
Measuring Practice Guidance Notes



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Introductory Note

A common agreed standard for the measurement of property is desirable to facilitate the efficient workings of the property sector and the professionals working therein.

To assist this, we have tried to simplify the approach, cover a wider range of properties, reflect the expanded role of the property professionals and provide guidance on the use of the recommended measurement applications.

The code applies to all areas of property agency, marketing, rating, valuations and rent reviews. In addition, all references to floor areas should be accompanied by a reference to the measurement code adopted. Any deviation from the Code should be highlighted in any correspondence or material produced. The National Building Elements should be referred to for Building Cost Estimation.

Metric area only should be used, in all cases.

Property Type	Measurement Application	Building Cost Estimation
Office	IPMS*	IPMS*
Retail	NIA	GIA
Retail Warehousing	GIA	GIA
Motor Showroom	GIA	GIA
Drive-thru Restaurant	NIA	GIA
Industrial	GEA	GIA
Leisure-plex/Leisure Centre	GIA	GIA
Crèche Facility	GIA	GIA
Nursing Home	GIA	GIA
Hospital	GIA	GIA
Cinema	GIA	GIA
Hotel	GIA	GIA
Public House	GIA	GIA
Guesthouse	GIA	GIA
Hostel	GIA	GIA
School	GIA	GIA
Funeral Home	GIA	GIA
Residential	GIA	GIA
Land	Site Area	

Notes

* Mandatory for all SCSI members from 1st February 2016 unless client instructs otherwise. Refer to IPMS Code for office measurement www.scsi.ie

For mixed use properties the relevant code for each constituent part will apply. However, for Industrial/Warehouse properties with less than 50% of their use in office use, the measurement will be calculated on the basis of GEA and stated separately, party walls to be measured to mid-point.

Mezzanines should be measured only if they are of a permanent nature. If they are of a permanent nature then the area should be stated separately; also stated separately should be the area beneath the mezzanine. The presentation should, therefore, be as follows:

- Warehouse area clear height: x sq m
- Warehouse sub-mezzanine: x sq m
- Mezzanine: x sq m

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

- 1.1 Perimeter wall thicknesses and external projections
- 1.2 Areas occupied by internal walls and partitions
- 1.3 Columns, piers, chimney breasts, stairwells, lift-wells, and the like
- 1.4 Atria with clear height above, measured at base level only
- 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 main roof level
- 1.10 Outbuildings which share at least one wall with main building
- 1.11 Covered loading bays
- 1.12 Areas with a headroom of less than 1.5m
- 1.13 Pavement vaults
- 1.14 Garages
- 1.15 Conservatories

Excluding

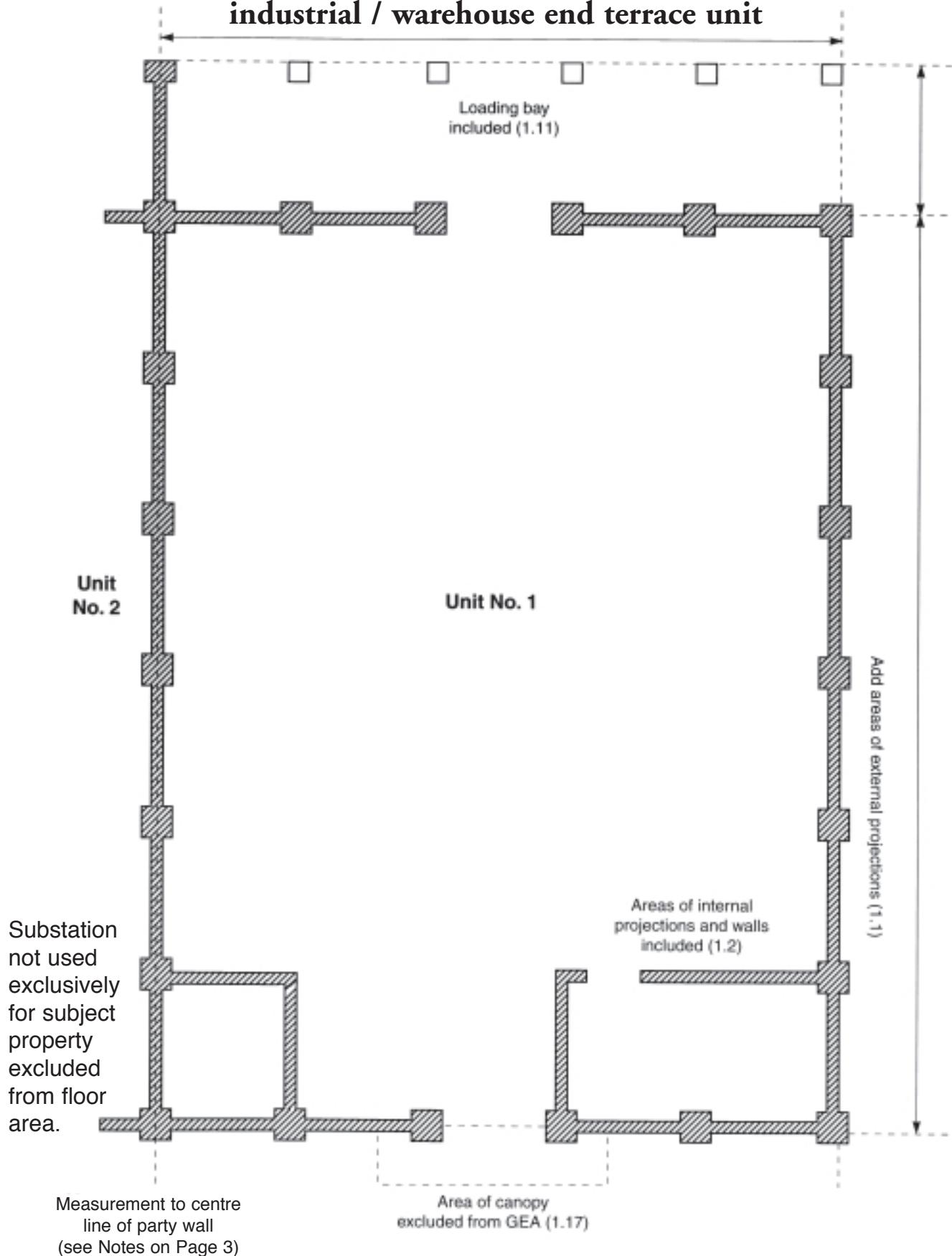
- 1.16 External open-sided balconies, covered ways and external fire escapes
- 1.17 Canopies
- 1.18 Open vehicle parking areas, roof terraces, and the like
- 1.19 Voids over or under structural, raked or stepped floors
- 1.20 Greenhouses, garden stores, fuel stores, and the like in residential property
- 1.21 Sub-stations not used exclusively by the subject property

Notes

(how to use GEA)

GEA 1 **Diagram A** – illustrates how to apply GEA

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



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.

