XYZ Formula - WGNB

Store - Seoul, South Korea

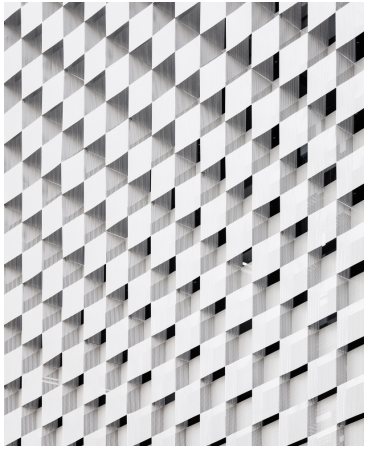
Institute for advanced architecture of Catalonia

STUDENT: Andrea Giacomo De Stasio

XYZ Formula
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Rhythmical and vitality of the XYZ Formula's facade are said to come from the concept of 'See-through'.
As the connection between the product image and spatial atmosphere cannot be ignored, XYZ Formula - the representing image of which is moisture products – was designed with the storytelling of 'Permeate'. The facade, inciting the compelling interest using punching plates, has illustrated a series of processes of 'Permeate' along with its function of absorbing natural light.







https://www.archdaily.com/875995/xyz-formula-wgnb

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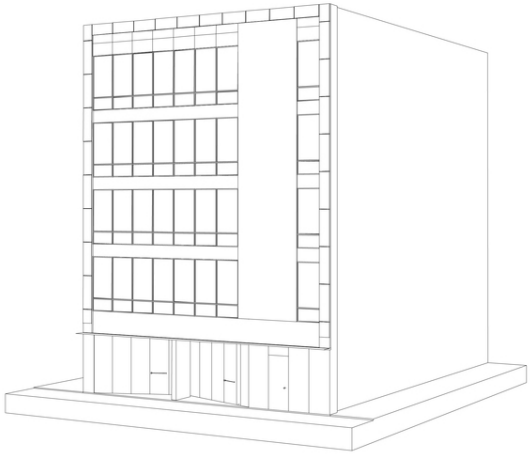
The main criteria of the design is a square grid façade, perforated to let light through.

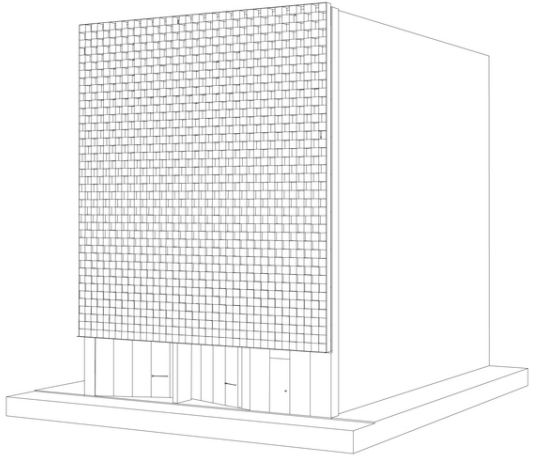
The façade works as a second skin of the pre-existing building to constrain the penetration of light inside the store.

The skin is worked by rows, Bended perforated metal bands stack on the z unit

The base geometry is a square grid,
the sides are bended exponentially in length from base to top of the building

