

5^{TO} FORO ACADÉMICO
BIM
COLMAYOR

INDUSTRIA 4.0



BIM y los paradigmas de la IA



TEXT TO IMAGE





TEXT TO VIDEO

 Meta



TEXT TO TEXT





Casa contemporánea en Japón. Imagen © Ulises Design Studio (@ulises.ai)



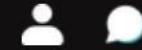
Casa contemporánea en Japón. Imagen © Ulises Design Studio (@ulises.ai)



Casa contemporánea en Japón. Imagen © Ulises Design Studio (@ulises.ai)



Casa contemporánea en Japón. Imagen © Ulises Design Studio (@ulises.ai)

[APPS](#)[REVIT ASSETS](#)[SERVICES](#)[ABOUT](#)[RESOURCES](#)[CONTACT](#)

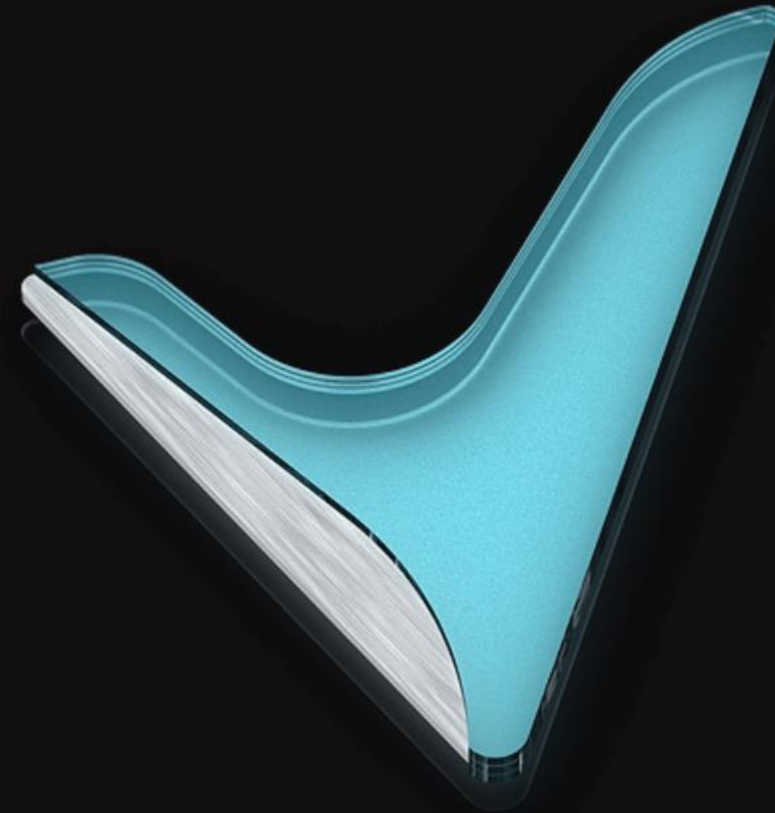
VERAS

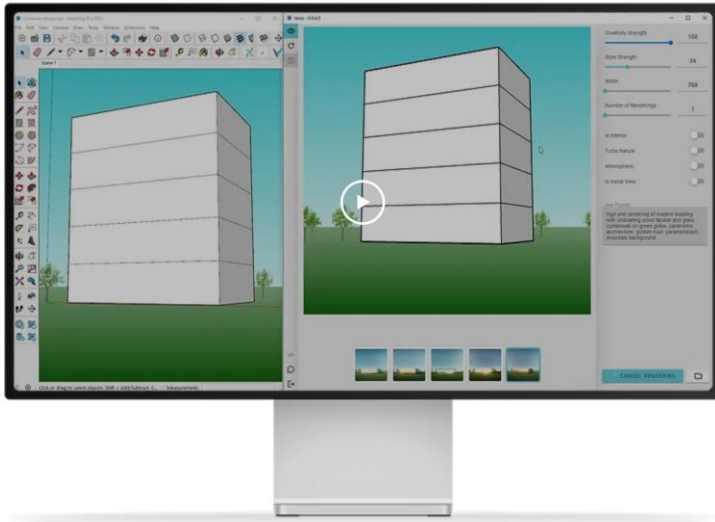
Veras® is an AI-powered visualization add-in for SketchUp®, Revit® & Rhinoceros®, that uses your 3d model geometry as a substrate for creativity and inspiration.

SketchUp® supported versions: 2021, 2022, 2023

Revit® supported versions: 2019, 2020, 2021, 2022 and 2023

Rhinoceros® supported versions: 7

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VERAS FOR SKETCHUP

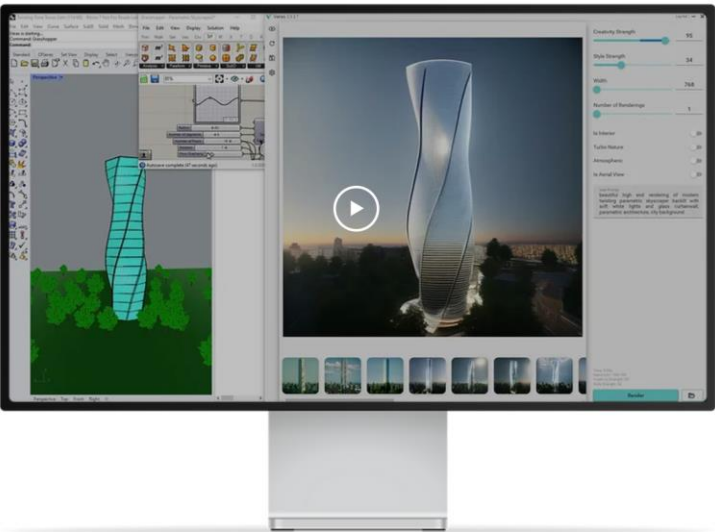
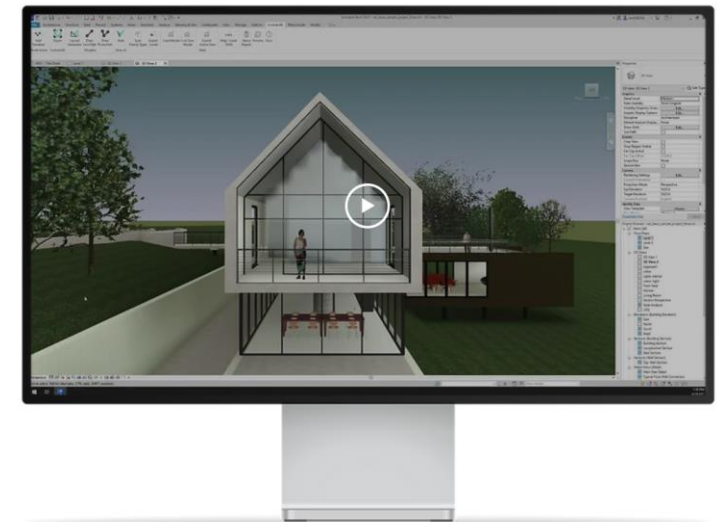
Unleash your design potential with Veras for SketchUp, the revolutionary tool that lets you use AI directly inside your SketchUp models. Whether you're working on ideation for concept models or need lightning-fast visuals, Veras for SketchUp empowers you with designer superpowers you never knew existed.

But Veras for SketchUp is more than just a productivity booster. It's a game-changer for designers looking to push the limits of what's possible. With its advanced AI capabilities, Veras for SketchUp can help you unlock new design insights and create truly innovative solutions.

VERAS FOR REVIT

Veras for Revit is the ultimate tool for architects, engineers, and contractors looking to push the boundaries of what's possible with AI. With this revolutionary tool, you can use Veras AI rendering directly inside your Revit models, enabling you to create stunning visualizations and design studies with ease using your Revit model as the substrate.

However, Veras for Revit is more than just a rendering tool. It's a game-changer for architects and designers looking to ideate and iterate faster. With its powerful AI algorithms, you can generate multiple design options in a matter of seconds, giving you more time to focus on refining your ideas and creating truly innovative solutions.

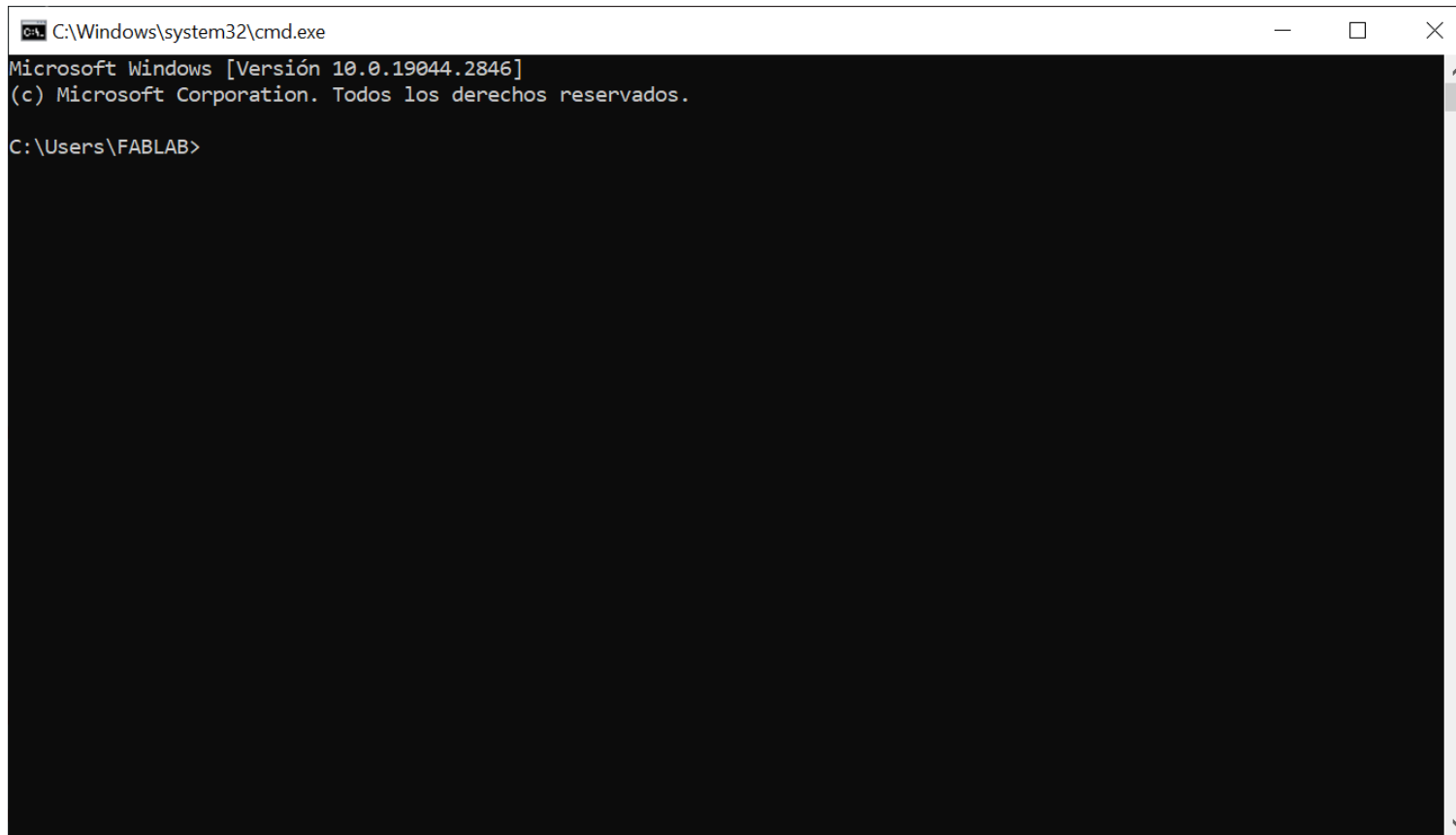


VERAS FOR RHINO

Veras for Rhino is the ultimate tool for designers who want to take their work to the next level. With this powerful tool, you can integrate artificial intelligence directly into your Rhino models, allowing you to access lightning-fast ideation and iterative design capabilities.

With Veras for Rhino, you don't need Grasshopper - our AI-powered tool works directly within your Rhino environment. This makes it incredibly easy to use, with no complex setups or integrations required. Simply start designing and let Veras for Rhino do the rest.





A screenshot of a Windows Command Prompt window. The title bar shows the path "C:\Windows\system32\cmd.exe". The window content displays the following text: "Microsoft Windows [Versión 10.0.19044.2846]", "(c) Microsoft Corporation. Todos los derechos reservados.", and "C:\Users\FABLAB>". The rest of the window is black, indicating that the rest of the command prompt output has been hidden.

