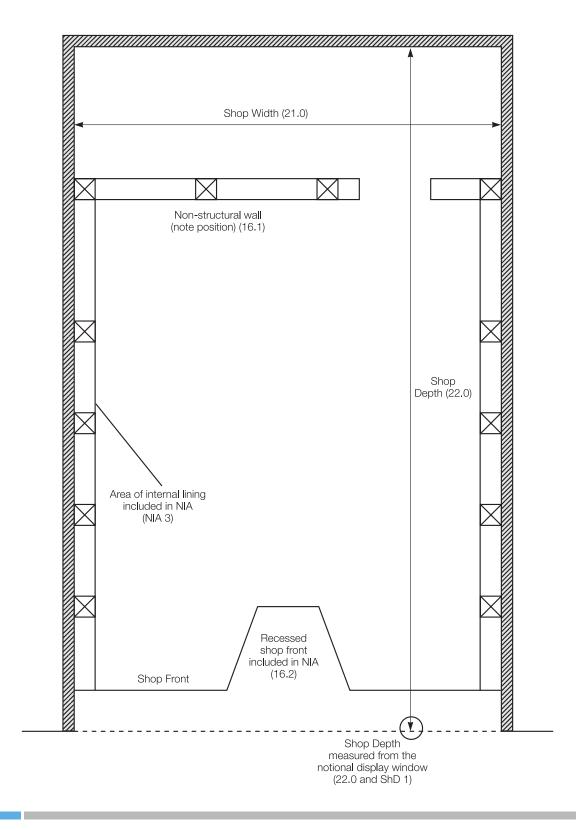
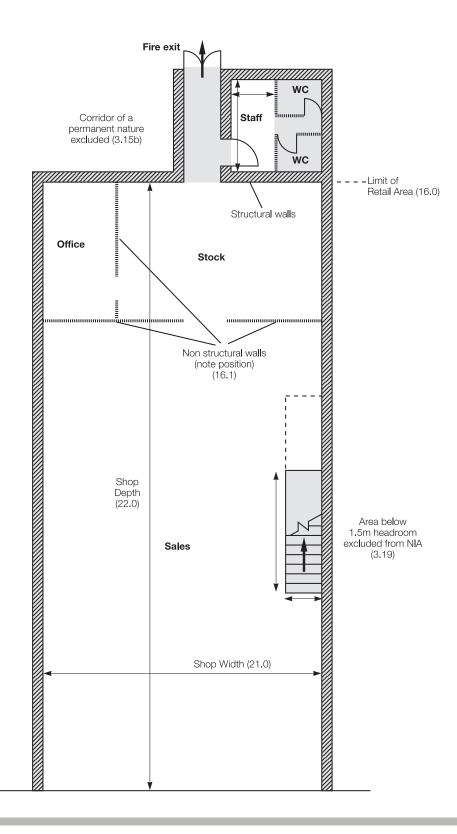


Diagram L - An example of NIA in practice in a retail context



Residential Agency Guidelines

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
- 24.2 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 selfcontained, they should be measured and described separately
- 24.9 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]		Notes (how to use)	
APP 20	Residential estate agency – RAG is for marketing, sale and letting of residential property	RAG1	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

Residential Valuations

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 28) 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.

Net Sales Area

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		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

Effective Floor Area

27.0	Effective Floor area			
	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

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Applications [when to use]		Notes (how to use)	
APP 21	Net Sales Area – NSA is used in the valuation and marketing of residential dwellings, particularly in new developments	EFA 1	Effective Floor Area – is measured as for NIA assuming all walls are structural
APP 22	Effective Floor Area – EFA is used for council tax banding of flats and maisonettes		

Leisure

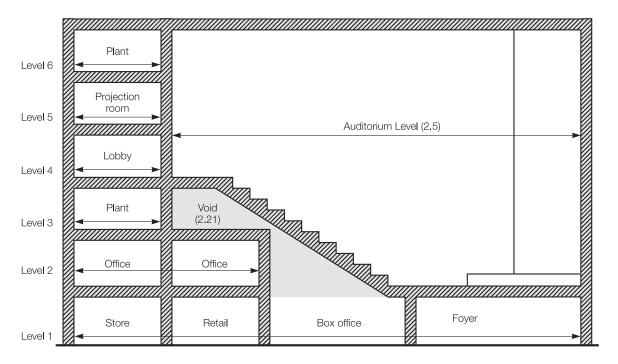
28.0 As stated in the Introduction this is a code of measurement, not valuation. Many properties used for leisure are valued having regard to trading potential. In these circumstances the area of the premises may not be a factor used directly in the assessment of value. There are, however, occasions 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

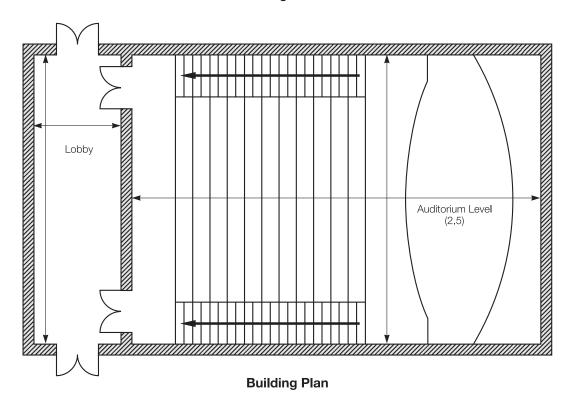
30.0 Market practice suggests that it may be helpful for some areas within GIA to be stated separately:

- 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
- 31.0 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





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