

From Data to Architectural Diagrams

A Modern Workflow for Architects

Softwares used:

SketchUp: Modeling and editing 3D before export

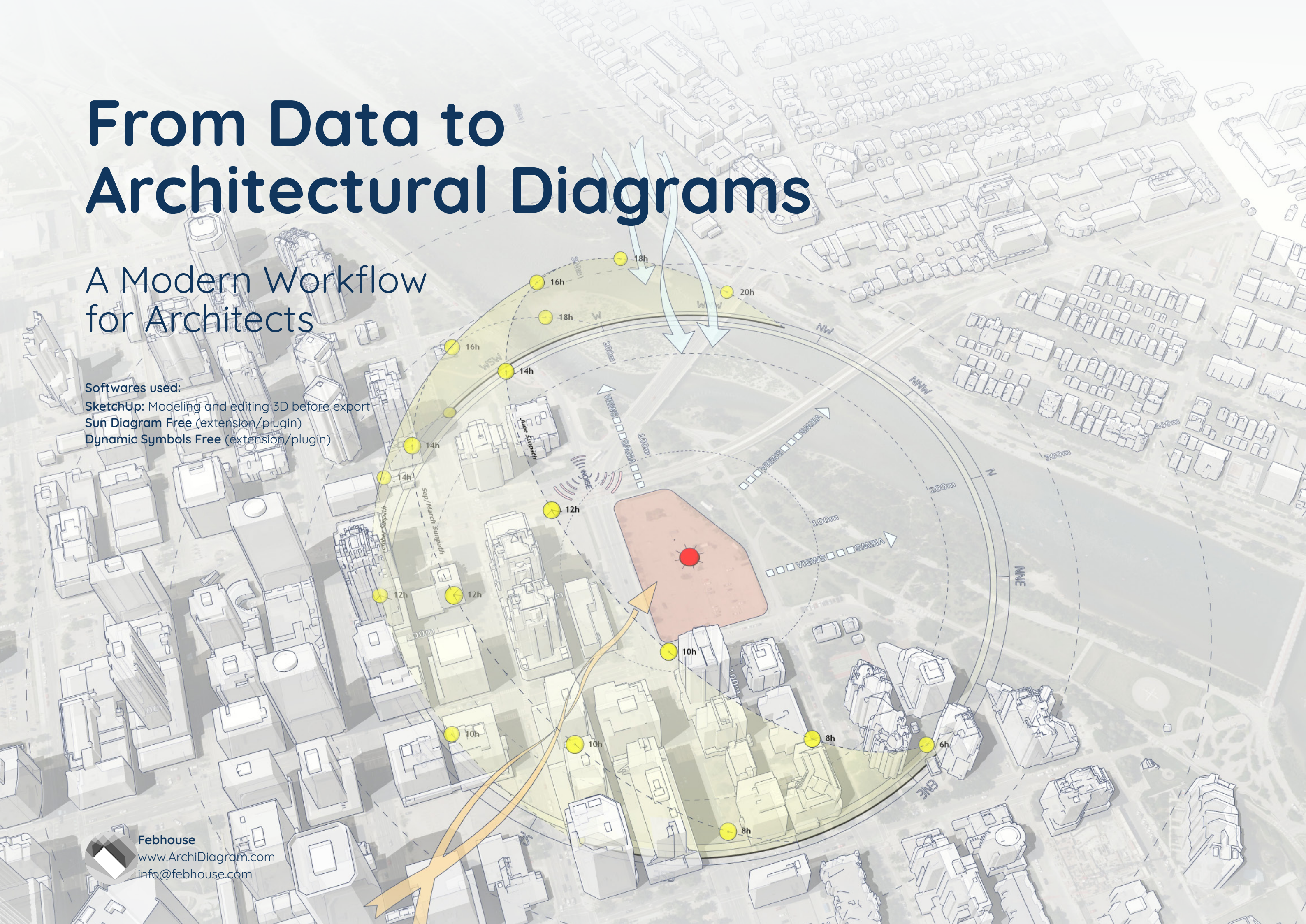
Sun Diagram Free (extension/plugin)

Dynamic Symbols Free (extension/plugin)

 Febhouse

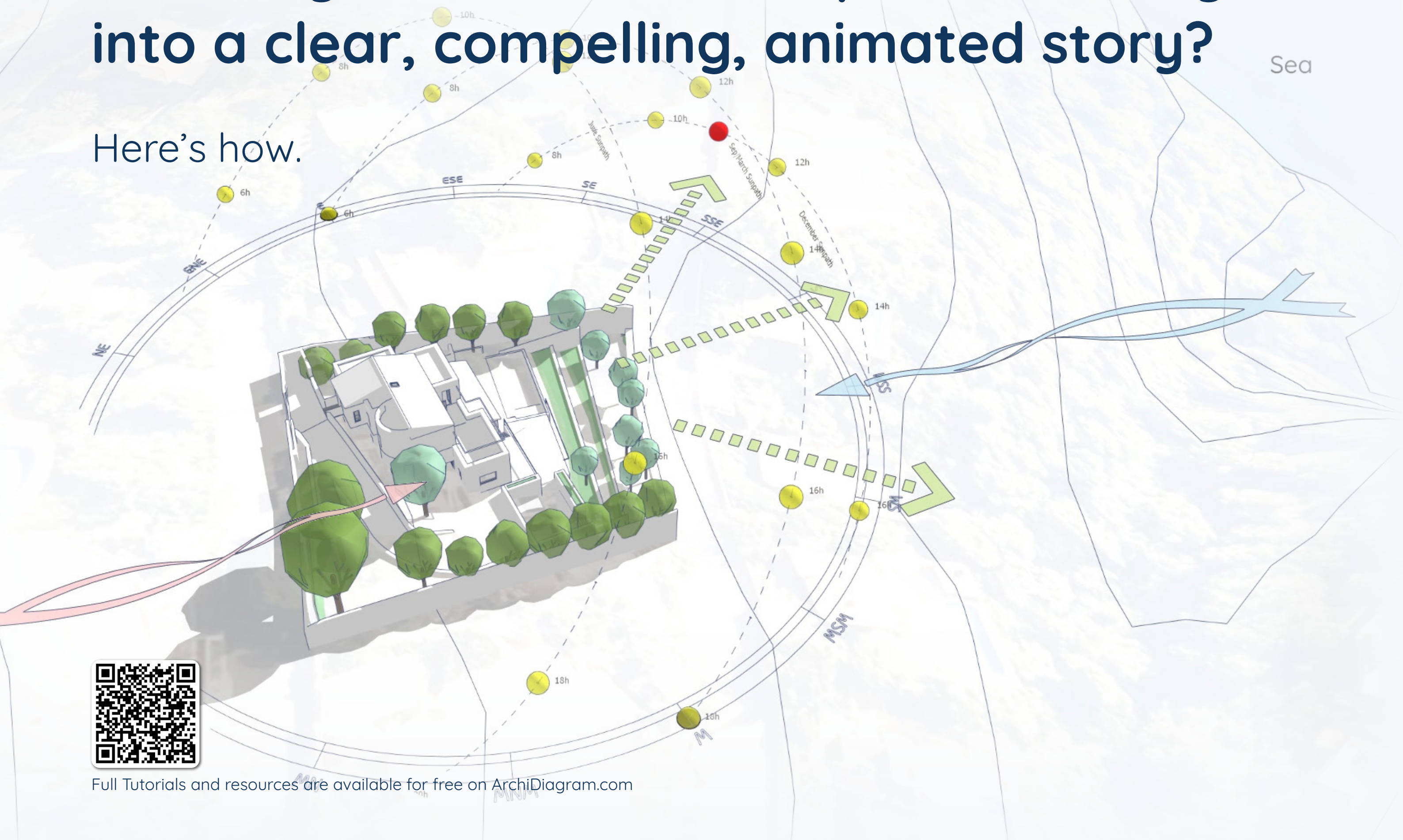
www.ArchiDiagram.com

info@febhouse.com



What if you could turn complex site analysis into a clear, compelling, animated story?

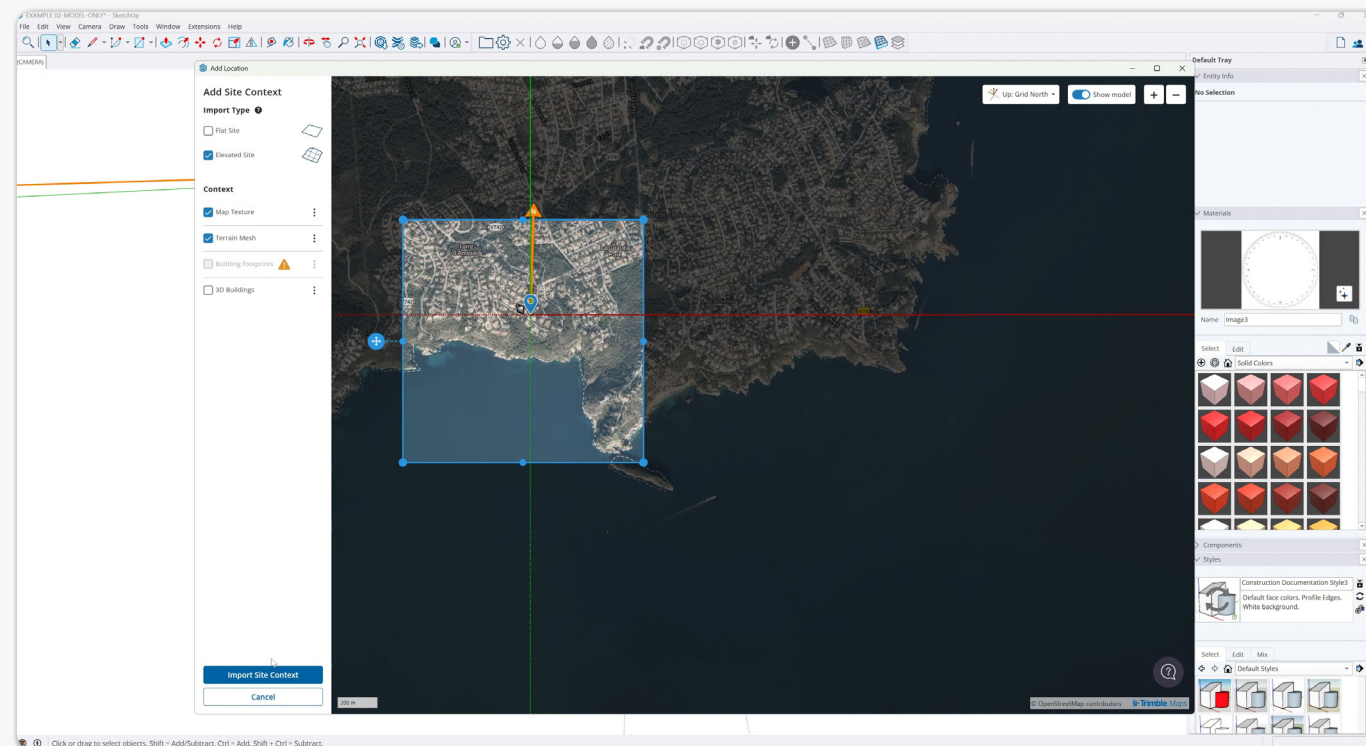
Here's how.