Including

- 2.1 Areas occupied by internal walls and partitions
- 2.2 Columns, piers, chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like
- 2.3 Atria with clear height above, measured at base level only
- 2.4 Internal open-sided balconies and the like
- 2.5 Structural, raked or stepped floors are to be treated as a level floor measured horizontally
- 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, etc.)
- 2.8 Mezzanine areas intended for use 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 main roof level
- 2.10 Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaner's 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
- 2.15 Pavement vaults
- 2.16 Garages
- 2.17 Conservatories

Excluding

- 2.18 Perimeter wall thickness and external projections
- 2.19 External open-sided balconies, covered ways and external fire escapes
- 2.20 Canopies
- 2.21 Voids over or under structural, raked or stepped floors
- 2.22 Greenhouses, garden stores, fuel stores, and the like in residential property
- 2.23 Sub-stations not used exclusively by the subject property

Notes

(how to use GIA)

- GIA 1 **Diagrams** – diagrams B and C illustrate how to apply GIA
- GIA 2 **Separate buildings** – GIA excludes the thickness of external walls, but includes the thickness of all internal walls. Therefore it is necessary to identify what constitutes a separate building
- GIA 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
- GIA 4 **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 5 **Level changes** – the presence of steps or a change in floor levels is to be noted
- GIA 6 **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 B

Example of appropriate dimensions for GIA defined

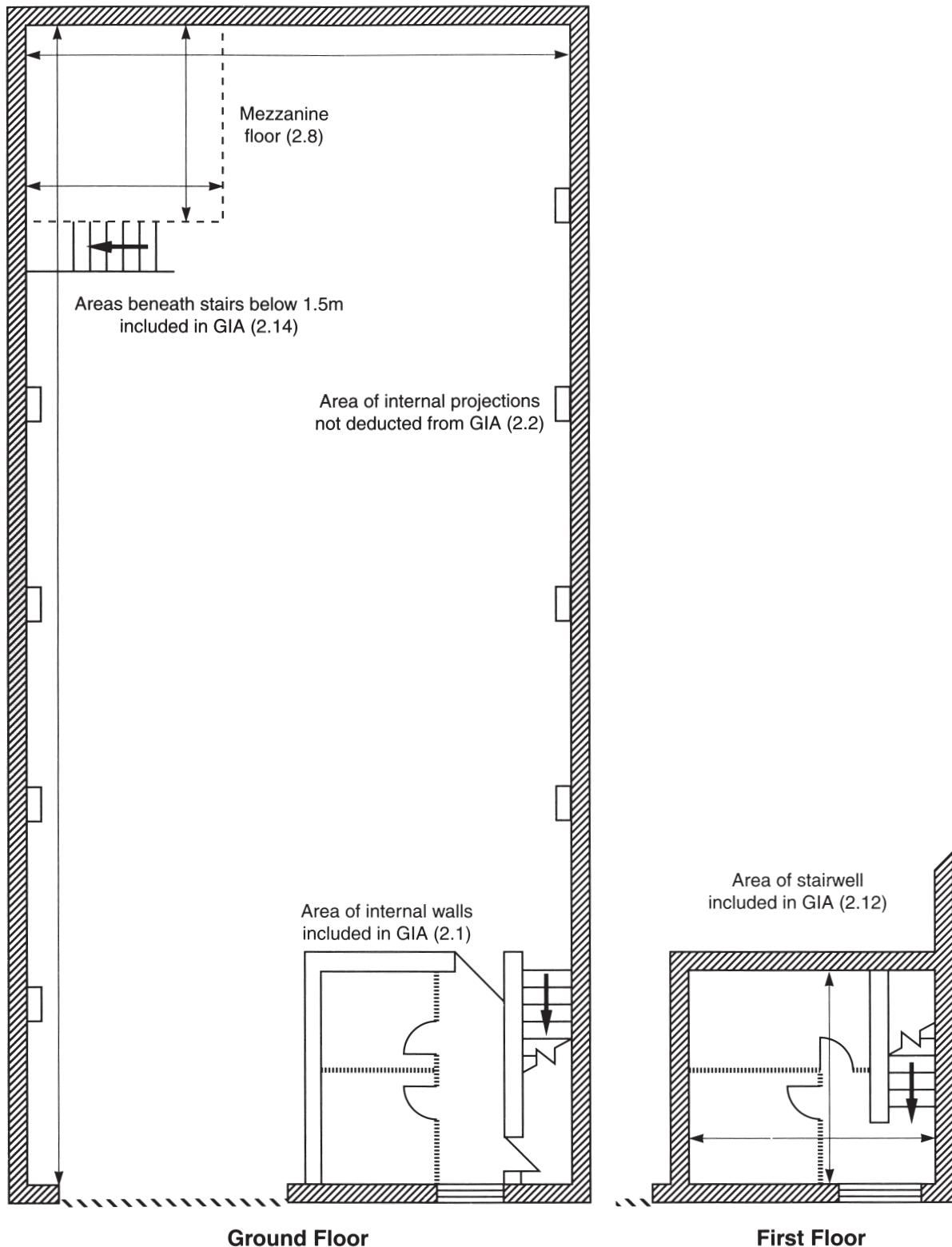
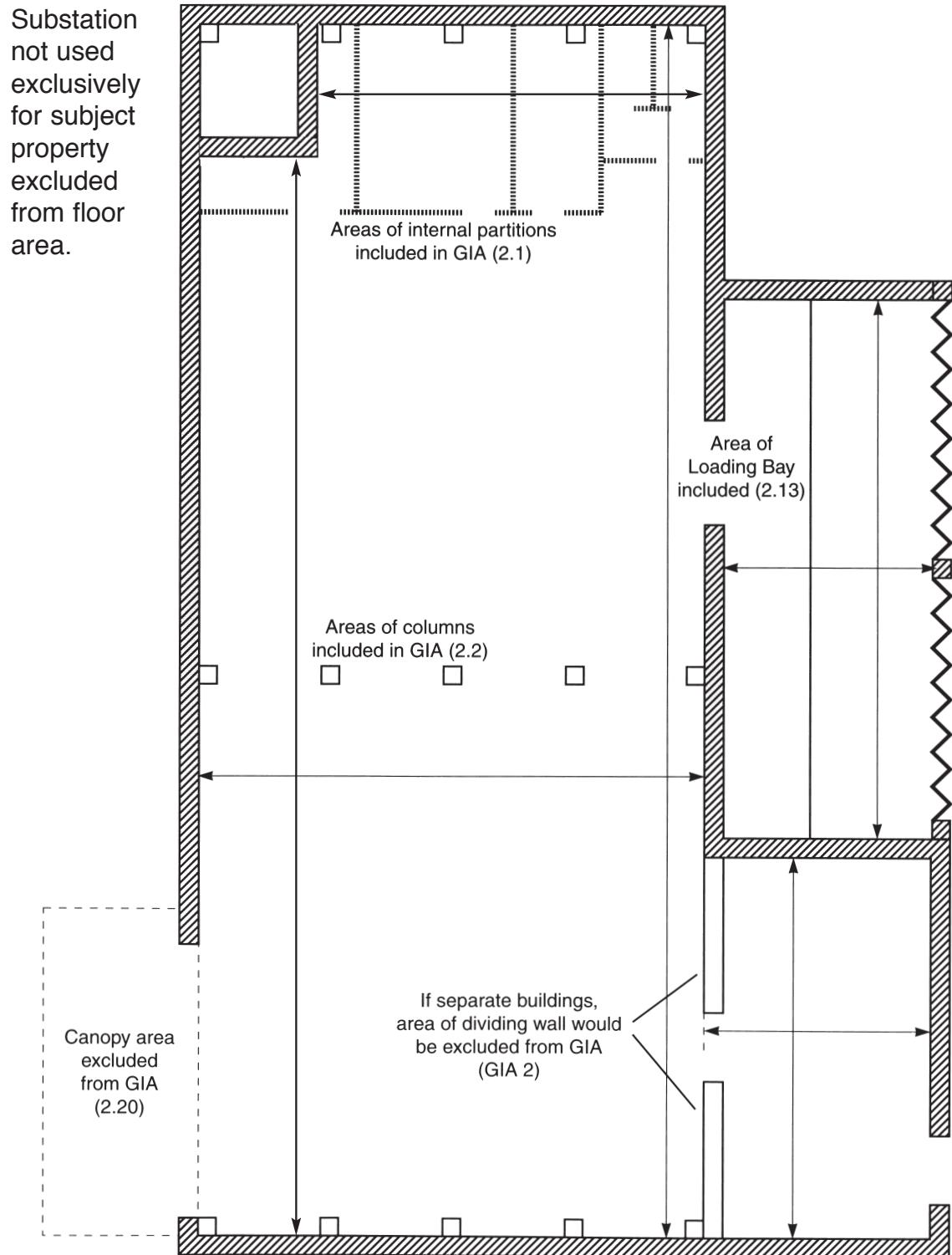