PROMT

Instrucción

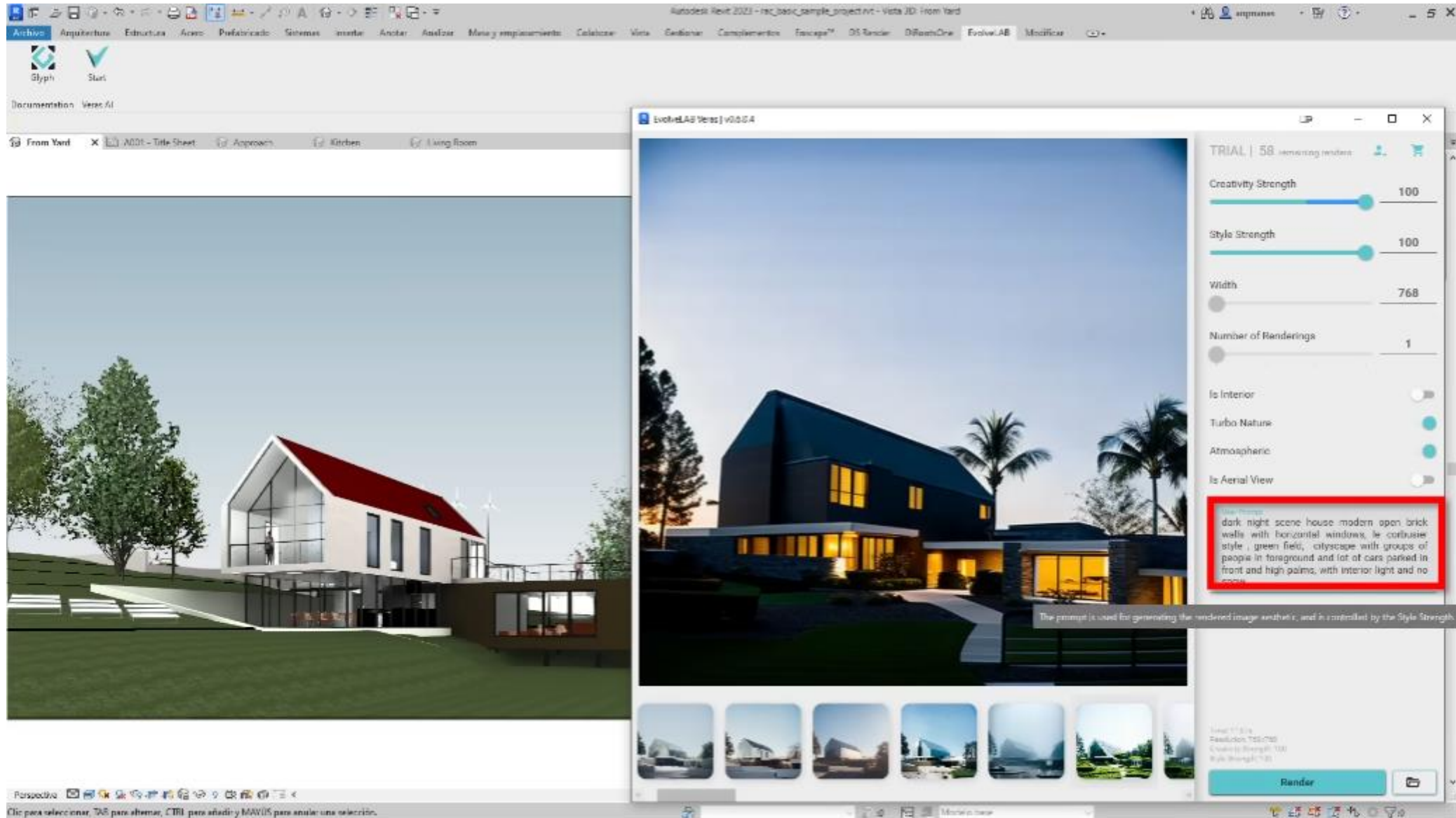
Contexto

Inputs

Outputs

ESTRUCTURA
PROMT

The image shows a screenshot of the Autodesk Revit 2023 software interface. The main window displays a 3D architectural rendering of a modern house with a prominent red gabled roof and large glass windows. The house is situated on a green lawn with trees in the background. An EvolveLAB Veros window is overlaid on the right side of the Revit interface. This window shows a rendered image of the same house from a different perspective, with a control panel on the right. The control panel includes sliders for Creativity Strength (set to 79) and Style Strength (set to 52), as well as a Width slider (set to 768) and a Number of Renderings slider (set to 1). There are also toggle switches for 'Is Interior', 'Turbo Nature', 'Atmospheric', and 'Is Aerial View'. A text box below the sliders contains a prompt: 'house modern open walls with windows, style angles bucolic city neighborhood, green background trees with groups of people in foreground and lot of cars parked in front and high palms'. At the bottom of the EvolveLAB window, there is a 'Render' button and a 'Model here' button. The Revit interface also shows various toolbars and a file explorer at the top.



Autodesk Revit 2023 - rvt_basic_sample_project.rvt - Vista 3D: From Yard

Archivos Arquitectura Estructura Acero Prefabricado Sistemas Insertar Anclar Analizar Meta y emplazamiento Calcular Vista Definir Complementos Escapes™ OS Ruclo D'RooshOne EvolveLAB Modificar

Documentation Verso AI

From Yard A001 - Title Sheet Approach Kitchen Living Room

EvolveLAB Verso | v0004

TRIAL | 67 remaining renders

Creativity Strength 100

Style Strength 100

Width 768

Number of Renderings 1

Is Interior

Turbo Nature

Atmospheric

Is Aerial View

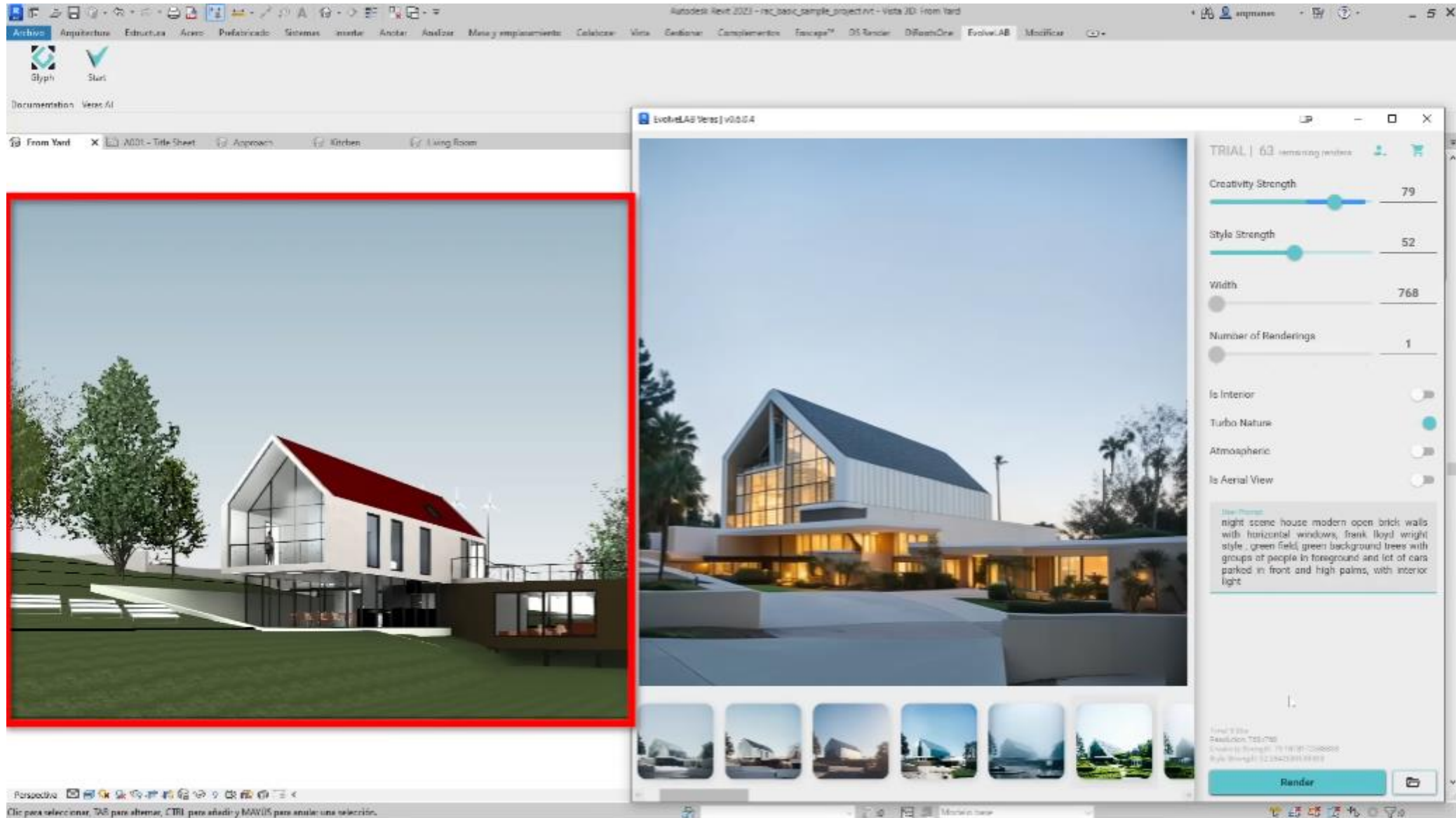
Use Prompt
house modern open walls with windows, style angeles bucci city neighborhood, green background trees with groups of people in foreground and lot of cars parked in front and high palms

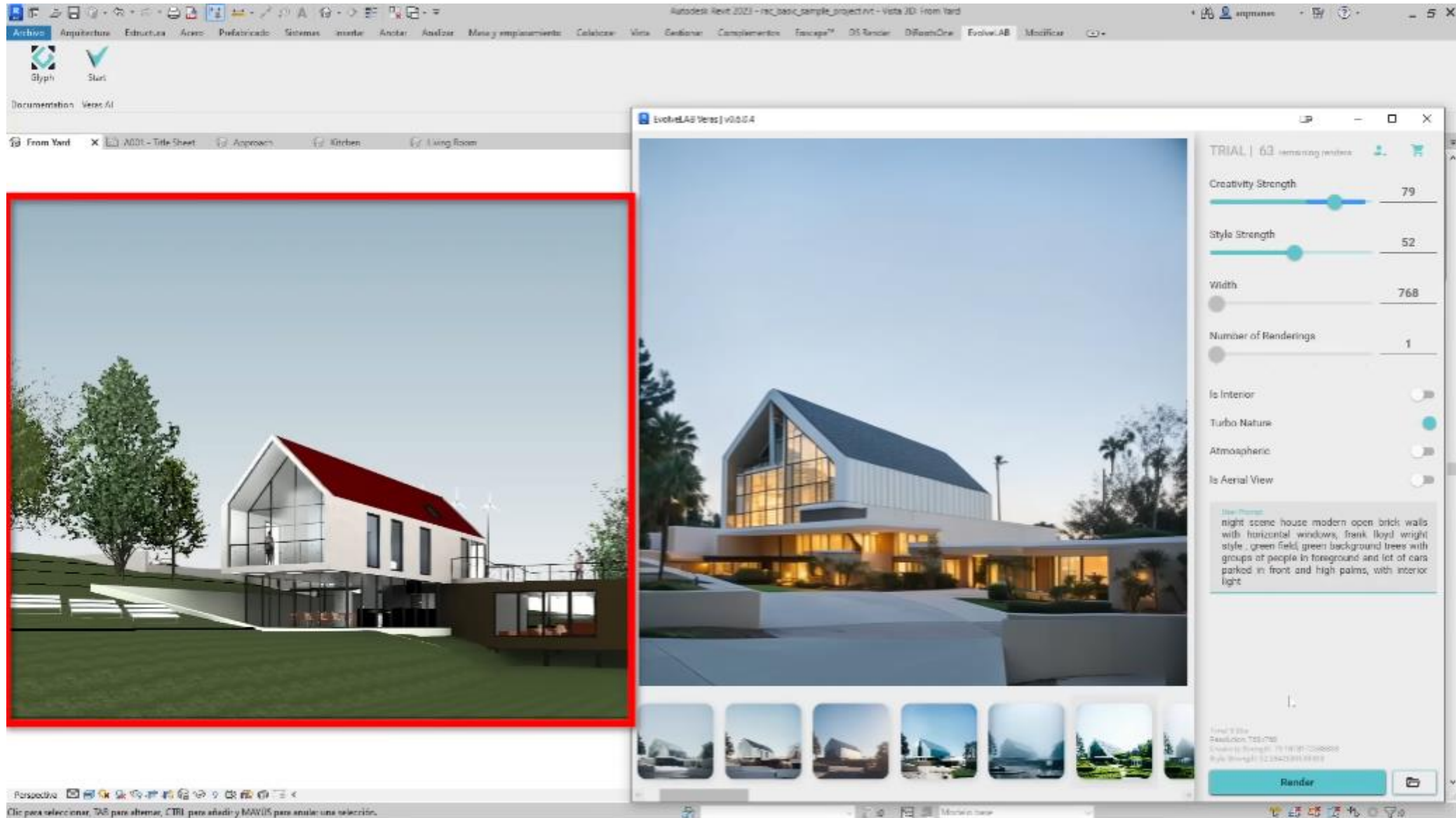
The prompt is used for generating the rendered image aesthetically, and is controlled by the Style Strength

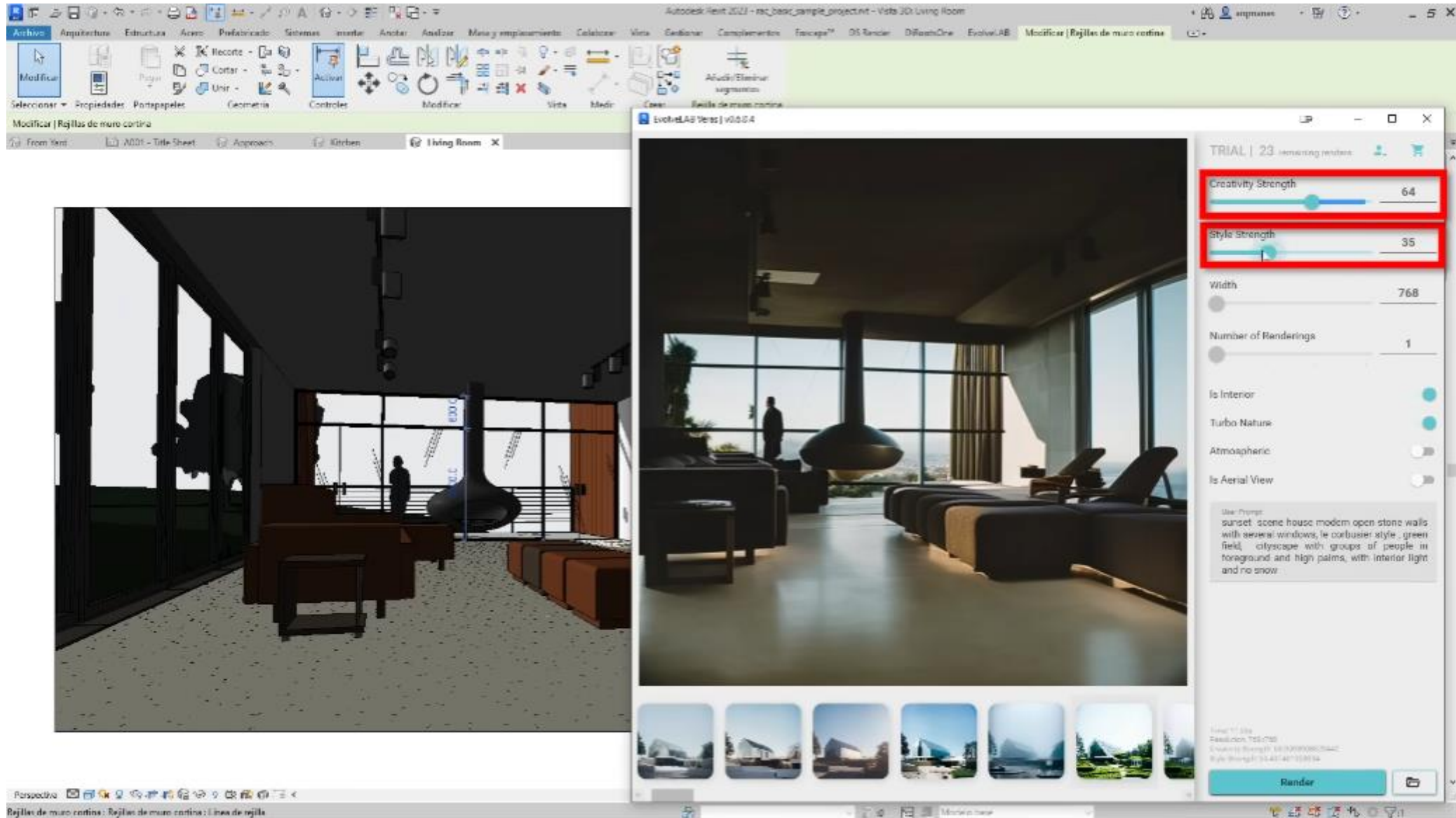
Render

Perspectiva

Clic para seleccionar, TAB para alternar, CTRL para añadir y MAYÚS para anular una selección.



