

Module of the Oppler's synagogue in Wroclaw

Module of the building

Brick module





Bricks found during **excavation on the area of the former synagogue** were used to determine a module of the building. Afterwards according to the module the plans of the synagogue were divided.



Various bricks were measured in order to determine average dimensions of a brick.



Dimension of bricks

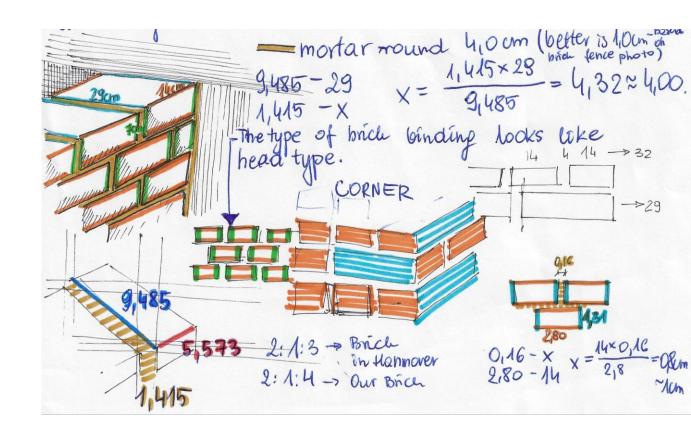
Result of the excavation

Height	Width	Length	Amount	Localization
6,5	14	28,5	1	south elevation
6,5	14	-	1	south elevation
7	14	-	3	south elevation
7	14	29	1	west elevation
7,5	14,5	29	2	west elevation
6,5	14-15	29	a few	foundation
6,75	14,75	-	1	front wall
6	13,5-14	29	1	backside wall

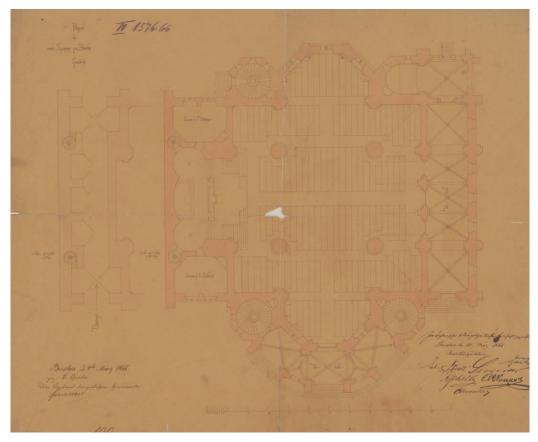
Dimension of bricks

Result of the excavation

The average dimensions, based on archeological research, were assumed as 7 x 14 x 29 cm + 1 cm of a joint thickness.



Starting materials for working with the module Floor plans

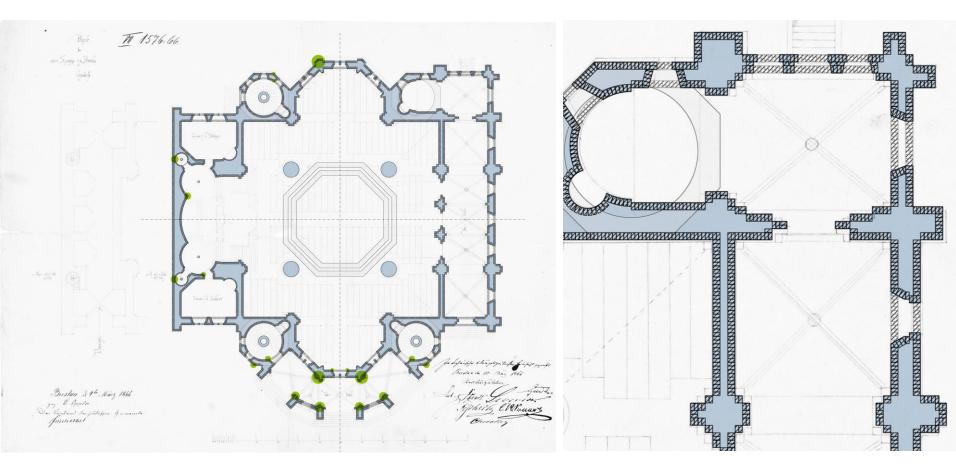


First floor plan of the executive project

Source: Museum of Architecture in Wroclaw, Department of Building Archives of the City of Wroclaw, Akta Policji Budowlanej, MAt–AB–70589

