Decision No. (233) of 2015
Concerning the Unified Method of Calculating Real Estate Areas in the Emirate of Abu Dhabi

Chairman of the Department of Municipal Affairs Department:

Having reviewed:

- Law No. (1) of 1974 concerning the reorganization of the Governmental Body in the Emirate of Abu Dhabi and its amendments;
- Law No. (4) of 1983 concerning the Organisation of Construction Works in the Emirate of Abu Dhabi and its amendments.
- Law No. (10) of 2006 concerning the Municipality and Municipal Council of the Western Region in the Emirate of Abu Dhabi;
- Law No. (3) of 2005 on the Regulation of Real Estate Registration in the Emirate of Abu Dhabi
- Law No. (19) of 2005 concerning real estate ownership, and its amendments;
- Law No. (9) of 2007 concerning the establishment of the Department of Municipal Affairs;
- Law No. (10) of 2007 concerning the Municipality and Municipal Council of Abu Dhabi City in the Emirate of Abu Dhabi;
- Law No. (11) of 2007 concerning the Municipality and Municipal Council of Al-Ain in the Emirate of Abu Dhabi;
- Law No. (16) of 2009 Concerning regulation of construction works and its amending laws;
- Chairman of the Department of Municipal Affairs' Decision No. (1/52) of 2008 Issuing the Executive Regulations of Law No. (3) of 2005 on the Regulation of Real Estate registration in the Emirate of Abu Dhabi;
- And based on what is dictated by public interest.

Decided the following:

Article (1)
Definitions

Emirate	The Emirate of Abu Dhabi.
Department	Department of Municipal Affairs
Municipality	Abu Dhabi City Municipality or Al Ain City Municipality or the Western Region Municipality and any Municipality that may be established in the future in the Emirate.
Real Estate	All kinds of real properties, including lands, buildings and establishments, and real properties by allotment.
Concerned Municipality	Abu Dhabi City Municipality or Al Ain City Municipality or the Western Region Municipality and any Municipality that may be established in the future in the Emirate.
Survey work	The actions and procedures that must be taken and carried out to identify the shape, volume, level, depth, boundaries, or any technical or procedural matter related to the land area, or positioning of locations whether on the land surface, above or beneath it, on the horizontal and vertical levels, whether on land, at sea, or any natural or man-made areas in the Emirate of Abu Dhabi.
Surveyor	An authorized person who possesses the necessary qualifications, ability, license, and experience to carry out survey work.
Competent Division	Spatial Data Division
Appendix to the Decision	Appendix to the Administrative Decision No. (233) of 2015 on the Unified Method of Measuring and Calculating the Area of Buildings, Villas and Residential Units in the Emirate of Abu Dhabi

Article (1)

The unified method for measuring and calculating the areas of buildings, villas, and residential units in the Emirate of Abu Dhabi appended to this decision shall be approved and its provisions shall be applied as of the date of enforcement of this decision.

Article (2)
(Decision Objectives)

The standards and methods for measuring and calculating the areas of buildings, villas, and residential units in the emirate of Abu Dhabi aim at:

- Finding and adopting measurement methods and ways and calculating areas in the real estate field.
- Enhancing the effectiveness of the real estate market through building confidence among investors, real estate ownersand financiers as regards the standards and methods related to the real estate market.
- Standardizing and adopting these standards, measurement methods, and calculating areas at the level of the Emirate of Abu Dhabi.
- Ensuring the application and use of a unified method in all real estate activities, which may include, for example, ownership plan, architectural plans, contractors' executive plans, which are used in appropriations, financing, real estate valuation for offices, residential, industrial, and commercial buildings and for the purposes of sale, lease, etc..

Article (3)
Applying for Calculating Real Estate Areas

An application for calculating the real estate area shall be submitted to the competent division in the municipality concerned, provided that it fulfills the following requirements:

- The application specifies the type of real estate, whether it is vacant (land) or a building and the type of building.
- The name of the property owner based on the national identity card.
- A copy of the national identity card.
- The purpose of calculating the area, and if the aim is a contractual relationship, a copy of the contract shall be attached to the submitted application.

Article (4)
(Procedures for Calculating Real Estate Areas)

The real estate surveyor undertakes to review the data of the real estate subject of survey according to the following steps:

- Ensure that the survey requester has authority or power over the property, according to a certified document.
- Obtain the register of the property subject of survey.
- Verify all the data mentioned in the register and cross-check it with the data provided by the survey requester in terms of the following:
    a. Submit a copy of the national identity card.
    b. The name in the family record matches that in the register or in the certified document

submitted by the survey requester.

c. Number and address of real property according to the register.

- In the event that the real property is owned by a legal person, the property data must be cross-checked with the entity's decree or deed of incorporation, or its commercial register.
- Prepare a detailed description of the reality of the property based on the data and documents gathered.

Article (5)

Real Property Inspection Procedures

Real estate inspection is a major step in the process of calculating the real estate area, as it provides the surveyor with a realistic view and information that he uses in calculating the area, according to the following regulations:

- Obtain the owner's approval on examination and physical inspection of the property, and to agree with the owner on the appropriate time for carrying this out.
- Prepare a property file that includes, for instance, official data like the site plan, certificate of building completion.
- Provide the equipment necessary for examination and physical inspection of the property and to take measurements (measurement apparatus, camera).

Article (6)

Procedures for Challenging Survey Report

The following regulations are applied in appealing a survey report:

- Surveyors shall abide by the survey standards and legislations in force in the emirate.
- The surveyor shall abide by the following in the survey report:
  a) Use survey tools according to practical and legal requirements.
  b) Explain the survey tools used, and how and why they were used.
  c) The papers and documents that were relied upon in calculating the real estate area.
  d) Stamp the report and approve it by the surveyor in accordance with the legislations in force.
- Any stakeholder may appeal the survey report, provided that he shall be committed to deposit a sum of money determined by the municipality equal to the incurred survey costs.
- Other surveyors are appointed by the municipality to carry out the survey work, each of them individually.
- In the event that the results of the other two reports are contrary to the first report, the first surveyor will bear all survey costs.
- In the event that the report of the other two surveyors or one of them matches the first report in a way acceptable by the municipality, the costs of the other two reports shall be incurred

by the appellant.

Article (7)

Any text or provision contrary to the provisions of this decision shall be repealed.

Article (8)

This decision shall be published in the Official Gazette and shall become effective 30 days after the date of its publication.

Saeed Eid Al Ghafli
Chairman of the Department of Municipal Affairs

Issued in Abu Dhabi
On: 5 Muharram 1437 Hijri
Corresponding to: 18 October 2015

Appendix to Administrative Decision No. (233) of 2015
Concerning the Unified Method of Measuring and Calculating the Area of Buildings, Villas, and Residential Units in the Emirate of Abu Dhabi

Part One: Field and Objectives

1.0 Introduction

The standards and methods for measuring and calculating the areas of buildings, villas, and residential units in the emirate of Abu Dhabi aim at finding and adopting measurement methods and ways and calculating areas in the real estate field; enhancing the effectiveness of the real estate market through building confidence among investors, real estate owners and financiers as regards the standards and methods related to the real estate market. The Department of Municipal Affairs, out of its regulatory responsibility, seek to standardize and adopt these standards, measurement methods, and calculate areas at the level of the Emirate of Abu Dhabi; and to ensure their application and use in all real estate activities, which may include, for example, ownership plans, architectural plans, contractors' executive plans, which are used in appropriations, financing, real estate valuation for offices, residential, industrial and commercial buildings and for the purposes of sale, lease, etc..

The Department of Municipal Affairs and its partners in Abu Dhabi stress that the clauses of the Law on regulating the practice of Survey works in the Emirate of Abu Dhabi and its executive regulations are to be approved in maps, plans and data of real properties and buildings of all types, including the clauses of the Law represented in the reference system and the approved projection; and in the units of measurement, standards and specifications of survey work and control of its quality and accuracy. The Department of Municipal Affairs took into account the classification of real estate buildings and thus finding methods to calculate the areas in different ways that are consistent with the classification, purpose, and use of the real property.