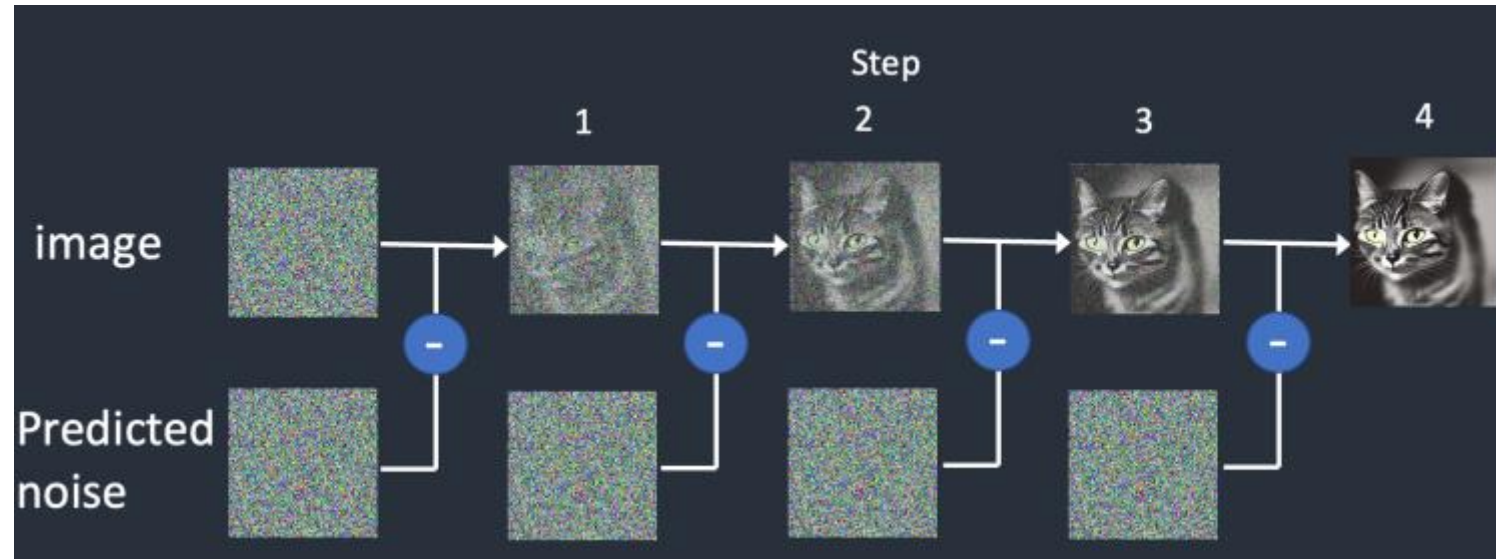




01

PROMT

02



03

Opciones de transformación en formato render



2D ORIENTACIÓN DOBLE PLANTA TIPO

Situación cocina: Trasera

Situación dormitorio principal: Delantero

Baño en suite en dormitorio ppal: No

Fondo banda dormitorios: 3.02 m

Fondo banda servicios: 2.26 m

Ancho de cocina: 2.97 m

Ancho de dormitorio principal: 2.79 m

Ancho de baño 1: 1.58 m

Ancho de baño 2: 2.02 m

Superficie de terraza interior: 1.64 m²

Situación de terraza interior: Derecha

Ancho de apertura de terraza: 90 %



SUPERFICIES vivienda 1

SUPERFICIES ÚTILES POR ESTANCIAS

Hall	4.66 m²
Pasillo	5.84 m²
Cocina	9.59 m²
Estar-Comedor	19.96 m²
Dormitorio ppal	12.39 m²
Dormitorio 2	13.09 m²
Baño Ppal	5.04 m²
Baño 2	4.17 m²
Armario	1.1 m²
Terraza Interior	1.63 m²
Terraza Exterior	4.27 m²
Terraza Exterior	3.85 m²
Terraza Exterior	14.03 m²

SUPERFICIES TOTALES

Útil Interior Total	77.47 m²
Útil Exterior Total	21.66 m²
Útil Total	99.13 m²
Construida	92.24 m²
Parte Proporcional zc	14.13 m²
Construida + ppzc	106.37 m²

TIPOLOGIAS EN PLANTA 2

Vivienda 2D B		3 Uds (18.75 %)	
Útil Total	84.16 m²	Construida	88.81 m²
Útil Interior	76.70 m²	C. + ppzc	102.42 m²
Útil Exterior	7.45 m²	Útil/C. + ppzc	0.75

Vivienda 2D C		3 Uds (18.75 %)	
Útil Total	99.13 m²	Construida	92.24 m²
Útil Interior	77.47 m²	C. + ppzc	106.37 m²
Útil Exterior	21.66 m²	Útil/C. + ppzc	0.73

Vivienda 3D A		3 Uds (18.75 %)	
Útil Total	100.23 m²	Construida	106.15 m²
Útil Interior	92.24 m²	C. + ppzc	122.41 m²
Útil Exterior	7.99 m²	Útil/C. + ppzc	0.75

PROMT TREN



TREN



TREN

PROMPT FACHADA VERDE



PROMPT FACHADA VERDE

PROMPT FACHADA VERDE

IA

“[sistemas informáticos](#) o combinaciones de [algoritmos](#) cuyo propósito es la creación de [máquinas](#) que imiten la [inteligencia humana](#) para realizar tareas, y que pueden mejorar conforme recopilan información.”

https://es.wikipedia.org/wiki/Inteligencia_artificial

IA

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https://es.wikipedia.org/wiki/Inteligencia_artificial

Diseño Paramétrico

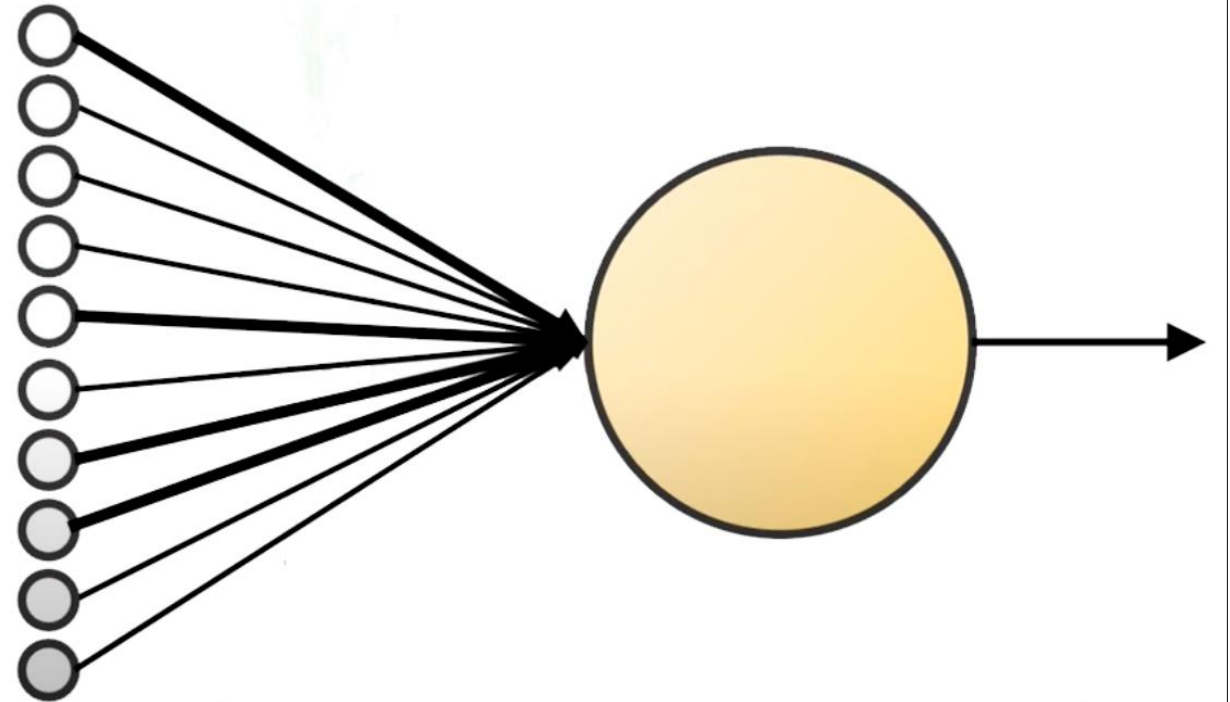
paradigma de diseño en el cual la relación entre los elementos se utiliza para manipular y comunicar el diseño de geometrías y estructuras complejas.

Diseño Generativo

proceso de exploración de diseño iterativo que utiliza un programa de software impulsado por **IA** para generar una gama de soluciones de diseño que cumplen con un conjunto de restricciones.

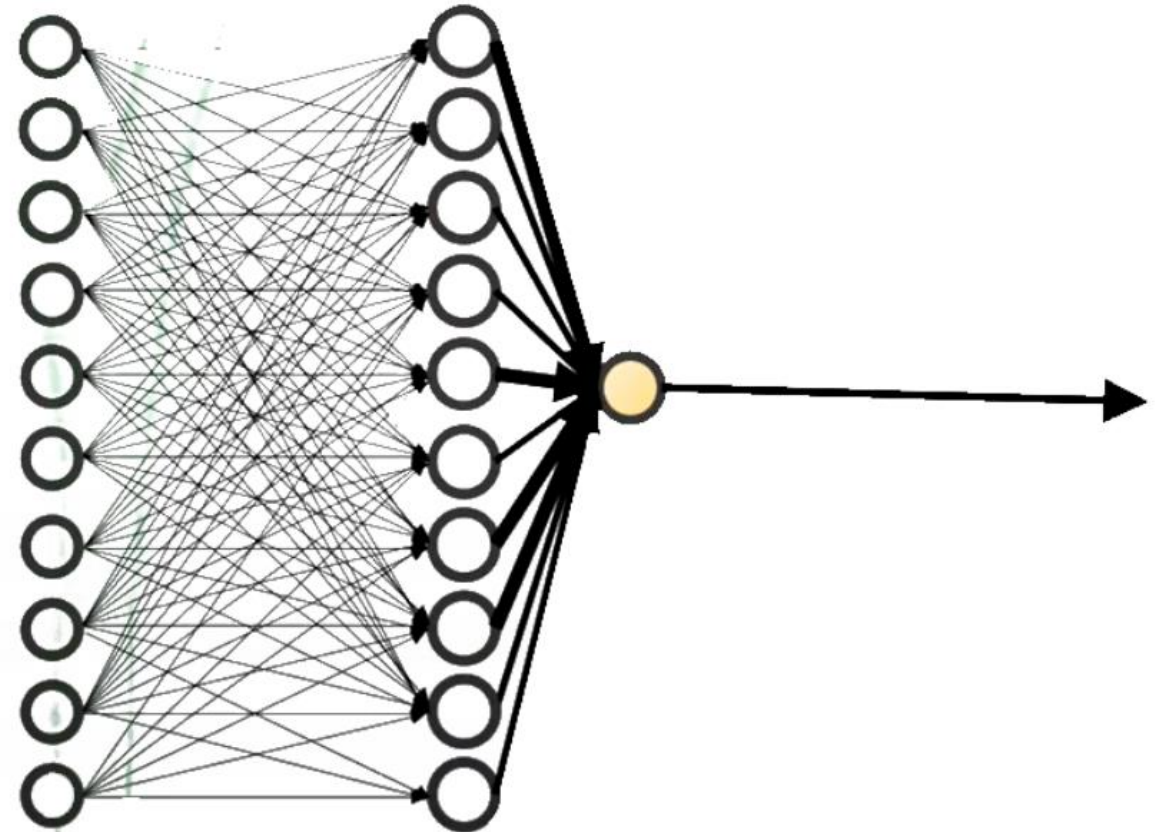
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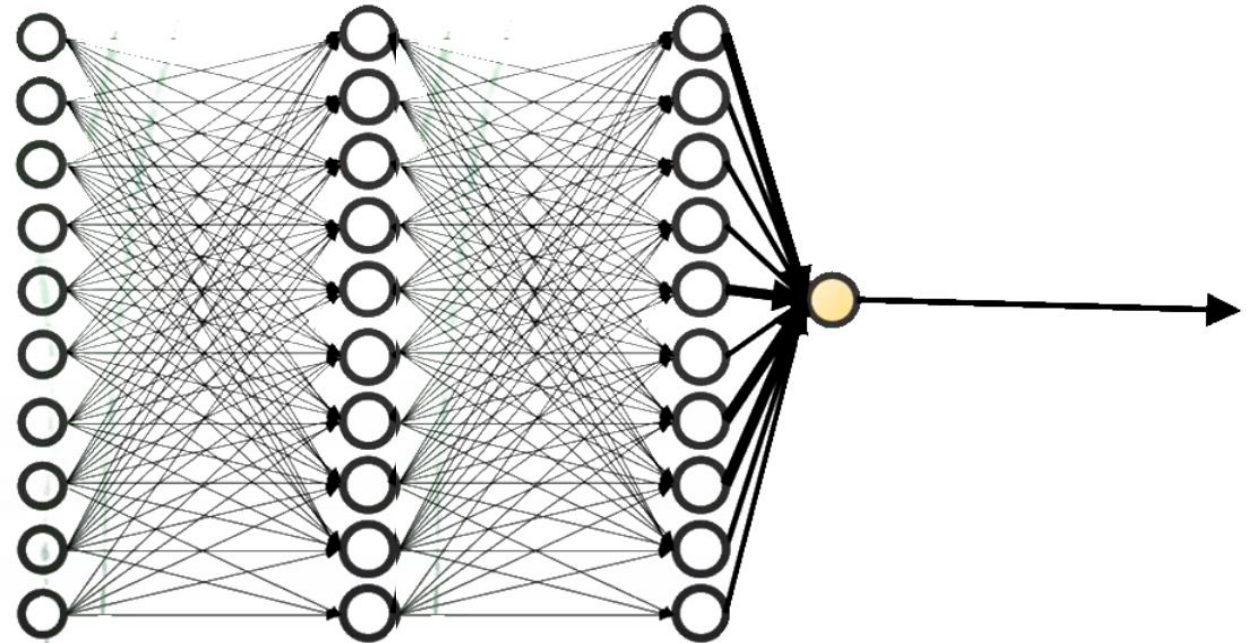
Diseño Generativo