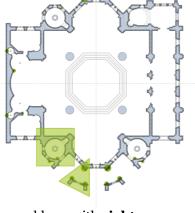
Division of the plan according to the module

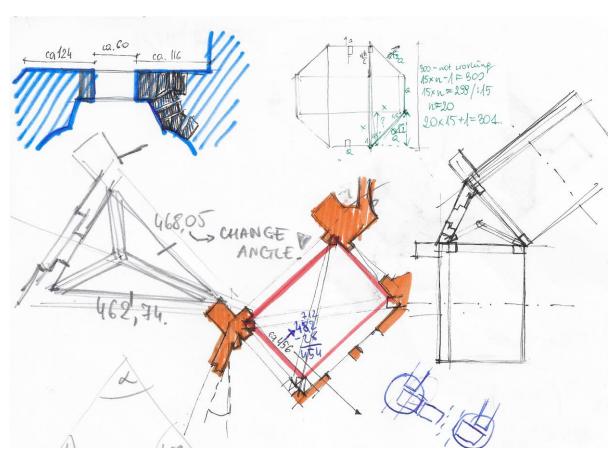
based on the drawing of the executive project



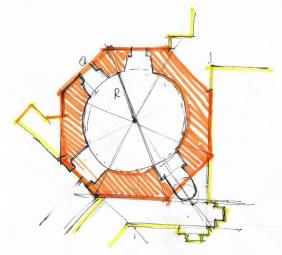
Troubles with the plan

Problematic angles and towers



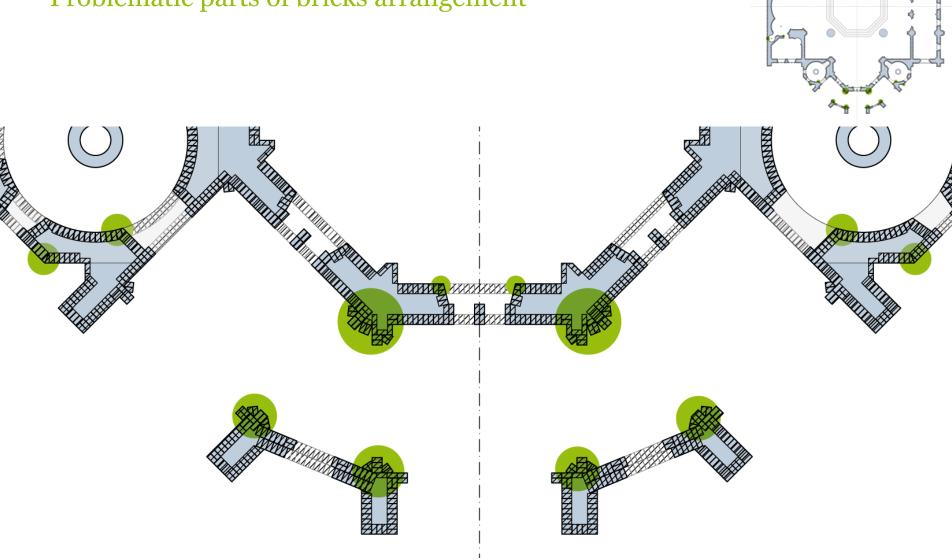


While modeling were problems with **right** angles of walls in entrance part and with fitting octagon tower in the plan appeared. Sketches and calculations helped with better understanding of the building and finding the solutions of the problem.



