

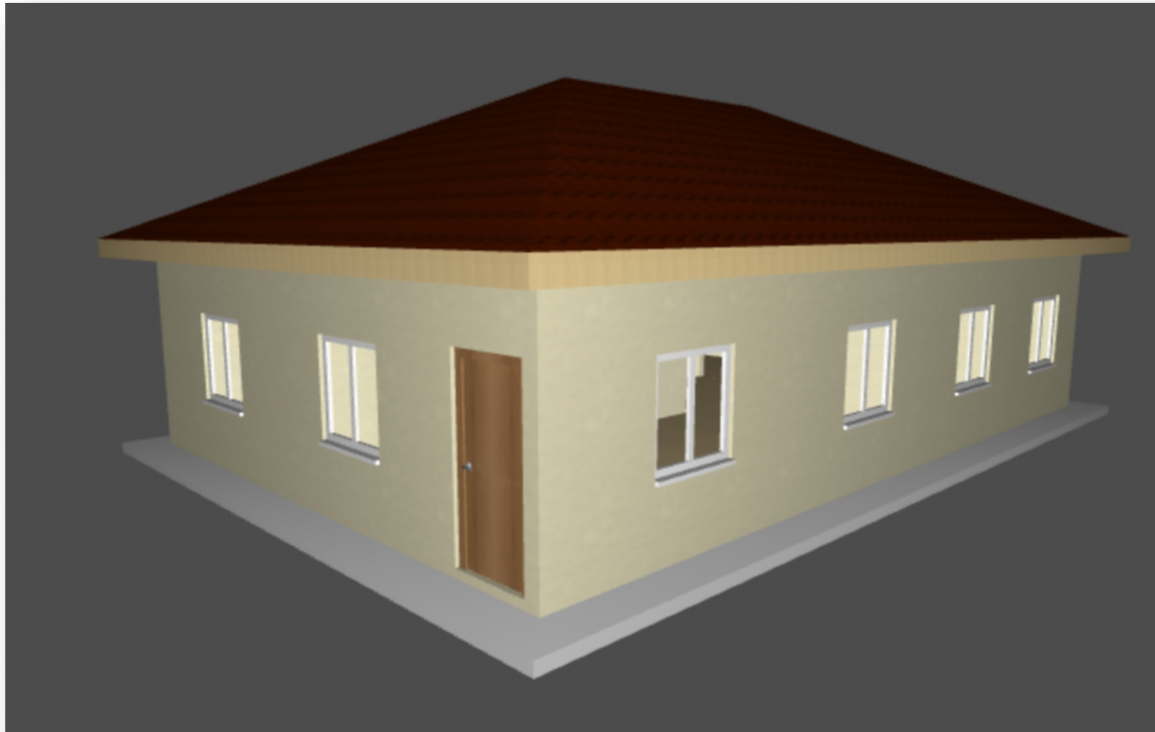


TiffinBIM v.12

Quick Guide

Draw, Calculate, Present, Amend. Easy.

Try these steps and join our training for full tips and tricks.



SETTING-UP SOFTWARE FOR TRAINING

TiffinBIM User Download Form

Fields marked with an * are required

Name *

Company / Organisation / Agency / Institution

Email *

DOWNLOAD

Thank you for registering your interest to test out TiffinBIM. Below, you will find the **28 – day trial, fully functional TiffinBIM software (Windows 64 – bit)** and the quick guide for your reference on learning the functions available in the software.

TiffinBIM v.12 Trial (Windows 64- bit)

TiffinBIM Quick Guide

Online Purchase

Minimum System Requirement

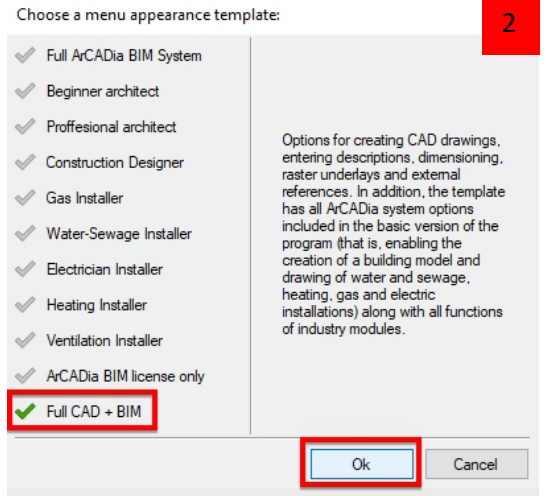
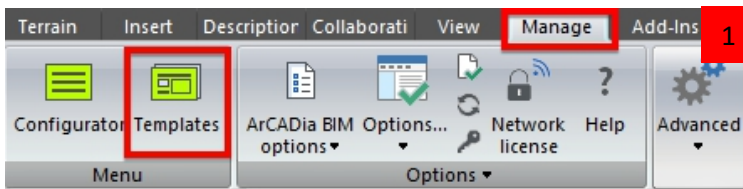
Intel Core 2 Duo or AMD Athlon II processor (Intel Core i5-6500 recommended)
3 GB RAM (12 GB and 64-bit system recommended)
5 GB free hard disc space for installation (SSD recommended)
Graphics card compatible with DirectX 9.0c 1GB RAM
Windows 10 or Windows 8.1 or Windows 7 SP1 (Windows 10 64-bit recommended)

DESCRIPTION

We will be using a free 28-day trial version of a lightweight and IFC-compliant BIM software, TiffinBIM.

- 1) Go to <https://www.innovacia.com.my/tiffinbim/>
- 2) Fill up the registration form to **download** your **free trial**
- 3) Check the **Minimum System Requirement** of your PC
- 4) Click the grey bar to download **TiffinBIM v.12 (64 bit)**
- 5) **Follow the download instructions and run** the software

SETTING-UP FOR VERSION 12



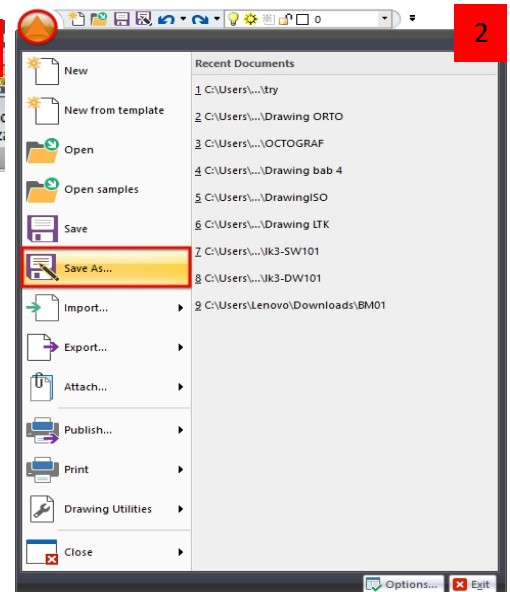
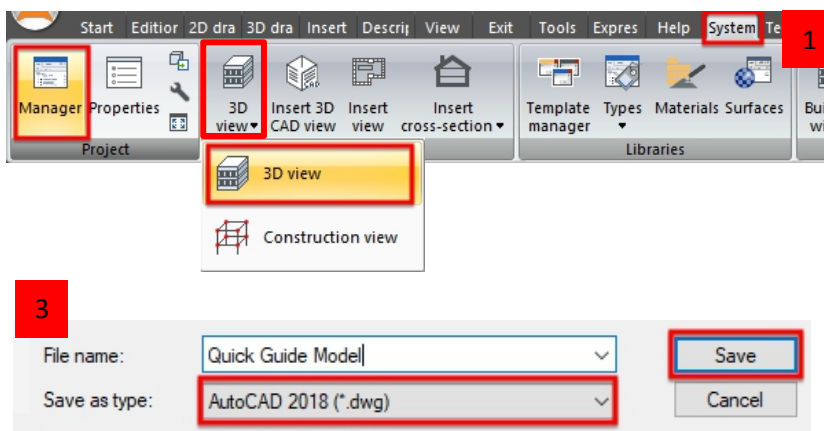
DESCRIPTION

If you are using TiffinBIM Version 11.2 and 12 for this training module, you have to set the software at **Full CAD + BIM** mode. Please follow these steps:-

- 1) At **Manage Ribbon**, Click **Templates**.
- 2) At choose a menu appearance template, tick **Full CAD + BIM** and then Click '**OK**'.
- 3) The Ribbon are now changed to the full tools.

