

International Property Measurement Standards: Retail Buildings

International Property Measurement Standards Coalition (IPMSC)

Consultation Draft

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Contents

Welcome to IPMS: Retail Buildings.....	3
The IPMS Coalition (IPMSC).....	4
IPMS Standards Setting Committee.....	8
Introduction.....	9
Definitions.....	11
Part 1 Aim and Scope of the Standards.....	15
1.1 Aim of Standards.....	15
1.2 Use of the Standards	15
1.3 Accuracy	15
1.4 Floor Level Designation.....	15
Part 2 Principles of Measurement	16
2.1 General Principles of Measurement and Calculation..	16
2.2 Best Measurement Practice	16
2.3 Limited Use Areas.....	17
2.4 Adjustment between IPMS and other standards.....	17
Part 3 IPMS Standards.....	18
3.1 IPMS 1 (External)	18
3.2 IPMS 2 – Retail (Internal)	26
3.3 IPMS 3 – Retail (Occupier)	34
3.3.1 Use.....	34
3.3.2 IPMS 3A – Retail (Occupier).....	34
3.3.3 IPMS 3B – Retail (Occupier).....	41
3.3.4 IPMS 3C – Retail (Occupier).....	48
Part 4 Technical.....	51
4.1 IPMS Retail Component Areas	51
4.2 Internal Dominant Face.....	59
4.3 Clear Height and Internal Height.....	61

Welcome to IPMS: Retail Buildings

On behalf of the **IPMS Coalition** we present the *IPMS: Retail Buildings* Consultation Draft. The **Coalition** comprises organisations from all over the world, who have come together to create one shared international standard for property measurement. We have recognised that there has been a lack of consistent measurement standards within many markets. This has led to a fundamental lack of transparency, impacting consumers and resulting in considerable variations of market practices. Our profession and consumers deserve better.

This Consultation Document follows feedback from previous building classes consultations and discussions with many stakeholders over inconsistencies in retail measurement within and across markets. It is a continuation of the work already carried out in relation to measurement of office, residential and industrial buildings and part of a programme of work that includes preparing **IPMS** for other building classes and for mixed use.

The **Coalition** accepts that standard setting is a never-ending process of continuous improvement and will be listening closely to the market to make future developments to the standard as and when needed.

As a **Coalition** we are also continuing the important work of implementation through engaging with governments, occupiers, owners and other important stakeholders. You can view the list of well over 200 companies and governments that have committed to using **IPMS** at www.ipmsc.org

In preparing this Consultation Document, the **Coalition** wishes to acknowledge the work on the floorplans undertaken by Professor Marc Grief of Mainz University of Applied Sciences.

For further information on IPMS please visit www.ipmsc.org

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The IPMS Coalition (IPMSC)

The International Property Measurement Standards Coalition (IPMSC) was formed at the World Bank, Washington DC, in 2013 and comprises the organisations listed below. The IPMSC aims to bring about the harmonisation of national property measurement standards through the creation and adoption of agreed international standards for the measurement of **Buildings**.

This Consultation Document for the measurement of retail Buildings is the fourth building class Consultation Document prepared by the **Coalition's** Standards Setting Committee (SSC). The **Coalition** members at the date of publication include:

Asociación de Consultoras Inmobiliarias (ACI)

La Asociacion Espanola de Analisis de Valor (AEV)

Appraisal Institute (AI)

Asian Association for Investors in Non-listed Real Estate Vehicles (ANREV)

Asociación de Promotores Constructores de España (APCE)

Asociación Española de Geómetras Expertos (AEGEX)

Australian Property Institute (API)

Asia Pacific Real Estate Association (APREA)

Asociacion Profesional de Sociedades de Valoracion (ATASA)

The American Society of Farm Managers and Rural Appraisers (ASFMRA)

Italian Real Estate Industry Association (ASSOIMMOBILIARE)

American Society for Testing and Materials (ASTM)

Federation of real estate investment Expert (Bundesverband der Immobilien-Investment-Expert (BIIS)

British Property Federation (BPF)

Building Owners & Managers Association Canada (BOMA Canada)

Building Owners & Managers Association China (BOMA China)

Building Owners & Managers Association Indonesia (BOMA Indonesia)

Building Owners & Managers Association International (BOMA International)

Building Owners & Managers Association Japan (BOMA Japan)

China Institute of Real Estate Appraisers and Agents (CIREA)

Chongqing Real Estate Association

Commonwealth Association of Surveying and Land Economy (CASLE)

Consiglio Nazionale Geometri e Geometri Laureati (CNGeGL)

European Association of Real Estate Professions (CEPI-CEI)

CoreNet Global

Council of European Geodetic Surveyors (CLGE)

Council on Tall Buildings and Urban Habitat (CTBUH)

Counselors of Real Estate (CRE)

Cyprus Association of Civil Engineers (CYACE)

Cypriots Architects Association (CAA)

Czech Banking Association (CBA)

Emirates Green Building Council (Emirates GBC)

European Mortgage Federation (EMF)

Technical Chamber of Cyprus (ETEK)

Facility Management Institute Slovakia (FMI)

FM Institute Czech

International Real Estate Federation (FIABCI)

International Federation of Surveyors (FIG)

Ghana Institution of Surveyors (GhIS)

Society of Property Researchers, Germany (GIF)

GRESB

HypZert

International Association of Assessing Officers (IAAO)

International Consortium of Real Estate Associations (ICREA)

Institute of Estate Agents (IEA)

Hungarian Real Estate Developers Association (IFK)

International Facility Management Association (IFMA)

International Facility Management Association – Poland (IFMA)

European Association for Investors in Non-Listed Real Estate Vehicles (INREV)

International Monetary Fund (IMF)

Institute of Philippines Real Estate Appraisers (IPREA)

Institute of Real Estate Management (IREM)

International Right of Way Association (IRWA)

Institution of Surveyors Kenya – ISK

International Union of Tenants (IUT)

luav University of Architecture

Japanese Association of Real Estate Appraisers (JAREA)

Japan Association of Real Estate Counselors (JAREC)

Bulgarian Chamber of Professional Valuers (KPO)

The Middle East Council of Shopping Centres (MECSC)

Nigerian Institution of Estate Surveyors and Valuers (NIESV)

National Society of Professional Surveyors (NSPS)

Ordre des géomètres experts français (OGE)

Cyprus Federation of Building Contractors Associations (OSEOK)

Open Standards Consortium for Real Estate (OSCRE)

Polish Green Building Council (PGBC)

Property Institute New Zealand (PINZ)

Property Council of Australia (PCA)

Property Council New Zealand (PCNZ)

ProProgressio

Queensland Spatial & Surveying Association (QSSA)

The Real Estate Institute of Botswana (REIB)

Real Estate Syndicate of Lebanon (REAL)

Real Property Association of Canada (REALpac)

Real Estate Investments Zimbabwe (REIZ)

Royal Institute of British Architects (RIBA)

Royal Institution of Chartered Surveyors (RICS)

Royal Society of Ulster Architects (RSUA)

Russian Cadastral Engineers

South African Property Owners Association (SAPOA)

Society of Chartered Surveyors Ireland (SCSI)

SECOVI – SP (SECOVI)

Cyprus Association of Quantity Surveyors and Construction Economists (SEEOKK)

Society of Office and Industrial Realtors (SIOR)

Swiss Surveyors Association (IGS)

Appraisal Foundation (TAF)

International Union of Property Owners (UIPI)

The National Union of Economists of the Construction (UNTEC)

Germany Property Federation (ZIA)

IPMS Standards Setting Committee

The IPMSC has selected real estate experts from around the world to form its Standards Setting Committee (SSC) and develop global standards for property measurement.

The SSC brings together experts including academics, real estate fund and asset managers, valuers, and specialists in development and construction. The SSC acts independently of the **Coalition** and its members.

The SSC members and co-authors for Retail Buildings are:

Max Crofts FRICS (UK)	Chairman
Allen Crawford FRICS, FAPI (Australia)	Vice Chairman
Alexander Aronsohn FRICS (UK)	Executive Secretary to the Committee

Claudio Bernardes MEng FRICS (Brazil)
ir. Jeroen Burger (Netherlands)
Anthony Gebhardt MRICS, RQS (South Africa)
Kent Gibson BOMA Fellow (USA)
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Koji Tanaka FRICS, ACI Arb, RIBA, JIA (Japan)
Dario Trabucco PhD (Italy)

Introduction

Research by the **SSC** has found that measurement practices vary substantially across local and global retail markets. The **SSC** has focused only on issues directly related to **Building** measurements and calculated areas within a **Building**. It is acknowledged that globally there are different **Floor Area** measurements adopted in construction, transactions and valuation. *IPMS: Retail Buildings* will not only provide clarity for those purchasing or leasing retail property, but also enable comparison of differing measurement standards by interfacing with **IPMS**.

IPMS has been created through a transparent, detailed and inclusive standard setting process. It supports associated financial reporting and valuation standards, such as the International Financial Reporting Standards (IFRS) and, in the USA, the Uniform Standards of Professional Appraisal Practice (USPAP). The International Valuation Standards Council (IVSC) supports **IPMS**, which should be read in conjunction with International Valuation Standards (IVS).

The **SSC** has spent considerable time researching established standards to ensure that existing intelligence has not been wasted. The **SSC** did not, however, identify any pre-existing retail measurement standard that was suitable for adoption internationally. **IPMS** is not a hybrid of those standards but does introduce some concepts that may be new to some markets. These concepts have been further refined for the purpose of **IPMS**.

IPMS are high level and over-arching. Markets that do not have an existing established measurement standard are encouraged to adopt **IPMS**. The **SSC** expects **IPMS** to work initially in parallel with local standards and for a dual reporting basis and interface to be adopted where appropriate. In time, the **SSC** expects **IPMS** to become the primary basis of measurement across all markets.

The **SSC** considered it unrealistic to create a single standard that would immediately apply to all classes of **Buildings** because each has distinctive characteristics that require individual analysis. However, the principles, methodology and measurement practices developed for **IPMS** will be similar for all **Buildings**. **IPMS** needs to be consistent as another class of **Building**, mixed use, incorporates several **Building** classes.

To mitigate against confusion with terms that already have established definitions, the **SSC** avoided using existing **Floor Area** descriptions such as Gross External Area (GEA), Gross Internal Area (GIA) and Net Internal Area (NIA). These terms are commonly, but inconsistently, used in markets across the world.

The **SSC** consulted widely to understand the measurement conventions used in different international markets against the background of the impact on consumers of non-transparent and varying local market practices. Our research found there was a need to measure the external area of a **Building**, for planning purposes or for the summary costing of development proposals. The **SSC** decided to refer to this as **IPMS 1** and apply it to all classes of **Buildings**. **IPMS 2 – Retail** was developed to measure the internal area of a **Building** and **Component Areas** and will assist the **Property Industry** in making efficient use of space and benchmarking data. It was also important to measure areas in exclusive occupation for transactions and other purposes.

The SSC identified three different measurement bases: **IPMS 3A – Retail**, **IPMS 3B – Retail** and **IPMS 3C Retail**, that were required to meet global market needs. Some markets require only one of these measurement bases, but others may use both for different purposes.

Consultation Draft

Definitions

Ancillary Area

An area in exclusive use, which is separate from the main area being measured and is being used for supplementary purposes.

Balcony

An external platform at an upper floor level with a balustrade to the open sides projecting from or recessed from an **External Wall** and including, in this definition, generally accessible rooftop terraces, external galleries and loggia.

Balustrade

A protective barrier formed by a solid wall, railings or other feature.

Building

An independent attached or detached **Structure** forming all or part of a **Property**.

Catwalk

An internal or external walkway above the surrounding area that provides higher level access.

Clear Height

The height within a **Building** or section of a **Building** measured from the floor to the lowest point of the structural element above, ignoring the existence of any brackets, struts or fixtures and fittings.

Coalition

The Trustees of IPMS, comprising not-for-profit organisations each with a public interest mandate.

Common Facilities

Those parts of a **Building** that would, in multiple occupation, provide shared facilities that typically do not change over time and may include, for example, circulation areas, stairs, escalators, lifts/elevators and motor rooms, toilets, cleaners' cupboards, plant rooms, fire refuge areas, maintenance rooms and unallocated parking spaces.

Component

One of the main elements into which the **Floor Area** of a **Building** can be divided.

Component Area

The total **Floor Area** attributed to one of the **Components**.

Covered Area

The extent of the area of a **Building** covered by one or more roof(s) and the perimeter of which is sometimes referred to as the drip line, being the outermost permanent structural extension, exclusive of ornamental overhangs.

External Wall

The enclosing element of a **Building**, including windows and walls, that separates the exterior area from the interior area.

Finished Surface

The wall surface directly above the horizontal wall-floor junction, ignoring skirting boards, cable trunking, heating and cooling units, and pipework.

Floor Area

The area of a normally horizontal, permanent, load-bearing structure for each level of a **Building**.

IDF (Internal Dominant Face) Wall Section

The extent of each section of an **External Wall** where the inside finished surface area of each part of a window, wall or other external construction features varies from the inside surface area of the adjoining window, wall or external construction feature, ignoring the existence of any columns.

Internal Dominant Face (IDF)

The inside surface area comprising more than 50% of the first 2.75 metres measured vertically from the floor, or to the ceiling if lower, for each **IDF Wall Section**. If such does not occur, then the **Finished Surface** is deemed to be the **IDF**.

Internal Height

The height within a **Building**, or section of a **Building**, measured from the floor to the lowest point of a ceiling or suspended ceiling, ignoring the existence of any brackets, struts or fixtures and fittings.

IPMS

The International Property Measurement Standards.

IPMSC

The International Property Measurement Standards Coalition.

IPMS 1

The total of the areas of each floor level of a **Building** measured to the outer perimeter of **External Walls**, **Sheltered Areas** and **Balconies**.

IPMS 2

The total of the areas of each floor level of a **Building** measured to the **Internal Dominant Face** of all **External Walls** and **Balconies** on each level.

IMPS 3

The **Floor Area** available on an exclusive basis to an occupier.

Loading Bay(s)

Area(s) designed for vehicles next to or adjacent to a **Loading Dock**.

Loading Dock(s)

Elevated platform(s) at an opening of a **Building** designed for receiving or dispatching goods or equipment.

Mall Line

See **Shop Line**.

Mezzanine

An intermediate or partial floor, other than a **Catwalk**, that is usually fully or partially open on one or more sides.

Patio

A paved or floored terrace, adjacent to a **Building**, which may or may not be covered by an independent framework.

Property

Any real estate asset in the built environment.

Property Industry

Comprises **Users**, **Service Providers** and **Third Parties**.

Retail Building

A **Building** predominately used for retail purposes, whether or not part of the **Building** is used for other purposes.

Service Provider

Any entity providing real estate related services to a **User** or **Third Party** including, but not limited to, **Valuers**, surveyors, facility managers, property managers, asset managers, agents and brokers, **Space Measurement Professionals**, cost consultants, interior designers and architects.

Sheltered Area

Any part of the **Covered Area** that is not fully enclosed but excluding insignificant areas under the eaves.

Shop Line

The notional line established as the maximum potential extent of the retail area in exclusive use. In shopping centres this may be referred to as the **Mall Line**.

Space Measurement Professional

A **Service Provider** qualified by experience or training to measure **Buildings** in accordance with **IPMS**.

SSC

The Standards Setting Committee appointed by the **IPMSC** to develop global standards for property measurement.

Standard Facilities

See **Common Facilities**.

Structure

A construction that provides shelter or serves an ancillary function, but is not necessarily fully enclosed.

Temporary Structure

A physical element within a **Building** installed on an interim or permanent basis, the removal of which would not damage the physical integrity of the **Building**.

Third Party

Any entity other than a **User** or **Service Provider** with an interest in property measurement including, but not limited to, governments, banks, other property financing bodies, data analysts and researchers.

User

An owner-occupier, developer, investor, purchaser, vendor, landlord or tenant.

Valuer

A **Service Provider** with an appropriate professional qualification in valuation or appraisal.

Veranda

An open or partly enclosed area on the outside of a **Building** at ground level (Level 0), and covered by a roof that is an integral part of the **Building**.

Part 1 Aim and Scope of the Standards

1.1 Aim of Standards

The aim of **IPMS** is to provide transparency in the measurement of **Buildings**. **IPMS** supports the requirements of **Service Providers**, **Third Parties** and **Users of Property** for consistency in measurement reporting. Until now the stated area of floor space in identical **Buildings** has varied considerably between countries, and sometimes within the same country, owing to differing measurement conventions.

The measurements can be used for asset management, benchmarking, construction, facility management, marketing, property financing, research, transaction, valuation and other purposes.

1.2 Use of the Standards

IPMS defines what is to be measured in a **Building** and the measurement parameters. **IPMS** does not dictate how measurements are to be obtained.

The appropriate **IPMS** building class to be used (such as office, residential, industrial, retail) should be chosen according to the current or proposed designed function of the **Building**, or part of a **Building** being measured.

IPMS can be used for any purpose agreed between **Users**, **Service Providers** and **Third Parties**.

IPMS provides a common language that can interface with existing local measurement standards.

1.3 Accuracy

Service Providers must adopt appropriate measuring and computing processes to satisfy the requirements of **Users**. These requirements can range from a broad approximation of the measurement for some purposes to a precise calculation for contractual or other reasons.

1.4 Floor Level Designation

The **SSC** found there to be no market consistency in the reference to a particular **Building** level.

For all property classes **IPMS** has adopted Level 0 as the primary ground level. Upper and lower levels are referred to sequentially as the number of levels above or below Level 0. For example, Levels 1, 2 or 3, etc. are above Level 0 and Levels -1, -2 or -3, etc. are below Level 0.

Part 2 Principles of Measurement

2.1 General Principles of Measurement and Calculation

IPMS is a factual measurement and must not include understated or inflated **Floor Areas**. The **SSC** has adopted the following fundamental principles of measurement and calculation, applying to all **Buildings**:

1. The item must be capable of being measured.
2. The measurement must be objectively verifiable.
3. All measurements, except height, are to be taken horizontally.
4. The measurements and calculations must be clearly documented and the following stated:
 - The **IPMS** standard used, for example, IPMS 1, IPMS 2 – Retail, IPMS 3A – Retail, IPMS 3B – Retail or IPMS 3C – Retail
 - The method of measurement and the tools used (see Section 2.2.1)
 - The unit of measurement
 - The date of the measurement
 - Whether the measurement is verified on site.
5. **Buildings** are to be measured individually and reported on a floor-by-floor basis as existing or proposed at the time of measurement.
6. The principles of **IPMS** should be extrapolated using a common-sense approach.