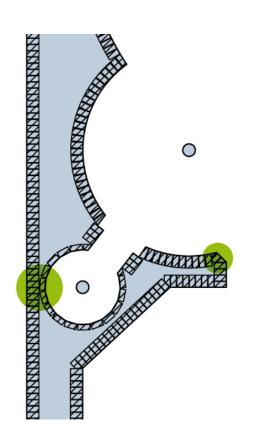
Troubles with the module

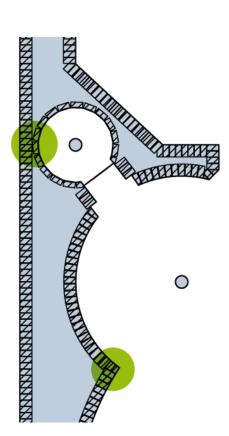
Problematic parts of bricks arrangement

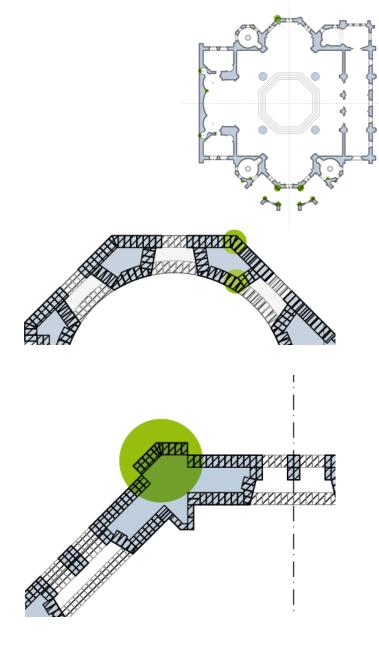


Troubles with the module

Problematic parts of bricks arrangement

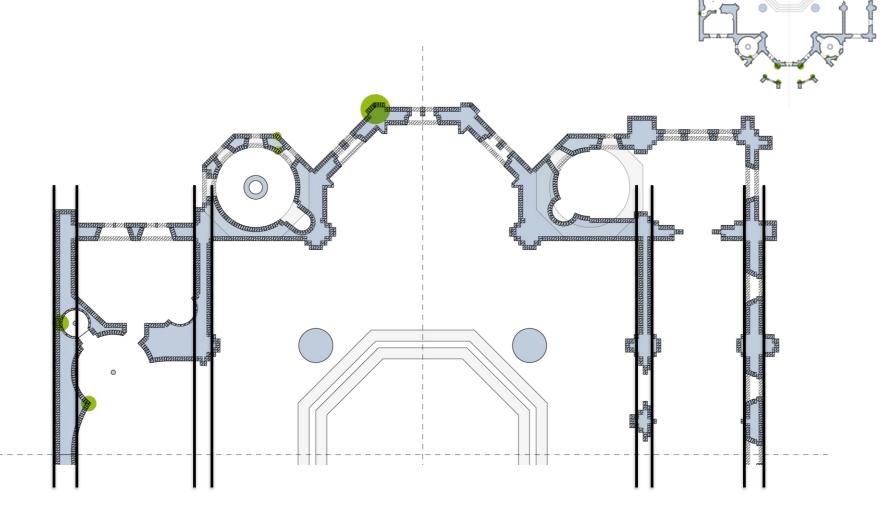






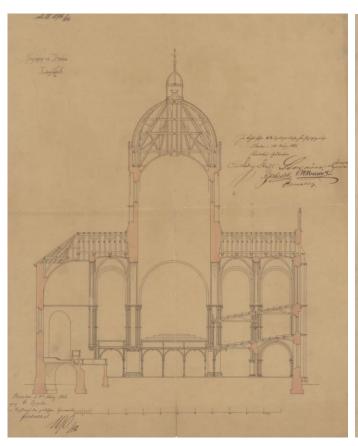
Troubles with the module

Different thickness of symmetrically situated walls



Starting materials for determining heights

Sections and elevations





Longitudinal section of the executive project

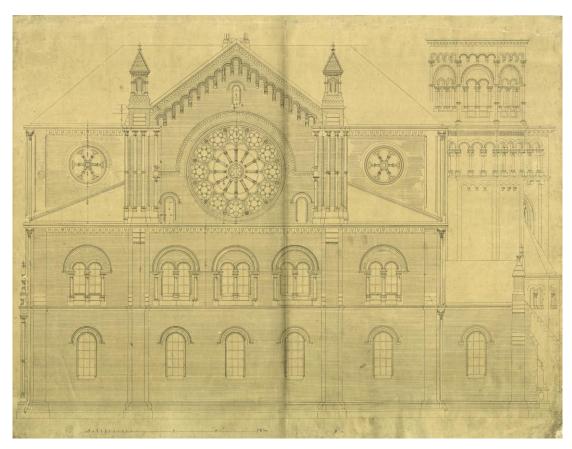
Source: Museum of Architecture in Wroclaw, Department of Building Archives of the City of Wroclaw, Akta Policji Budowlanej, MAt–AB–70588

Dome and tower elevation – additional, later drawing