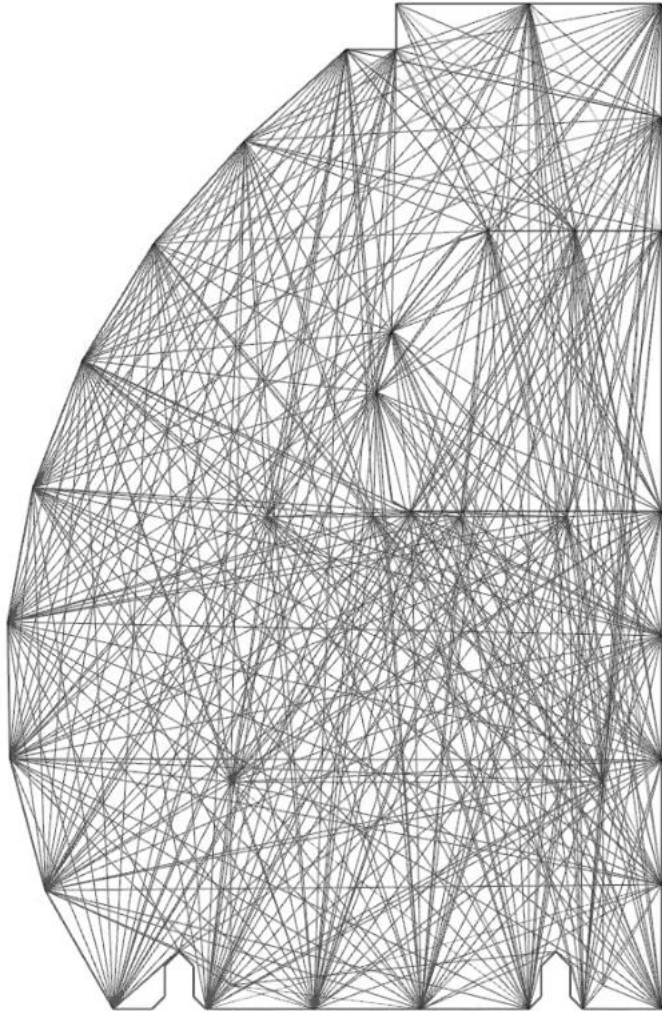
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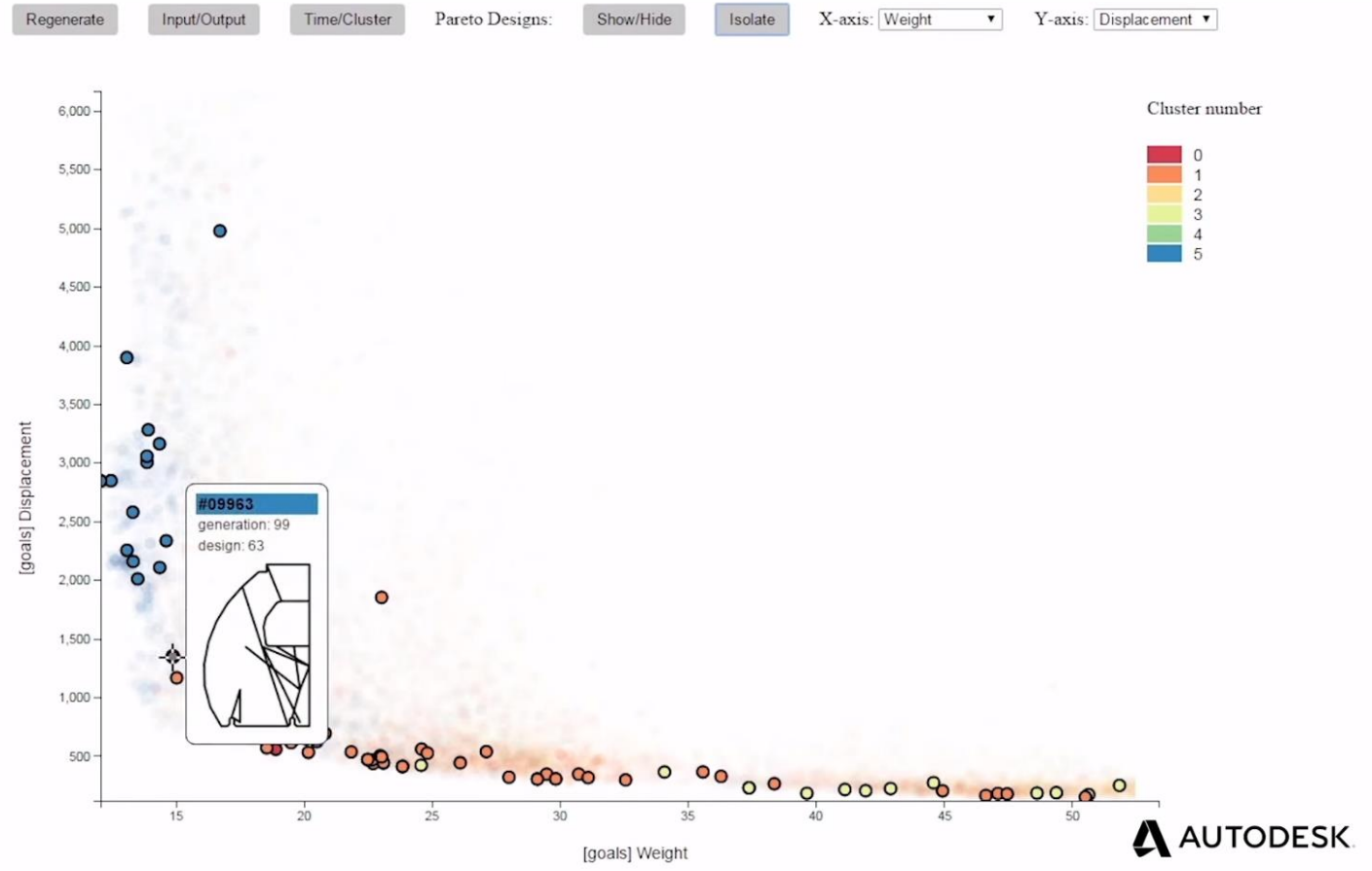
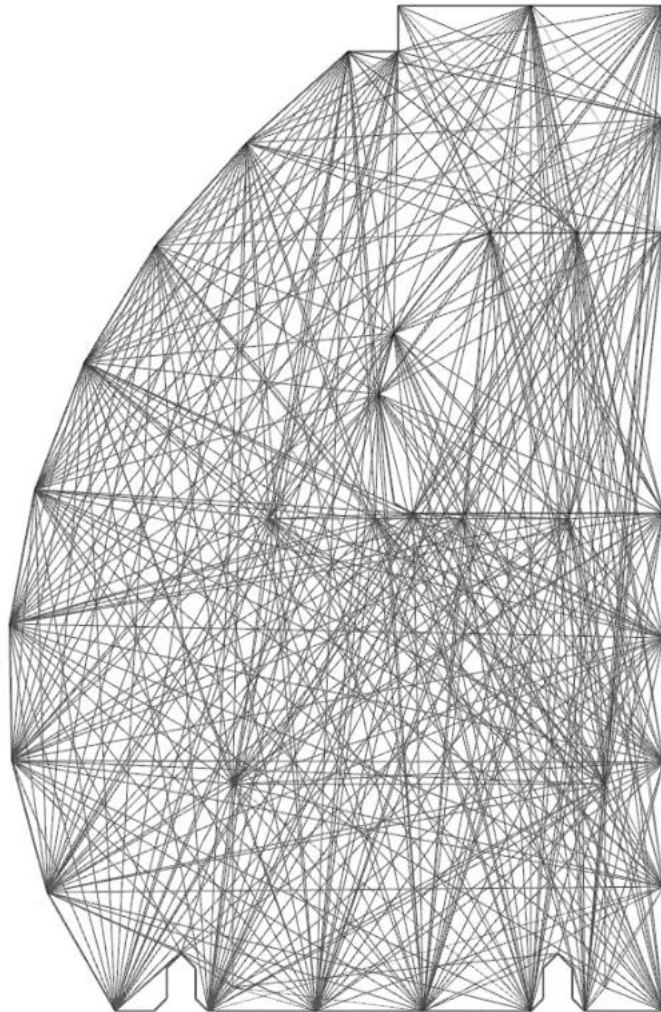


