




# usBIM.maint

## User Guide for processing and importing floor plans

	usBIM.maint – Data Import Guide		Ed.	1
			Rev.	3
			Date	23/10/2023

## Guide for DWG floor plans import into usBIM.maint

### 1 Introduction

This paragraph aims to illustrate the guidelines to be implemented for the processing of files DWG for the purposes of their import into usBIM.maint.

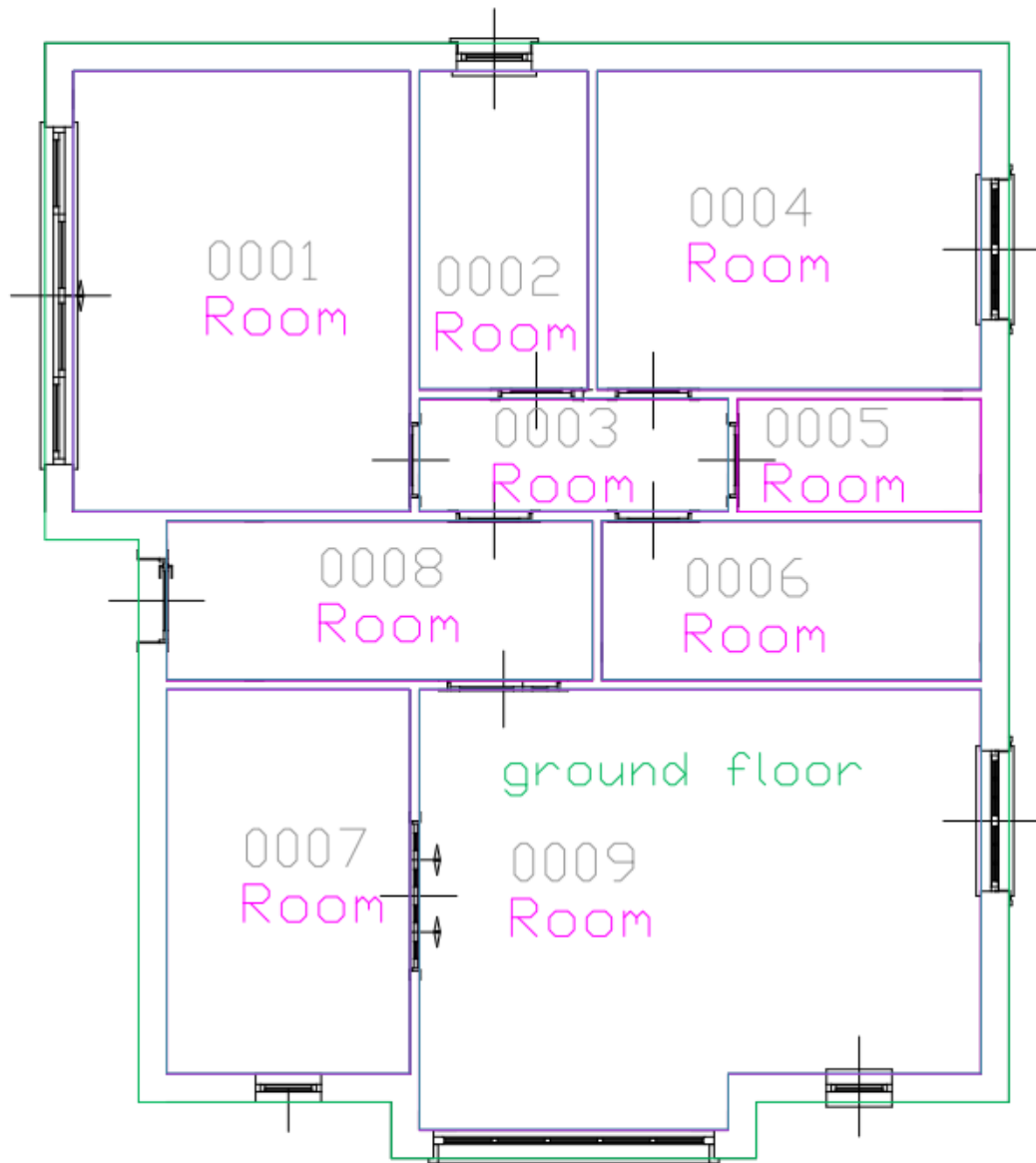
#### 1.1 Preparation of a floor plan file in the DWG format


The usBIM.maint information system allows the insertion and modification of CAD floor plans of the properties by uploading a DWG file for each floor with all the information floor plans relating to the functional units and compartments.