Source: Stadtarchiv Hannover, Nachlaß Oppler, Mappe 60, Blatt 13.

Starting materials for determining heights

Sections and elevations

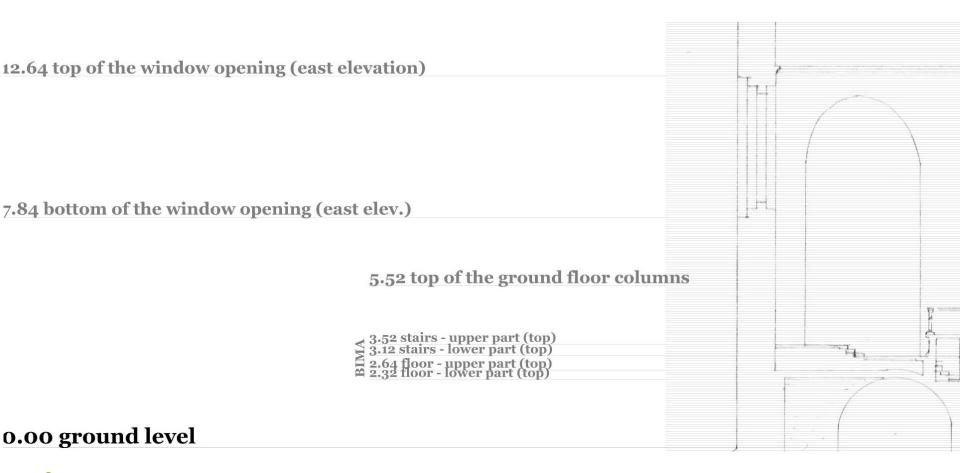


West elevation of the executive project

Source: Stadtarchiv Hannover, Nachlaß Oppler, Mappe 60, Blatt 12.

Division according to the module

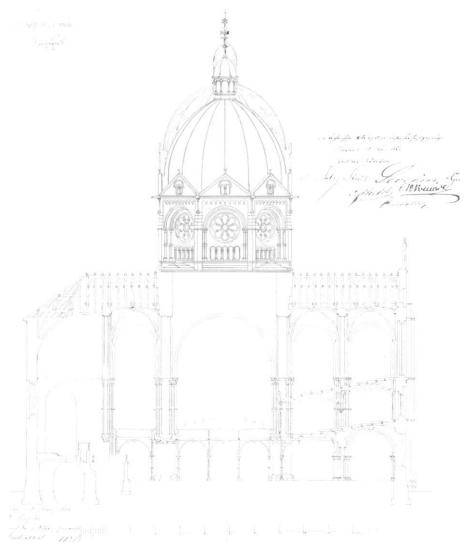
7 cm of the brick height + 1 cm of the joint

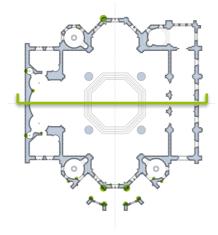


Troubles with the section drawing Differences between section and elevation of a dome ini Ianol iid The dome on an elevation drawing is lower than on the longitudinal section. The elevation drawing was probably a replacement project for this part of a building made after the decision of diminution the height of the dome due to structural reasons.