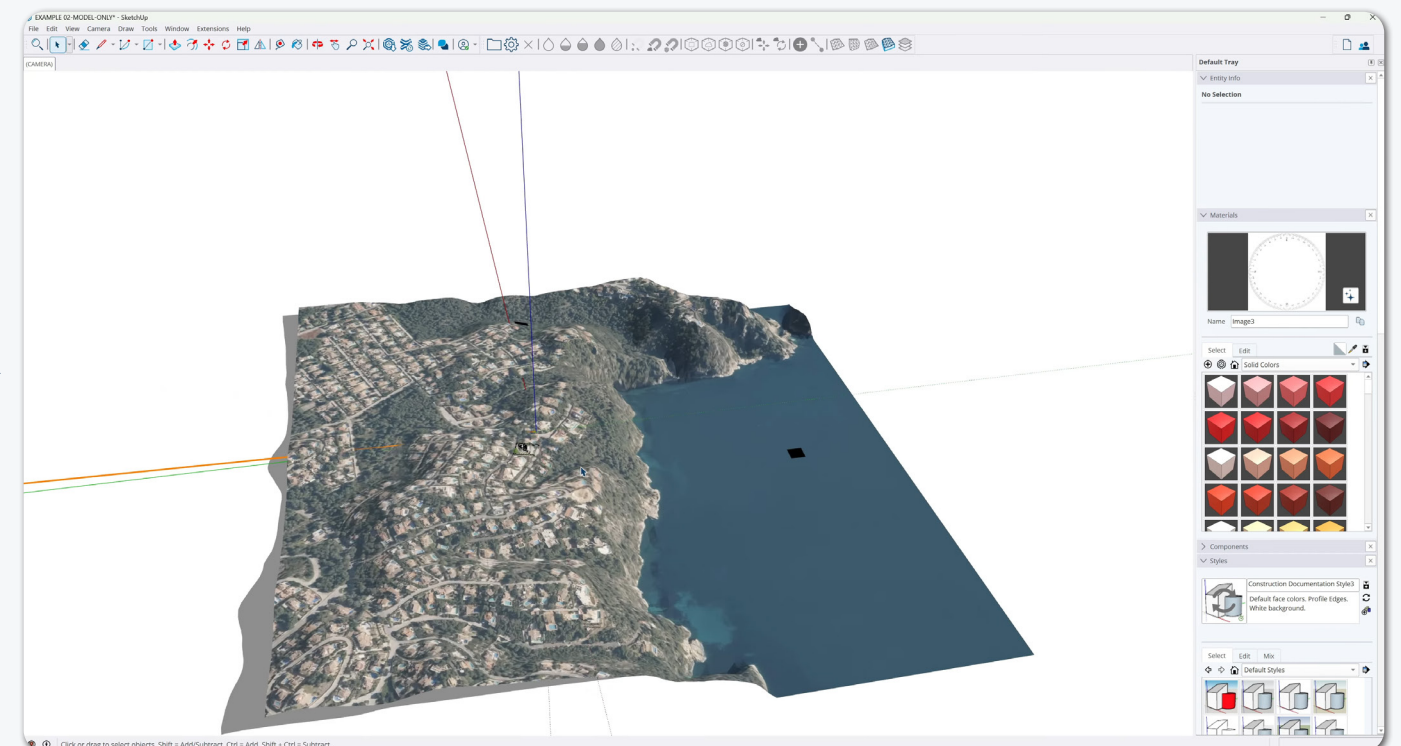
Full Tutorials and resources are available for free on [ArchiDiagram.com](https://www.ArchiDiagram.com)

STEP 1: Import Terrain and Map Data

Use SketchUp's "Add Location" feature to import terrain data and satellite maps for your project site.



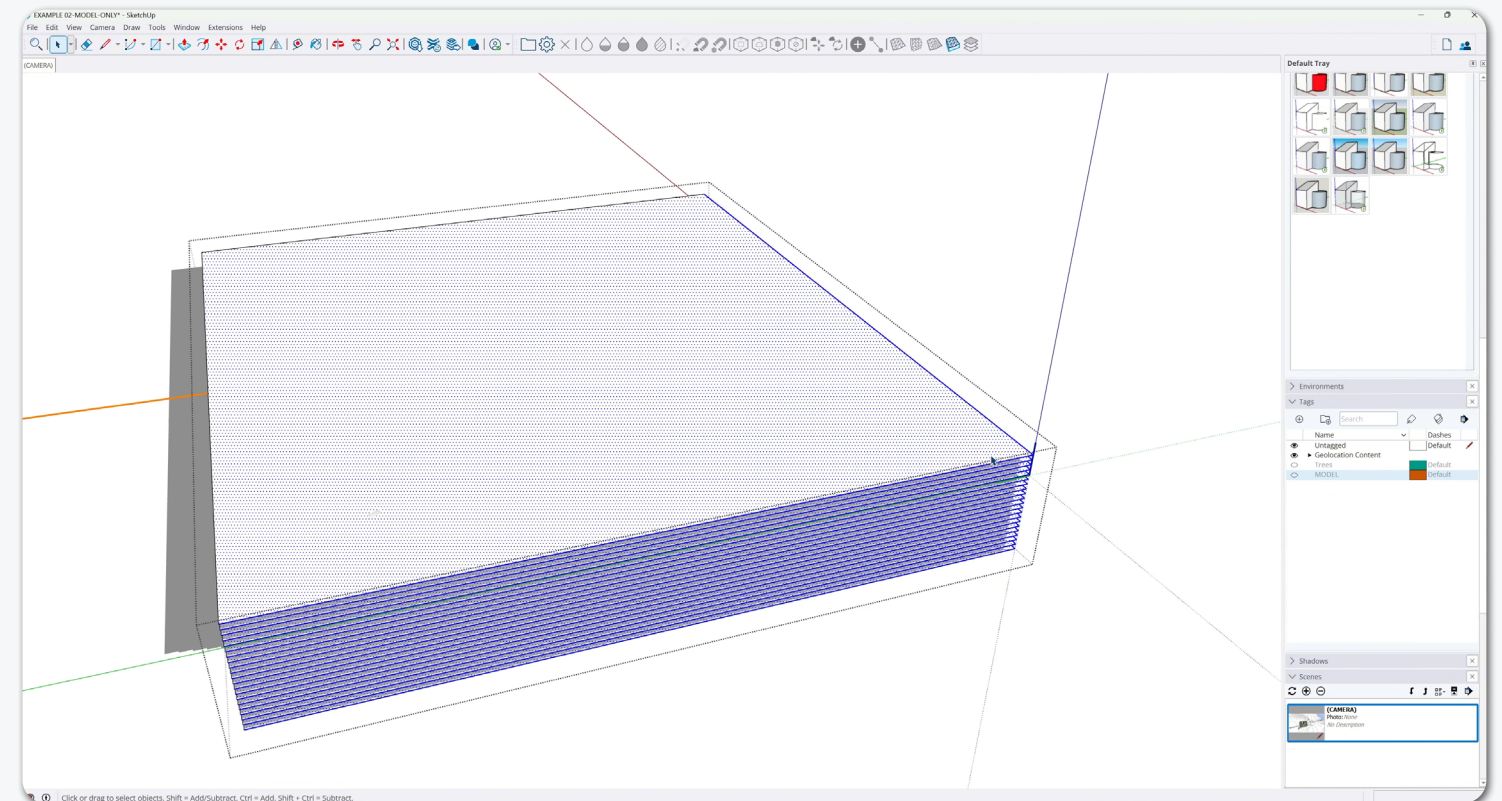
Add Location



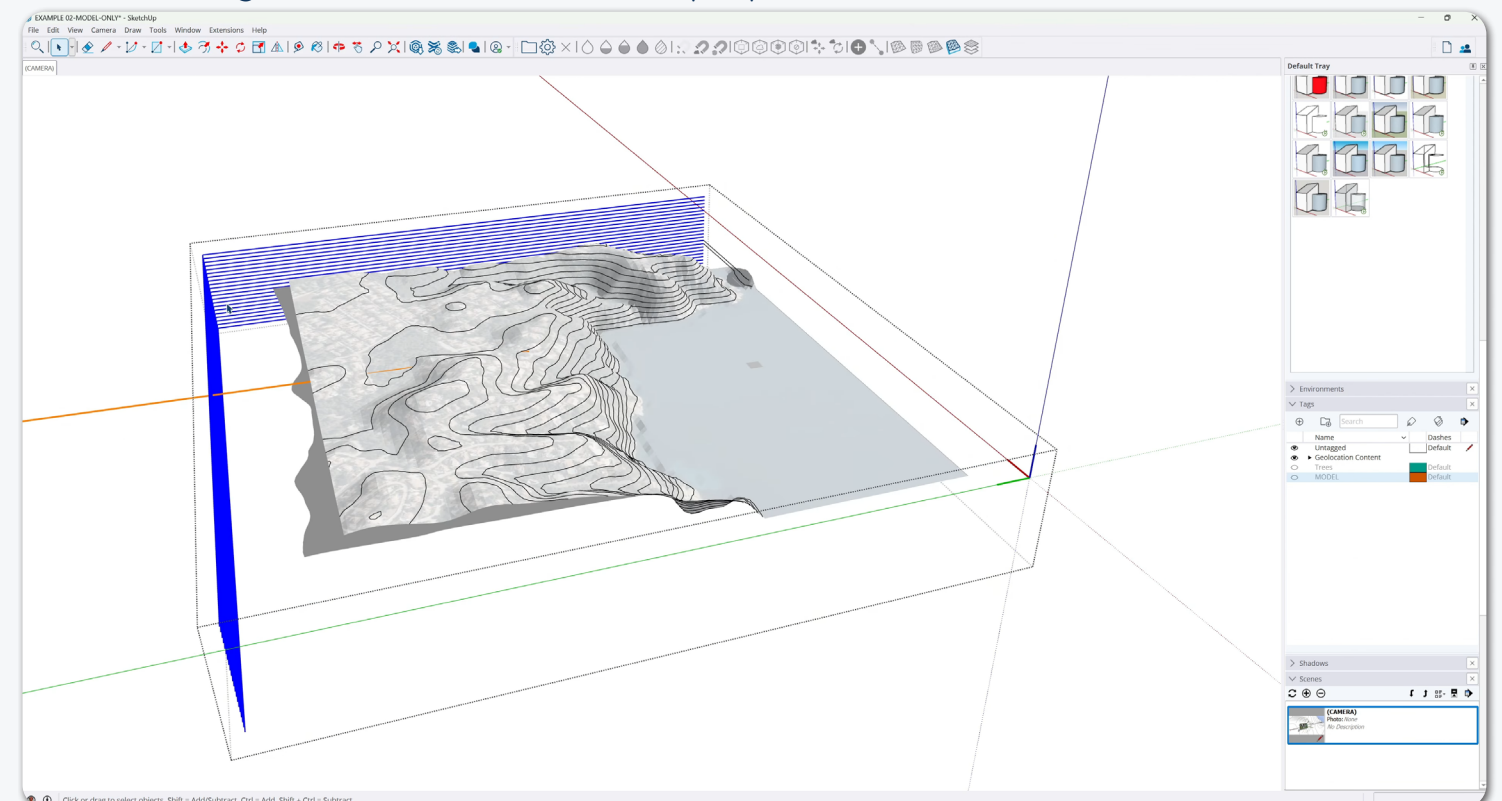
SketchUp will automatically download terrain and satellite maps