Diagram C

Example of appropriate dimensions for GIA defined



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.

Including

- 3.1 Atria with clear height above, measured at base level only (but see 3.11)
- 3.2 Entrance halls (but see 3.11)
- 3.3 Notional lift lobbies
- 3.4 Kitchens
- 3.5 Built-in units, cupboards, and the like occupying usable areas
- 3.6 Ramps of lightweight construction to false floors
- 3.7 Area occupied by ventilation/heating grilles, where such equipment does not protrude above the floor level
- 3.8 Area occupied by skirting and perimeter trunking
- 3.9 Areas severed by internal non-structural walls, demountable partitions, whether or not permanent, and the like, where the purpose of the division is partition of use, not support, provided the area beyond is not used in common
- 3.10 Pavement vaults
- 3.11 Mezzanine areas intended for use with permanent access

Excluding

- 3.12 Those parts of entrance halls, atria, landings and balconies used in common (see 3.1 and 3.2)
- 3.13 Toilets, toilet lobbies, bathrooms, cleaners' rooms, and the like
- 3.14 Lift rooms, plant rooms, tank rooms (other than those of a trade process nature), fuel stores, and the like
- 3.15 Stairwells, lift-wells and permanent lift lobbies
- 3.16 Corridors and other circulation areas where used in common with other occupiers or of a permanent essential nature (e.g. fire corridors, smoke lobbies, etc.)
- 3.17 Areas under the control of service or other external authorities including meter cupboards and statutory service supply points
- 3.18 Internal structural walls, walls enclosing excluded areas, columns, piers, chimney breasts, other projections, vertical ducts, and the like
- 3.19 The space occupied by permanent and continuous air-conditioning heating or cooling apparatus, and ducting insofar as the space it occupies is rendered substantially unusable
- 3.20 Areas with headroom of less than 1.5m
- 3.21 Areas rendered substantially unusable by virtue of having a dimension between opposite faces of less than 0.25m. See diagram E
- 3.22 Vehicle parking areas (the number and type of spaces noted)

Notes

(how to use NIA)

- NIA 1 **Diagrams** – diagrams D, E, F, G and H illustrate how to apply NIA
- NIA 2 **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 3 **Advice** – when dealing with rent reviews, lease renewals or valuation of investment properties, the exclusions are generally intended to relate to the premises as demised. Unless otherwise indicated by statutory provisions 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 4 **Level changes** – the presence of steps or a change in floor levels is to be noted
- NIA 5 **Restricted headroom** – when marketing on an NIA basis it may be appropriate to identify floor areas below full height but above 1.5m
- NIA 6 **Perimeter trunking/heating** – when marketing on an NIA basis reference to the inclusion of perimeter units/trunking may be appropriate in order not to mislead
- NIA 7 **Corridors** – whether or not a wall defining a corridor is structural, permanent or essential (see 3.16 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 D