1.1. The floor area of buildings

The final outcome of calculating the floor area of a building depends on the sum of the area of all floors. The floor area can also be also divided into three types of areas, with each having a measurement standard (Abu Dhabi Property Measurement Standard) that is different from the other areas in terms of the categories and elements that compose it, so we find that there are three types of floor areas as follows:

(1) Abu Dhabi Floor Area Measurement Standard 1) (ADFAMS-1)
(2) Abu Dhabi Floor Area Measurement 2) (ADFAMS-2)
(3) Abu Dhabi Floor Area Measurement 3) (ADFAMS-3)

The Abu Dhabi Floor Area Measurement 3 (ADFAMS -3) is divided into a number of categories and elements in line with international standards for measuring the area of real properties to enable comparison with world real estate markets, and to convert from one unit of measurement to another.

1.2 Built area for villas and houses:

The Built Area for villas and houses are measured and calculated from the dimensions of the exterior walls of the villa or house, and ornamental protrusions (like pilaster) in these walls are ignored. The built-up area can be divided according to the method of measuring or calculating the area into:
(1) Built Area Measurement Standard - Area A
(2) Built Area Measurement Standard - Area B
(3) Property Measurement Standard - Plot Area C

1.3 Area of real estate units

(1) Unit Measurement Standard - Area 1 (PMS Area 1)
(2) Unit Measurement Standard - Area 2 (PMS Area 2)
(3) Unit Measurement Standard- Area 3 (PMS Area 3)

1.4 Definitions

Application	The method applied for using categories to define areas in a building. These areas include according to the type of building: floor area for multi-storey buildings, built area for villas and houses, and the area of apartments, offices, shops, and workshops.
Building	Detached building that constitutes all or part of the real property, and which incorporates villas and houses and each independent building of one or two floors.
Apartment building	Detached multi-storey building that contains multiple standalone real estate units and common spaces and facilities.
Unit	Part of the apartment building that is independently utilized and possessed such as apartments, offices, shops, workshops, and showrooms.

Category	A key element that can be used to classify common spaces and facilities.
Standards	Standards for measuring and calculating the areas of buildings, villas, houses, and units.
Real estate	It includes all assets in the built environment, including land and construction.
Real estate industry	It includes users, service providers, and third party entities.
Service provider	Any entity providing consultation in the real estate sector to users, be they valuers/ appraisers, surveyors, real estate services, asset and property managers, agents, brokers, measurement experts, cost consultants ,interior designers, architects, and others.
Area Measurement Experts	A service provider that is qualified or experienced through both training and experience to measure areas according to the standards approved in the Emirate of Abu Dhabi.
Third party	Any entity other than the user or the service provider that has an interest in measuring areas such as government entities, banks, financiers, data analysts and researchers.
User	Owner, possessor, developer, investor, buyer, seller, land owner, lessor, tenant.
Valuer/ appraiser	A service provider with suitable professional qualifications to carry out appraisal and valuation work.
Category unit	Any part of the real property that forms a part or belongs to one of the categories.

1.5. Objective of the standards

The standards and methods for measuring and calculating the areas of buildings, villas, houses, and real estate units in the Emirate of Abu Dhabi aim to fulfill the needs of real estate users regarding the consistency of methods for measuring and calculating areas and develop their ways in the real estate field; since without these standards the floor area, built area, or unit area in one building will differ ,given the multiple entities carrying out the measurement and given the different real estate developers, since several methods for measurement and calculation are used.

These standards also aim to increase the reliability of the data for third party so that it can confidently use the real estate data in service management work, real estate financing or any other purposes in the real estate field.

1.6 Use of Standards

Standards for measuring and calculating the areas of buildings, villas, houses, and real estate units in the Emirate of Abu Dhabi can be used to carry out relevant applications, and to accomplish any of the real estate purposes agreed upon between the parties like users, service providers, and third parties.

In the event of a dispute, controversy, or conflict between these standards and legislative texts at the federal level, the federal texts shall govern and shall have priority in application and implementation.

1.7 Purpose of standards and methods for calculating areas

Any measurement used in calculating or assessing the value of the property must be consistent with the method used to analyze the data resulting from relevant and documented real estate transactions, so that the value is only assessed after taking into account the supporting documents and calculation basics.

In particular, the measurement basics are used to analyze real estates in cases of lease or to calculate capital value. In addition, the procedures for assessing the value of the property must also reflect the same basis principles of real estate measurement. These standards are also used by service providers seeking to link the standards to the general measurement bases used in the real estate market. On the other hand, the reports of the service providers must include the basics of measuring the floor areas of buildings and references related to the application of standards so as to be clear to the users and third parties, , and both can also be linked to plans that include relevant floor, building, or unit.

Part 2: Principles and Basis of Measurement

2.1 Principles of measurement

The Department of Municipal Affairs of the Emirate of Abu Dhabi has adopted basic measurement principles that are applicable to all types of real estates and related transactions. The basic principles adopted for the measurement are as follows:

a) The size must be measurable.
b) The approved unit of measurement must be used.
c) The process of measuring the size must be repeatable.
d) The measurement is comparable to similar types of measurements.
e) The approved unit conversion factors must be used to convert measurements and areas from one unit to another.
f) Carry out measurement work in an objective manner, with clear measurement basis.
g) The measurement or calculation accuracy is well-known.

2.2 General principles for standards and methods used in calculating the area of buildings, villas, houses, and units

a) It is necessary to measure any building, villa, or real estate unit individually.
b) Apartment buildings must be measured and scheduled based on the floors, i.e. taking measurement of each floor and writing them down in a table for that individual floor.
c) Measurement of dimensions used in calculating the area of the floor, villa, or unit must be taken at the horizontal level.
d) Measurements must be taken using methods consistent with the experience of the real estate market in the Emirate of Abu Dhabi.
e) (e) In case of adjacent units, the midline of common wall is the outer boundary of the unit.

2.2.1 Measurement practice

There are a number of options for conducting building and real estate measurements. A specialist or real estate surveyor is usually appointed in the complex and highly- valuable real estate markets to prepare detailed executive plans for each floor separately. The measurements and area assessment are provided by the specialist or the real estate surveyor from the plans. The executive plans can also be used as a basis for making measurements, so that the dimensions correspond to the drawing scale of plans. The service provider must also indicate whether or not he has checked on-site measurements.
In all cases, in the absence of plans, the service provider must explain how or was the floor area established? For example, measuring dimensions with laser devices, measuring tape, or by adopting agreed-upon areas.

2.2.2. Accuracy and permissible error

The accuracy of the measurement depends on the method used and the site condition during the measurement period. The need to obtain the highest accuracy in measuring and calculating the areas depends on the purpose for which the measurements were made, for example, the presence of an expert to determine the financial disputes that are directly related to the floor area, or if the purpose of measurement is to prepare a draft to estimate service fees that were based on incomplete information.
The service provider must also search for appropriate methods to obtain the highest possible accuracy in measuring and calculating areas. Therefore, in all cases, the permissible error must be clear and agreed upon.
Table (1) suggests the minimum permissible degree of accuracy.

Table 1: Permissible degree of accuracy

Drawing scale	Accuracy	Accuracy percentage	Smallest size for the landmark that is visible without zooming in or out the drawing scale	Examples for survey work	Actual use
1:100	± 25 mm	1%	50 mm	**Measuring building areas, topographic area, low precision planning, network area, valuation area work**	**General drawings for planning the gaps, agency, valuation, ratios, boundary area, real estate area, engineering design.**
1:200	± 50 mm	2%	100 mm	**Measuring areas of buildings with low precision, topographic area, high-precision service lines, area of gross areas**	**Planning, building foundation plans, and detailed design**

2.2.3. Measurement Report

The service provider must choose the appropriate method of measurement, which must be clearly stated in the measurement report, including the date of carrying out the measurement.

2.2.4 Unit of measurement

The measurements and the calculation of the areas must depend on the unit of measurement that is approved in the Emirate of Abu Dhabi, which is the meter. As for users and third parties, they may request to convert measurements using approved conversion factors, so the measurements and areas are convertible to other units.

