



# Autodesk® Revit® Architecture Add-in Efficiency

## AB2536

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# Class Summary

- **AB2536** Have you ever wondered what some practical everyday uses might be for the Autodesk Revit API? This class is designed to explore the many applications that are currently available through Autodesk Exchange. The class will also explore custom-built applications for Revit software as well as mobile applications. This class will focus on how firms can use applications to create an efficient workflow and improve project documentation. Applications are allowing us to rethink the design and documentation process. Participants will leave the class with a list of free applications that they can use to optimize their architectural workflow.

# Learning Objectives

At the end of this class, you will be able to:

- Find new apps for Revit 2013
- Use apps to increase project efficiency
- Explain how a mobile app can contribute to architectural workflow
- Describe the possibilities for making custom apps with the Revit API

# Who likes shopping Online?









# Autodesk Exchange | Apps

**Autodesk Revit**








Search Exchange Apps Show All >

**Welcome to the Autodesk Exchange for Autodesk® Revit®**  
Your portal to the Autodesk Revit software ecosystem, Autodesk Exchange provides access to Add-Ins that allow you to more efficiently author Information-rich Building Information Models.

**Featured Apps**

 <b>Views Exporter...</b> StrucSoft Solu... ★★★★★ 0 Reviews Trial	 <b>Export Revit t...</b> Nasser's Revit... ★★★★★ 1 Review Free	 <b>ARCxl Details ...</b> ARCxl, LLC ★★★★★ 0 Reviews Free
 <b>Material Batch...</b> Shanghai YeahS... ★★★★★ 0 Reviews Free	 <b>Sumex Paramete...</b> Sumex Design, ... ★★★★★ 3 Reviews Trial	 <b>Ideate BIMLink...</b> Ideate, Inc. ★★★★★ 5 Reviews Trial

**Best Sellers**

 <b>Palladio X BIM Wind...</b> Arrange window... Free
 <b>CADtoEarth</b> CADtoEarth is ... Free
 <b>BIMObject</b> The BIMObject™ ... Free
 <b>D C Tools for Revit</b> D C Tools is a... Free
 <b>COINS Auto-Section ...</b> Brings fluidit... Free
 <b>CTC Revit Family To...</b> The CTC Revit ... Free
 <b>File Upgrader</b> File Upgrader ... Free

**Exchange Apps Developers!**  
Sign up now and publish your products to millions of Autodesk users

**Quicklinks**

Annotation Tools (13)	Construction (13)	Interoperability (16)	Plumbing Design (6)	Structural Analysis (2)
Architectural Design (24)	Content (14)	Landscape (1)	Productivity (4)	
Building Analysis (2)	Electrical Design (6)	Materials (5)	Productivity Tools (52)	
Building Performance Analysis (5)	Interior Design (1)	Mechanical Design (6)	Reality Capture (1)	

<http://apps.exchange.autodesk.com/RVT/Home>




# Autodesk Exchange | Apps

**Autodesk Revit**

Search Exchange Apps  Show All >

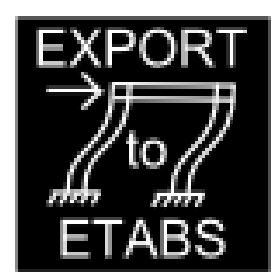
Showing 10 of 69 Results



**Views Exporter 2013**  
StrucSoft Solutions Ltd.

Exports any number of views and sheets from Autodesk Revit to DWG, DWF, FBX, Image and to a virtual PDF printer simultaneously.


★★★★★  
0 Reviews  
Trial



**Export Revit to ETABS**  
Nasser's Revit Tools

Export Revit's Analytical Model into CSI's ETABS


★★★★★  
1 Review  
Free



**IsRENDER RAC**  
Informatica System srl

IsRENDER RAC performs processing render in Autodesk Revit in batch mode (automated).

★★★★★  
0 Reviews  
Trial



**Material Batch Deletion**  
Shanghai YeahSo Software Co., Ltd.

Search and delete multiple materials from project document easily.

★★★★★  
0 Reviews  
Free

1 2 3 4 5 ... 7 ▶

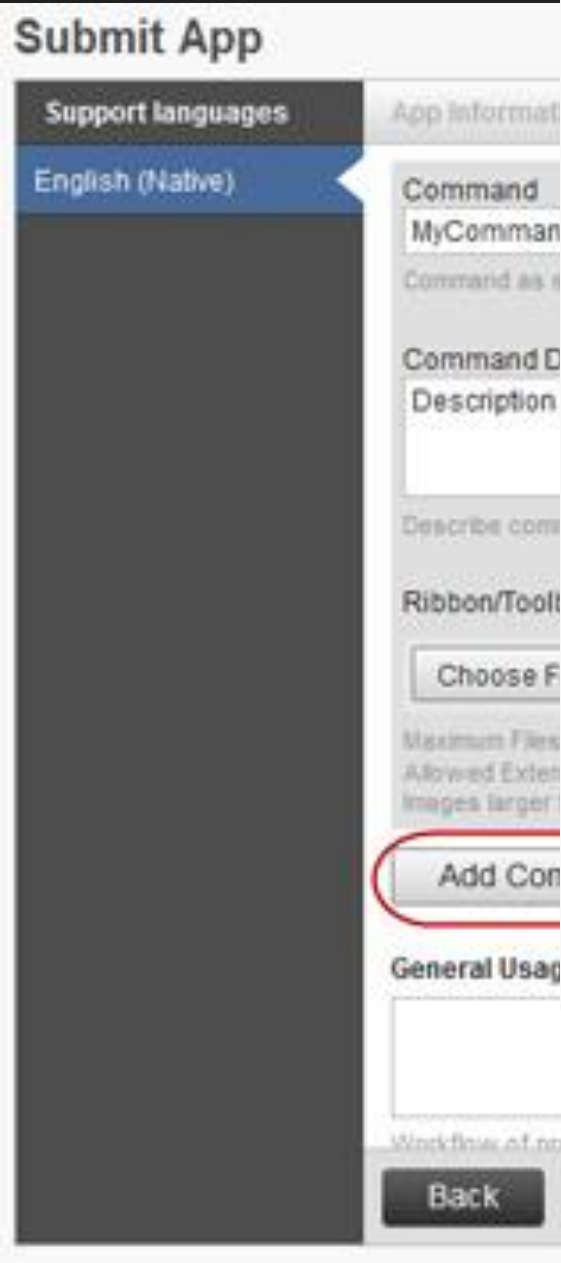
**Quicklinks**

Annotation Tools (13)	Construction (13)	Interoperability (16)	Plumbing Design (6)	Structural Analysis (2)
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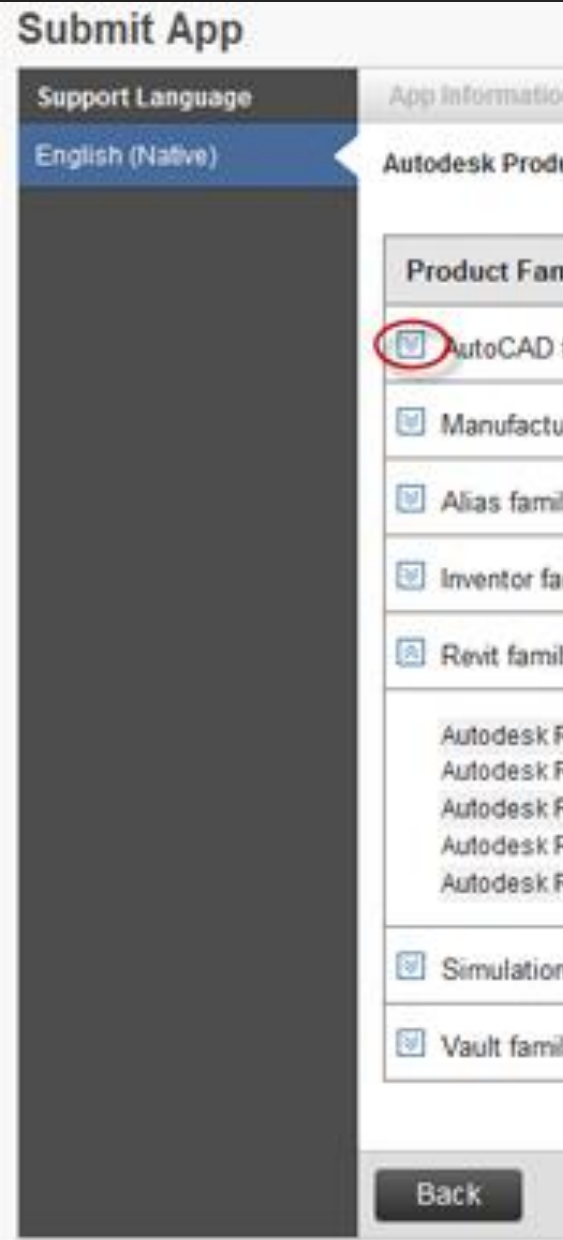
<http://apps.exchange.autodesk.com/RVT/Home>

