



WELCOME to the latest version of **dimensionX** 3.01 which has many major changes & enhancements from version 2.82.

PREMIUM dimensionX users please READ:

10. *MEASURING from DWF files EXPORTED from REVIT* of this document as well as the "How 2 create 3D Revit DWF dimXv3.00.Pdf" document in the Tutorials folder.

It has changed from the ver 2.82 steps.

STEP-BY-STEP:

This is a short "step-by-step" guide to Setting up and Starting up a new Project in **dimX**

RECOMMENDED DEFAULT Settings APPLY to all computers when you first install **dimX** on that computer

PLEASE NOTE:

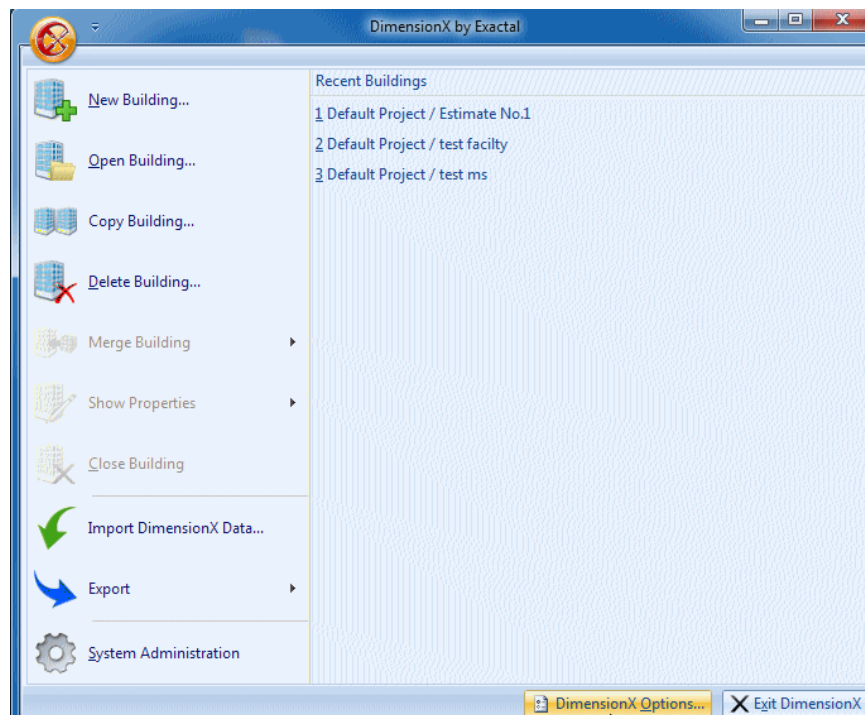
It is absolutely essential that each of the tutorials in **dimX** are diligently completed. These notes DO NOT in any way supercede or replace the necessity to DO the tutorials

DEFAULT SETTINGS before starting

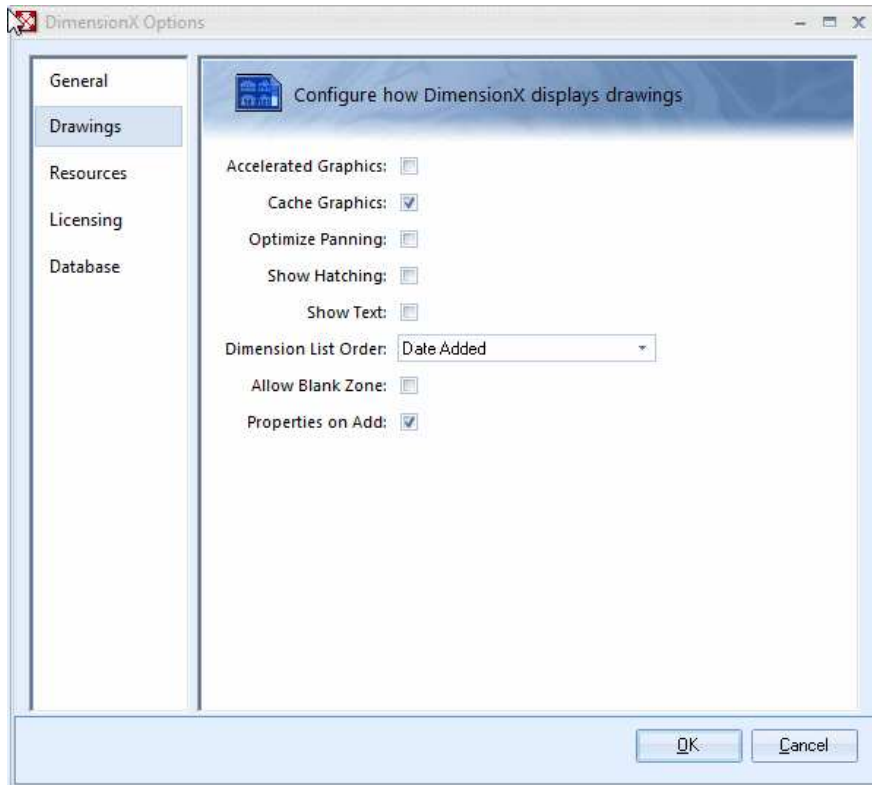
- Open **dimX** and when the list of projects appears on the screen, press [**ESC**] to close the list

- Now click on the **dimX** APP button which is  :

and then select the DimensionX Options in the bottom right



which opens the Options form. **Select** the Drawings options as shown below:



Accelerated Graphics:

- On Vista & 7 computers **DO NOT TICK**
- On any earlier version of Windows **TICK**

- **Cache Drawings:** **TICK** this option

- **Optimize Panning:** leave **UNTICKED**

- **Show Hatching:** leave **UNTICKED**

- **Show Text:** leave **UNTICKED**

– these 2 Show Options use memory and if required, can be turned on once the drawing is loaded

- **Dimension List Order:** change this to **Date Added** so dims are displayed “as measured”

- **Use Blank Zones:** **UNTICK** this option

– ZONES should always be used to measure so that all data in WinQS is in Locations.