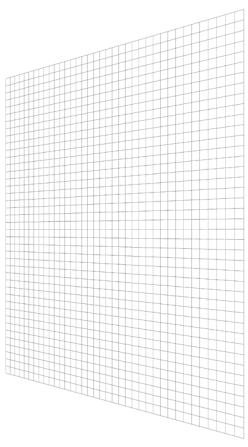
To give a sense of depth



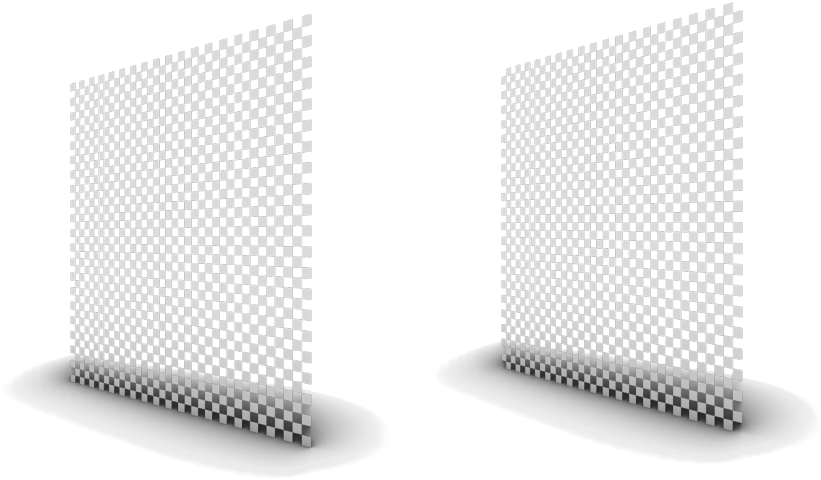


Pseudo Code

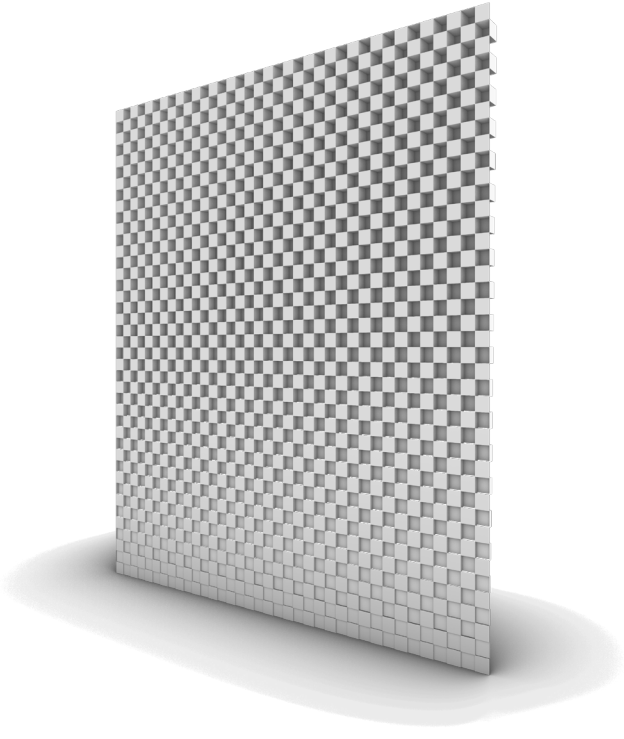
Square grid	37x41 elements in the XZ plane
Select	Alternated cells
Surface from edges	Create
Extrude	One of the selection exponentially in the y direction
Trim	Front face of the boxes
Cull	XY Plane's parallel faces of the boxes
Merge	Data in one surface