Part 3: Standards for measuring and calculating floor areas for buildings:

The standards and calculation of buildings and real estate areas depend on the type of building as follows:

3.1. Floor areas for buildings:

To measure and calculate the floor areas of buildings, the following standards are adopted:

(a) Abu Dhabi Floor Area Measurement Standard 1(ADFAMS-1).
(b) Abu Dhabi Floor Area Measurement Standard 2 (ADFAMS-2).
(c) Abu Dhabi Floor Area Measurement 3 (ADFAMS-3).

Abu Dhabi Floor Area Measurement Standard-1 (ADFAMS-1) is the sum of the areas of

any floor in the building whose dimensions have been measured to the perimeter or outer edge of the body of the building and documented in the building report. This standard is known as Gross External Area.

3.1.1.1. Usage

ADFAMS-1 can be used for planning purposes or by contractors or consultants to estimate the cost of implementing standard plans.

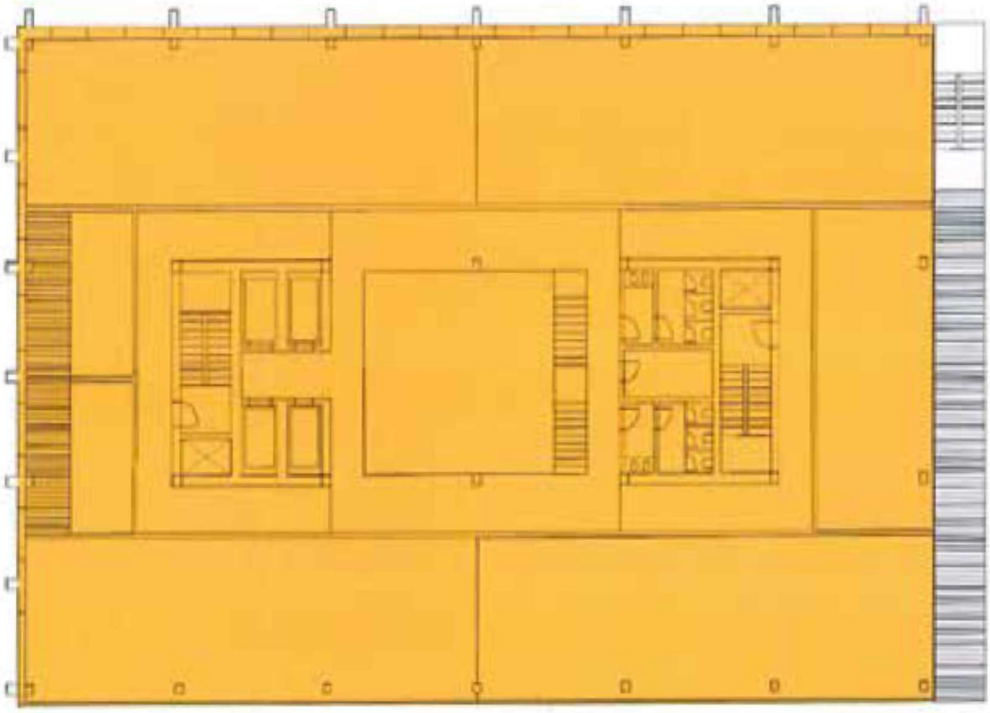
3.1.1.2. Details of the Abu Dhabi Floor Area Measurement Standard -1 (ADFAMS-1):

The standard for measuring and calculating a floor area for buildings and real estate **(ADFAMS-1)** is the sum of the external areas of any floor in the real estate, measured from the face of the prevailing exterior wall ,(excluding the elements of decorative protrusions), and it can also be the external areas of any building in case of calculating the area of more than one building. In the case of halls (corridors, porches, or vestibules) covered with roofs and located on the ground floor and the floors above it, the extension of the external façade of the dominant wall adjacent to it is considered an external façade for it in calculating ADFAMS - 1.

The external area of basements is calculated through the extension of the exterior level of the outer wall boundaries on the ground floor to the bottom, or by measurement if the extension of the basement differs from the building footprint.

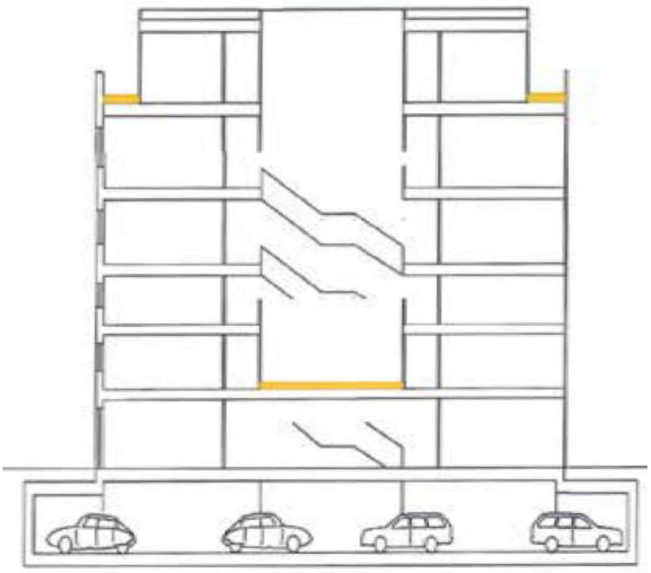
The ADFAMS-1 includes the area of the following:

- Roof Space, if available.
- Covered Voids.
- Closed passages between separate building parts.
- Any areas on the ground floor that are open sided, and covered, except for those covered with suspended ceiling or aesthetic protrusion.



شكل رقم (1): معيار قياس وحساب مساحة طابقية 1 (ADFAMS - 1)

Figure 1: Abu Dhabi Floor Area Measurement Standard 1 (ADFAMS-1)



شكل رقم (2): معيار قياس وحساب مساحة طابقية 1 (ADFAMS-1) ومعيار قياس وحساب مساحة طابقية– 2 (ADFAMS-2)

Figure 2 ADFAMS 1 and ADFAMS 2

Diagram No. (1) is Abu Dhabi Floor Area Measurement Standard-1 (ADFAMS), knowing that the Floor Area Measurement Standard -1 does not include the area of:

- Open light wells.
- Open external emergency stairs.
- Roof terrace.
- Diagram No. (2) is Abu Dhabi Floor Area Measurement Standard-1 (ADFAMS-1) and Abu Dhabi Floor Area Measurement Standard-2 (ADFAMS-2) where:

- Measurement of a floor area -1 (ADFAMS-1) does not include the roof terraces, which must be measured and recorded separately.
- The measurement of the floor area -2 (ADFAM-2) must include the floor area of the atrium on the lowest floor it exists in.

3.1.2. Abu Dhabi Floor Area Measurement 2 (ADFAMS-2)

- Abu Dhabi Floor Area Measurement 2 (ADFAMS-2) is the sum of areas for any floor in the building whose dimensions have been measured to the face or the inner diameter of the building's exterior walls and is recorded in the report for each building. This standard is known as Gross Internal Area.

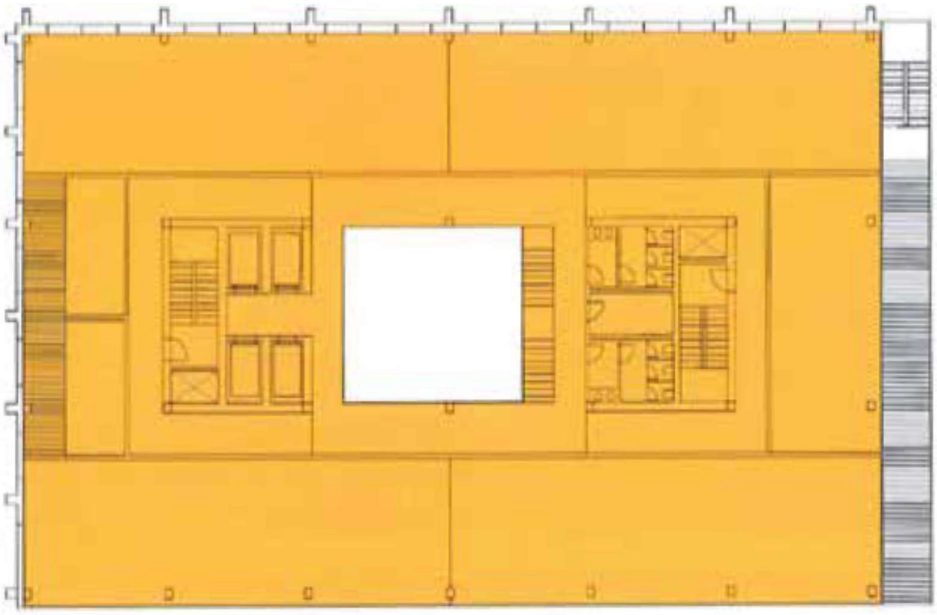
3.1.2.1. Usage

- ADFAMS-2 can be used by service managers to estimate cost and not for lease purposes, but it can be considered as a basis for calculation in this regard.