Note: If you are using the older Version 11.0, you can straight away proceed with the training.

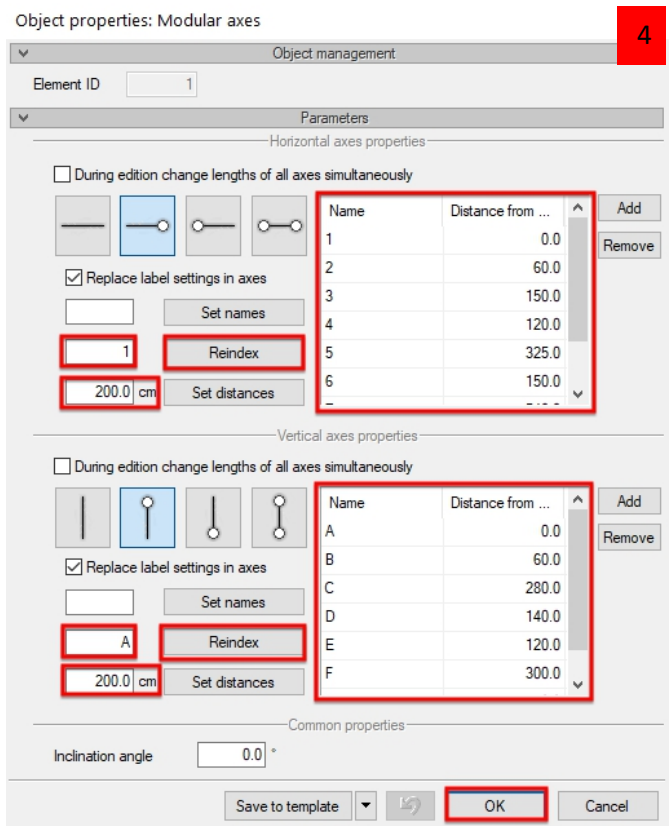
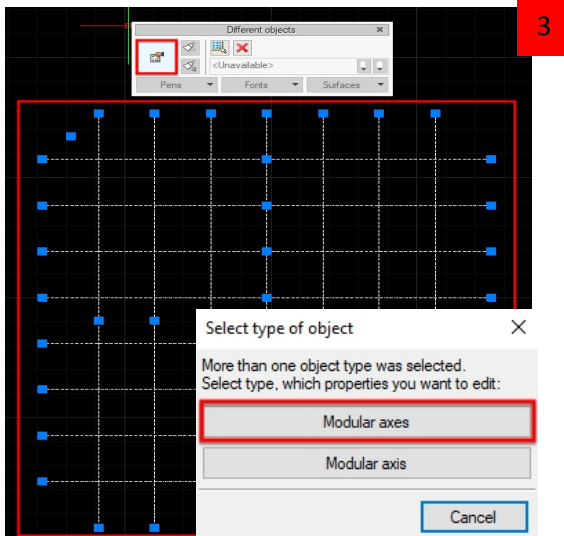
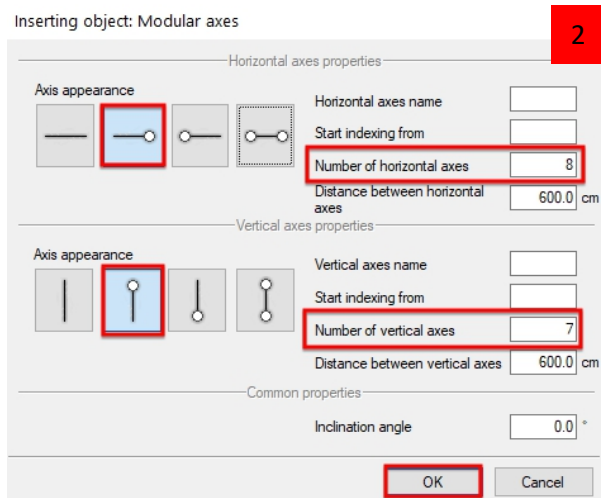
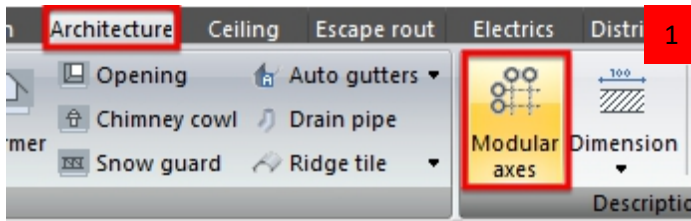
SETUP AND CREATING NEW PROJECT



DESCRIPTION

- 1) Open **Project Manager** at **System Ribbon**
- 2) Open **3D View** at **System Ribbon**
- 3) To save the project, click on the **File Tab** and select **Save As**
- 4) Change **File Name** to **Training BIM modelling**, Save as type **AutoCAD 2018 (*.dwg)**