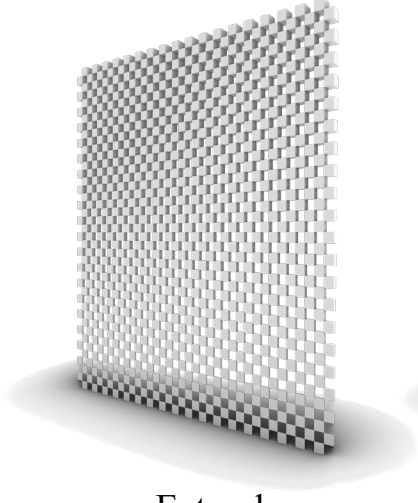
Square grid



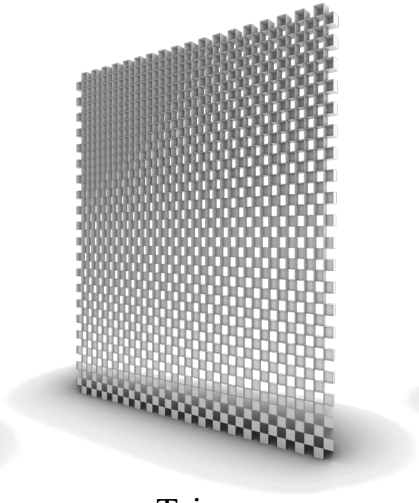
Surface from edges



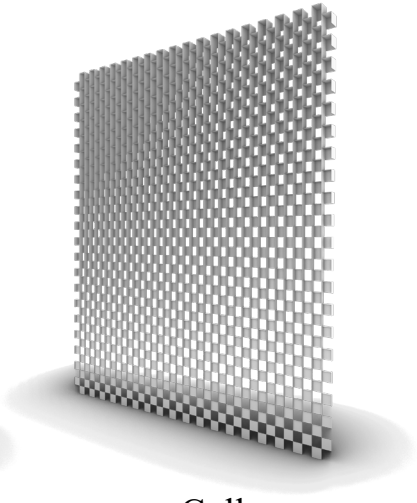
Merge



Extrude



Trim



Cull

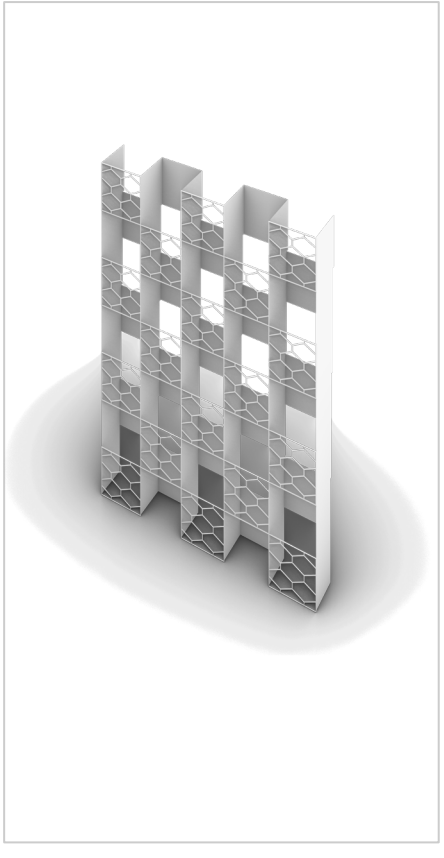
TUTORS: RODRIGO AGUIRRE, MOHAMAD ELATAB

ASSISTANT: IVAN MARCHUK, OANA TAUT

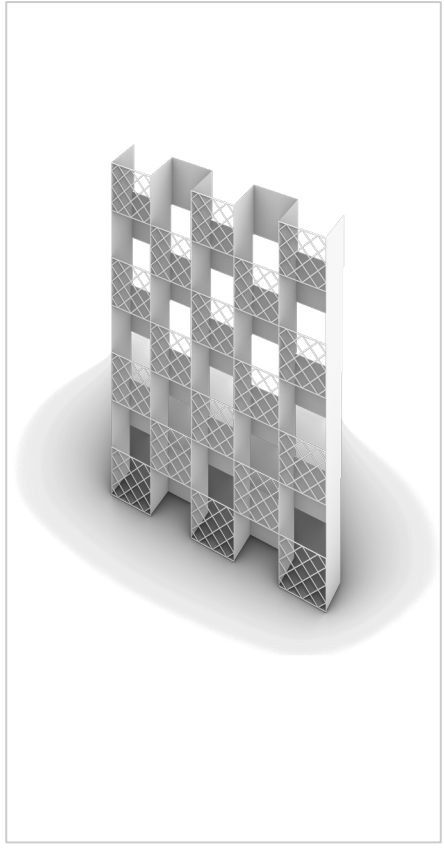
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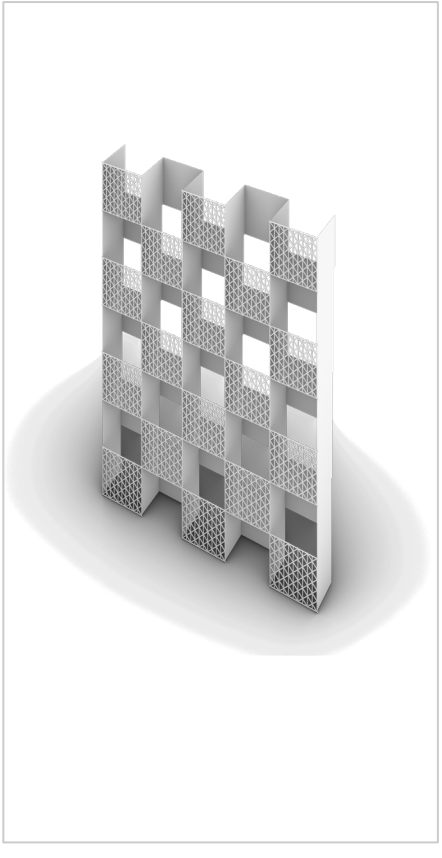
Facade iterations – light permeate (Samples)



