

GRAPHISOFT **Archicad**[®]

Project Audit

CONFIDENTIAL REPORT

for

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Test Architectural Industries Inc.



GRAPHISOFT[®]

A NEMETSCHKE COMPANY

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Introduction

This GRAPHISOFT Archicad Project Audit Report contains evaluations of different aspect of your Archicad Model, covering 115 checked items. These items are evaluated along the lines of 3 main categories: Performance, Structure, and BIM Essentials.

‘Performance’ takes into account things about the project that could affect the required processing power, thus making Archicad run less efficiently than it could, and also some organizational and workflow aspects, that might have an effect on the speed of how fast you can work.

‘Structure’ refers to how well the project and its attributes and settings are organized. An organized, well-structured project allows users to work more efficiently, and understand the workflows faster and better.

‘BIM Essentials’ are the basic tools and rules required to build up a project along the principles of Building Information Modeling. Mastery of these are all necessary to maintain a Model that can be the basis for good model exchange practices.

The report is broken down into 7 Sections, grouped by theme, to help you see what main fields may need improving in your project. After each section there is a summary of that section, and at the end of the entire report there is a Summary of all 115 items divided by all 7 sections and all 3 categories.

Please keep in mind that this report is solely based on the Archicad Project File provided, by no means it is capable of evaluating how you work. The results here in some cases may not be objective. They are only meant to help you find areas that could be improved by trainings and consultation.

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Scoring

You get a score for each checked item in this report. This score can be anything from 0–3, or “N/A” in case it is not applicable to your project. These scores will be placed in a Scoring Panel next to each item in the report. Since each item might affect different aspects of your model, the score will not necessarily apply to each of the three categories. You will see the score next to the name of the category it applies to, and you will see “—” next to the categories it doesn’t apply to.

Each item also gets an Impact Multiplier. This number can be anything between 1–5, and signifies the Impact it can have on your project. In the final results and summaries, the results to each question will be weighed by these multipliers, so more serious issues will have more effect on your final result.

On the right side of each question’s Scoring Panel, you can see a colored bar. This bar gets its color based on the score. It is meant to make it easier for you to spot the problematic items when quickly scrolling through the report.

After each section, you will see a summary where all the scores from the current section will be summed, and you can see some notes made by the auditor (if any). In the Summary Section, you will see your final score based on all items in the entire report.

Scoring Panels:

Performance	3/3	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	5	

Possible Scores:

Good	3/3	
Average	2/3	
Needs Improvement	1/3	
Not used at all	0/3	
Not Applicable	N/A	

0. Audit Details

Audit Details

Date of Audit:	August 2, 2021
Archicad Project Audit version:	v2021
Auditor's name:	Kovács, Dániel Alexander
Audit Provided by:	GRAPHISOFT HQ
Archicad version used for Auditing:	Archicad 24 INT 5004
Report Language:	English (International)

Project Details

Project's name:	S-Office – Sample Project
Project stage:	Design Development
Archicad version:	Archicad 24 INT 3008
PLA file name:	GRAPHISOFT_Archicad_Sample_Project-S-Office_v1.2_AC24Modified.pla
PLA file size:	758 MB
3rd Party Add-ons used:	No 3rd Party Add-ons.



1. Library Management

Libraries contribute to the size and speed of a project. Large and complex library parts, missing objects, duplicate objects, multiple libraries, excessive library parts, all contribute to the performance of the project. A three library system is recommended: the current Archicad Library for standard objects, an Office Library for objects specific to your company and a project-specific Library for objects unique to each project only. And any Migration libraries if the project has been migrated. Also many Archicad objects are scale dependent. These are not covered in the checkup but please be aware of this and edit the settings of each object if necessary. Use the Embedded Library with caution: it should not contain too many elements.

1.1. Embedded Library

Number of items in the Embedded Library: 31

Consider tidying the Embedded Library up by organizing items into folders, for the sake of being tidy. No significant issues will arise if you choose not to.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85477/>

<i>Performance</i>	2/3	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	5	

1.2. IFC Libraries

IFC Library Container Files (.LCF): 1

IFC Folders: 2

All or most of your IFC libraries are stored in the project folder based. Enumeration of these libraries takes more time and can cause serious performance issues. Save these libraries as .LCF to gain better performance and more organized project.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/25729/>

<i>Performance</i>	1/3	
<i>Structure</i>	1/3	
<i>BIM Essentials</i>	1/3	
<i>Impact Multiplier</i>	3	

1.3. Images over 1MB

Number of image files over 1MB: 3

There are no or few images over 1MB. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85477/>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

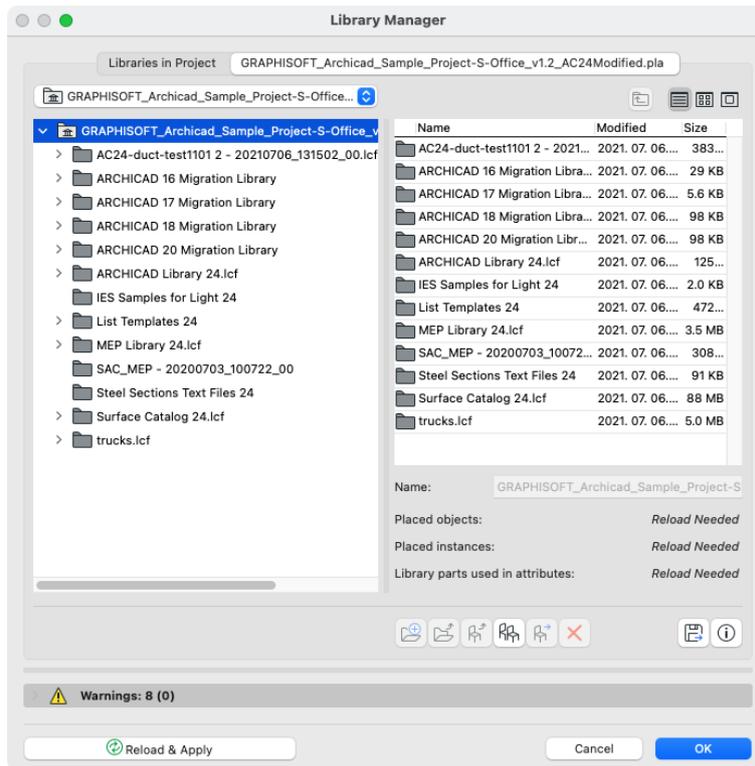
1.4. Linked Libraries

Number of Linked & BIMcloud libraries: 13

There are more than 6 Linked & BIMcloud libraries loaded in the project. These should be kept to a minimum as per the three library system as mentioned in the section header. If you regularly use any add-on libraries, surface catalog libraries, etc., it is a good idea to load them individually so they can be updated individually. If there are any extra libraries loaded in the project that are not shown below, you can safely remove them. We recommend to always link at least the default Archicad library.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85478/>

Performance	1/3	
Structure	1/3	
BIM Essentials	—	
Impact Multiplier	5	



1.5 Large Point Cloud files in the Library

Size of Point Clouds in MBs: 153 MB

The Point Cloud files in total are less than 200MB in size, which is a good size. It is recommended to keep Point Cloud file sizes to a minimum as large Point Clouds can slow down 3D navigation, affect library loading times and increase file sizes. Make sure to remove the Point Clouds from the project, if no longer needed.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85653/>

Performance	3/3	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	3	

1.6 Missing Library Parts

Number of Missing Library Parts: 7

This number of missing library parts is relatively low. These may consist of images and/or objects. Consider modifying, replacing or deleting these parts or the Surfaces that reference the image files. It's a good rule of thumb to never have the library loading report appear with Missing Object errors.

Reference: <https://helpcenter.graphisoft.com/user-guide/127921>

Performance	2/3	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	3	

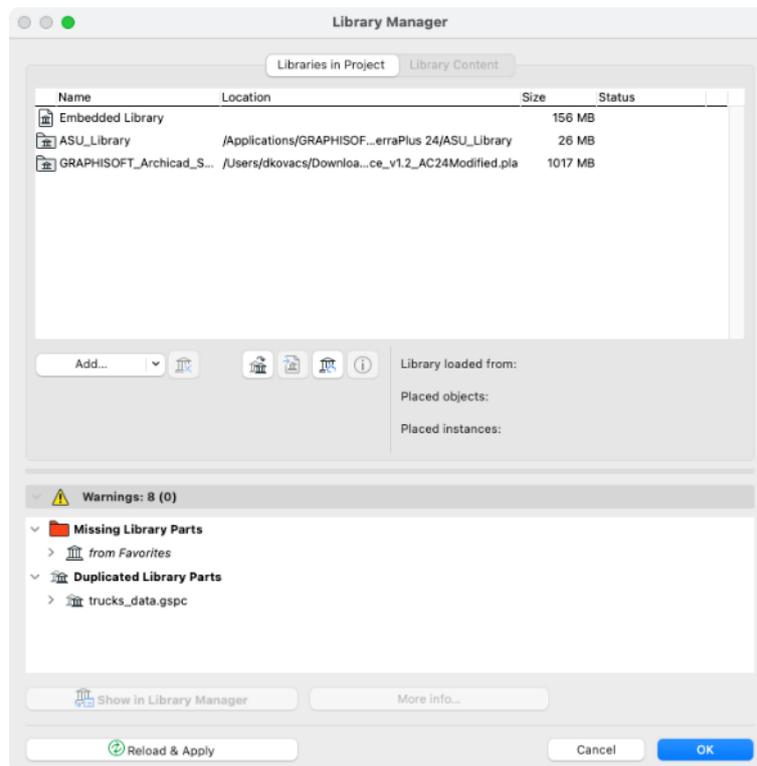
1.7. Duplicated Library Parts

Number of Duplicated Library Parts: 1

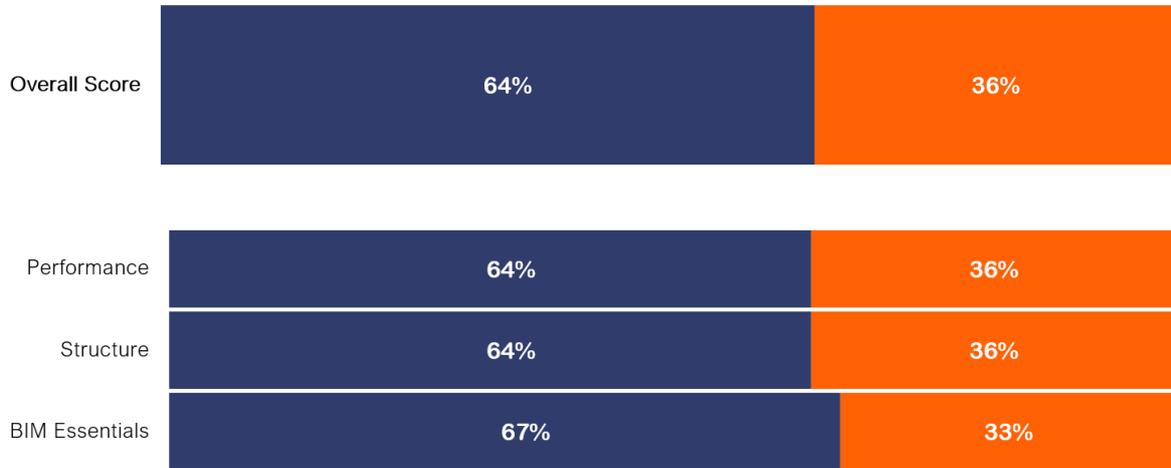
This number of duplicated library parts is relatively low. Consider removing all duplicates. Duplicates can be identified by selecting each library listed under the 'Library' with 'Duplicated Library Parts', then clicking the blue 'Information' button in the bottom right corner. In the next dialog change the flyout to 'List of All Duplicates'. Then remove those duplicates from one of the libraries, via your operating system and reload the libraries. It's a good rule of thumb to never have the library loading report appear with Duplicate errors.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85653/>

<i>Performance</i>	2/3
<i>Structure</i>	2/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	1



Library Management Potential



Auditor Notes

No Additional Notes.