Example of appropriate dimensions for NIA multiple occupation

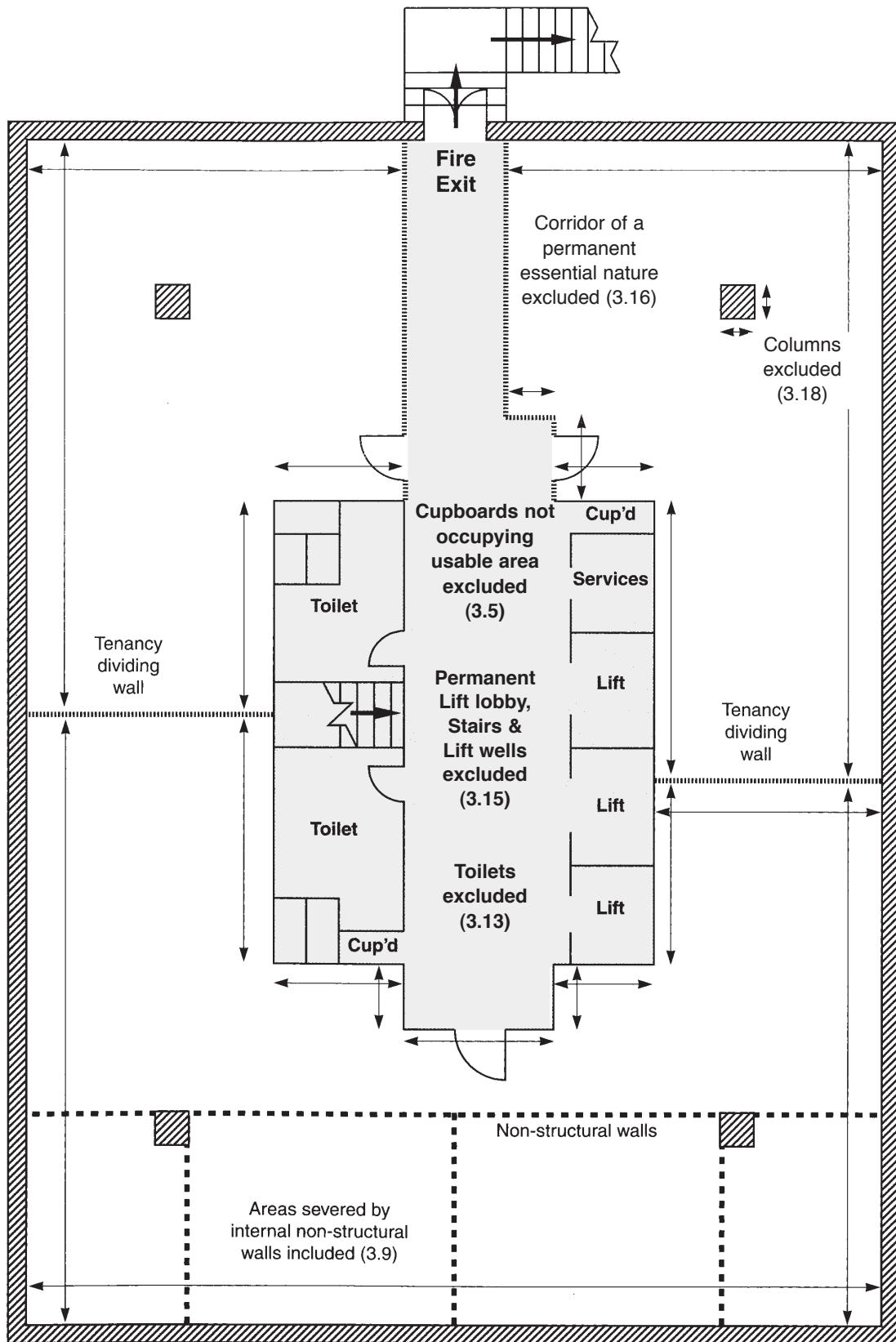


Diagram E

Example of appropriate dimensions for NIA floor area

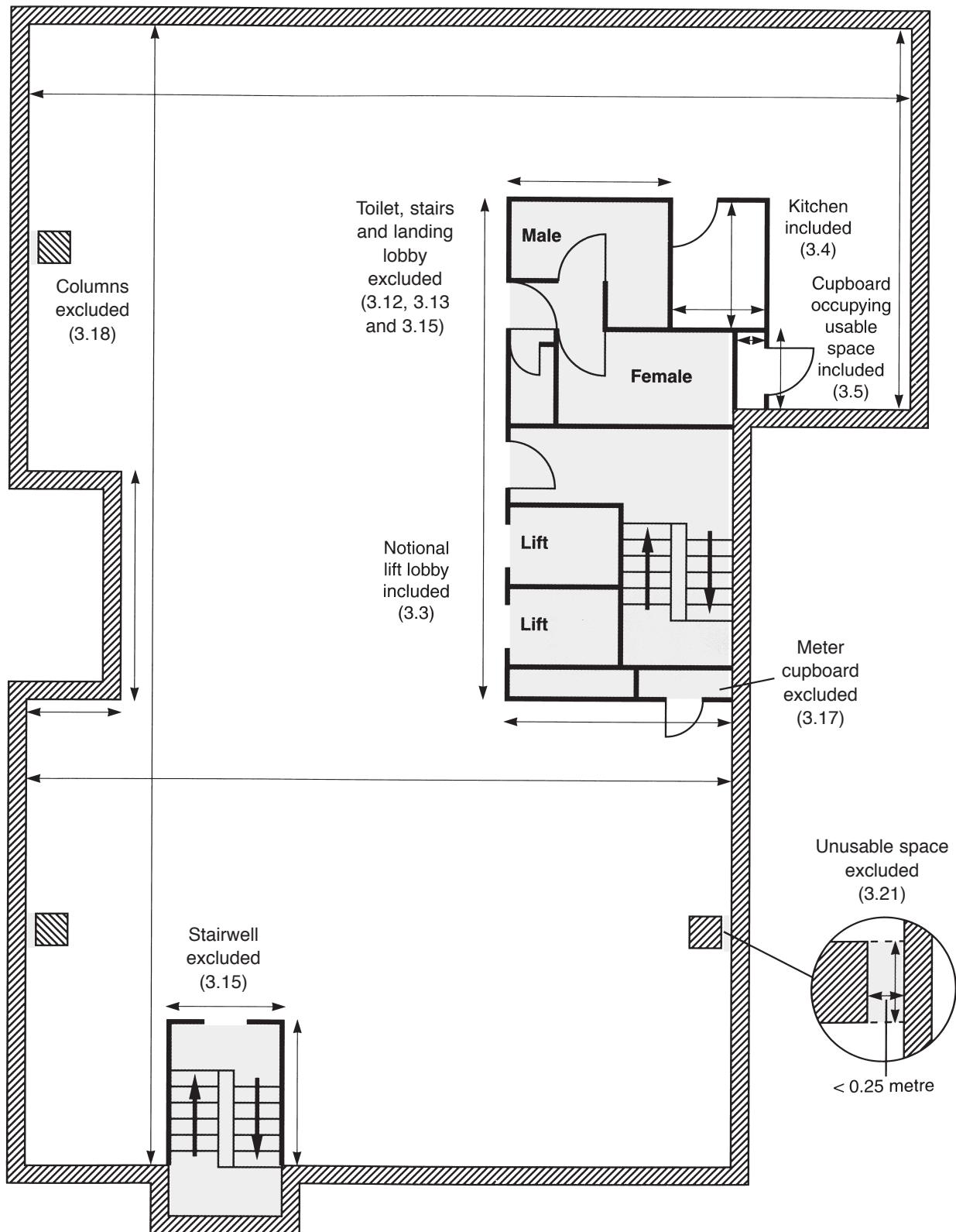


Diagram F
**Example of appropriate dimensions for NIA floor area defined
 offices converted from dwelling house**