2.2 Best Measurement Practice

2.2.1 General

The **SSC** recommends that all **IPMS** measurement is supported by computer-generated drawings, if available, but where other drawings are used as a basis for measurement annotated dimensions on drawings should be used in preference to a reliance on scaling alone.

The **Service Provider** must report how the **Floor Area** has been established; for example, by computer-generated drawings, other drawings or by laser or tape measurement.

2.2.2 Unit of Measurement

Measurements and calculations should be in the unit commonly adopted in the relevant country in which the **Building** is situated.

Users and **Third Parties** may require measurements to be converted between imperial and metric, in which case the conversion factor must be stated.

2.2.3 Measurement Reporting

Any **Component Area** under **IPMS 1** or **IPMS 2** reported to a **User** or **Third Party** should, where practical and appropriate, be cross-referenced to an appropriately coloured drawing and **Component Area** spreadsheet.

When reporting measurements and **Floor Areas** for proposed developments, **Service Providers** must take special care to ensure that measurements are cross-referenced as accurately as is reasonably possible to plans at the date of reporting.

2.3 Limited Use Areas

Service Providers need to be aware that in certain markets there may be areas in **Buildings** that are incapable of legal or effective occupation due to local or national legislation. Such areas and their limitations are to be identified, measured and stated separately within **IPMS** reported areas. If areas are subject to a restriction, this should be stated in the reporting document and in any **Component Area** spreadsheet.

Users and **Third Parties** need to be aware that the inclusion of measured areas in **IPMS** does not necessarily mean that the areas are available for legal occupation or use.

The reason why a particular area is regarded as a Limited Use Area must be stated.

The following examples are not exhaustive.

Example 1 – Area difference from Internal Dominant Face

There may be a need to show the difference, if any, in **Floor Area** between measurements taken to the **Internal Dominant Face** and measurement taken to the wall-floor junction.

Example 2 – Areas with height restrictions

In various markets, areas defined as having limited or restricted height are identified separately. This height can vary between jurisdictions and in some instances the restricted height may be due to construction features.

Example 3 – Areas with limited natural light

In some jurisdictions, areas with limited natural light in a **Building** are required to be identified separately.

Example 4 – Above and below ground

A **Building** may include floors below ground level. For measuring purposes, this may be important in determining the conditions under which the premises may be used in compliance with local or national legislation, rules on fitness for habitation, or taxation.

2.4 Adjustment between IPMS and other standards

Where dual reporting is adopted, reconciliation between **IPMS** and the standard referred to must be appropriately explained. The **SSC** recommends that **Coalition** members provide interface guidance in their local implementation procedures for their respective membership.

Part 3 IPMS Standards

The IPMS standards are:

- IPMS 1 (External)
- IPMS 2 – Retail (Internal)
- IPMS 3A – Retail (Occupier)
- IPMS 3B – Retail (Occupier)
- IPMS 3C – Retail (Occupier)

3.1 IPMS 1 (External)

3.1.1 Use

IPMS 1 is used for measuring the area of a **Building** including **External Walls**.

The primary intent of IPMS 1 is that it is used for planning purposes or the summary costing of development proposals.

IPMS 1 is a whole **Building** measurement.

3.1.2 Definition

IPMS 1: The total of the areas of each floor level of a **Building** measured to the outer perimeter of **External Walls, Sheltered Areas** and **Balconies**.

The definition for IPMS 1 is the same for all classes of **Building**.

In many markets, but not universally, this is known as Gross External Area.

Measurement Practice:

Areas for IPMS 1 are to be taken from drawings or on site.

If required, IPMS 1 can be reported on a **Component-by-Component** basis for each floor of the **Building**. The aggregate of the **Component Areas** must equal IPMS 1.

If there are no available plans for a basement, the area must include an estimation of the exterior wall thickness.

In respect of **Sheltered Areas**, IPMS 1 is to be measured to the **Covered Area**. In respect of roller shutters and other openings the principal external perimeter line of the **Building** across such openings should be followed to measure IPMS 1.

Balconies and internal **Permanent Mezzanines** are to be measured to the outside edge of the floor construction.

Inclusions:

IPMS 1 includes all areas and walls, columns, and enclosed walkways or passages between separate **Buildings**, available for direct or indirect use. Enclosed void areas, such as atria, are only included at their lowest floor level.

Measurements included but to be stated separately:

Balconies, Sheltered Areas, Verandas and Mezzanines are included but the measurement of each must be stated separately.

Measurements excluded but to be stated separately:

Measurement for **IPMS 1** does not include:

- **Temporary Structures**
- Open light wells or the upper level voids of an atrium
- Open external stairways that are not an integral part of the **Building**, for example, an open framework fire escape
- Any **Structure** beyond the **Covered Area**.

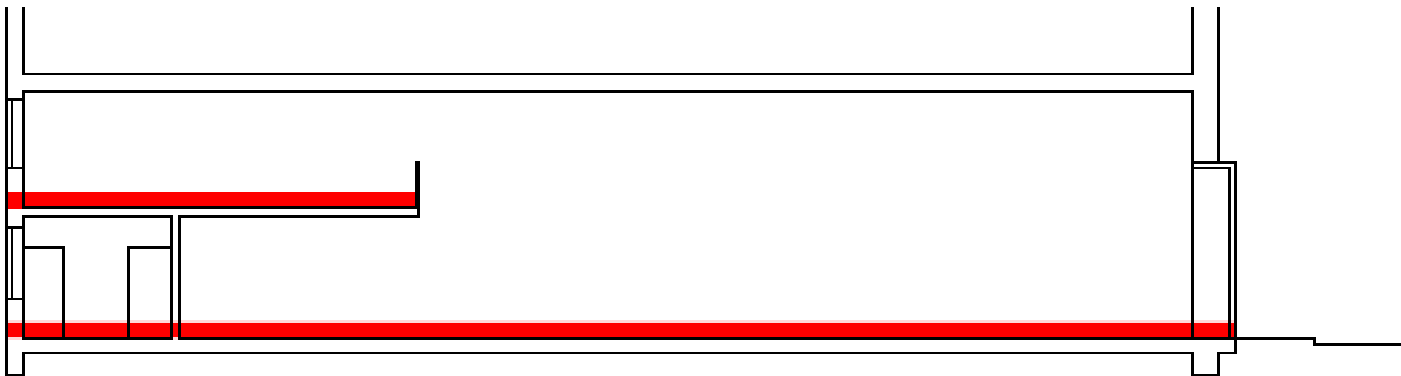


Diagram 1: IPMS High Street Cross Section

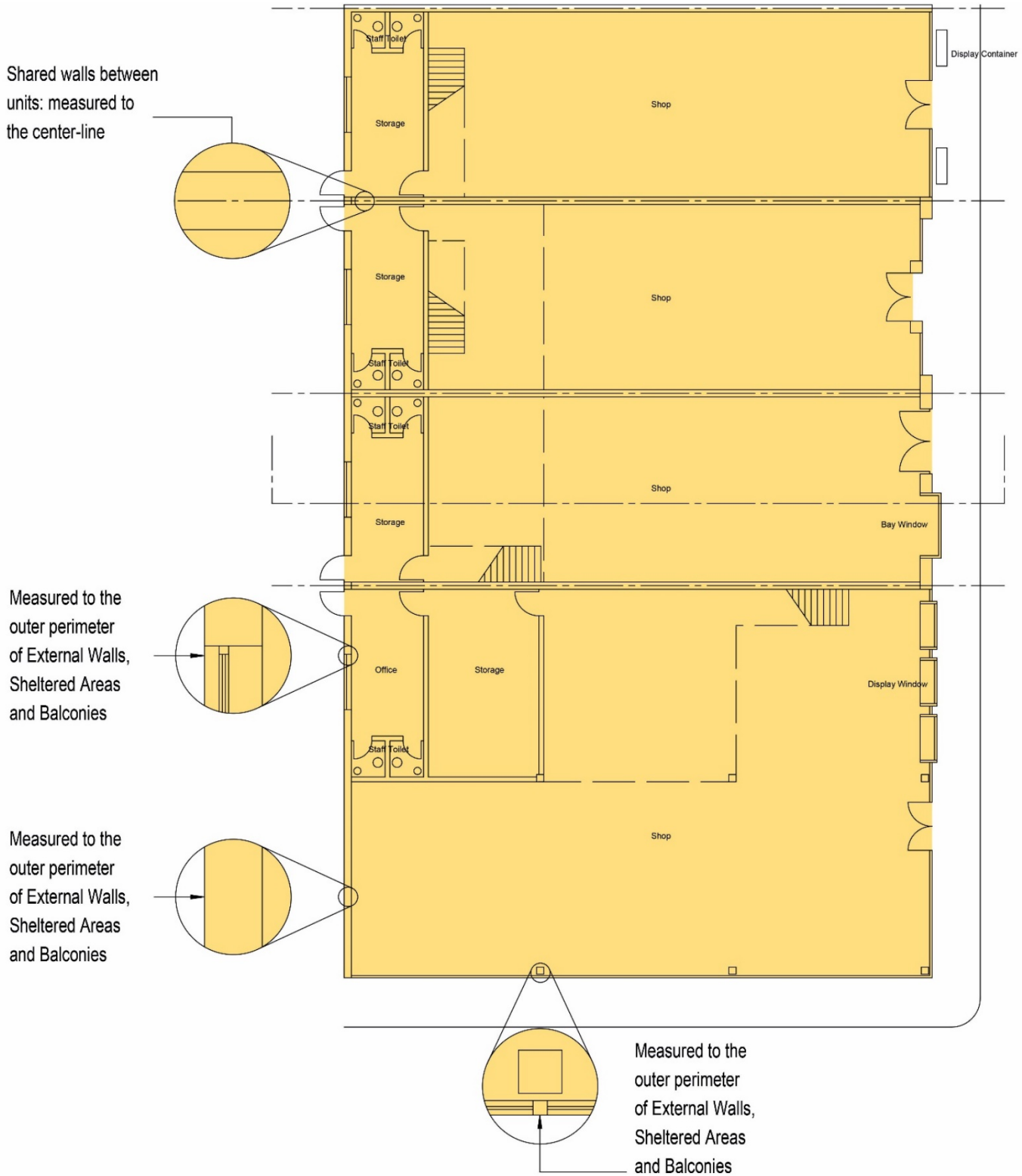
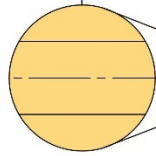
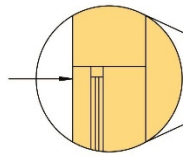


Diagram 2: IPMS 1 Retail High Street Ground Floor

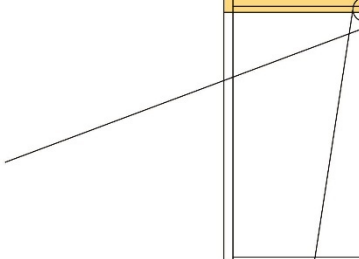
Shared walls between units: measured to the center-line



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Gallery included but stated separately



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies

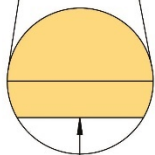


Diagram 3: IPMS 1 Retail High Street Mezzanine

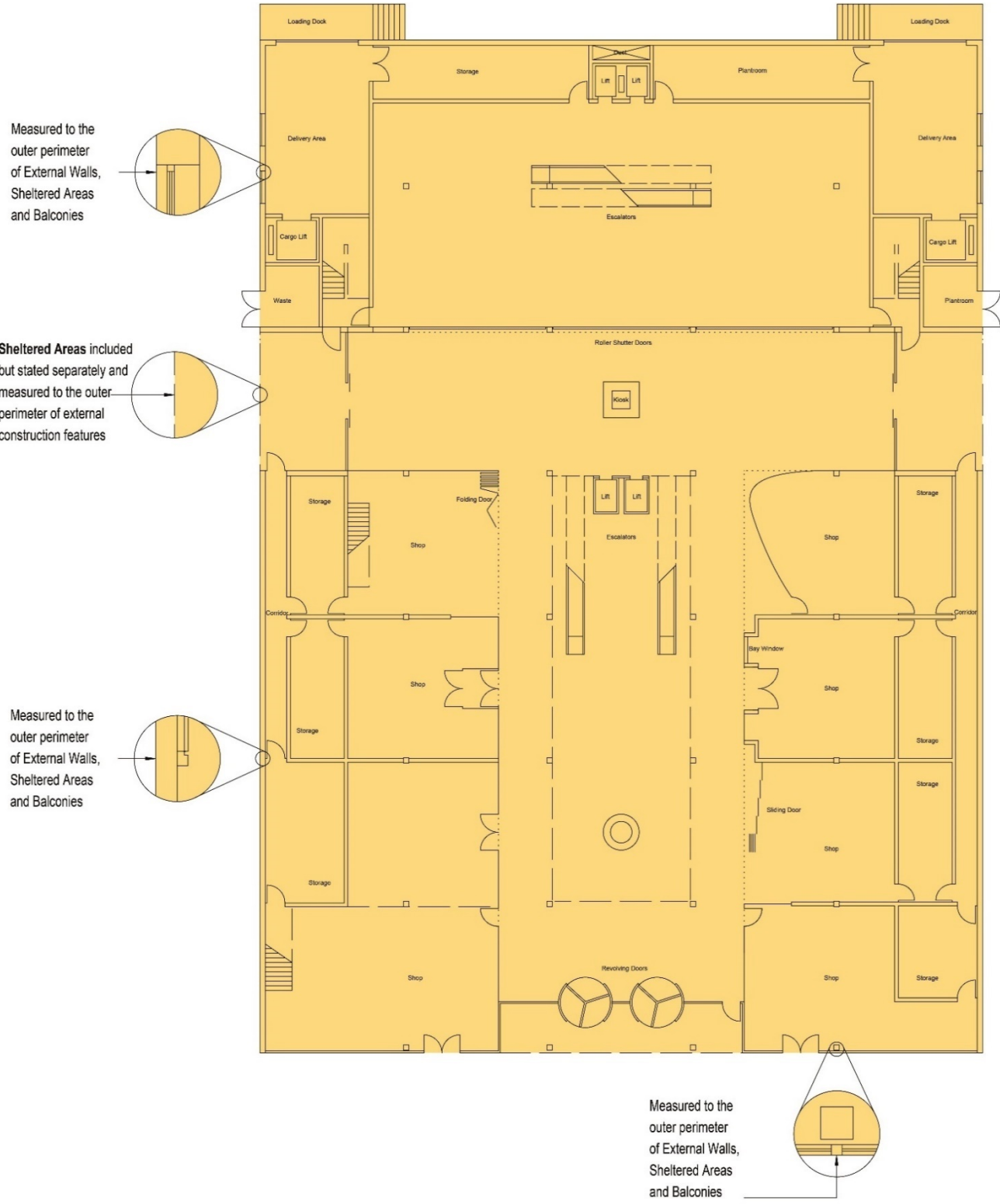
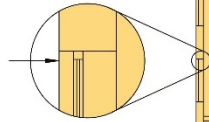
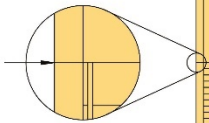


Diagram 4: IPMS 1 Retail Mall Ground Floor

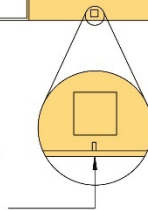
Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies

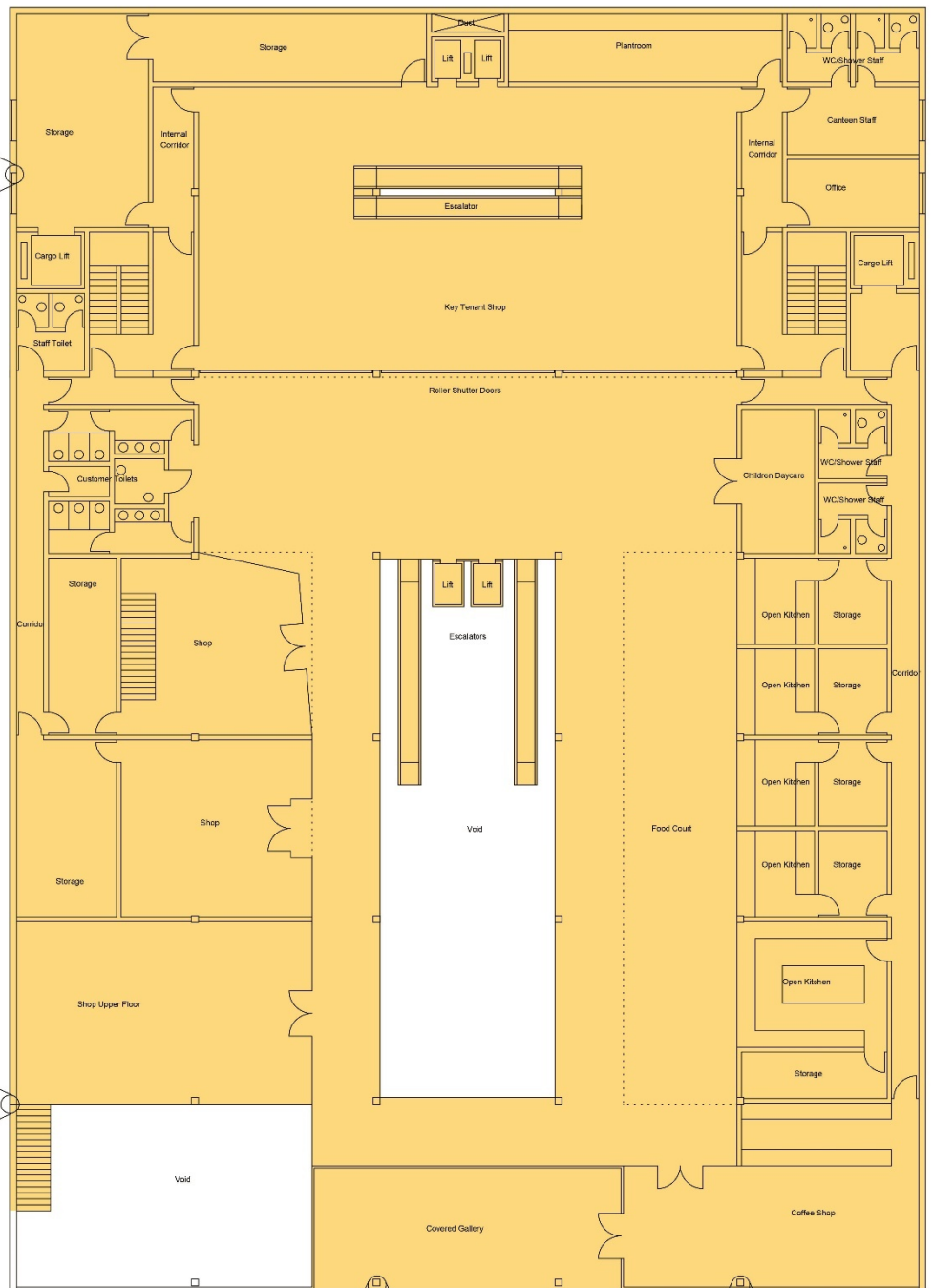
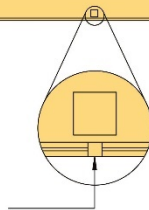
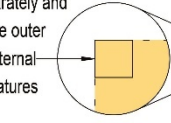