2. Project Management

The way the model and annotation is managed can greatly affect the size and speed of a project. 2D & 3D elements and trace references can all slow down performance and add to file bloat if not managed correctly.

2.1. Solid Element Operations

Number of Solid Element Operations: 128

Number of Target Elements: 49

Number of Operator Elements: 45

The project contains a considerable amount of Solid Element Operations, but be careful adding many more. Too many SEOs can slow Archicad down considerably. Consider if these SEOs can be handled with polygon editing, priority based connections or trims.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85547/>

Performance	2/3	
Structure	2/3	
BIM Essentials	2/3	
Impact Multiplier	5	

2.2. Simultaneously open tabs

Number of tabs open simultaneously: 15

Too many tabs open simultaneously can start to bog down the project. The highest optimal number is 6 or 7. Consider closing any unnecessary tabs and/or changing your work environment to open tabs in existing tabs, via the User Preferences Schemes> More Options section.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85468/>

Performance	2/3	
Structure	—	
BIM Essentials	—	
Impact Multiplier	1	

2.3. Simultaneously active Trace References

Number of Trace References active simultaneously: 5

The project has a manageable number of Trace References enabled. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85501/>

Performance	3/3	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	3	

2.4. Trace Referencing Views & Layouts

Number of Trace References using Views or Layouts as Source: 1

Trace referencing views from the view map or layouts from the layout book as opposed to viewpoints from the project map can start to bog down Archicad if there are too many, as Archicad needs to calculate all the view settings for each. Trace referencing Sections, Elevations, Layouts, etc. that need updating can also cause slowness. There are very few or no trace referenced viewpoints, views and layouts. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128016/>

Performance	3/3	
Structure	—	
BIM Essentials	—	
Impact Multiplier	3	

2.5. Number of Elements

Total number of all (2D & 3D) Elements in the Entire Project: 11 170

The project has 100 000 elements or less which is a manageable amount. No action needs to be taken.

Note: This number doesn't include elements on the Archicad Layer.

Reference: <https://helpcenter.graphisoft.com/user-guide/128013/>

Performance	3/3	
Structure	—	
BIM Essentials	—	
Impact Multiplier	3	

2.6. Utilizing Archicad's 3D modeling capabilities

Number of 3D Elements in the 3D Model Space & Floor Plans:	10 120
Number of 2D Elements in Floor Plans:	151
Number of all (2D & 3D) Elements in the 3D Model Space & Floor Plans:	10 271
Percentage of 3D Elements out of all Elements in the 3D Model Space:	99%

Performance	3/3
Structure	—
BIM Essentials	3/3
Impact Multiplier	1

The project has most or all of the building elements created in 3D. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/25478/>

2.7. Number of Groups

Number of Groups in 3D Model Space & Floor Plans: 145

The project has over 100 groups which could start to slow down Archicad. Consider reducing this to a more manageable amount (under 100).

Reference: <https://helpcenter.graphisoft.com/user-guide/128013/>

Performance	2/3
Structure	—
BIM Essentials	—
Impact Multiplier	3

2.8. Sun Shadows in 3D Styles

Number of 3D Styles that have Sun Shadows turned on:	5
Total number of 3D Styles in the Project:	13
Percentage of 3D Styles with Sun Shadows out of all 3D Styles:	38%

The project has some 3D Styles with Sun Shadows enabled. These can affect performance. Consider the need for these 3D Styles, especially if they are assigned to Views.

Reference: <https://helpcenter.graphisoft.com/user-guide/128998/>

Performance	2/3
Structure	—
BIM Essentials	—
Impact Multiplier	3

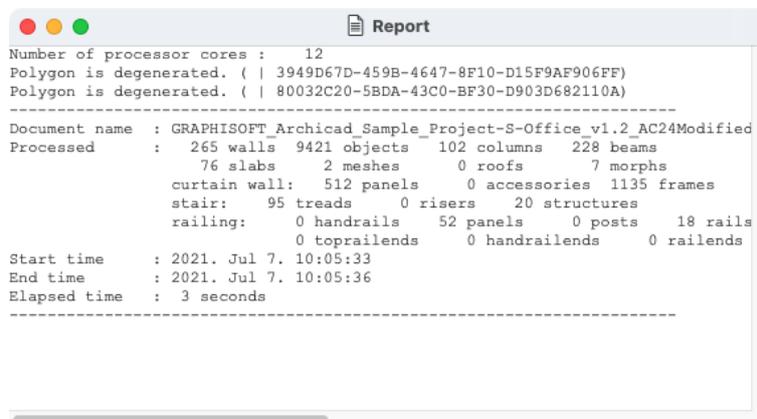
2.9. Errors in 3D

Number of Errors in Session Report: 2

Archicad reports up to 10 errors when opening the 3D window. Consider finding these corrupt elements using Find & Select and modifying or replacing them. Turning on 'Interrupt with error messages' and 'Write Report' in the Model Rebuild Options of the Work Environment profile will aid with this, along with using the Element ID Manager if there are multiple element with identical IDs.

Reference: https://helpcenter.graphisoft.com/user-guide/128945/#XREF_78293_Session_Report

Performance	2/3
Structure	2/3
BIM Essentials	—
Impact Multiplier	1



2.10. Number of Polygons

Number of Polygons in the Project: 2 134 404

The project contains less than 5 million polygons. With this many polygons, Archicad should function smoothly.

Keep an eye on the polygon count, and try to keep it as low as possible to avoid performance issues in the future. You can try to lower the detail level of elements in the Model View Options whenever you are not working on Visualizations, delete any elements you are not using anymore, and turn off layers that you do not need while editing certain aspects of the model. Note that downloaded objects usually have a high polygon count.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/25868/>

Name	Objects	Polygons	Percent	Detail Level
Wall	265	13 960	0.654%	
Column	102	1 652	0.077%	
Beam	228	9 188	0.43%	
Window	0	0	0%	
Door	65	3 206	0.15%	
Object	9 257	1 936 111	90.71%	
Lamp	99	104 203	4.882%	
Slab	76	9 777	0.458%	
Roof	0	0	0%	
Mesh	2	2 817	0.132%	
Zone	65	689	0.032%	
Curtain Wall	1	13 854	0.649%	
Shell	0	0	0%	
Skylight	0	0	0%	
Morph	7	1 767	0.083%	
Stair	4	3 020	0.141%	
Railing	17	10 622	0.498%	

Number of polygons : 2 134 404

Name	Objects	Polygons	Percent	Detail Level
Door	65	3 206	0.15%	
Object	9 257	1 936 111	90.71%	
Chair 10 24.gsm	69	106 674	4.998% by MVO	
Office Chair 02...	47	99 828	4.677% by MVO	
Flexible Duct 2...	296	71 264	3.339% Full	
Pipe Straight 2...	2 198	52 752	2.472% Full	
Bean Bag 24.g...	32	33 344	1.562% by MVO	
Office Chair 04...	48	20 880	0.978% by MVO	
Custom Flow E...	6	19 914	0.933% Full	
Custom Flow E...	4	14 936	0.7% Full	
Custom Flow E...	4	14 936	0.7% Full	
Custom Flow E...	4	14 936	0.7% Full	
Sofa Layout 24...	7	13 226	0.648% by MVO	
Duct Straight 2...	638	13 212	0.619% Full	
Custom Pipe Fi...	33	12 870	0.603% Full	
Custom Duct F...	16	12 096	0.567% Full	
Custom Pipe Fi...	30	11 700	0.548% Full	
Custom Flow E...	4	9 244	0.433% Full	
Custom Duct F...	56	9 072	0.425% Full	
Custom Duct F...	48	7 776	0.364% Full	
Custom Flow E...	4	7 756	0.363% Full	

Number of polygons : 2 134 404

Performance 2/3
Structure 2/3
BIM Essentials —
Impact Multiplier 5

2.11. Number of Duplicates

Number of Duplicated elements in the Entire Project: 6

The project contains very few or no duplicates.

You can make sure that it stays like this, if you run the Check Duplicates command to track down duplicates. This command is part of the GRAPHISOFT Goodies Add-on package. You can find out more about it on the page linked below.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/64529/>

Performance 3/3
Structure 3/3
BIM Essentials 3/3
Impact Multiplier 3

2.12. Model extents and position

Model's distance from the Archicad Project Origin: 0.00 m

The model is close to the Archicad Origin and no elements are out of bounds. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/25447/>

Performance 3/3
Structure 3/3
BIM Essentials 3/3
Impact Multiplier 3

2.13 Model Accuracy

Amount of inaccurate perpendicular wall connections: None

All the walls in all stories are straight and square. No action needs to be taken.

Reference: <https://bimcomponents.com/LCF/Details/6119>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	3	

2.14. 2D Linework Consolidation (in Floor Plans)

Number of deleted duplicates: 0

Number of merged connecting lines: 0

Number of merged overlapping lines: 0

Number of deleted lines overlapped by identical lines: 0

Number of deleted lines covered by solid lines: 0

Number of deleted lines overlapped by different type lines: 0

Number of adjusted lines: 0

Number of split lines: 0

Total number of affected lines: 0

The plan views required no, or minimal linework consolidation. No action needs to be taken, although there may also be linework consolidation required in other viewpoints.