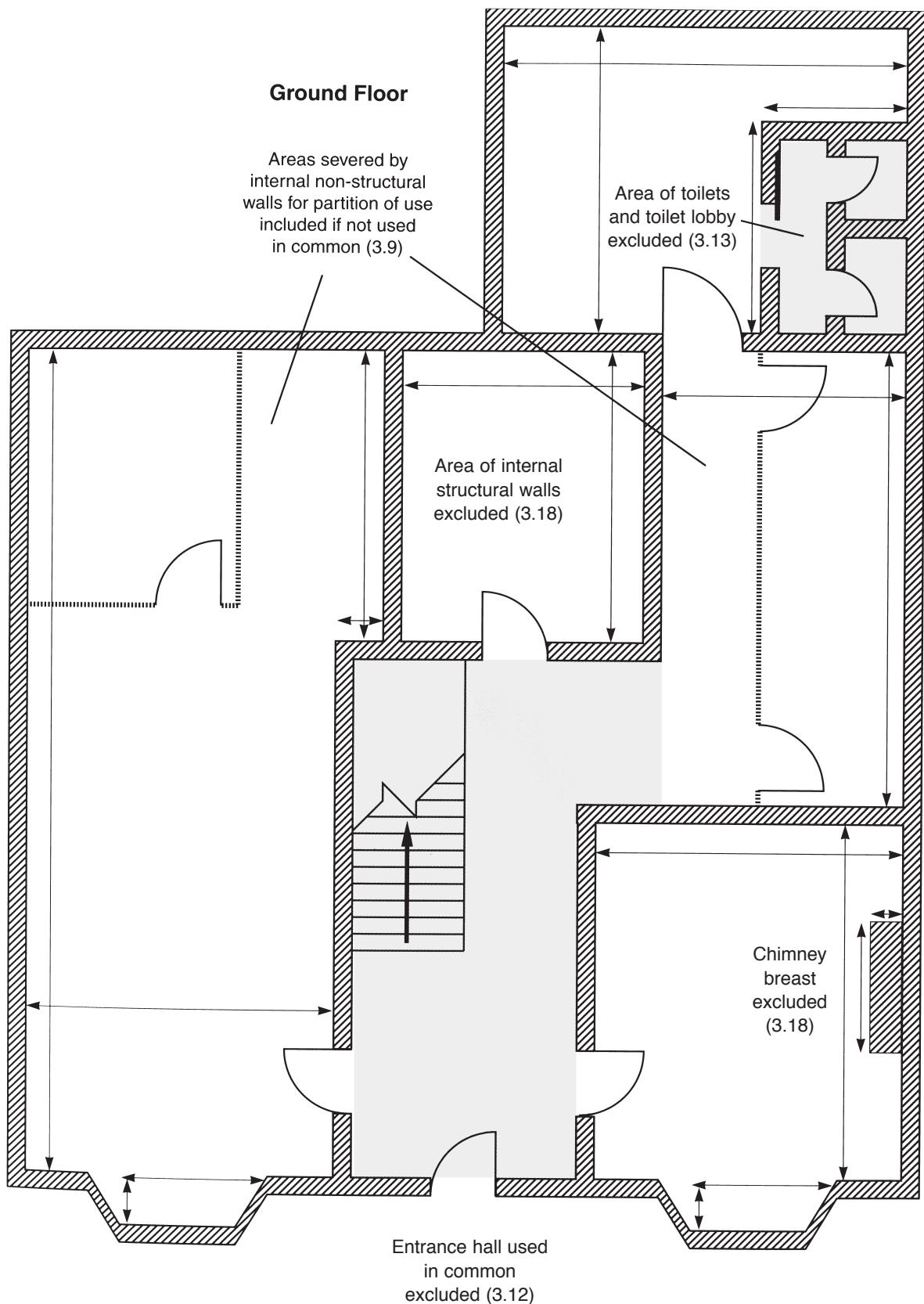


Diagram G

An example of NIA in practice in a retail context

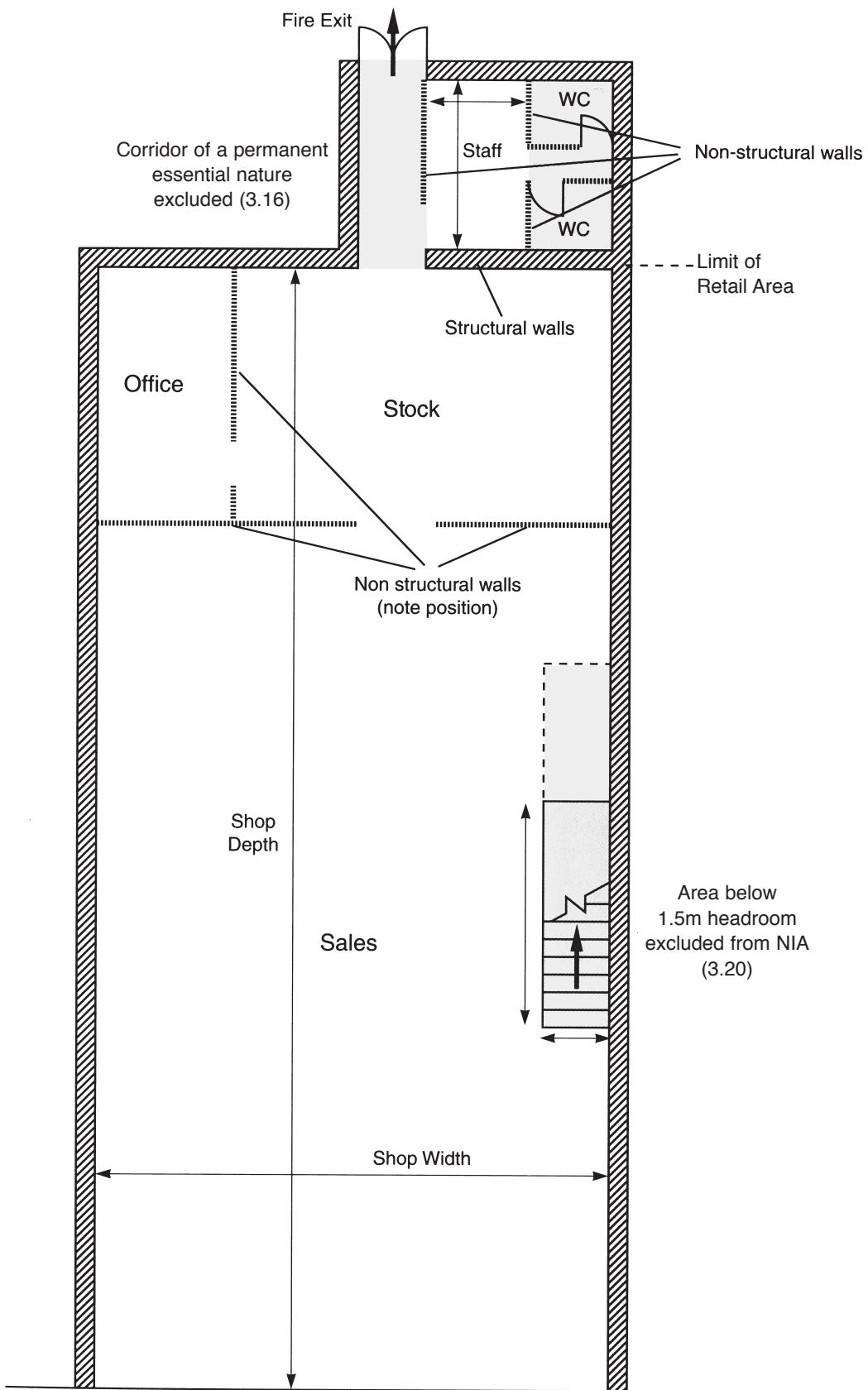


Diagram H

An example of NIA in practice in a retail context

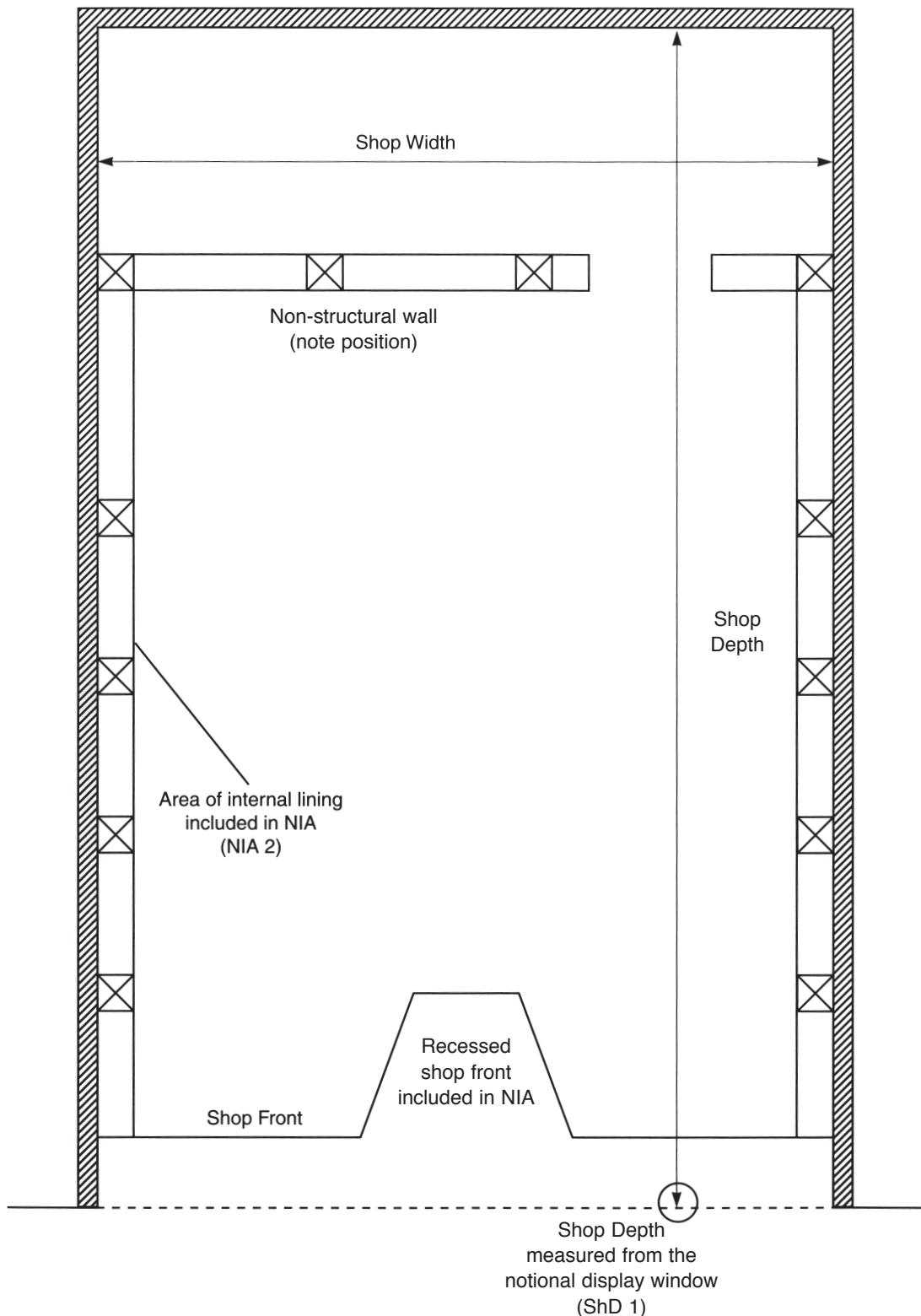


Diagram I