# Autodesk Exchange | Apps

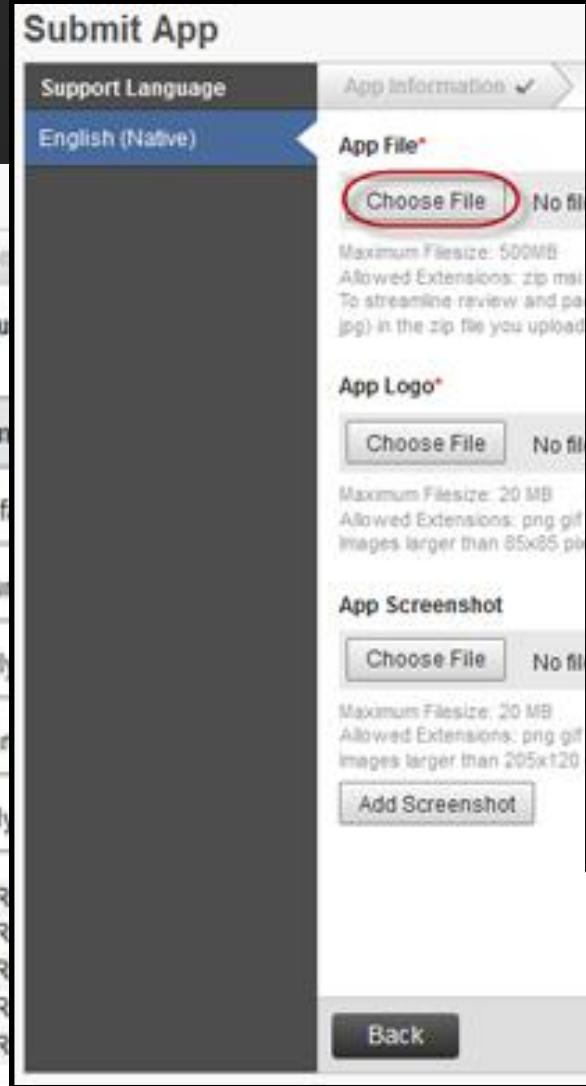
Docs



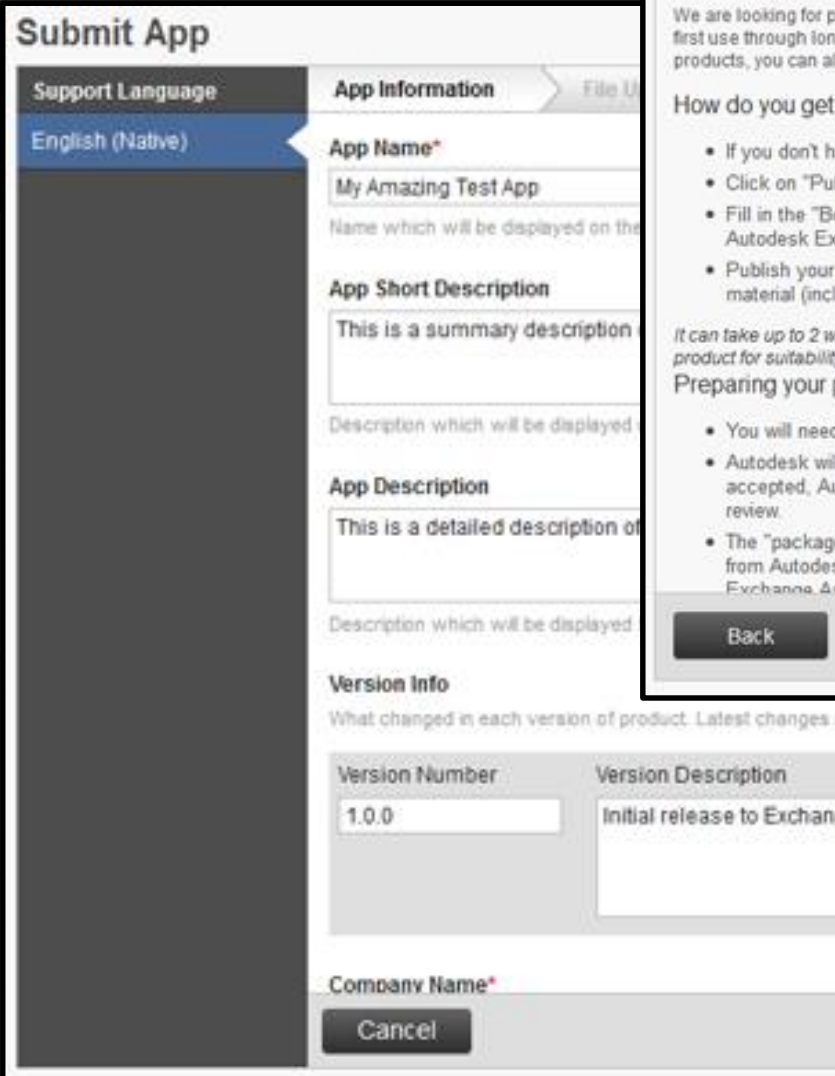
Version



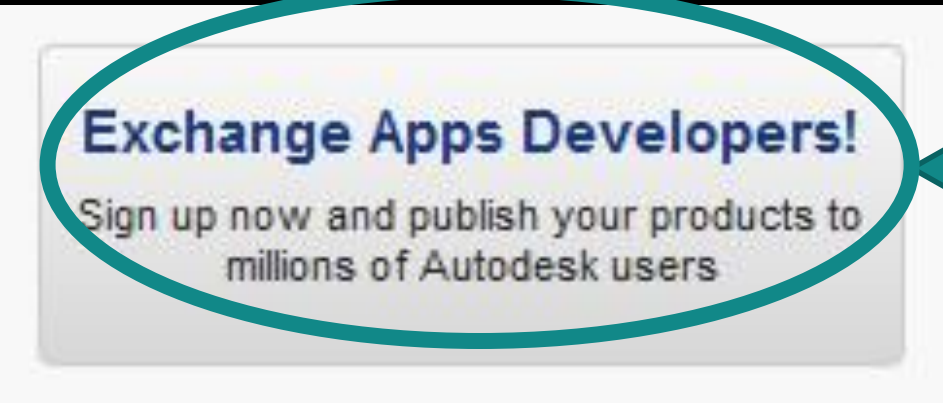
Upload



Info



Terms



- Plug-ins
- Standalone applications
- Training tutorials
- E-books
- Content
- Etc.

<http://usa.autodesk.com/adsk/servlet/item?siteID=123112&id=20149658>

# Comprehensive listing

## RevitAddOns.blogspot.com By Tim Grimm

**Revit Add-ons**

The one-stop resource for Revit add-in applications





# A quick note about installs...

Per Users - C:\Users\\*\*\*\*\AppData\Roaming\Autodesk\Revit\Addins

For Everyone - C:\ProgramData\Autodesk\Revit\Addins\2013

\*Files Required...