STEP 2: Generate Contour Lines

Create a series of intersecting planes and use the “intersect faces, With Model” command to generate precise contour lines from the 3D terrain mesh



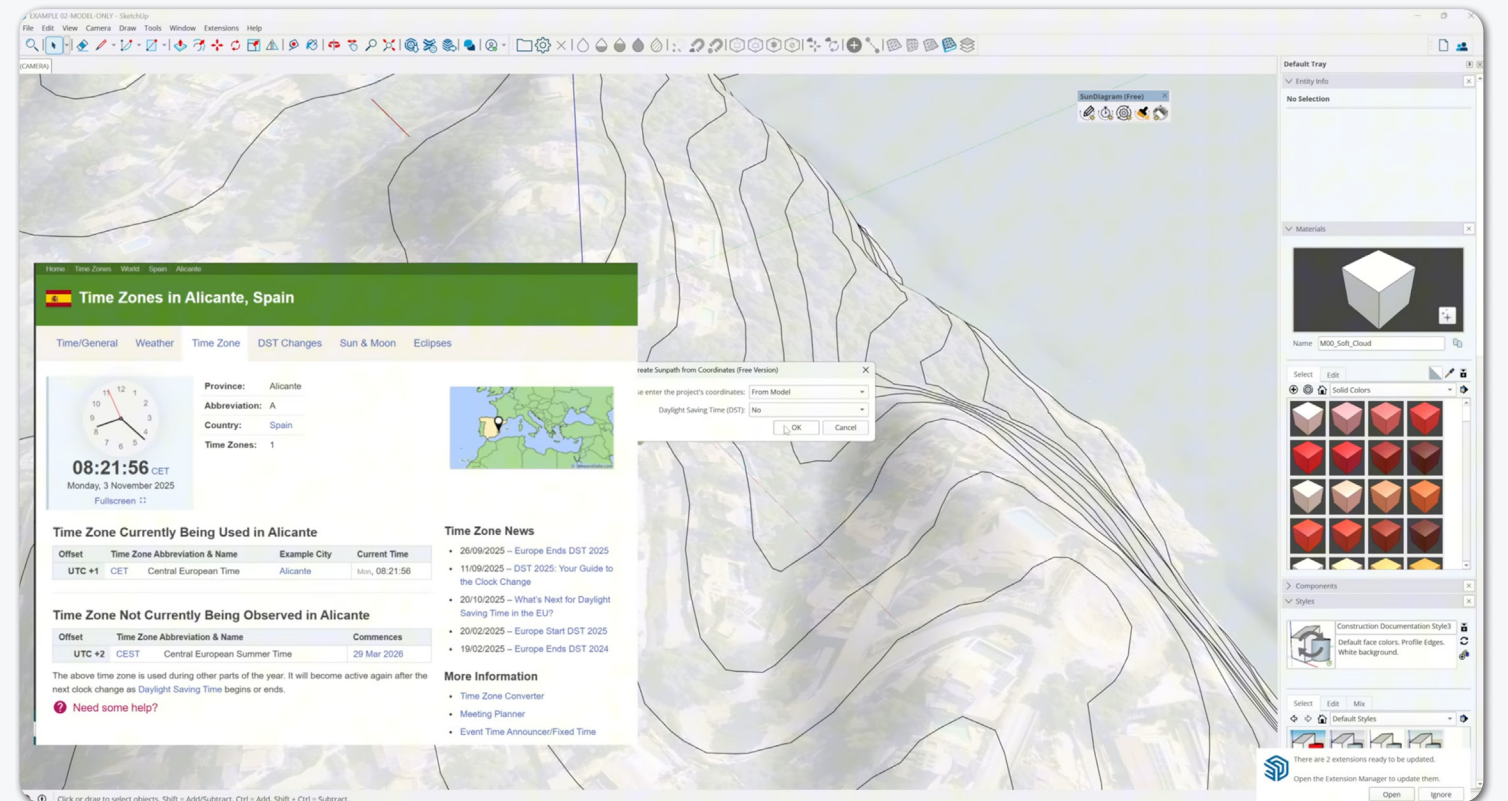
Draw rectangles at 10-meter intervals, perpendicular to the terrain.



Use Intersect Faces, With Model to generate intersections between the planes and terrain

STEP 3: Create a 3D Sun Path with Sun Diagram Plugin

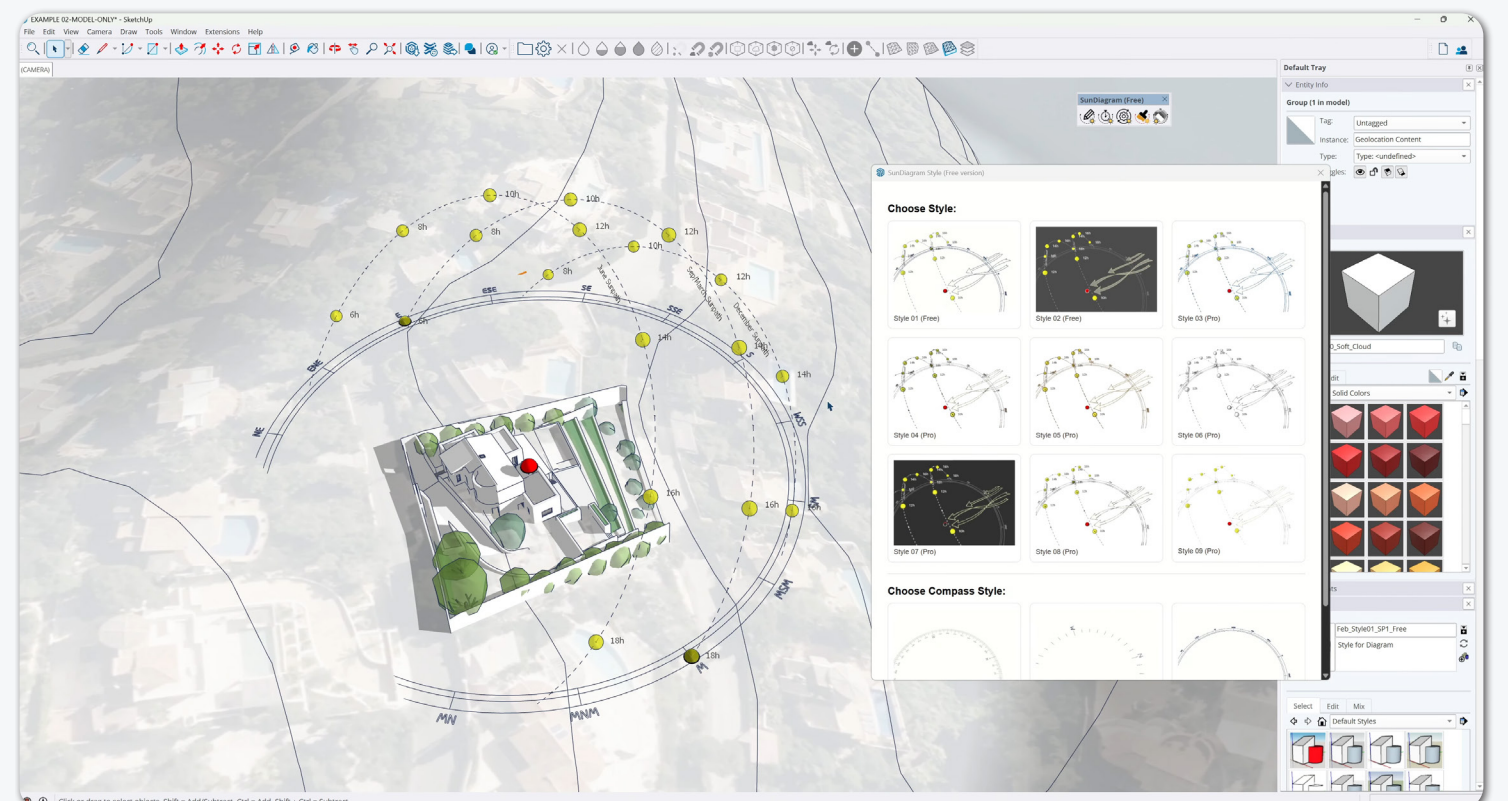
- Start by installing the free Sun Diagram plugin directly from the SketchUp Extension Warehouse.
- Use the first feature, “Create Sun Path” to generate an accurate 3D Sun path based on your model’s pre-loaded coordinates
- Choose from a library of professional visual styles to match your presentation needs. We’re using “style01” for this clean, bright diagram.



Use the first feature of the plugin to create the 3D Sun Path.