3.1.2.2. Details of ADFAMS-2

- The ADFAMS-2 for measuring and calculating floor area for buildings and real properties is the sum of internal areas for any floor in the real property, measured from the face of the inner wall of the prevailing exterior walls, while ignoring the columns or other building support systems that protrude to the inside from the wall.

- ADFAMS-2 includes all areas including interior walls, columns, halls, covered corridors, closed passages between separate buildings that are directly or indirectly usable. It also includes the area of the covered voids at the lower level, but it does not form part of the (ADFAMS-2) in the upper levels.



شكل رقم (3): معيار قياس وحساب مساحة طابقية (ADFAMS-2) للطابق الثاني

Figure 3: ADFAMS-2 for the 2nd floor

3.1.3. Abu Dhabi Floor Area Measurement 3 ADFAMS-3

- ADFAMS -3 floor area standard includes a set of categories, so that the total area of these categories in the floor equals the ADFAMS-2 for this floor.

3.1.3.1.Usage

Categories of ADFAMS-3 help users and service providers make direct comparison of floor areas among other different standards by adopting or developing software or computer applications to calculate floor areas.

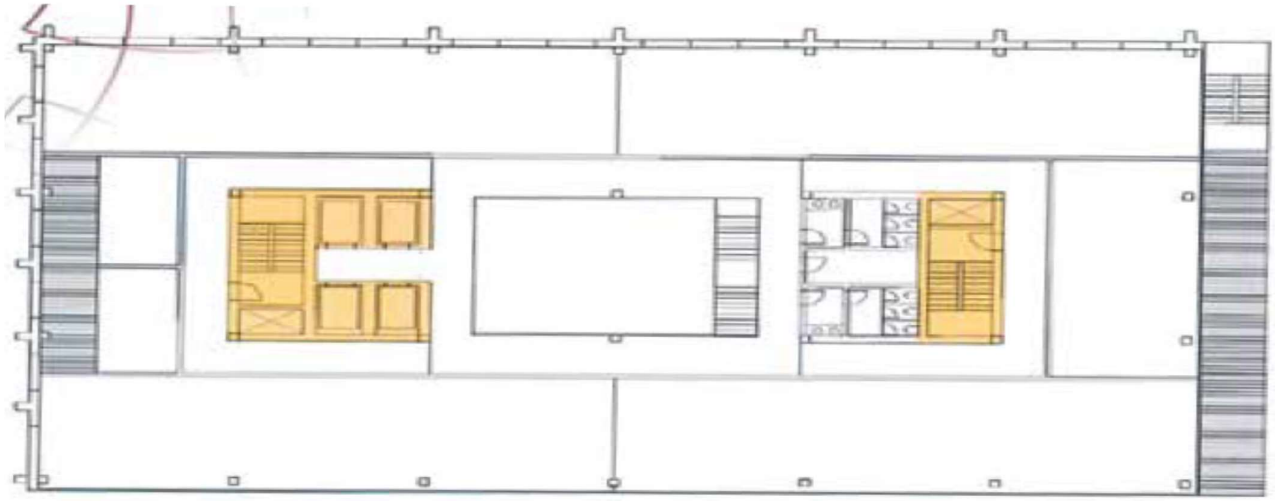
3.1.3.2. Detail of ADFAMS -3:

(ADFAMS -3), depends on measuring the categories in the building and calculating the area of each separately according to the sequence of categories from (a) to (f) individually. The building wall and columns are measured within the category without making any individual measurement for them. Categories are divided into their components or sub-categories to facilitate measurement. In this case, the sub-categories may need separate measurements. It is noteworthy that when comparisons are made across a number of markets, it is necessary to fully adopt the category by measuring all the sub-categories.

Category (Fa): Vertical Penetrations

Diagram No. 4 shows vertical penetrations including:

a) Stairs, elevators, and ducts.
b) Structural enclosing walls.
c) Non-structural enclosing walls.



شكل رقم (4) المنافذ الرأسية

Figure (4) Vertical penetrations

Category Fb: Technical services

Diagram No. (5) shows technical services which include:

a) Plant control rooms, elevator shaft , maintenance rooms
b) Structural enclosing walls.
c) Non-structural enclosing walls.
d) Columns therein

شكل رقم (5) الخدمات الفنية

Category Fc: Common Hygiene Area Category

Diagram No. 6 shows the common hygiene area category which includes:

a) Bathroom services, cleaning cabinets, hygiene lockers, laundry rooms, dressing rooms.
b) Structural enclosing walls.
c) Non-structural enclosing walls.
d) Columns therein

Figure (6) Common hygiene area category

Category Fd: Circulation Area

Diagrams No. (7 and 8) show circulation area which includes:

a) Emergency exit corridors, technical services, other circulation areas.
b) Structural enclosing walls.
c) Non-structural enclosing walls.
d) Columns therein.

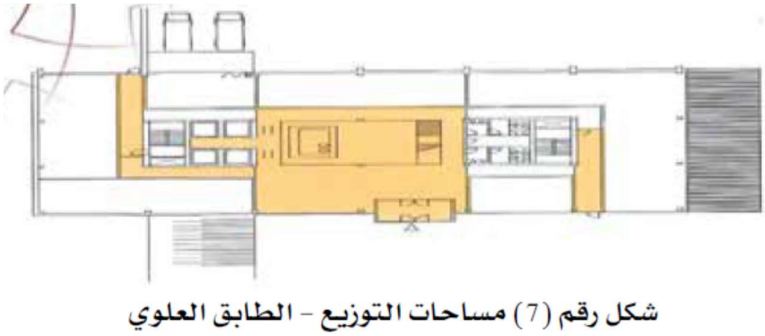


Figure (7) circulation area- upper floor

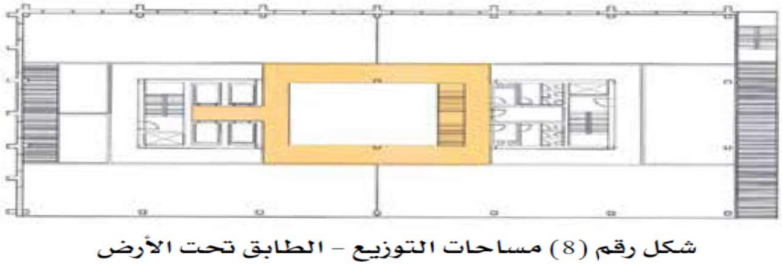


Figure (8) circulation area- underground floor

Category Fe: Workspace/ Amenities

Figure 9 and 10 show workspace/ amenities or gym areas which include all areas not included in categories (a), (b), (c) and (d):

a) Space for offices, sports and rest places (such as cafe)
b) Structural enclosing walls (closed).
c) Non-structural enclosing walls.
d) Columns therein.