CREATING GRID LINE



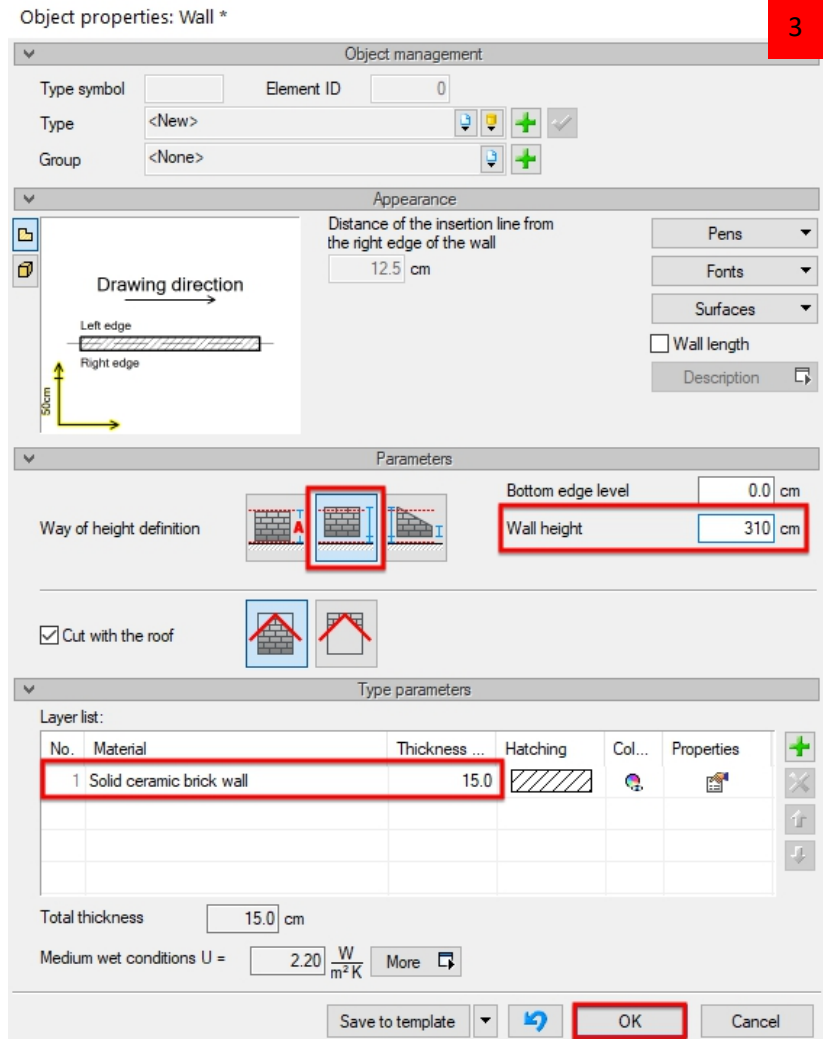
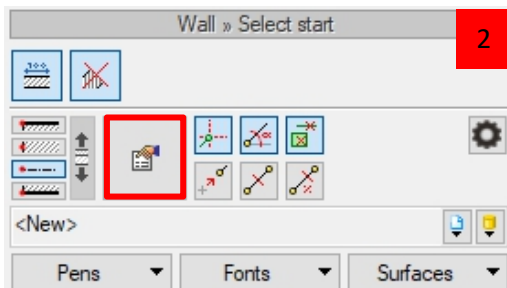
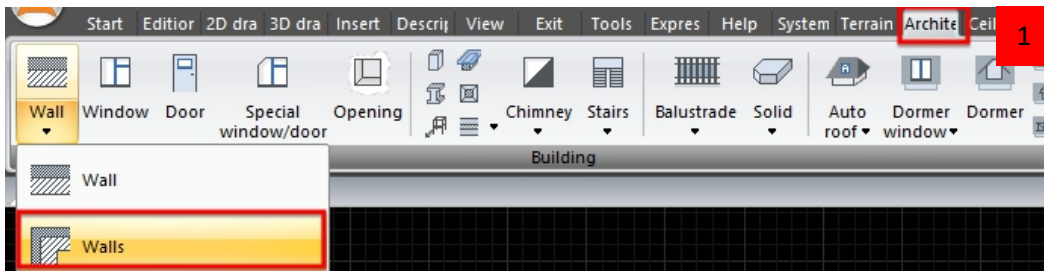
Horizontal		Vertical	
1	0	A	0
2	600	B	600
3	1500	C	2800
4	1200	D	1400
5	3250	E	1200
6	1500	F	3000
7	5400	G	600
8	600		
Dimension in mm			

DESCRIPTION

- 1) At **Architecture ribbon**, click **Modular Axes**
- 2) On the **Inserting Object: Modular Axes**, insert according to the information following **Diagram 2** and insert to **Drawing Area**
- 3) Select the grid line, on **object insertion** click the **Go To Object Properties**. Next is on **Select Type of object**, click **Modular Axes**
- 4) On **Object Properties**, modify according to the information following **Diagram A** and then click **OK**

***You can refer Appendix A for insert the modular axes.**

WALL MODELLING



Wall

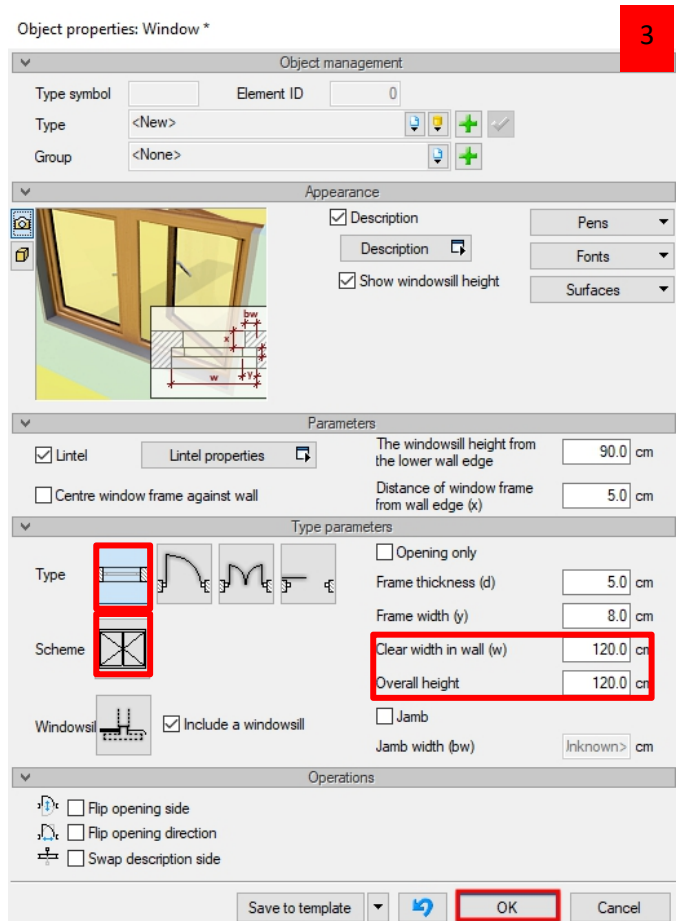
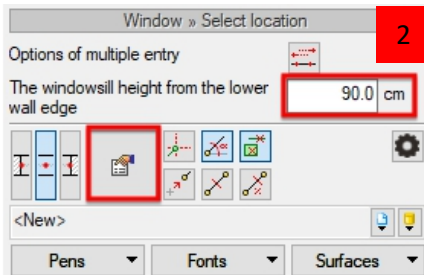
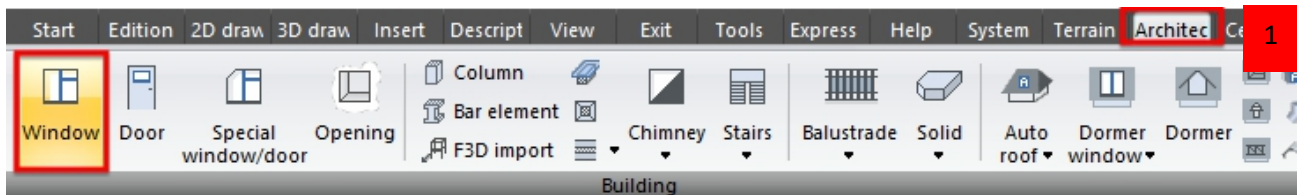
1. Thickness - 150mm
2. Height – 3100mm

DESCRIPTION

- 1) At **Architecture Ribbon**, select **Walls**
- 2) On **object insertion** click **Go To Object Properties**
- 3) At **parameters** change the **way of height of wall** and **wall height** is 3100mm. Then on **Type parameters** change the **thickness** according to **Diagram A** and then click **OK**. Then start draw at **Drawing Area** and model the **wall**

***You can refer Appendix A for insert the wall.**

INSERTING WINDOW



Windows

1. Window - 2 Panel (1200 x 1200mm) Distance from floor edge 900mm
2. Toilet Window - 1 Panel (600 x 600mm) Distance from floor edge 2100mm

DESCRIPTION

- 1) At **Architecture Ribbon**, select **Window**
 - 2) On **object insertion** change the **window height from lower wall edge - 900mm** and Click **Go To Object Properties**
 - 3) At **type parameters** change the **type and scheme of window**. Then change the **size** according to **Diagram A** and then click **OK**.
- Then start draw with click the **wall** to position the **window**. Repeat the same step for **toilet window**.
- *You can refer Appendix A for insert the window.**

INSERTING DOOR

1 Architect

2 Door

3 Object properties: Door *

A Doors

1. Door - (1000 x 2100mm) Distance from floor edge 100mm
2. Toilet door (Harmony door) - (800 x 2100mm) Distance from floor edge 100mm