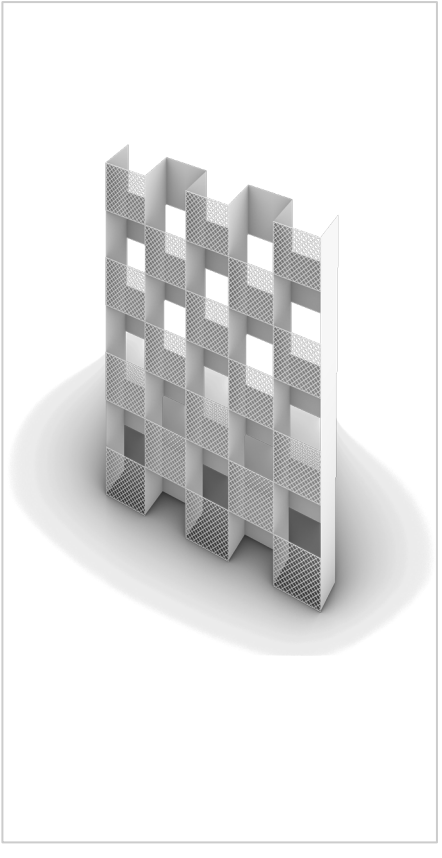
Hexagon Cells



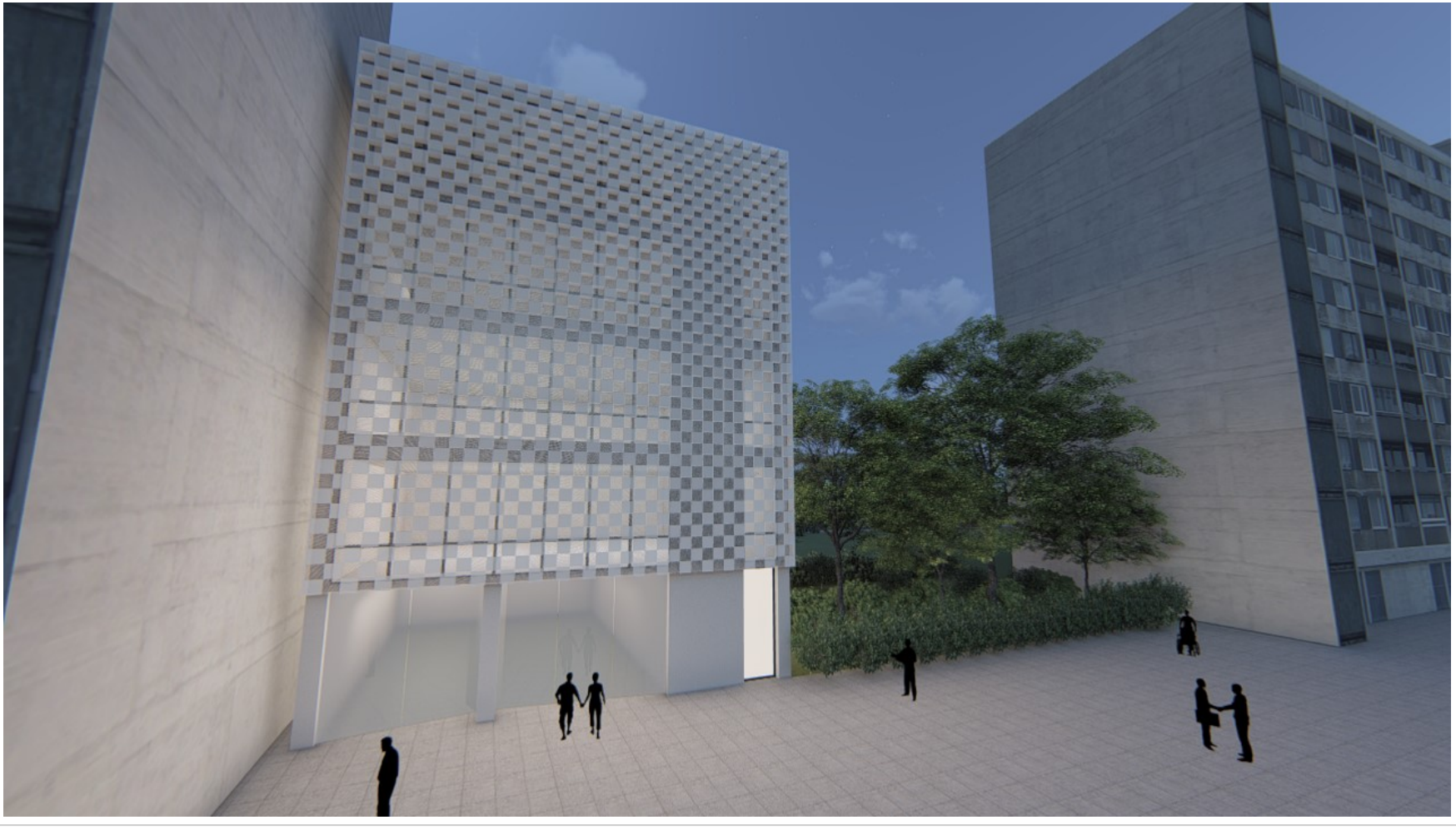
Diamond Panels



Triangulate Panels



Weaverbird's inner polygons



Grasshopper