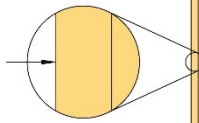
Diagram 5: IPMS 1 Retail Mall Upper Floor

Sheltered Areas included but stated separately and measured to the outer perimeter of external construction features

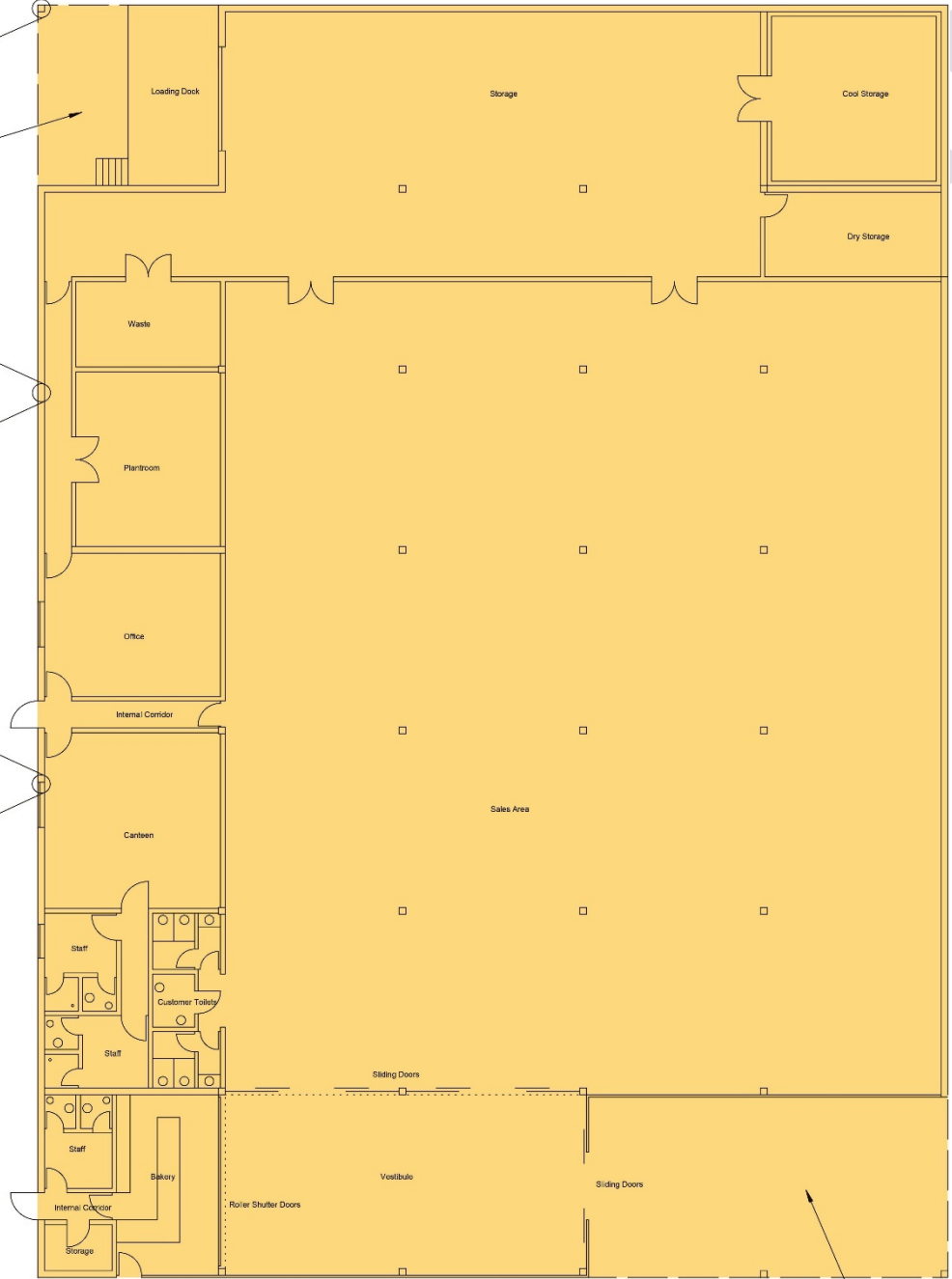
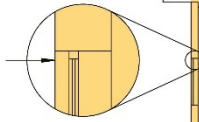


Sheltered Area

Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies



Sheltered Area

Diagram 6: IPMS 1 Retail Stand Alone Discounter



Diagram 7: IPMS 1 Retail Strip Centre



3.2 IPMS 2 – Retail (Internal)

3.2.1 Use

IPMS 2 – Retail is a whole **Building** measurement that is used for measuring the interior boundary area of a **Building**. The primary intended use is for providing data on the use of space and for benchmarking.

IPMS 2 – Retail enables **Users, Third Parties** and **Service Providers** to make direct floor space comparisons between data derived from different market practices.

3.2.2 Definition

IPMS 2 – Retail: The total of the areas of each floor level of a **Building** measured to the **Internal Dominant Face** of all **External Walls** and **Balconies** on each level. In many markets, but not universally, this is similar to Gross Internal Area.

Measurement Practice:

All areas in a **Retail Building**, including for example storage, are to be measured in accordance with **IPMS 2 – Retail**. **Balconies** and **Mezzanines** are to be measured to the inner face of the balustrade, but not beyond the outside edge of the floor construction. If required **IPMS 2 – Retail** may be reported on a **Component-by-Component** basis for each floor of a **Building**.

Inclusions:

IPMS 2 – Retail includes all internal areas, including internal walls and columns. Enclosed void areas such as atria are only included at their lowest floor level.

Measurements included but to be stated separately:

Balconies, internal **Loading Bays**, **Mezzanines** and enclosed walkways or passages between separate **Buildings**, available for direct or indirect use, are included but the measurement of each must be stated separately.

Measurements excluded but to be stated separately:

Areas outside the **External Wall** such as **Sheltered Areas** and external **Loading Bays** do not have to be measured, but if they are measured then these areas should be measured and stated individually and separately. **Sheltered Areas** are to be measured to the **Finished Surface** of any walls and otherwise to the outer perimeter of the **Covered Area**.

This diagram assumes the four units are measured as a single **Building**.

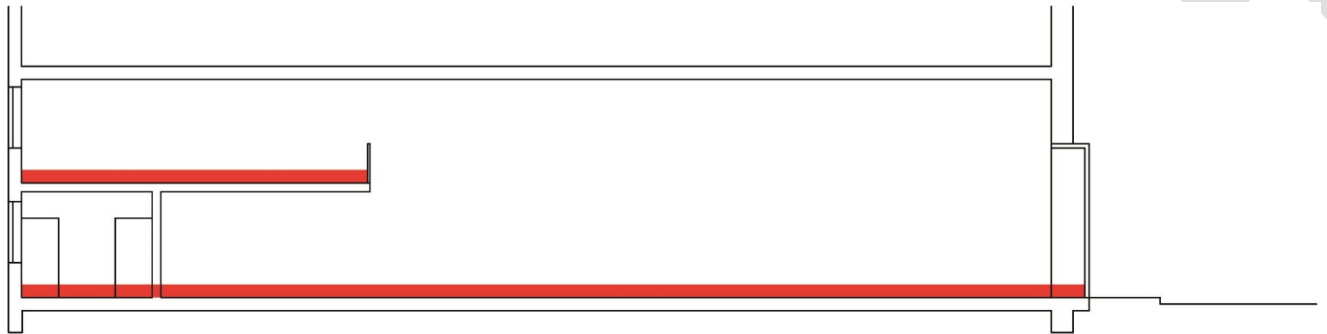


Diagram 8: IPMS 2 High Street Cross Section

Consultation

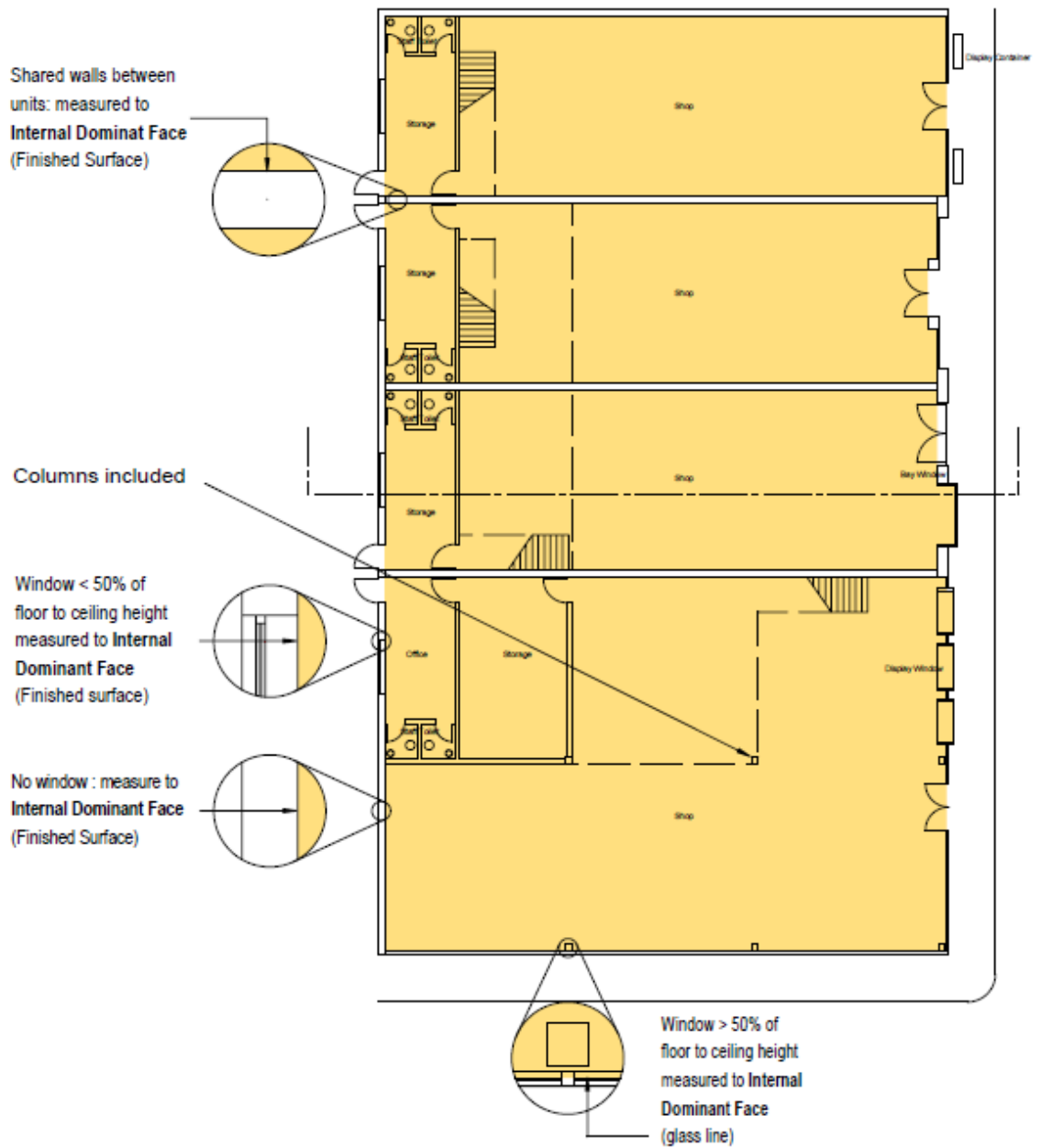


Diagram 9: IPMS 2 Retail High Street Ground Floor

This diagram assumes the four units are measured as a single **Building**.

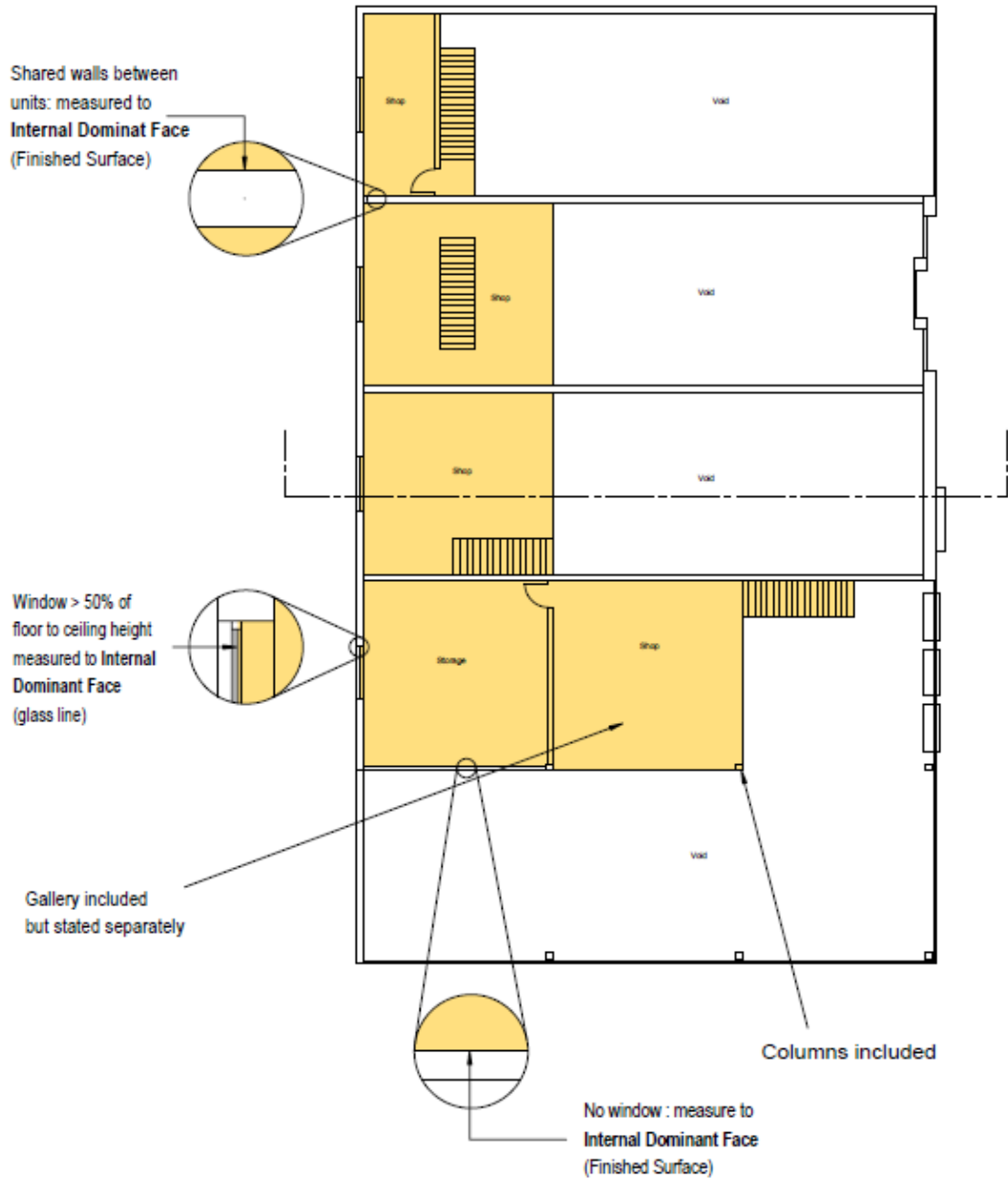


Diagram 10: IPMS 2 Retail High Street Upper Floor

This diagram assumes the mall is measured as a single **Building**.