The threshold height from the lower wall edge: 10.0 cm

The threshold height from the lower wall edge: 10.0 cm

Distance of window frame from wall edge (x): 5.0 cm

Clear width in wall (w): 100.0 cm

Overall height: 210.0 cm

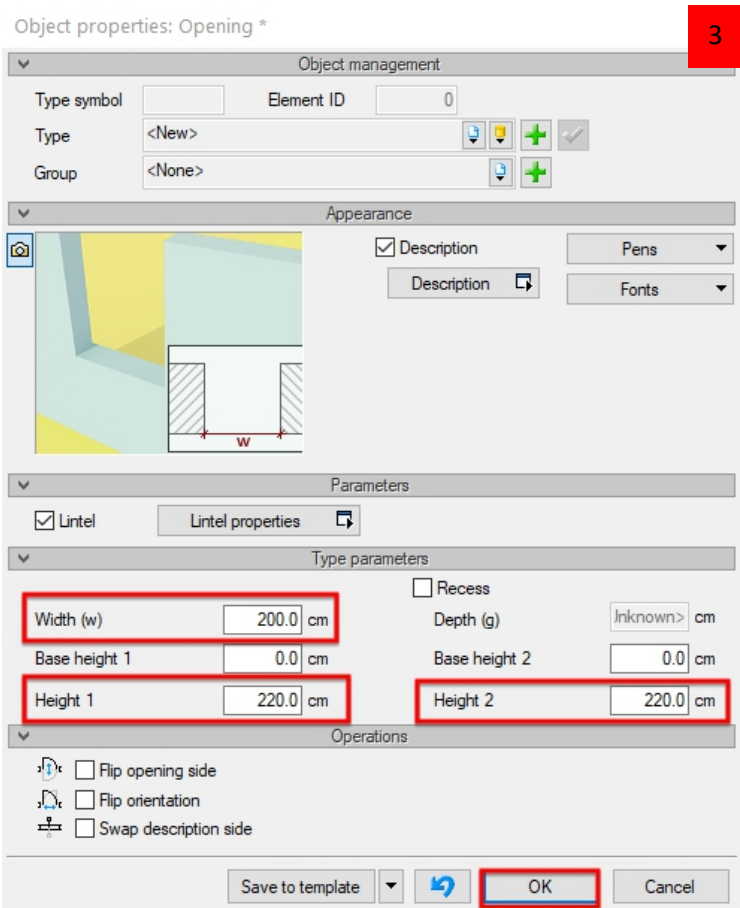
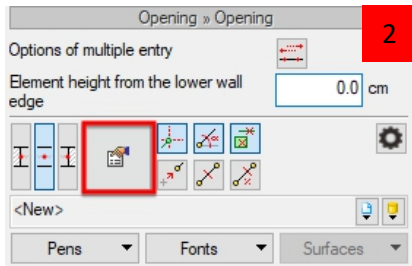
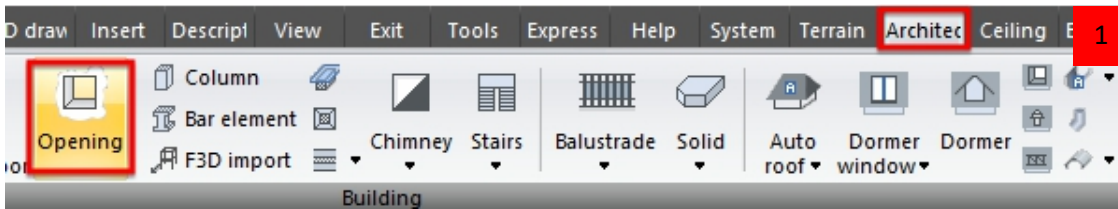
OK

DESCRIPTION

- 1) At **Architecture Ribbon**, select **Door**
 - 2) On **object insertion** change the **door height from lower wall edge - 100mm** and Click **Go To Object Properties**
 - 3) At **type parameters** change the **type and scheme of door**. Then change the **size** according to **Diagram A** and then click **OK**.
- Then start draw with click the **wall** to position the **door**. Repeat the same step for **toilet door**.

***You can refer Appendix A for insert the door.**

INSERTING OPENING



Opening

A

1. Width - 2000mm
2. Height 1 and 2 - 2200mm

DESCRIPTION

- 1) At **Architecture Ribbon**, select **Opening**.
- 2) On **object insertion** click **Go To Object Properties**.
- 3) At **type parameters** change the **size of width and height** according to **Diagram A** and then click **OK**.

Then start draw with click the **wall** to position the **opening**.

***You can refer Appendix A for insert the opening.**

FLOOR MODELLING

The image shows the software interface for floor modeling. It is divided into four numbered sections:

- 1:** The 'Ceiling' ribbon in the top menu bar, with the 'Floor on ground' button highlighted.
- 2:** A 2D floor plan view showing a room layout with red dashed lines indicating the room boundaries.
- 3:** The 'Room' object insertion dialog, with the 'New' button highlighted.
- 4:** The 'Type parameters' dialog for the floor, showing a table of material layers.

No.	Type	Thick...	Visible	Material
1	Finish	2.5	<input checked="" type="checkbox"/>	Floor panels
2	Finish	5.0	<input checked="" type="checkbox"/>	Lean concrete ground
3	Finish	2.5	<input checked="" type="checkbox"/>	Insulation asphalt paper 4 mm thick
Bottom boundary of level				
1	Finish	10.0	<input checked="" type="checkbox"/>	Concrete of high density 2400
2	Finish	20.0	<input checked="" type="checkbox"/>	Sand

Floor

A

1. Floor - 100mm (25mm, 50mm, 25mm)
2. Toilet floor (Terrazo) - 50mm (10mm, 30mm, 10mm)

DESCRIPTION

- 1) At **Ceiling Ribbon**, select **Ground Floor**. It was automatic insert.
- 2) Click the **room area** (click all room accepted toilet area)
- 3) On **object insertion** click **Go To Object Properties**
- 4) At **Type parameters**, change the **thickness and material** of floor according to **Diagram A**, then remove all at **Bottom boundary of level** and then click **OK**. Repeat the same step for **toilet floor**.

SLAB MODELLING

Slab A

1. Rectugular Slab - thickness 150mm
(Bottom edge level -150mm)
Area (9600 x 14050 mm)

DESCRIPTION

- 1) At **Architecture Ribbon**, select **Rectangular Solid-length and width**.
- 2) On **object insertion** click **Go To Object Properties**
- 3) At **Parameters** change **bottom height level** and on **Type parameters** modify the **height of slab** according to **Diagram A** and then click **OK**

Insert **slab** following the **grid line A1** and **G1** then move to **G8**.

