BY: MICAELA, ASIEL , ROSALINDA, ANDRES , DIEGO

MADRID

DAOIZ

remodelation

REMODELATION

INTRODUCTION

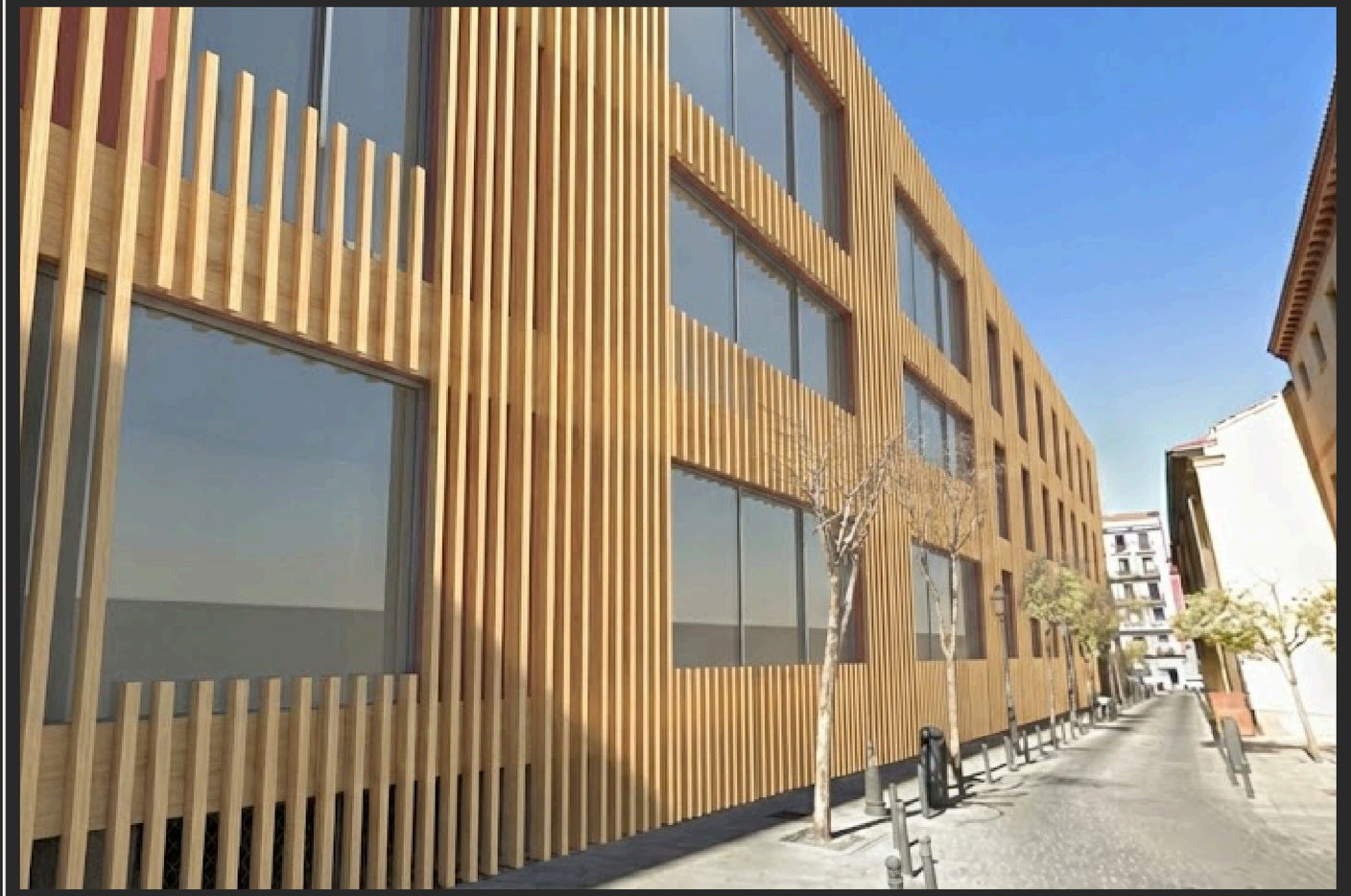
In our part of the project, we have focused on rebuilding the Daoiz part, both inside and outside, always thinking about sustainability, functionality, and durability.

BEATRIZ MATOS

We were inspired by this building designed by the architect Beatriz Matos, but we added our own idea of converting the wooden panels into exterior shutters to retain heat or cold and consume less energy.