Figure (9) workspace/ sports areas- ground floor

Figure (10) Workspace/ sports area- upper floor

In the event of the presence of enclosing walls common to two categories, the area that is occupied by walls shall either be combined into one of the categories in the sequence (a), (b), (c) or (d), or shall be equally divided between the relevant categories. In addition, some real estate markets necessitate that a distinction be made between structural and non- structural walls, but in the absence of such distinction, both must be merged and identified as walls only.
As for categories (b), (c) and (d), if the use is multi-purpose, then the area is to be attributed to the dominant use.
Common hygiene area is in category (c), but in the event of the provision of additional hygiene services related to the lessor in the areas leased for him, it may constitute a part of category (f).
Floor levels are recorded according to the practices and experiences of real estate market by identifying the main entrance and then scheduling the other floors accordingly.
The area of the reception on the entrance floor are either to be included in category (d) as part of category d (i), or to be placed separately within category (f).

The areas included in category (f), which are not available for direct use, can be placed differently, for example, the parking lot in the basement, which can be described by the number of parking spaces or through its capacity instead of the floor area. In this case, the total areas described in ADFAMS-3 the floor area -3 are not equal to the result from the standard for measuring and calculating the floor area -2 ADFAMS-2.
Places that are indirectly related to the use of the real estate can be described as additional or annexed places.
Areas of rest places are included in category (f), part (i), in case of exclusive use of a unit or that they fall within a unit, otherwise there should be a separate definition through category (d), part (i)
Balcony areas, ceiling entries, are not included in ADFAMS-1 , so they do not constitute a part of ADFAMS-2 nor ADFAMS-3. Therefore, they must be measured and announced separately.

3.2. Applications

The Department of Municipal Affairs adopted the use of the following applications when calculating the floor area. Therefore, to calculate the floor area, users and service providers must exclude some or all of the categories incorporated in ADFAMS-3 when calculating ADFAMS -2 according to the following:

3.2.1 Floor area -1, FA1

ADFAMS-2 is used to obtain Floor area -1(FA1) representing Gross Useable Floor Areas.

FA1 = ADFAMS-2 – Category Fa.

3.2.2 Floor area-2 (FA-2)

ADFAMS-2 is used to obtain Floor area-2 (FA2) representing the Net Floor Area for Work/ Sports/ Amenities.

FA2 = ADFAMS-2 – (Category Fa + Category Fb + Category Fc + Category Fd).

3.2.3 Floor area-3 (FA3)

ADFAMS2 is used to obtain Floor area-3 (FA3) which represents the Net Work/ Amenities, and Circulation Net Floor Area) and the areas of structural walls and internal columns are excluded from this area .

FA3 = ADFAMS-2 - (Category Fa + Category Fb + Category Fc + sub- Categories Fd (ii) and Fd (iv) + sub-category Fe (ii) and Fe (iv).

3.2.4. Floor area-4 (FA 4) (4)

ADFAMS2 is used to obtain Floor area 4 (FA4) representing Work/ Amenities/ and Common Hygiene Net Floor Area:

FA4=ADFAMS-2 – (Category Fa + Category Fb + sub Category Fc (ii) + Category Fd)

It is also possible to directly calculate Floor area 2 (Fa2) and Floor area 3 (Fa 3) by measuring category (f) if other categories and their sub- categories are considered as part of the standard used.

Part 4: Standards for Measuring and Calculating Land Areas and Built Area for Villas and Houses

Land areas for villas and houses are measured from the external façade of the exterior walls and are matched with their conformity with the dimensions and area approved and registered for the land plot. In case of adjacent villas and houses in cities, the area of the land is measured and calculated from the middle of the common wall.

4.1. Built area for villas and houses

To measure and calculate the built areas for villas and urban houses, the following standards are adopted:

(a) Built area measurement standard (ADBAMS-1)

(b) Built area measurement standard-2 (ADBAMS-2)
(c) Built area measurement standard-3 (ADBAMS-3)

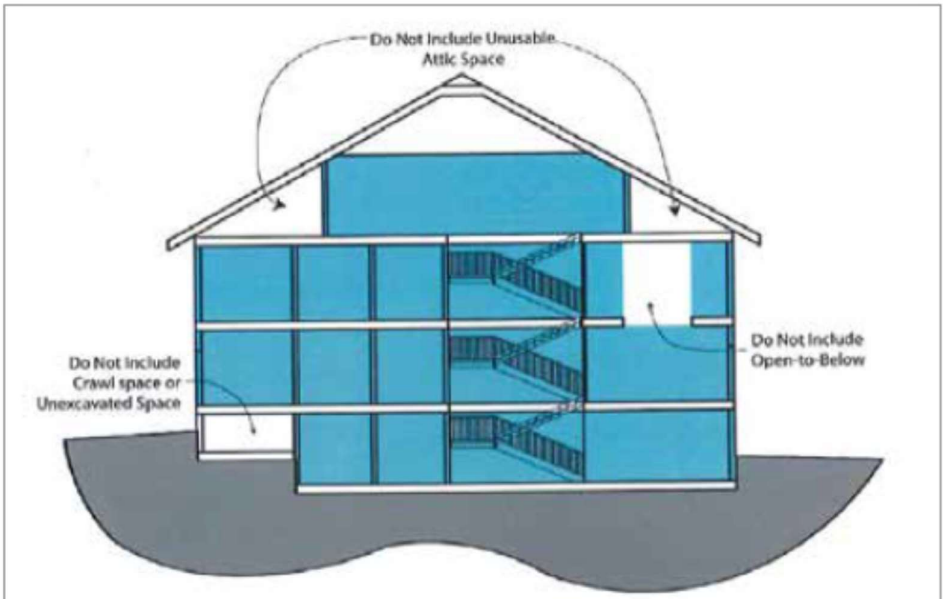


Figure 11: villa diagram

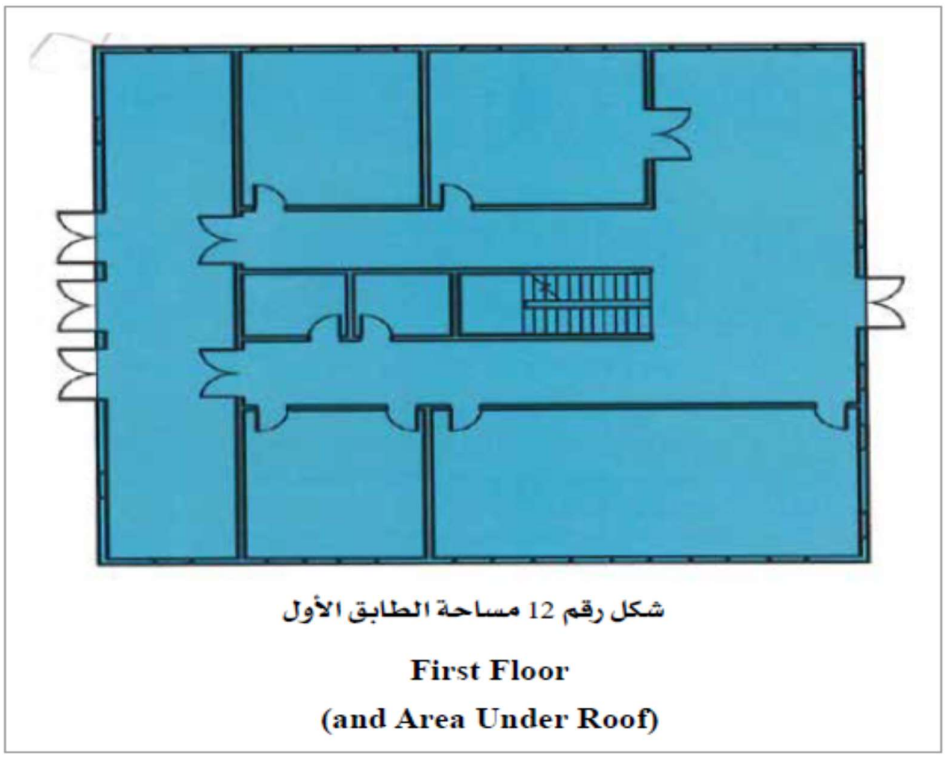
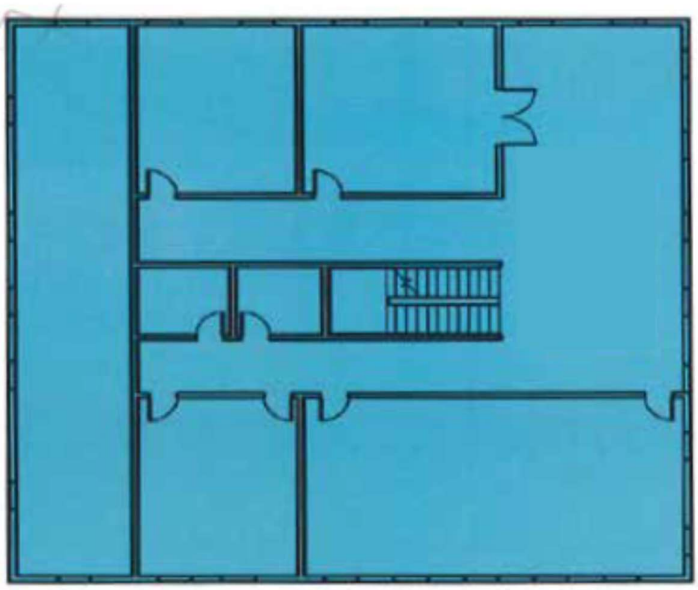