***You can refer Appendix A for insert the slab.**

CEILING MODELLING

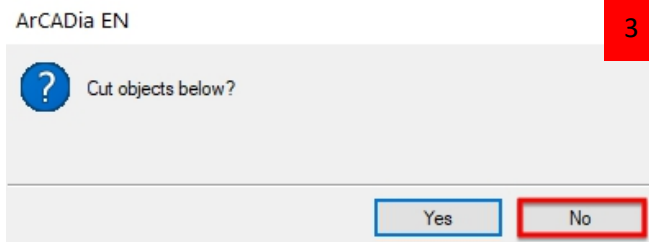
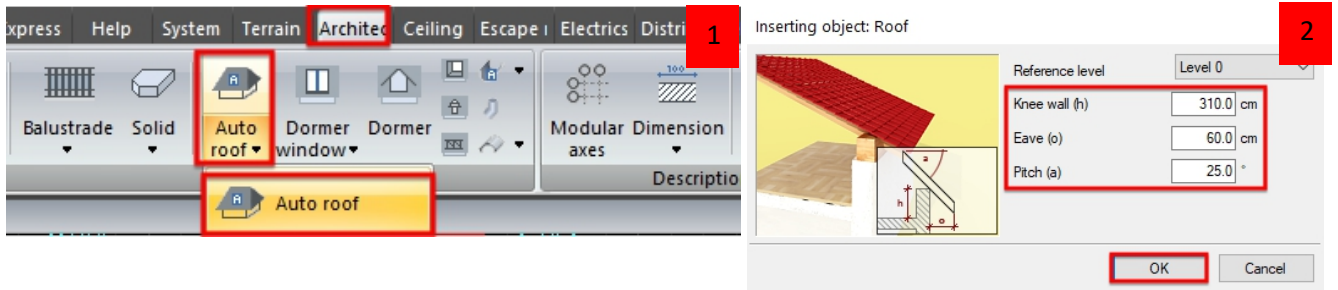
Ceiling A

1. Ceiling - thickness 150mm
(Suspension height - 3100mm)

DESCRIPTION

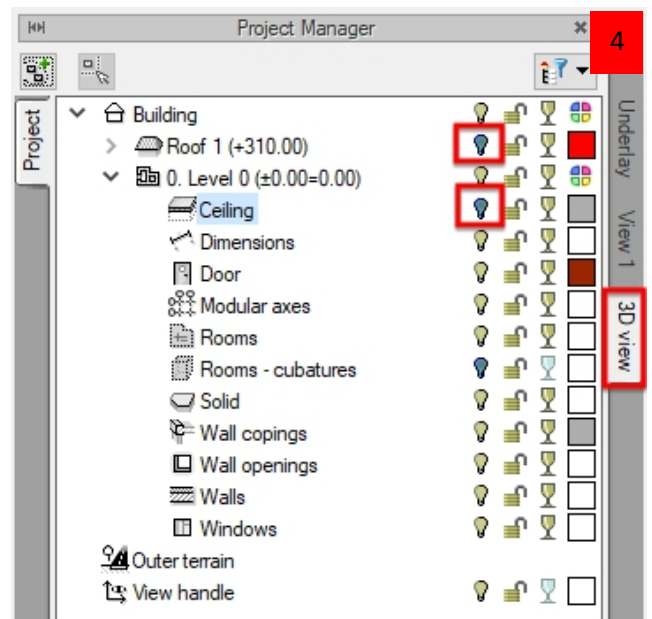
- 1) At **Ceiling Ribbon**, select **Ceiling Automatically**.
- 2) On **object insertion** click **Go To Object Properties**
- 3) At **Parameters** change the **Suspension height**. Then **Type parameters** modify the **Thickness** according to **Diagram A** and then click **OK**.
Move the mouse to the drawing, it will shown the **line** and click at the drawing.

ROOF MODELLING



Roof A

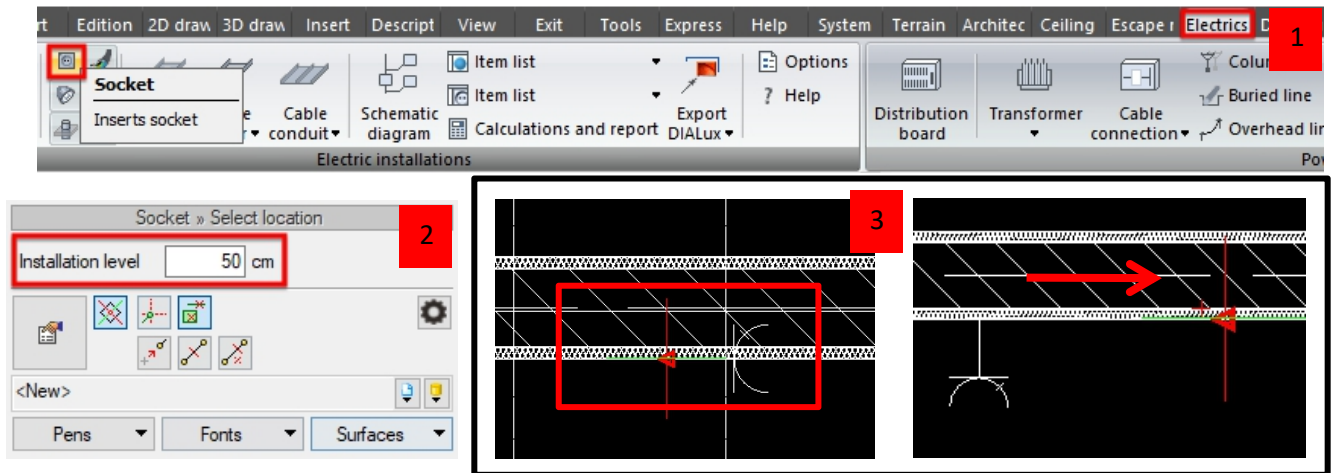
1. Knee Wall (h) - 3100 mm
2. Eave (o) - 600mm
3. Pitch/slope - 25° degree



DESCRIPTION

- 1) At **Architecture Ribbon**, select **Rectangular roof**.
- 2) **Inserting object** will pop up, insert the information according to **Diagram A** and the click **OK**.
Move the mouse to the drawing, it will shown the **line** and click at the drawing.
- 3) If pop up 'Cut object below?' **Click No**
On drawing, slope of roof are automatic created.
- 4) To insert any component and want to see from 3D view. Click **3D View** then click **mentol to roof and ceiling to hide** the component. Then to modify again go to View 1.

INSERTING SOCKET

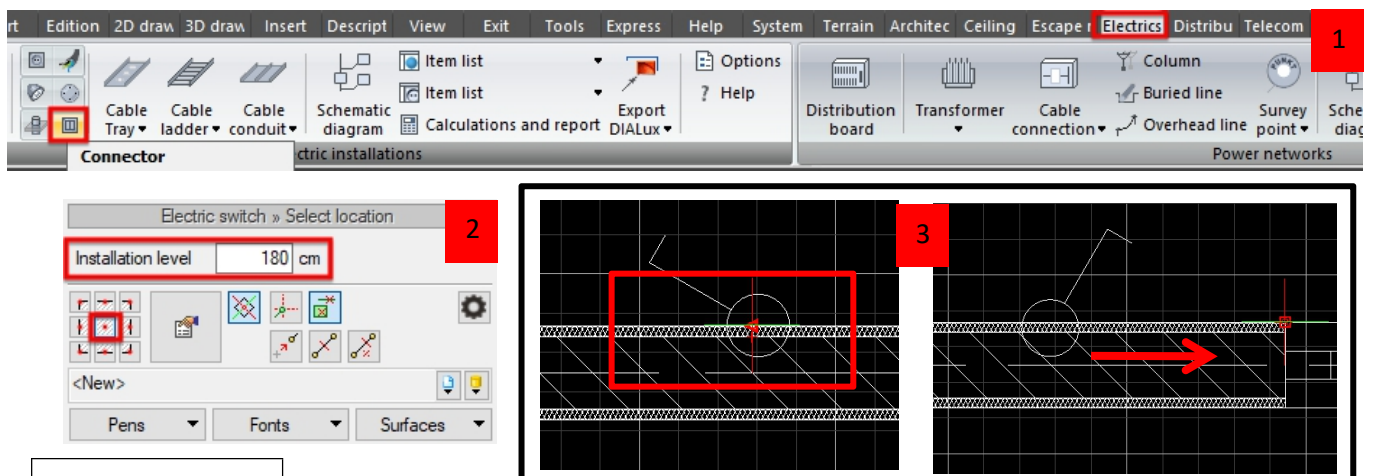


DESCRIPTION

Socket

- 1) At **Electrical Ribbon** click **Socket**.
 - 2) **Object insertion** will pop up. Set the **Installation level - 500mm**.
 - 3) Go to drawing click at needed part and rotate to get the good position with move the mouse at left/right/up/down.
- *Installation level - 500mm

