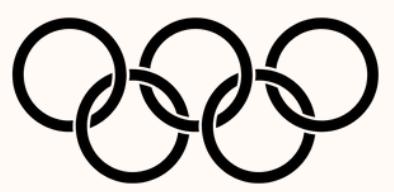




CENTAR BIJELA STAŽA | PROPOSAL

Our Vision

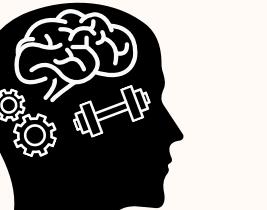


WINTER OLYMPICS 1984



HEART OF THE COMMUNITY

The new center becomes a vibrant, welcoming meeting place for people of Dobrinja. It fosters social cohesion, reinforces neighborhood identity, and offers an inclusive environment where residents of all ages and backgrounds feel connected, supported, and at home.



GROWING & RECHARGING

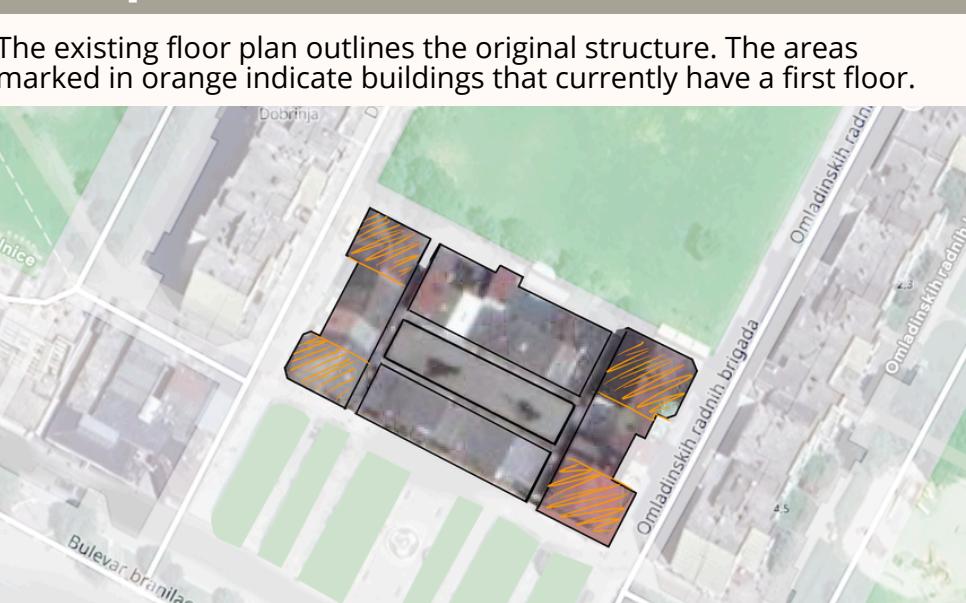
By combining sports, culture, and education, we create a vibrant and dynamic environment that fosters personal growth, mental and physical well-being, and meaningful relaxation, encouraging active lifestyles, social interaction, and a culture of lifelong learning for all generations.



SUSTAINABLE FUTURE

The center is built for long-term sustainability, featuring energy-efficient design, adaptable and multi-functional spaces that meet the needs of today's diverse community, while actively contributing to a greener, more resilient and inclusive future for Dobrinja.

Site plan of situation



The areas marked in blue represent proposed extensions where we plan to add a full first floor to the side buildings, replacing the small first-floor sections currently shown in orange. Additionally, we intend to demolish the areas marked in red. The pink-marked area will be retained.



The new design features rooftop terraces, green roofs with solar panels.

Functional layout

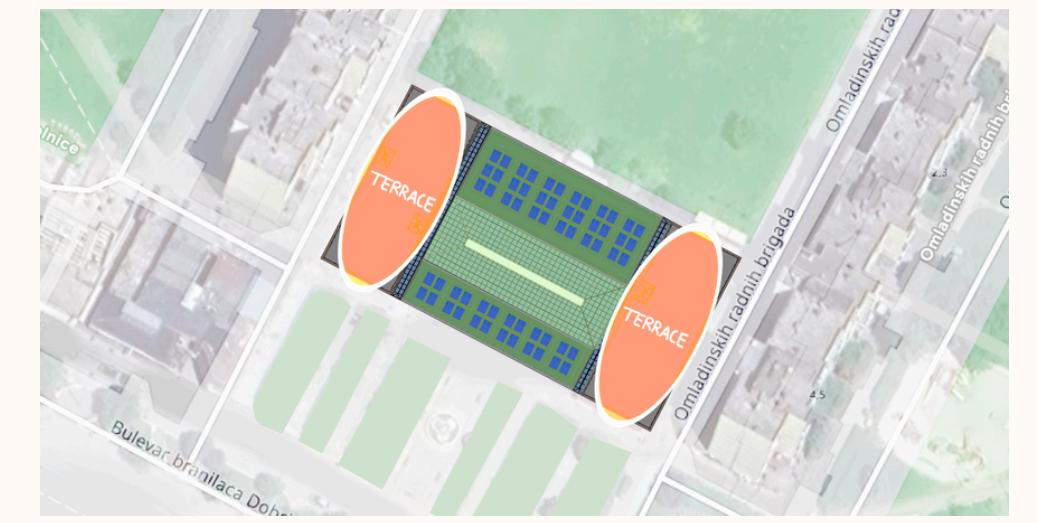
The functions are interconnected to create a vibrant, multifunctional space where culture, sports, leisure, and commerce come together.