.Addin

.dll

[CP3766 - Tying All of Your Autodesk® Revit® Add-ins into a Pretty Little Ribbon](#)

# Lets shop!







**Name:** CAD to Earth

**By:** AMC Bridge LLC

**Price:** Free

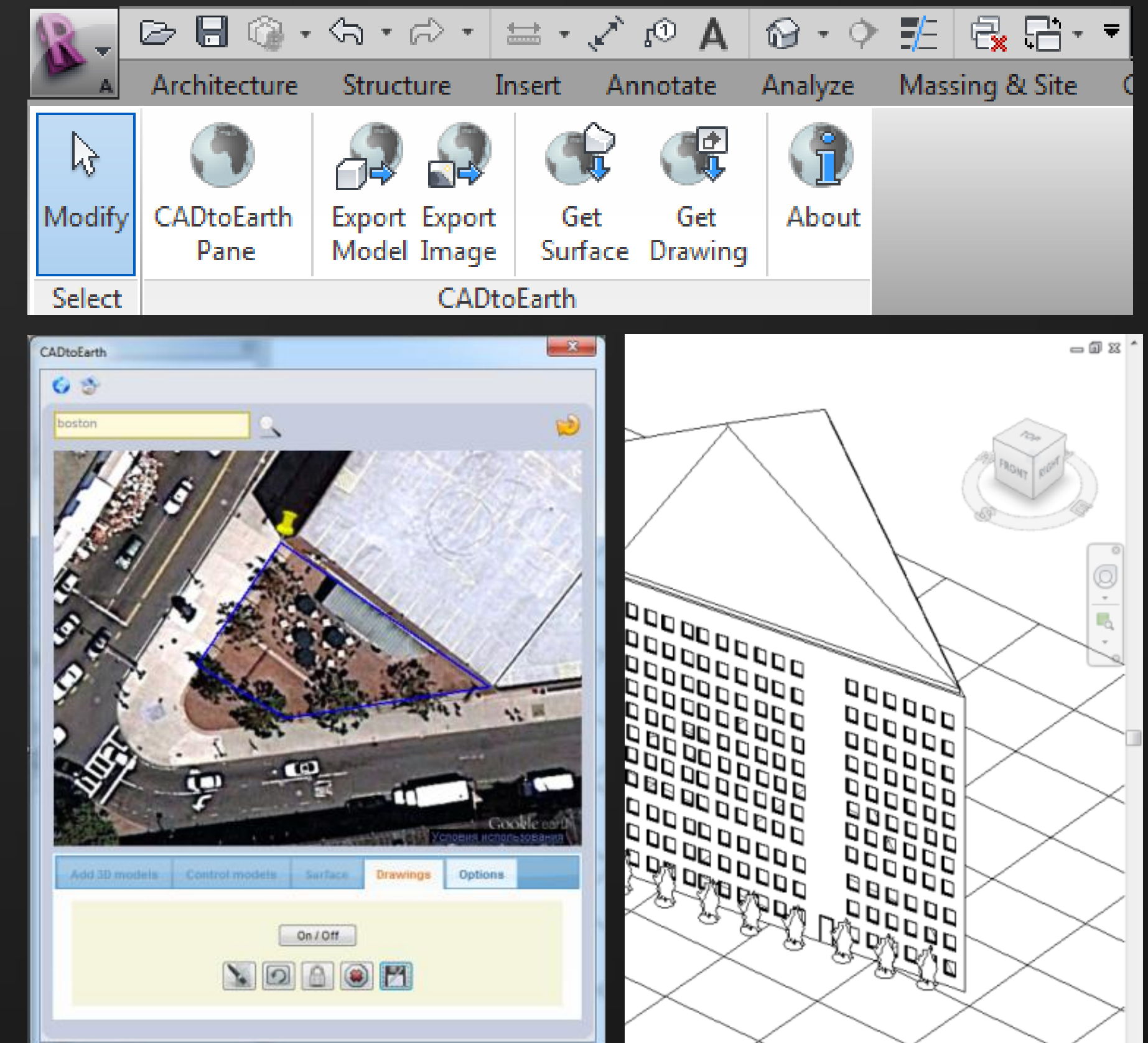
**Rating:** ★★★★★

**Concept + Features:** Upload a model directly from modeling session onto Google Earth or Microsoft Virtual Earth. Import a section of the surface of the Earth directly from Google Earth into modeling session. Position your 3D structure on the imported surface within modeling session and then upload it back to Google Earth or Microsoft Virtual Earth. Perform the same operations on 2D objects in modeling environment and Google Maps

**Pros:** Great way to get topography into your Revit model. Bring in a CAD mesh and choose it for topography by CAD, done! Also, converts file to .kmz for upload to Google maps.

**Cons:** I had a tough time getting the other features allowing upload to Google maps to work. And the install requires a browser plug-in for Google earth.

Quick Look:





**Name:** DigiPara Elevatorarchitect

**By:** DigiPara GmbH

**Price:** Free

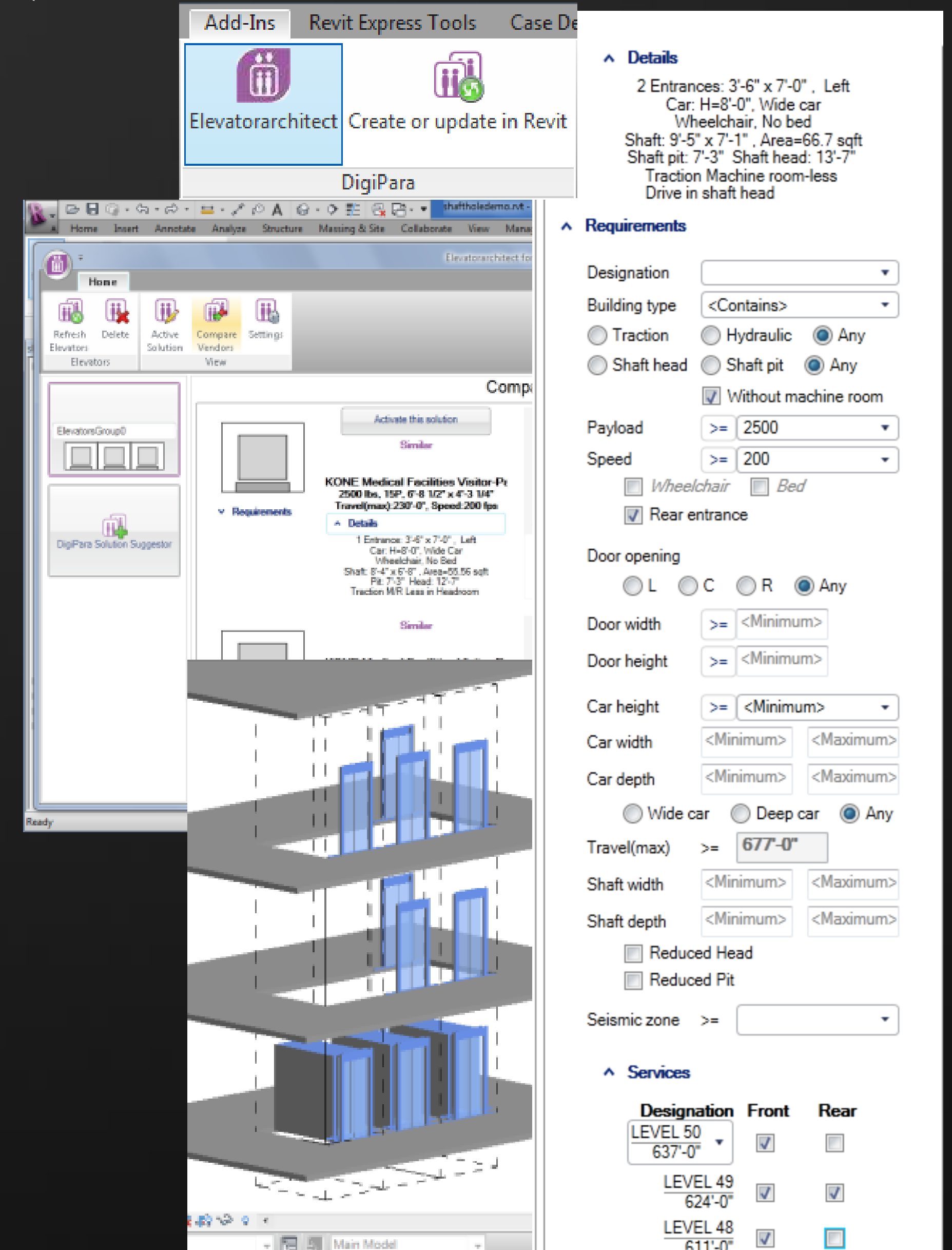
**Rating:** ★★★★★

**Concept + Features:** It supports Revit users in finding the correct size and number of required elevators and professionally guides them to the point of reaching an optimal 3D Revit model. DigiPara Elevatorarchitect greatly simplifies and enhances the design workflow as the placing and adjustment of single Revit families are eliminated.

**Pros:** Lots of options to configure to get something in place quick. Most needed possibilities are available. (Custom configuration coming March 2013!)