Reference: <https://helpcenter.graphisoft.com/user-guide/128023/>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

2.15. 2D Fill Consolidation (in Floor Plans)

Number of fills before consolidation: 7

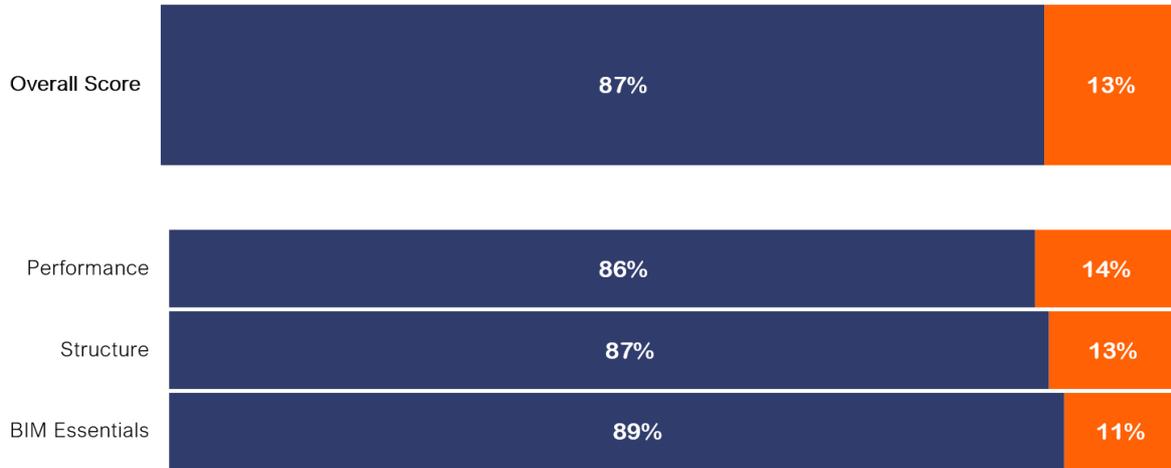
Number of fills after consolidation: 2

The plan views required no, or minimal fill consolidation. No action needs to be taken, although there may be fill consolidation required in other viewpoints.

Reference: <https://helpcenter.graphisoft.com/user-guide/128023/>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

Project Management Potential



Auditor Notes

No Additional Notes.

3. Attribute Management

Attribute Management does not greatly affect the performance of the project, but it is very important to have a tight structure especially when collaborating or using hotlinked modules between projects. Attributes can be viewed via the Attribute Manager and should be thoughtfully assigned a name and ID. Some special attributes provided by GRAPHISOFT, such as pens and fills, should not be changed from their original otherwise elements may not appear correctly.

3.1. Attributes in use

Number of Attributes in use in the Project: 353
Total number of Attributes in the Project: 587
Percentage of Attributes in use out of total: 60%

The Layers, Line Types, Fill Types, Composite Structures, Profiles, Surfaces, Building Materials, and Zone Categories in the project are at a high ratio of being used. An excessive amount of attributes can increase the size of the project and add unnecessary complexity. It is important to keep attributes that may be required in the future, but consider removing redundant attributes if it gets out of hand.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85469/>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

3.2. Structuring of Layers

Layers do follow a consistent naming convention and there are some external layers, such as those from Consultants or XREFs. Consider modifying the names so that they read the same.

Reference: <https://helpcenter.graphisoft.com/user-guide/127877/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	1	

3.3. Layer Intersection Group Numbers

The project makes good use of layer intersection priority numbers throughout all of the layer combinations. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127880/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	5	

3.4. Layer Extensions

Not all of the layers use extensions. Consider using extensions for all layers as they aid in identification and sorting.

Reference: <https://helpcenter.graphisoft.com/user-guide/128976/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	1	

3.5. Number of Layers

Total number of Layers in the Project: 60

The project has less than 100 layers which is considered a good amount. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127877/>

<i>Performance</i>	3/3	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

3.6. Elements on the "Archicad" Layer

Number of elements on the Archicad Layer in Floor Plans: 0

There are no elements in the plan viewpoints that reside on the Archicad layer. No action needs to be taken.

The Archicad Layer is a special Layer that cannot be deleted, hidden or renamed, so elements should reside on their own dedicated layer, not the Archicad layer.

Reference: <https://helpcenter.graphisoft.com/user-guide/127877/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	3	

3.7. Structuring of Layer Combinations

All Layer Combination names follow a consistent and predictable naming convention and have correct layer settings. Check the wireframe settings of layers as they may need to be the same in all layer combinations. And check your layer combinations for any unnecessarily visible layers. Otherwise no action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127879/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	1	

3.8. Structuring of Pens & Colors

All/most Pen Sets are in use, all/most pens have a description, and all/most pen sets are being used. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85471/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	1	

3.9. Structuring of Line Type attributes

Some of the default Archicad Line Types might have been overridden. This can make library parts appear incorrectly. New line types do not follow a consistent and clear naming convention. Duplicate line types may also exist. Consider reinvoking the default line types, removing any duplicates and following a clear naming convention.

Reference: <https://helpcenter.graphisoft.com/user-guide/127883/>

Performance	—	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	1	

3.10. Structuring of Fill Type attributes

Some of the default Archicad Fill Types might have been overridden. This can make library parts appear incorrectly. New fill types do not follow a consistent and clear naming convention. Duplicate fill types may also exist. Consider reinvoking the default fill types, removing any duplicates and following a clear naming convention.

Reference: <https://helpcenter.graphisoft.com/user-guide/127884/>

Performance	—	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	1	

3.11. Structuring of Composite Structure attributes

The Composites do not follow a clear naming convention and/or contain many spelling or grammatical errors. Duplicate composite structures may also exist. Consider correcting these.

Reference: <https://helpcenter.graphisoft.com/user-guide/127886/>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	1	

3.12. Structuring of Complex Profile attributes

Complex Profiles do not follow a clear naming convention and/or contain many spelling or grammatical errors. Duplicate profiles structures may also exist. Consider correcting these.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85508/>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	1	

3.13. Structuring of Surface attributes

The default Archicad Surfaces have been left untouched and/or new surfaces follow a consistent and clear naming convention. No duplicates or italicized surfaces exist. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85472/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	1	

3.14. Structuring of Building Material attributes

The Building Materials follow a consistent and clear naming convention. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127885/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	1	

3.15. Structuring of Zone Categories

The Zone Categories follow a consistent and clear naming convention. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128148/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	1	

3.16. Structuring of City attributes

Some of the Cities do not follow a clear naming convention and/or contain some spelling or grammatical errors. Consider correcting these.

Reference: <https://helpcenter.graphisoft.com/user-guide/127874/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

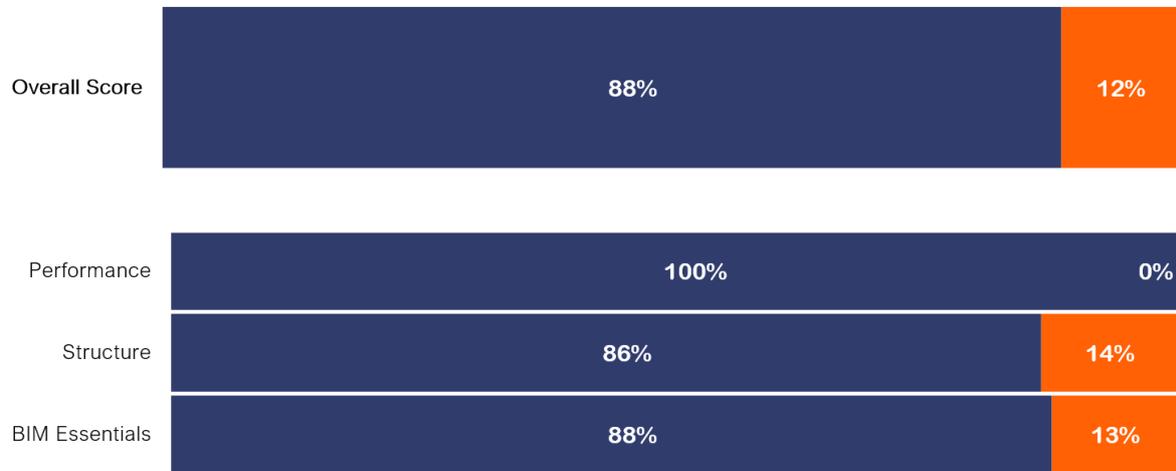
3.17. Structuring of Operation Profiles

The Operation Profiles do not follow a clear naming convention and/or contain many spelling or grammatical errors. Consider correcting these.

Reference: <https://helpcenter.graphisoft.com/user-guide/128840/>

<i>Performance</i>	—	
<i>Structure</i>	1/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

Attribute Management Potential



Auditor Notes

- The layers were well organized, but there were 2 different organizational structures (the default Archicad system, and a unique system). It is recommended to use a single unified system instead.
- Layer extensions are barely utilized, there are some more opportunities, and it would improve the organization of the layers
- Intersection group numbers are well utilized, outstanding.

4. Project Settings

Project Settings do not greatly affect the performance of the project, but it is good to have settings that make sense and ease the workflow. The items listed below are more suggestions aimed to improve the Structure than issues that are detrimental to the health of the project.

4.1. Autogrouping

Edit > Grouping > Autogroup' is Enabled in the project. Consider the need to have this enabled, especially for the long term. Autogroup should be used with caution, as too many groups in a project can slow Archicad down.

Reference: <https://helpcenter.graphisoft.com/user-guide/128013/>

<i>Performance</i>	2/3	
<i>Structure</i>	—	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.2. Snap Point Settings

The Snap Points settings (at 'View > Snap Point Options') are in a state that might slow down pre-selection. If you notice any feedback slowness, consider changing these settings back to 'Half' and 'Along Entire Element'.

It is recommended to set Snap Points to 'Half' and 'Along Entire Element', because those require the least processing power. It is not recommended to turn all of these options off completely though, as they can improve modeling accuracy and speed significantly.