Net Internal Area (NIA)
**Examples of appropriate points from which to measure
in respect of various types of heating installations**

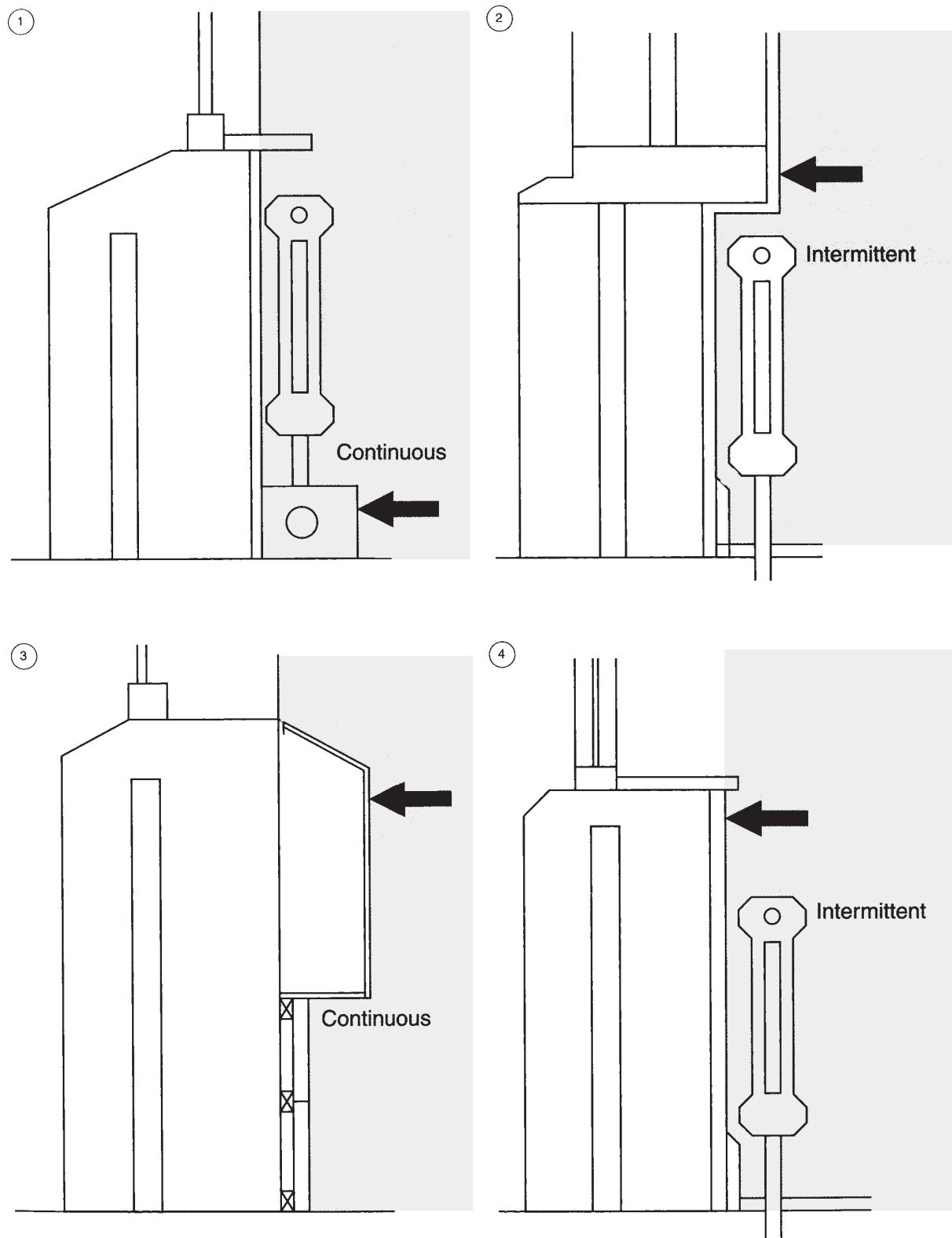
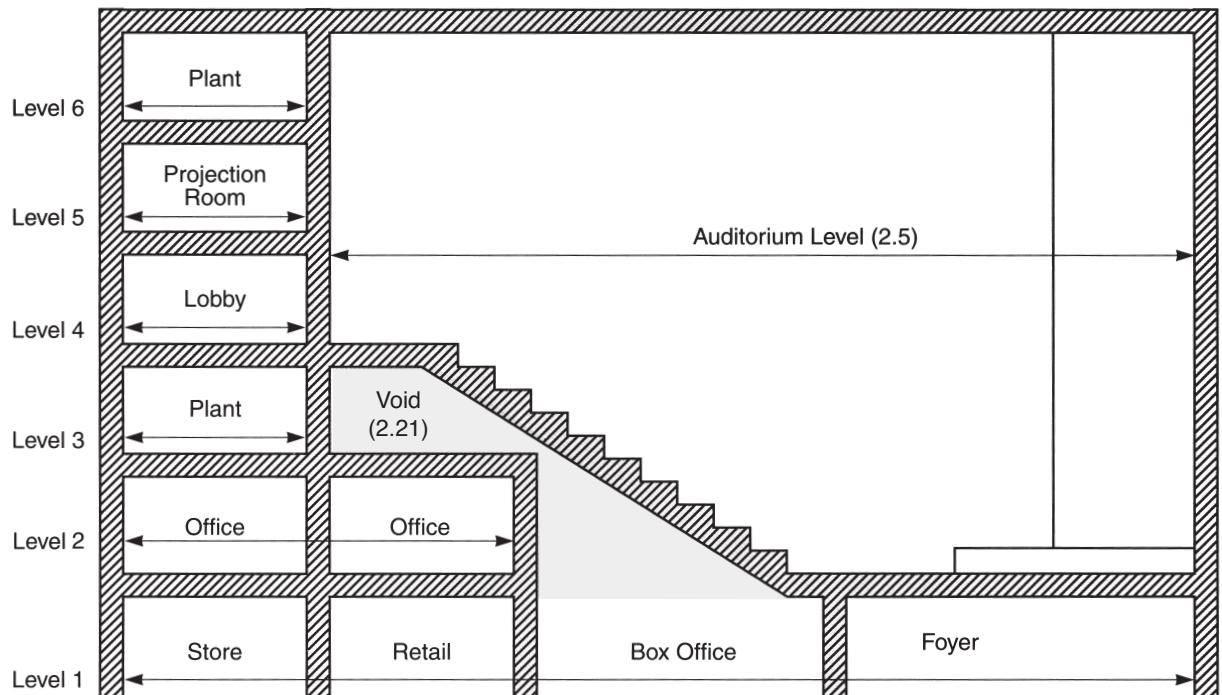
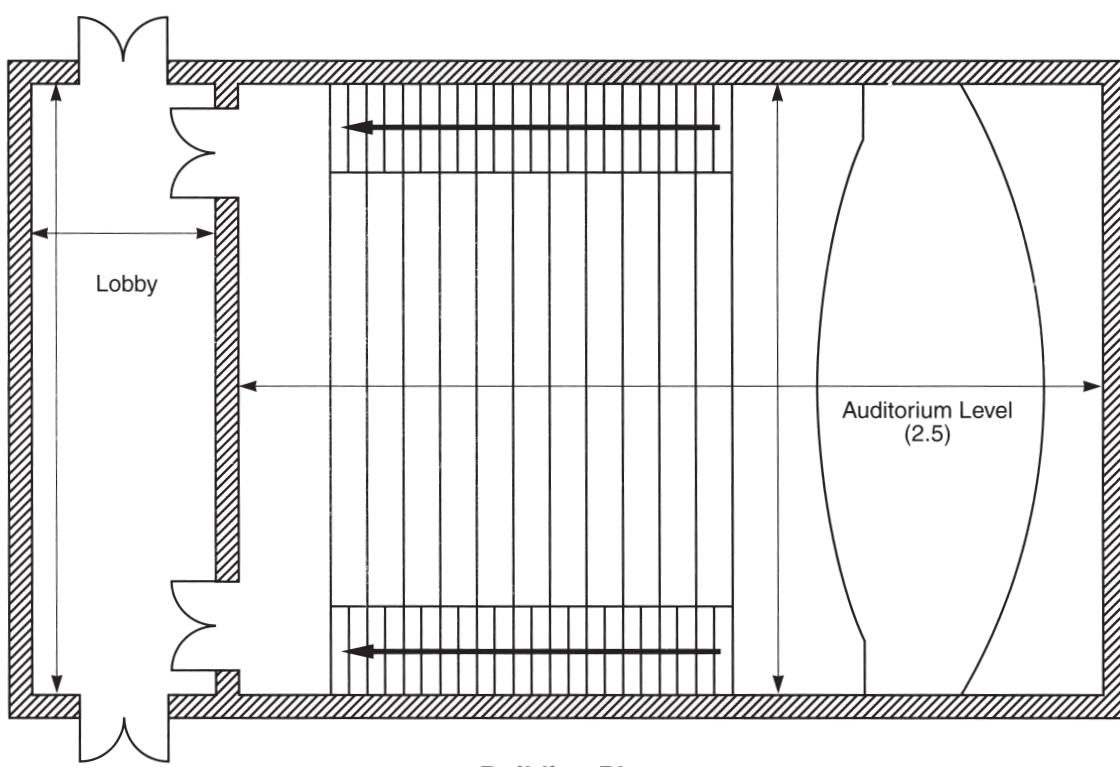