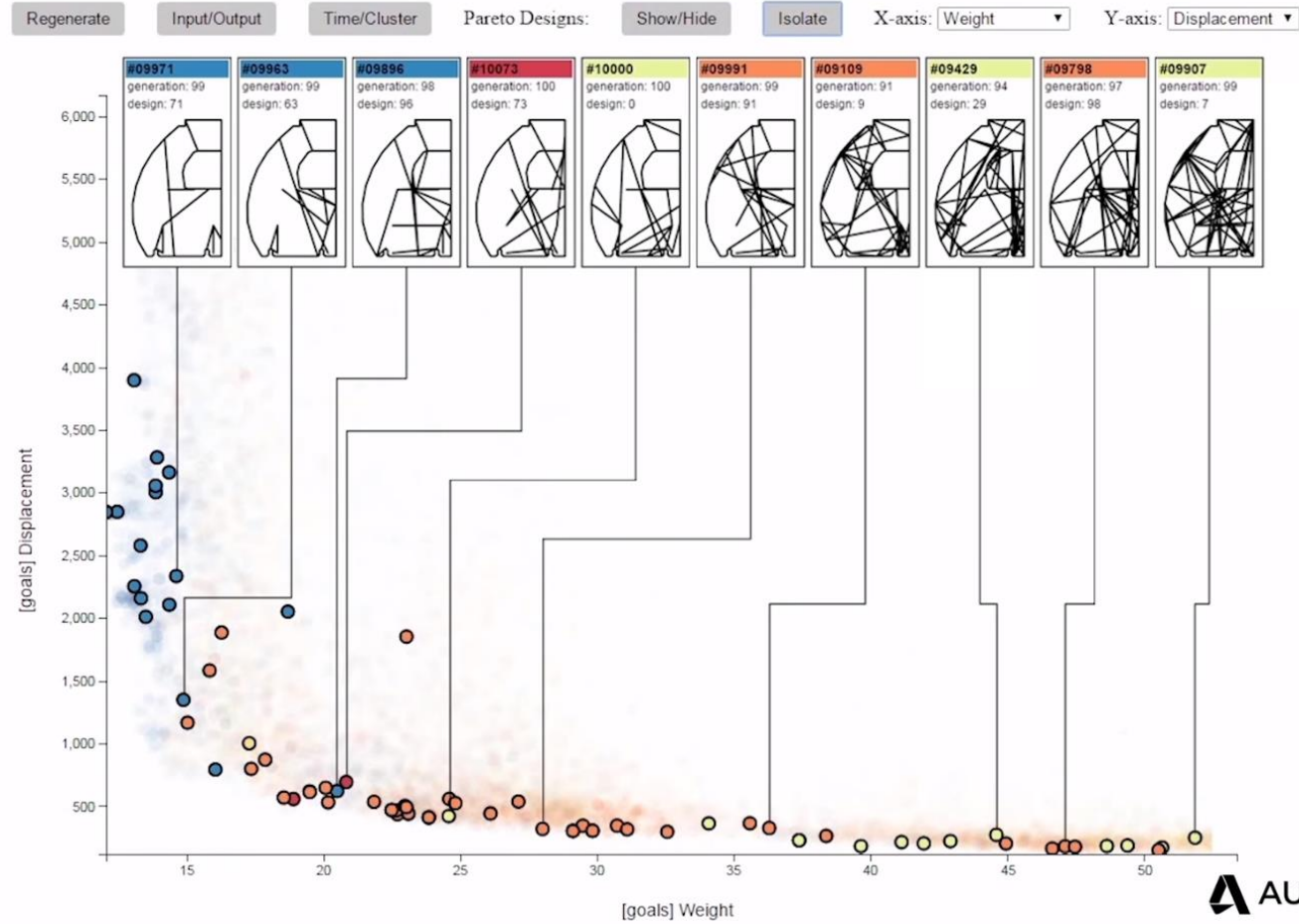
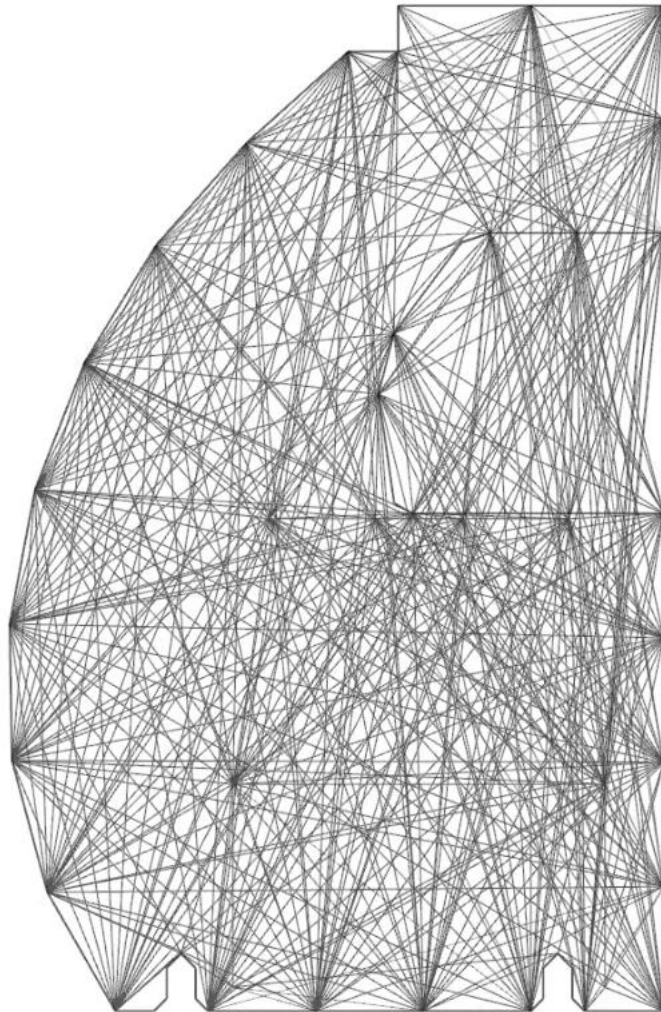
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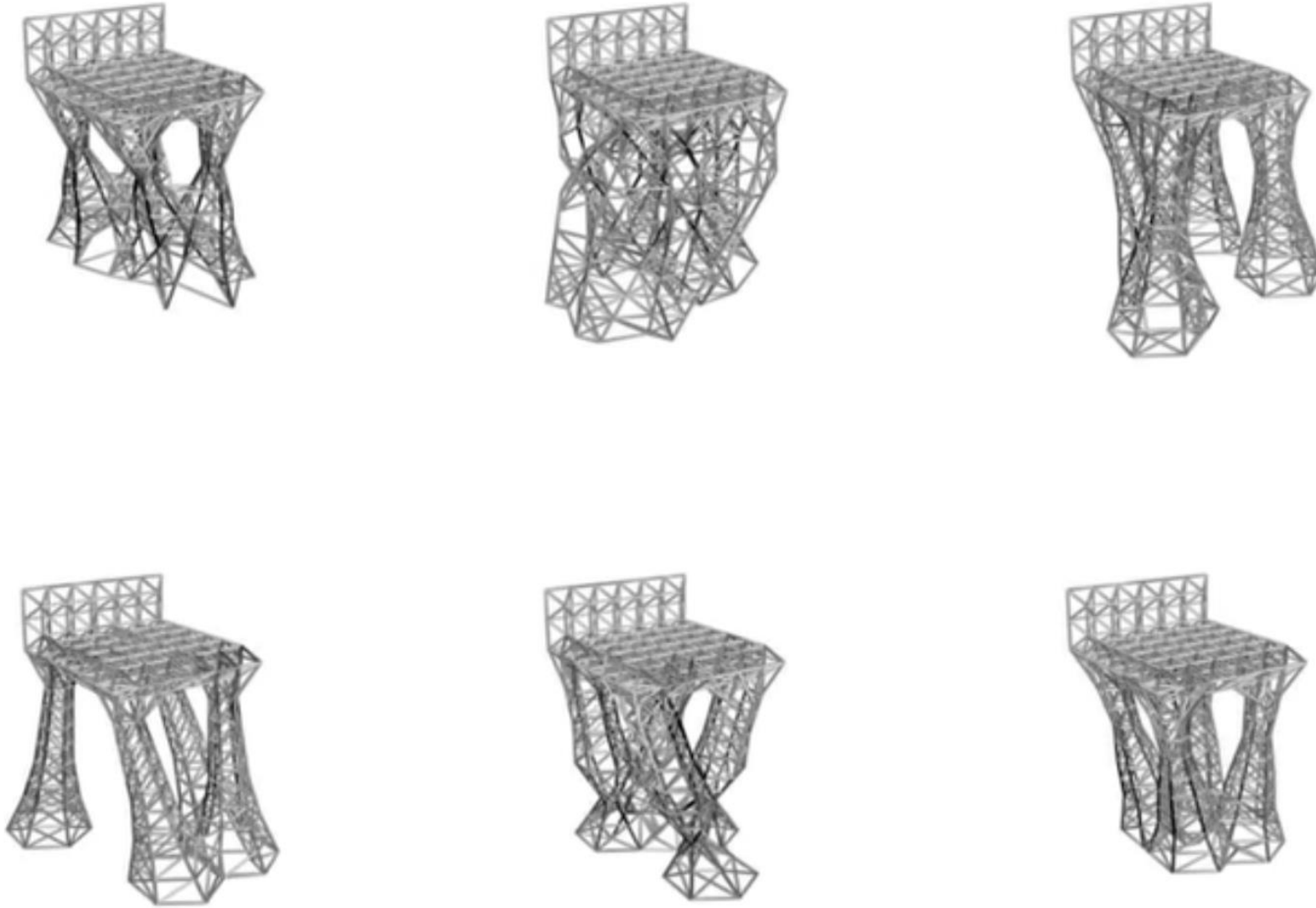












https://dev.fractal.live/customize-56e9d1f6dbf21101000d63dc

Project Fractal

ice Planning Test Large

Design options sort by creation time

Generate Options Save As New Design Clear All

Overall Density: 8

Overall Corridor: 8

Overall Space: 1

Overall Density: 4

Overall Density: 0.4

Overall Density: 2

Overall Density: 15

Overall Density: 31.5

Overall Density: 1.8

Overall Density: 0.4

Overall Density: 3.8

Overall Density: 6

Overall Density: 6

WindowWall
by: DynamoTeam

Project Fractal

Number of Bays: 2, 4, 6, 8, 10

Number of Floors: 2, 4, 6, 8, 10

WWR: 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8

Window Wall Ratio

NUMBER OF BAYS: 5

NUMBER OF FLOORS: 6

WWR: 0.4

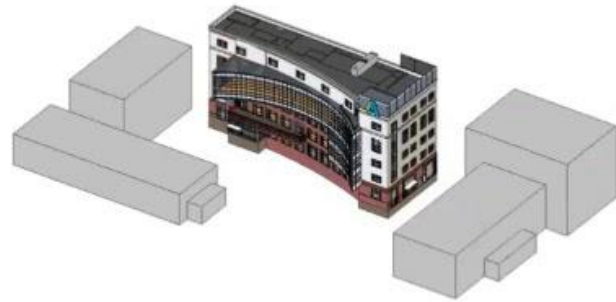
Save

Design Options

Sort by: creation time

Generate Clear

What is Insight?



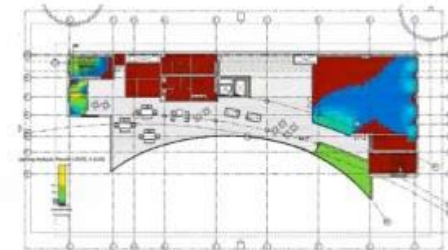
From any Revit Model
(FormIt – Conceptual)