INSERTING CONNECTOR

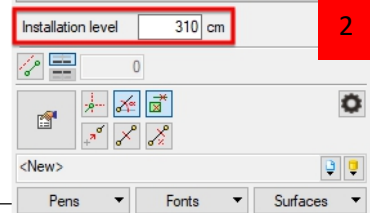
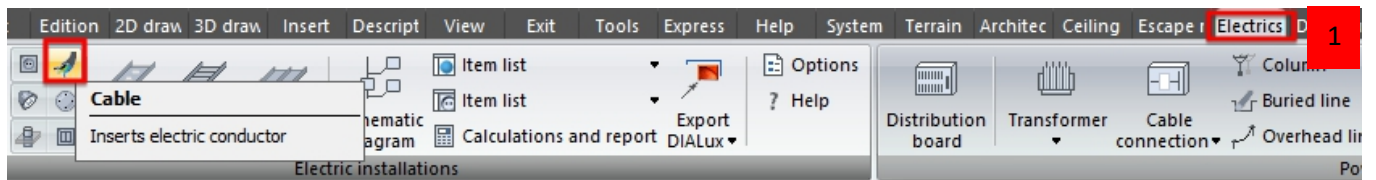


DESCRIPTION

Connector

- 1) At **Electrical Ribbon** click **Connector**.
 - 2) **Object insertion** will pop up. Set the **Installation level - 1800mm** and than change the edge to get the good position.
 - 3) Go to drawing **click** at needed part and **rotate** to get the good position with **move the mouse at left/right/up/down**.
- *Installation level - 1800mm

INSERTING CABLE

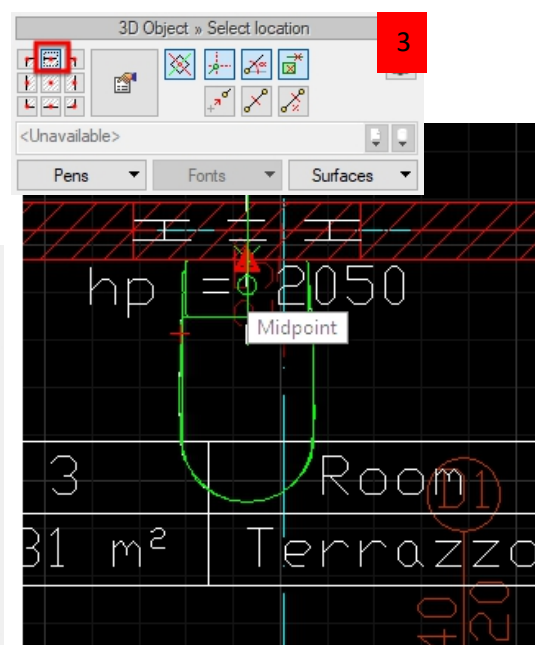
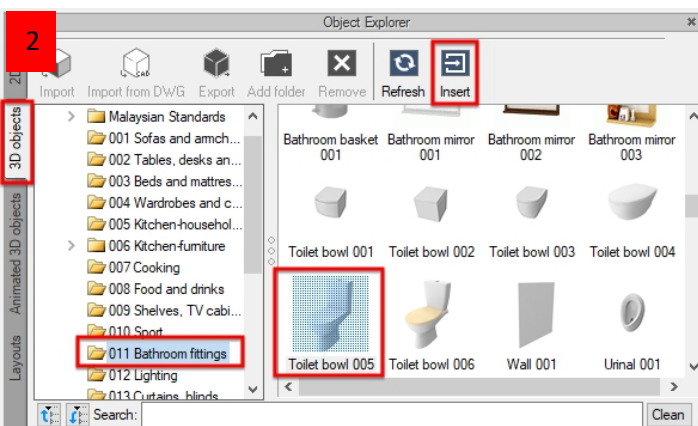


DESCRIPTION

Cable

- 1) At **Electrical Ribbon** click **Cable**.
- 2) **Object insertion** will pop up. Set the **Installation level - 3100mm**.
Go to drawing **insert cable and connect to socket and connector**
*Installation level - 3100mm

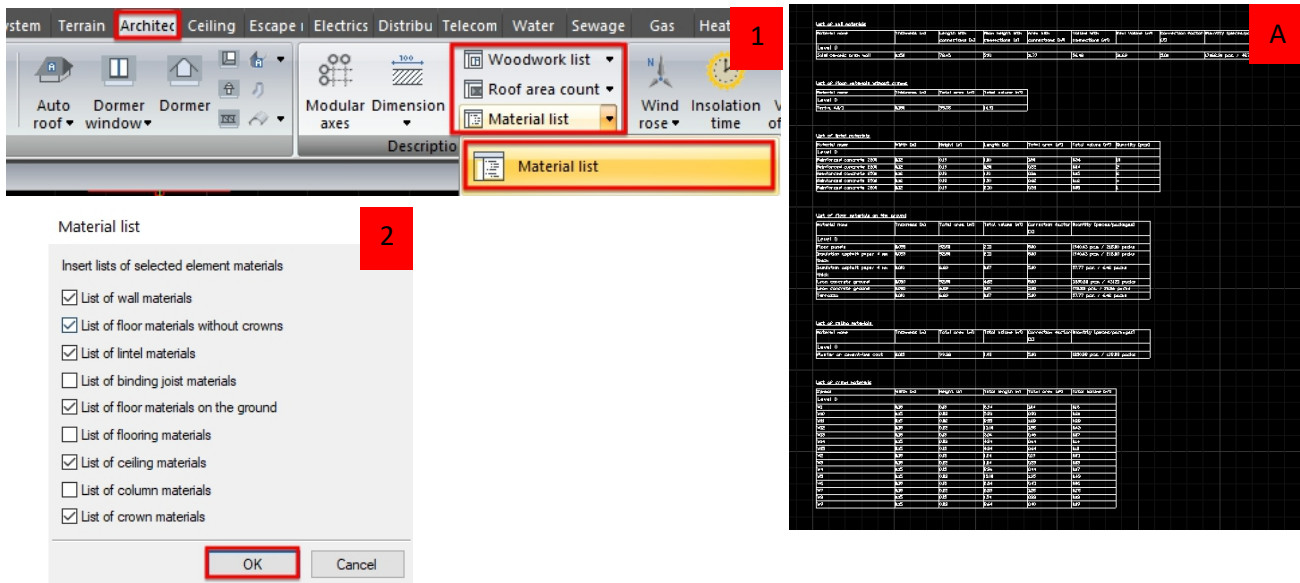
INSERTING LIBRARY (3D OBJECT)



DESCRIPTION

- 1) At **System Ribbon**, select and click **Object Explorer**.
- 2) On **Object Explorer** click **3D objects**. Next scroll down select **Bathroom**, then click **Toilet bowl** and click **Insert**.
- 3) On **object insertion**, Change the edge to get the good position.
Go to drawing **click** at needed part and **rotate** to get the good position with **move the mouse at left/right/up/down**.