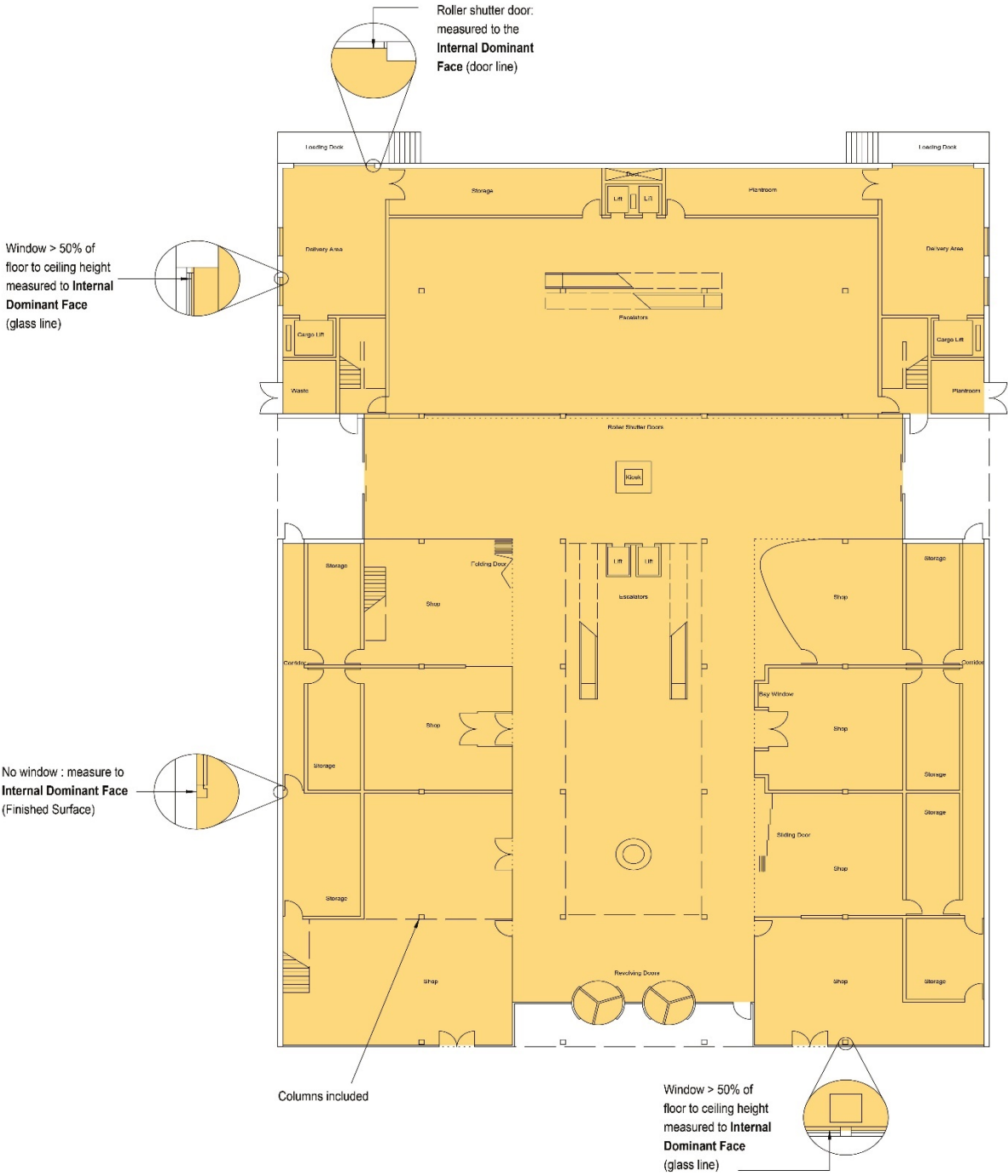


Diagram 11: IPMS 2 Retail Mall Ground Floor

This diagram assumes the mall is measured as a **single Building**.

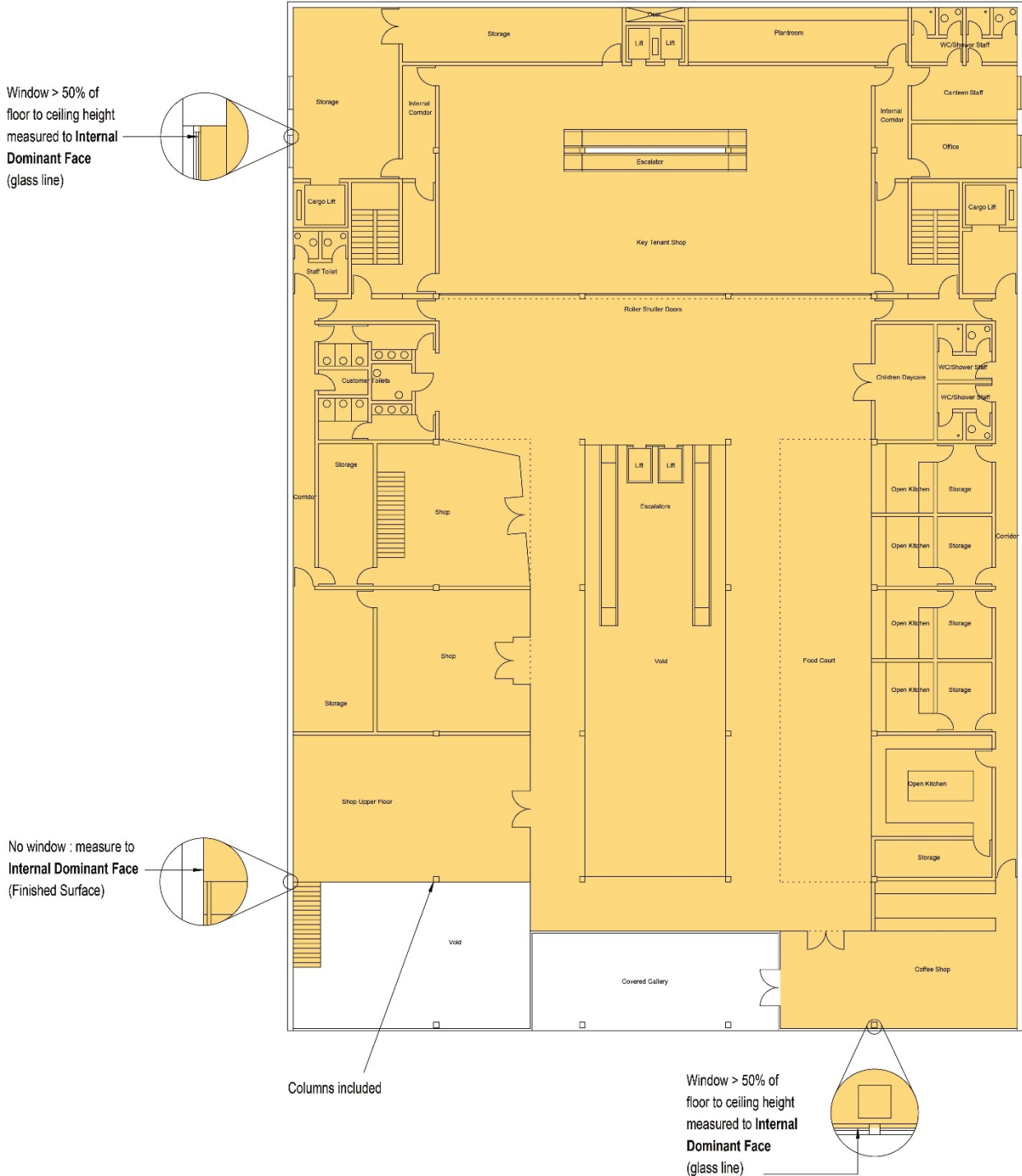


Diagram 12: IPMS 2 Retail Mall Upper Floor

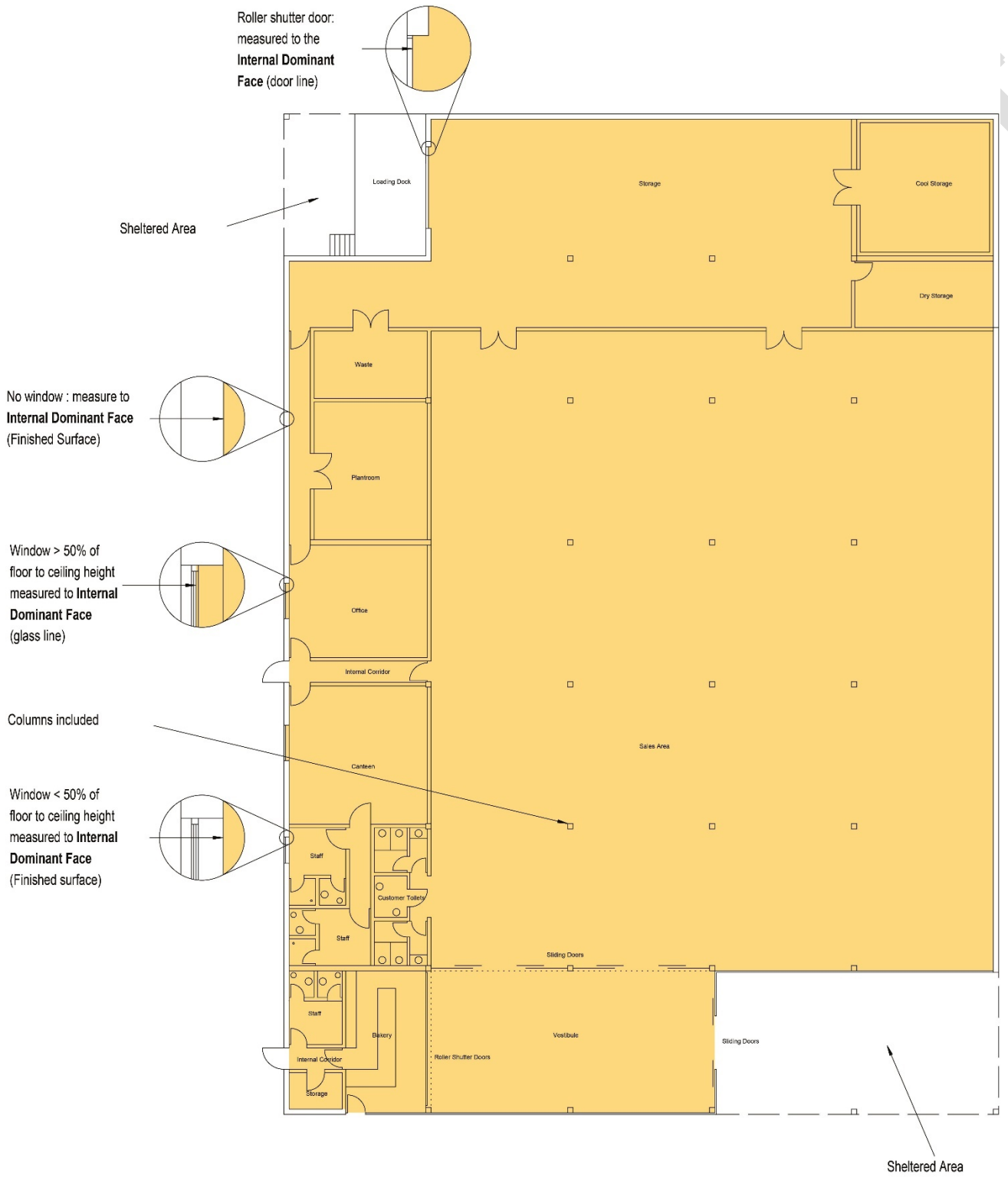


Diagram 13: IPMS 2 Retail Stand Alone Discounter

This diagram assumes the strip centre is measured as a single **Building**.

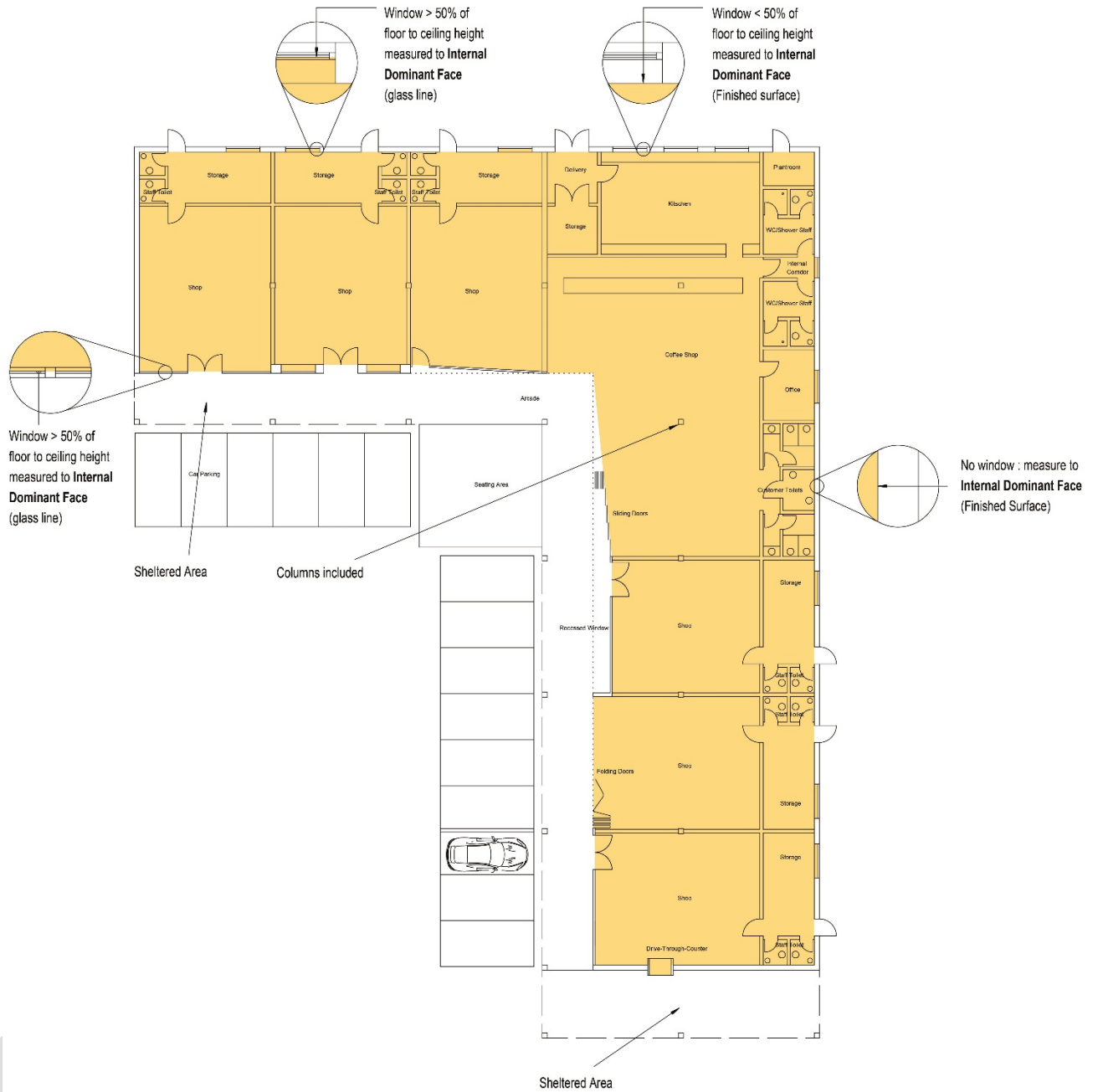


Diagram 14: IPMS 2 Retail Strip Centre

3.3 IPMS 3 – Retail (Occupier)

3.3.1 Use

IPMS 3A – Retail and **IPMS 3B – Retail** are used for measuring the occupation of **Floor Areas** in exclusive use. They are not directly related to **IPMS 1** or **IPMS 2 – Retail**.

The **SSC** has researched international property markets and identified different measurement bases that need to be accommodated for transaction or cost allocation purposes. Some markets require only one of these measurement bases for transactional purposes, this being the primary intended use for **IPMS 3**. Other markets may either use **IPMS 3A – Retail**, **IPMS 3B – Retail** or **IPMS 3C – Retail** depending on the purpose.

Service Providers must not simply state that a measurement is in accordance with **IPMS 3 – Retail**. The reference must state whether the measurement is **IPMS 3A – Retail**, **IPMS 3B – Retail** or **IPMS 3C – Retail**.

Each retail unit in a multi-occupied **Building** must be measured separately but, if consistent, the total area of all relevant units may be reported as an aggregate of **IPMS 3A – Retail**, **IPMS 3B – Retail** or **IPMS 3C – Retail**.

3.3.2 IPMS 3A – Retail (Occupier)

Definition:

IPMS 3A – Retail: The area in exclusive occupation, including the **Floor Area** occupied by **External Walls**, internal walls and columns.

Measurement practice:

The area of exclusive occupancy is measured adopting the following hierarchy to:

- the centre-line of shared walls between occupants and/or
- the **Shop Line** and/or
- the outside face of the **External Walls** and otherwise
- to the **Finished Surface**.

The **Floor Area** occupied by stairs is only to be included at the lowest level. A vertical penetration, with floor opening and surrounding walls, if any, of less than 0.1m² (1 ft²) should not be separately identified and instead included in the **Floor Area** measurement of **IPMS 3A – Retail**.

Measurements included but stated separately:

Balconies and **Permanent Mezzanines** are included in **IPMS 3A – Retail** and are to be measured to the outer face of the balustrade but never to exceed the outside edge of the floor.

