

The architectural concept

The planned building will be one of the largest buildings in Cluj-Napoca, so it will be a dominant presence in the urban scale. Its elevated position makes the volume visible from several parts of the city. The building will also be the last element of the existing hospital complex and its relationship to the smaller buildings is of particular importance. These two aspects require the image of a simple, compact building that will characterize its surroundings as a kind of "origo". Despite the intricate contour, oblique corner, the sloping terrain and the predestination for a fragmented building solution, the proposal shows a restrained overall picture. The striking plasticity of the facade is an offset to the simple mass of the building. The plan aims to create a contemporary transcript of the beautiful and detailed brick architecture of the last century that can be found all over the hospital complex.

The facade shading system made out of horizontal concrete slabs and thin brick vertical slats help shade the generous glass openings. The thin facade structures have a filigree effect. The interior functions are grouped around a single courtyard. The size of the inner courtyard is approx. 16 x 24 meters, which provides a pleasant internal ratio. The compact mass is released by two large openings. These holes help illuminate and ventilate the middle yard, as well as provide a green surface connection to the patient room levels. The relationship between the building and the city is twofold. The plaza in front of the main entrance is designed to be a public space for residents of the area where you can relax, walk or meet with others. The plaza is connected to the small church by a sloping green park.

This green area could also serve as a city park. The building is connected to Babes Street by a sloping area planted with vegetation, making the image of the house less monumental. This area is not public, but the slope overgrown with trees offers a nice and calming view from the street. The foyer varies between the elegant spaces with high ceilings and the friendly, intuitive sequences of inner spaces. Due to the transparency and the light from the inner courtyard the building has an easily understandable space structure.

Structure

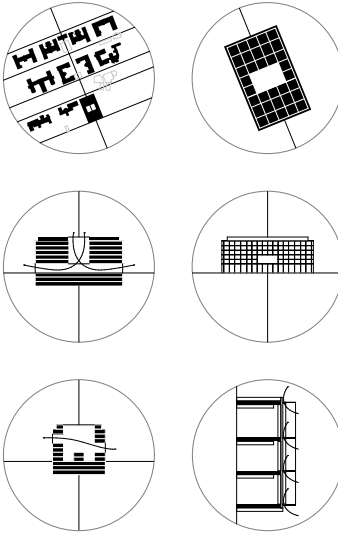
The structure of the proposed building is reinforced concrete pillars (and two cores around the staircases) with a 7.8 x 7.8 m grid which grows up to 9 m at the staircases. This grid can accommodate the bedrooms in the ward levels and it is also optimal for the parking system. The mechanical level is located at the top of the house, which not only serves the operating unit below, but also provides space for the helipad.

Material use

The defining material of the facade is brick, which, together with the raw reinforced concrete slabs, provides durability for decades and makes frequent renovations of the facade unnecessary. In addition to the glass surfaces, there are operable facade panels covered with a thin ceramic layer. The rooms are not fully glazed, but the large fix glass in the middle provides adequate and elegant lighting.



DETAIL OF THE INNOVATIVE ELEMENTS AND ENERGY CONCEPT - SECTION AND FACADE
scale 1:300



CONCEPT DRAWINGS



ENERGY CONCEPT OF THE BUILDING



FACADE FROM VICTOR BABES STREET
scale 1:500

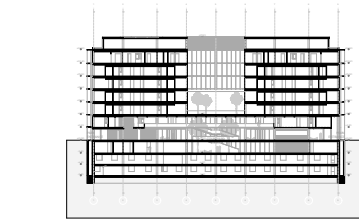


FACADE FROM ALEEA STUDENTILOR
scale 1:500

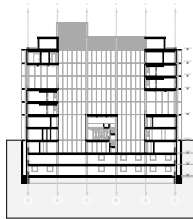
PROPOSED FUNCTIONAL STRUCTURE

Department	Number of beds	Estimated usable area (m ²)
RENAL TRANSPLANT AND UROLOGY DEPARTMENT	85 beds	
Urology I Division (Includes 5 beds for children)	35 beds	950
Urology II Division	30 beds	750
ICU Kidney Transplant Ward	10 beds	310
Nephrology Ward	10 beds	250
Dialysis Division	4 beds	160
Day Hospitalization Division	8 beds	85
PULMONOLOGY & PHTHISIOLOGY AND THORACIC SURGERY DEPARTMENT	67 beds	
Pulmonology & Phtisiology Division	40 beds	88
Thoracic Surgery Division	27 beds	556
CARDIAC SURGERY AND HEART TRANSPLANT DEPARTMENT	25 beds	
Cardiovascular Surgery Division (3 beds for children)	20 beds	430
Transplant Division	5 beds	190
GASTROENTEROLOGY AND LIVER TRANSPLANT DEPARTMENT	40 beds	
Gastroenterology Division	30 beds	526
Liver Surgery Division	10 beds	345
Liver Transplant Division	5 beds	210
ANESTHESIA & INTENSIVE CARE UNIT	45 beds	
AIC Ward for Kidney Transplant and Urology (5 beds for kidney transplant)	16 beds	393
AIC Ward for Pulmonology & Phtisiology and Thoracic Surgery	16 beds	246
AIC Ward for Cardiac Surgery and Heart Transplant	9 beds	270
AIC Ward for Gastroenterology and Liver Transplant	9 beds	240

COMMON MEDICAL SERVICES		
Access area / Office of admissions - (diagnoses)	-	905
Integrated outpatient clinic	-	430
Emergency Department (CPU)	-	317
Imaging / Radiology Department	-	425
Operating rooms	-	1600
Sterilization	-	161
Pharmacy	-	345
Laboratory	-	530
Transfusion unit	-	182
Pathological Anatomy	-	410
Research and Education	-	525
TECHNICAL & ADMINISTRATIVE SPACES		
Food block (kitchen & cafeteria)	-	188
Technical & Logistics unit	-	2032
Laundry	-	278
Administrative unit	-	645
Chapel	-	46
Helipad	-	317
Underground parking	-	2104
NUMBER OF BEDS / CONTINUOUS HOSPITALIZATION	240 beds	240
NUMBER OF BEDS / DAY HOSPITALIZATION	12 beds	12
Usable area (estimated)		18706 sqm
Area of circulations (estimated) + common areas		5754 sqm
Gross floor area (estimated)		24470 sqm
Gross floor area (estimated) corresponding to each hospital bed		102 sqm/bed



B-B SECTION
scale 1:500



A-A SECTION
scale 1:500

SUMMARY OF ESTIMATED USABLE AREAS AND NUMBER OF BEDS



PERSPECTIVE ABOUT THE INTERIOR COURTYARD