**Cons:** Each elevator is made of many individual components not one per elevator, but given that this is all managed by the add-in, not such a bad thing.

Quick Look:







**Name:** Revit Works Door Factory

**By:** Revit Works Ltd

**Price:** \$595 US - \$3,870 US *(Based on # of Users)*

**Rating:** ★★★★★

**Concept + Features:** Create almost any door you want in seconds without going into the family editor. The Door Factory not only simplifies the creation of doors, it creates doors that are incredibly easy to use. Save time by creating doors as and when you need them, allowing you to stay focused on your design. Achieve consistency for all the doors in your project.

**Pros:** This provides the backbone of creating your own office standard for any door and allows almost infinite customization. Documentation of how the system works so you can customize is explained well for this complex tool.

**Cons:** Would be nice if you could automate the making of door iterations. But this is an awesome tool!

Quick Look:

## Multiple Types of Trims and add your own profiles!

(Exterior) profile Select Profile

None Flat Splayed Custom

None Flat Splayed Custom

## Multiple Pre-made Panels and add your own!

Select panel family

- (Default) Solid
- Glass Framed with Transom
- Glass Framed
- Glass with Patches
- Glass with Rails
- Glass with Side Patches
- Glass
- Solid Hori Panels x3
- Solid Hori Panels x4
- Solid Panelled x4
- Solid Panelled x6 Equal
- Solid Panelled x6
- Solid with Kickplate

Preview

Panel Family: Glass Framed with Transom.rfa

Comments: Framed glass panel with transom

Dimensions

Panel Thickness: 40.0

Panel specific parameters *Letters refer to dimensions shown in preview above.*

a: 120.0 b: 120.0 c: 110.0 d: 780.0 e: 120.0

Tolerances

Structural Tolerance	10	<input checked="" type="checkbox"/>	Tick to use default settings Untick to allow overrides
Panel to Jamb Gap Side2	1	<input checked="" type="checkbox"/>	
Panel to Head Gap	1	<input checked="" type="checkbox"/>	
Panel to Doorstop Gap	1	<input checked="" type="checkbox"/>	
Panel to Jamb Gap Side1	1	<input checked="" type="checkbox"/>	
Panel to Base Gap	5	<input checked="" type="checkbox"/>	



**Name:** Family Browser

**By:** *Kiwi Codes*

**Price:** \$250/Site Location/Year

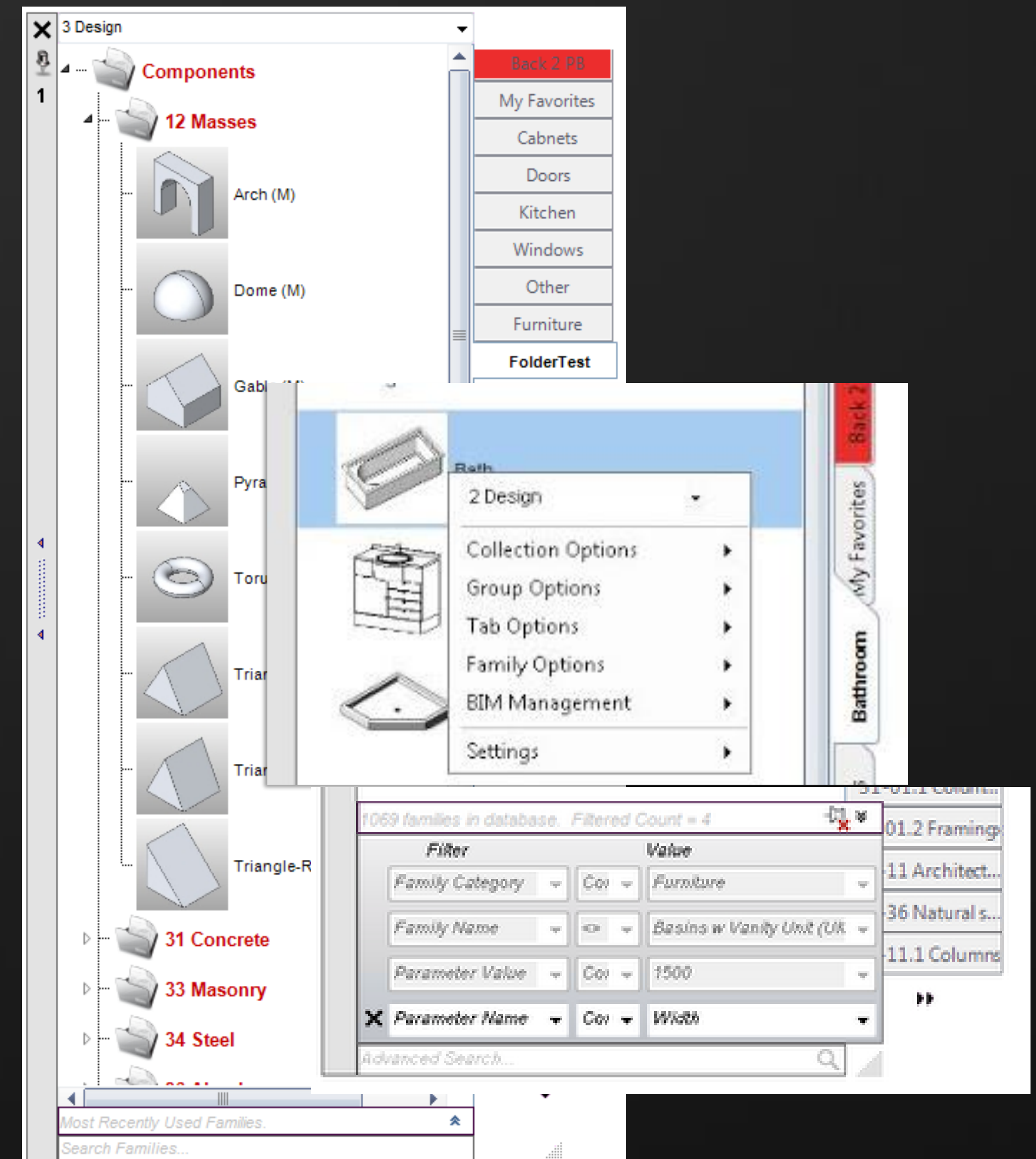
**Rating:** ★★★★★

**Concept + Features:** A browser with organization 4 levels deep via selection sets, groups, tabs and sub-folders. All families are indexed for simple and advanced search. Once located the families can be dragged and dropped in to the project even type specific.

**Pros:** Easy Setup / Quick Setup / Deployment wizard / Library organization

**Cons:** The setup of Groups, Tabs and subfolders could be better with a management console (coming soon). Advanced Search can be sluggish on library of 1500+ Families but works fast enough to be useful.

Quick Look:







**Name:** D|C|Tools for Revit

**By:** D|C|CADD

**Price:** Free

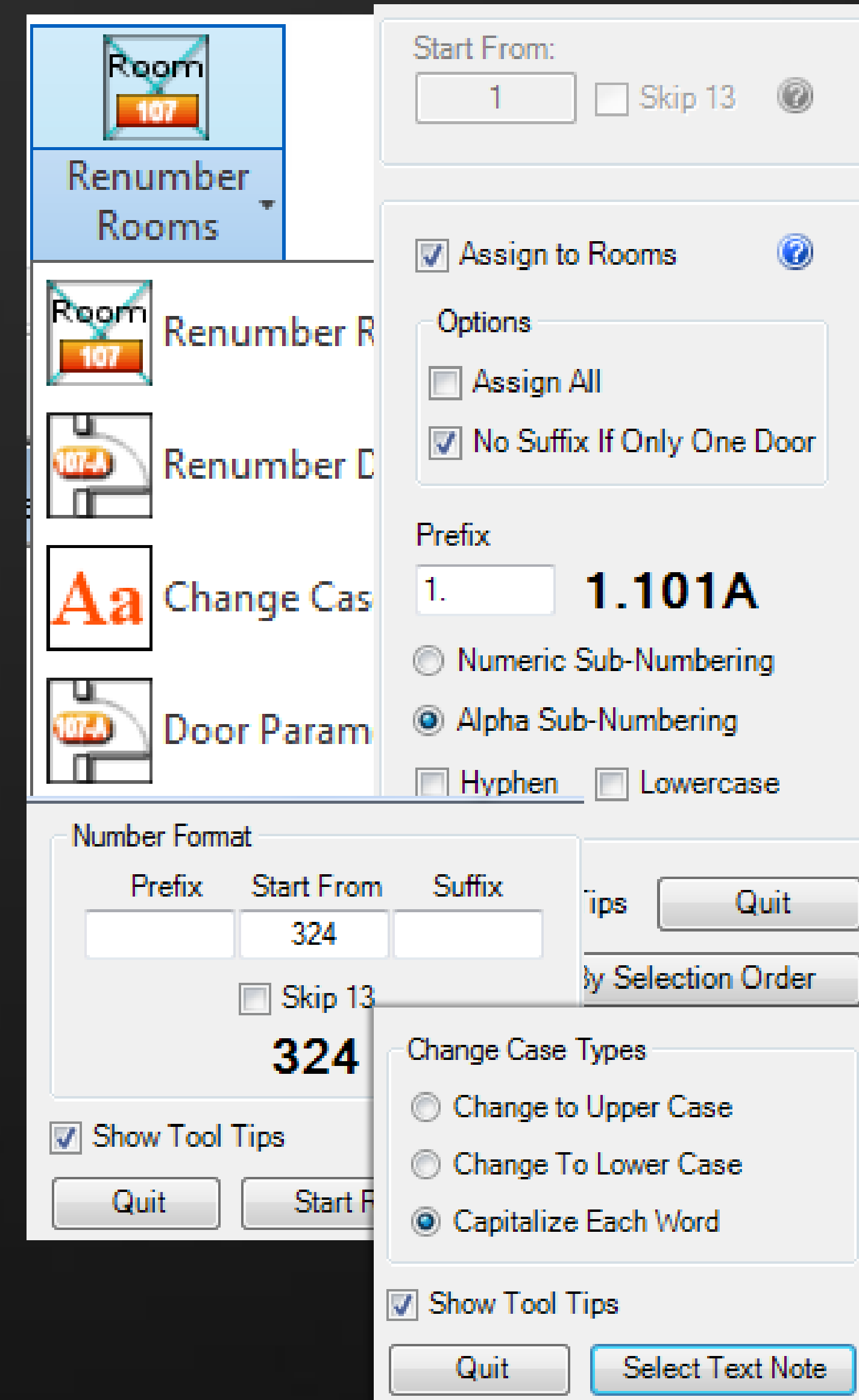
**Rating:** ★★★★★

**Concept + Features:** These tools include: Room Renumber Tool - Renumbers rooms in the order you select them. Door Renumber Tool - Allows you to renumber doors by selection order or by the room into which they swing. We also include an option that omits the suffix if a room has only one door swinging into it. Change Case Tool - Text notes can be changed to all upper case, all lower case or you can capitalize every word in the note. Door Parameters Tool This tool updates the "to-room" and "from-room" parameters for every door in the project.

**Pros:** Offers suffix and prefix options for numbering rooms. Allows for more manual renumbering of doors or an automated based on door swing.

**Cons:** Could cover more categories and have a type / instance option. (All coming soon!)

Quick Look:





**Name:** Coins Auto Section Box

**By:** COINS

**Price:** Free

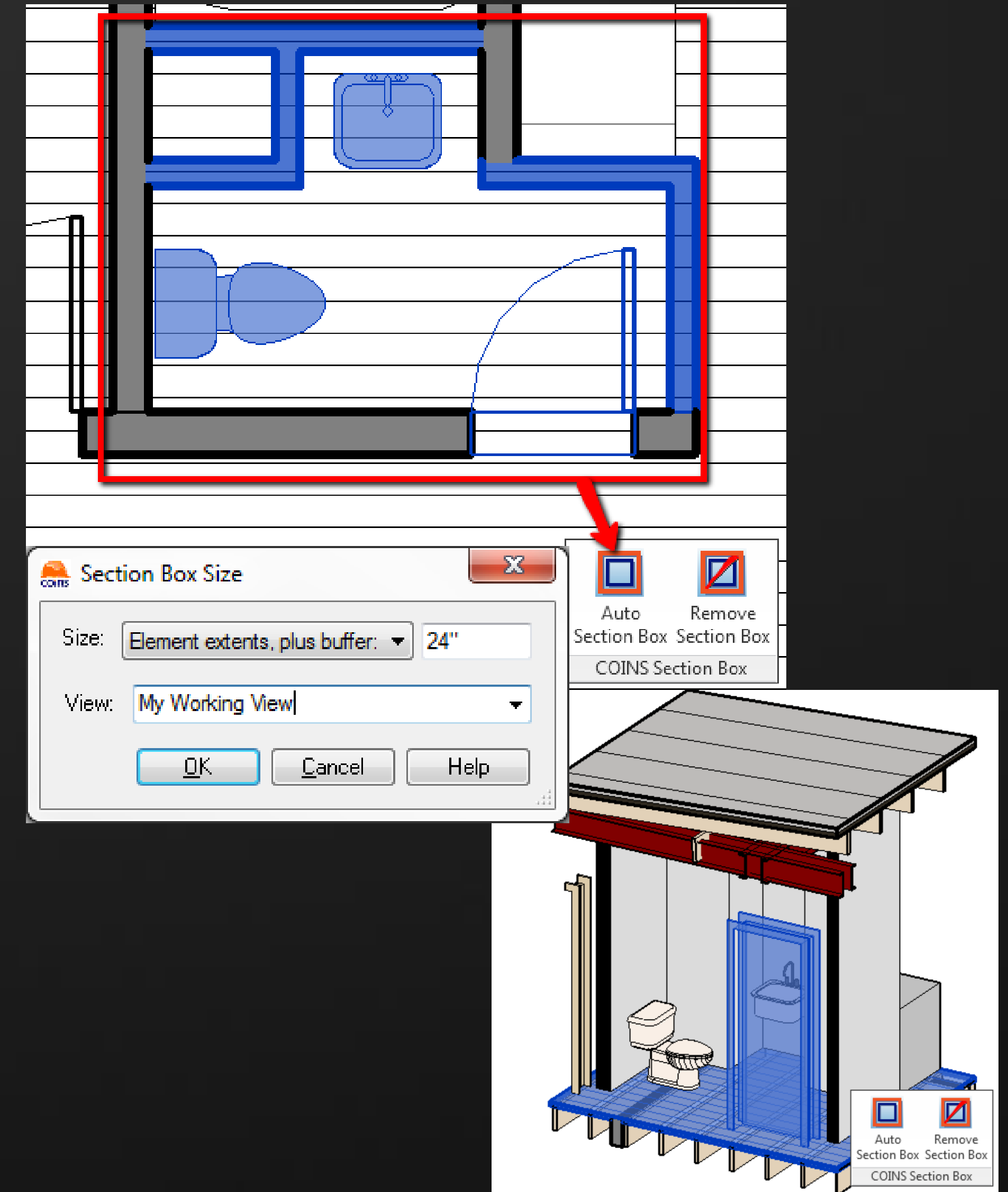
**Rating:** ★★★★★

**Concept + Features:** The COINS Auto-Section Box tool allows you to quickly create temporary and permanent views to be used for immediate interrogation of the model or for construction document deliverables. This works by allowing you to focus on the model instead of managing views or a view's properties.

**Pros:** Add a keyboard shortcut or to the QAT and this tool gives you another level of visual clarity at a moment's notice! The process of creating 3D specific views is now made easy.

**Cons:** One minor note to create auto section box in a camera view the tool must be activated from a 3d view and then choose the camera view to auto section box.