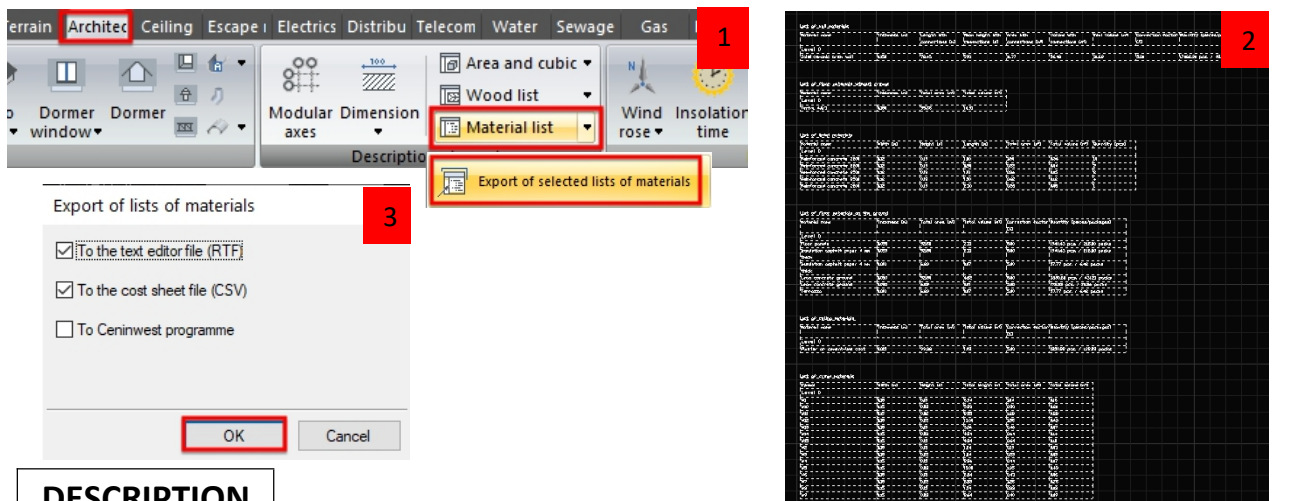
MATERIAL LIST/COSTING



DESCRIPTION

- 1) At **Architecture Ribbon** click **Material List**.
- 2) Material list will be shown. Tick all list (Auto detected what you used)
Repeat for the Electrical and 3D Object.
Insert List on Drawing Area as per Diagram A

EXPORT MATERIAL LIST/COSTING



DESCRIPTION

- 1) At **Architecture Ribbon** click **Export of Selected lists of Material**.
- 2) Select all table of material lists, then right click.
- 3) **Export of lists of material** will be shown, then **tick** to export the lists.

Note:

RTF for Word Processor (doc file) and CSV for Excel (csv file)

List of lintel materials

Material name	Width [m]	Height [m]	Length [m]	Total area [m ²]	Total volume [m ³]	Quantity [pcs]
Level 0						
Reinforced concrete 2500	0.12	0.19	1.5	1.08	0.21	6
Reinforced concrete 2500	0.12	0.19	1.1	0.13	0.03	1
Reinforced concrete 2500	0.12	0.19	3.3	0.16	0.03	1
Reinforced concrete 2500	0.12	0.19	2.1	0.5	0.1	2
Reinforced concrete 2500	0.12	0.19	0.9	0.11	0.02	1
Roof materials						
11 Ungrouped						
Ceramic plit	95.4	143.1	1.5	5	0.25	rolls
Granular m	95.4	1431.05	15	5	2.50	rolls
List of column materials						
17 Ungrouped						
Chequer br	0.25	0.25	3.1	0.13	0.39	5 208.65 pcs. / 0.60 packs
List of flooring materials						
22 Ungrouped						
Insulation ε	0.025	52.4	1.31	5	1099.31	pcs. / 122.15 packs
Insulation ε	0.01	4.91	0.05	5	41.19	pcs. / 4.58 packs
Lean concre	0.05	52.4	2.62	5	2198.62	pcs. / 284.29 packs
Lean concre	0.03	4.91	0.15	5	123.56	pcs. / 13.73 packs
Parquet	0.025	52.4	1.31	5	1099.31	pcs. / 122.15 packs
Parquet	0.01	4.91	0.05	5	41.19	pcs. / 4.58 packs
List of crown materials						
32 Ungrouped						
Symbol	Width [m]	Height [m]	Total length [m]	Total area [m ²]	Total volume [m ³]	
Level 1						
W14	0.11	0	4.15	0.47	0	
W15	0.11	0	2.93	0.33	0	
W16	0.11	0	3.04	0.35	0	
W17	0.11	0	3.64	0.41	0	
W18	0.11	0	3.75	0.43	0	
W19	0.11	0	3.15	0.36	0	
W20	0.11	0	9.6	1.09	0	
W21	0.11	0	2.55	0.29	0	
W22	0.11	0	7.75	0.88	0	
W23	0.11	0	7.64	0.87	0	

Material Lists in a Spreadsheet for your costing.

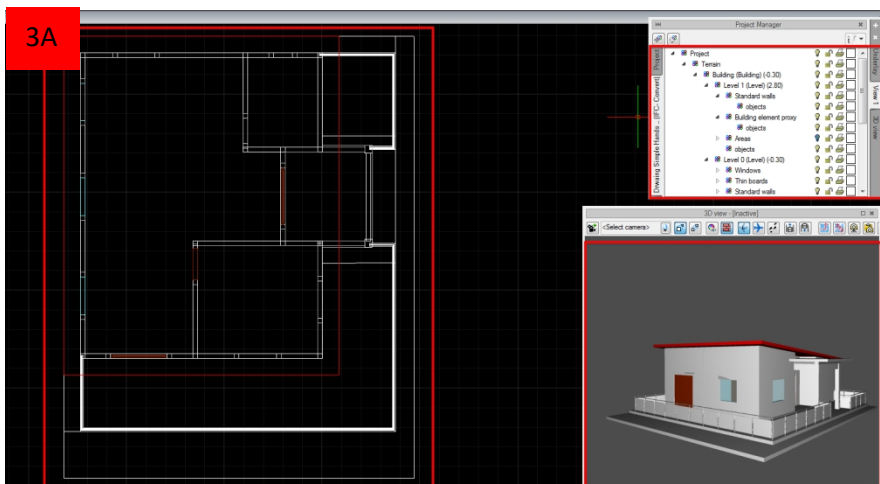
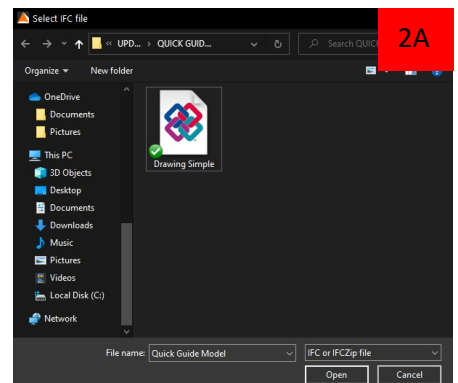
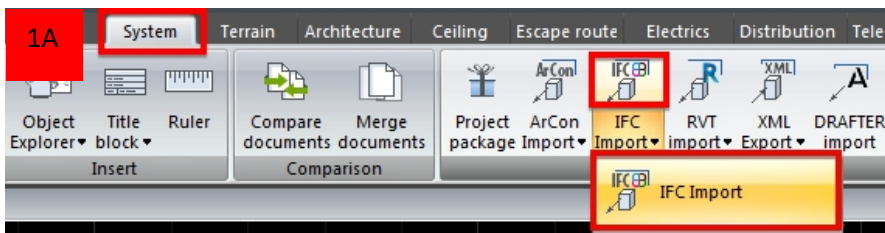
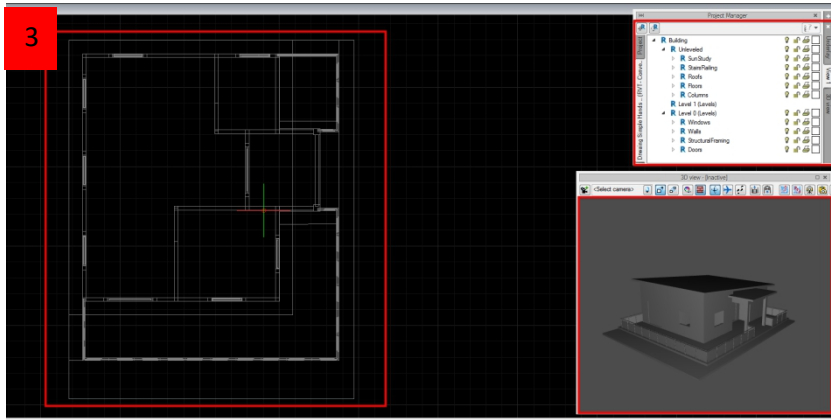
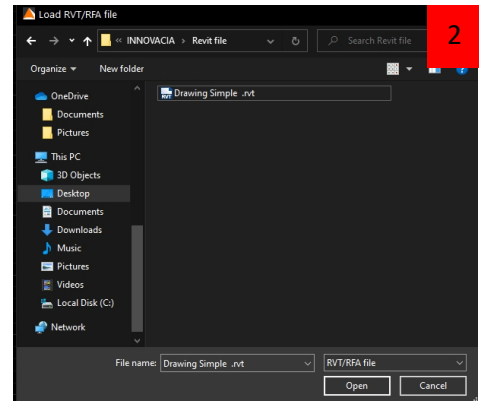
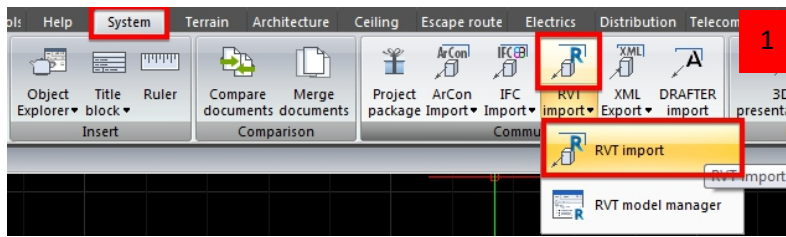
ArCADia-ARCHITECTURE
Author: NFR Distributor License for: Inovacia [003]