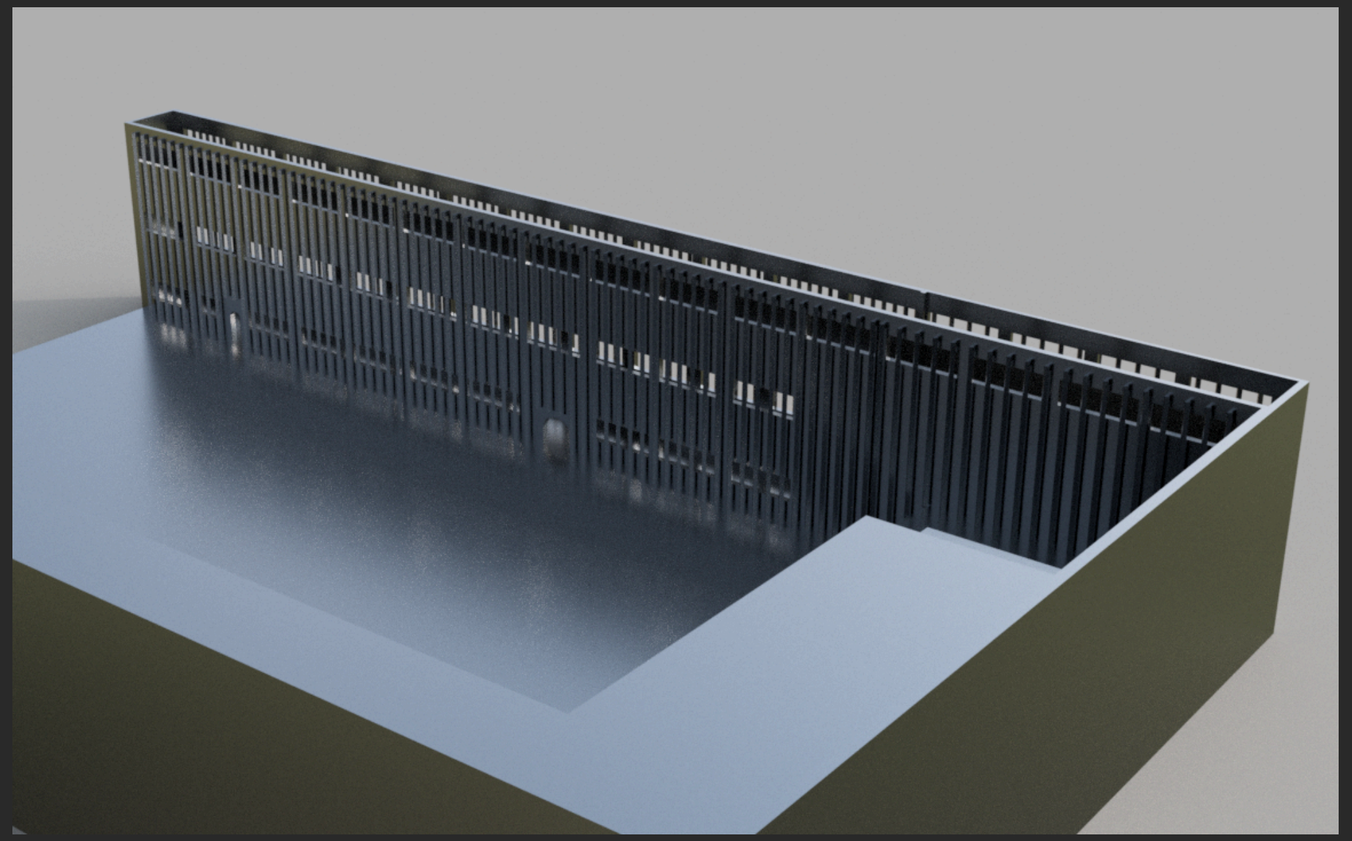
OUTER PART

On the outside, we thought it would be a good idea to add some shutters to the windows with a mechanism to adjust them, allowing more or less light to enter. We also focused on the building's aesthetics, preserving its historical aspects.



