# XYZ Formula - WGNB

## Store - Seoul, South Korea

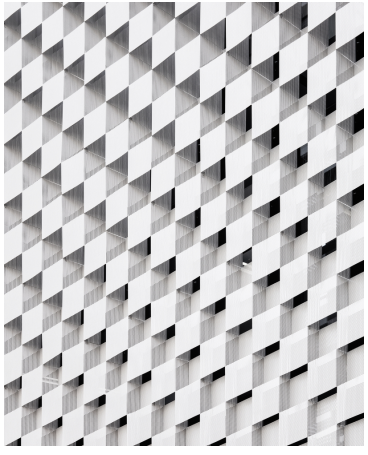
Institute for advanced architecture of Catalonia

STUDENT Andrea Giacomo De Stasio

## XYZ Formula
## WGNB

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

## XYZ Formula
## WGNB

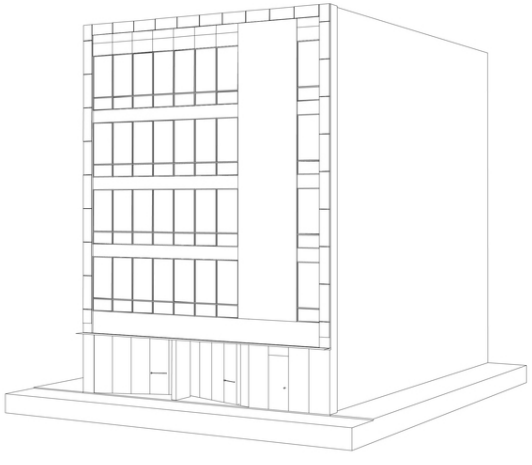
The main criteria of the design is a square grid façade, perforated to let light through.

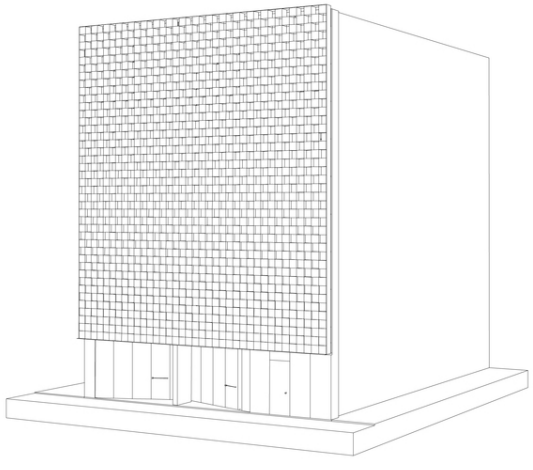
The façade works as a second skin of the pre-existing building to constrain the penetration of light inside the store.