Reference: <https://helpcenter.graphisoft.com/user-guide/127969/>

<i>Performance</i>	2/3	
<i>Structure</i>	—	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.3. Magic Wand Settings

Give Preference to: **Best Match**

Tracing Method: **Deviation from Curves (≥40 mm)**

The default Archicad Magic Wand Settings have been left untouched, or the new settings are appropriate. It is okay to change the magic wand settings for certain tasks, but you should always turn the settings back to avoid accidentally creating an excessive amount of segments in elements. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127974/>

<i>Performance</i>	3/3	
<i>Structure</i>	—	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

4.4. On-screen View Options

The following On-Screen View Options can slow down Archicad's 2D performance: Vectorial Hatching, Show Trimming Bodies, and Hidden Morph Geometry. Some of these are enabled. If you are experiencing slow 2D performance, consider disabling these options.

Reference: <https://helpcenter.graphisoft.com/user-guide/128436/>

<i>Performance</i>	2/3	
<i>Structure</i>	—	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.5. Structuring of Model View Option Combinations

The default Archicad Model View Option Combinations have been left untouched and/or any new Model View Option Combinations follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128435/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	1	

4.6. Model View Option Combinations in use

Number of Model View Option Combinations in use in the Project: 6
Total number of Model View Option Combinations in the Project: 8
Percentage of Model View Option Combinations in use out of total: 75%

There are some Model View Option Combinations that are not assigned to views and/or MISSING Model View Option Combinations are assigned to views. Consider rectifying these and or deleting unnecessary ones.

Reference: <https://helpcenter.graphisoft.com/user-guide/128435/>

Performance	—
Structure	2/3
BIM Essentials	—
Impact Multiplier	3

4.7. Curtain Walls shown in Full Detail in 3D (Model View Options)

Number of Model View Option Combinations with Curtain Walls in Full Detail: 5
Total number of Model View Option Combinations in the Project: 8
Percentage out of total: 63%

Showing Curtain Walls in Full (vs. Schematic) detail level can contribute to Archicad slowing down. There are some Model View Option Combinations with these options enabled. If you experience slowness, consider the need for these in the Model View Option Combinations in which they are enabled and adjust if necessary. At least consider making Curtain Walls show as Schematic in non-publishing Model View Option Combinations.

Reference: <https://helpcenter.graphisoft.com/user-guide/128995/>

Performance	2/3
Structure	—
BIM Essentials	—
Impact Multiplier	1

4.8. Stairs & Railings shown in Full Detail in 3D (Model View Options)

Number of Model View Option Combinations with Stairs & Railings in Full Detail: 7
Total number of Model View Option Combinations in the Project: 8
Percentage out of total: 88%

Showing Stairs & Railings as Full (vs. Simplified or Schematic) can contribute to Archicad slowing down. There are many Model View Option Combinations with these options enabled. If you experience slowness, consider the need for these in the Model View Option Combinations in which they are enabled and adjust if necessary. At least consider making Stairs & Railings show as Schematic in non-publishing Model View Option Combinations.

Reference: <https://helpcenter.graphisoft.com/user-guide/128995/>

Performance	1/3
Structure	—
BIM Essentials	—
Impact Multiplier	1

4.9. Objects shown in Full Detail in 3D (Model View Options)

Number of Model View Option Combinations with taps, handles & knobs in 3D: 6
Total number of Model View Option Combinations in the Project: 8
Percentage out of total: 75%

Showing objects in high detail level can slow the model down in the 3D Window, Sections, Elevations, etc. This is controlled by the "Object and Lamp Detail Level" and "Accessories in 3D" options, under the 'Miscellaneous settings for Library Parts' tab of the Model View Options Dialog. There are some Model View Option Combinations with these options enabled. If you experience slowness, consider the need for these in the Model View Option Combinations in which they are enabled and adjust if necessary.

Reference: <https://helpcenter.graphisoft.com/user-guide/128995/>

Performance	2/3
Structure	—
BIM Essentials	—
Impact Multiplier	1

4.10. Structuring of Graphic Override Combinations

The default Archicad Graphic Override Combinations have been left untouched and/or any new Graphic Override Combinations follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128456/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	1	

4.11. Graphic Override Combinations in use

Number of Graphic Override Combinations in use in the Project: 12

Total number of Graphic Override Combinations in the Project: 26

Percentage out of total: 46%

There are many Graphic Override Combinations that are not assigned to views, or views with No Overrides assigned to them. Consider the need for unused combinations and delete if necessary. And consider assigning dedicated Graphic Override Combinations to all views.

Reference: <https://helpcenter.graphisoft.com/user-guide/128456/>

<i>Performance</i>	—	
<i>Structure</i>	1/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

4.12. Structuring of Graphic Override Rules

The Graphic Override in the project refer to Graphic Override Rules and they have dedicated pens and surfaces assigned to them. They also have consistent naming conventions and no (or few) spelling or grammatical errors. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128455/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.13. Structuring of Renovation Filters

The default Archicad Renovation Filters have been left untouched and/or any new renovation filters follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128446/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.14. Renovation Filters in use

Number of Renovation Filters in use in the Project: 4

Total number of Renovation Filters in the Project: 6

Percentage of Renovation Filters in use out of total: 67%

There are some Renovation Filters that are not assigned to views. Consider the need for these and delete if necessary.

Reference: <https://helpcenter.graphisoft.com/user-guide/128446/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	3	

4.15. Structuring of 3D Styles

The default Archicad 3D Styles have been left untouched and/or any new 3D Styles follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128998/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

4.16. 3D Styles in use

Number of 3D Styles in use in the Project: 2

Total number of 3D Styles in the Project: 13

Percentage of 3D Styles in use out of total: 15%

There are many 3D Styles that are not assigned to views. Consider the need for these and delete if necessary.

Reference: <https://helpcenter.graphisoft.com/user-guide/128998/>

Performance	—	
Structure	1/3	
BIM Essentials	—	
Impact Multiplier	3	

4.17. Renovation Status of Elements

All elements are set to the proper Renovation status. No further actions needed.

Reference: <https://helpcenter.graphisoft.com/user-guide/128443/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	3	

4.18. Structuring of Favorites

The project contains a comprehensive amount of Favorites, with little or no incorrect settings or grammatical errors and good folder structure.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85479/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	1	

4.19. Greyed out Favorites

Number of greyed out Favorites in the project: 0

The project contains no greyed out favorites, so they are all usable. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85479/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	1	

4.20. Structuring of Element Transfer Settings

Element Transfer Settings can make using Favorites and Element Transfer much easier. The default Archicad Element Transfer Settings have been left untouched and/or any new Element Transfer Settings follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128012/>

Performance	3/3	
Structure	—	
BIM Essentials	—	
Impact Multiplier	1	

4.21. Project Info

Number of filled Project Info items: 23

The Project contains many Project Info entries. These entries can be seen in the File Properties, IFC and BIMx files. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128941/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	1	

4.22. Project Notes

There are no notes present. Project Notes can be used to store useful notes and comments about the progression of the project. Consider using these more.

Nevertheless, this is an important aspect of Archicad Projects, so make sure to ask your BIM Consultant about how you can apply this to your project.

Reference: <https://helpcenter.graphisoft.com/user-guide/128942/>

Performance	—	
Structure	—	
BIM Essentials	N/A	
Impact Multiplier	1	

4.23. Project Preview

There is an appropriate Picture set for the Project Preview. This preview picture appears in Operating System Previews, and BIMx as the cover photo of the model.

Reference: <https://helpcenter.graphisoft.com/user-guide/128943/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	1	

4.24. Architect Credits in BIMx

The Architect Credits in BIMx contains a clear Company Logo (with an alpha channel when applies). The URL exists and is fully qualified (starts with https://), so it will link back to your webpage, and there is an appropriate Display Text for the URL. No action needs to be taken. The Architect Credits will be visible in BIMx.

Reference: <https://helpcenter.graphisoft.com/user-guide/128944/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	1	

4.25. Element ID Management

Number of Elements with duplicate IDs: 2 796

Depending on the desired workflows, giving every element a unique ID can make data management easier when finding and quantifying elements in schedules. Many of elements in the project the same IDs. Consider giving every element a unique ID, unless you implement a system that conflicts with this theory.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85604/>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	3	

4.26. Structural Function

Number of Elements set to 'Undefined': 6 870

Elements should generally be assigned a Structural Function, especially when collaborating with Structural Engineers. Structural function should be set to 'Load-Bearing Element' or 'Non Load-Bearing Element', but never left as Undefined. There are many elements with their Structural Function set to 'Undefined'. Consider correcting these elements. We recommend using a schedule to audit all Undefined elements.

Reference: <https://helpcenter.graphisoft.com/user-guide/128888>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	3	

4.27. Position

Number of Elements set to 'Undefined': 6 870

Elements should generally be assigned a Position, especially when conducting Energy Evaluation. Position should be set to 'Interior' or 'Exterior', but never left as Undefined. There are many elements with their Position set to 'Undefined'. Consider correcting these elements. We recommend using a schedule to audit all Undefined elements.

Reference: <https://helpcenter.graphisoft.com/user-guide/128888>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	3	

4.28. Element Classification

Number of Elements set to 'Undefined': 382

Elements should generally be assigned an Element Classification, especially when collaborating using IFC. Element Classification should be set depending on the type of element. There are many elements with their Element Classification not assigned. Consider correcting these elements, and checking that the Element Classification is assigned correctly to the elements that have been defined. We recommend using a schedule to audit the Classification value of all elements.

Reference: <https://helpcenter.graphisoft.com/user-guide/128888>

Performance	—	
Structure	1/3	
BIM Essentials	1/3	
Impact Multiplier	5	

4.29. Structuring of Archicad Properties

Template Default Properties and/or custom Archicad Properties are being used by elements in the project. They follow a consistent and predictable naming convention and appear to have correct settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85550>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	3/3	
<i>Impact Multiplier</i>	3	

4.30. Find & Select Criteria Sets

No Find & Select Criteria are saved in the project. Consider using these to enable easier finding & selecting of elements.