Quick Look:







**Name:** Palladio X BIM WindowsLayout

**By:** Mensch und Maschine acadGraph GmbH

**Price:** Free

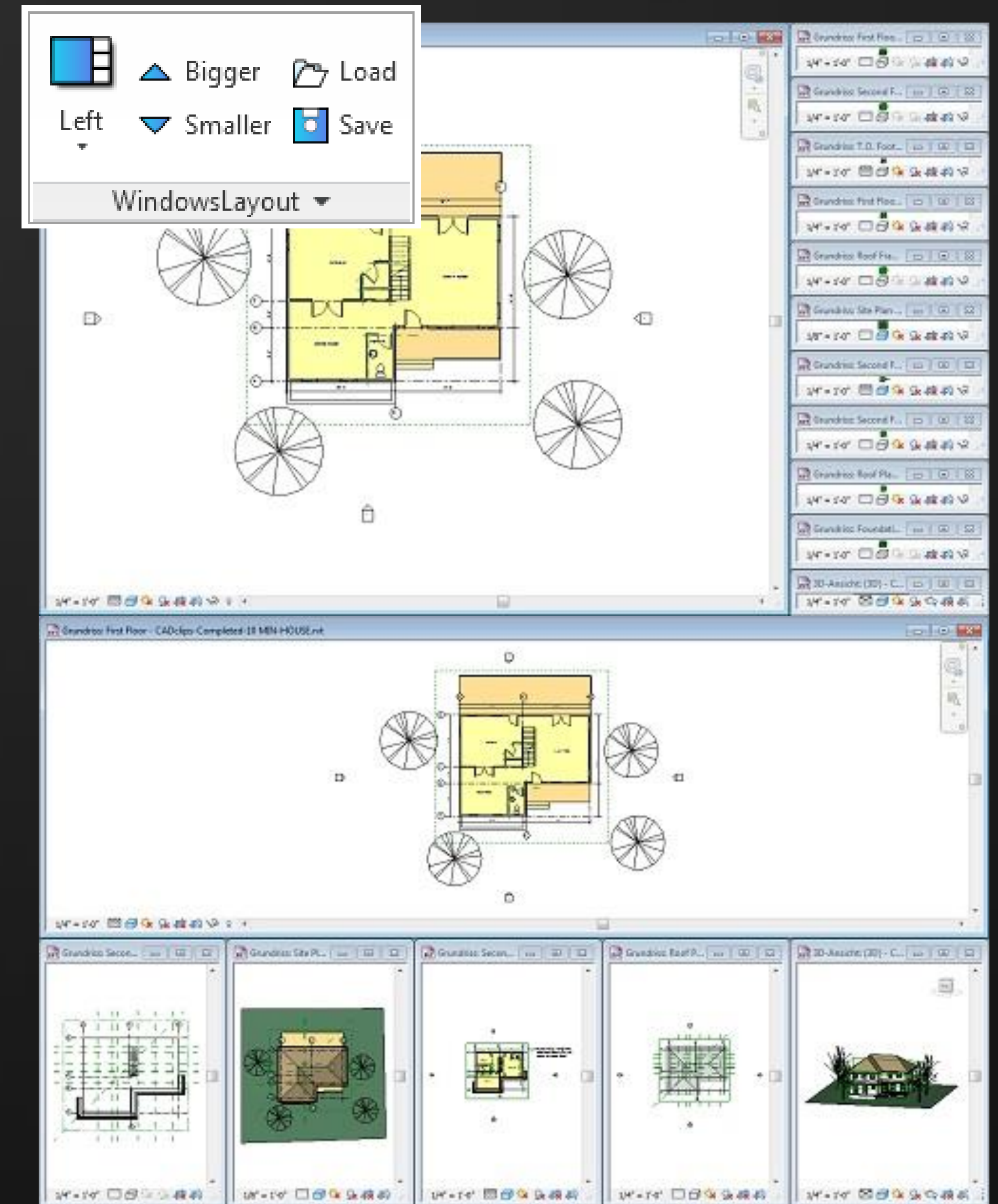
**Rating:** ★★★★★

**Concept + Features:** PXBIM Windows Layout assumes that you want the active window to get most of the screen space. You can give 20 to 80 percent of the screen space to the active window while the inactive windows will arrange in the remaining space. Additionally, you can save and restore your window configuration. Optionally, you can decide if you want the re-arranged windows to be zoomed in or not.

**Pros:** Quickly adjust the size of all windows while keeping one larger than the rest.

**Cons:** Needs more layout abilities like saving named view configurations.

Quick Look:





**Name:** Hatch22

**By:** Mertens 3D

**Price:** Free

**Rating:** ★★★★★

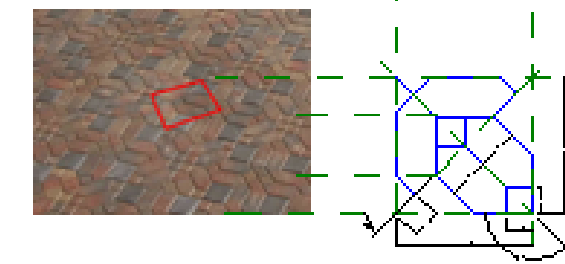
**Concept + Features:** Hatch22 is a free Revit Addin utility that helps you to create model and drafting Fill Patterns/ Hatch Patterns. Line types are added to your project to enable you to draft the pattern you wish to be converted to a .pat model or drafting pattern. Once converted the pattern file can be imported as a custom pattern and applied to materials and filled regions.

**Pros:** Relatively easy to create any pattern by simply drafting it. It's easy to combine into one file with a copy/paste feature if you have one standard pattern file.

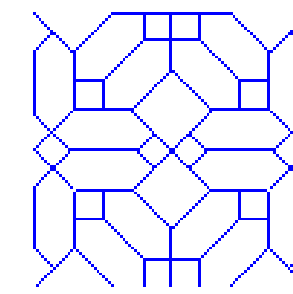
**Cons:** You must right click on the addin and dll files to unblock them in the properties menu before they will work.

## Quick Look:

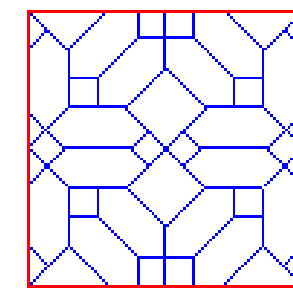
1) Identify the smallest pattern



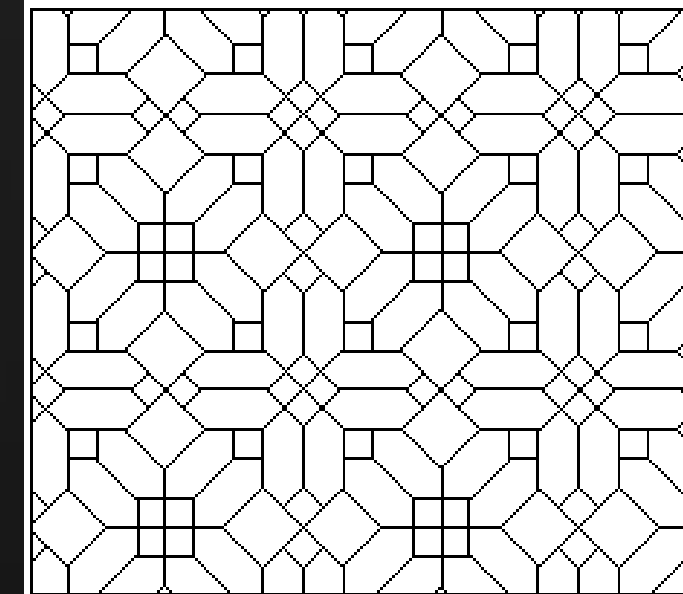
2) create a group with that pattern



3) lay the pattern out as necessary to verify



4) copy the bigger pattern and ungroup. Use this to make a hatch pattern from.