Tool Spotlight: Sun Diagram

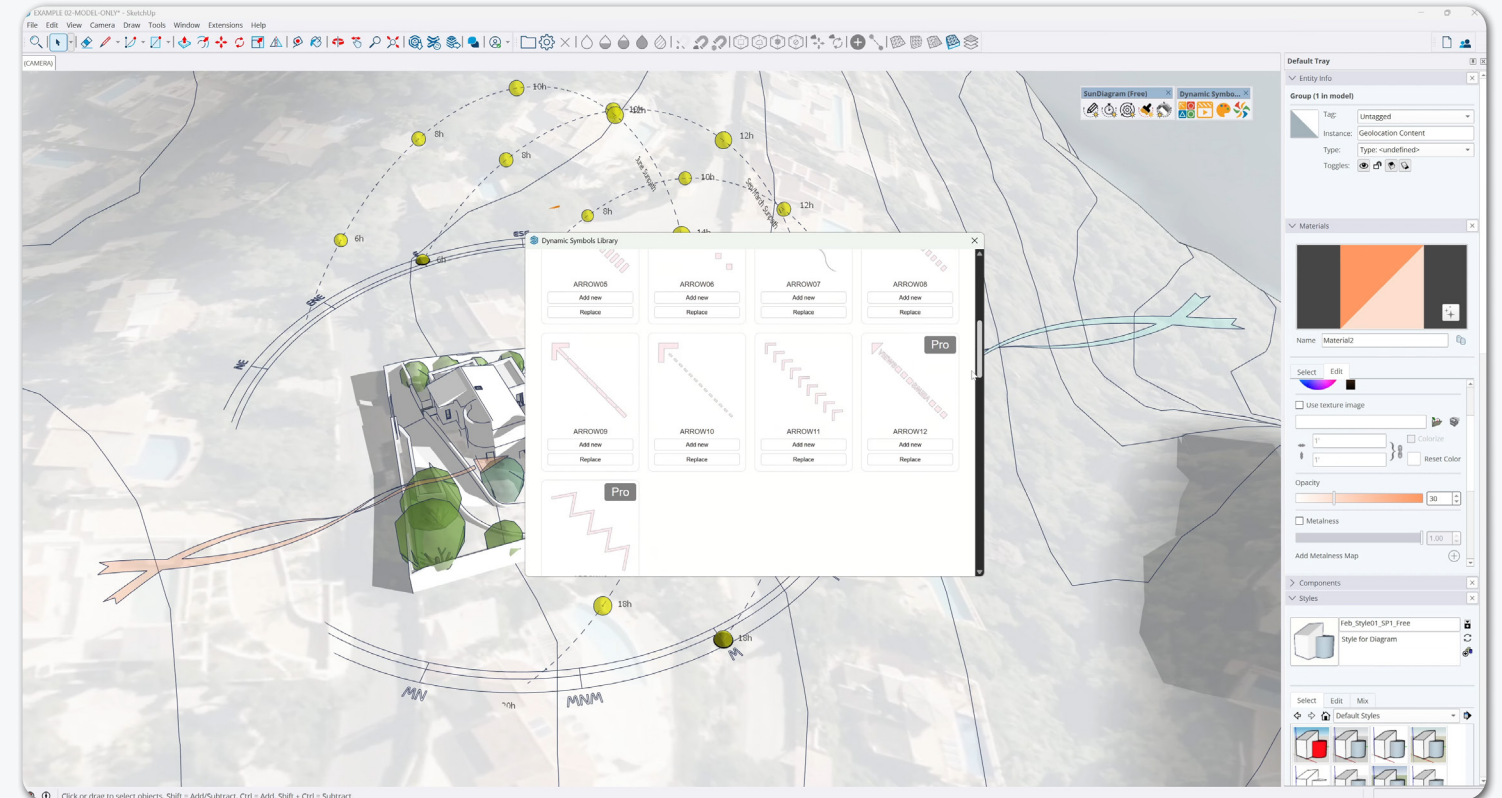
Instantly generate accurate, location-based 3D sun path and shadow studies in SketchUp.



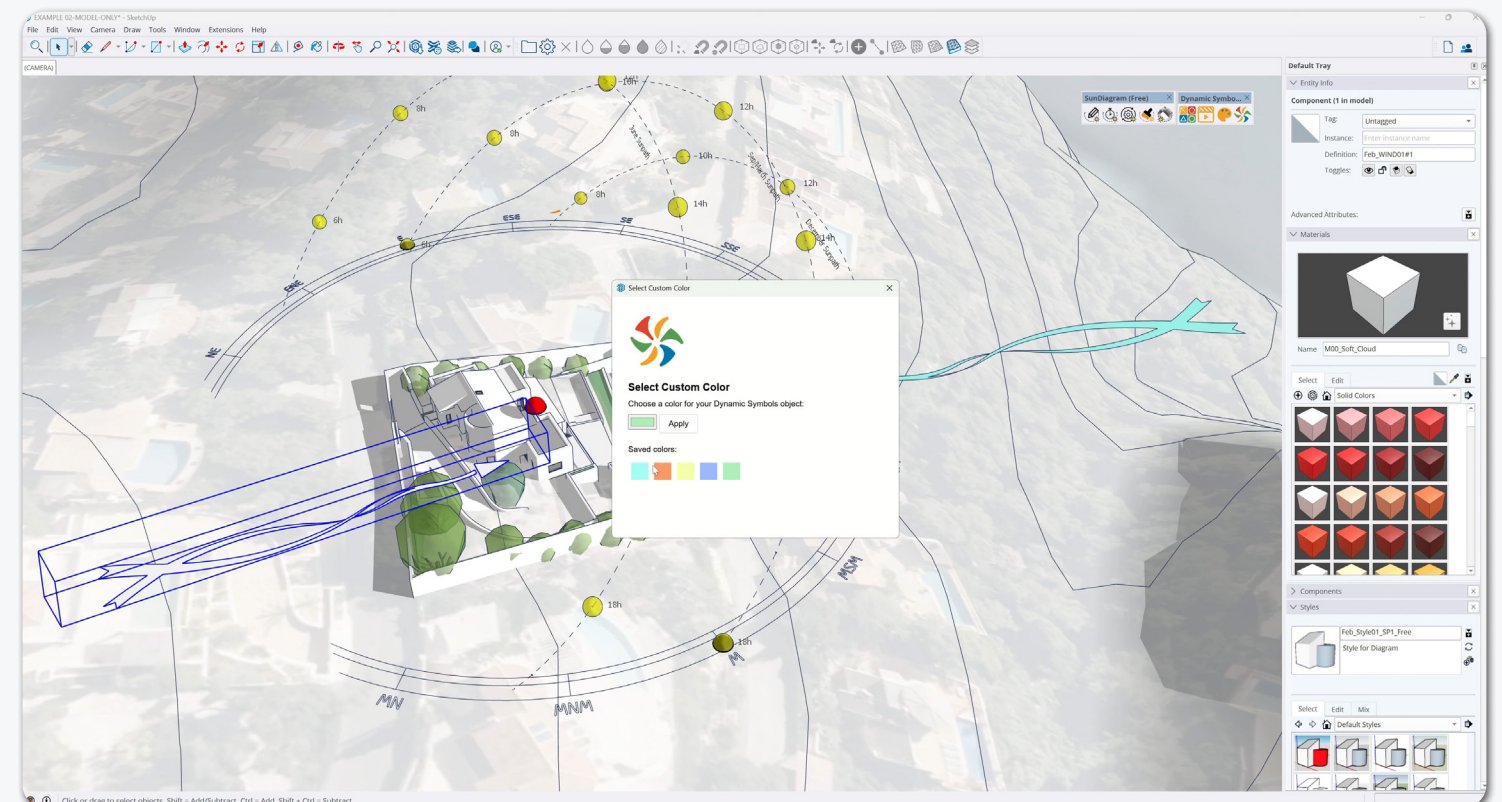
Select the display style of the diagram using the 4th feature of Sun Diagram

STEP 4: Add Symbols with Dynamic Symbols Plugin

- Install the free Dynamic Symbols plugin from the Extension Warehouse. Select symbols from the library to represent site-specific data like wind direction, primary views, or noise sources.
- Easily place, scale, rotate, and color the symbols to fit your diagram
- Here, we've added two wind flows: a cool breeze from the sea and a hot wind from the land



Use the first feature to generate a symbol.



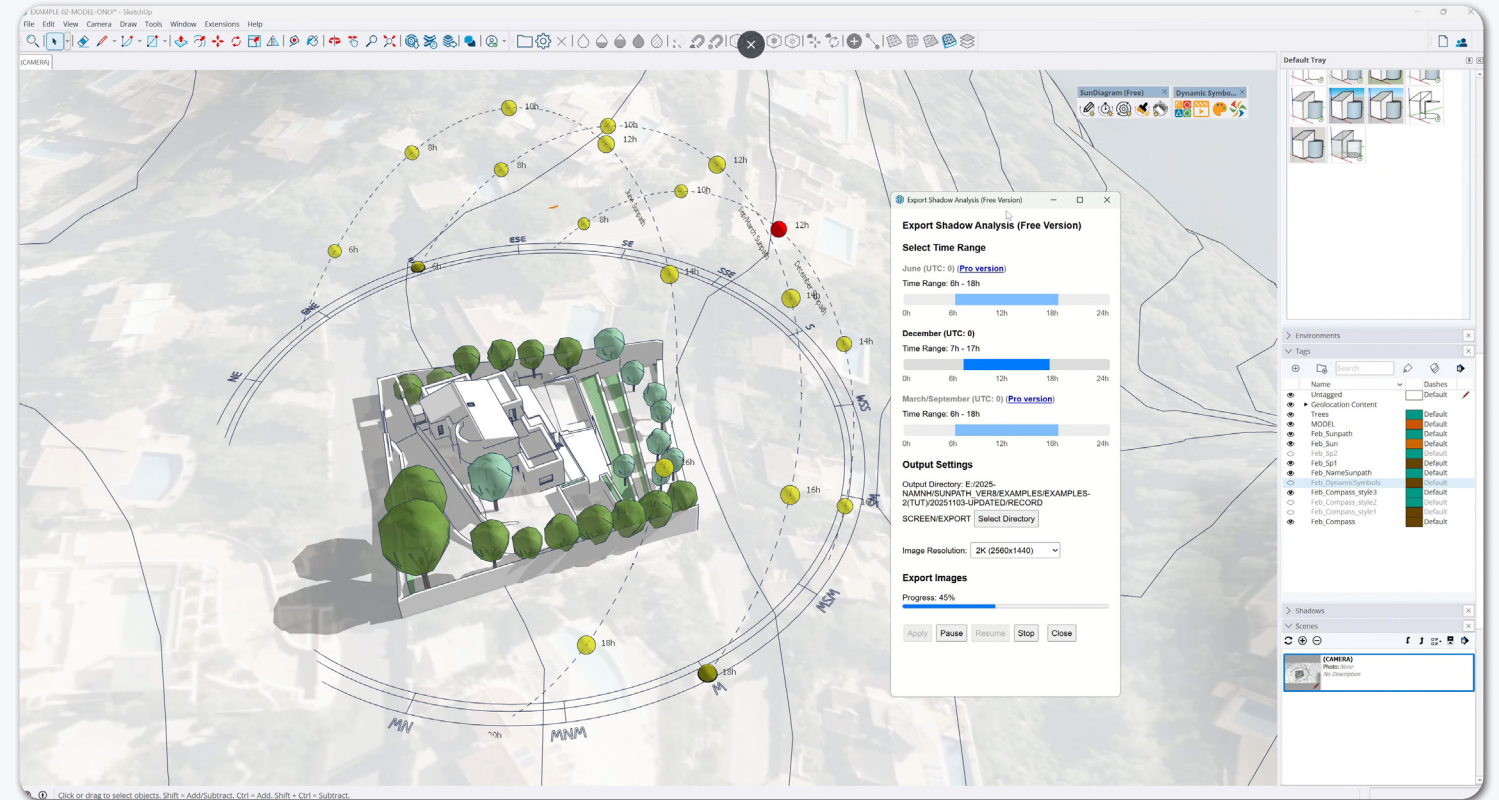
Color the symbols using the 3rd feature of Dynamic Symbols