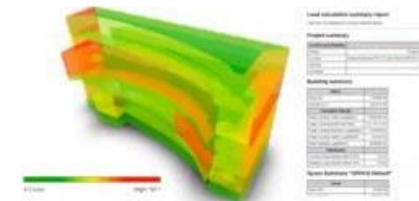
Building Energy



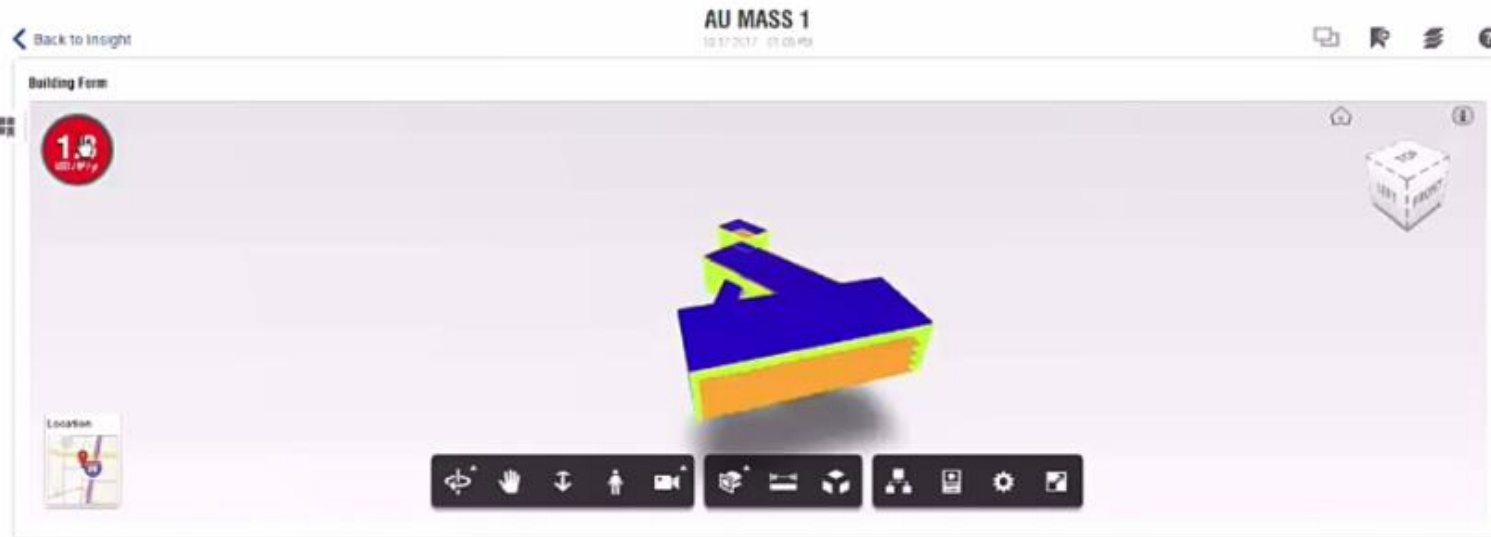
Solar Radiation



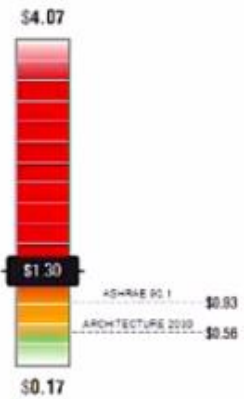
Daylighting



Heating/Cooling



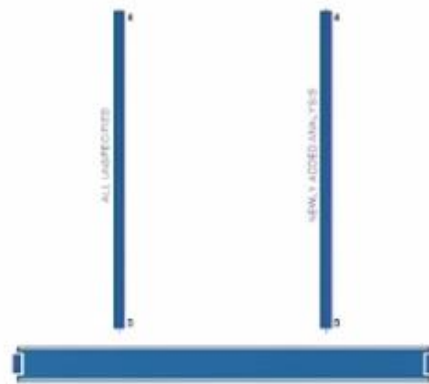
Benchmark Comparison
USD / ft² / yr



Infiltration



Model History
USD / ft² / yr



Roof Construction



Operating Schedule

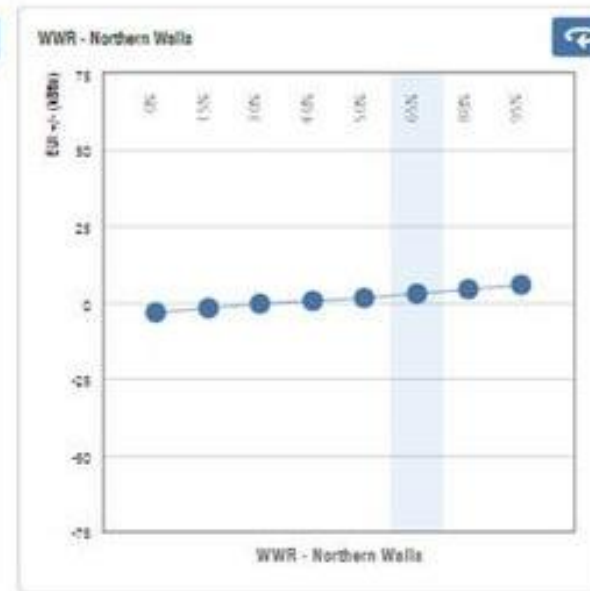
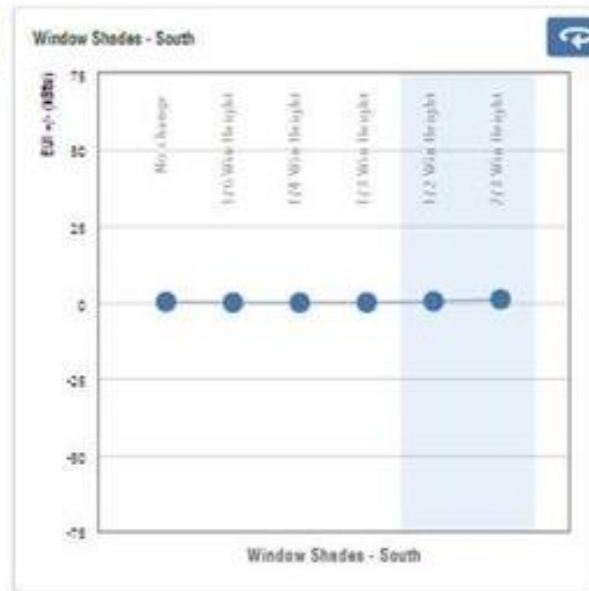
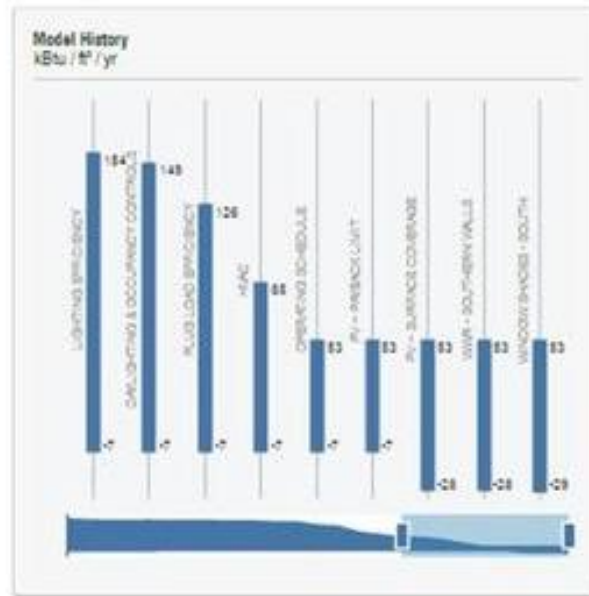
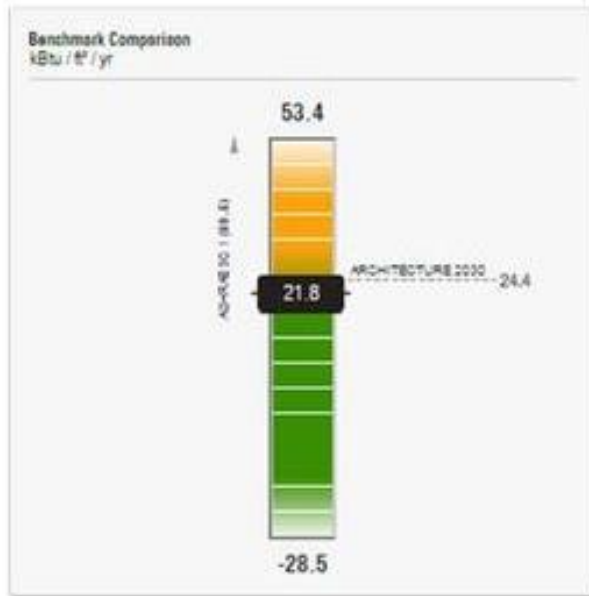
The typical hours of use by building occupants.

Current Setting:
24/7 - BIM



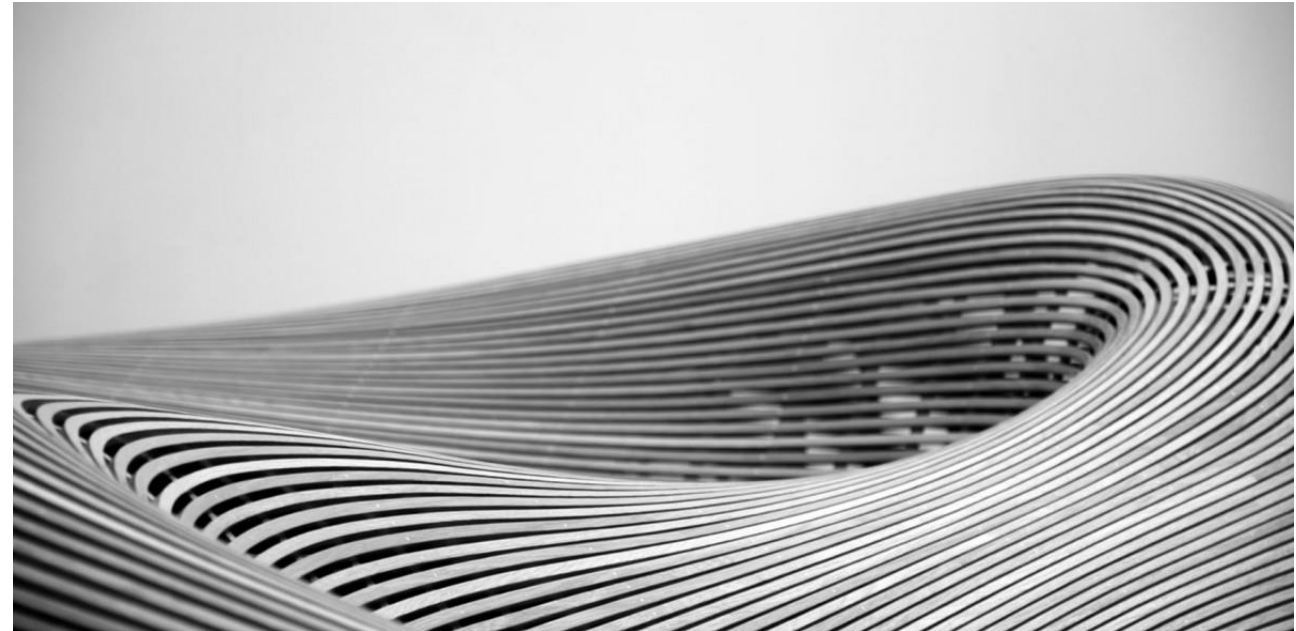
Wall Construction





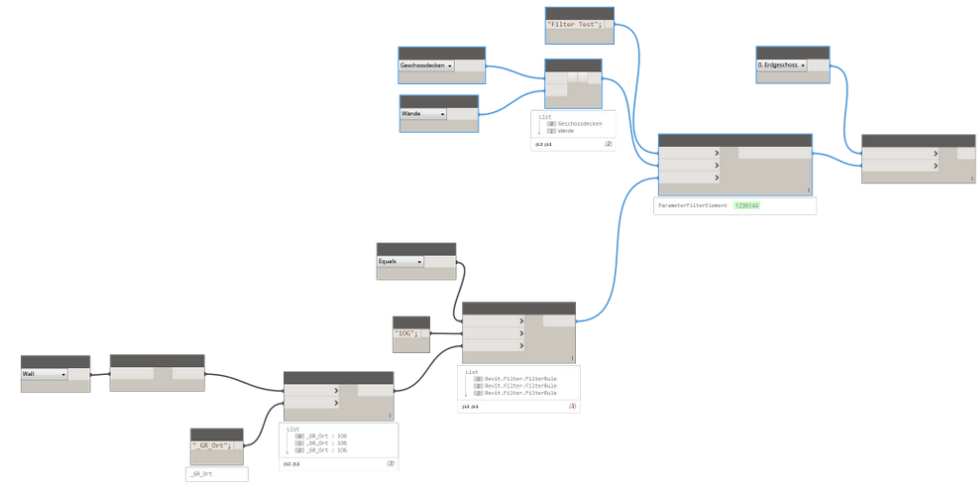
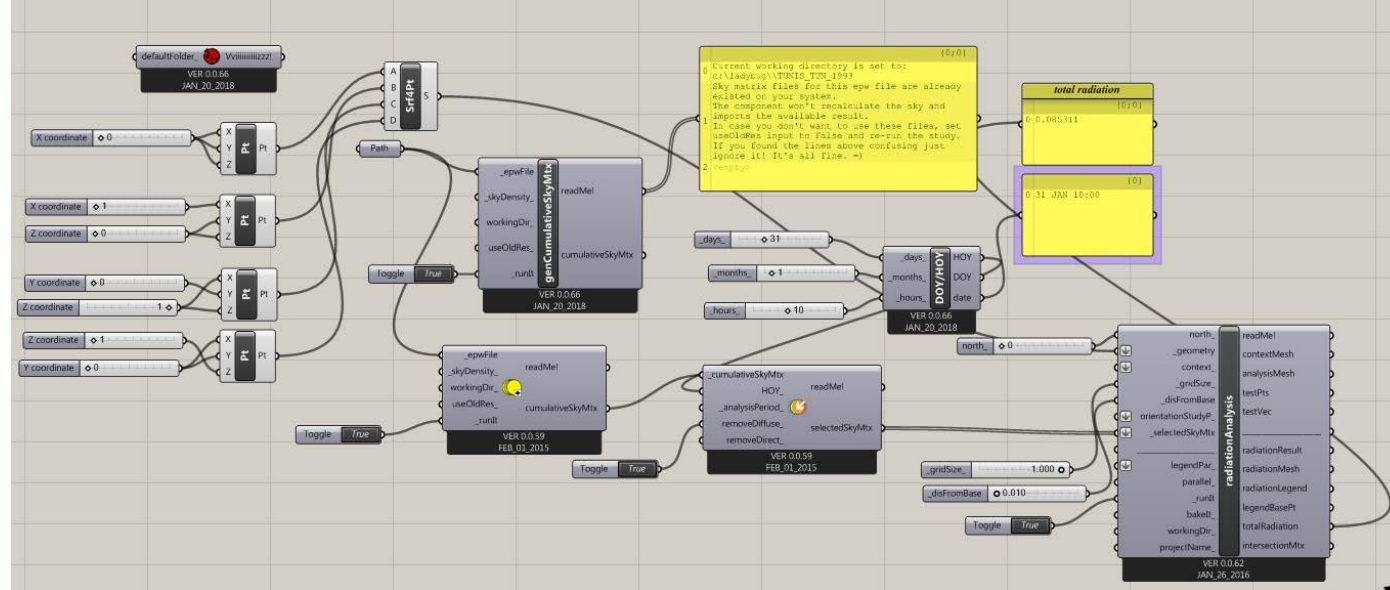
Diseño Paramétrico

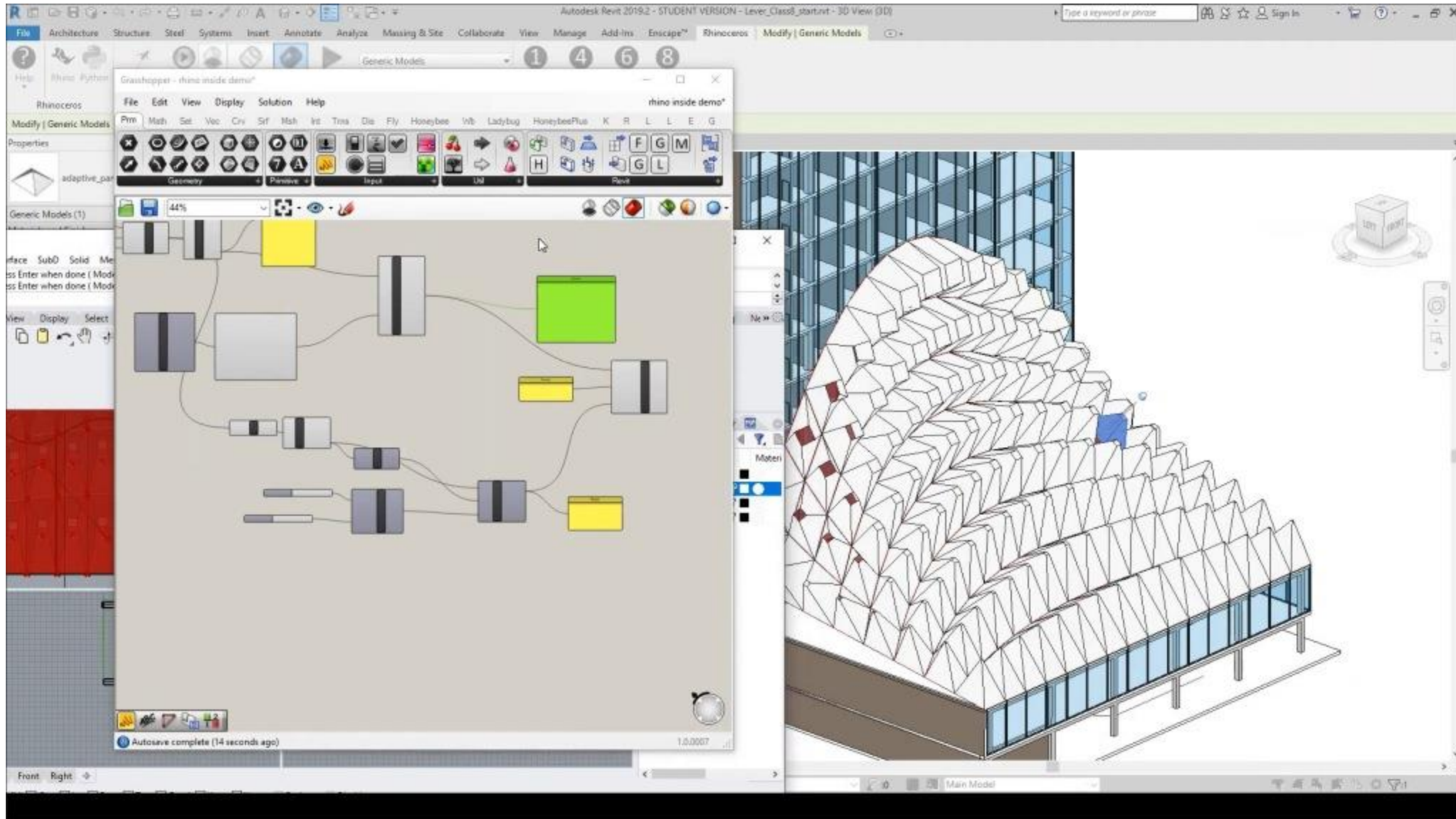
paradigma de diseño en el cual la relación entre los elementos se utiliza para manipular y comunicar el diseño de geometrías y estructuras complejas.