5) try it out

Make Subcategories

☒ Drafting Hatch  
☐ Model Hatch  
☐ AutoCAD

Hatch Name

mertens3d

Comment

My Comments

Make Hatch From Selection

Save .pat

Copy to Clipboard





**Name:** RTV Xporter

**By:** RTV Tools Limited

**Price:** \$ 9.99

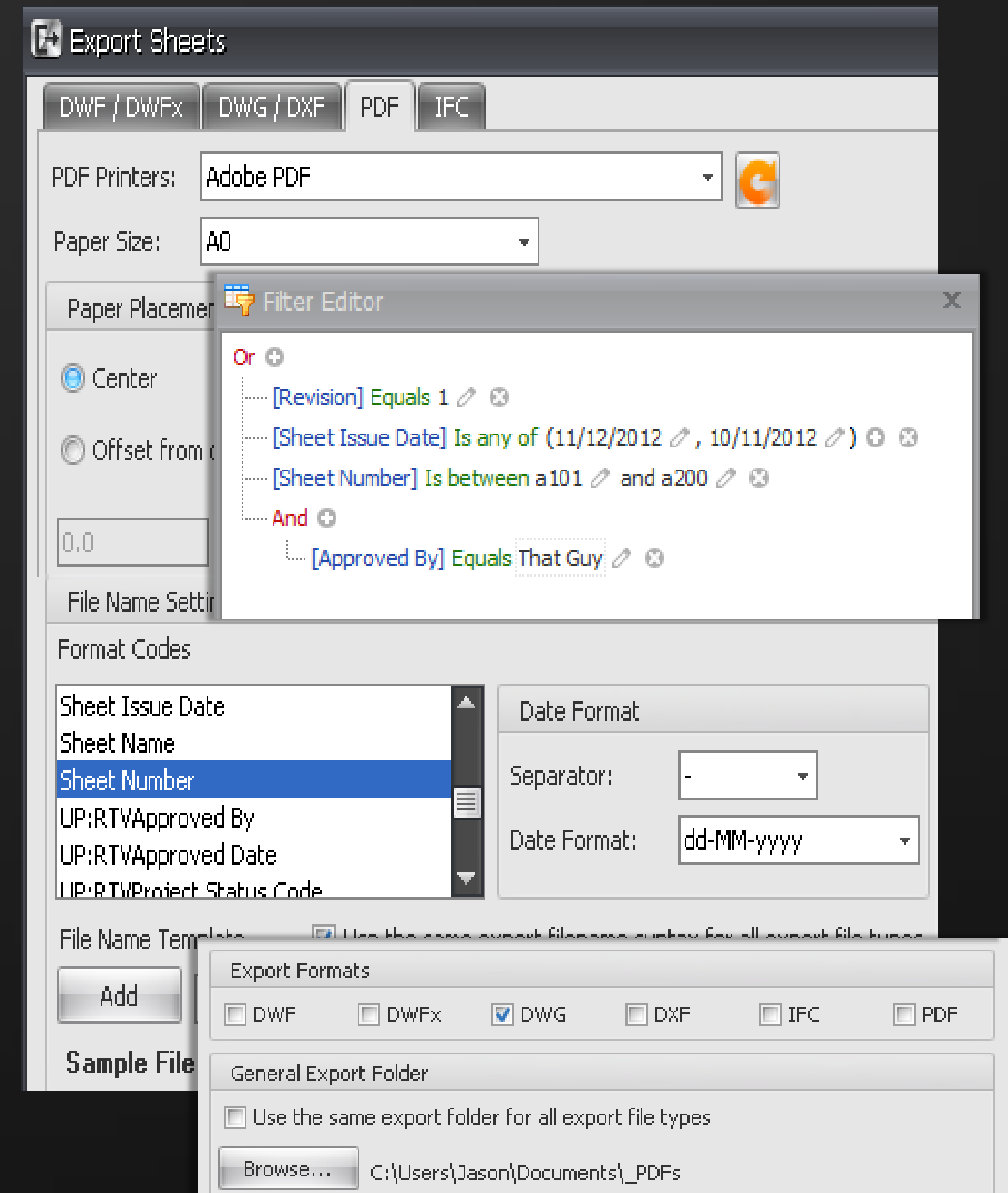
**Rating:** ★★★★★

**Concept + Features:** Quickly browse, search and filter Revit® drawing sheets and views using the intuitive RTV Xporter user interface. Automatically saves the exported files to match any company's or project team's file naming conventions with ease. RTV Xporter also supports batch printing to two separate printers simultaneously.

**Pros:** Refined print / export features including export multiple file types and print to multiple in one pass, plus savable filter settings! Filter is robust with much more flexibility than you see in Revit. Great time saver!

**Cons:** none so far...

## Quick Look:





**Name:** Delete Views Sheets & Links

**By:** Case Apps

**Price:** Free

**Rating:** ★★★★★

**Concept + Features:** Delete Sheets, Views and Revit Links does just what it says. You can select which of the three options you chose using the provided check-boxes. This tool should only be used on models detached from central as it can be quite destructive.

**Pros:** Simple and it does what it's called! Plus it's free!

**Cons:** Would be nice if it could do more custom prep in case you want to keep certain views or links for coordination. It could be more robust if it is for file exchange.

Quick Look:







**Name:** Change and Replace Line Styles

**By:** Case Apps

**Price:** Free

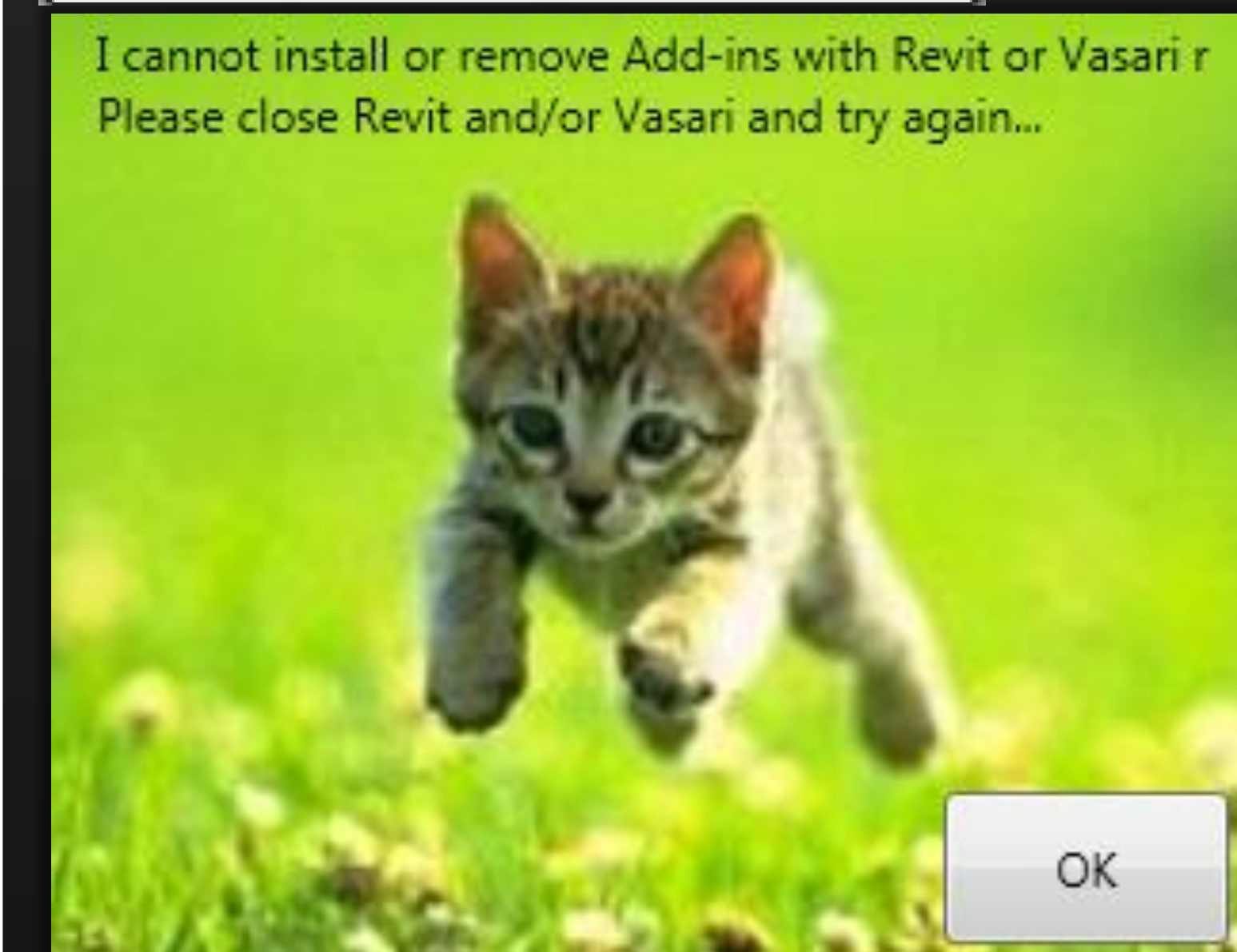
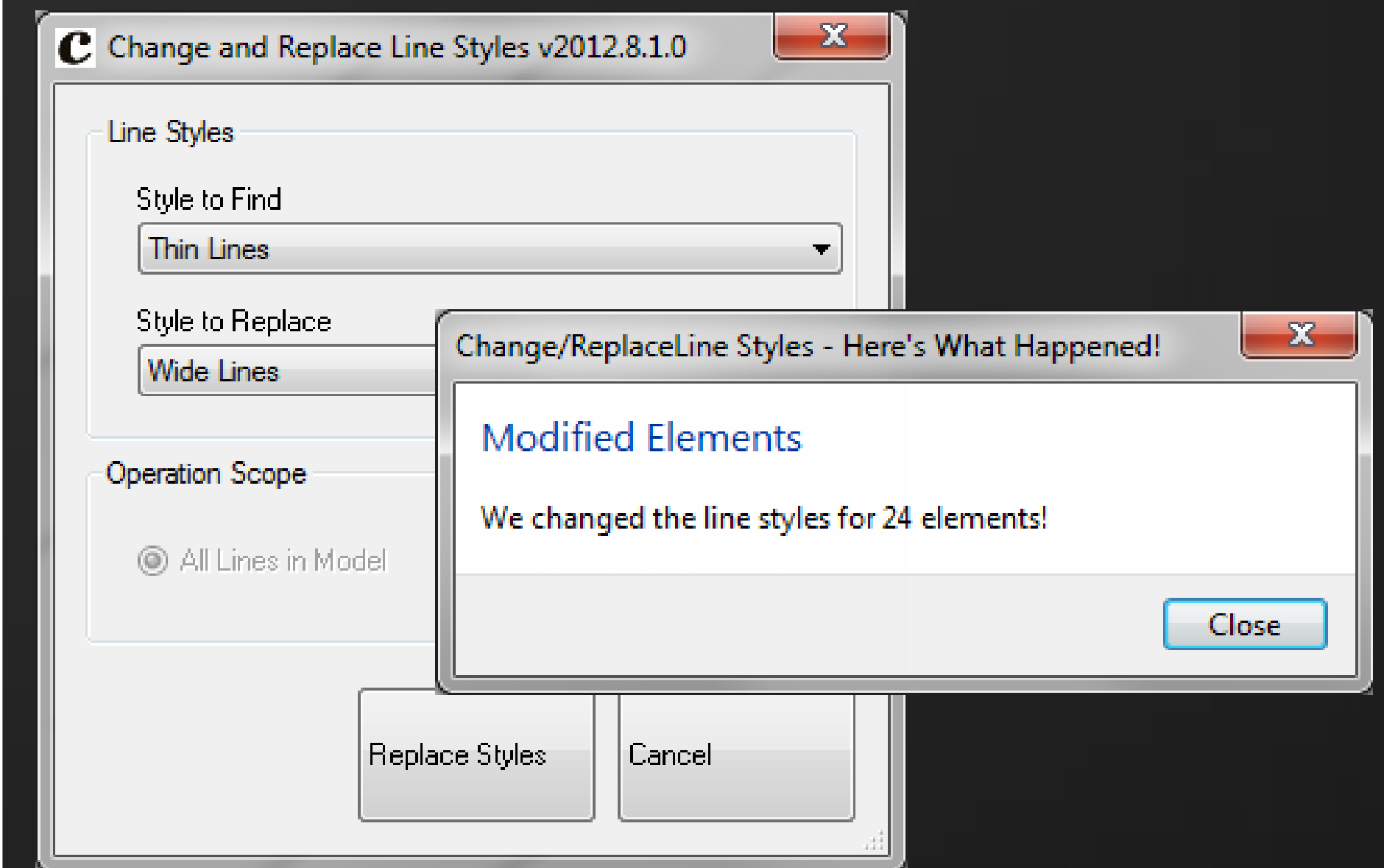
**Rating:** ★★★★★