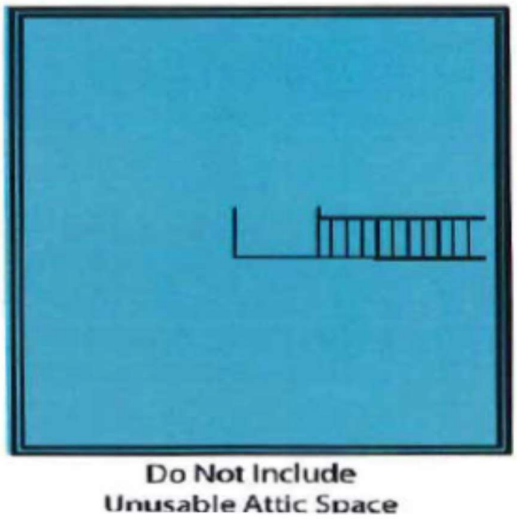
Figure No. 12: First Floor (and Area Under Roof)



Second Floor

شكل رقم 13 مساحة الطابق الثاني - تستثنى الفضاءات من حساب المساحة.

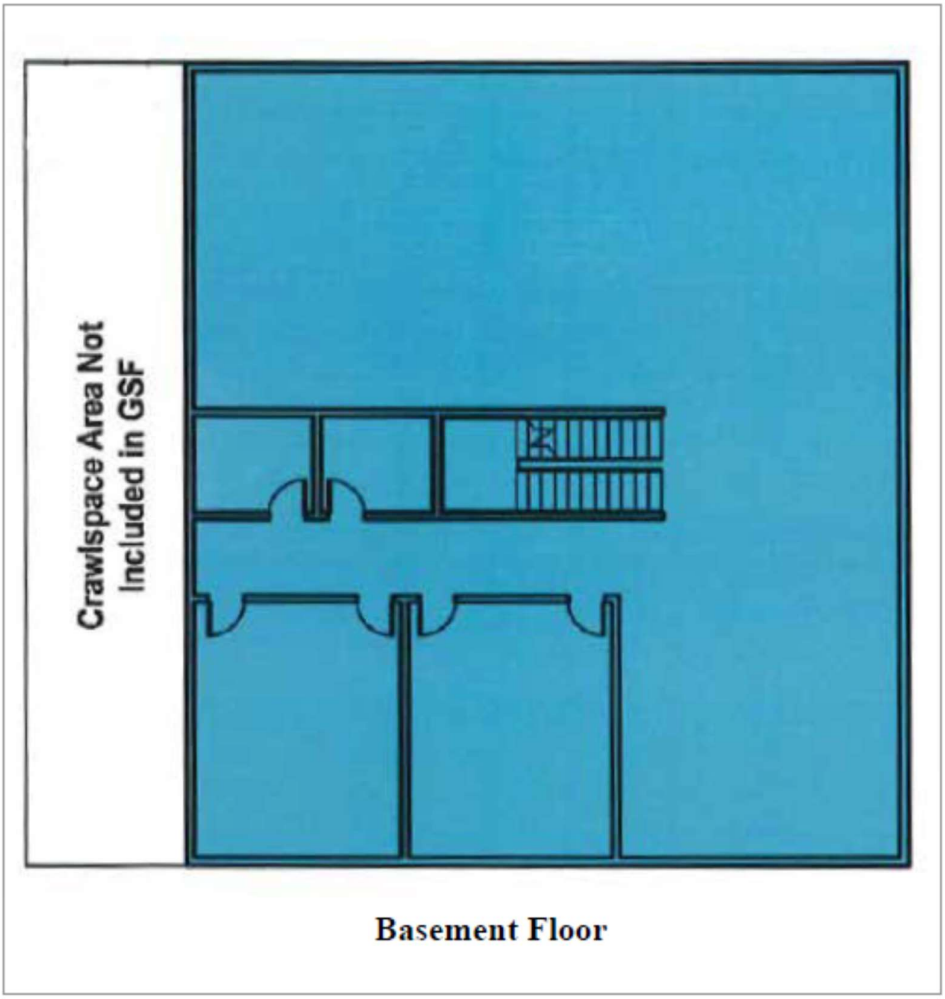
Figure 13: Area of second floor- Spaces are excluded from calculating the area.



Third Floor

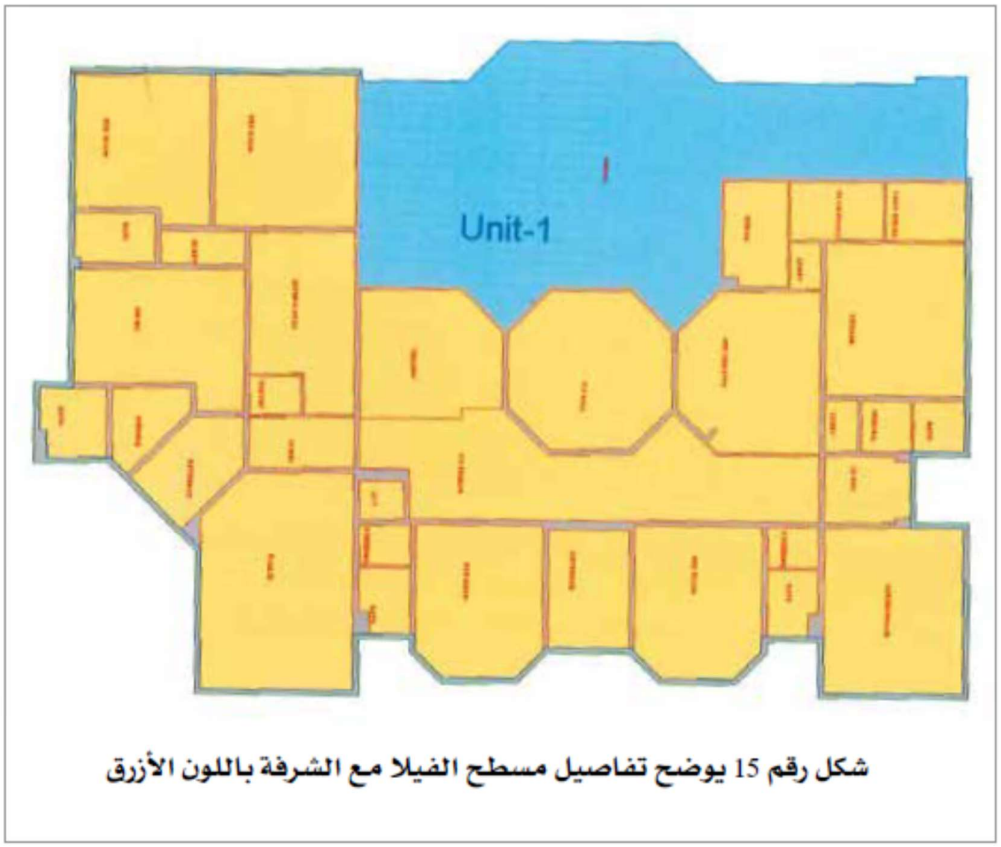
شكل رقم 14 مساحة الطابق العلوي تستثنى المساحات غير المستخدمة من حساب المساحة

Figure No. 14 Third Floor. Unusable Attic spaces are excluded from calculating the area.