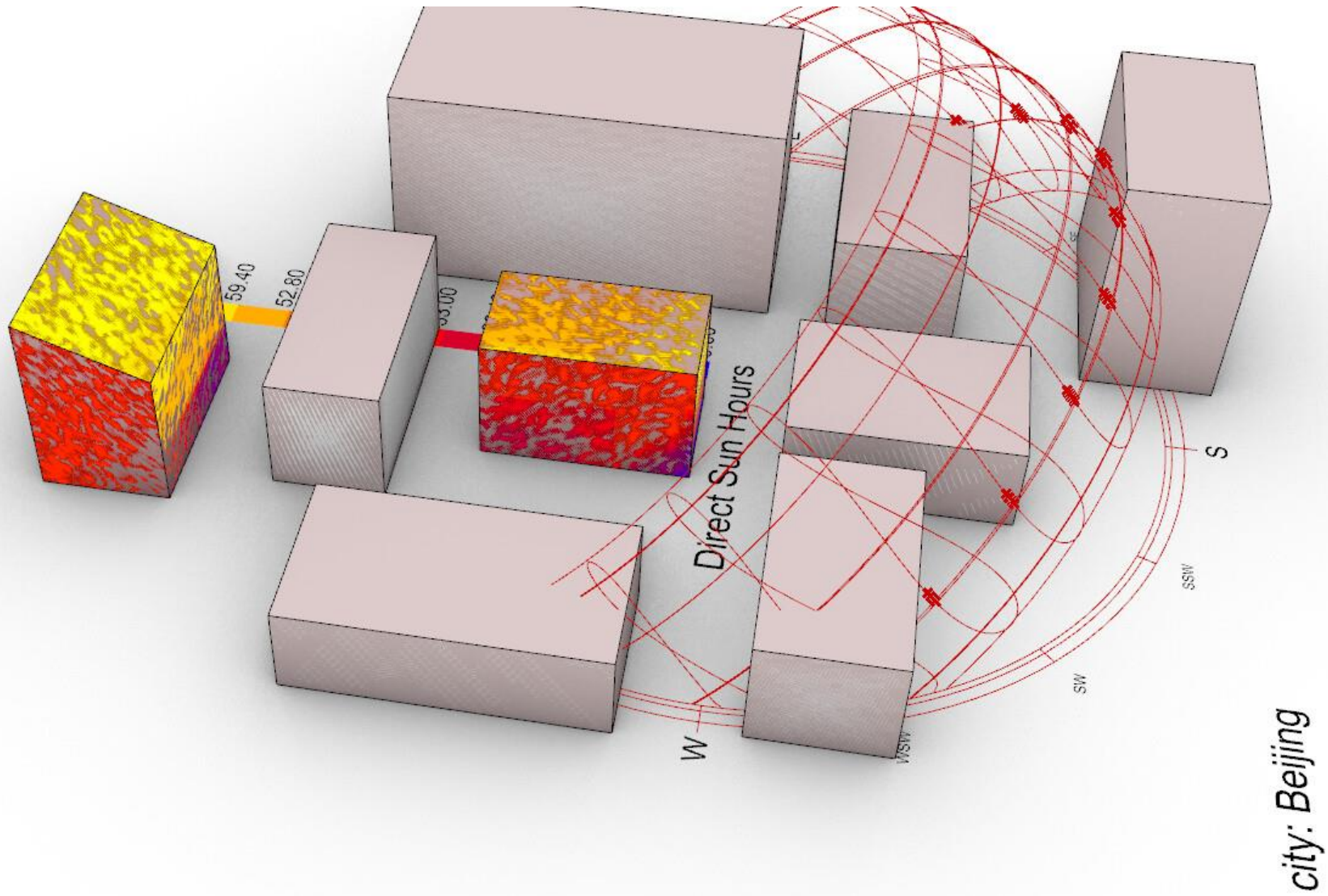


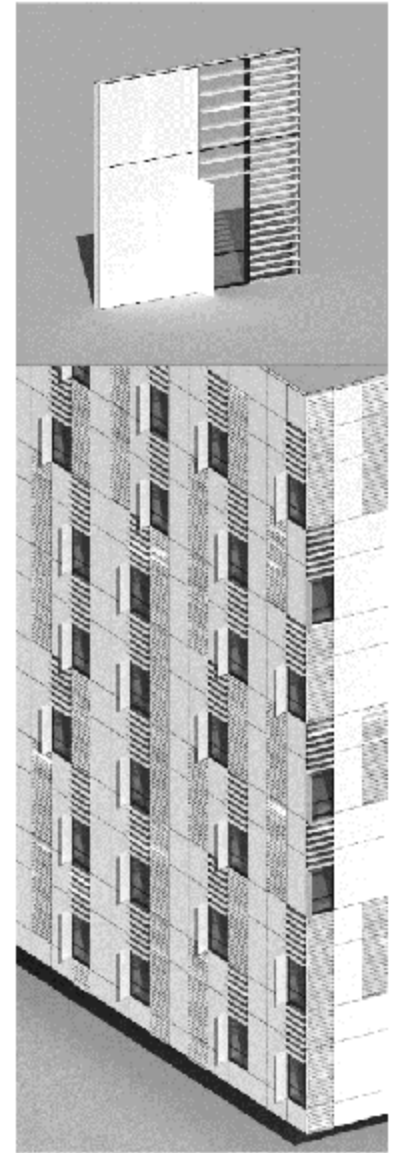
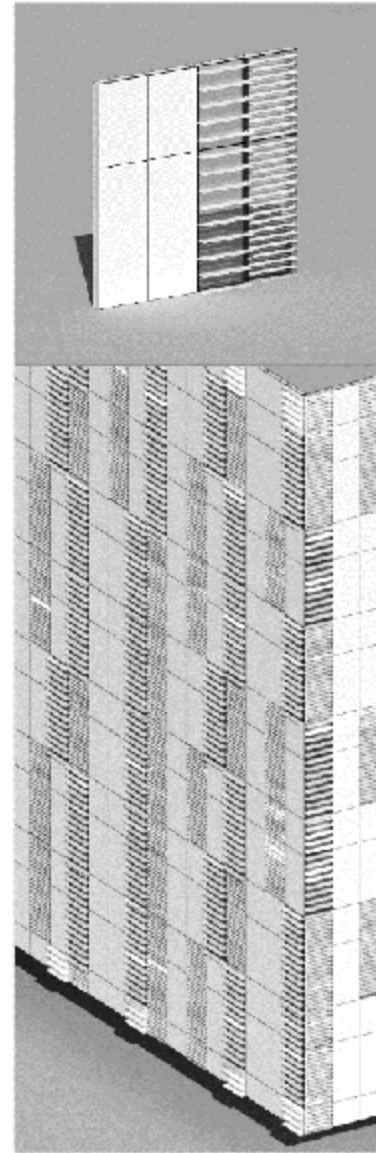
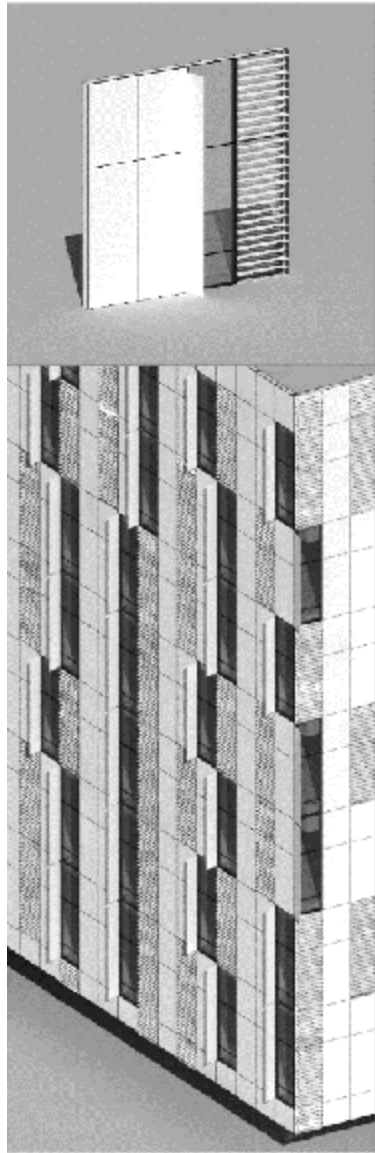
Diseño Paramétrico

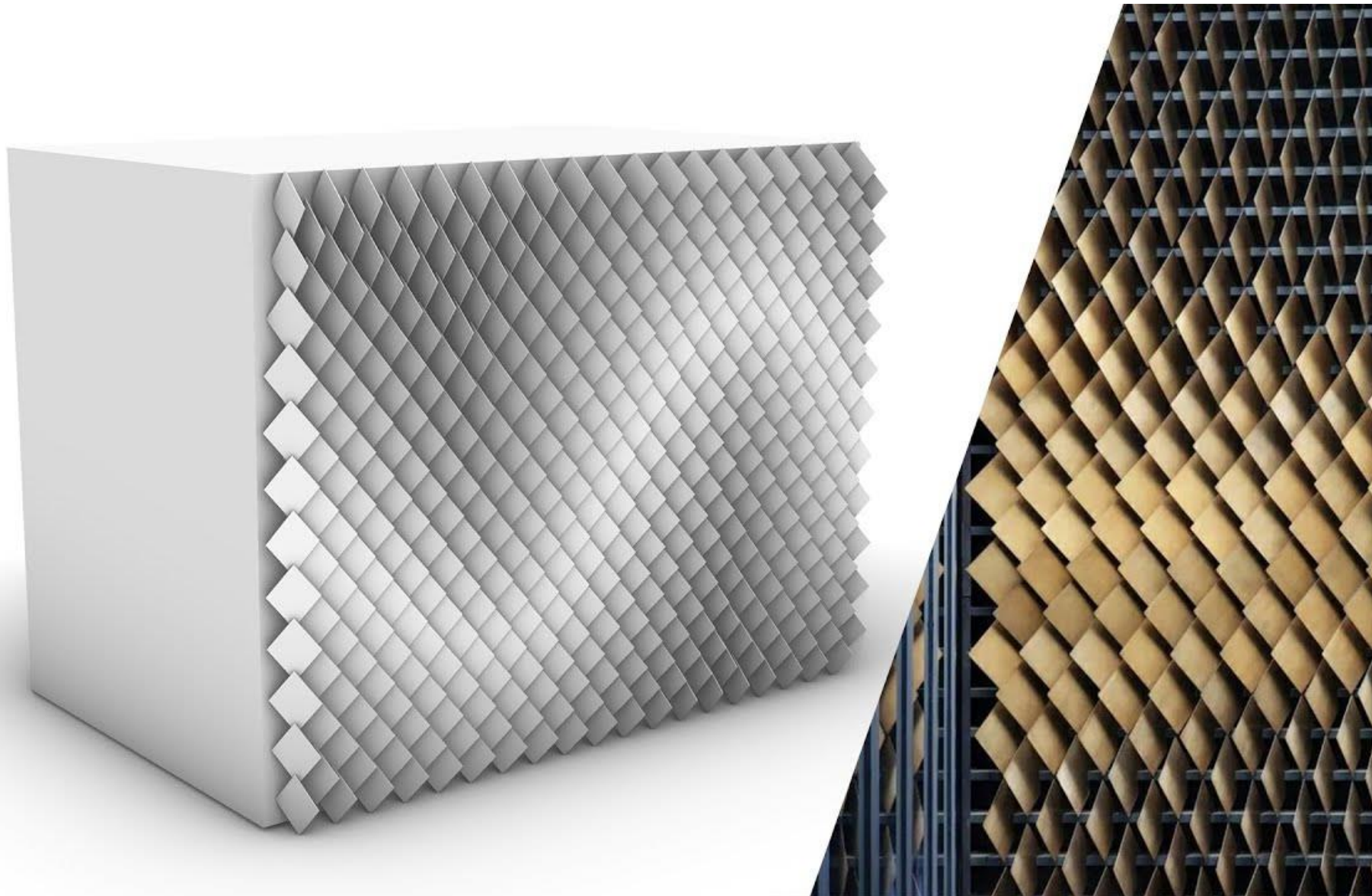
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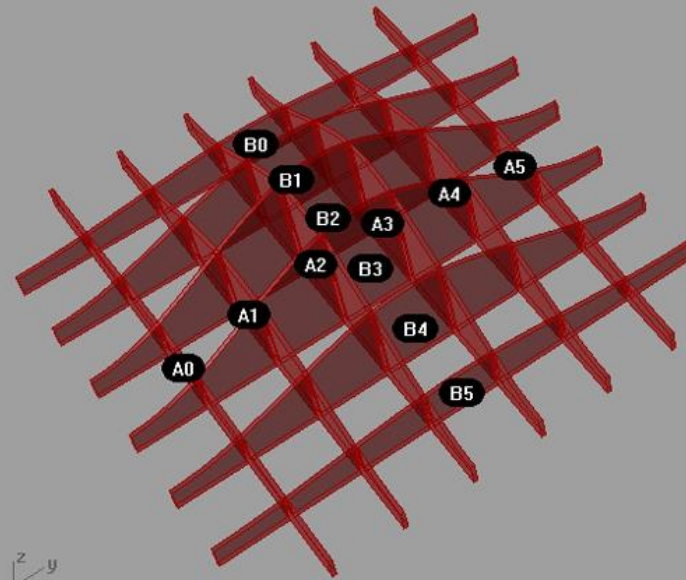
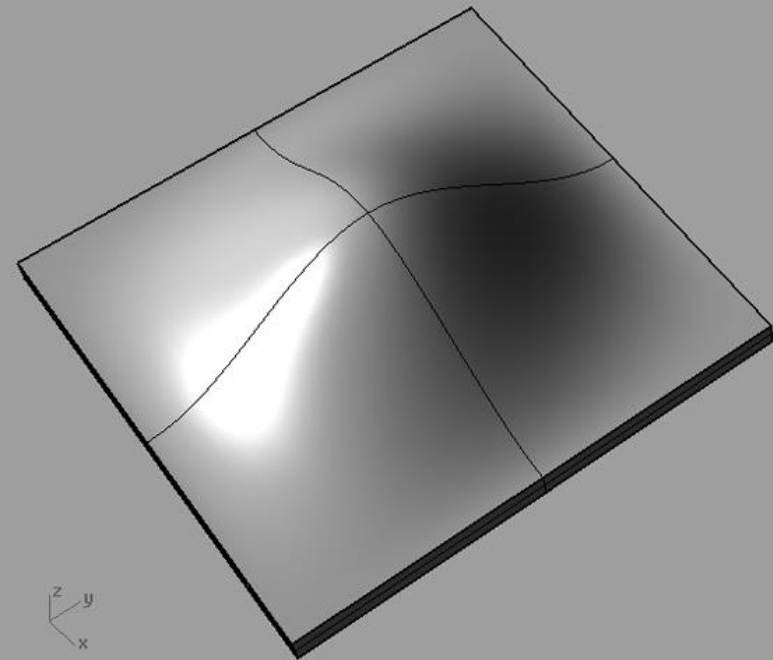
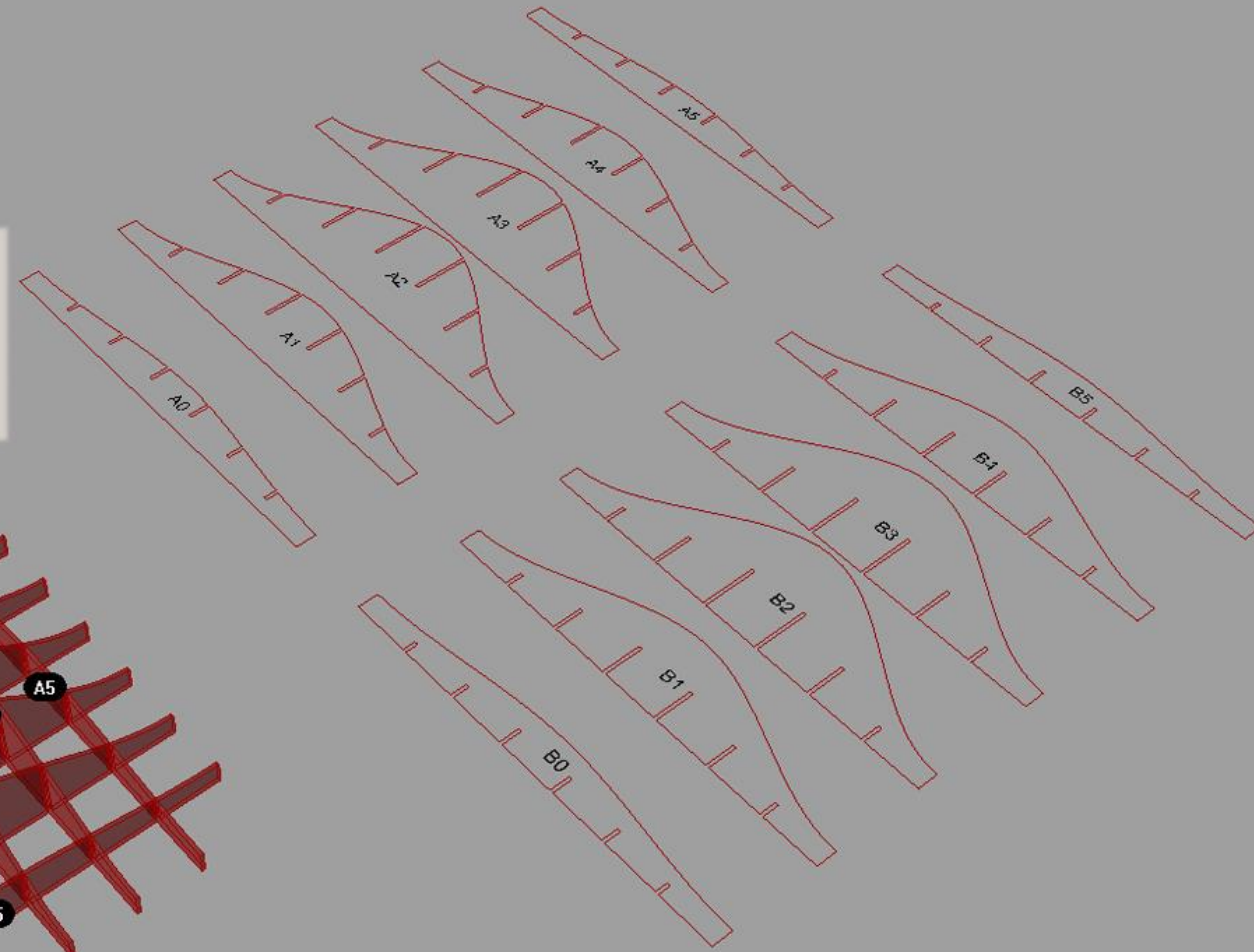
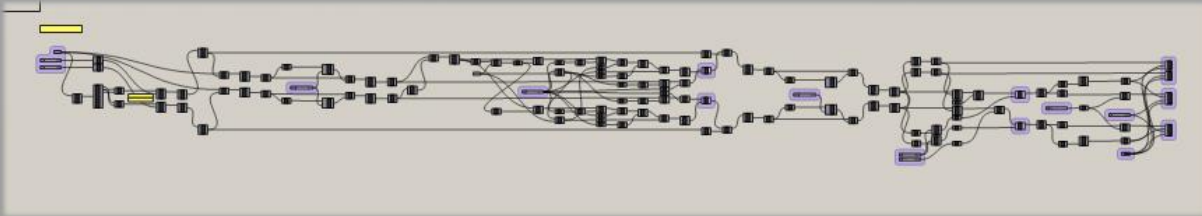