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

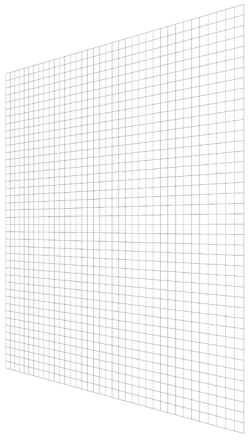
To give a sense of depth



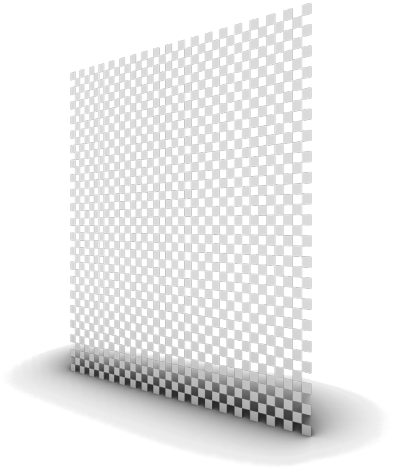


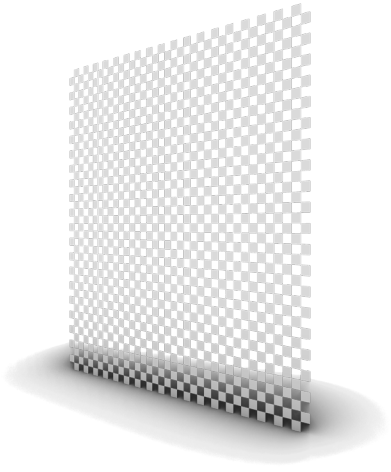
# Pseudo Code

| | |
|---|---|
| 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 |

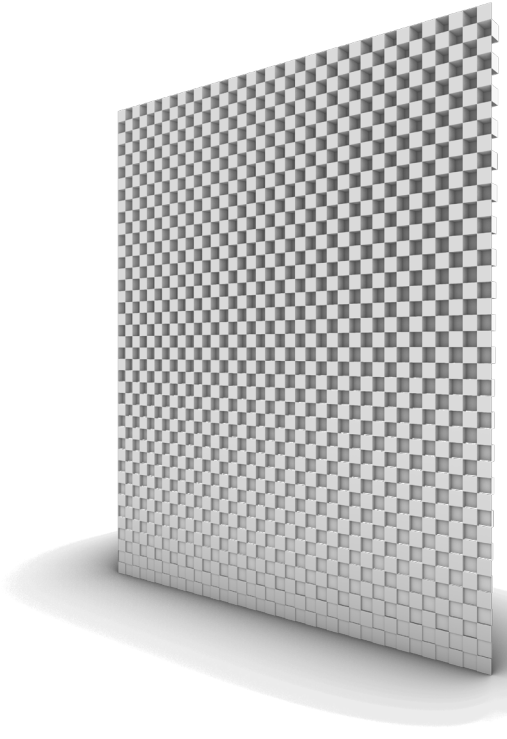


Square grid

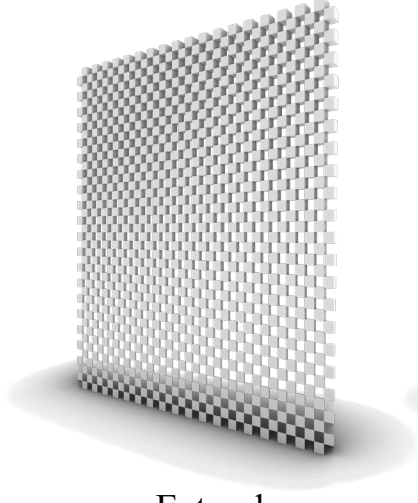




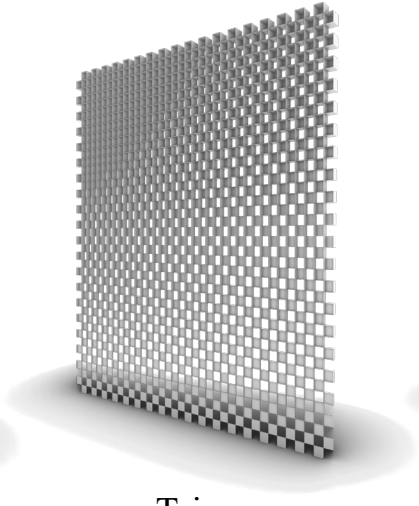