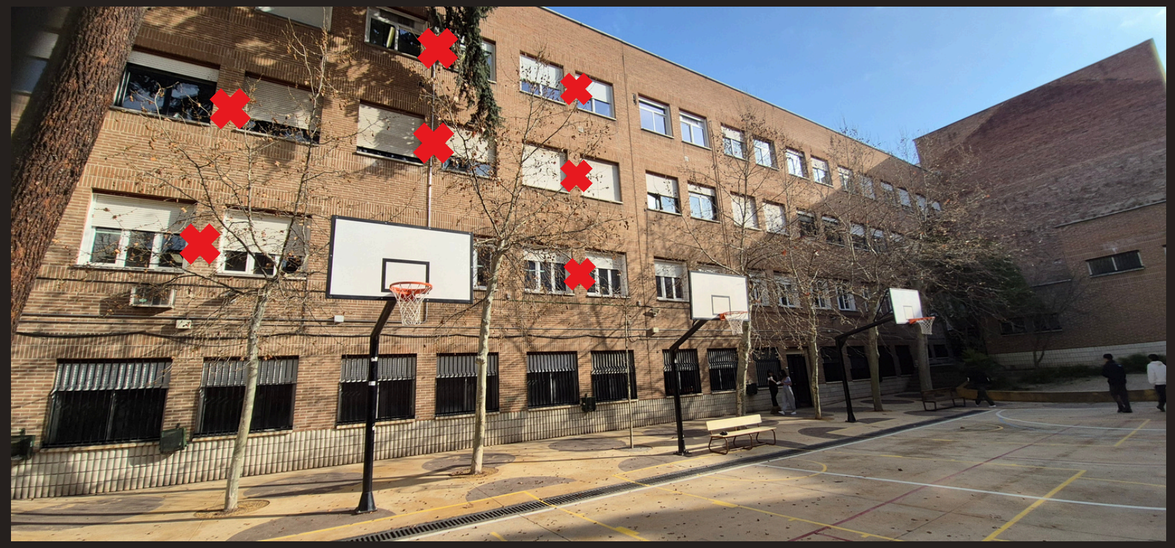
INTERIOR PART

In this section, we repeated the system we came up with for the exterior, maintaining our system of external blinds. This part is more useful as it is on the side of the building where the sun hits the most. We also installed sliding windows because they better match the aesthetics of the external blinds and are more efficient in terms of maintenance.

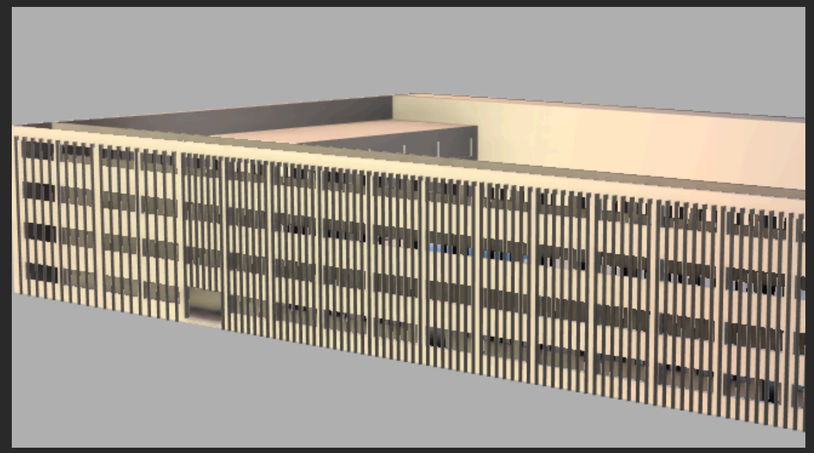


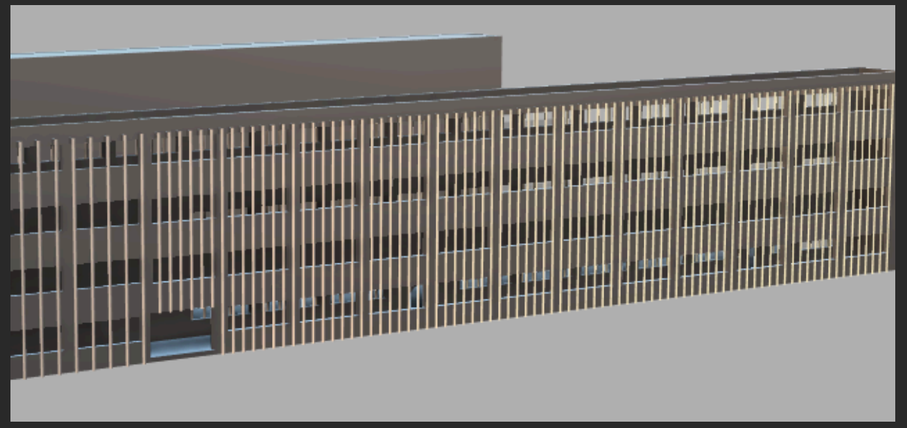
INTERVENTION

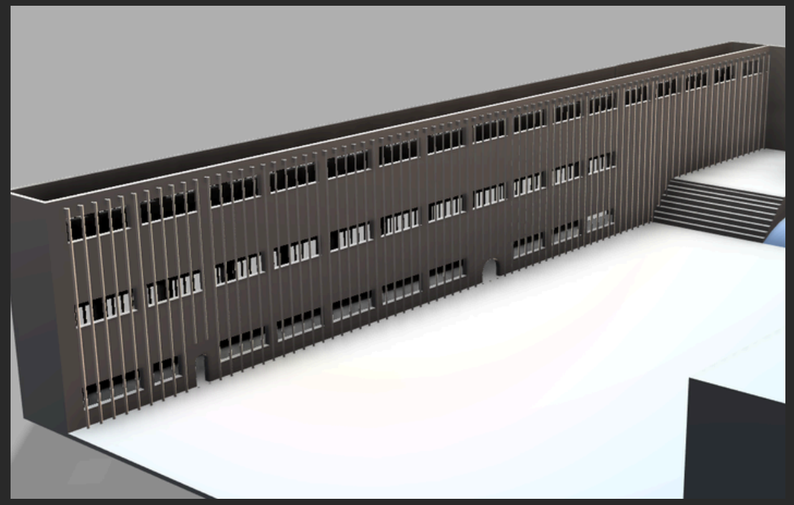
We will remove this parts of the walls in order to make bigger windows getting more light.