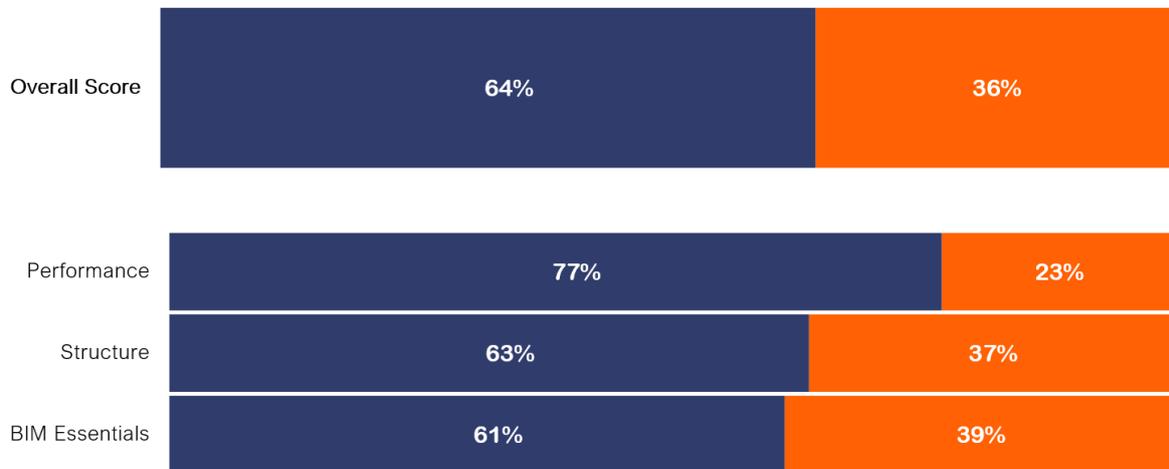
Nevertheless, this is an important aspect of Archicad Projects, so make sure to ask your BIM Consultant about how you can apply this to your project.

Reference: <https://helpcenter.graphisoft.com/user-guide/127953>

<i>Performance</i>	—	█
<i>Structure</i>	—	
<i>BIM Essentials</i>	N/A	
<i>Impact Multiplier</i>	1	



Project Settings Potential



Auditor Notes

- There are a large number of items using the same IDs, most of them are actually coming from IFC elements - the type of the element is entered into the ID field.
- Some beams were classified as Building Element Proxies. Please see if that was intentional, and if there are any other elements mis-classified
- There are a lot of duplicated IDs, and most of them are coming from IFC MEP Elements. For the native Archicad Elements, it is recommended to re-assign the IDs, and for the IFC elements, please see if you can store the element type in some other field, and use a valid ID in the ID field instead.

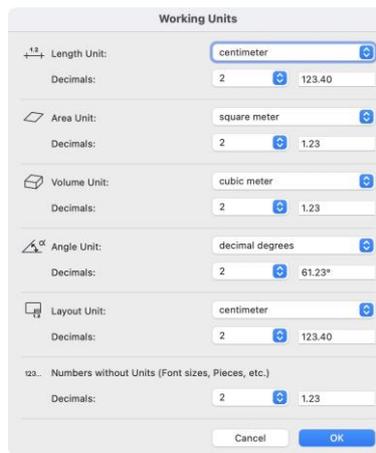
5. Project Preferences

Project Preferences do not greatly affect the performance of the project, but it is good to have preferences that make sense, give correct results and ease workflow. The items listed below are more suggestions aimed to improve the Structure than issues that are detrimental to the health of the project.

5.1. Working Units

The project's Working Units are using the template defaults, or match the local Dimension Standards. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127873/>

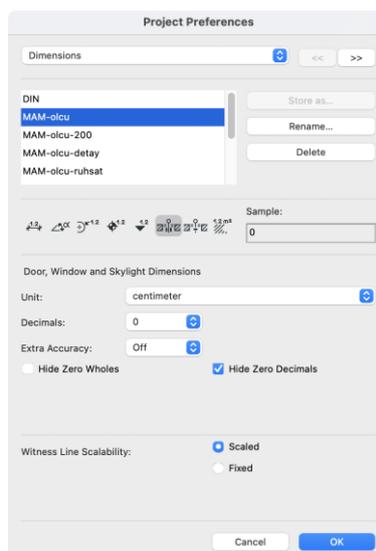


Performance —
Structure 3/3
BIM Essentials —
Impact Multiplier 3

5.2. Dimension Preferences

The project's Dimension Preferences are using the template defaults, or match the local Dimension Standards. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128969>



Performance —
Structure 3/3
BIM Essentials 3/3
Impact Multiplier 5

5.3. Dimension Preferences in use

Number of Dimension Preferences in use in the Project: 2
 Total number of Dimension Preferences in the Project: 7
 Percentage of Dimension Preferences in use out of total: 29%

There are many Dimension Standards that are not assigned to views and/or CUSTOM Dimension Standards are assigned to views. Consider rectifying these and or deleting unnecessary ones.

Reference: <https://helpcenter.graphisoft.com/user-guide/129011/>

Performance —
 Structure 1/3
 BIM Essentials —
 Impact Multiplier 5

5.4. Calculation Units & Rules

The Template Default settings have been left in place, or the the new settings are appropriate. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128970/>

Performance —
 Structure 3/3
 BIM Essentials —
 Impact Multiplier 1

Project Settings:

Default Settings:

5.5. Conditional Rules

The project either contains no schedules with conditional parameters or the ones referred to by schedules have the relevant rules check. Conditional Rules are only applied to schedules that list any 'Conditional' Parameter in their fields (eg. Conditional Surface on the Outside Area'). No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128970>

Performance —
Structure 3/3
BIM Essentials —
Impact Multiplier 1

Project Settings:

Default Settings:

5.6. Zone Preferences

The project's Zone Preferences are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128971>

Performance —
Structure 3/3
BIM Essentials —
Impact Multiplier 1

Project Settings:

Default Settings:

5.7. Reference Levels

The The Sea Level (and maybe some Reference Levels) in the project have been utilized. These can be used to automate annotation in Section and Elevation and with Level Dimensions. The Sea Level is directly linked to the altitude set in Project Location. No action needs to be taken.

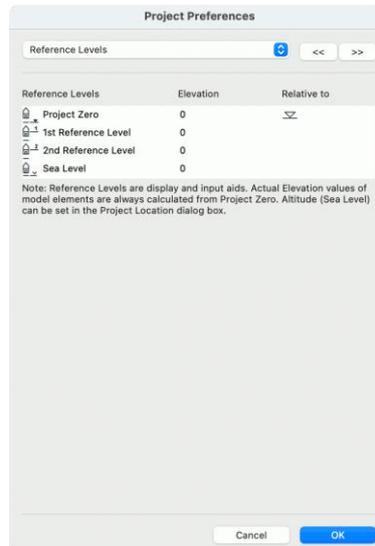
Reference: <https://helpcenter.graphisoft.com/user-guide/128972>

<i>Performance</i>	3/3
<i>Structure</i>	3/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	1

Project Settings:



Default Settings:



5.8. Legacy Preferences

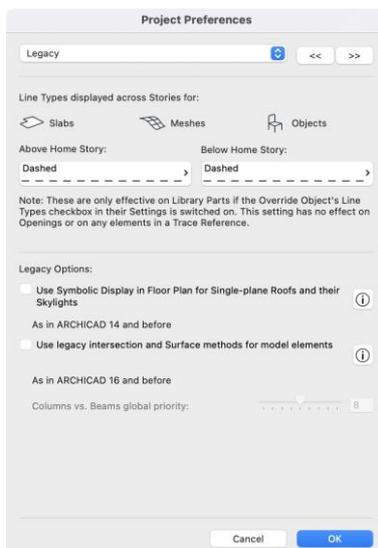
Number of Legacy Preferences Enabled: 0

Having Legacy Preferences enabled can indicate that the project is not fully utilizing all of the latest features. This project has no Legacy Preferences enabled. No action needs to be taken.

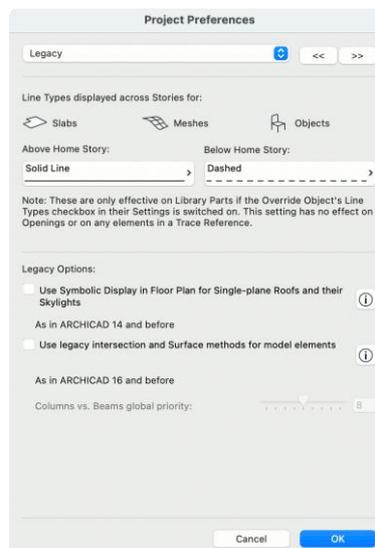
Reference: <https://helpcenter.graphisoft.com/user-guide/128973>

<i>Performance</i>	3/3
<i>Structure</i>	3/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	3

Project Settings:



Default Settings:



5.9. Stair Rules and Standards

Number of hidden Rules: 0

Total number of Rules: 6

Any item that is set to be hidden here will not appear in the Rules & Standards panel of Stair Settings (provided that the rule is not in use). Having too many shown may indicate a learning opportunity. Having too many hidden may confuse users. Ask your BIM consultant about how you could fulfill this missing potential.

Reference: <https://helpcenter.graphisoft.com/user-guide/128190>

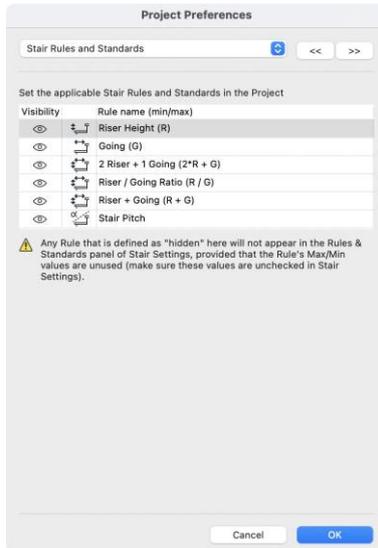
Performance 0/3

Structure 0/3

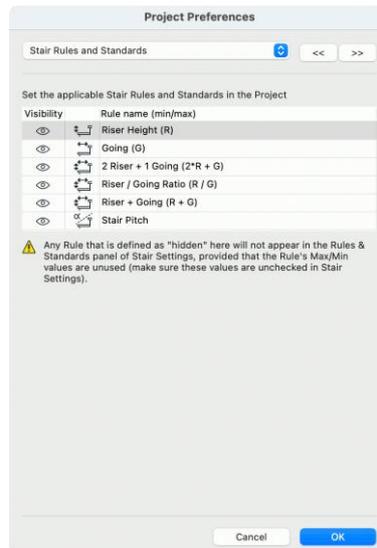
BIM Essentials —

Impact Multiplier 1

Project Settings:



Default Settings:



5.10. Project Location Settings

The Project Location matches and includes the address in Project Info. The Project North and the Altitude have also been set. No action needs to be taken.

