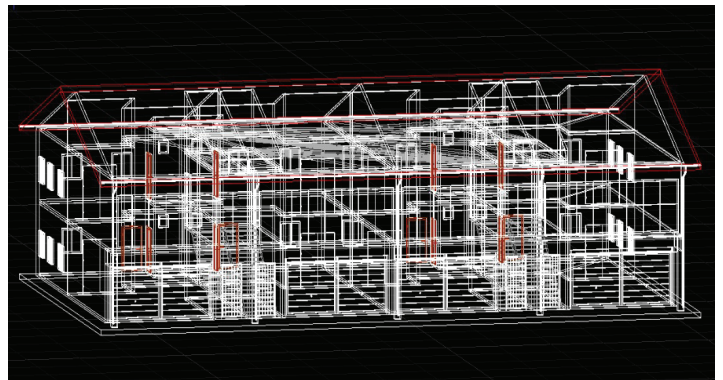


AFFORDABLE 2-IN-1 CAD/BIM SOFTWARE FOR IR4.0 APPLICATIONS

An affordable, compatible, perpetual, lightweight software with easy learning curve.
A solution for both of your current CAD usage and future BIM projects.



THE QUEST FOR AN AFFORDABLE CAD/BIM SOLUTION

Innovacia, being the pioneer in IBS research and training in Malaysia, identifies infotech as a major element in the success of construction industrialisation.

Answering the Government's call for more Malaysian-made solutions, in 2010 it invested in producing TiffinCAD - South East Asia's first home-grown, full-fledged CAD software.

In 2014, with the emergence of global demand for BIM, TiffinBIM was released, backed by a European partner, ArCADia.

***According to Malaysia BIM Report 2016 by CIDB,
the high cost of technology is ranked as the No. 1 challenge
against BIM implementation***

TiffinBIM is a special version of ArCADia, at an affordable price not available elsewhere, incorporated with selected vertical installations required in the region including **Malaysia's standard symbols based on MS2522 and MS 1064**. ArCADia itself is a global BIM force with presence in more than 40 countries; winner of the 2018 Finances On line's Great User experience and Rising Star awards.

Now incorporating **Architectural, Mechanical, Electrical and Structural BIM installations in one single package**. Option to use the command line for traditional CAD users. Or the ribbon GUI for BIM commands. Suitable for clients, consultants, contractors, manufacturers, education centres.

For both STEM/TVET and Professional users.

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A solution for both of your current CAD usage and future BIM projects.

TiffinBIM v.12 SYSTEM REQUIREMENTS

Compatible with Windows 10, 8.1 or 7 SP1 (64 - bit)

MINIMUM HARDWARE SYSTEM REQUIREMENTS

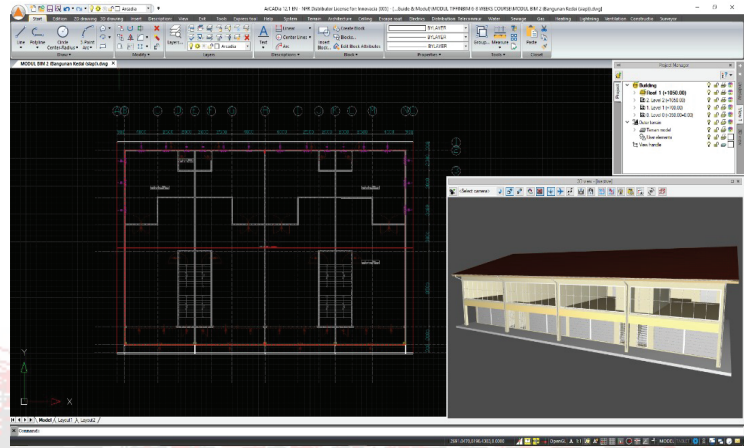
Intel® Pentium® 4 or comparable
3 GB RAM
5 GB free hard disk space for installation
Graphics card compatible with OpenGL Version 1.4 or higher