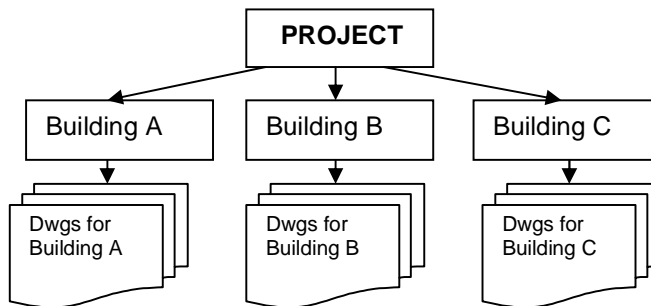
- **Properties on Add** **TICK** this option

this will pop up the dimension's properties form after each dimension is completed allowing one to type in your own reference & select the **CORRECT Zone** of a dimension. This is useful as it can prevent measurements being made by accident when just clicking the mouse.

The POP up can be switched OFF while measuring from within **dimX** by just selecting the dimensionX Options as described above. (while measuring manual Counts for example)

These settings become the “default” when creating a new **dimX** project and building

1. ADDING A NEW PROJECT & ZONES:



The first thing you need to do is create a **PROJECT**. Each Project may have more than one BUILDING and each Building may have multiple drawings.

- Open **dimX** and when the list of buildings appears on the screen, press [Esc] to close it
- Now click on the **dimX** APP button
- select the System Administration option
- Insert a NEW Project here...

Project Name: A simple name here to describe the Project

Project Code: Not a compulsory field but can match your office project code.

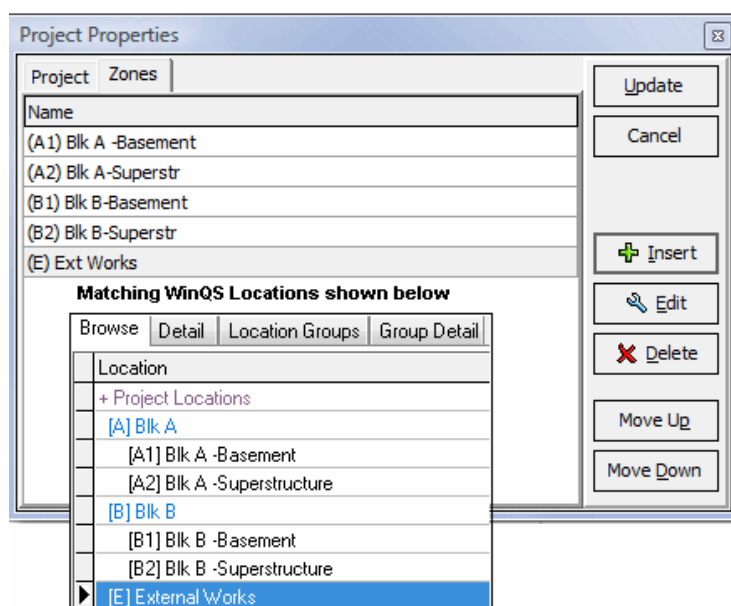
Location: This is NOT the same as a **WinQS** location – we suggest you use “Default”

- Now – click on **Zones (tab) > Insert**

ZONES are entered at Project level – Buildings inherit zones from the Project

PLEASE ensure that you read the latest **dimX Tips & Tricks** to ensure that you understand how Zones and **WinQS** locations inter-relate

Shown below is a picture of the relationship between the Zones and the Locations – Remember **ONLY** measured levels should be entered into **dimX** where the location is multi-level, leave off the “parent” level location which is not measure in **WinQS**



- Press [Esc] to close the list of Projects

2. ADD BUILDING/S:

You now have a blank screen

Note: Keep the name of a **dimX** building reasonably short & meaningful

- Click on **dimX** APP button and select New Building or press **Ctrl+N** on the keyboard

- Enter the following information for the Building:

Name: Enter the Building Name which will appear at the top of the screen in **dimX**

Building Code: Not a compulsory field

Project: Click on the drop-down arrow and attach this building to the Project (probably the one you have just created)

Building Type: Not a compulsory field but can be used to categorise the buildings

BASED ON:

NOTE: YOU CAN COPY DimGroups BY USING THIS OPTION – DO NOT RETYPE STANDARD GROUPS

If you have previous Buildings where you possibly have a generic list of Dimension Groups (DimGroups), you may choose to “Base” this new building on an existing one. You can then choose the data that you wish to use (typically would only be the Dimension Groups)

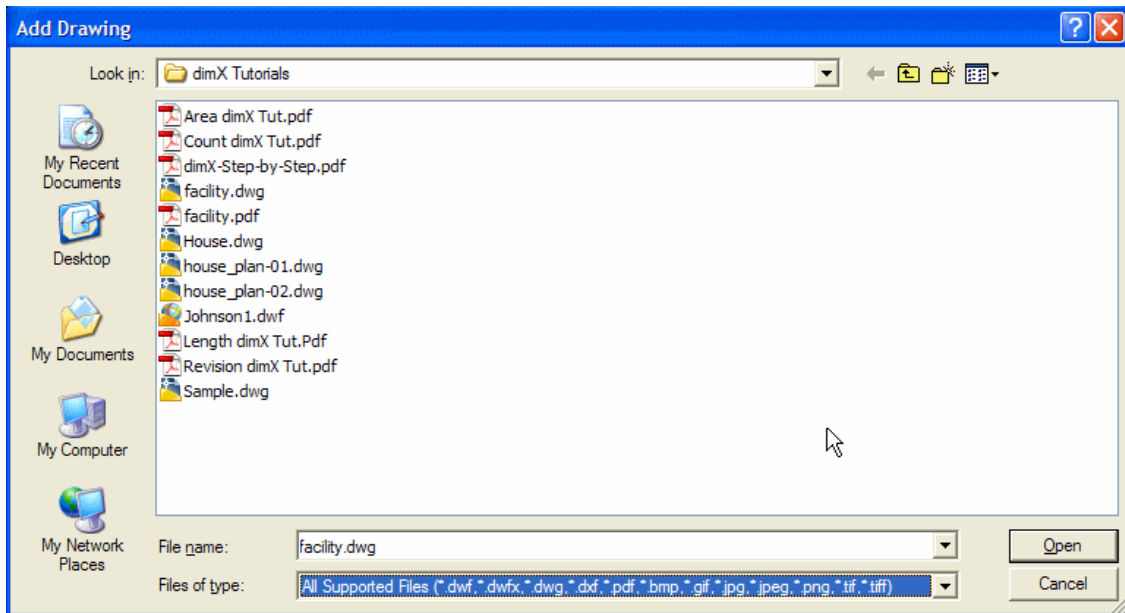
NOTE: You may also use System Admin (see 1) to enter a set of “Standard Dimension Groups”