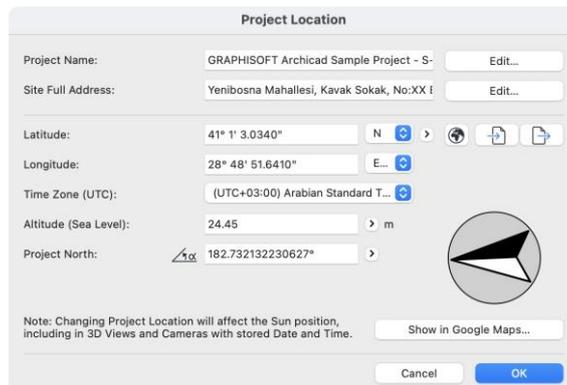
Reference: <https://helpcenter.graphisoft.com/user-guide/127874>

Performance —

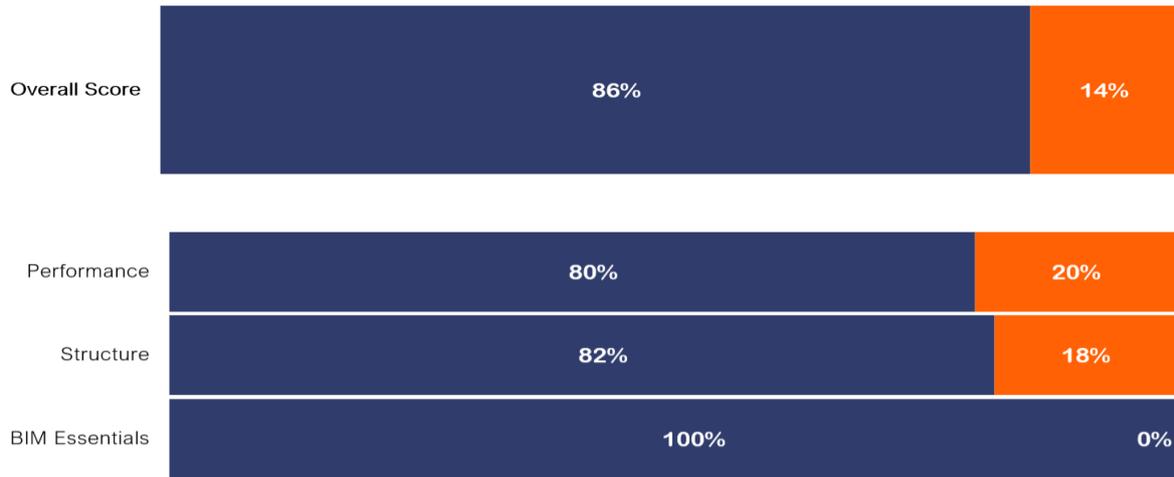
Structure 3/3

BIM Essentials 3/3

Impact Multiplier 3



Project Preferences Potential



Auditor Notes

No Additional Notes.

6. Project Structure

Project Structure relates to the structure of viewpoints from the project map, views from the view map, layouts from the layout book and publisher sets. A well organized project structure can save a lot of time simply because it is consistent, predictable and easy to understand and use. For very large projects, excessive layouts can cause performance issues.

6.1. Structuring of Project Map

The Viewpoints in the project map are organized and grammatically correct. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127932/>

<i>Performance</i>	3/3
<i>Structure</i>	3/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	3

6.2. Number of Viewpoints

<i>Number of Stories:</i>	7
<i>Number of Sections:</i>	3
<i>Number of Elevations:</i>	4
<i>Number of Interior Elevations:</i>	4
<i>Number of Worksheets:</i>	2
<i>Number of Details:</i>	3
<i>Number of Cameras:</i>	0
<i>Number of Schedules:</i>	23
<i>Number of Project Indexes:</i>	5
<i>Number of 3D Documents:</i>	4
<i>Number of Lists:</i>	54
<i>Total Number of Viewpoints:</i>	109

There are no excess viewpoints. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127943/>

<i>Performance</i>	3/3
<i>Structure</i>	3/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	5

6.3. Viewpoints not derived from 3D model

<i>Number of Independent/Linked Viewpoints:</i>	0
<i>Number of Viewpoints derived from the 3D model (Auto/Manual rebuild):</i>	109
<i>Total number of Viewpoints:</i>	109
<i>Percentage of Independent/Linked out of all Viewpoints:</i>	0%

With the exception of Worksheets and Details, it is recommended to keep all other viewpoints set to Auto-rebuild Model or Manual-rebuild Model so that the model can be rebuilt and updated at any time. Except in special scenarios, this indicates a good workflow. All these viewpoints in the project are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127943/>

<i>Performance</i>	—
<i>Structure</i>	3/3
<i>BIM Essentials</i>	—
<i>Impact Multiplier</i>	5

6.4. Story Settings

The Story structure is sound. Naming is grammatically correct and follows a consistent naming convention. Story Heights appear relevant, with no zero height stories. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128987/>

<i>Performance</i>	—
<i>Structure</i>	3/3
<i>BIM Essentials</i>	3/3
<i>Impact Multiplier</i>	3

6.5. Section Settings

All (or most) Sections are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129130/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.6. Elevation Settings

All (or most) Elevations are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129130/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.7. Interior Elevation Settings

All Interior Elevations are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129131/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.8. Worksheet Settings

All Worksheets are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129132/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.9. Detail Settings

All Details are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129132/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.10. 3D Document settings

All 3D Documents are set correctly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128996/>

<i>Performance</i>	—	█
<i>Structure</i>	3/3	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.11. Camera and Path Settings

There are some issues with the settings of Cameras and/or Paths. Cameras are only required for Fly throughs and Gallery Views for BIMx publisher sets. You can also use them as sources for 3D Views, but keep in mind that you can save 3D Views without using cameras. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129139/>

<i>Performance</i>	2/3	█
<i>Structure</i>	—	█
<i>BIM Essentials</i>	—	█
<i>Impact Multiplier</i>	1	█

6.12. Schedule Settings

Many of the Schedule Scheme settings have one or all of the following potential issues: No criteria to omit elements, incorrect criteria, incorrect sorting, lack of summation. Some listed Archicad Property fields might also have been deleted from the project, thus becoming "MISSING" in the scheme settings. Consider addressing these potential issues.

Reference: <https://helpcenter.graphisoft.com/user-guide/129009/>

<i>Performance</i>	—	
<i>Structure</i>	1/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	5	

6.13. Project Index Settings

Project indexes were not utilized in your project, but it could be ok in the current project stage. Nevertheless, this is an important aspect of Archicad Projects, so make sure to ask your BIM Consultant about how you can apply this to your project.

Reference: <https://helpcenter.graphisoft.com/user-guide/128433/>

<i>Performance</i>	—	
<i>Structure</i>	N/A	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

6.14. Shadow Casting in 2D Viewpoints

<i>Number of Viewpoints with shadows applied:</i>	4
<i>Total number of Sections, (Interior) Elevations & 3D Documents:</i>	15
<i>Percentage of Viewpoints with shadows out of the total:</i>	27%

There are some views with Shadow Casting enabled. Shadow Casting takes time for Archicad to calculate. Ensure shadows are only used for presentation purposes, and not turned on in Viewpoints that you only use for editing. If you start experiencing slow rebuild times consider disabling them until it comes time to publish.

Reference: <https://helpcenter.graphisoft.com/user-guide/129130/>

<i>Performance</i>	2/3	
<i>Structure</i>	—	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	5	

6.15. Structuring of View Map

The View Map is structured well into folders that match the Layout Book. There are no grammatical errors. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127933/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	5	

6.16. Views in Clone folders

<i>Number of Views in cloned folders:</i>	14
<i>Total number of Views:</i>	66
<i>Percentage of Views in cloned folders out of the total:</i>	21%

The project contains a some clones, but it could use more. Clones are encouraged for views that are considered to represent the final status of a project.

Reference: <https://helpcenter.graphisoft.com/user-guide/127944/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	3	

6.17. View Settings

Number of views with custom/missing settings: **0**

There are no MISSING/CUSTOM settings in View Settings, all views in the project are set appropriately. No action needs to be taken.

When a Settings Combination or Preset is deleted from the project, the associated Views might not be able to reference it anymore, and it becomes MISSING. This can cause serious differences in the intended and actual output of Views. Similarly, if a Preset/Combination was not saved before applying it to a View, then it will reference a CUSTOM combination, which is unmanageable.

Reference: <https://helpcenter.graphisoft.com/user-guide/129011/>

<i>Performance</i>	—	
<i>Structure</i>	3/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

6.18. Structuring of Layout Book

The Layout Book is structured well into subsets and numbering is correct. There are no grammatical errors. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85596/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	5	

6.19. Number of Layouts

Number of Layouts in Layout Book: 26

There are less than 150 layouts in the project. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128638/>

Performance	3/3	
Structure	—	
BIM Essentials	—	
Impact Multiplier	5	

6.20. Layout IDs inherited from Subsets

All layouts get their ID from Subsets/Layout Book. This is desirable to automate layout numbering. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129125/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	3	

6.21. Drawing Name by Source View Name

All drawings get their Name from the View Map. This is desirable so that when the name of the view changes, the name of the drawing will change accordingly. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129125/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	1	

6.22. Drawing IDs inherited from Layout

All drawings get their ID from the Layouts and all are included in the drawing ID sequence. This is desirable to automate drawing numbering. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129125/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	3	

6.23. Drawing Settings

All (or most) drawings appear to have consistent and robust settings. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/129125/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	3	

6.24. Drawings stored in the project file

Number of Drawings stored in the project file: 1

Total number of Drawings: 2

Percentage of stored Drawings out of total: 50%

Drawings that have the 'Store Drawing in the Project File' option checked, means that the generated drawings are each stored in the file as a collection of lines, fills and text. These can greatly increase project file size. The project has some of it's drawings with this setting checked. Consider reviewing these.

Reference: https://helpcenter.graphisoft.com/troubleshooting/performance/file-size/#Layout_data

Performance	2/3	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	3	

6.25. Unused Master Layouts

Number of unused Master Layouts: 2

Total number of Master Layouts: 7

Percentage of unused Master Layouts out of total: 29%

There are some unused Master Layouts. Unused Master Layouts can sometimes indicate a redundancy and can add extra unnecessary size to the project. It is a good idea to keep any that be required in the future. Consider the need for these.

Reference: <https://helpcenter.graphisoft.com/user-guide/128628/>

Performance	2/3	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	3	

6.26. Linked Drawings on Master Layouts

Number of Linked Drawings placed on Master Layouts: 0

The project contains no linked drawings on master layouts. It can be a good choice to make the Title Blocks on Independent worksheets and place them on layouts as linked drawings, but be careful how many of these you link. Drawings, Title Blocks & Logos that are linked onto Master Layouts can increase unnecessary overheads, considering these items do not change often. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/128628/>

Performance	3/3	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	5	

6.27. Autotexts

The Master Layouts make good use of Autotext. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85593/>

Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	5	

6.28. Structuring of Publisher Sets

Publisher Sets are structured well (with no grammatical errors) and its functions are well utilized. No action needs to be taken.