Diagram J
**Example of appropriate dimensions for GIA floor area
defined at each level**
Leisure facilities



Building Section



Building Plan

Technical definitions

4.0 Cubic Content (CC)

The product of the Gross Internal Area and the Clear Internal Height as defined under the Guidance notes.

4.1 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 K.

4.2 Eaves Height (EH)

See diagram K.

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.

4.3 Ceiling Height (CH)

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

4.4 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 L.

4.5 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 K.

4.6 Site Area (SA)

The total area of the site within the site title boundaries, measured on a horizontal plane. If appropriate, where the area is occupied by adjoining roads, the area occupied by the road can be stated separately.

4.7 Site Depth (SD)

The measurement of a site from front to rear boundaries.

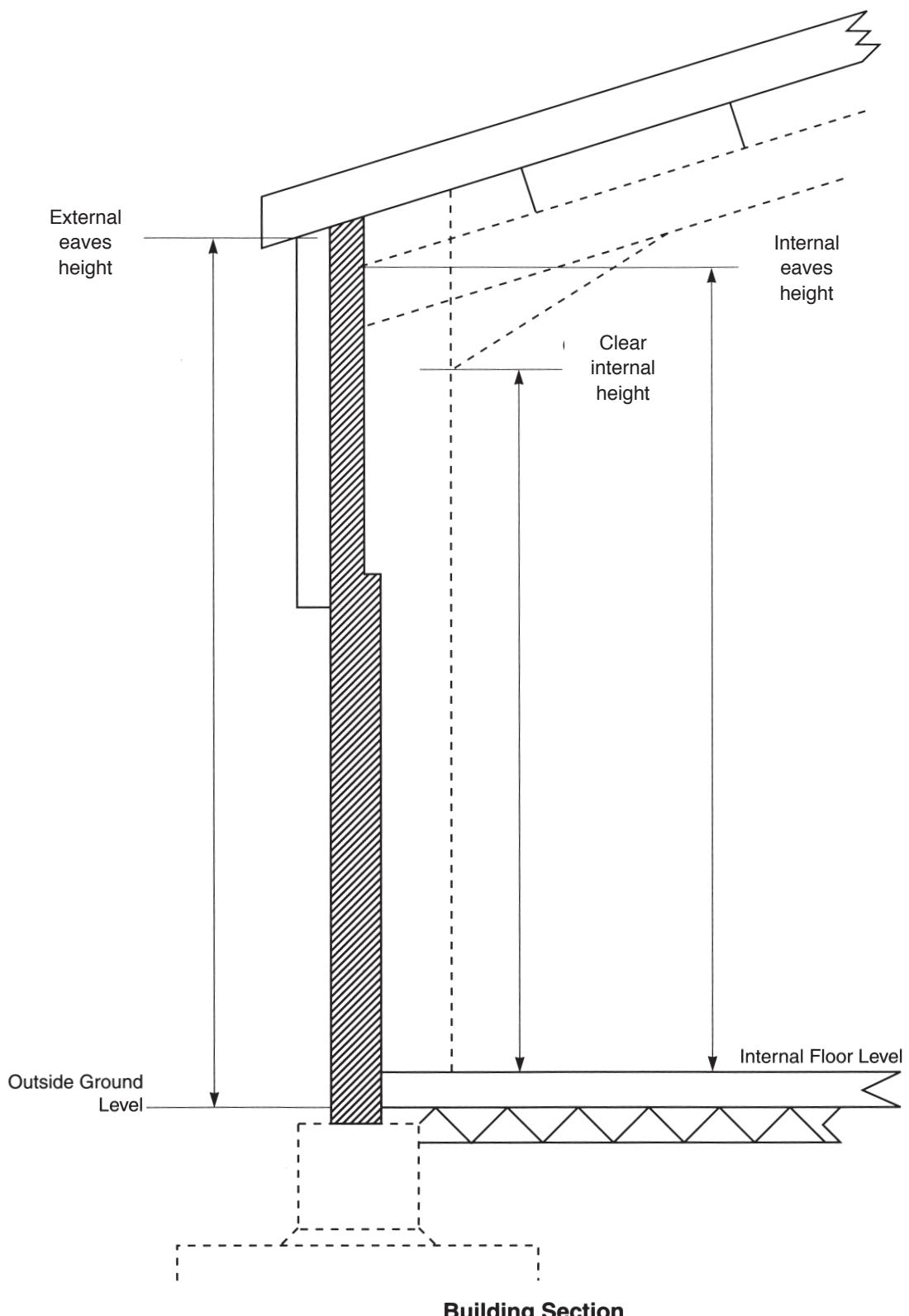
4.8 Building Frontage (BF)