RECOMMENDED HARDWARE SYSTEM REQUIREMENTS

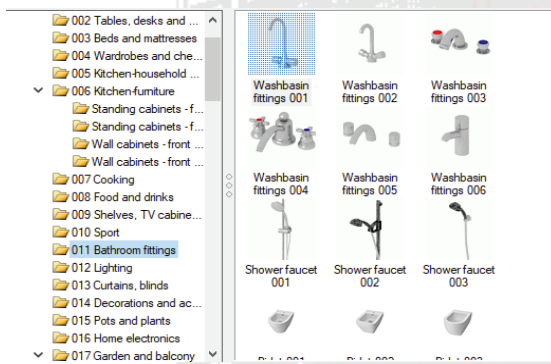
Intel Core i5 or comparable
8 GB RAM and higher
5 GB free hard disk space for installation (SSD)
Dedicated Graphics card (Nvidia/AMD) compatible with OpenGL Version 1.4 or higher

HIGHLIGHTS OF TIFFINBIM

- Managing views and the displayed information through the clear tree of the Project Manager.
- Inserting elements such as wall, pipe, etc. using the smart tracking function.
- Showing elements drawn in the view in a classic or the new 3D view rendered in real time (visualisation using a 3D game engine).
- A smart list of the most often used commands (Smart TOP 10) that are automatically memorized when working on a project, creating a personalized tool palette.
- The possibility to compare two versions of a project created as an ArCADia system model in the scope of new and modified system elements.



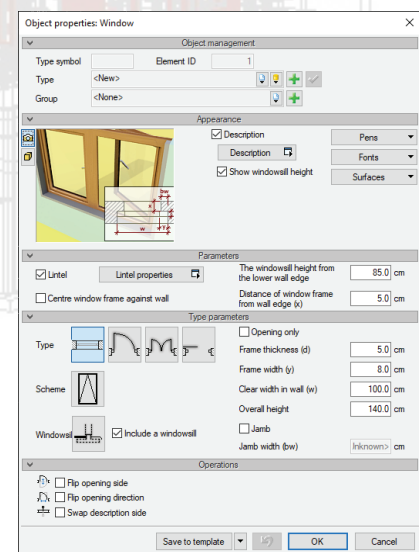
Draw, edit and manage your drawings in 2D classic view and at the same time, view the rendered 3D instantaneously.



A collection of 2D and 3D elements that can be used for various construction projects and design.

- The possibility to merge the building model from an architectural design with the installation design models to create one complete model of a building project.
- Collisions list of all or individual ArCADia system elements on a view, 3D view and a clear list.
- Modular Coordination (MC) axes generation.
- Built-in library that allows for detailing with 2D symbols (including JKR/CIDB Standard IBS components, SYABAS symbols, MS2522 CAD Symbols for Construction, MS1064 standard library and fashion/clothing industry standard design templates) and 3D objects (including for landscape and ID) needed in the drawing.

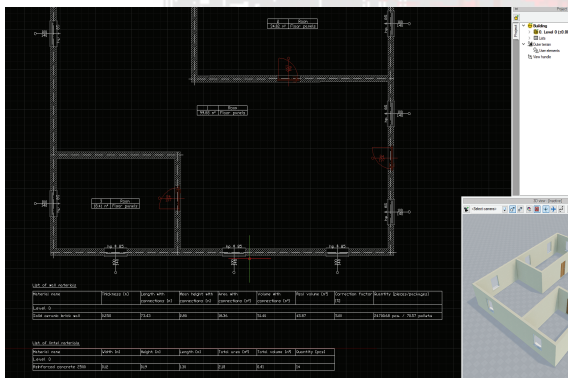
- Saving custom settings for elements (pens, fonts, default element sizes, etc.) in the project template.
- Built-in library of all elements types, with the possibility of expansion.
- Precise printing by setting all print parameters.
- Working in DWG 2018 native format.
- Built-in catalogue of construction materials
- Inserting of window and door woodwork in a parametric way.
- Automatic creation of rooms from the closed outlines of walls and virtual walls, with assigning names, functions, temperature and lighting demand.
- The ability to convert a 2D drawing created from a polyline or line into a single or multi-layer wall view, virtual walls and continuous footings.
- Inserting the bar structure framework from the .f3d file, which is seen as one element that can be exploded and seen as a single bar element (moved and edited individually).
- Automatic creation of cross-section by indicating the cutting line (also stepped) of the building with the option to define the elements visible in the cross-section view.
- Simplified rendering (quick and easy to use) or advanced with the possibility of defining all necessary settings (type and position of lighting, softening shadows, etc.).