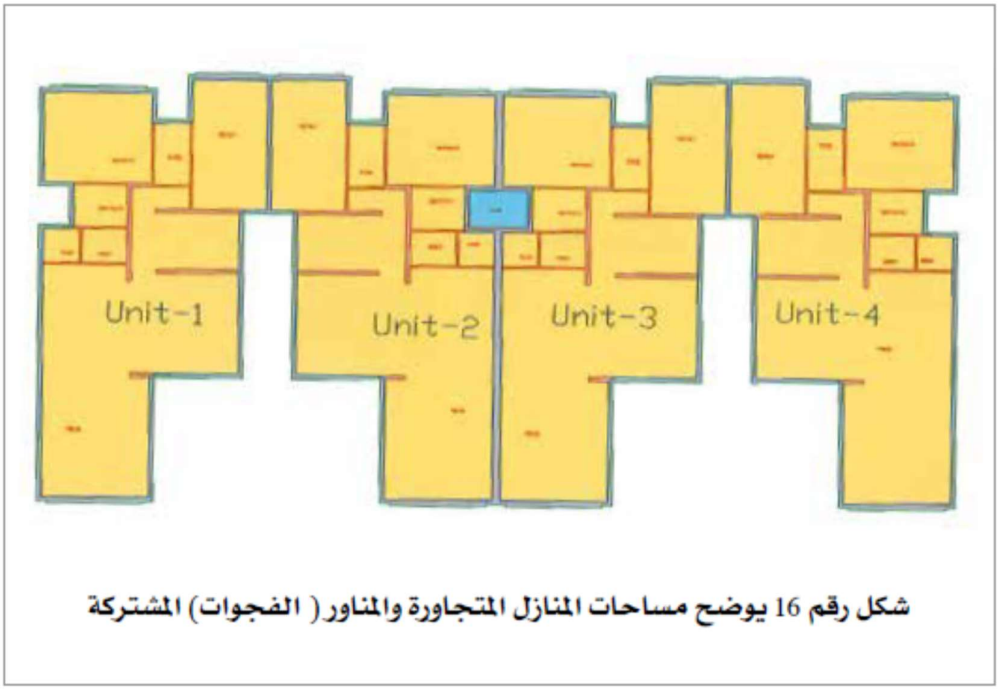
4.1.1 Built Area Measurement Standard-1 (ADBAMS-1)

ADBAMS-1 is the sum of areas of a villa, or a house calculated by measuring the dimensions of the external facades of the building body and are written down in the building report. In case the building is more than one floor, the area of each floor shall be calculated from the measurements of its external dimensions. In the case of adjacent villas and houses, the building area is calculated from the midline of the common walls. This standard is known as the Gross External Built Area.



شكل رقم 15 يوضح تفاصيل مسطح الفيلا مع الشرفة باللون الأزرق

Figure (15) shows the details of villa footprint with the balcony in blue.



شكل رقم 16 يوضح مساحات المنازل المتجاورة والمناور (الفجوات) المشتركة

Figure (16) shows the area of neighboring houses, external voids.

4.1.1.1. Usage

Built Area Measurement Standard -1 (ADBAMS-1) can be used for planning purposes or by contractors or consultants to estimate the cost of implementing standard plans.

4.1.1.2. Built Area Measurement Standard-1 (ADBAMS-1)

The Built Area Measurement Standard (ADBAMS-1) for villas, houses, and real properties is the sum of the external areas of any floor in the real estate, measured from the face of the dominant exterior wall (excluding elements of decorative protrusions). In the case of halls (corridors, porches, or vestibules) covered with ceilings and located on the ground floor and the floors above it, the extension of the external façade of the dominant wall adjacent to it is considered an external façade for it in calculating ADBAMS -1.

The external area of basements is calculated through the extension of the exterior level of the outer wall boundaries on the ground floor to the bottom, or by measurement if the extension of the basement differs from the building footprint.

- Covered Voids
- Closed passages between separate building parts.

4.1.2 Built Area Measurement Standard-2 (ADBAMS-2)

Built Area Measurement Standard-2 (ADBAMS-2) is the sum of the areas of any floor of a villa or a house whose dimensions have been measured to the inner face of the building's exterior walls and is noted in the report of the villa or house. This standard is known as Gross Internal Built Area.

4.1.2.1. Usage

Built Area Measurement Standard -2 (ADBAMS-2) can be used by service managers, and to estimate cost, and not for lease purposes, but it may be considered as a basis for calculation in this regard.

4.1.2.2. Details of Built Area Measurement Standard (ADBAMS-2)

The Built Area Measurement Standard (ADBAMS-2) for villas and houses, is the sum of the internal areas for any floor in the real estate, measured from the face of the inner wall of the prevailing exterior walls, while ignoring the columns or other building support systems that protrude to the inside from the wall

The Built Area Measurement Standard-2 (ADBAMS-2) incorporates all areas including interior walls, columns, halls, covered corridors, closed passages between separate buildings that are directly or indirectly usable. It also includes the area of the covered voids at the lower level, but it does not form part of the Built Area-2 (ADBAMS-2) in the upper levels.

4.1.3 Built Area Measurement Standard-3 (ADBAMS-3)

ADBAMS-3 includes a set of categories, so that the total sum of areas of these categories in the floor equals ADBAMS-2 for this floor.

4.1.3.1. Usage

Categories of Built Area -3 help users and service providers make direct comparison of built areas among other different standards by adopting or developing software or computer applications for calculating areas.

4.1.3.2. Details of Built Area Measurement Standard ADBAMS-3

Built Area Measurement Standard-3 (ADBAMS-3) depends on measuring the categories in the villa or house and calculating the area of each separately according to the sequence of categories from (a) to (f); the building wall and internal columns are measured as part of the category without making any individual measurement for it. Categories are divided into their components or sub-categories to facilitate measurement. In this case, the sub- categories may need separate measurements. Note that when making comparisons across a number of markets, it is necessary to fully adopt the category by measuring all its sub-categories.

Category (A): Unattached Building Services (Category Ba): It includes external lounges kitchens, and external service rooms.

Category (B): Vertical Penetrations, (Category Bb): It includes porches and ducts.

Category (C): Balconies (Category Bc): It includes balconies and open roofs.

Category D: Open – to- sky voids (Category Bd): It includes the internal stairs and open-to-sky voids above some of the rooms and halls in the basement open to the first upper floor.

Category (f): External Voids (Category Be): It includes the common and uncommon external void openings.

4.2. Applications

4.2.1 Built Area (BA)

The Department of Municipal Affairs adopted the following rules in calculating the built area for villas and houses:

1. Areas of porches and ducts are Porches are not included in the Built Area.
2. The area of the staircase is calculated only with the ground floor and ignored in the upper floors.
3. Voids are not calculated in the Built Area in upper floors.

Accordingly, to calculate the Built Area, users and service providers must exclude some of the categories included in ADBAMS-3 when calculating Built Area 2 (BA2). For example, to calculate BA1 and BA2, the area is calculated as follows:

4.2.1.1 Gross Built Area: It includes the gross built area calculated from ADBAMS-1 plus lounges and external service rooms if any.

Gross Built Area (GBA1) = ADBAMS-1 + Category A

4.2.1.2 (Used) Built Area-1: It includes the internal built area added to it the internal areas of lounges, and external servant rooms except for spaces, balconies, open roofs, and open-to-sky voids.
BA1= ADBAMS-2 + Category Ba – Category Bd – Category Be

4.2.1.3 (Used) Built Area-2
It includes the (used) Built Area-1 plus areas of balconies and open roofs.
BA2 = ADBAMS-2 + Category Ba + Category Bc – Category Bd – Category Be

Part 5: Standards for Measuring and Calculating Unit Area.