The CAD blocks described below refer to the file "*CAD\_Blocks\_Library\_v1.0.dwg*" provided with this document.

In order to be correctly interpreted by the usBIM.maint system, the DWG file must comply with the following *guidelines*:

1. The DWG files of the Floor Plans of the individual Buildings must be produced individually for each individual floor and must be superimposable;
2. The unit of measurement must be 1 unit corresponding to 1 meter;
3. The various **homogeneous Functional Areas**, such as departments, sectors, cost centres, etc., must be perimetered by polylines closed within a layer called "**Macro**". In the same Layer, within each polyline, a "FUNCTIONALUNIT" CAD BLOCK must be inserted (provided in the attached library). It is possible to indicate the intended use to be displayed on the Information System; the ratio between polylines on the "Macro" layer and FUNCTIONALUNIT blocks must be 1:1, therefore for each polyline only 1 block can be inserted.
4. Spaces such as "Rooms", "Environments", etc., must be perimetered by polylines enclosed within a layer called "**ROOMS**". In this Layer and within the polyline of the compartment, a CAD BLOCK of the **ROOM** type must be inserted (provided in the attached library) and inside "**DESIGNUSE**" and "**CODE\_ROOM**" properties it is possible to indicate, respectively, the intended use of the compartment to be shown on the Information System and a user code to distinguish it. The ratio between polylines on the "ROOMS" layer and ROOM blocks must be 1:1, therefore only one block must be inserted for each polyline.
5. The polylines that perimeter Spans and Functional Units must not be formed by "*arcs*" but only by **segments**. When it will be necessary to perimeter arch architectural structures, it will be necessary to draw polylines formed by small segments that approximate the arch as much as possible.
6. Each single polyline of the "ROOM" type describes a homogeneous environment, therefore a polyline of this type on the "ROOMS" layer cannot contain other polylines of the same type. More generally, **the polylines on the "ROOMS" layer must not overlap**.
7. All "ROOM" type polylines must be contained in a "macro" type polyline. **The polylines on the "Macro" layer must not overlap**.
8. A plan consisting of 1 Functional Unit is shown below, by way of example, "Ground Floor" (green polyline) comprising 5 rooms (magenta polylines).