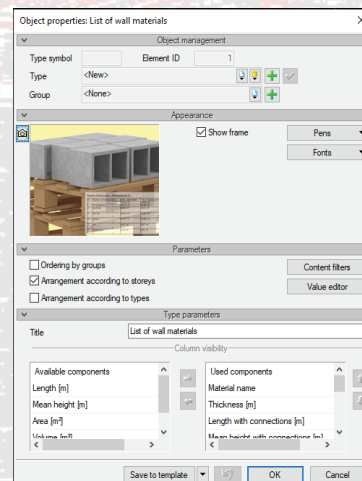
Edit your object's parameters according to specification. From type, measurements and even hashing and colour.

HIGHLIGHTS OF TIFFINBIM

- Automatic and manual dimensioning of the designed building. Possibility to enter description of the elements (roof, ceiling, wall) showing the list of materials from which the element was created.
- Automatically created lists: areas and cubage; roof surfaces, roof accessories (gutters, downpipes, etc.), the roof structure, bar elements, suspended ceiling elements and materials.
- Module for constructing the structural systems of ribbed-beam roofs, containing all the basic elements of the system: ceiling beams, reinforcing ribs, hidden ribs, exchanges, supporting mesh and additionally all necessary material lists including the elements needed to make the ceiling, completed with reinforcing steel and monolithic concrete.
- Inserting the binding joist with the insertion of longitudinal reinforcement and stirrups.
- Automatic 3D construction view created on the basis of a three-dimensional architectural model of a building.
- Creating drawings of the internal water supply, sewerage, internal gas, electrical, with rich library.
- Inserting devices with individually set shapes and dimensions defined by the user.

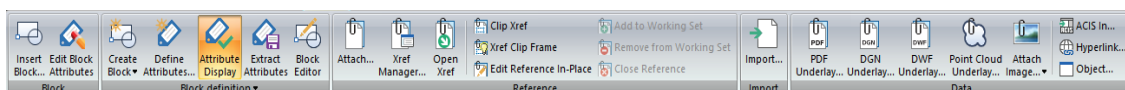


*Area and Bill of Materials (BOM) are automated.
No need to calculate and create it manually.*



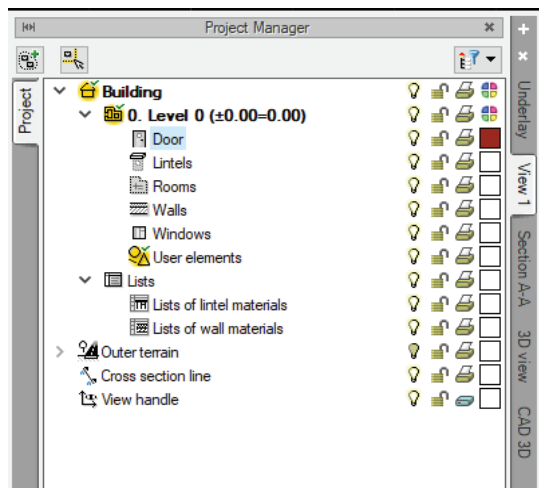
*Adjust Bill Of Materials (BOM) parameters
according to your specifications*

- Reading and saving drawings in the AutoCAD format from 2.5 to 2018 (DWG, DXF).
- Importing and editing raster images (eg geodesic underlay), including files such as: JPG, TIF, BMP, GIF, PNG.
- Import PDF files analogously to raster underlays or with conversion to vector elements.
- Export to PDF file.
- Possibility to enlarge the library of 2D / 3D objects with the following formats: XOBJECT, ACO, O2C, OBJ, XOBJ3D and DWG.
- IFC file conversion into ArCADia's basic objects (walls, windows, doors, ceilings, roofs).
- IFC file import (inserts an independent 3D model to the project).
- Managing IFC models.
- View properties of objects from the IFC model stored in the source program.
- Export of the ArCADia system project to IFC format.
- Import of RVT and RFA files from Revit.
- Project export (with all materials and textures) to the OBJ format.
- All generic CAD tools incorporating command line and input and Lisp programming language interpreter.
- Modification of the top menu, ribbons (panels and tabs), tool bars, command status bar and keyboard shortcuts.
- Generating ready-made materials lists, devices and connection fittings included in the project, intended for further processing and doing cost estimates and investment valuations; with export to txt and csv (Excel).
- Integration with RAMA, structural analysis and design software based on Eurocode.