List of lintel materials

Material name	Width [m]	Height [m]	Length [m]	Total area [m ²]	Total volume [m ³]	Quantity [pcs]
Level 0						
Reinforced concrete 2500	0.12	0.19	1.50	1.08	0.21	6
Reinforced concrete 2500	0.12	0.19	2.10	0.50	0.10	2
Reinforced concrete 2500	0.12	0.19	0.90	0.11	0.02	1
Reinforced concrete 2500	0.12	0.19	1.30	0.16	0.03	1
Reinforced concrete 2500	0.12	0.19	1.10	0.13	0.03	1

Material Lists in a Word Processor for your report.

INSERT RVT FILE, RFA FILE & IFC FILE TO TIFFINBIM



DESCRIPTION

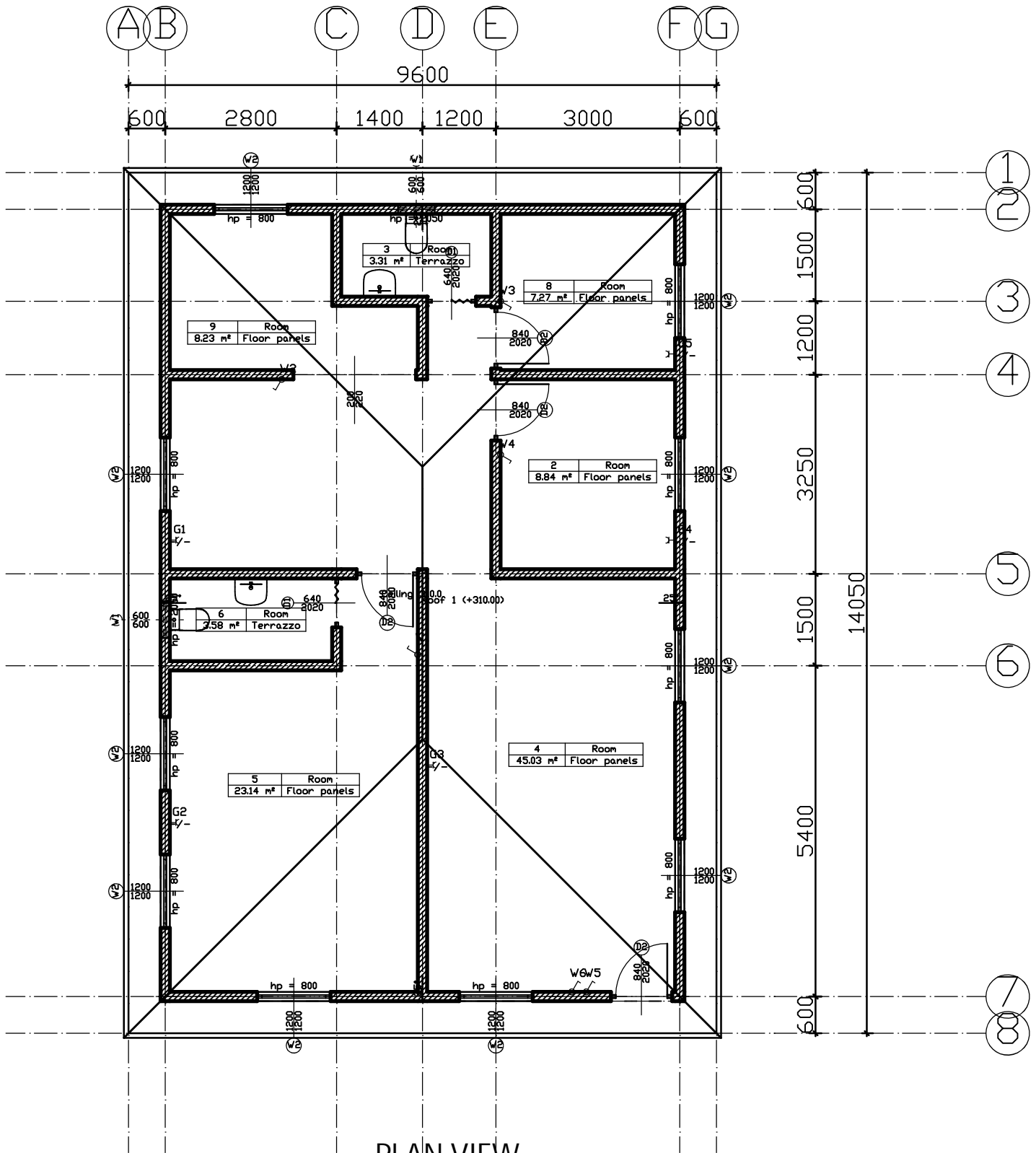
Note: We uses the another model but still same step.

1) At **System Ribbon** click **RVT import**.

2) Select **rvt file** on the folder and click **Open**.

3) The model from **rvt file** will shown as per **Diagram 3**. (We use the example Repeat same step (**Step 1-3**) for **insert ifc file** as per **Diagram 1A to 3A**.)

APPENDIX A



PLAN VIEW

TiffinBIM v.12

Draw, Calculate, Present, Amend. Easy.
www.innovacia.com.my/tiffinbim