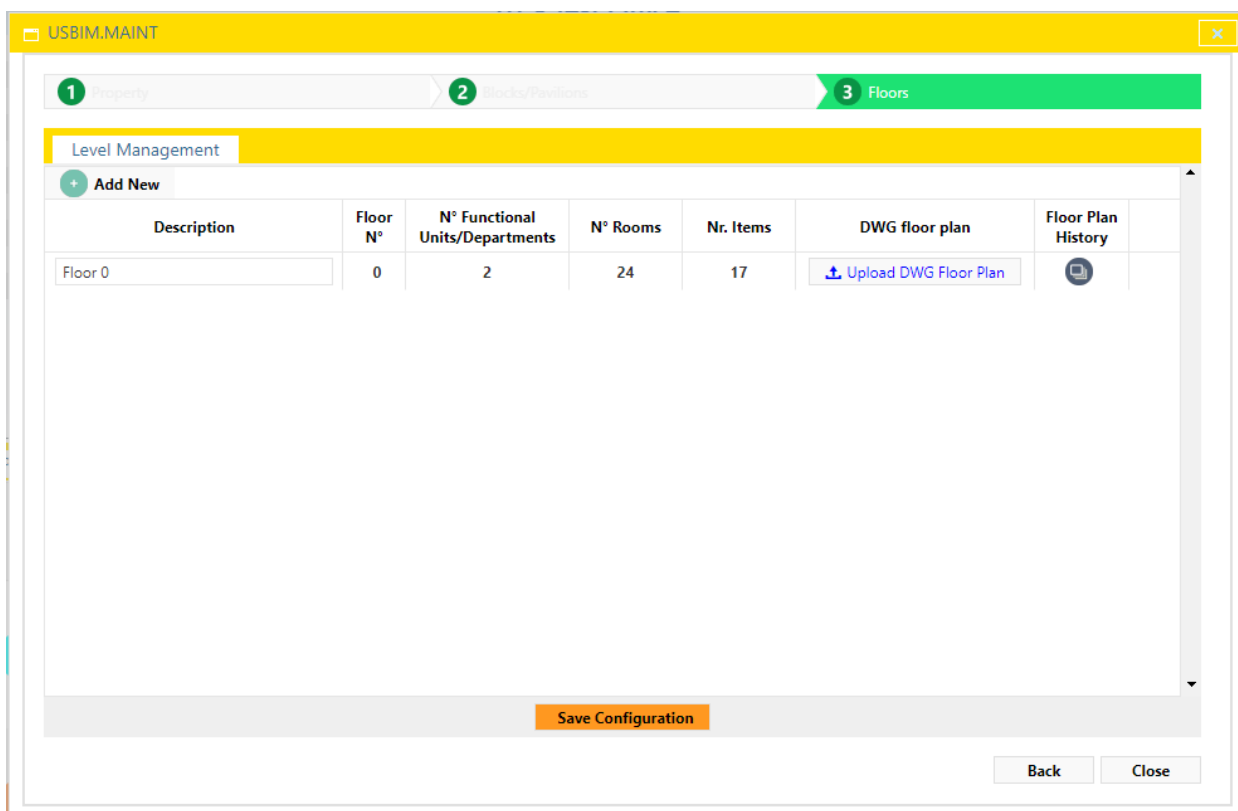


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## 2 Using the CAD\_Blocks\_Library

In general, to use the library on an existing floor plan, the following steps must be followed:

1. Open your dwg file and file " **CAD\_Blocks\_Library\_v1.0.dwg** "
2. Select the two text blocks "Ground Floor" and "0001 Compartment"
3. Copy and paste them into your DWG file
4. Select and delete all existing blocks type "001 bed..." etc. and replace them with the newly imported block "001 Compartment".
5. With the edit text function, update the information relating to the individual compartments, in particular for the **DESIGNUSE**
6. Make sure, before saving, that you have structured the DWG as described in the previous paragraph.
7. Save File
8. Open usBIM.maint and enter the master section to modify an existing property or create a property from scratch.
9. In the Property Data Management Plans window, you can now load the floor plan.




USBIM.MAINT

1 Property 2 Blocks/Pavilions 3 Floors

Level Management

+ Add New

Description	Floor N°	N° Functional Units/Departments	N° Rooms	Nr. Items	DWG floor plan	Floor Plan History
Floor 0	0	2	24	17	<a href="#">Upload DWG Floor Plan</a>	

Save Configuration

Back Close

10. If the data entry phase has been carried out correctly, the following screen will appear.

UPLOADING FLOOR PLANS

Upload DWG file

Uploaded file analysis

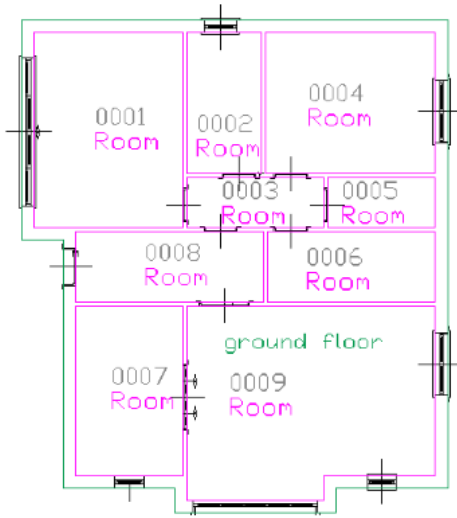
File Uploaded: **TEST FLOOR 0.dwg**

Functional Units Detected: **1**

Rooms detected: **8**

Objects Detected: **0**

Floor Plan Preview



Import

Cancel