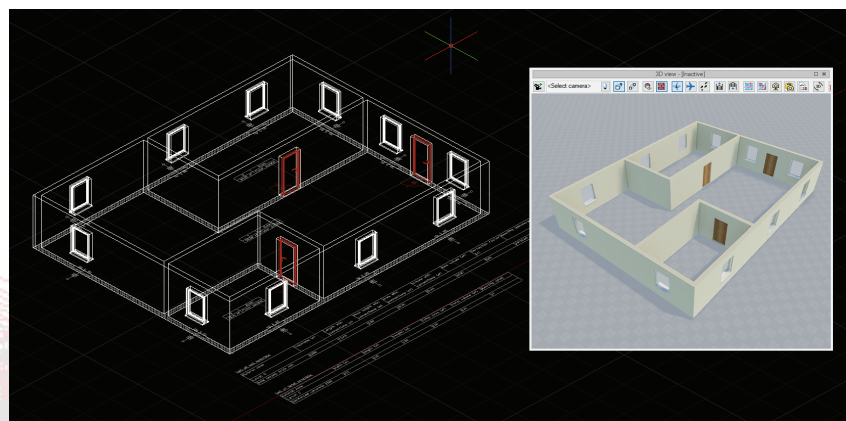


Multiple options to manage blocks, and IFC, RVT and PDF file formats

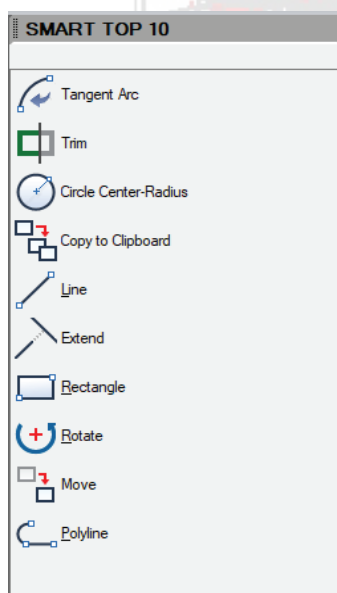
QUALITY OF LIFE (QOL) IMPROVEMENTS



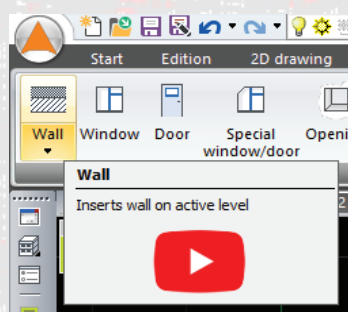
Project Manager: A better and efficient way to manage views and information available in each tree.



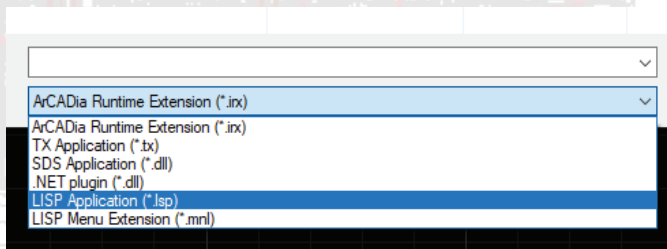
View your 2D BIM model in CAD 3D view, for a faster rendition on how your 2D model would like in wireframe form.



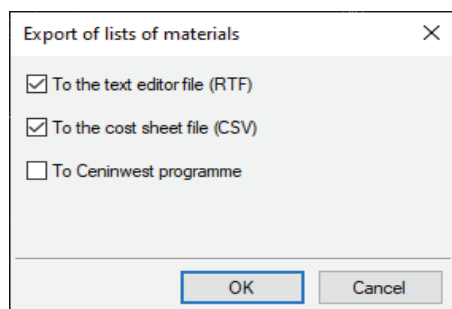
Smart Top 10: 10 often used commands that are automatically memorized when working on a project, for a smoother and efficient flow.



Mouse over BIM functions for fast and easy access to view tutorial videos on Youtube.



Load LISP files to assist and enhance your CAD / BIM experience



List of wall materials

Material name	Thickness [m]	Length with connections [m]	Mean height with connections [m]	Area with connections [m²]	Volume with connections [m³]	Real volume [m³]	Correction factor [%]	Quantity [pieces/packages]
Level 0								
Solid ceramic brick wall	0.250	73.43	2.80	18.36	51.40	45.87	5.00	24700.68 pcs. / 70.57 pallets

Export all or the selected BOM to RTF or CSV file format without having to rewrite everything in either Word or Excel, minimising errors.



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