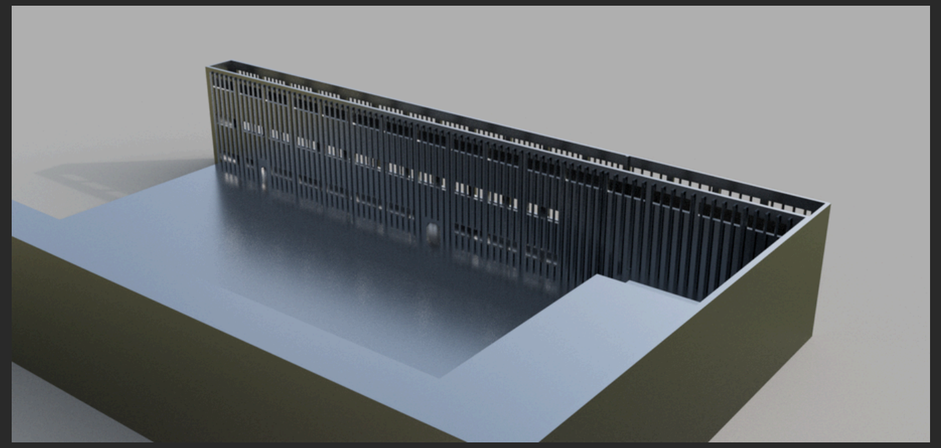


PHOTOS

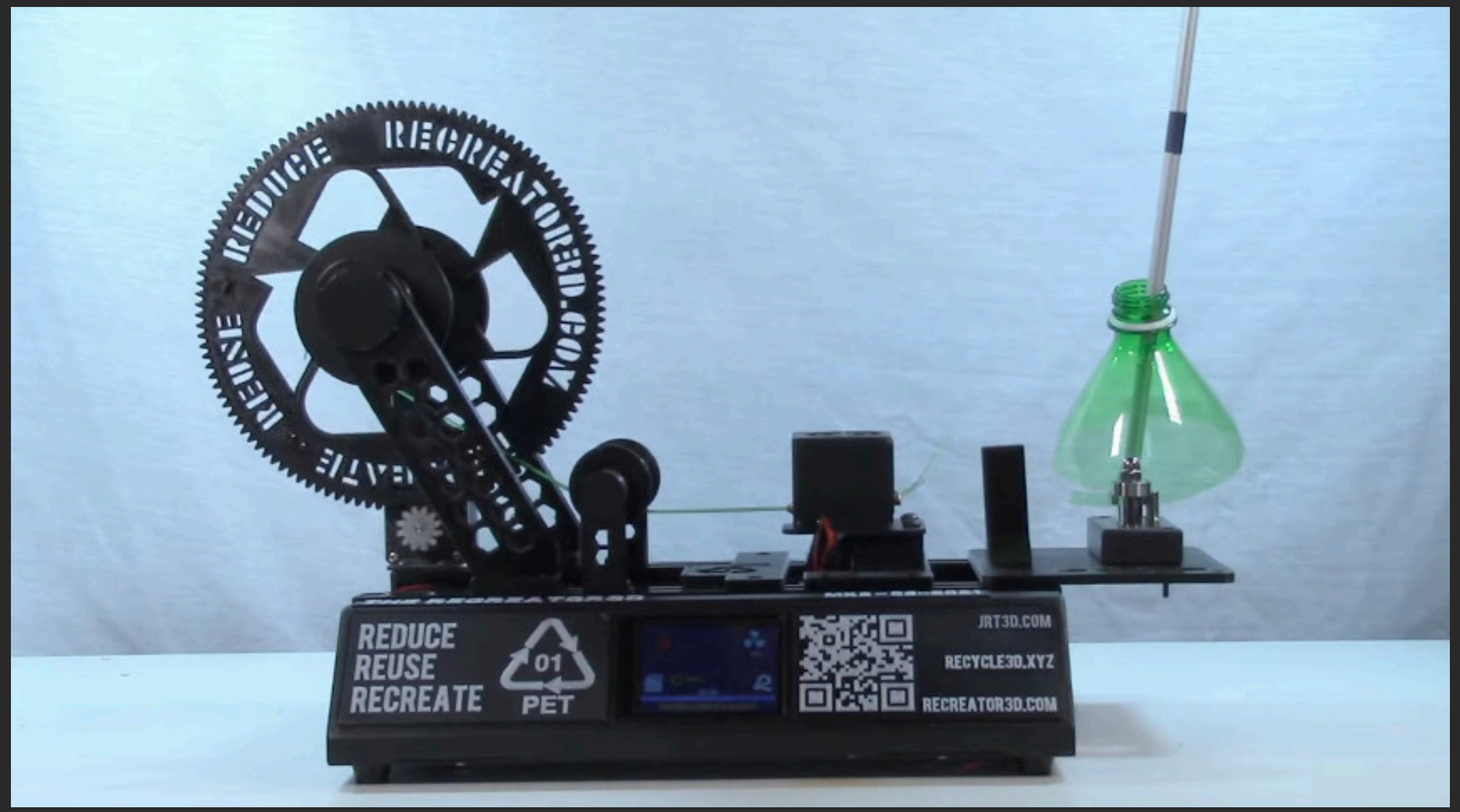






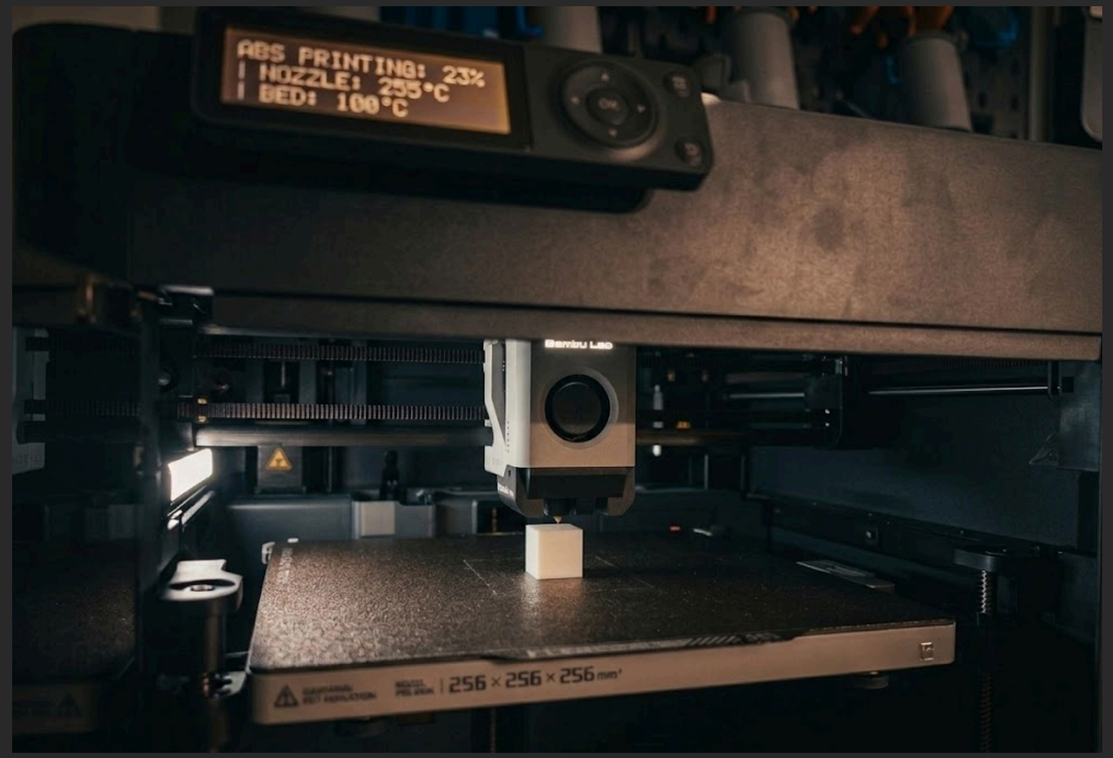


MATERIAL FOR MODELS

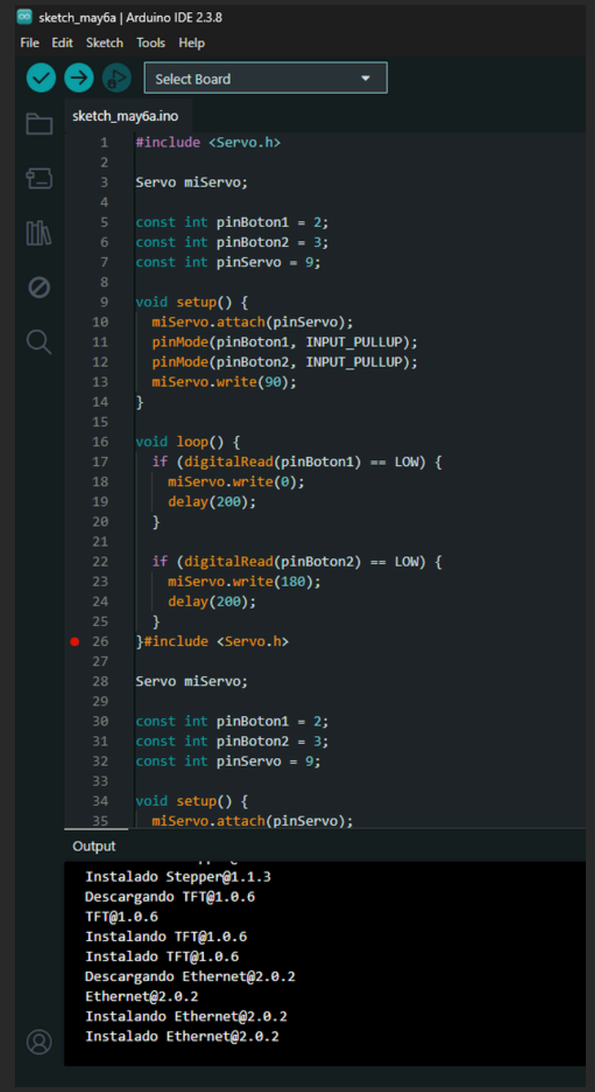


To make the models with 3D printing we use a material called pet that is completely recycled since it was made with plastic bottles.

MODEL STRUCTURE

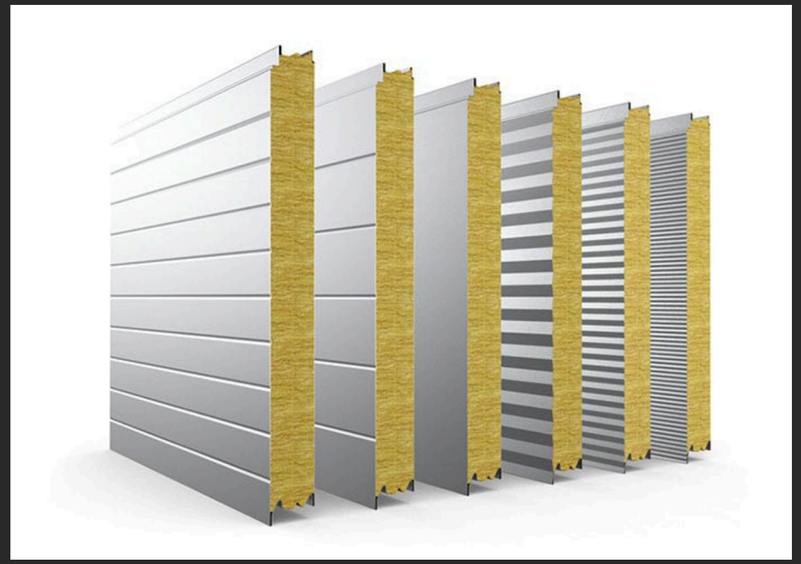


We started by designing the 3D model. After several tolerance tests, we managed to make everything fit. As soon as we finished that, we moved directly to the coding; with the help of the entire class, we successfully developed the code to ensure the servomotor moves properly.