Tool Spotlight: Dynamic Symbols

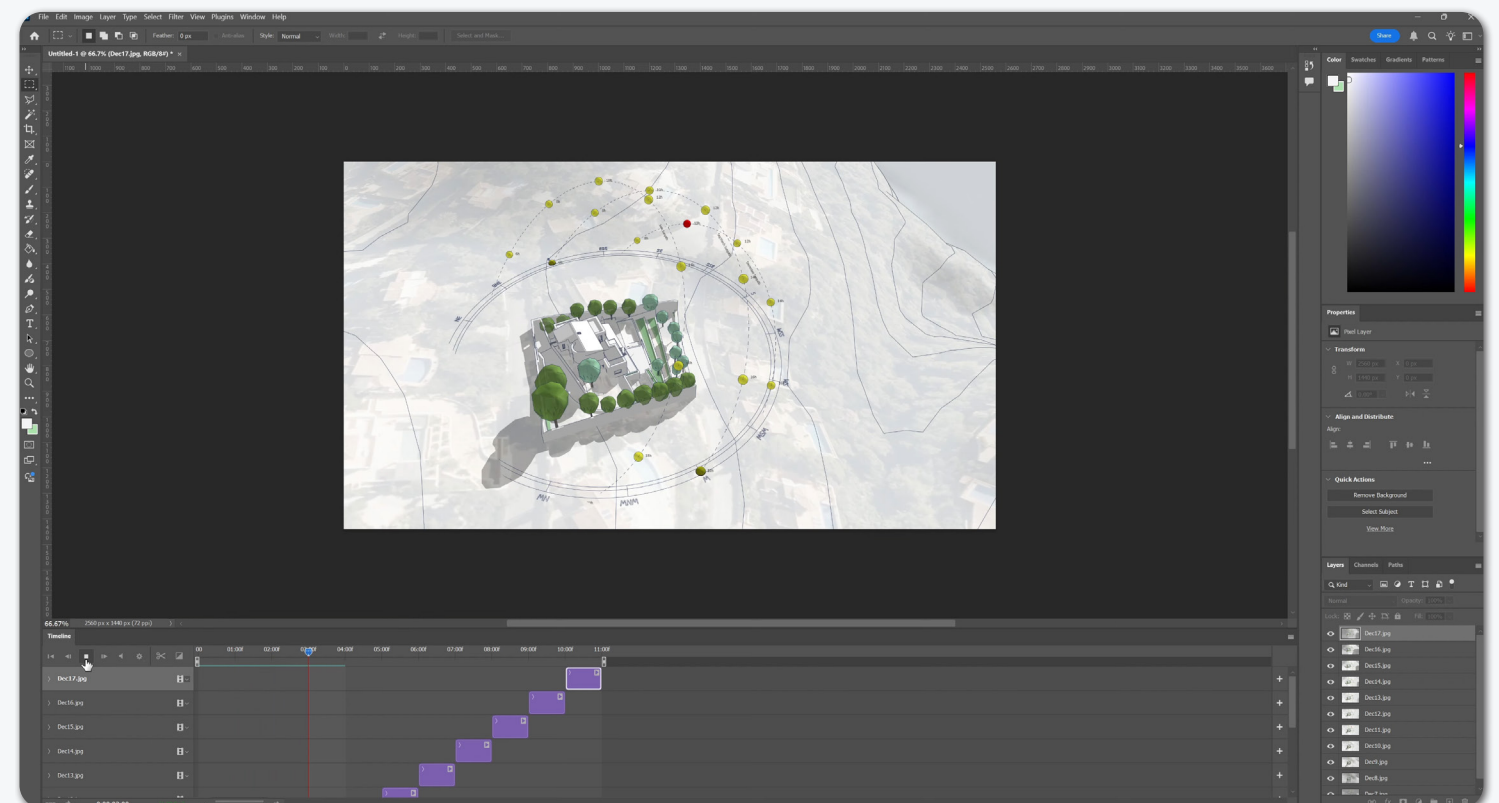
A smart library of animatable diagram symbols to bring your analysis to life with one click

STEP 5: Create a Shadow Analysis using Sun Diagram

- Bring Shadow to Life:
Use Sun Diagram's "Export Shadow Analysis" feature to batch export a sequence of images showing shadow movement over a selected time range (e.g., 6-18h for December)
- Create a Time-lapse
Combine the exported images in software like Photoshop (using the "Load file into stack" script) or Capcut to create a smooth video of shadow study



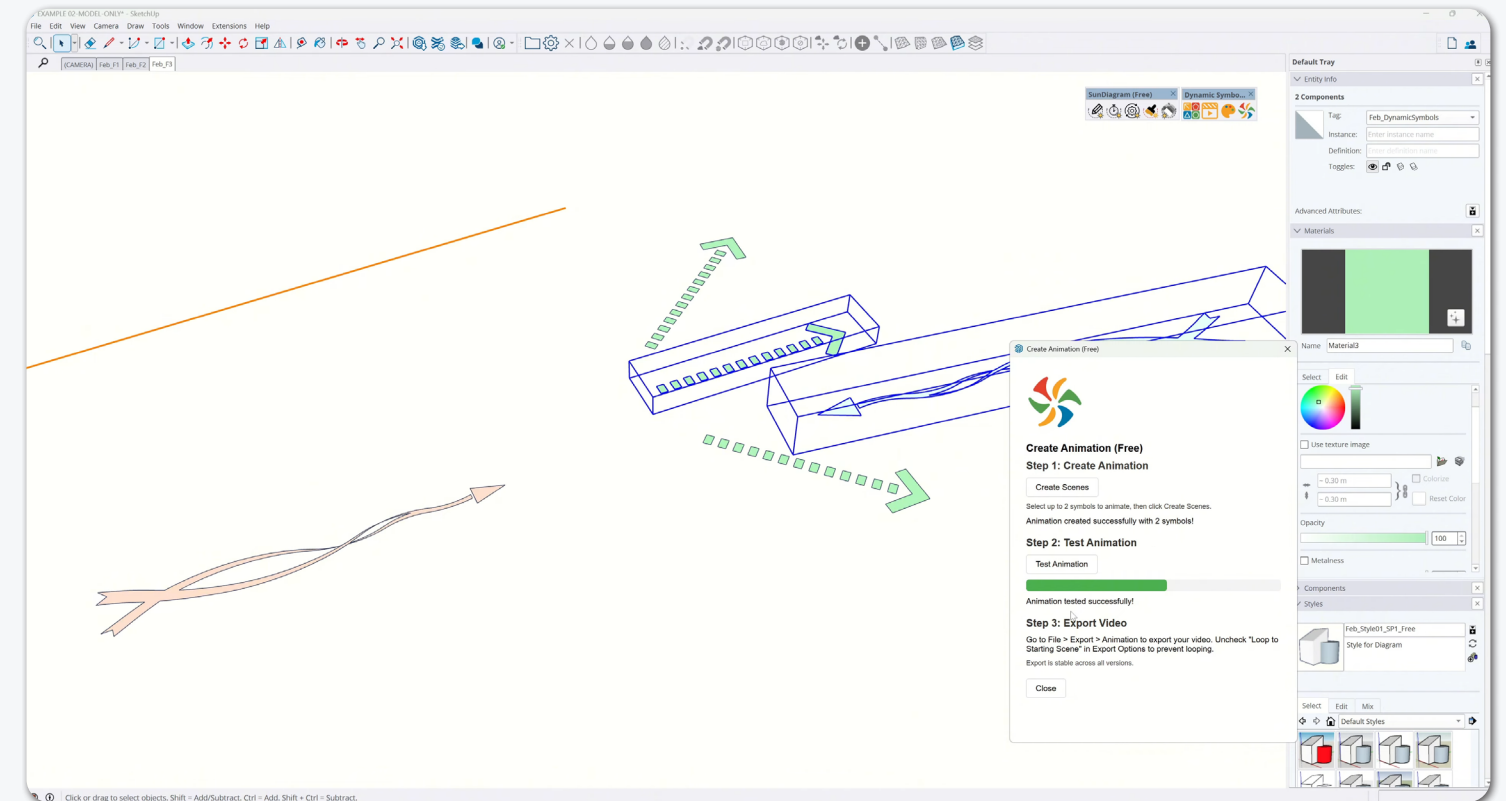
Use the 3rd feature of Sun Diagram to perform the Shadow Analysis.



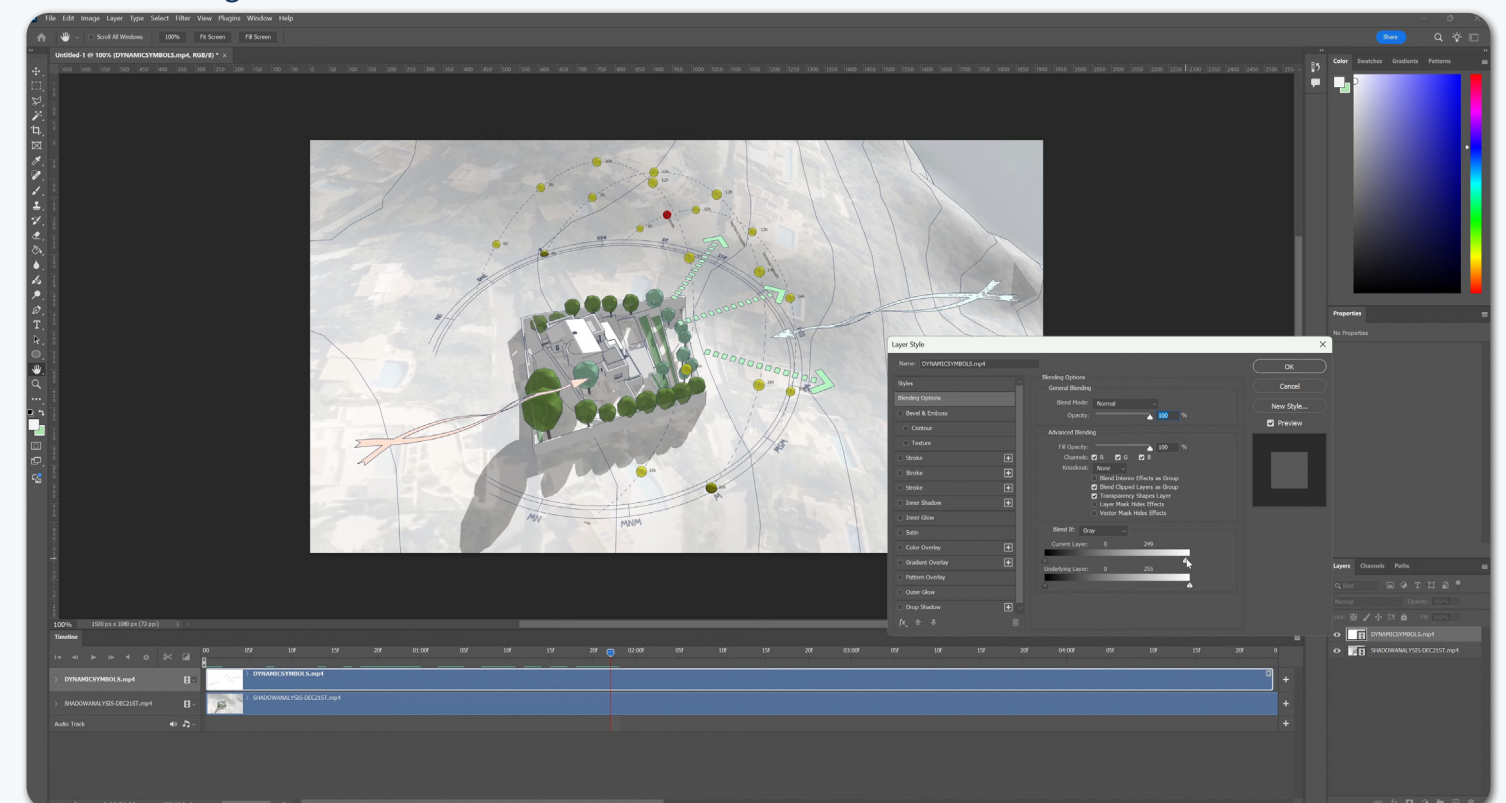
Combine the images into a video using Photoshop, Capcut, or similar software.