Measurements excluded but stated separately:

Measurement for **IPMS 3A – Retail** does not include the following areas, which are to be measured consistently with the **IPMS 3A – Retail** measurement hierarchy:

- **Ancillary Areas** reported individually
- **Temporary Mezzanine**

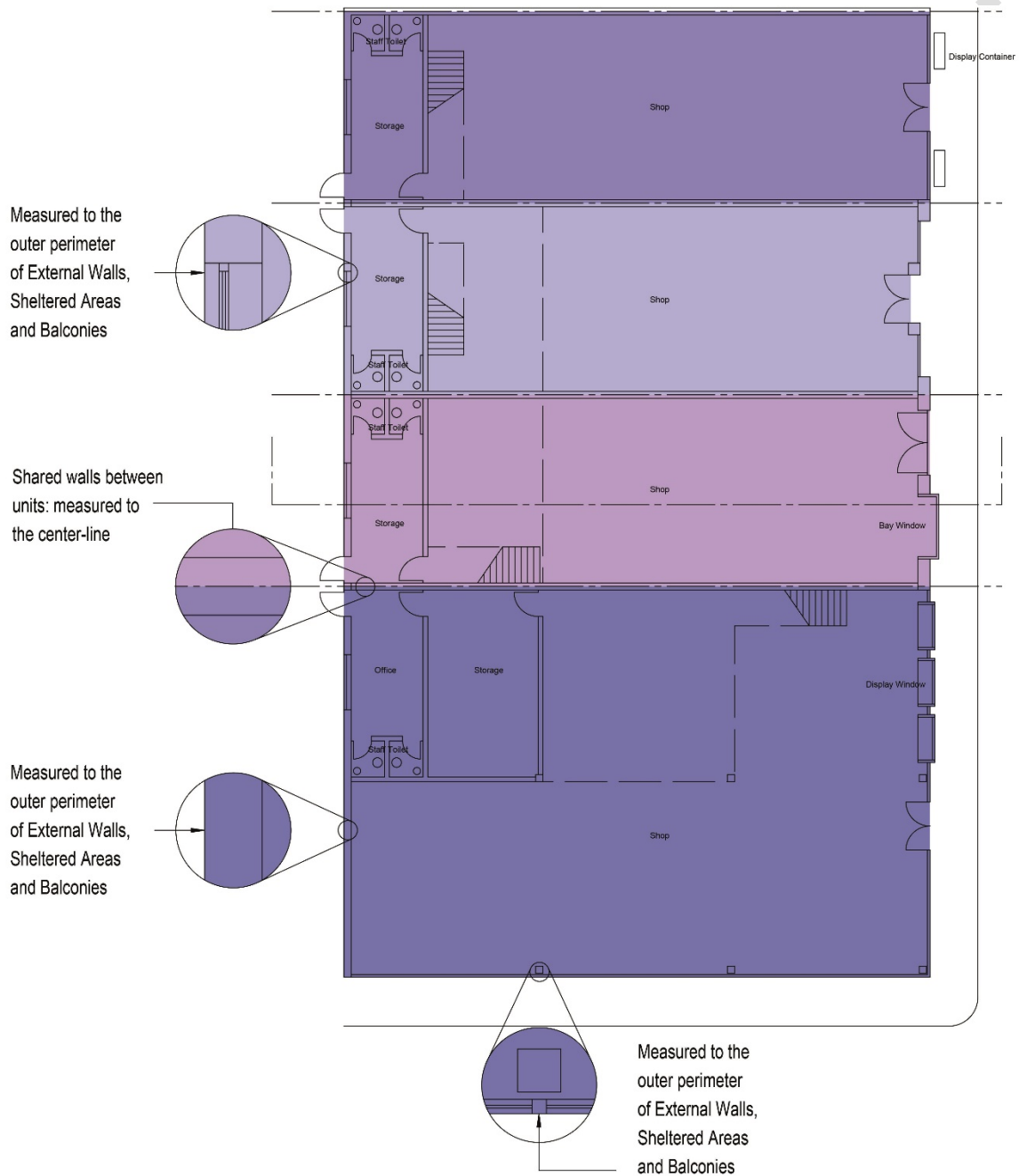


Diagram 15: IPMS 3A Retail High Street Ground Floor

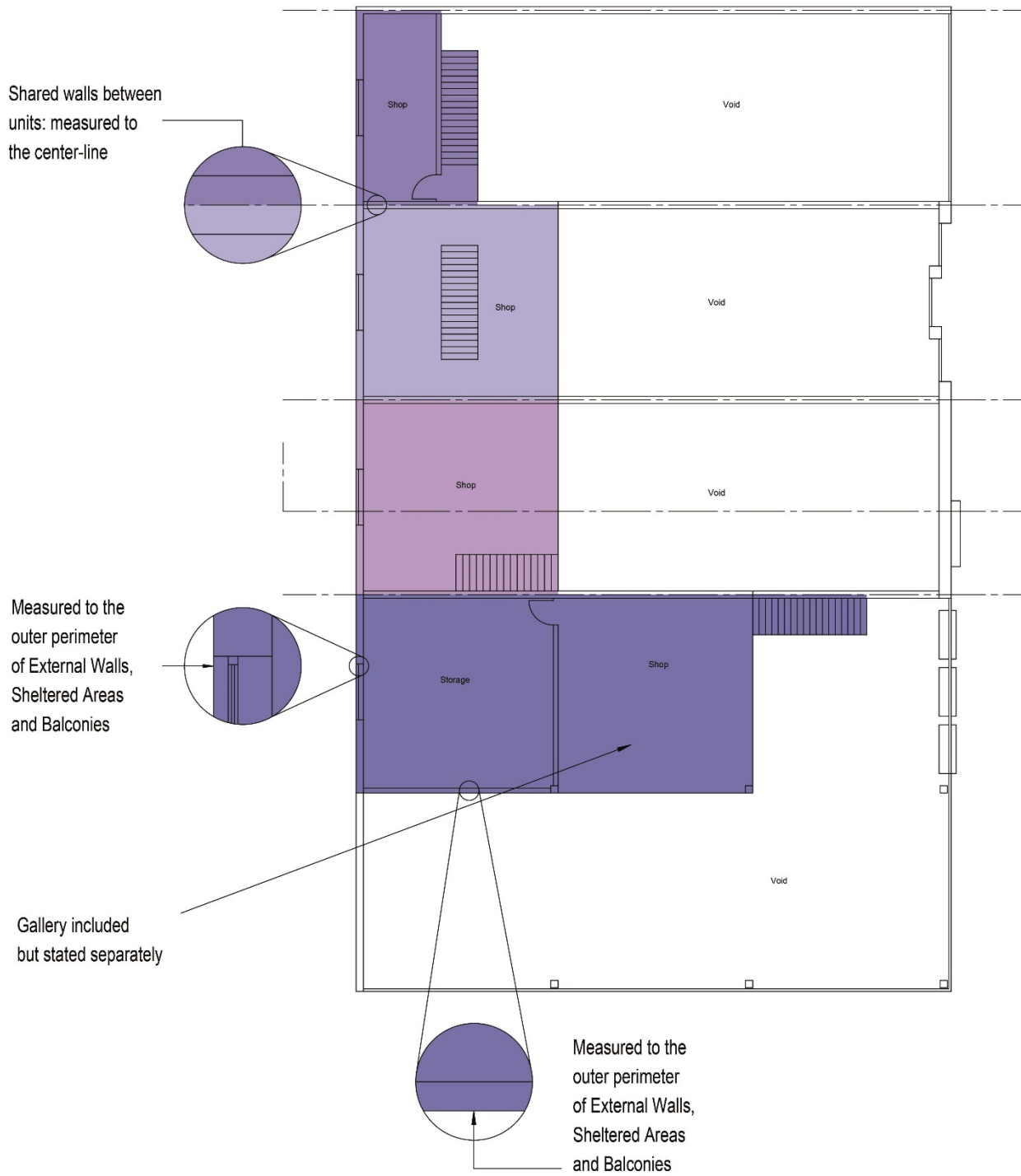


Diagram 16: IPMS 3A Retail High Street Mezzanine

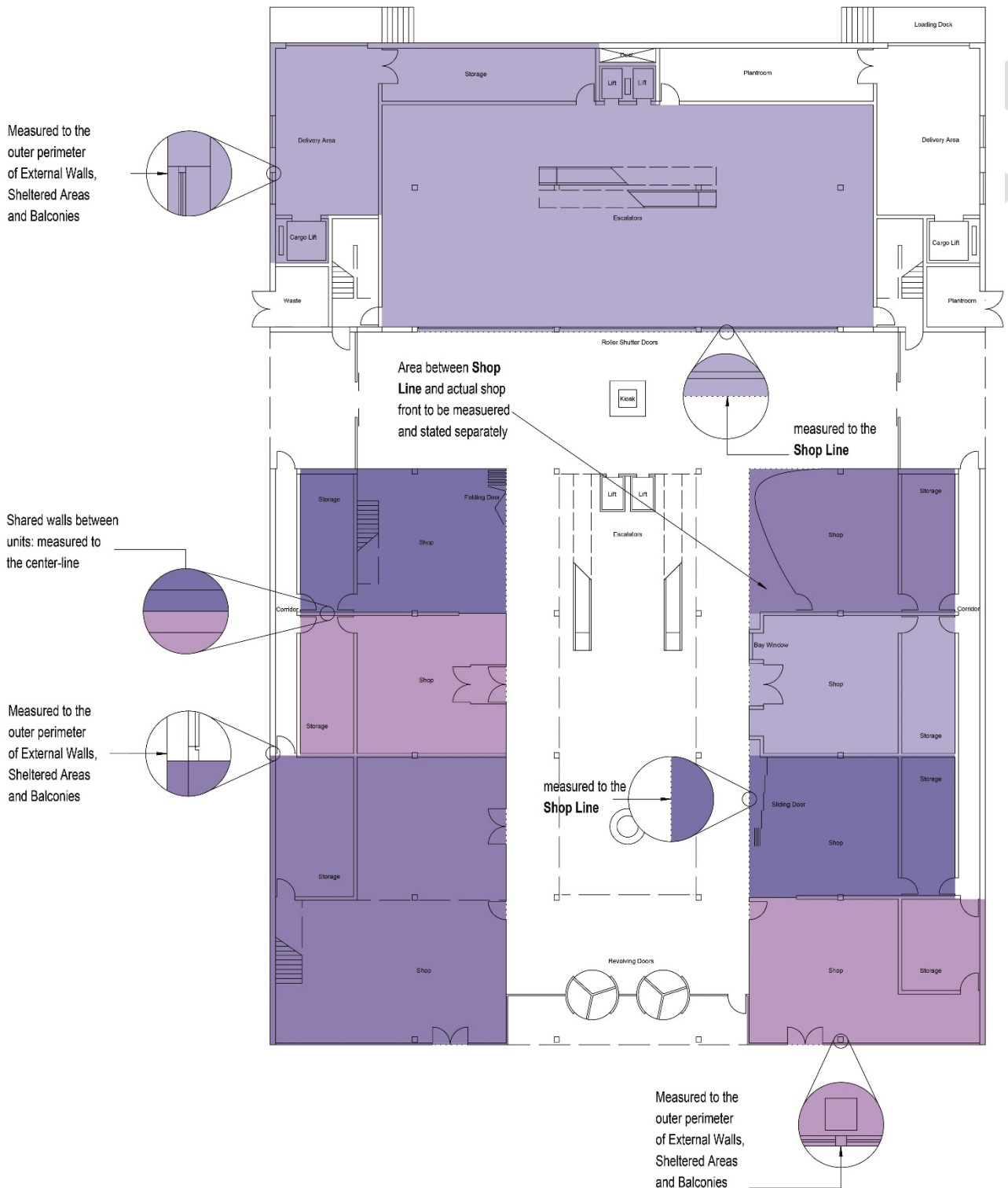


Diagram 17: IPMS 3A Retail Mall Ground Floor

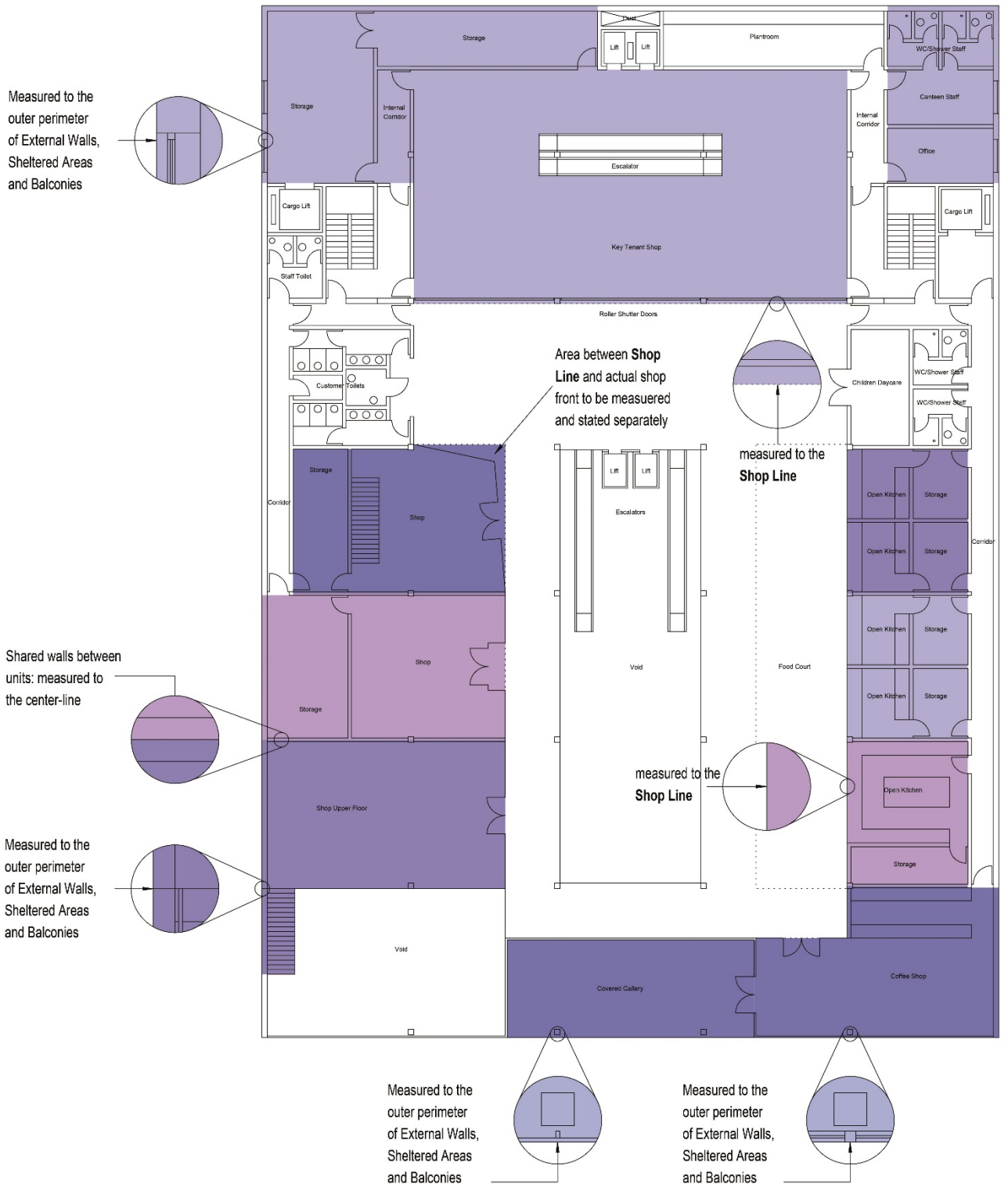


Diagram 18: IPMS 3A Retail Mall Upper Floor

Sheltered Areas included but stated separately and measured to the outer perimeter of external construction features

Sheltered Area

Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies

Measured to the outer perimeter of External Walls, Sheltered Areas and Balconies

Shared walls between units: measured to the center-line

Sliding Doors

Roller Shutter Doors

Vestibule

measured to the Shop Line

Sliding Doors

measured to the Shop Line

Sheltered Area

Diagram 19: IPMS 3A Stand Alone Discounter

3.3.3 IPMS 3B – Retail (Occupier)

Definition:

IPMS 3B – Retail: The area in exclusive occupation, including the **Floor Area** occupied by internal walls and columns.

Measurement practice

The area of exclusive occupancy in line with IPMS 3B – Retail is measured adopting the following hierarchy to:

- the centre-line of shared walls between occupants and/or
- the **Shop Line** and/or
- the **Internal Dominant Face** for all **External Walls** and otherwise to the **Finished Surface**

The **Floor Area** occupied by stairs is only to be included at the lowest level. A vertical penetration, with a floor opening and surrounding walls, if any, of less than 0.1m² (1 ft²) should not be separately identified and instead included in the **Floor Area** measurement of **IPMS 3B – Retail**.

Measurements included but stated separately:

Balconies and Permanent **Mezzanines** are included in **IPMS 3B – Retail** and are to be measured to the inner face of the **Balustrade**, but never to exceed the outside edge of the floor.

Measurements excluded but stated separately:

Measurement for **IPMS 3B – Retail** does not include the following areas, which are to be measured consistently with the **IPMS 3B – Retail** measurement hierarchy:

- **Ancillary Areas** reported individually
- Temporary **Mezzanines**.

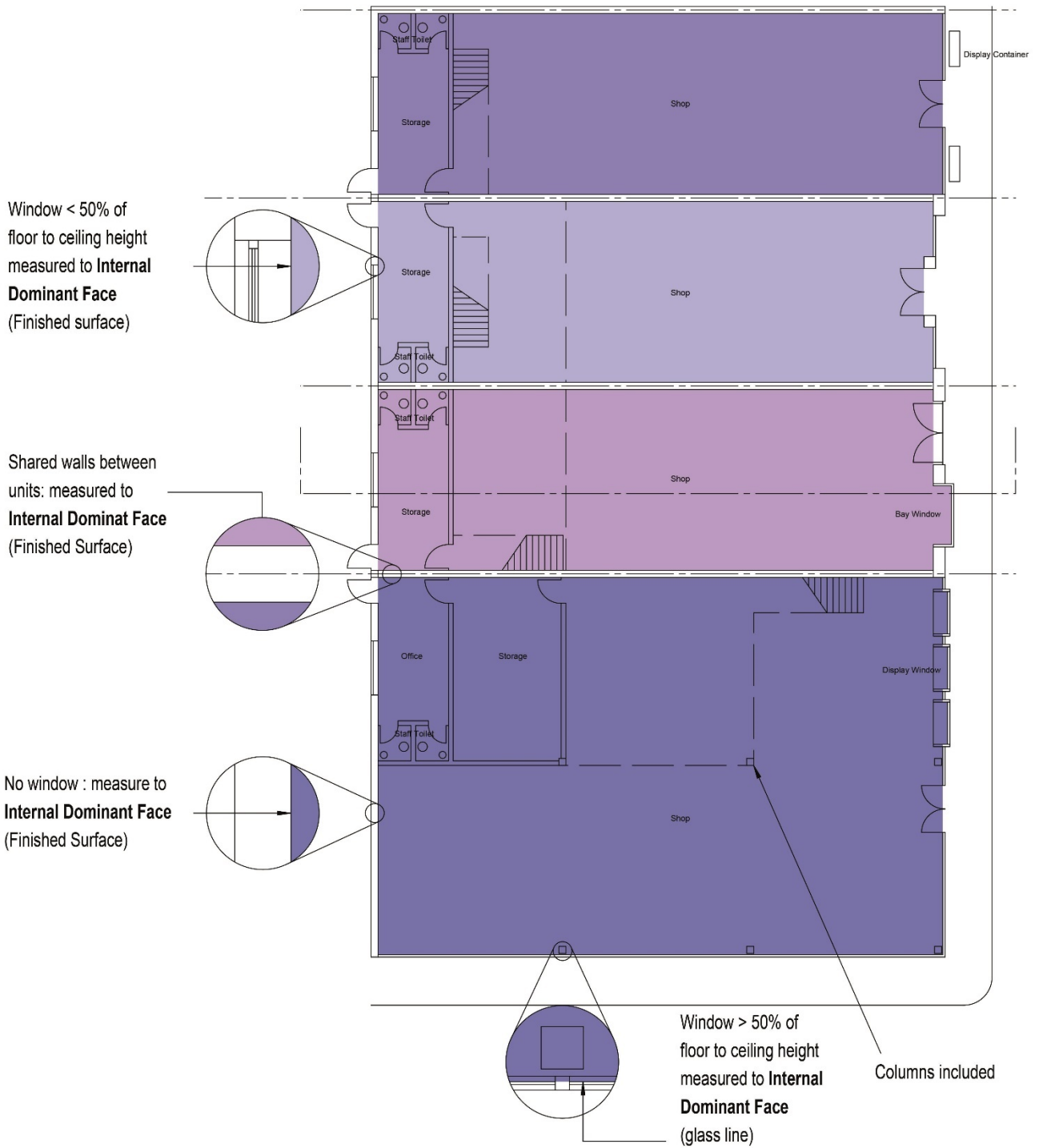
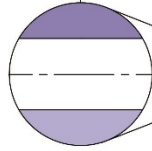
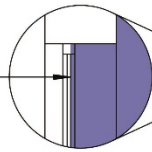