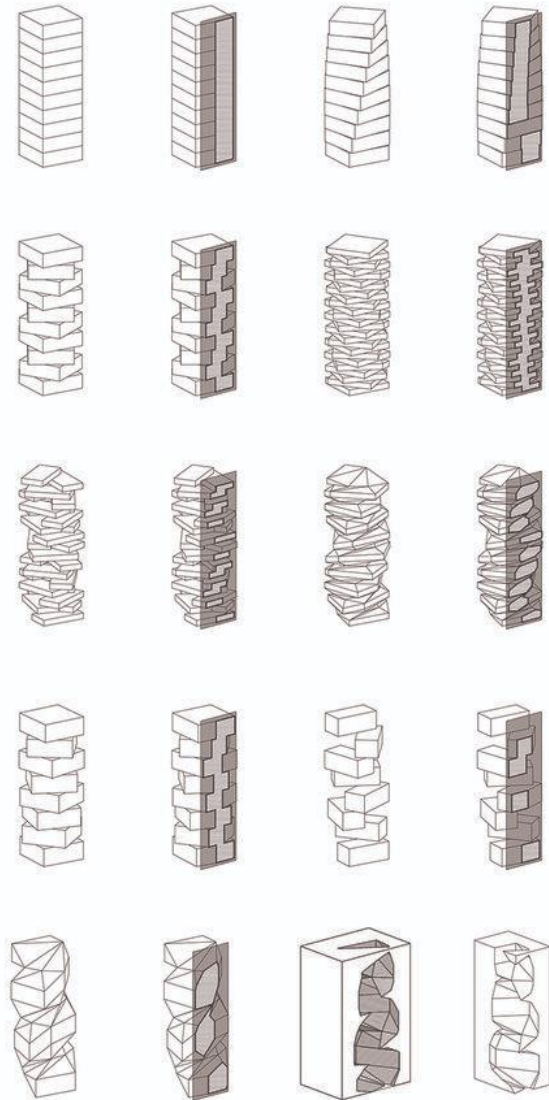


DIGITAL FABRICATION



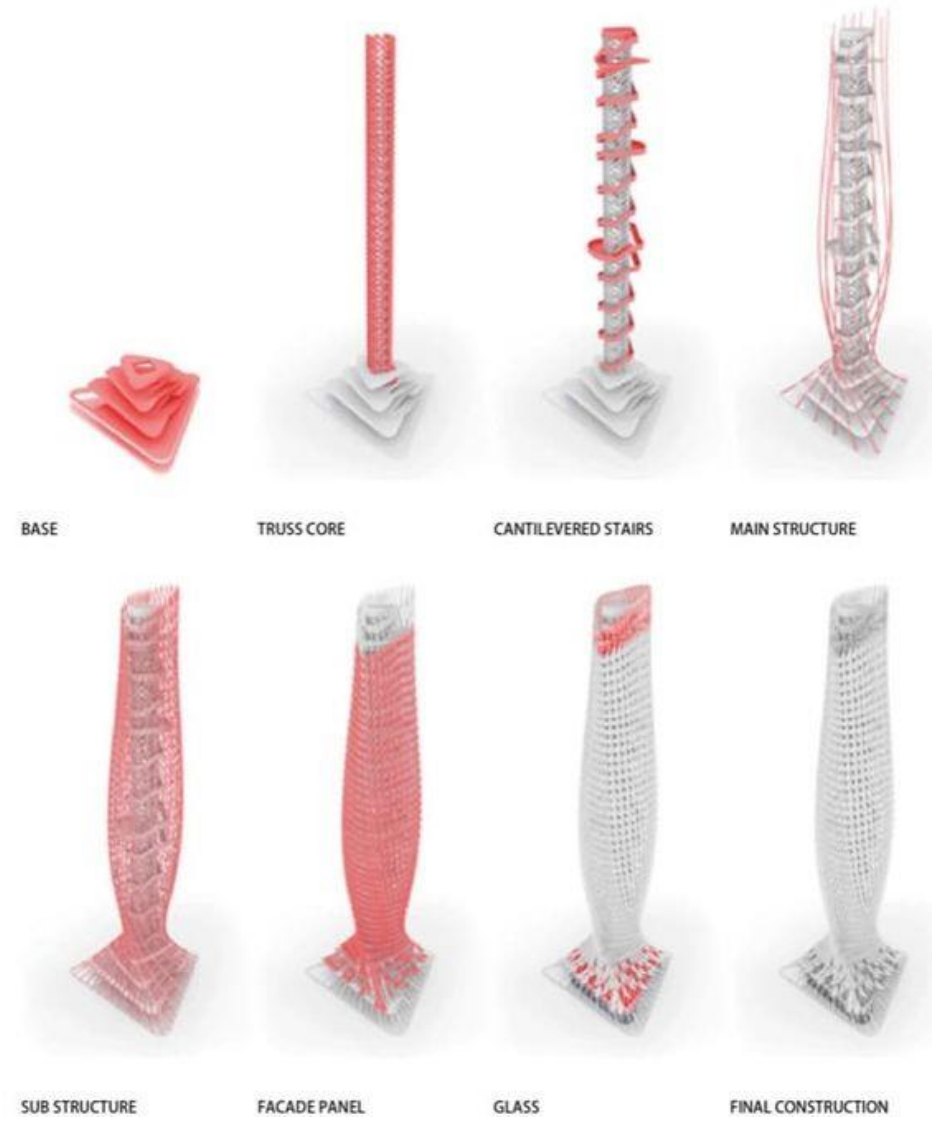
WAFFLE

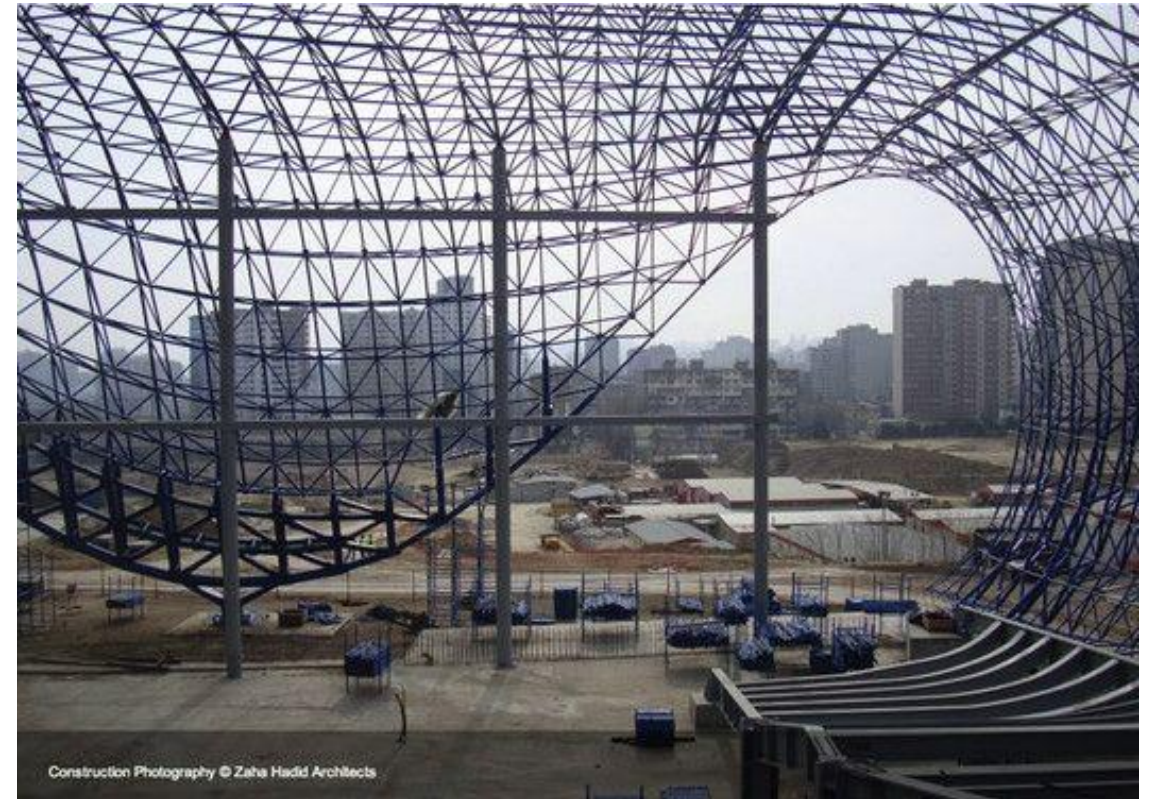




ROTATION | TRIM | SUBTRACTION







Construction Photography © Zaha Hadid Architects



CO-CREATED