**Concept + Features:** Have you ever imported a DWG file into your model and got a bunch of unwanted line styles? Have you ever wanted to quickly change those line styles to your standard styles already loaded into your model? This little guy does just this!

**Pros:** Another simple but effective tool. Great for cleaning up a file.

**Cons:** Could be better if you could intercept files being imported by default and prompt the user.

Quick Look:







**Name:** AR-media™

**By:** Inglobe Technologies

**Price:** € 99.00 Pro Lite / € 249.00 Pro

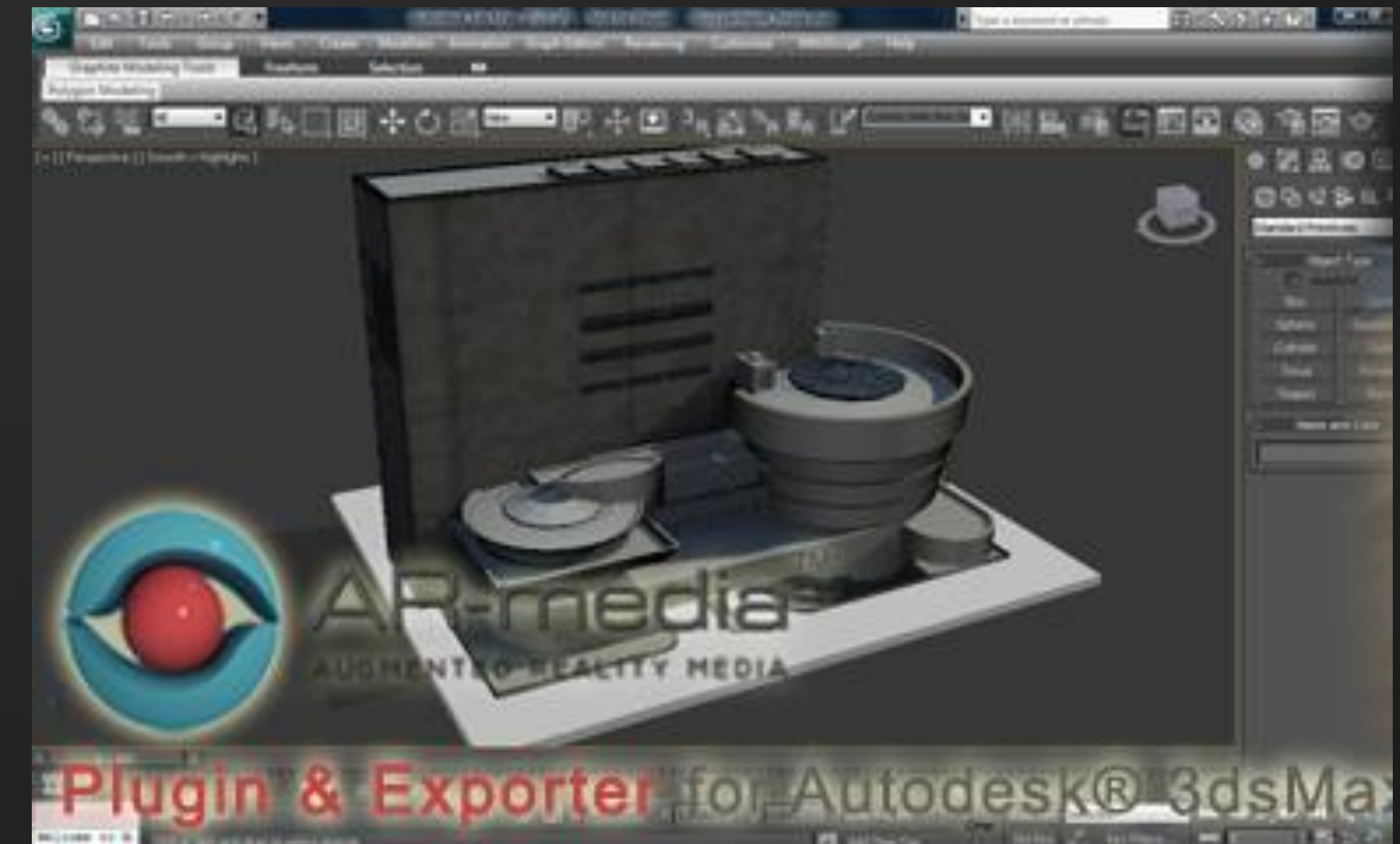
**Rating:** ★★★★★

**Concept + Features:** Simply stated, the Augmented Reality technology allows users to visualize their 3D creations directly in the real physical space which surrounds them. Geo-located models for iOS devices: you can now use iOS Player to display virtual models in the real world without any marker. With support for animations, shadows, clipping planes and more.

**Pros:** Great tool for getting a real context for your design whatever it may be. Easy to use and share with others. You can use markers or place something via geo-location making it possible to visualize a building on site just by sending an email to your iPad.

**Cons:** No direct conversion from Revit (said to be coming by AR-media)

Quick Look:







**Thank You,  
Questions?**