Reference: <https://helpcenter.graphisoft.com/user-guide/127946/>

Performance	—	
Structure	3/3	
BIM Essentials	3/3	
Impact Multiplier	5	

6.29. Shortcut folders in Publisher Sets

Number of Publisher Set items in shortcut folders: 144

Total number of Publisher Set items: 181

Percentage of items in shortcut folders out of total: 80%

Most of the Publisher Sets were created using shortcuts. It is recommended to use as many shortcuts for building up the Publisher Sets as possible, because placing Views and Layouts in the Sets manually may lead to unexpected or missing information.

Consider recreating these by using shortcuts.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85603/>

Performance	—	
Structure	2/3	
BIM Essentials	—	
Impact Multiplier	5	

6.30. Architect Credits in BIMx Publisher Set

The 'Use Architect Credits in BIMx Hyper-models' checkbox is checked in all of your BIMx Publisher Sets. No action needs to be taken. The Architect Credits can be viewed in BIMx.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/72763/>

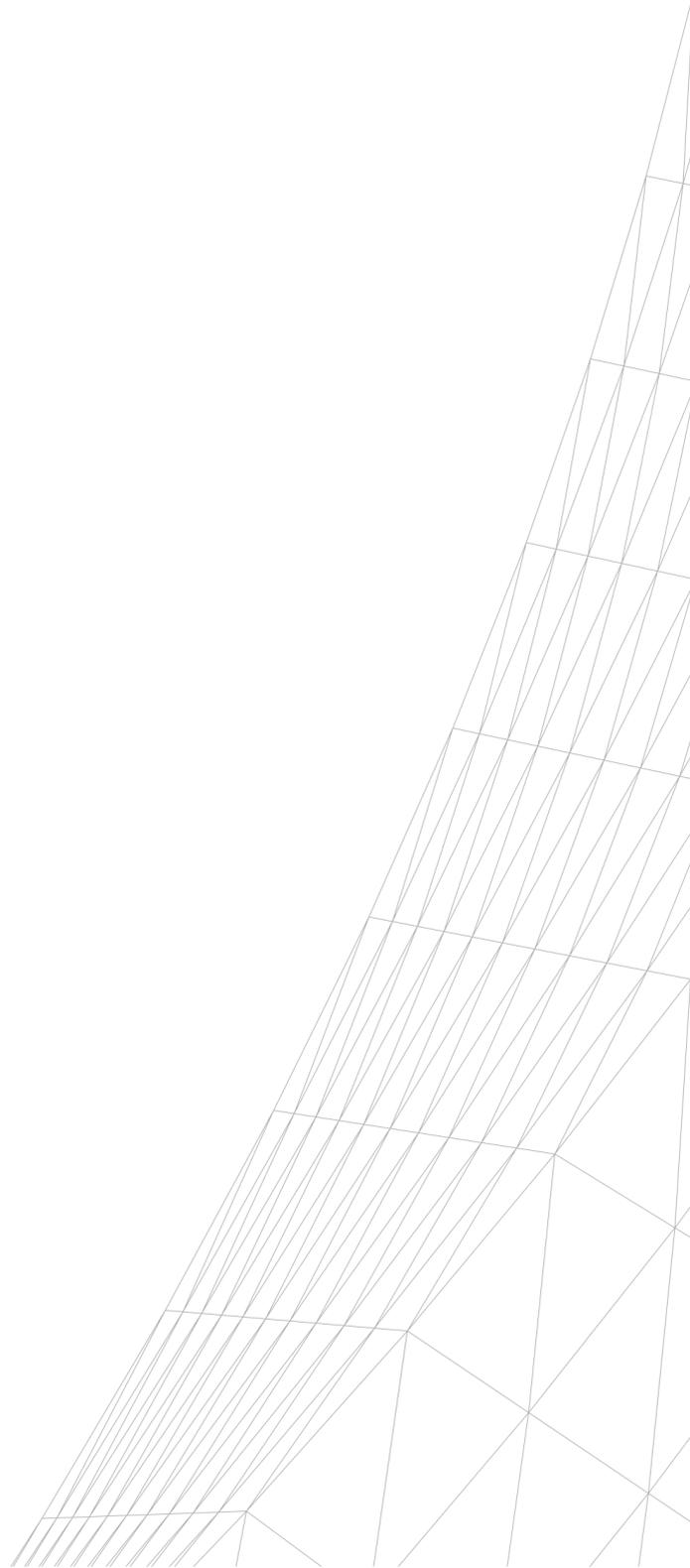
Performance	—	
Structure	3/3	
BIM Essentials	—	
Impact Multiplier	3	

6.31. Info Sets in BIMx Publisher Set

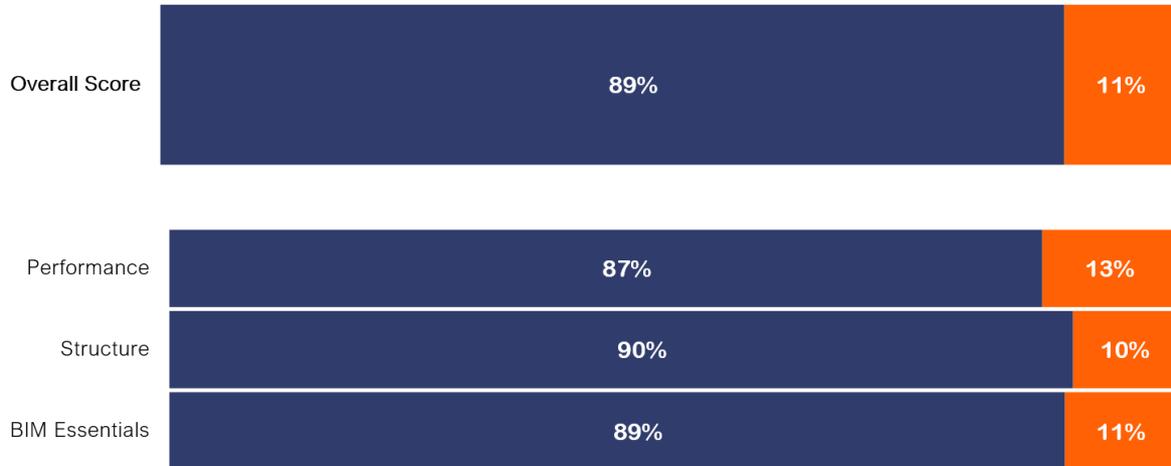
The 'Info Set' is set to Classification and Properties in most of your BIMx Publisher Sets. This already contains plenty of useful information, but this way you have very little control over what information will be displayed. Consider selecting a schedule for these.

Reference: <https://helpcenter.graphisoft.com/knowledgebase/44264/>

<i>Performance</i>	—	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	1	



Project Structure Potential



Auditor Notes

- All Drawing IDs are inherited from the source views, which is good and consistent behavior. But some views don't have IDs, and so the drawing doesn't have an ID either.
- Not many views were using clone folders, but it could improve the speed of the documentation workflows.
- Some Dimension settings were custom, and some Renovation Filters are missing.
- Shadow casting on 3D derived 2D viewpoints are well utilized - only the Elevations have them turned on, it is not turned on on technical drawings unnecessarily.

7. External Content

The way external content is managed affects all three foundations of a project: Size, Speed and Structure. Eliminating redundant data or embedded it can solve a lot of issues.

7.1. Internal Drawings

Number of missing internal drawings: 3

Some internal drawings are missing. Make sure to relink or delete these drawings as necessary. Some external drawings may be missing (external drawings are not included in the checkup). This will need to be checked locally.

Reference: <https://helpcenter.graphisoft.com/user-guide/129017/>

<i>Performance</i>	2/3	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	5	

7.2. External Drawings

Number of external drawings: 3

The project has some linked files. These may be large in size (without access to them they can not be assessed in Archicad Project Audit). Consider checking these images /PDFs / DWGs.

Reference: <https://helpcenter.graphisoft.com/user-guide/129017/>

<i>Performance</i>	2/3	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	5	

7.3. Hotlink Module Management

Number of hotlinks referenced from PLN files: 0

Number of hotlinks referenced from MOD files: 0

Number of hotlinks referenced from Teamwork Projects: 0

Number of hotlinks referenced from IFC files: 0

Number of hotlinks referenced from 3DM files: 0

There are no Hotlink Modules used in the Project. Nevertheless, this is an important aspect of Archicad Projects, so make sure to ask your BIM Consultant about how you can apply them to your project.

Reference: <https://helpcenter.graphisoft.com/user-guide/128713/>

<i>Performance</i>	N/A	
<i>Structure</i>	N/A	
<i>BIM Essentials</i>	N/A	
<i>Impact Multiplier</i>	5	

7.4. XREF Management

Number of XREFs bound to project: 2

Number of XREFs attached to project: 2

Some XREFs have been bound (or exploded). Such XREFs can increase the size of the project. Consider the need for this information. Deleting their layers is an effective way of removing the data associated with XREFs. Although removing their Attributes through Attribute Manager is the only way to remove every trace of them.

Reference: <https://helpcenter.graphisoft.com/user-guide-chapter/85673/>

<i>Performance</i>	2/3	
<i>Structure</i>	2/3	
<i>BIM Essentials</i>	—	
<i>Impact Multiplier</i>	1	

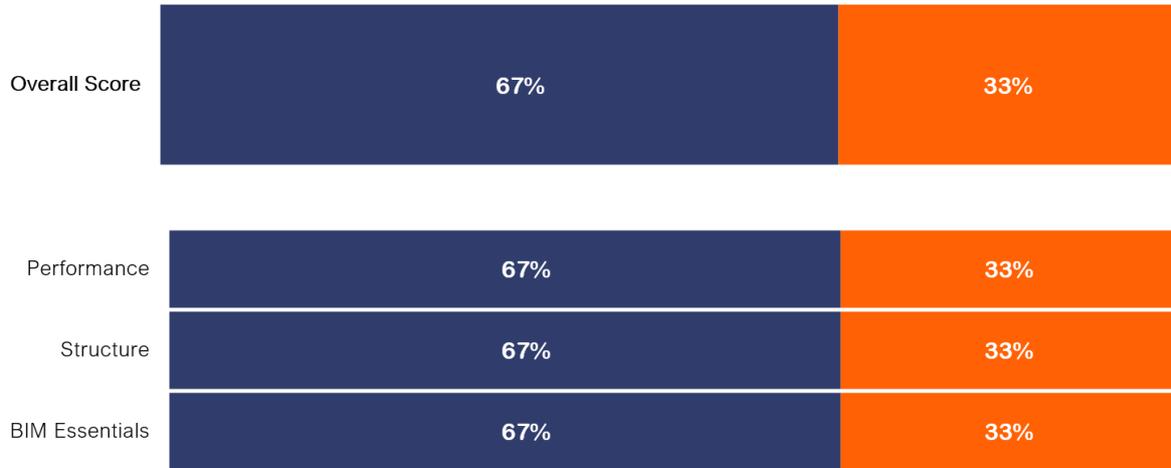
7.5. IFC Translators

All of the IFC items in the Publisher Sets are using a Generic Translator. If you only need a Generic IFC export, because you don't actively collaborate with other disciplines, this can make sense, but you should consider exporting different IFC files for different purposes using the appropriate Translators.