STEP 6: Final Animated Diagram

- Animate with one click
Select the symbols you want to animate and use the ‘Create scenes’ feature in the Dynamic Symbols plugin. It automatically generates the necessary scenes (Feb_F1, Feb_F2, Feb_F3) for animation
- Export the motion
Go to File, Export, Animation. Ensure only three ‘Feb’ scenes are included and uncheck ‘loop to starting scene’ in the options for a clean export
- A complete Animated Diagram
 1. Layering the stories: Combine the two exported videos - the shadow analysis and the animated symbols - in a video editor.
 2. Compositing: Place the symbols video layer above the shadow video. Use a blending option remove the white background from the symbols layer, allowing the shadow analysis to show through.

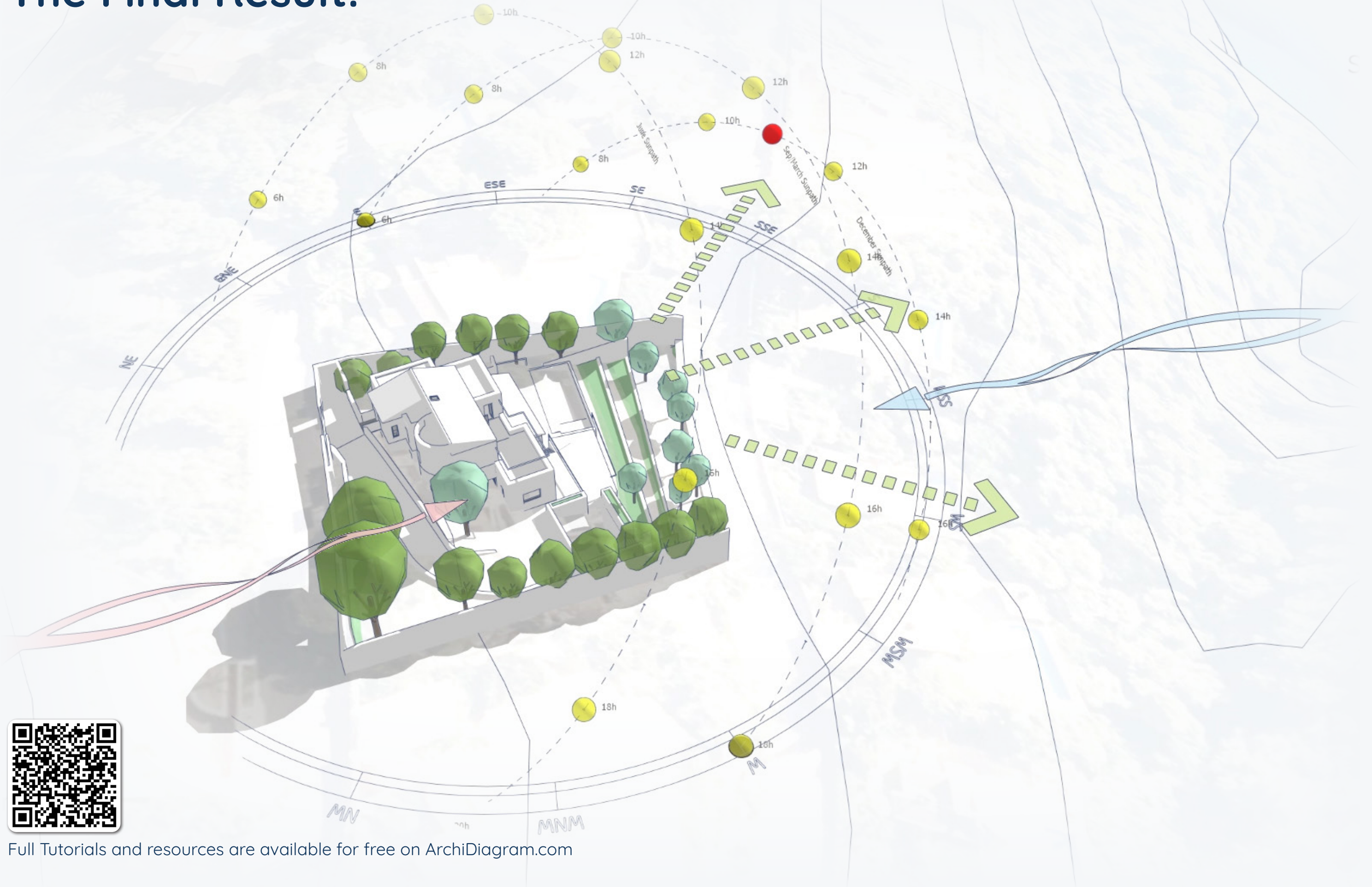


Select the symbols and click “Create Scenes”.



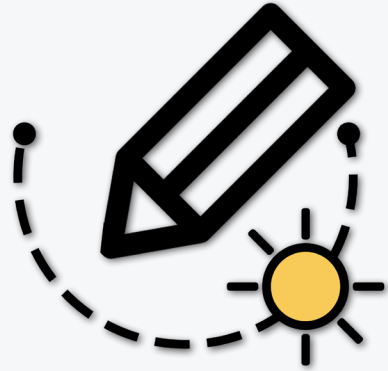
Remove the background of the dynamic symbols video layer using the blending option

The Final Result:

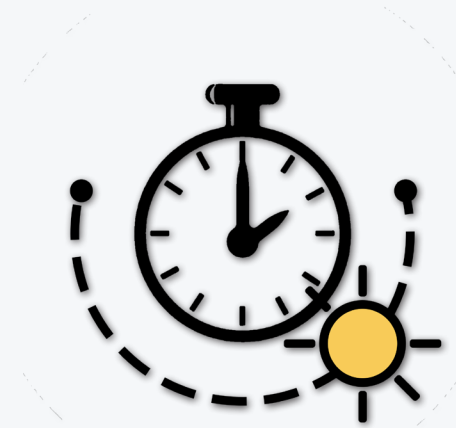


Full Tutorials and resources are available for free on ArchiDiagram.com

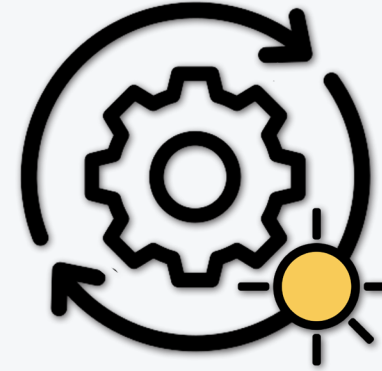
The Toolbox: Sun Diagram



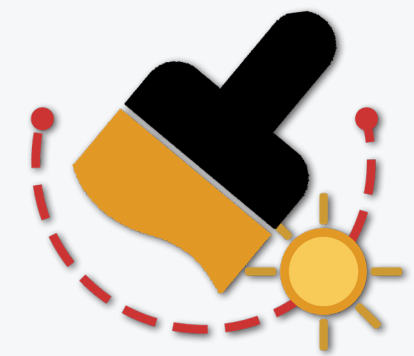
3D Sun Path: Generate an accurate 3D sun path from model coordinates or manual input.



Shadow Analysis: Instantly simulate shadows and sun positions for any selected date and time.



Batch Export: Export sequences of shadow and sun position images with a single click.



Style Library: Instantly apply different visual styles to your diagrams and compass.

Free Download



Or visit SunDiagram.com
or search on Extension Warehouse

Developer: NamNH - Febhouse

Compatibility: SketchUp2020+
MacOs & Windows

Sun Diagram

(Suitable for students or users who don't need DST support)

✓ Generate a 3D Sun path by simply entering coordinates

✗ Support DST (Daylight Saving Time)

✓ Create Shadow Analysis (June and December only)

✓ Export Shadow Analysis (December only)

✓ Style Library for your diagrams (02 Styles)

Free Download

Or you can look it up yourself in the Extension Warehouse.
Please search "sun diagram".

Sun Diagram (Pro)

(Full-featured version)

✓ Generate a 3D Sun path by simply entering coordinates

✓ Support DST (Daylight Saving Time)

✓ Create Shadow Analysis (June and December, September)

✓ Export Shadow Analysis (June, December, September)

✓ Style Library for your diagrams (09 Styles)

Download

Buy now on Gumroad
A lifetime license key will be included with your purchase.

The Toolbox: Dynamic Symbols



One-Click Symbol change: Instantly switch between symbols shape while keeping the position, size, and rotation unchanged.



One-Click Color Change: Instantly change symbols colors. The system saves your last 5 colors for quick access



Create Animation: Automatically generate scenes that bring your symbols to life for storytelling

Free Download



Or visit DynamicSymbols.com or search on Extension Warehouse

Developer: NamNH - Febhouse

Compatibility: SketchUp2020+
MacOs & Windows

Dynamic Symbols

(For students, learning, and basic diagram animation)

✓ One-Click Symbol Change - Keep Position & Orientation

✓ One-Click Color Change

✓ Create Animation (Limit to 2 symbols)

✗ Regular Symbol Updates

[Free Download](#)

Or you can look it up yourself in the Extension Warehouse. Please search "Dynamic symbols"

Dynamic Symbols (Pro)

(For professionals who need advanced animation tools and symbol libraries)

✓ One-Click Symbol Change - Keep Position & Orientation

✓ One-Click Color Change

✓ Create Animation (Unlimited)

✓ Regular Symbol Updates

[Download](#)

Buy now on Gumroad
A lifetime license key will be included with your purchase.