SANDWICH PANEL

We will anchor sandwich panels onto the old brick facade. We will install a prefabricated sandwich panel with a smooth, dark red paint finish because it matches the aesthetic of the institute.The sandwich panel itself has its own insulation.



PAINT

Measurements and Budgets

GROUP 1 CLOISTER

DEMOLITION OF EXISTING CONSTRUCTION

CODE	UNIT	DESCRIPTION	AMOUNT	PRICE	AMOUNT
1-001	m³	Demolition of masonry facade wall.	19,68	120€	2.362€
1-002			19,68	120€	2.362€
1-003					

STRUCTURES

CODE	UNIT	DESCRIPTION	AMOUNT	PRICE	AMOUNT
2-001	m	Prestressed concrete lintel beam.	461,1	900,00 €	18,90€
2-002					
2-003					

FACADE FINISH

CODE	UNIT	DESCRIPTION	AMOUNT	PRICE	AMOUNT
3-001	m²	Facade sandwich panel. Daoiz	630	22,67 €	14.282,10 €
3-002	m²	Sandwich panel facade. Interior	675	22,67 €	15.302,25 €
3-003	m²	Facade painting	1305	18,00 €	23.490,00 €

CARPENTRY

CODE	UNIT	DESCRIPTION	AMOUNT	PRICE	AMOUNT
4-001	UNIT	Window measuring 4.5 x 1.7 meters, including aluminum frame, glass, and air chamber. Installation and cleaning included.	87	900,00 €	78.300,00 €

MEASURE AND BUDGETS

These are the budgets and measurements we calculated for this work.