Combining drawings

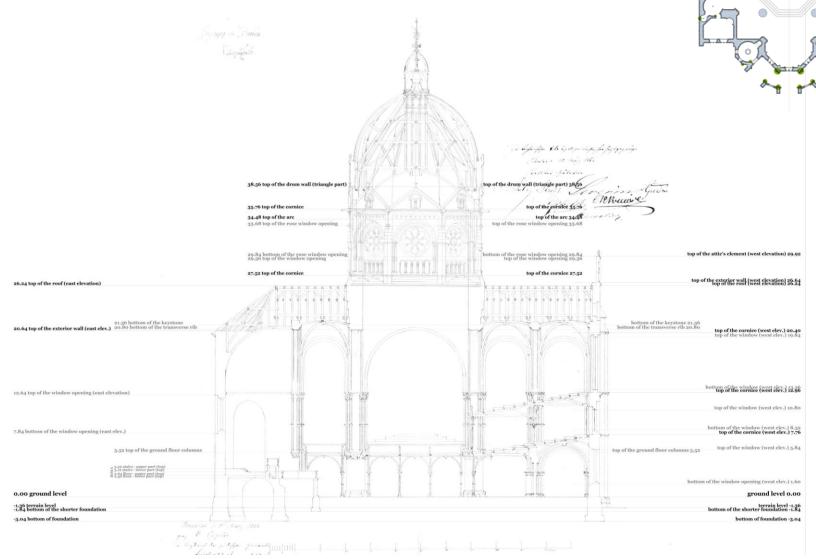
to obtain the latest version of the project





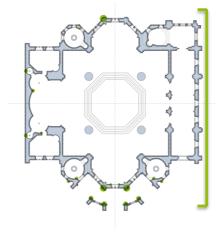
Determining important heights

based on the drawings of the executive project



Determining important heights

based on the west elevation of the executive project



26.80 top of the attic wall			U. A.			top of the roof cornice 26.80	top of the attic wall 26.8
		26.00 top of the roof		top of the roof 26.00	2000 0000 F253		
		24.48 top of the roof cornice		top of the roof cornice 24.48	The state of the s	top of the cornice over window 24.96	
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21.84 bottom of the window opening	100 mg	22.64 top of the lower roof 22.24 bottom of the lower roof 21.92 top of the cornice	an' II 'Ih	top of the lower roof 22.64 bottom of the lower roof 22.24 top of the cornice 21.92	ANT THE PERSON		bottom of the window opening 21.8
	21.52 top of the cornice over rose window		The state of the s			top of the cornice over rose window 21.52	
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Troubles with differences between heights

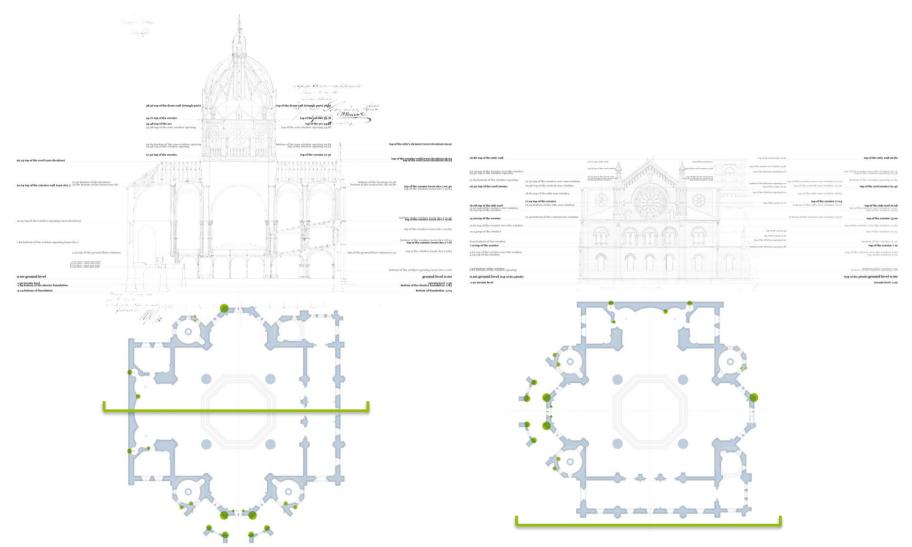
Inaccuracy of drawings / changes in the project