5.1 Measuring Unit Area

The area of all types of units, be they residential, commercial, and offices are calculated as follows:

1. Gross external area: It is measured or calculated from the dimensions of the external facades of the unit outer walls. . In the case of adjacent units, the dimensions are measured from the midline of the common wall.
2. Gross internal area: It is measured or calculated from the dimensions of the internal facades of the building's outer walls and from the midline of the common interior walls.

3. In case of commercial units or offices where the ceiling height exceeds the standard heights, the useable volumetric space is calculated by measuring the height from the ceiling midline to the floor level of the unit.

5.2 Standards for calculating and measuring the areas of real estate units:

To measure and calculate unit areas, the following standards are adopted:
Built Area Measurement Standard-1 (ADBAMS-1)
Built Area Measurement Standard-2 (ADBAMS-2)
Built Area Measurement Standard-3 (ADBAMS-3)

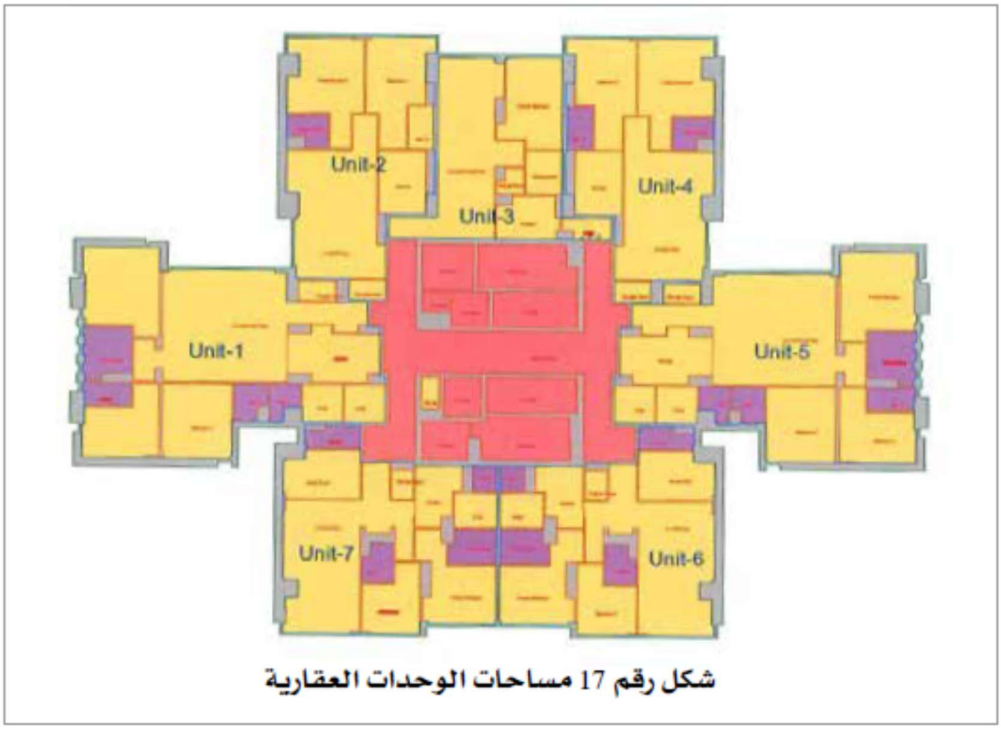


Figure No. 17 Areas of real estate units

5.2.1. Unit Area Measurement Standard-1 (ADUAMS-1)

Abu Dhabi Unit Area Measurement Standard-1 (ADUAMS-1) is the sum of areas of the real estate unit where the dimensions of the external facades of the building's outer walls defined for it, and from the midline of the common walls. It is written in the unit's report. In case the unit is more than one floor, the area of each floor shall be calculated from measuring its dimensions. In the case of adjacent units, the unit area is calculated from the midline of the common walls. This standard is known as (Gross External Unit Area).

5.2.1.1. Usage

ADUAMS-1 can be used for planning purposes or by contractors or consultants to estimate the cost of implementing standard plans.

5.2.1.2. Details of ADUAMS-1

The Unit Area Measurement Standard (ADUAMS-1) for real estate units is the sum of the external areas of any floor in the real estate, measured from the face of the dominant outer exterior wall (excluding elements of decorative protrusions). In the case of halls (corridors, porches, or vestibules) covered with ceilings and located on the ground floor and the floors above it, the extension of the external façade of the dominant wall adjacent to it is considered an external façade for it in calculating Unit Area measurement-1. This standard is known as the gross external area or (Gross External Unit Area).

5.2.2. Unit Area Measurement Standard-2 (ADUAMS-2)

It is the sum of areas of any floor in a unit whose dimensions have been measured to the inner face of the external walls of the building defined for it and from the midline of the common walls and is recorded in the unit's report. This standard is known as gross internal area or (Gross Internal Unit Area).

5.2.2.1 Usage

The Unit Area Measurement Standard-2 (ADUAMS-2) can be used by service managers, to estimate costs, and it can be considered as a basis for calculation for lease or sale purposes.

5.2.2.2 Details of Unit Area Measurement Standard (ADUAMS-2)

The Unit Area Measurement Standard (ADUAMS-2) for real estate units is the sum of the internal areas of any floor in the real estate unit, measured from the inner face of the dominant exterior walls of the building or the midline of the common inner walls, ignoring columns or other building-support systems that protrudes to the inside from the wall ADUAMS -2 incorporates all areas including interior walls of the unit, columns, halls, covered corridors, porches and closed passages between separate rooms that are useable either directly or indirectly. It also includes the area of the covered voids at the lower level, but it does not form part of Unit Area -2 (ADUAMS-2) in the upper levels.

5.2.3. Unit Area Measurement Standard (ADUAMS-3)

Unit Area Measurement Standard (ADUAMS-3) incorporates a group of categories, so that the sum of areas of these categories in the unit equals ADUAMS-2.

5.2.3.1. Usage

Categories of Unit Area-3 help users and service providers make a direct comparison of Built Areas among other different standards by adopting or developing software or computer applications for calculating areas.

5.2.3.2.Details of Unit Area Measurement Standard-3 (ADUAMS-3):

ADUAMS-3 depends on measuring the categories in the real estate unit and calculating the area of each separately according to the sequence of categories from (a) to (d); the building wall and internal columns are measured as part of the category without making any individual measurement for it. Categories are divided into their components or sub-categories to facilitate measurement. In this case, the sub-categories may need separate measurements. Note that when making comparisons across a number of markets, it is necessary to fully adopt the category by measuring all its sub-categories.

Category (Ua):Unattached Services. It includes balconies and open roofs.
Category (Ub): voids : It includes the interior stairs and voids above some of the rooms and halls in the basement that are open to the upper floor.
Category (Uc): Skylights: It includes the internal voids or the unit's share of the joint external voids.
Category (Ud): Rooms, passages, and facilities: It includes all rooms, corridors, halls, and facilities of the real estate unit.

5.3. Applications

5.3.1. Unit Area (UA)

The Department of Municipal Affairs adopted the following rules in calculating the unit area:

- The area of the staircase is included in the ground floor only and ignored in upper floors.
- Voids are not included as part of the unit area in the upper floors.
- External skylights are not included in the unit area.

Accordingly, to calculate the Unit Area, users and service providers must exclude some of the categories included in ADUAMS-3 when calculating Unit Area as follows:

5.3.1.1. Gross External Unit Area (GEUA): It includes the gross unit area, calculated from ADUAMS-1 plus Category Ua and Uc. Where a common skylight is present, its area is divided among the units sharing it.

Gross External Unit Area (GEUA) = ADUAMS-1 + Category Ua + Category Uc

5.3.1.2 Used Unit Area-1 (UAU-1)

It includes the internal unit area excluding voids, and **stairs in the upper floors and balconies and is calculated from ADUAMS-2.**

UAU-1 = ADUAMS-2 – Category Ub –Category Uc

5.3.1.3 Used Unit Area-2 (UAU-2): It includes Used Unit Area-1 (UAU-1) plus the areas of balconies and open roofs.

UAU-2 = ADUAMS-2 + Category Ua - Category Uc – Category Ub