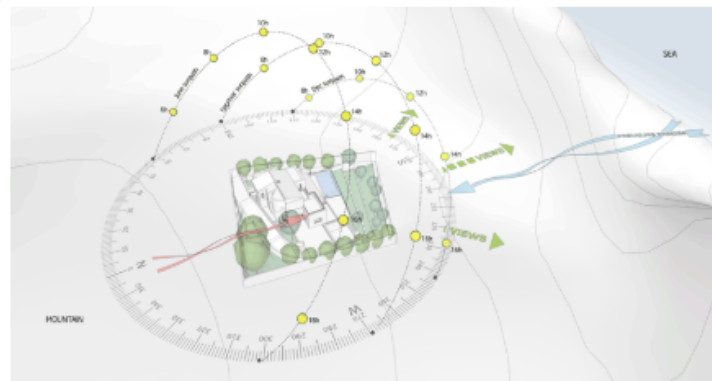
Archi Diagram - Resources by Febhouse

Free Tutorials, Templates & Tools For Architectural Diagrams.

- Tutorials
- Architecture Tools (SketchUp plugins)
- Sample diagrams
- Presentations (Canva, Indesign Templates..)

I. TUTORIALS: HOW TO CREATE ARCHITECTURAL DIAGRAM

Learn how to create powerful architectural diagrams — shared by Febhouse through step-by-step tutorials.



1. Tutorial: Create Architectural Diagram With Sun Diagram & Dynamic Symbols

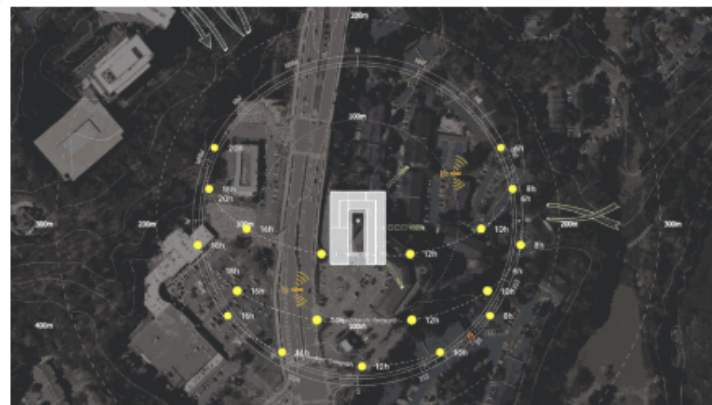
In this tutorial, we're sharing the updated workflow for creating an architectural diagram animation.

Applicable for

- Site analysis diagrams
- Sun path and shadow studies
- and more

Softwares used: SketchUp, Sun Diagram free (plugin), Dynamic symbols free (plugin)

[Free tutorial and downloadable files included](#)



2. Sample-41 (How To Step By Step)

We've added a short video showing the process of creating **Sample-41**.

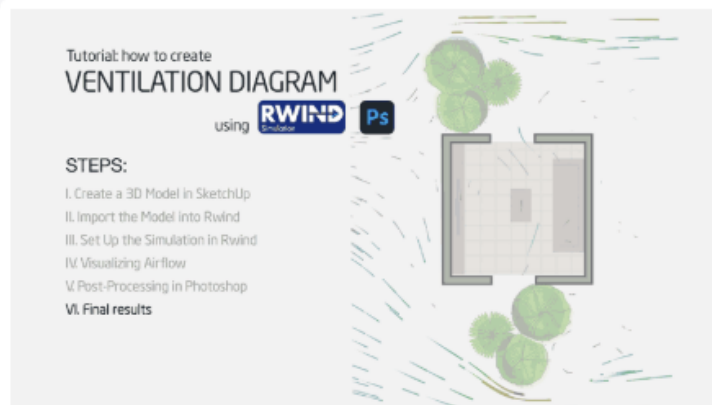
There's a slight change compared to the August workflow — we enabled X-Ray in Styles → Face Settings to highlight edges and make the surfaces more transparent.

Softwares used: SketchUp, Sun Diagram (plugin), Dynamic symbols (plugin)

You can watch it at the link below:

<https://www.youtube.com/watch?v=hqrsweWy1So>

[Sample-41 \(Free download\)](#)



3. Tutorial: How To Create Ventilation Diagram Using Rwind And Photoshop

This tutorial is different from all the others — it visualizes wind movement using Rwind Simulation. We used the trial version, which has now expired, so we probably won't be making more videos about it.

Applicable for :

- Ventilation diagram
- Winds analysis
- and more

Softwares used: SketchUp, Rwind simulation, Photoshop

[Free tutorial and downloadable files included](#)

Febhouse shares some architectural diagram projects here

[DIAGRAM EXAMPLES](#)

Your Hub for Success: ArchiDiagram.com

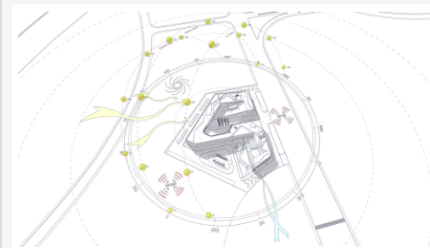
ArchiDiagram.com is your online platform for everything you need to create clear and efficient architectural diagrams

What you'll find:

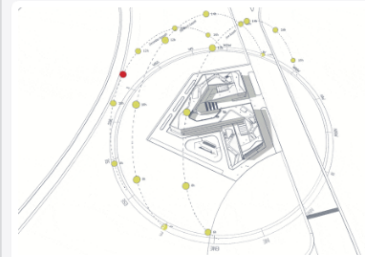
- **Free Step-by-Step Tutorials:**
Detailed video and written guides for modern diagramming workflow
- **Free Template & Sample Files:** Downloadable assets in SketchUp (.skp), Photoshop (.psd), and Canva formats to jumpstart your projects.
- **Workflow Tools:** Your central source for the latest versions of Sun Diagram and Dynamic Symbols

II. SKETCHUP EXTENSIONS (PLUGINS)

Here you'll find the SketchUp extensions and styles we've developed — designed to make your architectural diagrams faster, clearer, and more visually stunning. (Click on the image to download for free)



1. Dynamic Symbols
Dynamic Symbols is a **SketchUp extension (plugin)** that allows you to create animated symbols and switch between different states with just one click.
Dynamic Symbols has 3 Features:
1. One-Click Symbol Change — Keep Position, Size & Rotation
Dynamic Symbols lets you instantly switch between different symbol shapes with just one click — while keeping the symbol's position, size, and rotation unchanged.
2. One-Click Color Change — Keep Position & Orientation
Change the color of your symbols instantly with one click — no need to open complex menus or edit materials manually.
3. Create Animation Automatically generate animated scenes that bring your symbols to life — ideal for diagrams, flowcharts, or architectural storytelling.
[Free Download from Extension Warehouse](#)
[DynamicSymbols_UserGuide.pdf](#)
[Click image to explore](#)

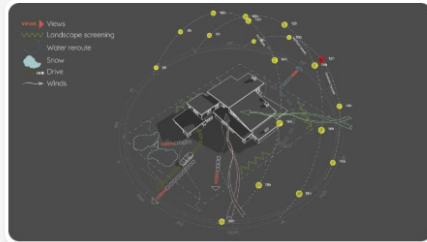


2. Sun Diagram
Sun Diagram is a **SketchUp extension (plugin)** designed to create 3D Sun paths and analyze sunlight for architectural projects.
Sun Diagram has 4 Features
1. Create Sunpath from Coordinates, with support for Daylight Saving Time adjustments.
2. Create Shadow Analysis: Simulate shadows and sun positions instantly for any selected time frame — no guessing or manual setup.
3. Export Shadow Analysis: Batch export shadow and Sun position images with a single click.
4. Style Library : Find the perfect style for your project — instantly, with just one click.
Sun Diagram is an upgraded version of 3D Sunpath Chart, designed to enhance your workflow even further.
[Free Download from Extension Warehouse](#)
[SunDiagram_UserGuide.pdf](#)
[Click image to explore](#)



III. SAMPLE DIAGRAMS

All diagrams are created with **Sun Diagram & Dynamic Symbols** by Febhouse



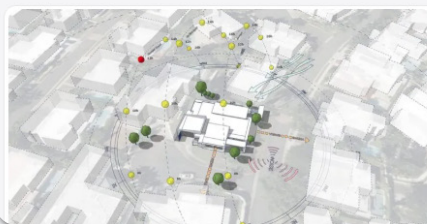
Project-39
Category: Site Analysis
Location: Truckee, California, United States
Tap the image → comment on our Instagram post → we'll DM you the SketchUp file. Your comment really supports us — thank you!



Project-41
Category: Site Analysis
Location: Atlanta, Georgia, United States
Tap the image → comment on our Instagram post → we'll DM you the SketchUp file. Your comment really supports us — thank you!



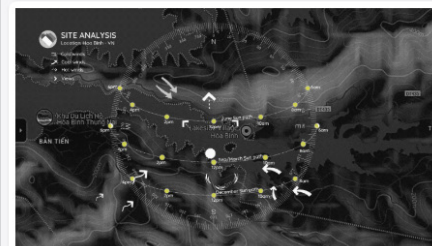
Project-42
Category: Site Analysis
Location: New York, United States
Tap the image → comment on our Instagram post → we'll DM you the SketchUp file. Your comment really supports us — thank you!



Project-53
Category: Site Analysis
Location: Puerto Rico
Tap the image → comment on our Instagram post → we'll DM you the SketchUp file. Your comment really supports us — thank you!

IV. PRESENTATION & SITE ANALYSIS TEMPLATES

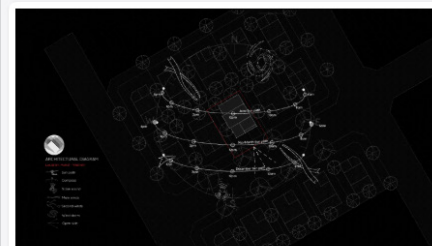
Discover templates crafted for stunning presentations and animated site analysis diagrams — ready to use with Canva, InDesign, PowerPoint, and more. The download link is in the video description or in the comments. 📄



0. Motion Symbols For Architectural Diagram
Applicable for :
- Urban design diagram
- Architectural diagram
- Site diagram
and more
Softwares used:
- Canva only, not require Canva Pro.
[Learn more](#)



1. Architectural Diagram With Canva Template (Style 01)
Applicable for :
- Urban design diagram
- Architectural diagram
- Site diagram
and more
Softwares used:
- Canva only, not require Canva Pro.
[Learn more](#)



2. Architectural Diagram With Canva Template (Style 02)
Applicable for :
- Urban design diagram
- Architectural diagram
- Site diagram
and more
Softwares used:
- Canva only, not require Canva Pro.
[Free Download](#)



