### Individual and shared properties in the Condominium: description, 3 D representation and updating

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#### SUMMARY

The cadastral registration of buildings and their own height are fully represented in the Italian cadastral system by a general plan, called E.P., and by plans drawings.

While plans drawings describe the parts of the building that have a stand-alone income and individual property, the E.P (planimetry paper) identifies and shows, not only the portion of the building individually owned, but also the shared goods, that can be censussed or not. Both individual and shared properties must be represented in a cadastral way.

For each construction, Private Surveyors introduce the building shape on the Land Cadastre map and then draw up documents for the cadastral insertion that must be deposited in the Building Cadastre Register.

Planimetry papers partly represent in a graphic way all the u.i. position in the building and their consistency, whilst plans drawings represent the consistency of each individual property in a graphic exhaustive way

The height piling is thus guaranteed for basements and upper floors both vertically and horizontally.

Should further repairs or alterations carried out on the building change its shape, its internal or external layout or its consistency, planimetry papers must be updated.

Should the alteration be related to the shared properties of the building, planimetry papers must be updated too.

This procedure ensures that the cadastral database corresponds exactly to what has been built Before stipulating any selling act, it will be necessary to check the correspondence between the u.i. involved in the act and the planimetry papers in the cadastral database and, if necessary, to update them in order to have the property being transferred described both graphically and in the database in an exact way.

## Individual and shared properties in the Condominium: description, 3 D representation and updating

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We call condominium a particular common property that occurs when a building, made up of multiple U.I., belongs to several owners

This typology, one of the commonest in the Italian building setting of highly populated cities, needs accurate description and representation in order to understand which parts are in individual property (houses, garages, etc.) and which are in sharing property (stairs, passages, etc.)

This description must be carried out in order to identify the real estate consistency and the holders' rights and also to make it possible to divide the expenses among the owners in a correct way.

Both individual and shared properties must be represented in a cadastral way.

Those portions are called shared goods, and they can be censussed, if they have a standalone income, (for example a shared storehouse in a block of flats) or not censussed, if they don't have a stand-alone income (stairs).

Despite the fact that shared properties generally represent building portions that are in service of individual properties, they have to be accurately descripted in both planimetric and altimetric ways.

This description must be accurate because shared properties may affect the tenure that each owner has on his own property

To understand this aspect, you should think of a portion of a balcony that, incorrectly described, might not guarantee easy access to a flat or might represent a right of way rather than the exclusive right of the balcony.

## The technical operations for the compilation of the above mentioned document are as it follows

- 1. outside survey of the entire building and its positioning on the cadastral map.
- 2. inside survey of the entire building and following data transposition on a file. The survey reports the inside space definition; the rooms, the openings, and everything that is important to describe the flat. Also gardens, courtyards, and everything that is individually owned must be surveyed. The file thus obtained, corresponding to precise specifications, will be uploaded into the doc.fa software, so the plan drawing will be an integral part of it too.
- 3. New building subdivision in different u.i. (that will be the stand-alone parts of the block of flats), general plan drawing and plan drafting (one for each u.i.). The general plan, called E.P. (planimetry paper) shows in a graphic mode all the 3-D u.i. position in the building. Each portion is described by a unique identifier that must be

indicated in the cadastral database and in the property deeds in order to describe exactly which part of the building is owned

# After the graphical part is integrated in the software, it will be necessary to compile the textual an descripting part of the building, as it follows:

- 1. A "D" model, reporting the details of the whole building like identification, ownership, address, and so on
- 2. A "N1 part 1" model, reporting the general building description: structure, equipments, aspects, shared parts (stairs, passages)
- 3. A few "N1 part 2" models (one for each u.i.) showing the metric and descriptive features.

In this model the data for a taxable base on which revenues are calculated, are computed and shown.

Technical, administrative and census data are inserted in the database by a private surveyor who draws up a document, called doc.fa (documento fabbricati = buildings document).

This document will be transmitted to the Territory Agency (building cadastre) through the internet for the validation and the input in the cadastral database.

The cadastral registration represents the last step of the building process; in fact, it must be accomplished within a month after the construction works are finished.

The U.I. representation in the three-dimensional space is guaranteed by the reference of the unit level (building floor) both in the plan drawings and in the planimetry paper. The absolute elevation from an hypotetic plan 0 (ground floor) is not indicated. What is represented is the relative position of the building portion in the 3d structure shape.

The choice of showing the relative height instead of the absolute height derives from the consideration that every single U.I. lies on a specific floor in the building and this relative height is more significant then the altimetric absolute height, that can change after outer layout works or enlargements.

With this methodology the height piling is thus guaranteed for basements and upper floors both vertically and horizontally.

This is a 2D representation of the three-dimensional space, since the layout of the U.I. is not visible on a 3D model but it is represented on separate layers that show the floor of the above mentioned building. The decision of describing the position of the U.I. on a two-dimensional space on a paper medium offers a less detailed description of the building, but it allows an easy recognition also to the people not in charge, because there is no need of any software to be shown For this reason, although this mode of representation was started almost a century ago, it has never needed to be transformed into a 3D model and is still considered the best way to show cadastral data and plans.

The whole model is edited by means of a free software distributed by the Territory Agency to each land surveyor of the area.

At the end of the elaboration the software generates a file that is transmitted through the internet to the Agency that checks, controls and then proceeds to the inclusion in the national database and sends an electronic receipt to the surveyor.

The entire process is fully computerized and the surveyor doesn't have to get personally in contact with the Cadastral Office

In occasion of works that modify the building or the u.i. outer shape or the inside arrangement it will be necessary to update the cadastral database both for the descriptive and the graphical parts.

The type of updating to be performed depends on the type of alteration made In particular:

- Should the alterations made change the shape of the building, it will be necessary first to update the cadastral map and afterwards to update the cadastral database
- If the alterations done don't change the shape of the building it will be necessary to update the cadastral database only
- In every case where shared properties are modified, it will be necessary to update the planimetry paper

This continuous updating guarantees that what is shown in the cadastral database represents precisely what has been built.

Before transferring notary's deeds of ownership it is needed to check the correspondence between the u.i. involved in the act and the planimetries in the cadastral database and, if necessary to update them in order to have the u.i. exactly described both graphically and in the cadastral database.

Although this procedure may seem, at a first glance, as an increase in operations, the same guarantees that the property transferred is congruent with the building regulation and the cadastral updating, thus preserving both the seller and the purchaser.

The buyer is sure that the good purchased is fully in accordance with the law while the seller is protected by any defect that may arise after the transaction.

#### CONTACTS

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