- Base UOM for the BUILDING (this must be Metres in order for the dimensions to AutoMeasure correctly into **WinQS**)
- Click Insert

3. ADD DRAWING/S:

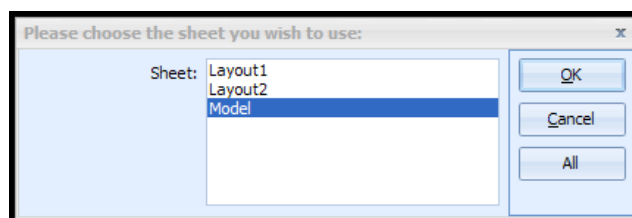


- After adding a new Building, you have to Add Drawings by clicking on the drawing button and locate the drawings saved in the Drawings folder (as explained in the Tips & Tricks Notes)

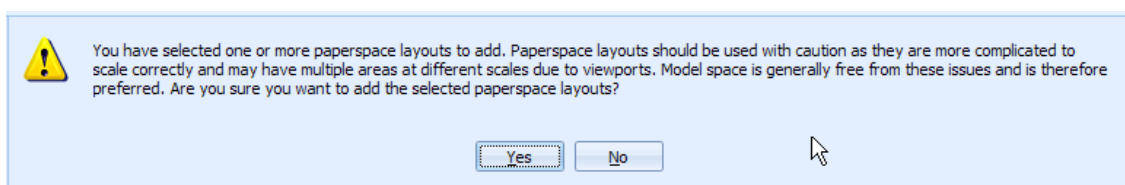


- The drawing could be a DWG, DWF, DWGx, DWFx, PDF or any of the supported drawing files as shown in the Add Drawing dialog as shown above
- Locate the drawing and open it (or double click) which may display the list of sheets included in the drawing file.

It is generally **better** to always use the 'model' and **ONLY** load the model.



If you select all a warning message will appear but all sheets can be loaded.



Once the model (or ALL) has been loaded the Drawing Properties form appears:

- Change the **dimX** Name of the Drawing (not the actual file name)

NOTE: Sometimes drawing names are extremely long and meaningless! You should CHANGE the name in **dimX** as shown (this does not alter the dwg file name – only the name displayed in **dimX**):

- DO NOT change the “Base UOM” – until you have done the measurement check
- DO NOT change the “No. of Floors” in **dimX**

Use the Location Multiplier in **WinQS** to “times up” any duplicated levels, buildings, etc.

- Leave the scale at 1 : 1 until you have done a check!
- Click insert

Setting the Working View in dimensionX

Shown below is a drawing (DWG file) that has been loaded into dimX.

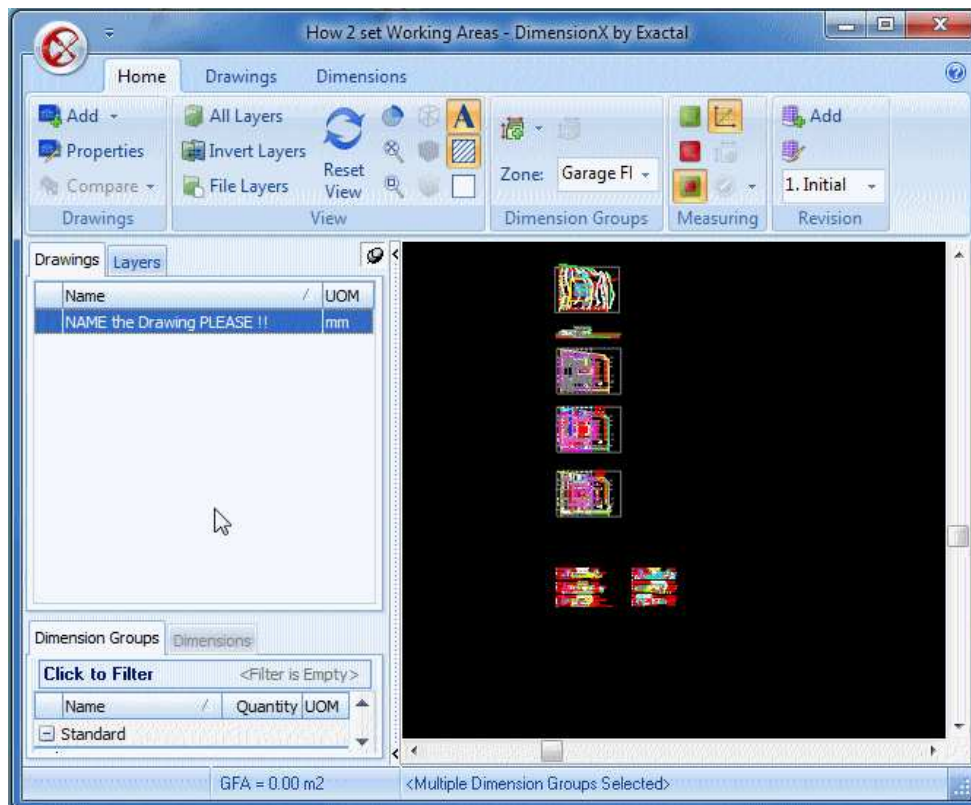
When this DWG was loaded, we have selected the 'model' ONLY option & this is what is displayed.

There are a number of plans/sections contained in this 'drawing/model' & measurements can be taken for each different part of the plan.

Most CAD users create a really confusing & convoluted naming convention for their drawings.

DO NOT change the actual file name of any drawings sent to you

BUT you can name each drawing once you have loaded it into dimX to mean something that you will recognize like 'Section A-A' or 'Ground Floor Plan'.



If you continue to measure off this drawing as loaded, you will waste a lot of time zooming into the different areas of the drawing.

However it is FAR better & easier to work with a SINGLE plan at a time for example the Basement Plan & Ground Floor Plan.