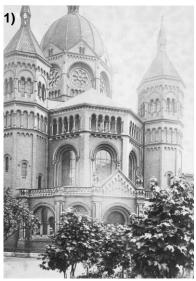
Coordinated drawings

Starting point for modelling synagogue

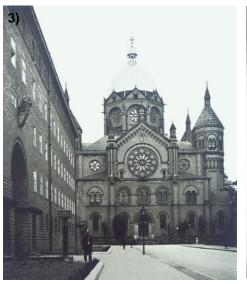


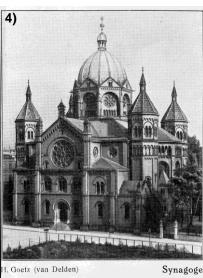
Starting materials for modeling

Iconography and old photos









- 1) Synagogue Herder, New synagogue in Wroclaw, 1885–1920 Source: Bilddatei-Nr. fmkbb8951, © Bildarchiv Foto Marburg.
- **2) Pic. 17, North view of New Synagogue, 1870's** Source: private collection of Maciej Łagiewski.

3) Pic. 21, Piasek, West view of synagogue from Eichbornstraße, 1929

Source: University Library in Wroclaw, Department of Graphic Collections, Building inspection photo. 6815–30.

4) Pic. 27, New Synagogue , southwestern view Source: private collection of Maciej Łagiewski.

Starting materials for modelling

Indetification of photos on a map



Pic. 10, Fragment of Wrocław's section plan in the scale 1:1000 from 1921.

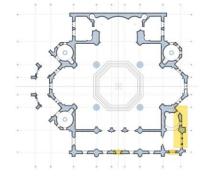
Source: Museum of Architecture in Wroclaw, Department of Building Archives of the City of Wroclaw, MAt–AB–110312.

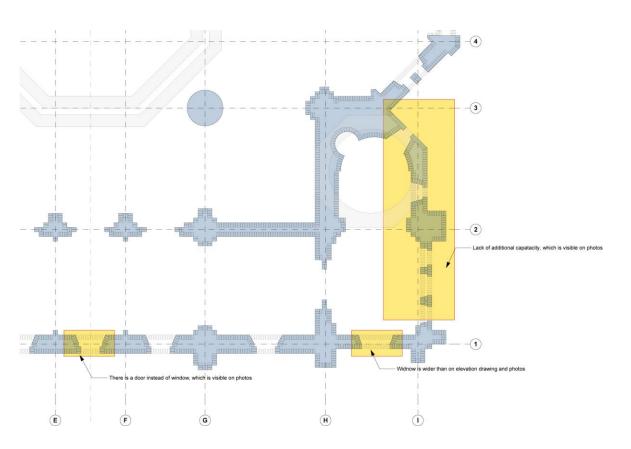
The first step was putting module plan on the map and checking if it fits to synagogue contour. Contour and plan don't fit correctly to each other.

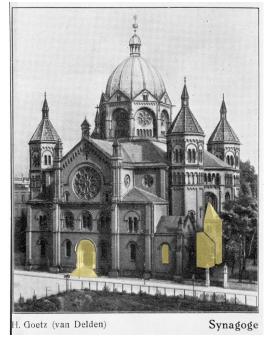
Then the views of each photos were marked on the map. Localization of photos was helpful with creating model of synagogue.