Diagram 21: IPMS 3B Retail High Street Ground Floor

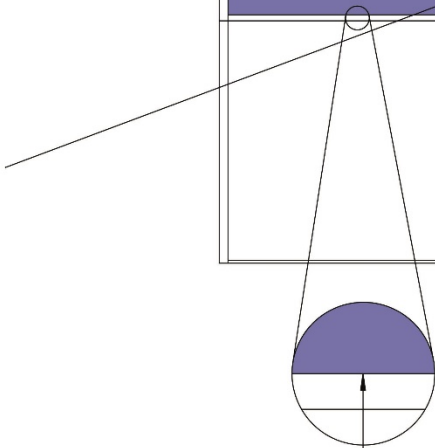
Shared walls between units: measured to **Internal Dominant Face** (Finished Surface)



Window > 50% of floor to ceiling height measured to **Internal Dominant Face** (glass line)



Gallery included but stated separately



Columns included

No window : measure to **Internal Dominant Face** (Finished Surface)

Diagram 22: IPMS 3B Retail High Street Mezzanine

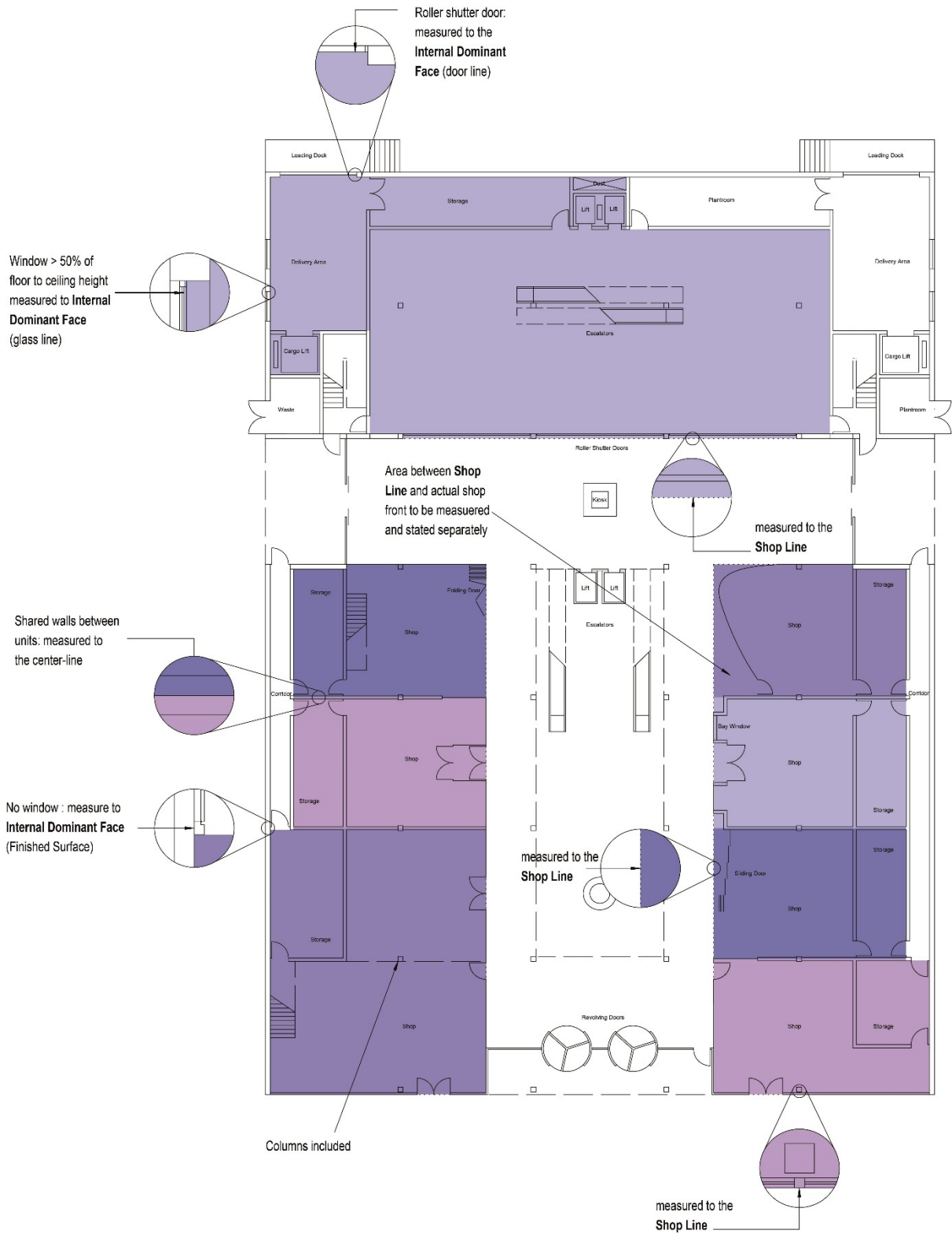


Diagram 23: IPMS 3B Retail Mall Ground Floor

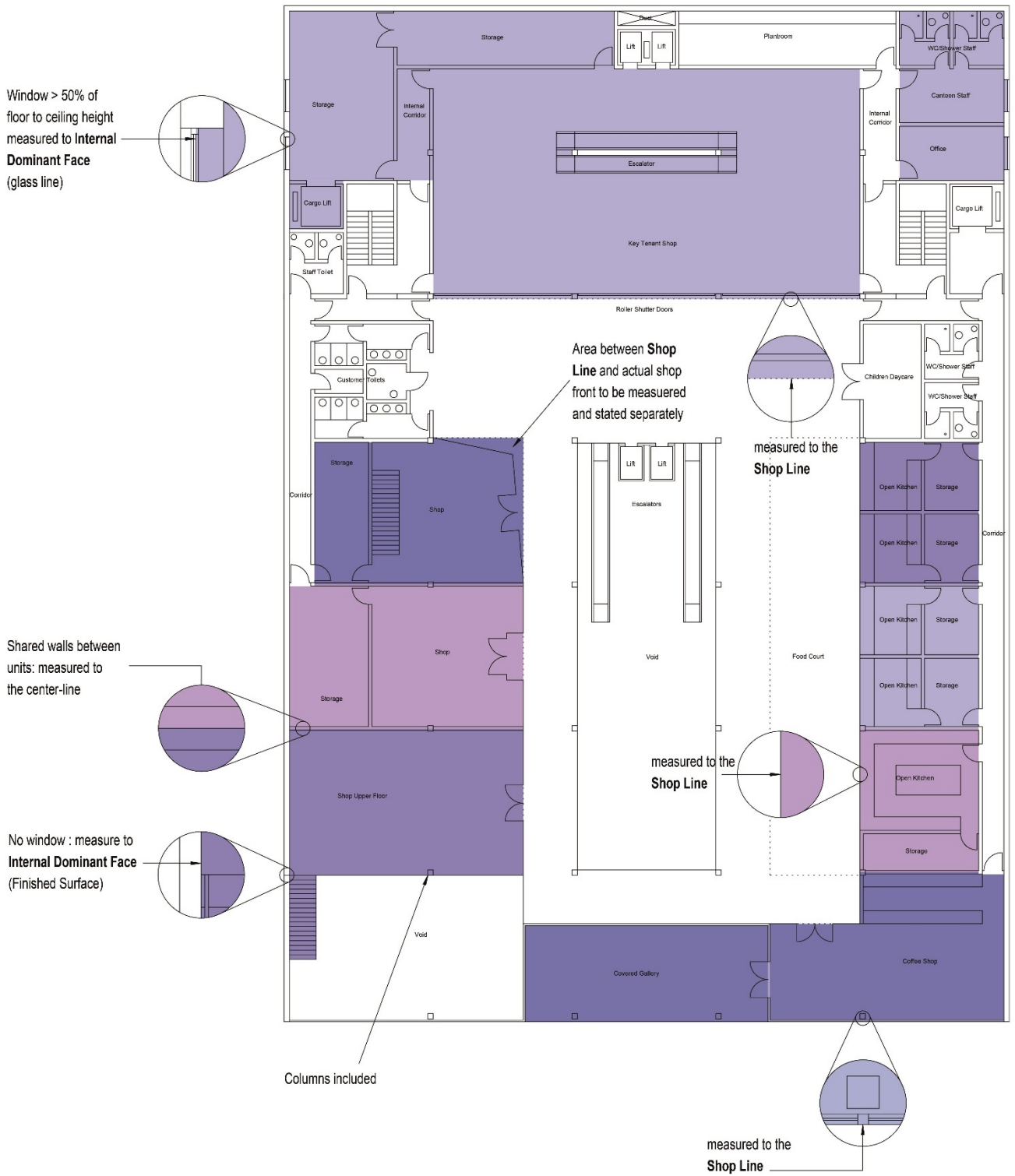


Diagram 24: IPMS 3B Retail Mall Upper Floor

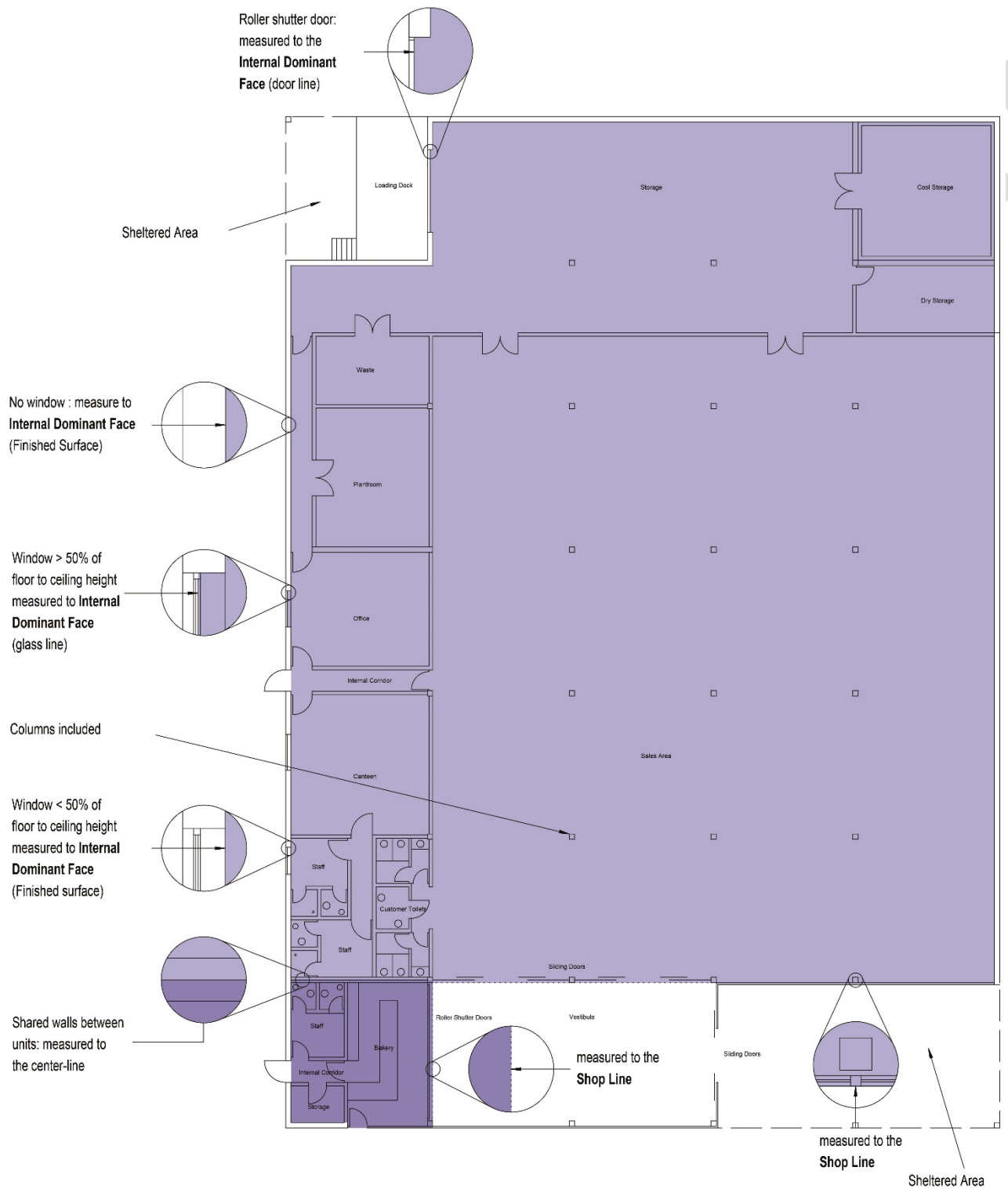


Diagram 25: IPMS 3B Retail Stand Alone Discounter

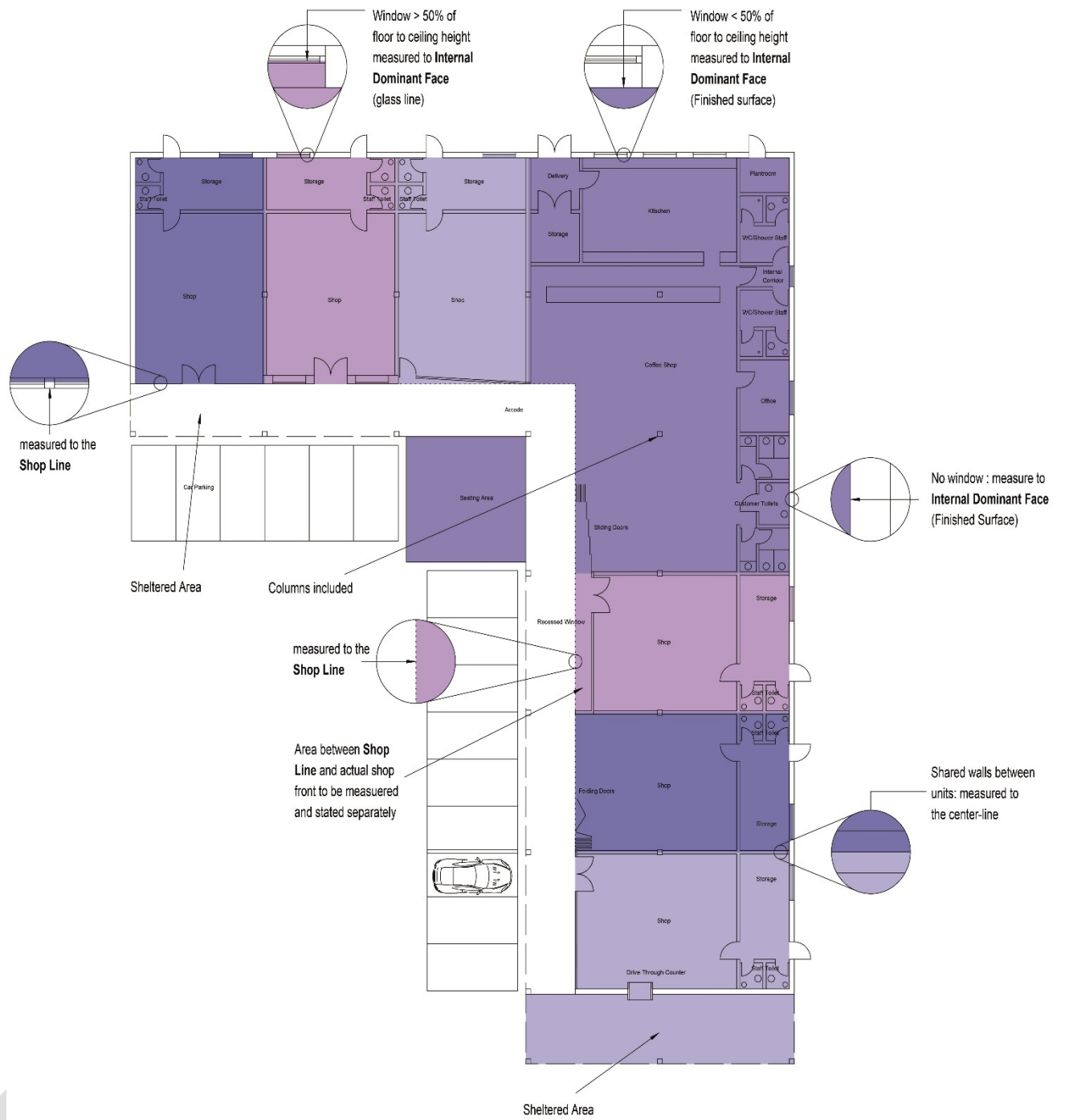


Diagram 26: IPMS 3B Retail Strip Centre

3.3.4 IPMS 3C – Retail (Occupier)

Definition:

IPMS 3C – Retail: The area in exclusive occupation excluding the **Floor Area** occupied by **External Walls**, full-height permanent internal walls and columns.

Measurement practice

The area of exclusive occupancy in line with **IPMS 3C – Retail** is measured adopting the following hierarchy to:

- the **Finished Surface** of shared walls between occupants and/or
- the **Shop Line** and/or
- the **Internal Dominant Face** for all **External Walls** and otherwise to
- the **Finished Surface**.