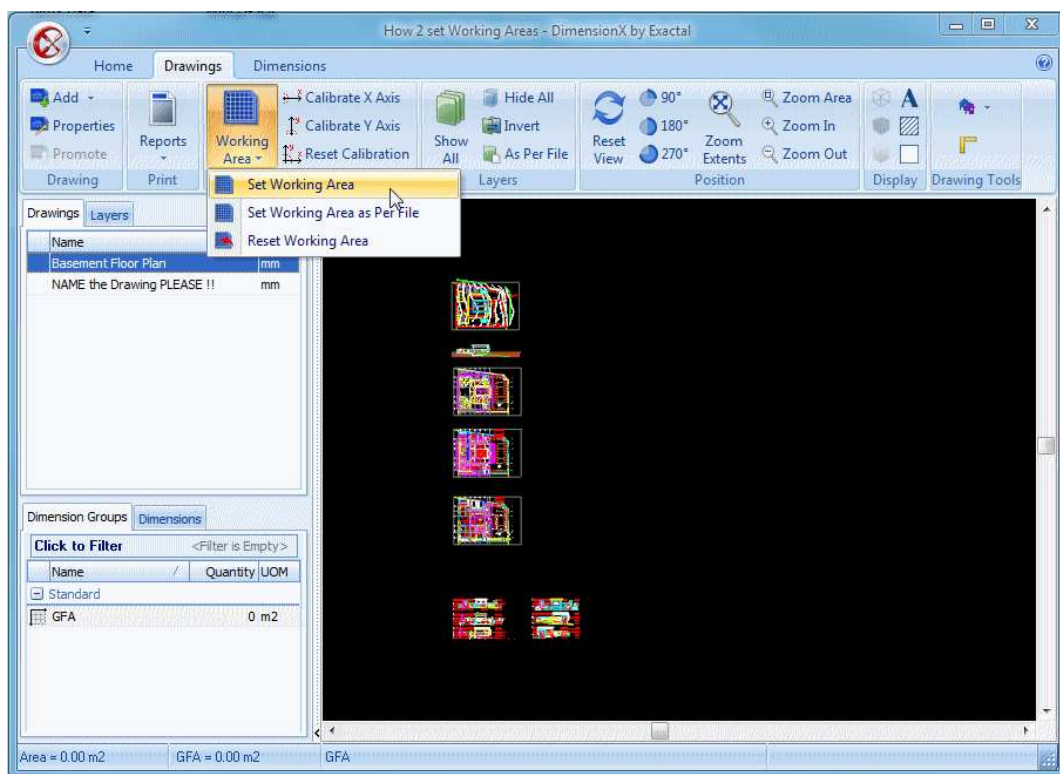
HOW DO I DO THIS ?

Load the drawing

NAME the drawing when you load it, 'Basement Floor Plan'

Select the Drawing ribbon & the Working Area button & Set Working Area option.

Now SET the Working Area around JUST the Basement Floor Plan as shown below. (you will see the rest of the drawing displays the other plans in background).



Now LOAD the SAME drawing again & name it 'Ground Floor Plan' and set the Working Area over just the Ground Floor Plan and so on.

CREATE a Working View for each separate plan, section or elevation on the drawing & it will make measuring from each part of the drawing much easier.

Now using the same Dimension Groups list in dimX, you can select each 'drawing' (as you named it) and measure what you need. Then just select the 'Ground Floor Plan' and measure off that.

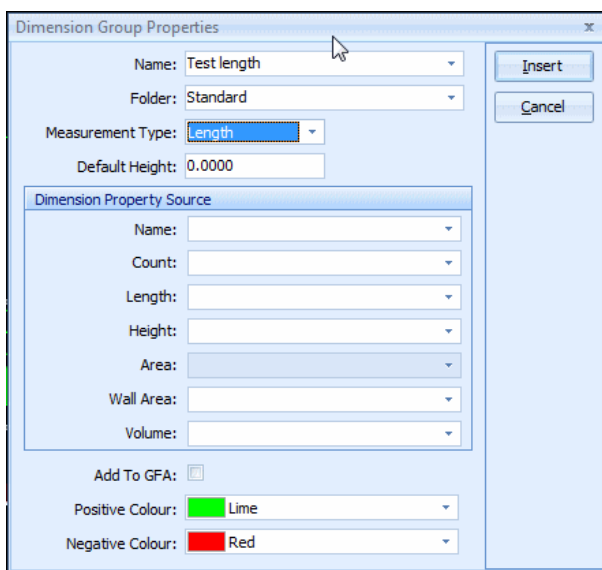
4. CHECK THE MEASUREMENT:

Before you continue with any measurement, YOU MUST NOW CHECK A LENGTH DIMENSION TO ESTABLISH WHAT UOM THE **DRAWING** SHOULD BE.

Generally, the UOM for the drawing is mm – HOWEVER, this could be meters or even feet or inches. (Not really relevant – as long as the output in meters is correct)

How to check a measurement:

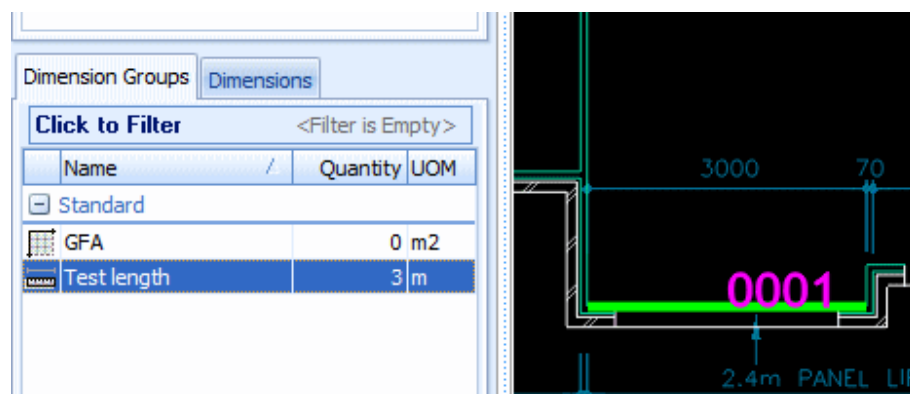
- Add a TEST LENGTH dimension group as follows:
- Select the Dimensions tab from the ribbon menu
- and click on the Add button



*The Name : Test length (you can delete this later)
Measurement Type: Length
Click on Insert*

(NOTICE now you can select a different colour for each different dim group !!)