Surface from edges



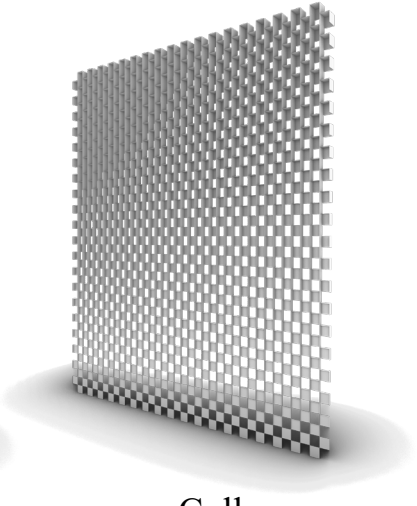
Merge



Extrude

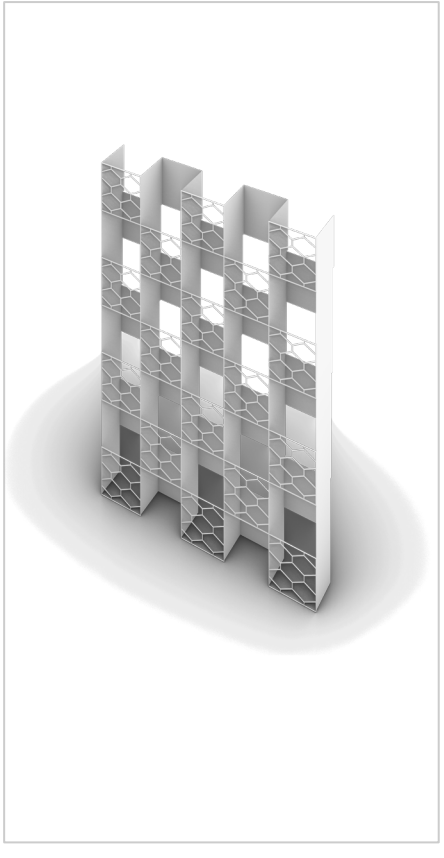


Trim

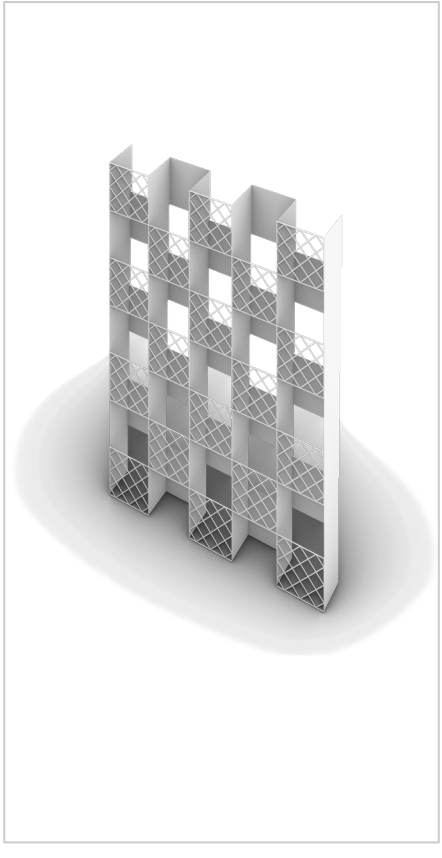


Cull

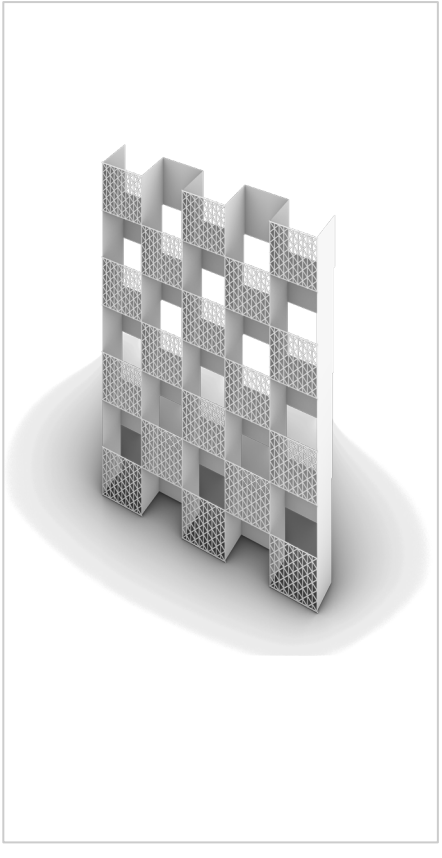
## Facade iterations – light permeate (Samples)



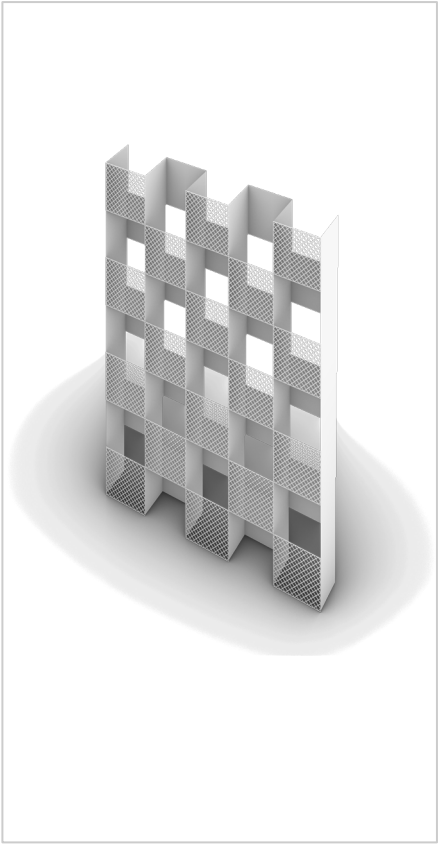
Hexagon Cells



Diamond Panels



Triangulate Panels



Weaverbird's inner polygons

**[Presentation final image]**

# Grasshopper