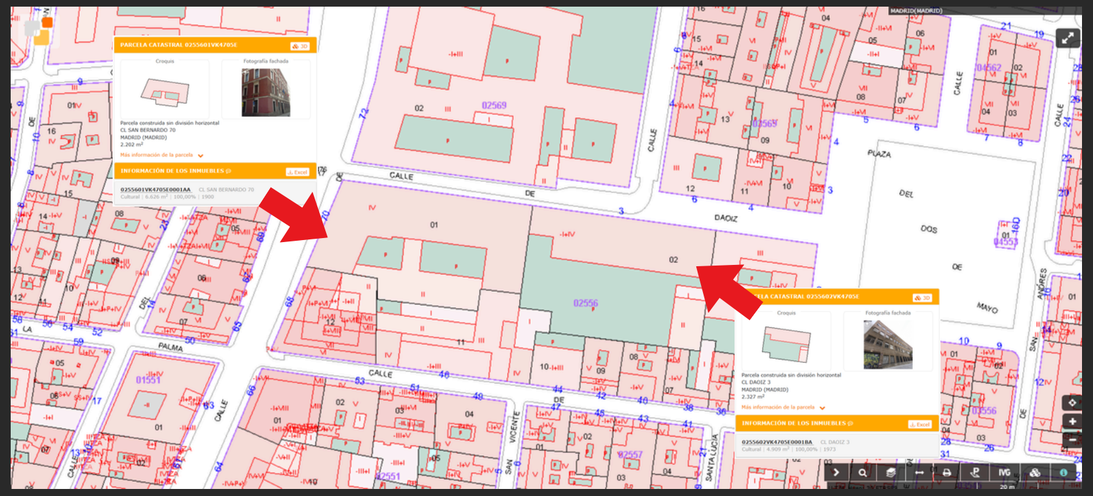
CONSTRUCTION LICENSE

IS THE BUILDING PROTECTED?

We can see in this photo that the Daoiz building is not protected, but the one at San Bernardo 70 is.

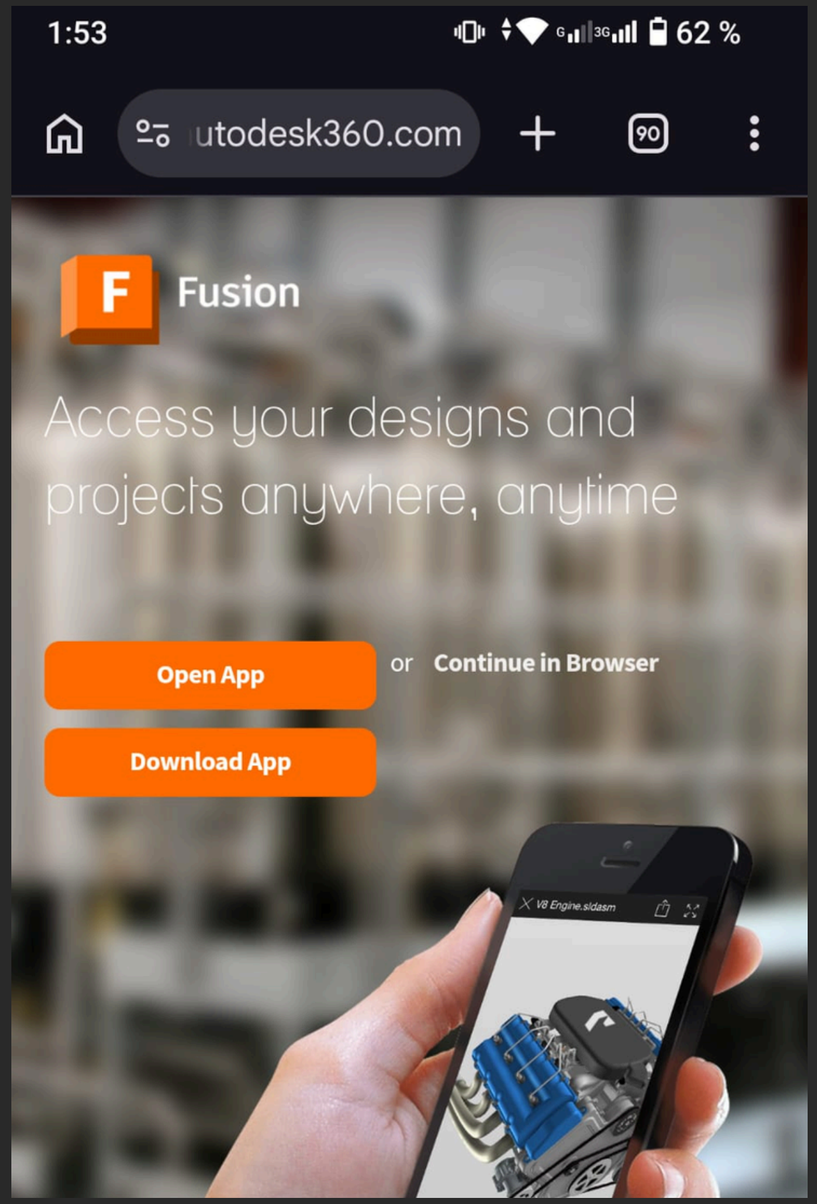
HOW DID WE GET THE LICENSE??