The **Floor Area** occupied by stairs is only to be included at the lowest level. A vertical penetration, with a floor opening and surrounding walls, if any, of less than 0.1m² (1 ft²) should not be separately identified and instead included in the **Floor Area** measurement of **IPMS 3C – Retail**.

Measurements included but stated separately:

Balconies and Permanent **Mezzanines** are included in **IPMS 3C – Retail** and are to be measured to the inner face of the balustrade, but never to exceed the outside edge of the floor and shall be stated separately.

Measurements excluded but stated separately:

Measurement for **IPMS 3C – Retail** does not include the following areas, which are to be measured consistently with the **IPMS 3C – Retail** measurement hierarchy:

- **Ancillary Areas** reported individually
- Temporary **Mezzanines**.

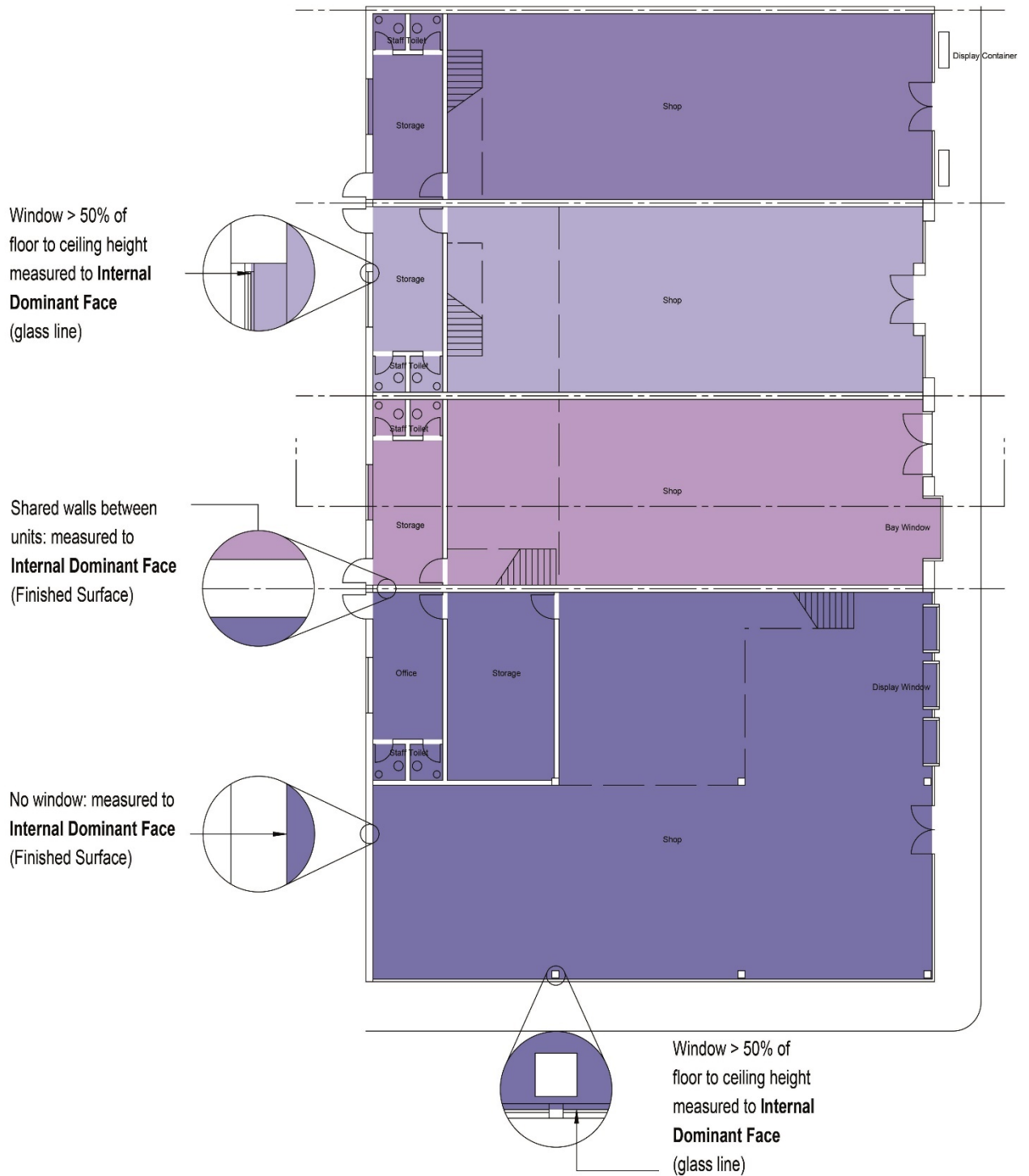
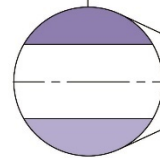
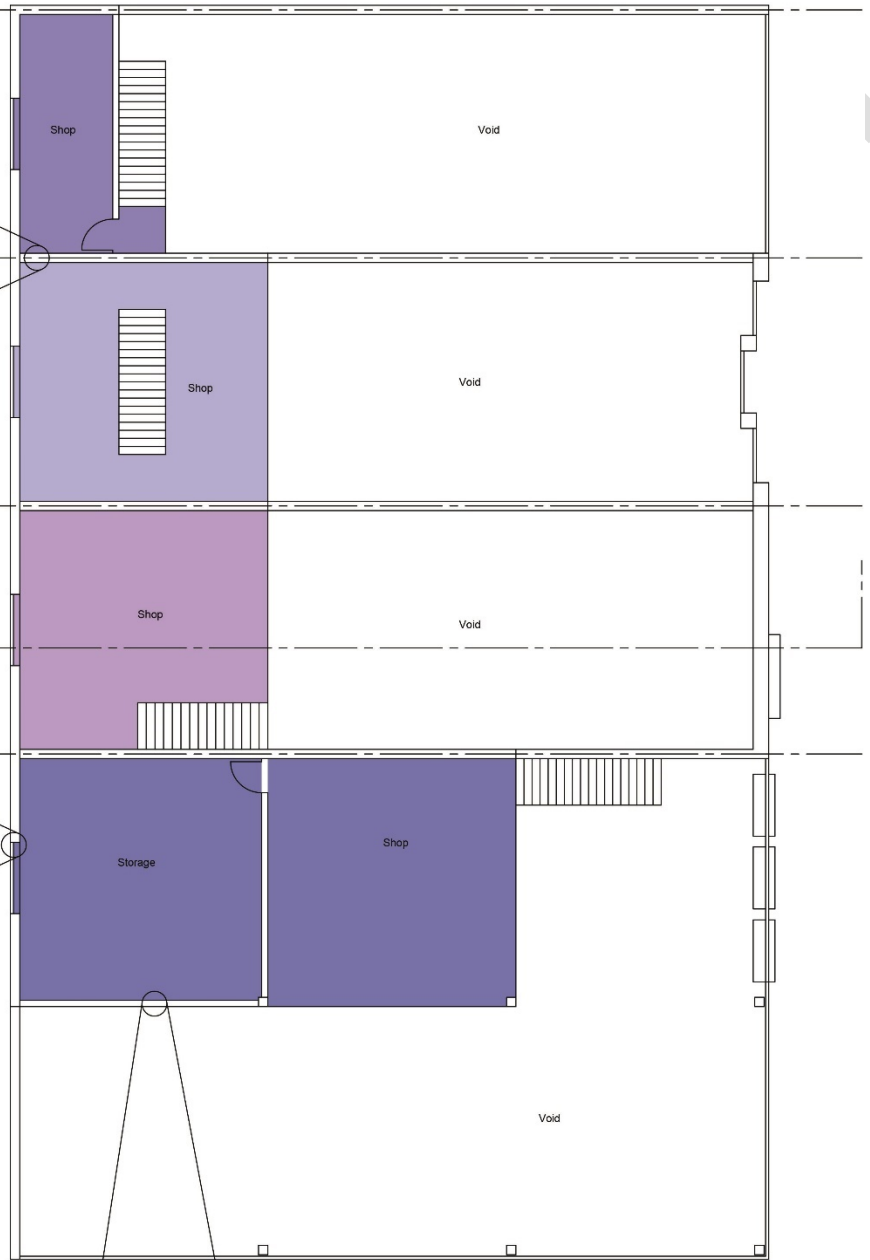
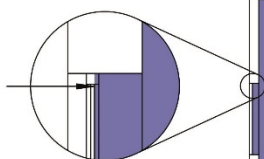


Diagram 27: IPMS 3C Retail High Street Ground Floor

Shared walls between units: measured to the **Internal Dominant Face** (Finished Surface)



Window > 50% of floor to ceiling height measured to **Internal Dominant Face** (glass line)



No window : measured to **Internal Dominant Face** (Finished Surface)

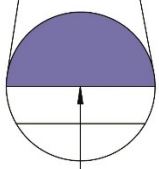


Diagram 28: IPMS 3C Retail High Street Upper Floor

Part 4 Technical

4.1 IPMS Retail Component Areas

The following are suggested Component Areas that may be used when areas need to be separately allocated for cost or other purposes under IPMS 1 and IPMS 2 – Retail. These may be further subdivided if required.











Component Area A	Vertical Penetrations Examples of vertical penetrations include staircase openings, stairs, lift / elevator shafts and ducts but any penetrations of less than 0.25 m ² /2.69ft ² are to be disregarded.
Component Area B1	External Wall The enclosing element of a Building , including windows and walls, that separates the exterior area from the interior area.
Component Area B2	Internal Structural Elements This comprises all internal structural walls and columns.
Component Area B3	Internal Non-Structural Elements This comprises all internal, full height, permanent walls other than those included in Component Areas B1 and B2.
Component Area C	Technical Services Examples of technical and building services include mechanical/electrical plant rooms, lift / elevator motor rooms and maintenance rooms.
Component Area D	Hygiene Areas Examples of hygiene area include toilet facilities, cleaner's cupboards, bath/shower rooms and changing rooms.
Component Area E1	Circulation Areas – Mall Comprises all public (shopper) circulation space within the Mall area fronting retail outlets.
Component Areas E2	Circulation Areas – Other All other circulations areas other than those forming part of the Mall (Component Area E1), measured horizontally.
Component Area F	Amenities Examples of amenities include internal facilities, such as child minding facilities and prayer rooms, for the benefit of shoppers.
Component Area G	Retailing Areas All areas used for retailing comprising retail outlets, areas designated for temporary retail stores and mall promotion areas.

Component Area H

Other Areas

Examples of other areas include balconies, covered galleries, internal car parking and storage rooms whether or not in exclusive use.

Legend of Components

	Component A - Vertical Penetrations		Area Outside Building
	Component B1 - Exterior Wall		Component D - Hygiene Areas (shared and/or exclusive)
	Component B2 - Internal Structural Elements		Component E - Circulation Areas (shared and/or exclusive)
	Component B3 - Internal Non-Structural Elements		Component F - Amenities
	Component C - Technical Services (shared and/or exclusive)		Component G - Working Space
			Component H - Other Areas

If a particular portion of space may be assigned to more than one **Component Area** then it is to be assigned to the **Component Area** that best reflects its primary design within the larger space.

Component Areas, as a whole or in part, may be classified as private (reserved exclusively for one occupier) or shared (available for the use of several occupiers).

Areas within Component Area H not available for direct retail related use may be described as ancillary. They are to be measured but may also be stated in an alternative way. For example, carparking may also be reported by the number of spaces.

Limited Use Areas

Limited use areas, as defined in Section 2.3, are included within IPMS reported areas, but must be identified, measured and stated separately.

These are technical drawings and do not represent the tenant or owner's perspective

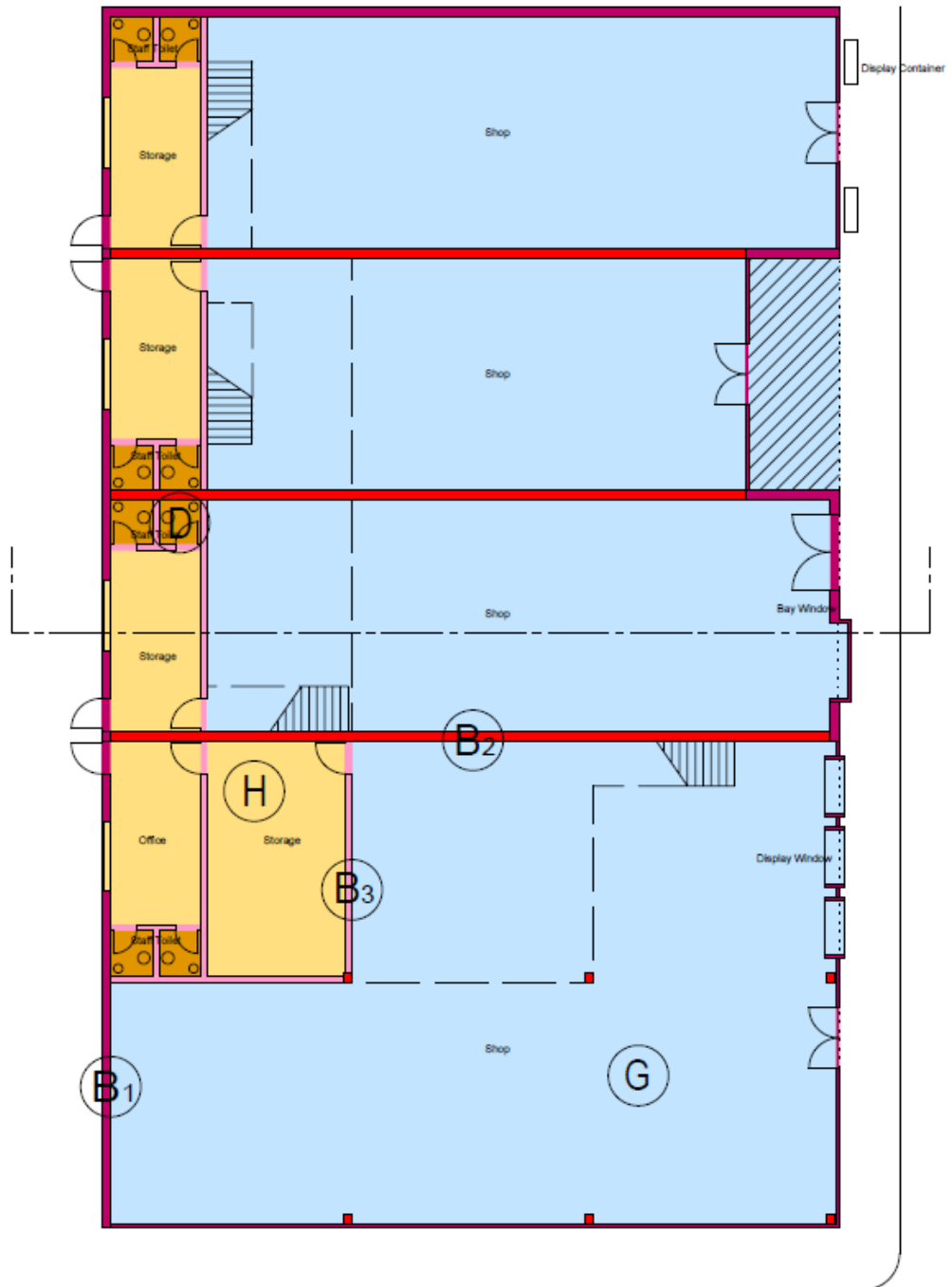
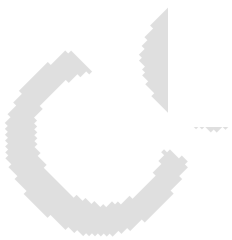


Diagram 29: IPMS Components Retail High Street Ground Floor



These are technical drawings and do not represent either the tenant or owner's perspective

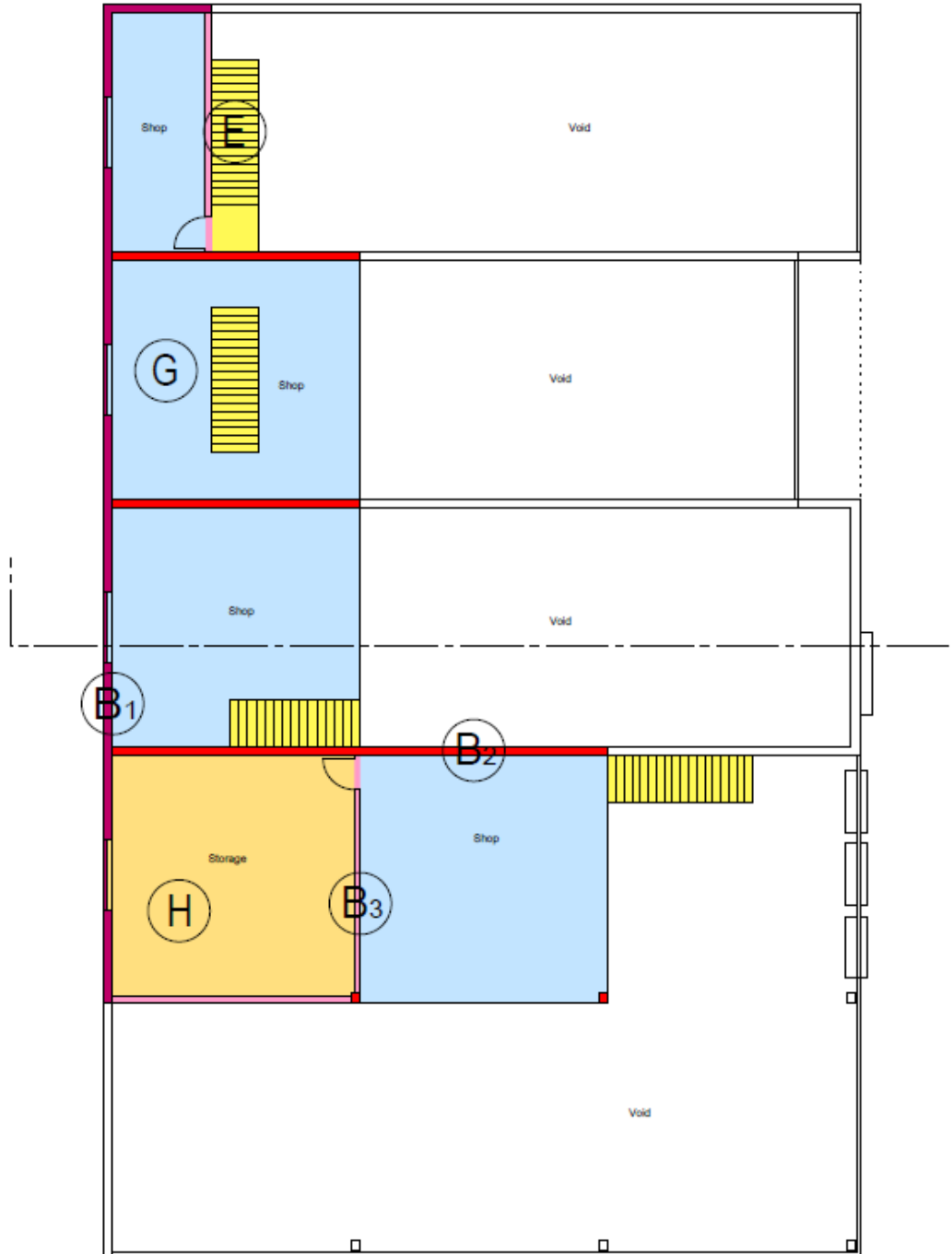


Diagram 30: IPMS Components Retail High Street Mezzanine

These are technical drawings and do not represent either the tenant or mall owner's perspective

