

# ARCHICAD Template Upgrade

ARCHICAD 21 to ARCHICAD 22

Workflow Guide 2018/2

Customer Support Services Department

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# Exclusively for SSA Customer Use

The Workflow Guide Series are know-how documents providing solutions recommended for BIM workflows and project management related challenges.

The ARCHICAD Template Upgrade Workflow Guide, offers an overview of all the key settings and functions, you need to check when upgrading your office template(s) from ARCHICAD 21 to ARCHICAD 22.

Note that the document does not refer to older versions of ARCHICAD and assumes that the template upgrade process is done from ARCHICAD 21 to ARCHICAD 22.

This document was created with the aim to support the efficiency of your work. If you have any feedback, please send it to [helpcenter@graphisoft.com](mailto:helpcenter@graphisoft.com).



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## Workflow Guide Series ARCHICAD Template Upgrade

(International English Version)

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## Introduction

An office template is a vital part of efficient project start-up and productive workflows. It ensures consistency in the methods of working and standardises the outputs.

With the annual ARCHICAD updates, it is recommended that the office template is upgraded in line with the new functionality introduced with each new ARCHICAD version.

Below, you will find a set of key considerations you need to make, when upgrading your existing ARCHICAD 21 template to ARCHICAD 22.

## 1. Libraries

- The ARCHICAD 22 Library is the only ARCHICAD library that should be loaded to your file. It is not recommended to load the Migration Libraries in the template. These can be added later on, when you are upgrading projects from previous versions of ARCHICAD, to ARCHICAD 22.
- The Embedded Library should be empty. If you need to add more objects to your template file, you are advised to load an Office Library to your template, along with the ARCHICAD 22 Library.

## 2. Views

### 2.1 Default Views

You are advised to create a set of generic floor plan views, which would match the default stories in the Project Map, so it is easy for users to get back to the starting position, if required. Such a view should:

- Show all elements and all components (Layers, Renovation Status, Partial Structure Display, etc).
- Not contain any overrides (Renovation Status Overrides, Graphic Overrides)
- Show components to the fullest Detail Level (use the most detailed Model View Option).
- Ensure that all element-level settings are not overwritten and all elements display as per their default settings.

The above will ensure that new users starting with the template will not encounter situations where they change a setting at an element level (e.g. different Building Material) and do not see any visual changes (because for instance a Graphic Override setting shows everything as solid black).

## 2.2 View Settings – Model View Options

The Model View Option panel has been redesigned and it does not allow for creation of Custom Model View Options any more. Users now have the ability to either edit existing Model View Options or create new ones, when they will be prompted to provide a name for the new Model View Option. There are also new options added for Curtain Walls, Stairs, Doors, Windows, Skylights and Objects.

- Check all your saved views in the View Map and update any views that previously referred to Custom Model View Option Combinations.
- Update your existing Model View Option Combinations by checking the following:
  - Curtain Wall component visibility and detail level in Curtain Wall Options.
  - Stair headroom visibility in Stair Options.
  - Door, Window and Skylight Section/Elevation/3D detail level control (previously only Floor Plan detail level was controlled through Model View Options) in Detail Level of Door, Window and Skylight Symbols.
  - Object Floor Plan/Section/Elevation/3D detail level control in Miscellaneous Settings for Library Parts.

## 3. Information Management

### 3.1 Classifications

- If you have created your own Classification Systems and have used the previous version number, update their version number to 22.
- If you update any Classification Systems at this point, check Tool defaults and Favorites to ensure that their settings are in line with the changes you have introduced to the Classification Systems.
- Check all Stair, Railing and Curtain Wall Favorites to ensure that they have the correct classification assigned to the main elements, as well as their sub-elements. Also, check all Stair, Railing and Curtain Wall sub-element Favorites for classification correctness.

## 3.2 Properties

- A new 'Undefined' option is available for the default value of Properties. Check all Properties and set defaults to 'Undefined' where necessary
- Expressions in Properties is a new feature in ARCHICAD 22
  - Check existing Properties and set defaults to be defined by Expressions where necessary.
  - The expression examples from the INT (International) template have been imported to your pre-set template. Check them and if you wish to keep them, translate them if necessary and set their Availability for Classification to suit your needs.
  - If in your previous template, you have created properties in the IFC schema to take advantage of the data mapping function, you may wish to consider to re-create these Properties in the Property Manager and use expressions to achieve the same result.

## 3.3 IFC Translators

A new function has been introduced in the IFC Translators, which gives you the ability to map IFC Properties to ARCHICAD Properties during import. This function is available through File > Interoperability > IFC > IFC Translators > Import Translators > Conversion Presets – Property Mapping.

- Use the 'ARCHICAD Properties' or 'ARCHICAD Properties (Common IFC Properties only)' presets from the INT (International) Template as reference to set up IFC Property to ARCHICAD Property Mapping in your IFC Translators. While this is not mandatory and you may wish to leave the preset as 'IFC Properties', in which case all IFC Properties will be left as is and will be imported as IFC Properties into your project, be aware of the limitation regarding how these properties can be labelled/scheduled/used in Graphic Overrides, this decision will bring. In general, it is recommended that at least basic mapping is introduced.
- For each Preset of the above, set the 'Replace Missing Renovation Status' value in line with the template's default Renovation Status.

## 3.4 Interactive Schedules

### 3.4.1 All Interactive Schedules

A number of fields and criteria, have been replaced by newer ones. These fields were element-specific in the past, whereas their new counterparts are available under the General group. These old fields have not been removed from ARCHICAD 22, but are marked by the '(ARCHICAD 20)' or '(ARCHICAD 21)' suffix in their names.

- Check all schedules and replace these old fields and criteria with their newer counterparts.