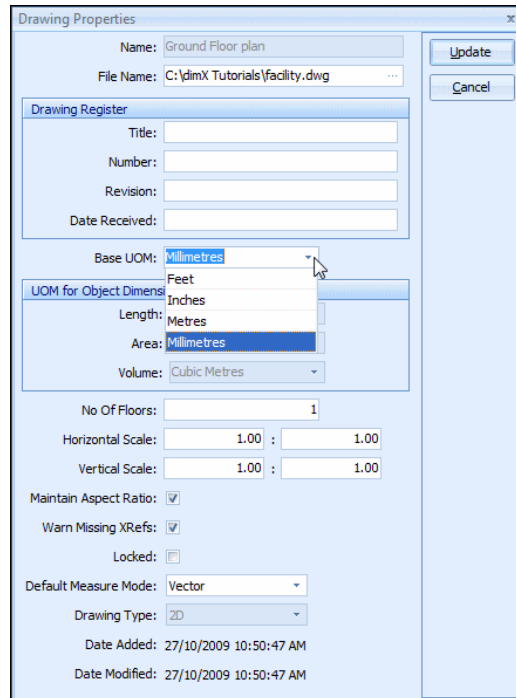
- Now, identify a line with a KNOWN length on the drawing and point to this line with the mouse. The green “sticky” cursor will attach to the line. Click and read the resulting dimension for “Test Length” as shown below:



- **LOADING a PDF** – If your drawing is in a PDF format, you MUST CALIBRATE the drawing BEFORE YOU MEASURE ANYTHING!

*Please click on the dimX **HELP** > Search > CALIBRATING DRAWINGS for more information*

- If the Test Length is NOT correct, double click on the name of the drawing to access the drawing “properties”. Before changing the scale, try changing the UOM & click Uppdate – each time looking at the “Test Length” to see if the measurement is correct.

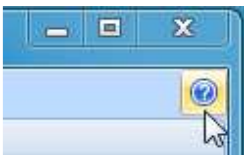


If none of the UOM selections reflect a correct measurement – then change the scale

- *Use the dimX **HELP** > Search > SCALING DRAWINGS for more information*

HELP !

Click on the **dimX** ribbon Help button or press the “F1” key



then use the Search function.
and Type in the keyword/s to search for

5. Dimension Groups (DimGroups) & Folders:

(or what a QS may call 'List of Collections')

Please read the latest version of **dimX Tips & Tricks** for detailed information and advice on DimGroups

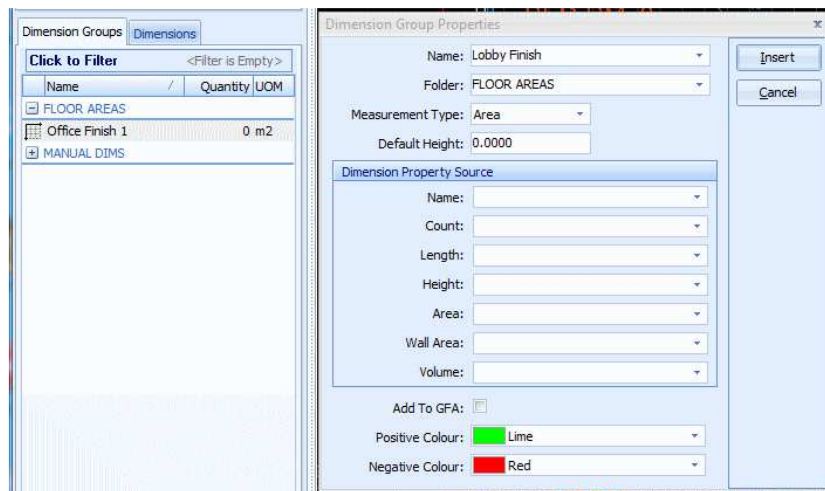
dimX allows a 2 level system of **Folders** that contain **Dimension Groups**.

It is the **DimGroups** that are actually measured - the detailed individual dimensions are saved in these.

Having a Folder containing many DimGroups together then allows the display of ALL the measurements taken for those DimGroups.

For example:

Folder = FLOOR AREAS (relates to Floor/Ceiling Finish)
 Dim Group = Office finish 1
 Lobby finish
 Toilet finish
 Board Room finish



NOTES: Try to KEEP the dimension group & Folder Names generic as possible.

REMEMBER: Measuring the floor area in **dimX** could be utilized to measure the floor & ceiling finish, & the perimeter could be used for skirting & cornices - if you supply the height then you will also get the wall area for the wall finish.

ONE measurement may be used many times – it is in **WinQS** that you will link any one measurement to many bill items

PLEASE **DO NOT** try to measure a FULL BoQ inside **dimX**.

All you are actually doing is **measuring collections** – Areas, Lengths and Numbers!

DO NOT try to measure the size of a Window in **dimX**, rather include the size in the DimGroup description and **count** how many of those specific windows there are.

Once in **WinQS** you then can link that 'No. of' to a MG for the adjustment of all the wall & finishes etc etc.

6. OVERALL MEASUREMENT:

The fundamental QS philosophy of OVERALL measurement STILL APPLIES. Do not try to measure net, rather measure OVERALL and do adjustments for windows, doors etc., using **WinQS**

7. ON COMPLETION OF MEASUREMENT:

When your measuring has been completed, you are ready to AutoMeasure the dimensions into **WinQS**
Please follow the instruction in the **WinQS** HELP or read the latest version of **dimX** Tips & Tricks

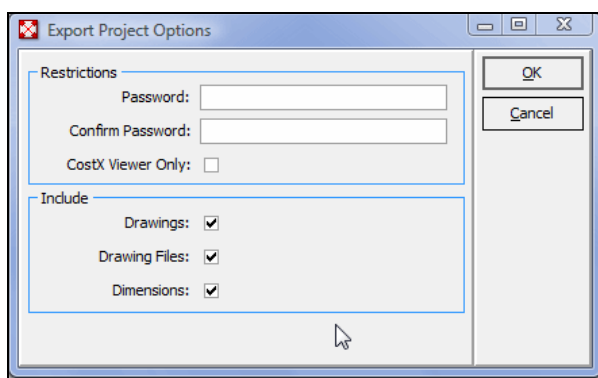
8. DISASTER RECOVERY:

It is ALWAYS essential that you keep good, regular copies of ALL your data in the event of a disaster such as theft, or other computer damage.