First we need to check if it's on the Site of Cultural Interest (BIC); in this case it isn't, so we have to send it to General Directorate of Heritage (Autonomous Community).They decide whether to approve our project or not.



FUNDRAISING

- Bank finantion
- Public grants ftom goverment
- Next Generation funds
- Crowfunding
- High school savings

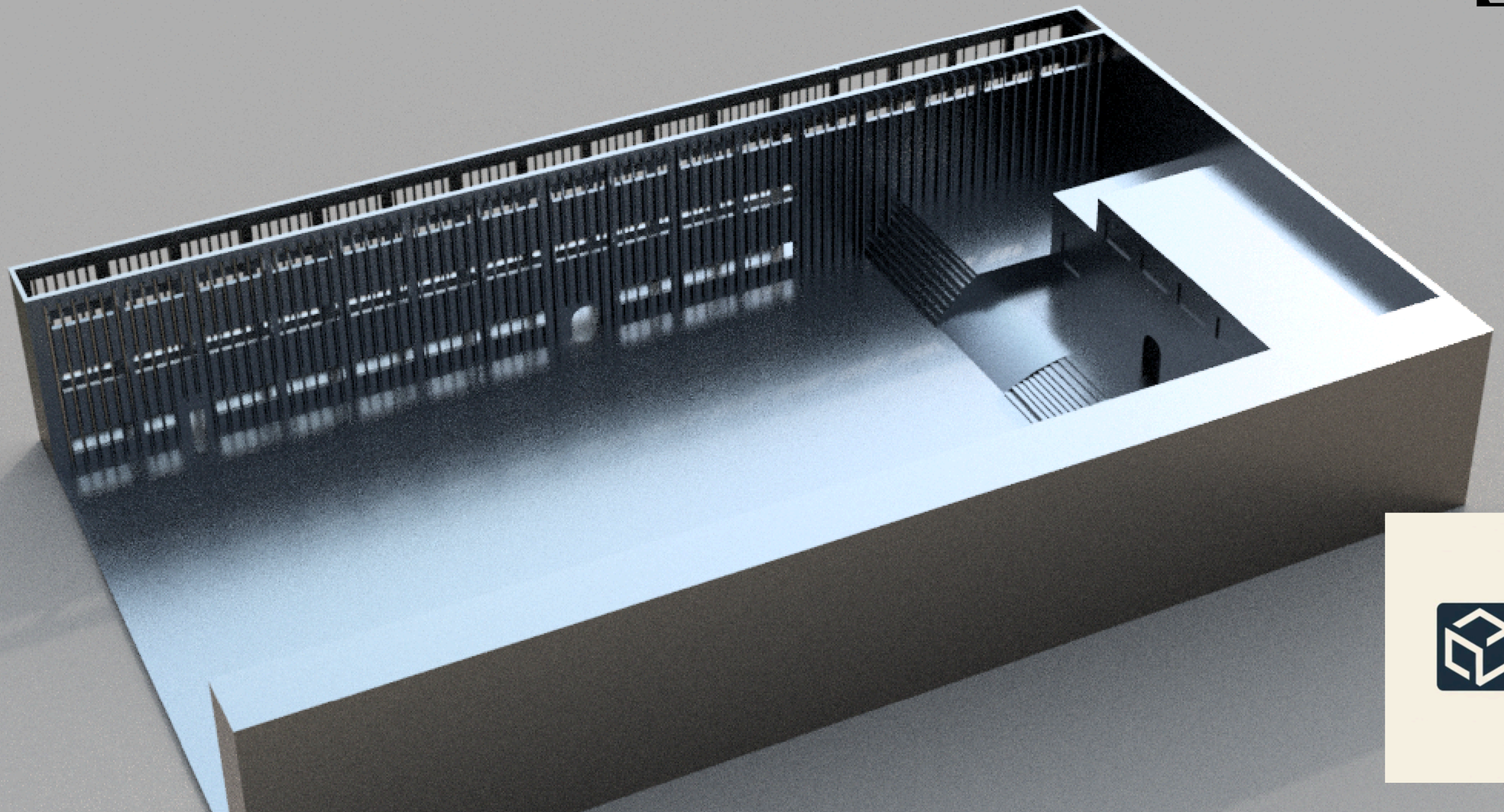


3D MODEL

pulsa en continue in browser

Link

thanks for listening!



DIMEN FAB 3D