Reference: <https://helpcenter.graphisoft.com/user-guide/128907/>

<i>Performance</i>	—	
<i>Structure</i>	—	
<i>BIM Essentials</i>	2/3	
<i>Impact Multiplier</i>	5	

External Content Potential



Auditor Notes

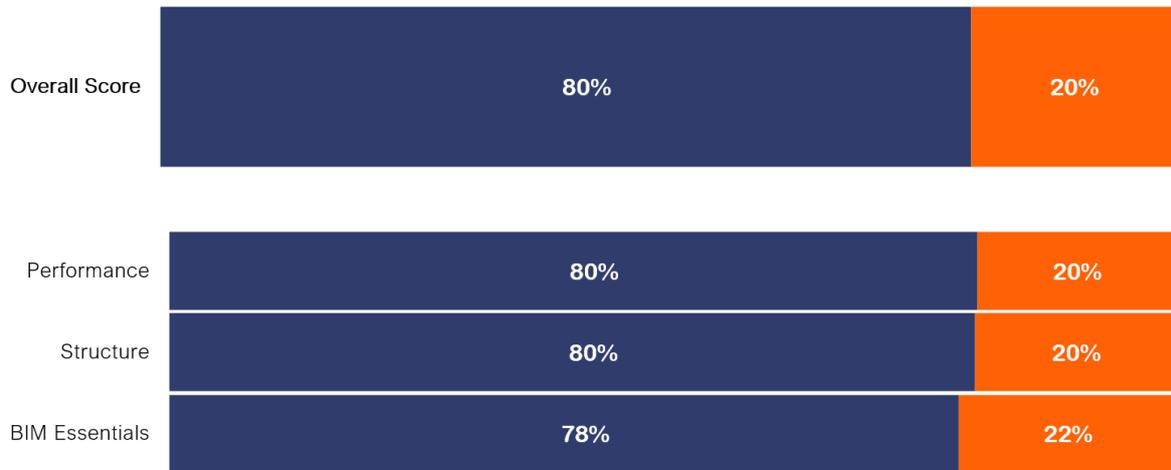
- The Structural IFC Model item in the Publisher set has no Translator associated with it.

Summary

Below is a summary of the project's performance. Please keep in mind that this is subjective and makes assumptions based on typical criteria, which may differ from your office workflows. Consider the Overall Archicad Project Audit Score a benchmark against other projects or previous Archicad Project Audits, rather than a typical rating. This report is intended to introduce you to possible areas to explore to further your Archicad experience. If you are at all concerned about the evaluation of your project, please contact your local GRAPHISOFT representative. Thank you for the opportunity to assist you with checking your project.

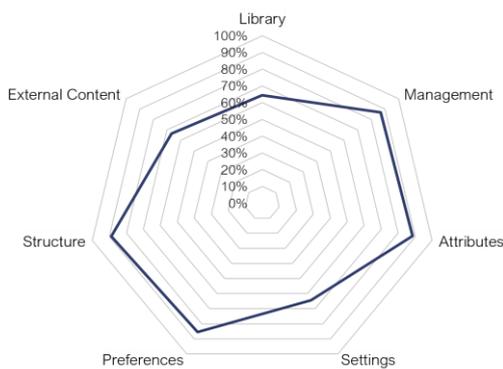
Overall Score
80%

Overall Scores

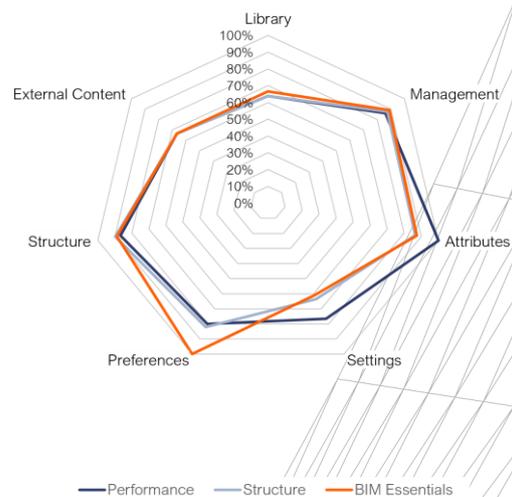


Scores by Sections

Overall



By Category



General Recommendations

While the Archicad Project Audit is extremely thorough in checking Archicad files for Performance, Structure and BIM Essential issues, there are other reasons why a file may be slow which falls outside the scope of an Archicad Project Audit. If you are experiencing ongoing problems after making changes suggested in this report, please be aware of the following.

GRAPHISOFT Help Center

The GRAPHISOFT Help Center is the best resource for any Archicad related help topic.

<https://helpcenter.graphisoft.com/>

Work Environment Settings

User Preferences Schemes> Advanced Redraw Options> Model Display in 2D Navigation: Adjust if you experience unexpected feedback during panning.

User Preferences Schemes> Model Rebuild Options> Update Auto-rebuild Model viewpoints continuously: Adjust if you are trace referencing sections/elevations etc and are experiencing slow rebuild times. (These will need to be manually rebuilt though).

Hotlinked Modules

Hotlinked modules are mapped locally to your computer or network and as such as not checked in the Archicad Project Audit. Please be aware that these hotlinks can seriously slow down your project if not managed properly. We recommend publishing and linking module files (.mod) rather than whole projects.

2D Problems

There are many ways that 2D elements can cause problems in a file, all of which cannot ideally be covered in the Archicad Project Audit. These include but are not limited to trees and foliage, bitmaps, scale sensitive objects, objects with requests coded into them, slow-to-regenerate doors and windows, zones interacting with walls and columns, complex profiles, symbolic vs. projected views, excessive palettes open like the Drawing Manager which needs to refresh constantly, DirectX problems, hardware optimization, and video card settings.

PhotoRendering Settings

There are many photorendering settings between the Internal, Cinerender and Sketch rendering engines. Sun shadows, detailed textures, lighting, reflection, physical render scenes, backgrounds, image size, etc all contribute to lengthy render processing times. Be sure to start with the simple (fast) scenes and tweak the settings slowly, gauging render times as you progress.

Teamwork

Be sure NOT to treat your BIMcloud (Basic) like it is a file server. Many issues come from keeping too many users logged into teamwork projects for too long. Keep in mind that Archicad will need to keep track of all those users and their (potential) changes to the model. This increases the size of the file, sometimes to a point where it is so large it becomes unusable. This could potentially crash the BIMcloud and jeopardize all of your Teamwork Projects. Teamwork Projects should only remain on the BIMcloud while they are active. Otherwise they should be saved as an Archive (.pla) and removed from the BIMcloud.

Also ensure that all libraries come from the same source. If they come from different sources, it will require constant reloading and this is not the intention. Ideally you should have a folder of libraries that contains all of the relevant BIMcloud libraries and periodically you or your BIM Manager should make sure all libraries loaded to the BIMcloud are pathed from the same central folder instead of the AC24 library coming from John's iMac and the office library got loaded from Jane's iMac, etc. You or your BIM Manager should go to the Manage BIMcloud Libraries dialog and relocate the link to a central folder.

Similarly if you consistently access Teamwork Projects from different locations, don't use the same user to do so. Create unique user names for each location (eg. Jane - Office & Jane - Home) so that Archicad can handle the two sets of changes separately.

Date Settings

On a Mac (only) if the computer's date is not set to the current date some operations can become slow, such as placing doors and windows.

Preventing Issues

To minimize the likelihood of running into issues, start by making sure your computer specifications meet the GRAPHISOFT recommended specifications for Archicad as listed at:

<https://graphisoft.com/resources-and-support/system-requirements>

Regularly turn off your computer to clear the RAM. At least once a day is recommended.

Join the Customer Experience Improvement Program, via the Help menu> Customer Experience... Don't worry it doesn't take much data and no personal information is revealed, but it does provide GRAPHISOFT with a lot of useful information that they can use to continually improve Archicad.

Send any and all Bug Reports to GRAPHISOFT.

Reporting Issues

If you are experiencing ongoing issues that have not been addressed after making suggested adjustments in the Archicad Project Audit, chances are you have a unique problem that is very specific to your project. In this case the best solution is to contact your local Archicad Sales Agent at:

http://www.graphisoft.com/info/where_to_buy/

Create a Bug Report whenever Bug Reporter pops up. You have an option to send either anonymous or detailed report. Detailed reports include specific, limited user data as detailed in our Privacy Notice. This extra information helps GRAPHISOFT programmers to fix bugs faster and serve you better.

GRAPHISOFT Bug Reporter

Something went wrong and the application closed unexpectedly. We apologize for the inconvenience.

To help us diagnose and fix the problem, please send us a crash report.

Please help us! Describe what were you doing when the problem occurred: **1**

Email address (optional)

Detailed Report for Better Troubleshooting
Agree below to send a detailed report, which will help us identify and fix the problem faster.

2 I have read and understand the Privacy Notice, and I agree to send a detailed report that contains certain personal data as described in the Privacy Notice.

[See Privacy Notice](#)

3

GRAPHISOFT Bug Reporter Bug Report Feedback

Your detailed bug report was submitted successfully.

Thank you for your help! **4**

Bug ID: AC24-2021-02-26-10-53-15-8267

Please contact your local reseller and reference the Bug ID shown above if you want to check the bug's status.

You can change your report type preference (detailed or anonymous) at any time: go to the folder where ARCHICAD is installed, and start GSRReport.

[More about bug reporting](#)

This report can be sent along with a step-by-step description of what symptoms you are experiencing and if possible what you think may be causing it or leading up to it, including screenshots where necessary. Also upload an Archicad Archive Project (.pla) to DropBox or a similar file sharing service and provide your local agent with a link to it.