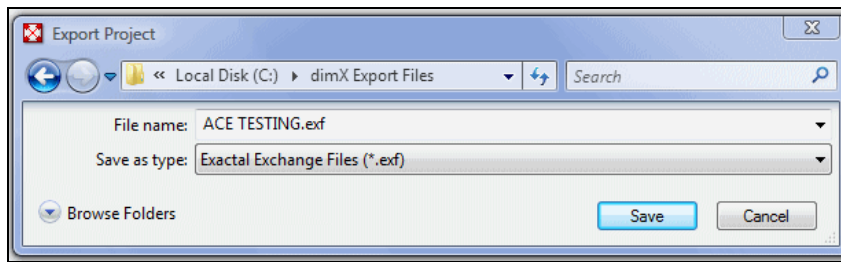
We advise that you regularly “Export” the data as follows:

9. EXPORT PROJECT/S:

- Create a NEW folder on your computer to save all your EXPORTED **dimX** projects
- Open **dimX** and press [Esc] when the list of projects appears so that you have the “blank” screen open
- Click on the menu option **File > Export > Project**
- From the list of projects double click on the relevant Project – the following options will be given. What is important is that you INCLUDE... Drawings, Drawing Files and Dimensions as shown



- Click OK and point to that new folder or confirm that the path (folder) is correct. As shown in the picture below, we have created a folder especially for the .EXF files named C:\dimX Export Files. You could do something similar; even create a folder on a central server.



- NOW please COPY THIS ENTIRE FOLDER to another media, such as a memory stick or a CD!

To PREVENT any problems when using dimX please ensure that:

The latest version of **dimX** is installed on **ALL** computers using **dimX** in your office

The latest copy of the **dimX** Tips & Tricks has been READ!

These **dimX** notes are distributed and APPLIED by everyone that is using **dimX**

The **dimX** Tutorials have been done

10. MEASURING from DWF files EXPORTED from REVIT

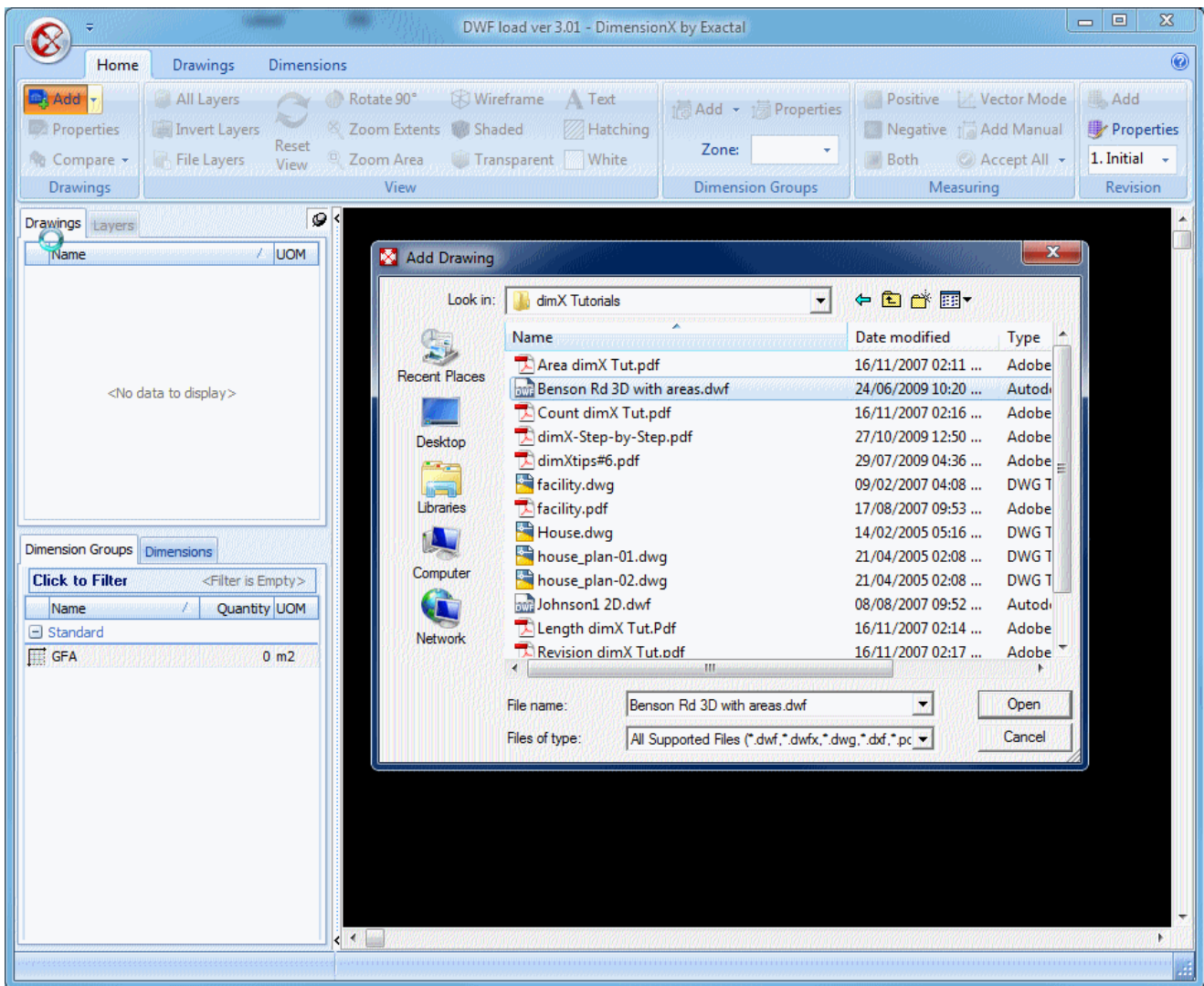
PLEASE ensure that **"How 2 create 3D Revit DWF dimXv3.00"** instructions have been followed to ensure an exported **DWF** file in the correct format is obtained from the consultant using AutoCAD Revit.

The latest dimX Tutorials (Nov 2009) already contain an example then you can use which is called **"Benson Rd 3D with areas"** and is located in the dimX Tutorials folder on your C: drive.

Create a NEW Project, and then you can Create a NEW Building AND

ADD a new drawing using the Add button and

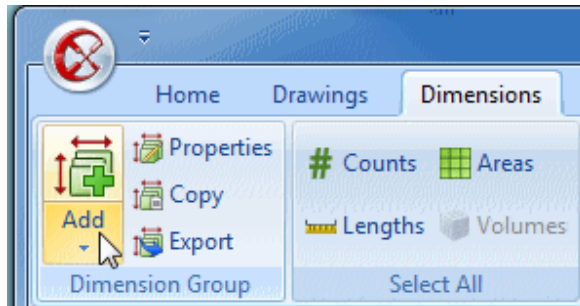
select the **Benson.. DWF** as shown below from the dimX Tutorials folder:



which will load once the 'Insert' button is clicked after you have renamed the drawing to be meaning full.