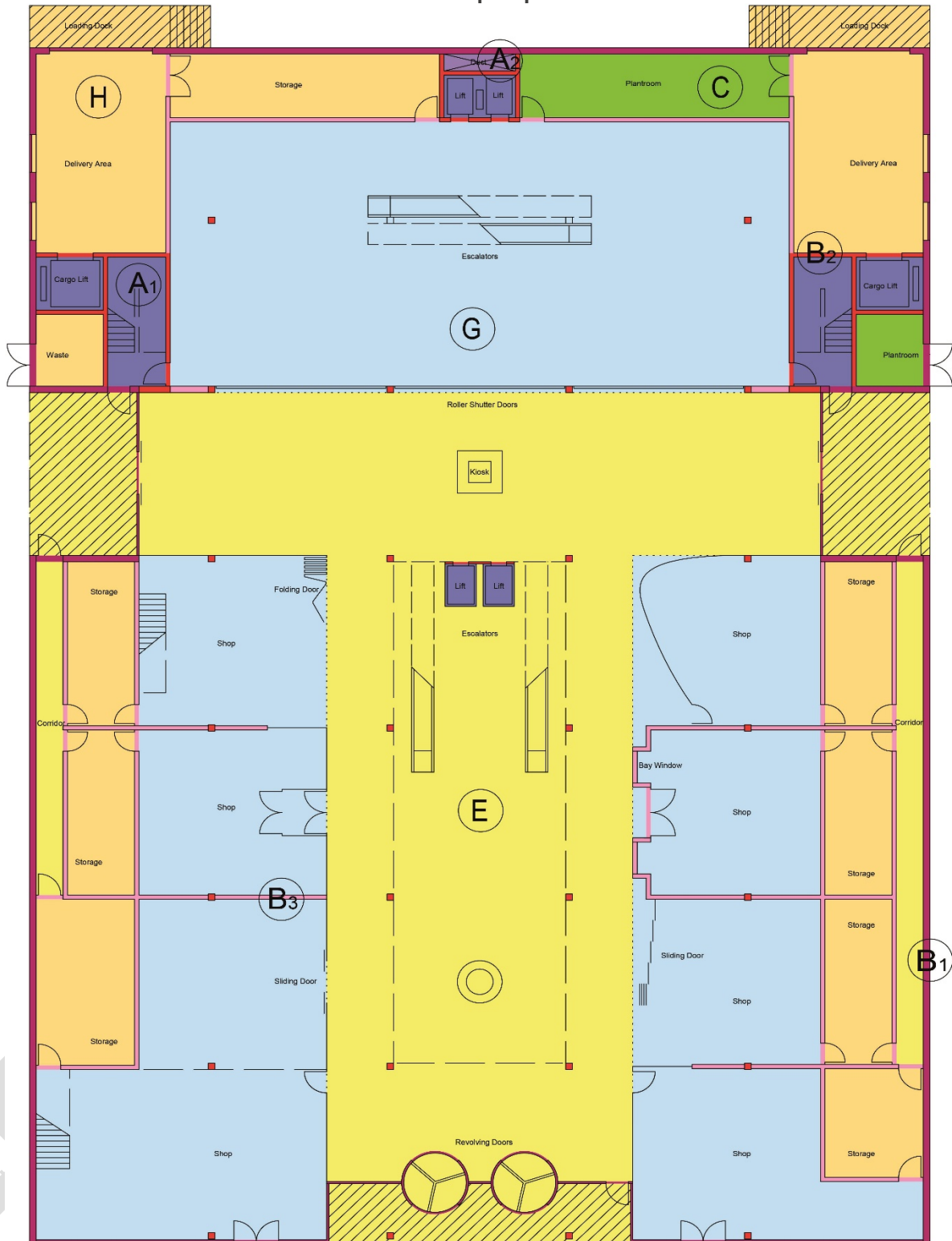


Diagram 31: IPMS Components Retail Mall Ground Floor

These are technical drawings and do not represent either the tenant or mall owner's perspective



Diagram 32: IPMS Components Retail Mall Upper Floor

These are technical drawings and do not represent the tenant or owner's perspective

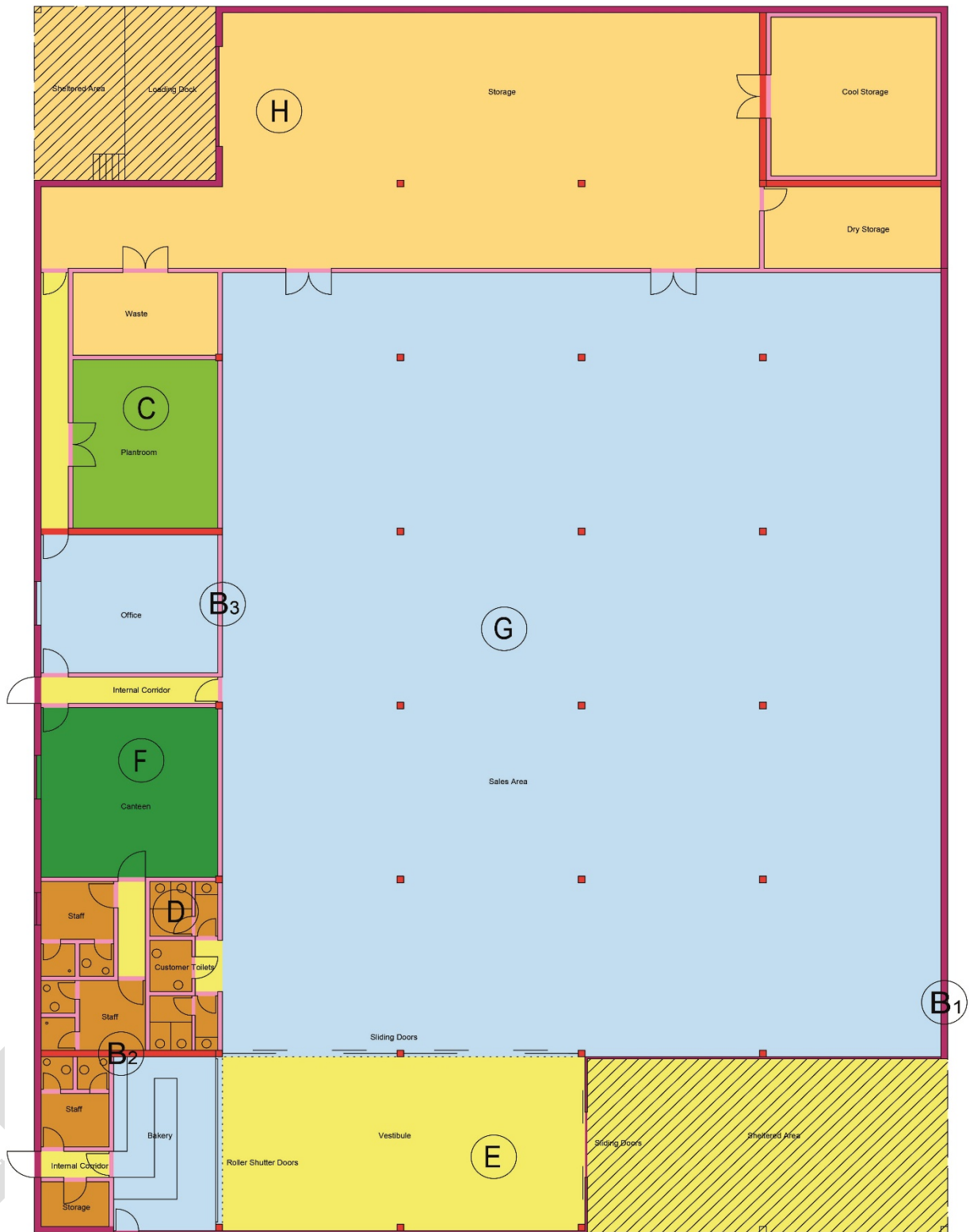


Diagram 33: IPMS Components Retail Stand Alone Discounter

These are technical drawings and do not represent the tenant or owner's perspective

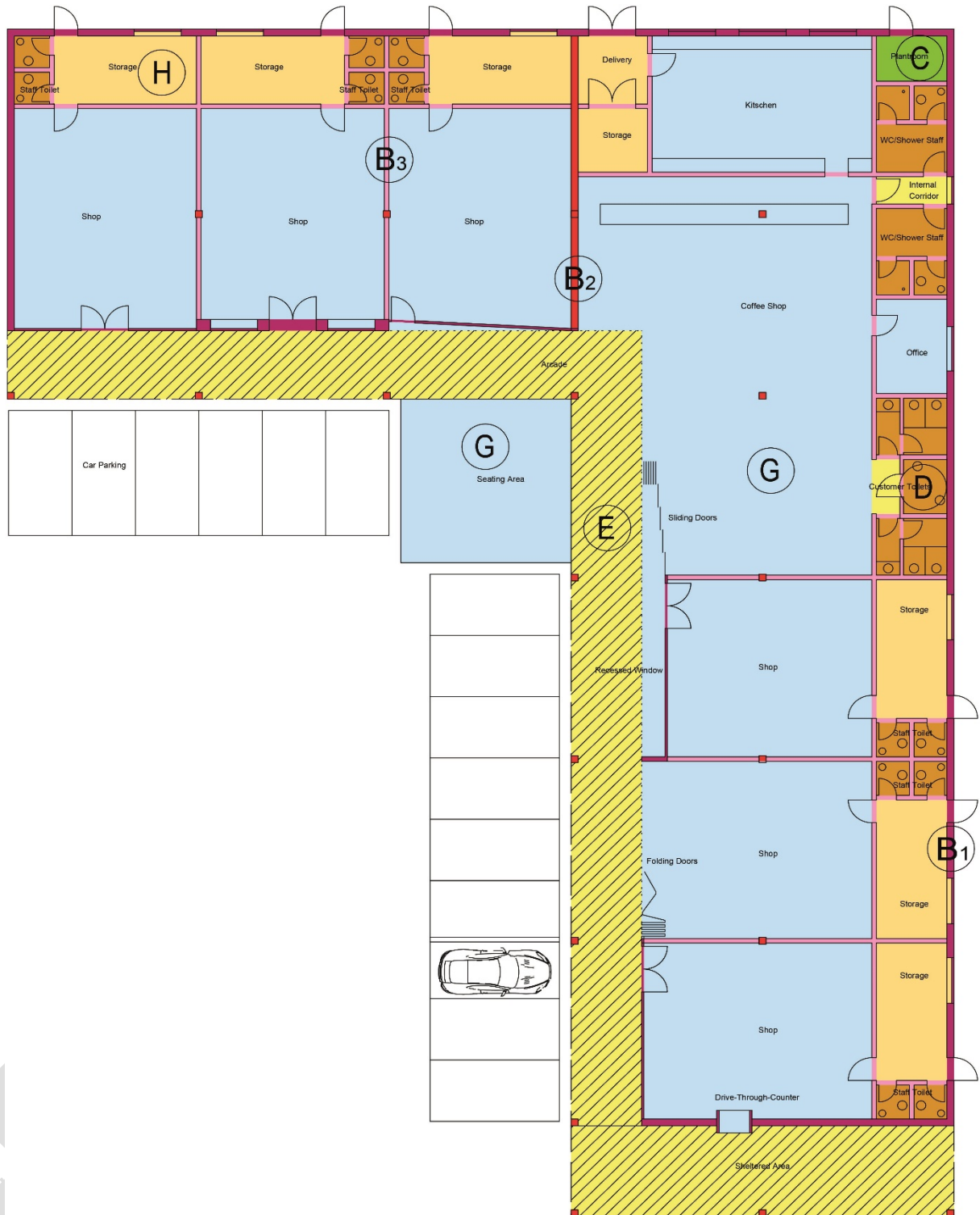


Diagram 34: IPMS Components Retail Strip Centre

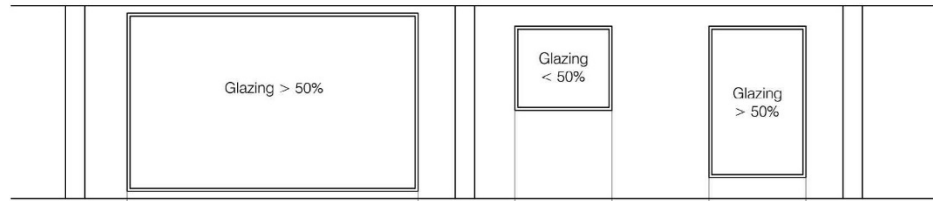
4.2 Internal Dominant Face

The **Internal Dominant Face (IDF)** is the inside surface area comprising more than 50% of the first 2.75 metres measured vertically from the floor, or to the ceiling if lower for each **IDF Wall Section**. If such does not occur, then the **Finished Surface** is deemed to be the **IDF**.

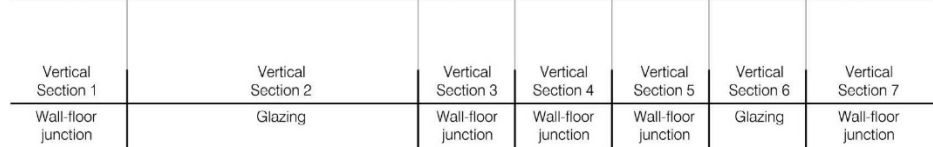
An **IDF Wall Section** is the extent of each section of an **External Wall**, where the inside finished surface area of each part of a window, wall or external construction feature varies from the inside finished surface area of the adjoining window, wall or external construction feature, ignoring the existence of any columns.

If the **Internal Dominant Face** is not vertical, the measurement is to the **Finished Surface**.

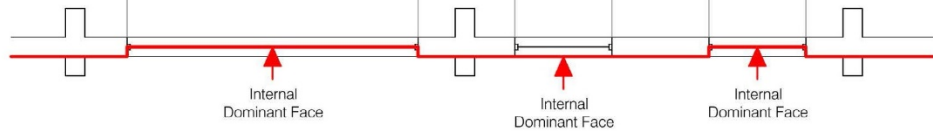
Internal Elevation



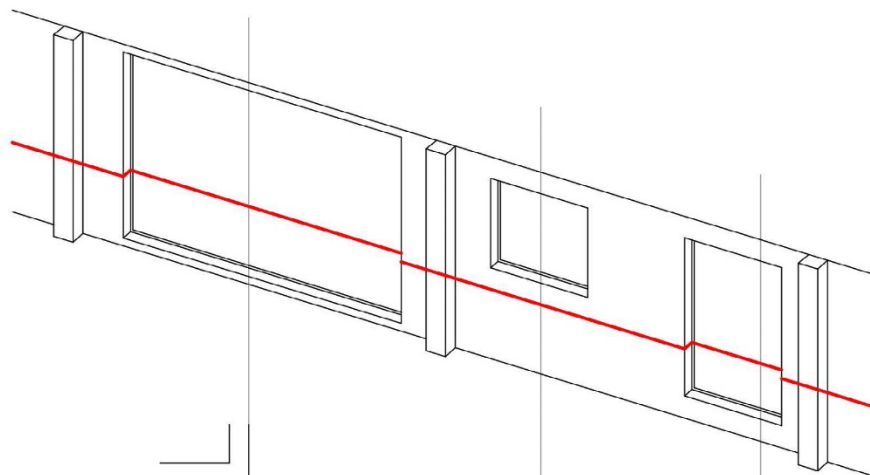
Measure to



Plan



Oblique view



Cross section

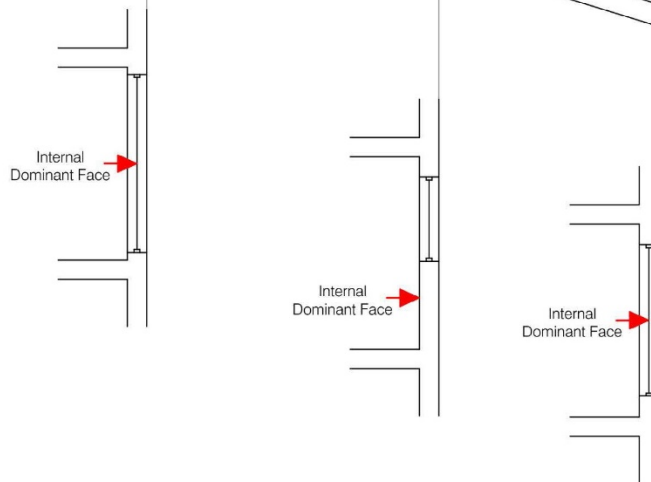


Diagram 35: Internal Dominant Face

4.3 Clear Height and Internal Height

Clear Height is the height within a **Building** or section of a **Building** measured from the floor to the lowest point of the structural element above, ignoring the existence of any brackets, struts or fixtures and fittings.

Internal Height is the height within a **Building** or section of a **Building** measured from the floor to the lowest point of the ceiling or suspended ceiling, ignoring the existence of any brackets, struts or fixtures and fittings.

Consultation Draft