Problems with the starting materials

Differences between plan and a reference photo



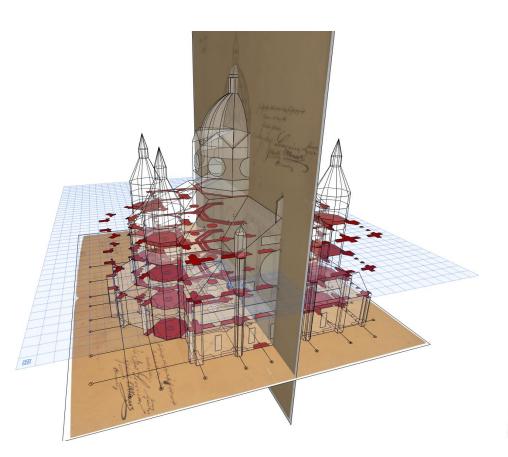




Pic. 27, New Synagogue , southwestern view Source: private collection of Macieja Łagiewskiego.

Working on a glass model

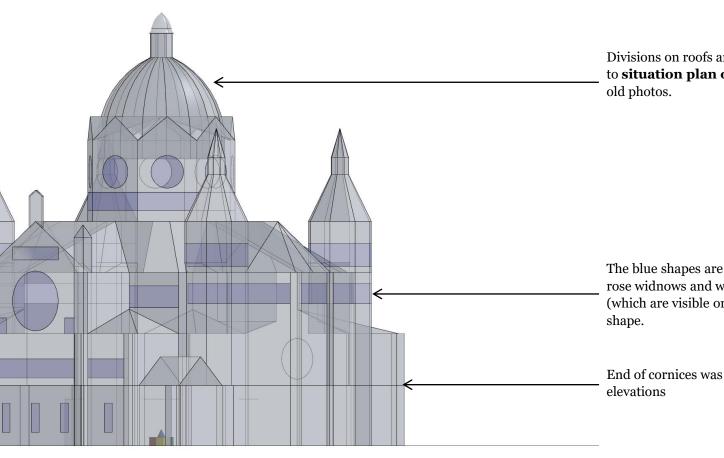
Creating a model





Divisions on glass model

Important heights in model



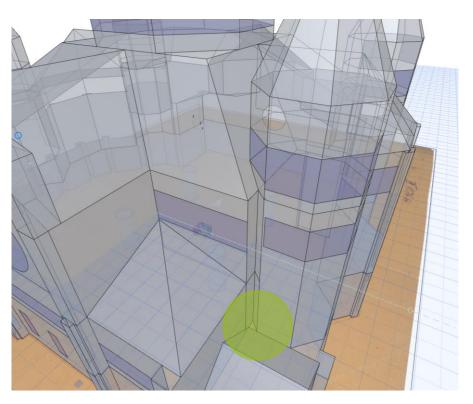
Divisions on roofs and dom was marked correctly to **situation plan of the concept project** and old photos.

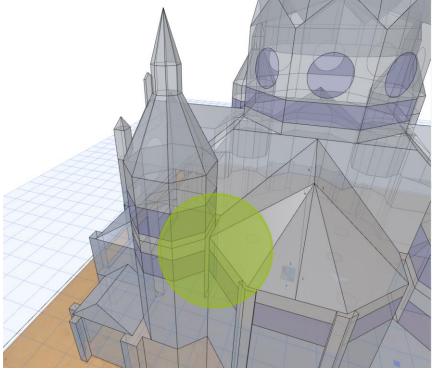
The blue shapes are the space for windows. Only rose widnows and windows on the ground floor (which are visible on the plan) have the right shape.

End of cornices was marked on model by lines on elevations

Problems with glass model

Connection between towers and synagogue





Solid model

Current stage of modeling



Next steps in modeling What problems should we resolve?

- Find sources about additional capaticity on southern elevation
- Find sources about connection between towers and building
- Prepare windows heights on the southern and northern elevation
- Create simple model of interior