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

4.9 Site Frontage (SF)

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

Diagram K
Illustration of appropriate dimensions for heights defined



Special use definitions:

Shops, including Shopping Centres and Department Stores

5.0 Retail Area (RA)

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

Including

5.1 Storerooms and ancillary accommodation formed by non-structural partitions, the existence of which should be noted

Excluding

Storerooms and ancillary accommodation formed by structural partitions

5.2 Recessed and arcaded areas of shops created by the location and design of the window display frontage should be itemised as a separate entity, distinct from the above.

5.3 Storage Area (StoA)

The NIA of a shop which does not form part of the RA and which is usable exclusively for storage purposes.

5.4 Ancillary Areas (AA)

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

5.5 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.

5.6 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.

5.7 Including

The display window frame and shop entrance

Excluding

Recesses, doorways or access to other accommodation

5.8 Shop Width (SW)

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

5.9 Shop Depth (ShD)

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

5.10 Including

The thickness of the display window (or any supporting structure)

Note: In the event that there is no display window / shop front, the notional shop front definition applies.(ShD1)

5.11 Built Depth (BD)

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

5.12 Split Levels

Access to split levels in retail units will be excluded where such access is limited to a single step where the height differential is no greater than 200mm.

Notes

(how to use)

RA 1 **Diagrams** – diagrams D to E, F, G and H illustrate how to apply NIA; diagrams G and H are specific to shops

RA 2 **Zoning** – the use of zones when assessing the values of shops is a valuation, not a measurement technique.

RA 3 **Ancillary Areas(AA)** – All NIA not included in RA and StoA but capable of beneficial use.

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

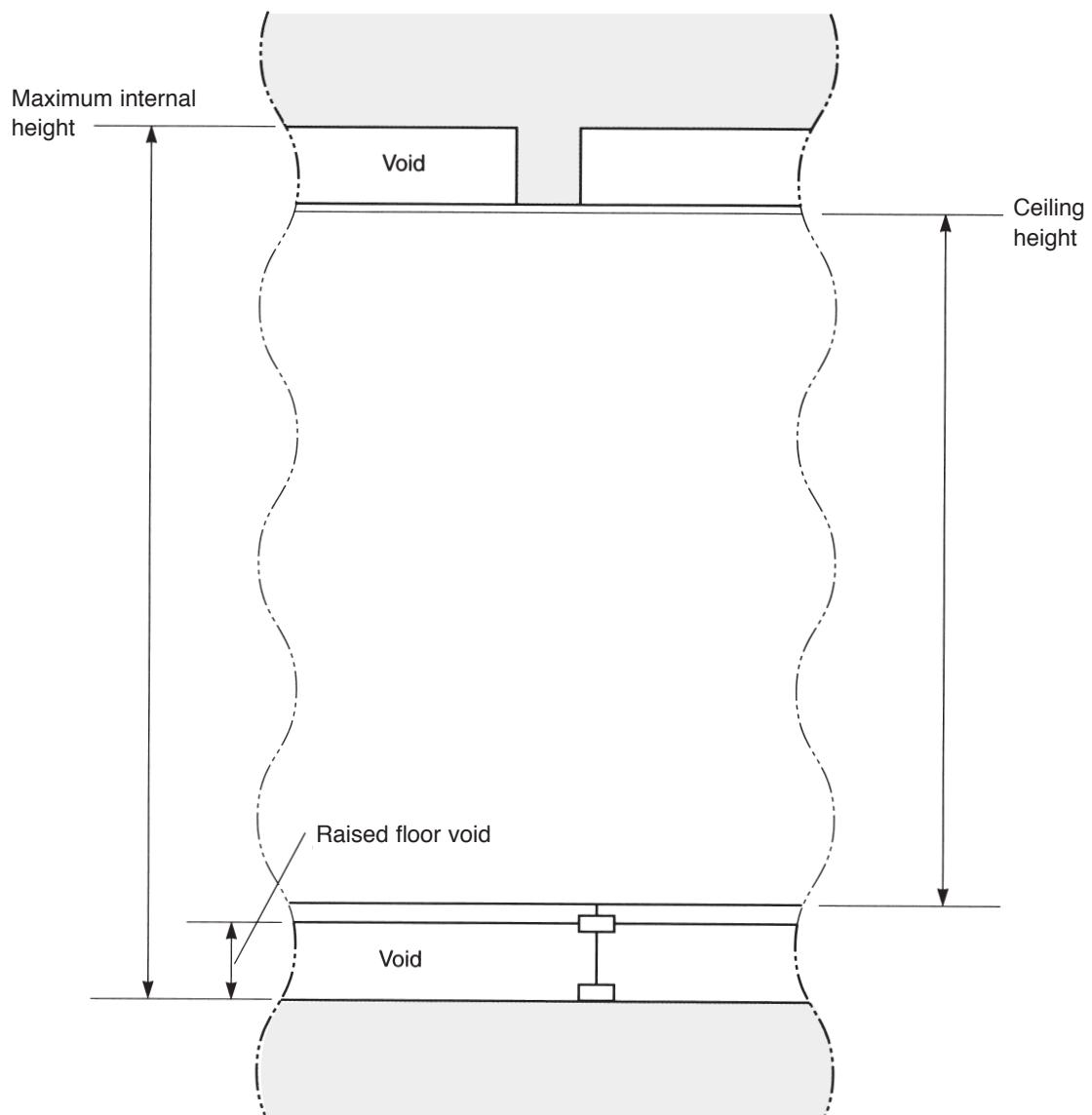
SW **Shop width** – if the shop width is not reasonably constant throughout the whole sales area, then this should be stated and additional measurements may need to be provided

ShD1 **Defining notional display window** – the notional display window is to be assumed placed at the forward-most point at which a shop display window could in fact be installed within the demise. The only exception to this will be buildings with facades listed for preservation by the relevant planning authority where the measurement will be to the actual shop front on site.

ShD 2 **Shop depth** – if the depth is not reasonably constant throughout the whole sale area, then this should be stated and additional measurements may need to be provided

ShD 3 **Building line** – the position of the building line is to be noted.

Diagram L
Illustration of appropriate dimensions for heights defined



Internal Section (part)

NOTES

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