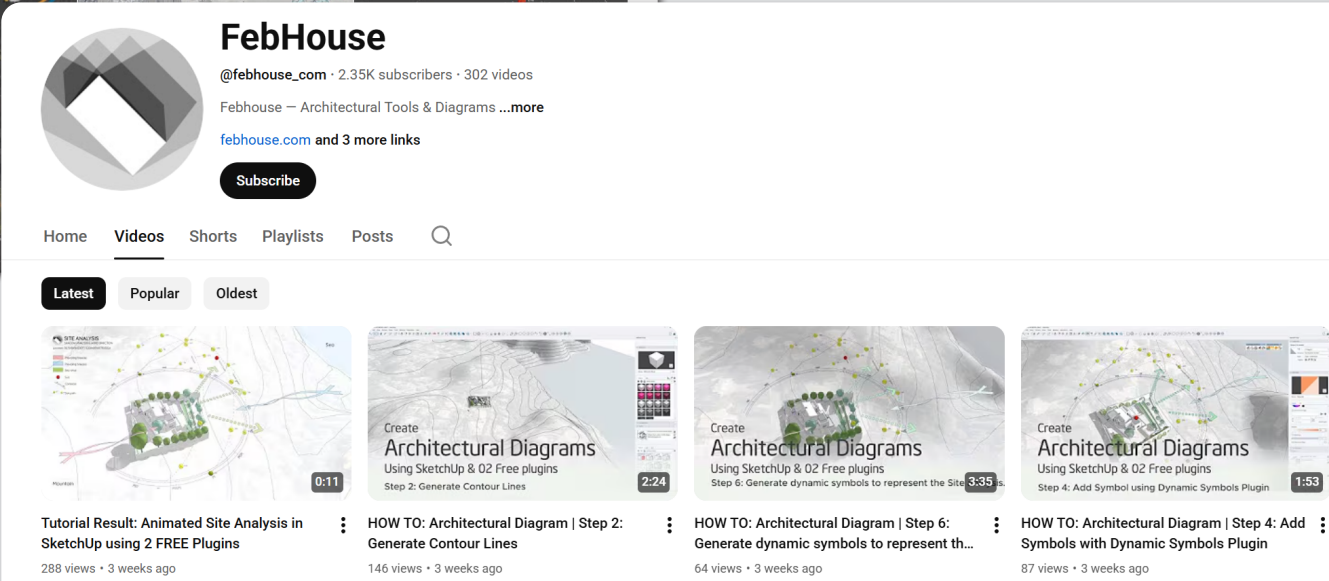
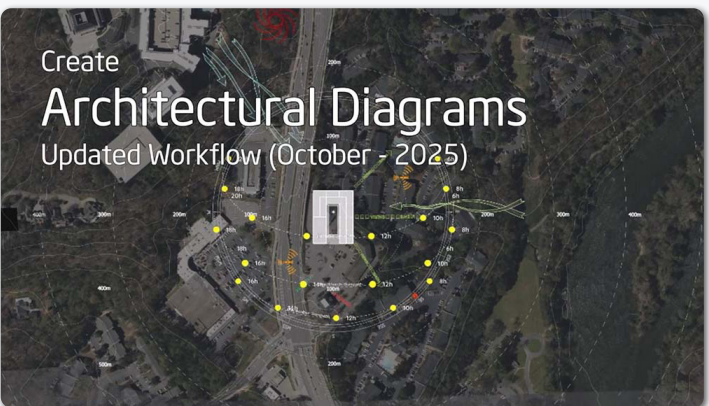
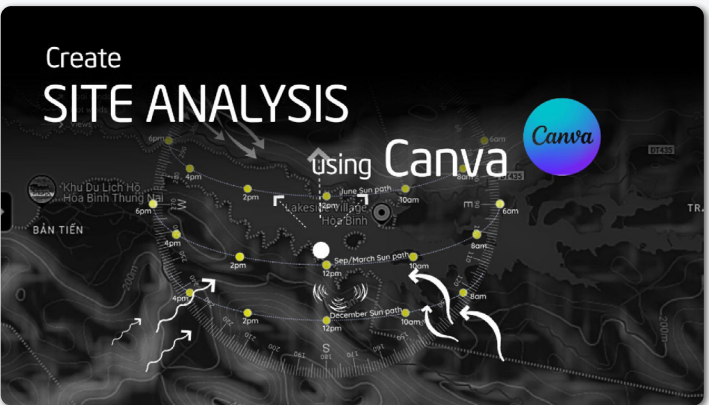
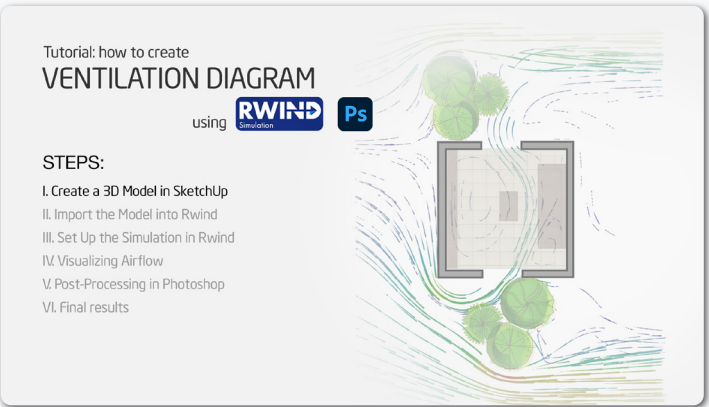
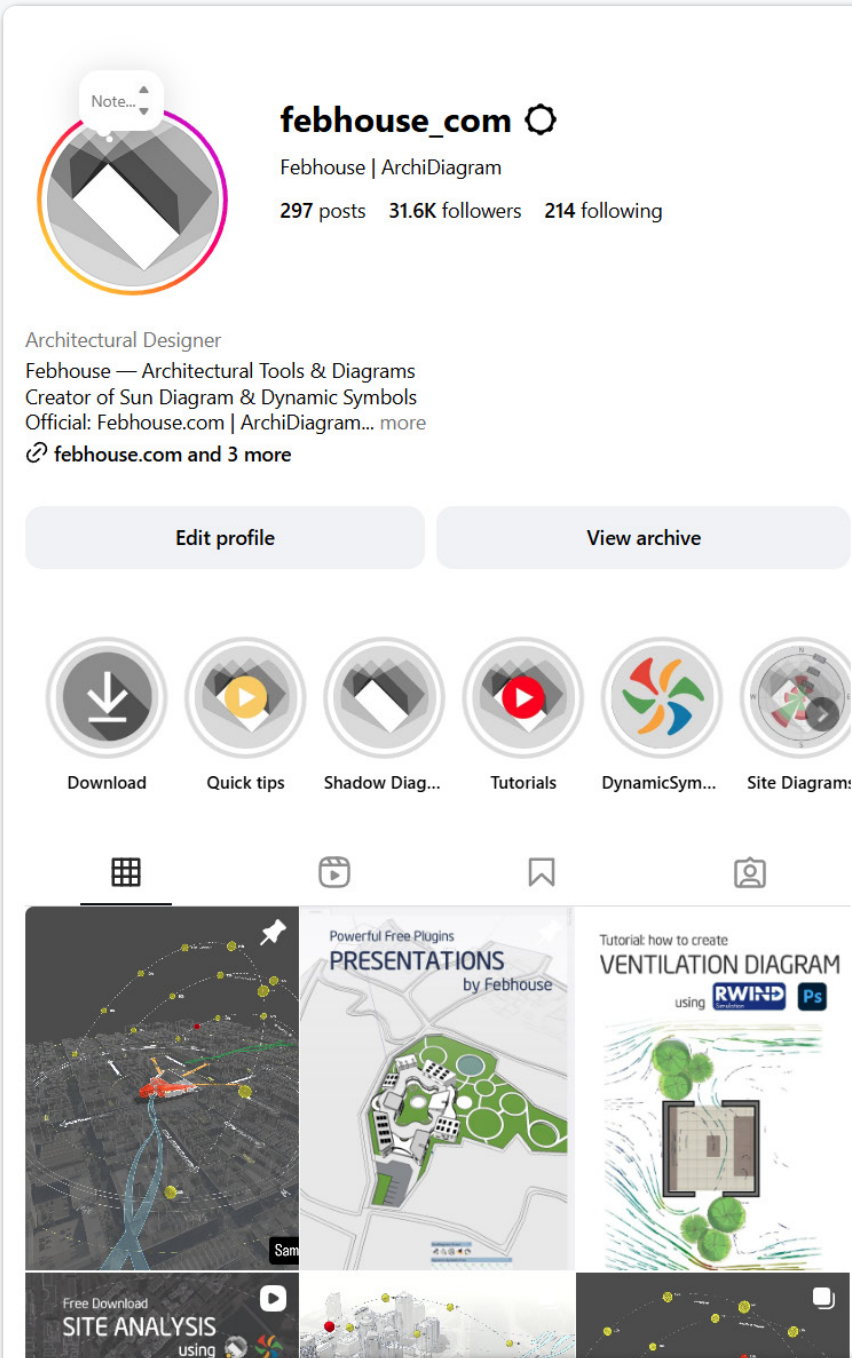
3. Architectural Diagram With Canva Template (Style 03)
Applicable for :
- Urban design diagram
- Architectural diagram
- Site diagram
and more
Softwares used:
- Canva only, not require Canva Pro.
[Free Download](#)

Get Inspired with the Febhouse Community

Join over 31k follwers for daily inspiration, workflow tips, and new resource announcements.

Follow us on Instagram (@febhouse_com) for case studies, quick tips, and free asset downloads directly through our post

Subscribe on Youtube (Febhouse) for full length video tutorials and step-by-step workflow guides



Key Question Answered



Can I use the resources for commercial projects?

Yes. All free templates and symbols can be used for commercial architectural projects.

However, the sample files provided on the website are based on real projects, so you may not include them in your portfolio or professional profile unless you have received explicit permission from us.



Do I need to use the Pro versions of the plugins to follow the tutorials?

No. Most tutorials can be completed without the Pro versions.

However, using Sun Diagram Pro and Dynamic Symbols Pro will produce more accurate diagrams and reduce the amount of manual work required.



Which SketchUp versions are supported?

Both Sun Diagram and Dynamic Symbols support SketchUp 2020 and above (Windows & macOS).



Where do I get support?

We provide support daily. Email us at info@febhouse.com or send a DM to [@febhouse_com](https://www.instagram.com/febhouse_com) on Instagram

Create Professional Architectural Diagram, Faster.

Download the Free Plugins

Get Sun Diagram and Dynamic Symbols from the SketchUp Extension Warehouse to start creating today.



<https://febhouse.com/architecture-tools>

Explore Tutorials

Visit ArchiDiagram.com for step-by-step guides and free sample file to master the workflow.



<https://ArchiDiagram.com>

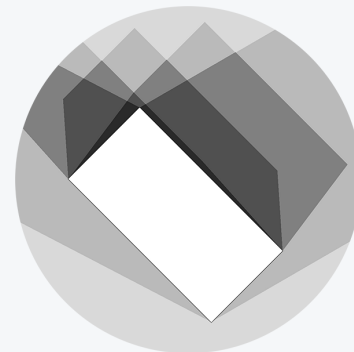
Follow for Inspiration

Join our community on Instagram @febhouse_com for daily tips and new techniques.



https://www.instagram.com/febhouse_com

Thank you for your support and trust in us!



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