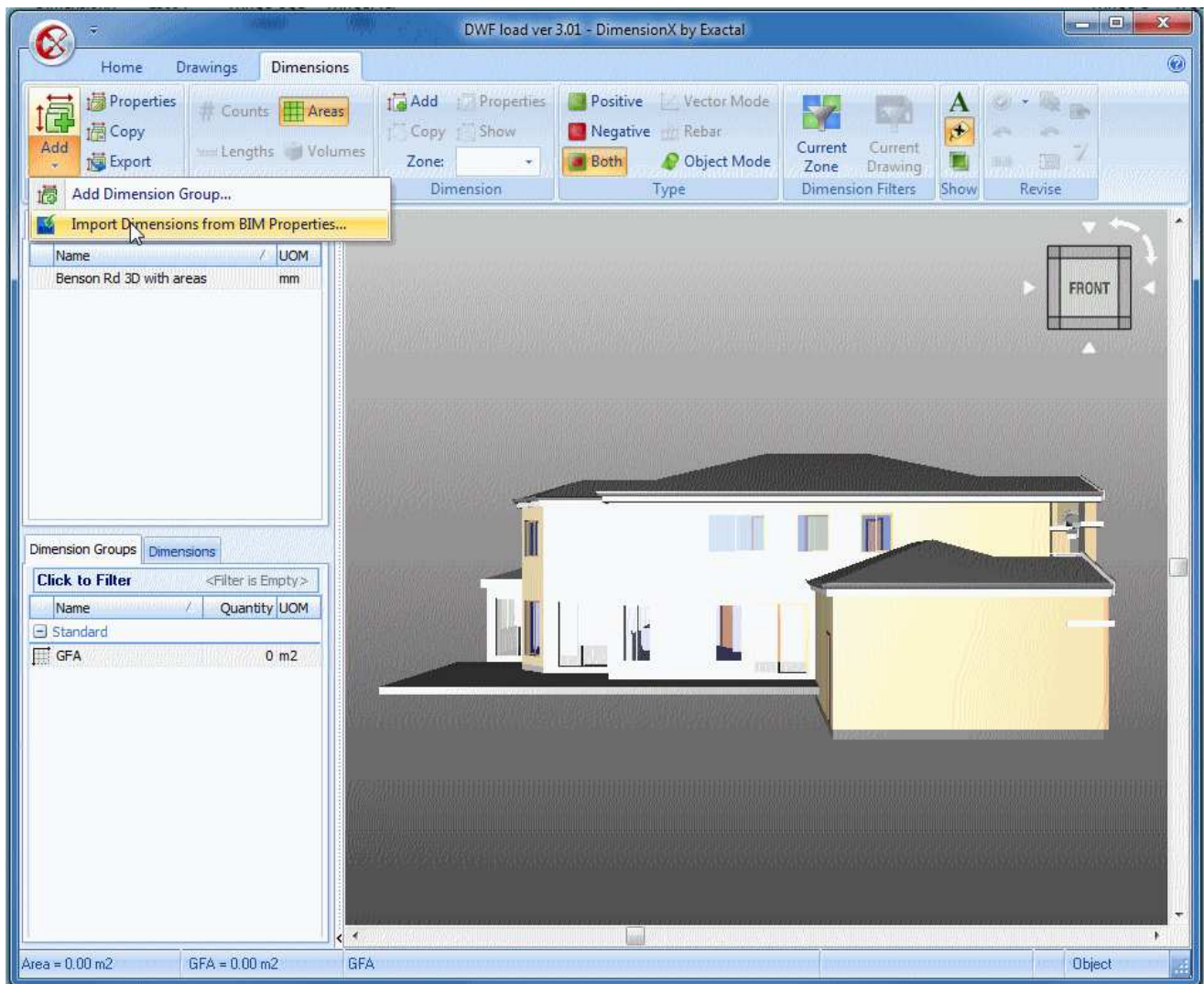
Once the drawing is loaded

select the Dimensions ribbon and in the Dimension Group menu group and



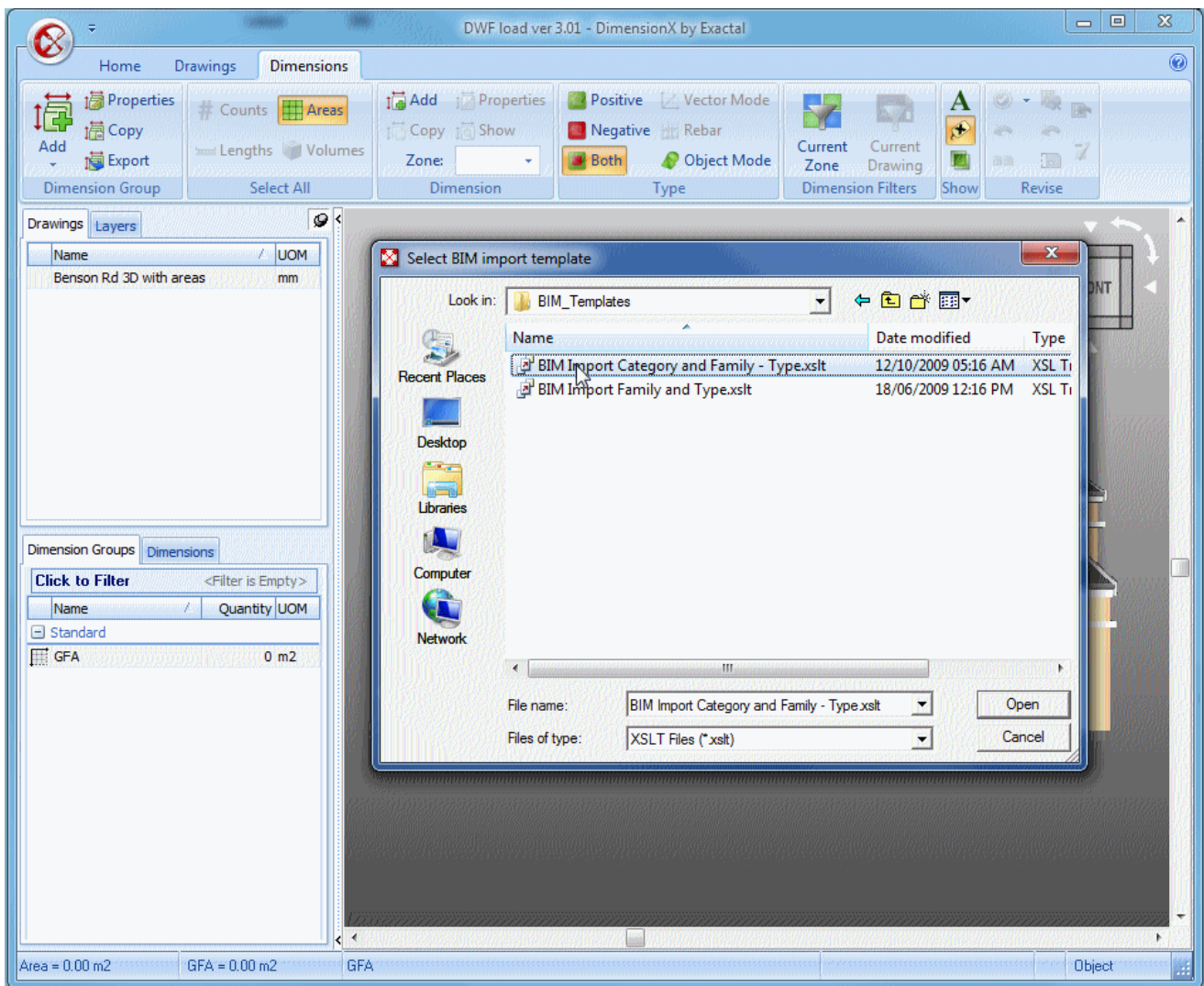
click on the 'Add' below the button

select the 'Import Dimensions from BIM Properties...'



Now select the 'BIM Template' you wish to use for defining the 'dimension groups' which **dimensionX** will use.

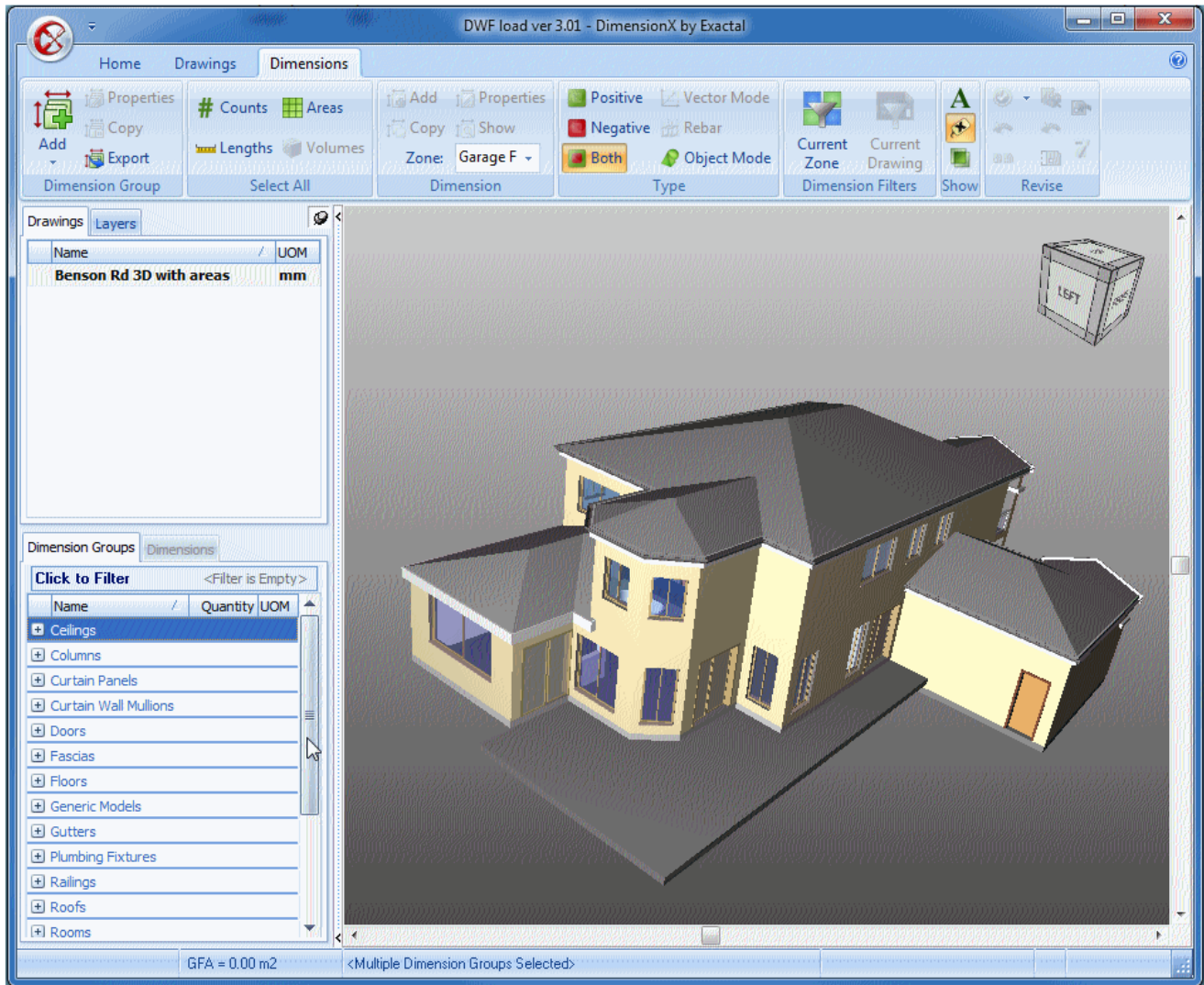
The 'BIM Import Category and Family-Type' is a good one to use now, select it



Now **dimensionX** will proceed and AUTO MEASURE all the items from the model.

PLEASE NOTE: ALL measurements ARE now NETT !!

and the dimension groups are automatically created for you from the data in the **DWF** file as shown below.



This is REAL fast, accurate and easy !!

After this Project is AUTO Measured into a **WinQS** project, containing all the dimensions, you can link these to create a Cost Plan, Estimate or Bill of Quantities.