### 3.4.2 BIMx-related Interactive Schedules

If you have used in your template any of the previous 'Default for BIMx Output' pre-set schedules or you have created your own custom ones, you are advised to:

- Replace, as above, any obsolete element-specific fields with their General counterparts.
- Not include any Curtain Wall, Stair and Railing (e.g. Curtain Wall Panel/Frame values, Tread/Riser values, etc), as in BIMx, only the main element (and not the sub-elements) of Curtain Walls, Stairs and Railings can be selected and queried for information.

Consider using the 'Default for BIMx Output' Interactive Schedule of the INT (International) template for reference for the above recommendations.

## 4. Tool Defaults & Favorites

### 4.1 General

- Check the Library Loading report for any missing library parts linked to Favorites and redefine using the newer version of these library parts if necessary. Remember, that direct editing of Favorites has been introduced since ARCHICAD 20, so there is no need any more to change the Tool default and then use Redefine.
- It is good practice to have at least one Favorite saved for each tool. Check and define new Favorites if necessary.

## 4.2 Curtain Wall Tool

- Update all Curtain Wall Tool related Favorites to use the ARCHICAD 22 library parts for their components.
- It is recommended that you import the Curtain Wall Scheme Favorites from the INT (International) template, to show users how the new pattern logic is designed to work.
- Add profiles for the profiled Curtain Wall components, as explained in Section 5.2.1.
- There are new options available for the Curtain Wall Floor Plan Projection Mode (e.g. Hybrid Projection). The suggested default is: Overhead Components – Symbolic, Cut Components – Projected with Symbolic Panels, Uncut Components – Symbolic. Use these options, as you see fit in the Tool default settings and in all Curtain Wall Favorites.
- Building Material is now available on the Component level. Update Tool default settings and all Curtain Wall Favorites to assign the desired Building Material. Check all Frame and Panel Classes to assign the desired Building Material too.
- A new Corner Frame has been introduced. Update Tool default settings and all Curtain Wall Favorites, by selecting a Corner Frame. Suggested default is the Regular Double Frame with Cap 22.

## 4.3 Stair Tool

- Stair Tool symbol components (Grid, Break Mark, Numbering, Description, Walking Line, Up/Down Text) in Floor Plan Display and Reflected Ceiling Plan display, have been changed. Update Tool defaults and Favorites to the ARCHICAD 22 marker objects. Double-check their parameters.

## 4.4 Door, Window & Object Tools

- Model View Option based 3D detail level control has been introduced. See Section 2.2 View Settings – Model View Options for more information.
- It is good practice to set the 2D and 3D detail level of all Door, Window and Object Favorites to be controlled by the Model View Option. This will mean that any overrides will be a conscious user choice and not the application of an ‘accidental’ setting.
- All GDL-based tools store the ‘which is the current page’ data in Tool defaults and Favorites. Make sure that each Favorite has a relevant ‘current page’



selected. For instance, doors should have the 'Door Settings and Opening' page set in Favorites, not 'Representation' or 'Descriptions'.

## 4.5 Markers

- Change, Detail and Worksheet Tool marker library parts have been changed. Update Tool defaults and Favorites to the ARCHICAD 22 markers. Double-check their parameters.

## 4.6 Labels

- Labels have been changed. Update Tool defaults and Favorites to the ARCHICAD 22 markers. Double-check their parameters.
- The ability to save custom labels from 2D elements (including Autotext) has been introduced. You may consider creating office-specific labels from 2D elements and save them to the office library which will be loaded by default to your office template.

## 5. Attributes

### 5.1 General

- If you plan to modify attributes, make sure you have created a comprehensive list of changes.
- Do not delete any attributes without providing a list of the deletions and what they should be replaced with, as Library defaults rely on attribute indexes (e.g. surface #1 being Brick).
- Do not move attributes (e.g. #23 used to be Steel and it has now been rearranged and it is Concrete). If eventually attributes are moved, a list of such modification is needed to follow up the changes in the Library.
- Keep attribute index changes to a minimum. Be aware that if GRAPHISOFT updates Library defaults, this will affect the way the new Library will work together with older files, if you have made any modifications to the indexes.

## 5.2 Complex Profiles

### 5.2.1 General

- The ability to define Parametric Offset Modifiers within Profiles has been introduced. They can be modified on the instance level in Wall, Beam and Column elements.
- Profiled Frame and Profiled Panel have been introduced to the Curtain Wall Tool. They can use profiles available for Beams and Objects.

### 5.2.2 Curtain Wall Profiles

- You are advised not to move the newly included Curtain Wall profiles to different indexes; leave them at #35-#41.
- You may slightly modify their contents if you wish, but you are advised to leave their intent as is (e.g. #35 should remain the default profile for a Capped Curtain Wall Frame, etc).

### 5.2.3 Offset Modifiers

- If your template uses the same Profiles as the INT (International) template, you will find the new updated Profiles in the pre-set template. All you need to do is update their names.
- If your template includes your own custom Profiles, check each profile and add Offset Modifiers where you seem fit.

## Appendix

### Useful Help Center links

- [1] Model View Options <https://helpcenter.graphisoft.com/?p=76856>
- [2] Expressions in Properties <https://helpcenter.graphisoft.com/?p=76724>
- [3] IFC Translators for Import – Property Mapping  
<https://helpcenter.graphisoft.com/?p=77319>
- [4] Migrating Curtain Walls to ARCHICAD 22  
<https://helpcenter.graphisoft.com/?p=83529>
- [5] Save 2D Elements as Label <https://helpcenter.graphisoft.com/?p=76687>
- [6] Offset Modifiers in Profiles <https://helpcenter.graphisoft.com/?p=76465>