The central garden acts as the heart of the design, naturally guiding visitors between the dining venue, shops, museum, and artisan markets. This encourages social interaction, enhances the overall experience, and ensures an efficient flow of people. As a result, the space becomes attractive to diverse audiences and gains both social and economic value.



In the left-side building, there are study and work spaces for both youth and adults. In the right-side building, you'll find a community center, as well as a sports and Olympic-themed arcade. This arcade includes features like interactive sports-related games, inspired by the Winter Olympics aimed especially at engaging younger audiences.



The rooftops offer terraces where people can relax and enjoy the view, enhancing the overall liveliness and accessibility of the building.

Schedule of requirements

Space

	M ²
Left, Ground Floor: 4 small shops	75
Left, Ground Floor: 1 central shop	116,83
Left, First Floor: Study room + balcony	155
Left, First Floor: Workspace + balcony	172,96
Left, First Floor: Atelier	194,21
Central, Ground Floor: Dining venue	510,41
Central, Ground Floor: Museum	291,21
Central, Ground Floor: Indoor garden	473,58
Right, Ground Floor: Shop 1	159,72
Right, Ground Floor: Shop 2	153
Right, Ground Floor: Shop 3	139,54
Right, First Floor: Arcade	228,96
Right, First Floor: Community center+ balcony	262,82

Toilets and technical rooms are on the ground floor

Spatial requirements:

A clear and functional layout ensuring plenty of natural daylight, proper ventilation, and integration of green spaces. The building's scale and design should harmonize with the surrounding neighborhood.

Technical requirements:

High-quality insulation for energy efficiency and comfort, compliance with fire safety standards, installation of solar panels, effective rainwater management systems, and modern HVAC for heating and cooling.

Sustainability:

Use of locally sourced, sustainable materials with a focus on reusing original bricks. Incorporation of a green roof and solar panels to reduce energy consumption and support a healthier environment.

Regulations:

- Netherlands: Adherence to the Dutch Building Code (Bouwbesluit), including strict accessibility and safety standards.
- Bosnia: Compliance with local building codes and environmental laws, ensuring fire safety, accessibility, and sustainable practices according to national and European guidelines.



Sustainability strategy

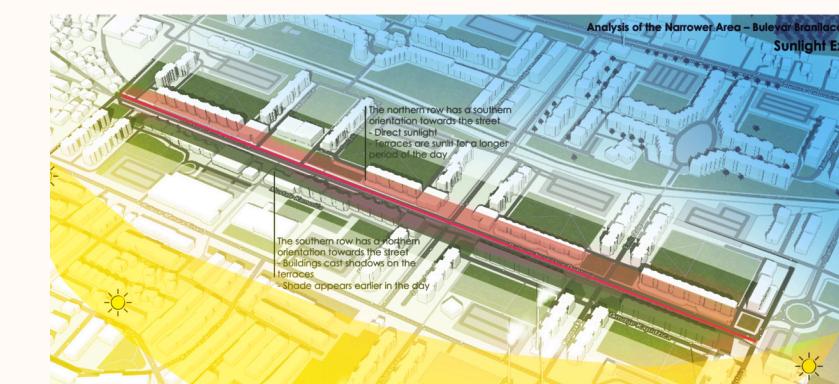
The roof of the central section of the market hall will be designed to support a healthier and more sustainable Dobrinja. Given Sarajevo's climate, hot summers, cold winters, and heavy rainfall, we propose a combination of solar panels and a green roof.

Solar panels will be installed on the sunniest parts of the roof, especially on the southern-facing slopes, to generate renewable electricity. This energy can power the building's lighting, hospitality areas, and community events, reducing reliance on the grid and lowering emissions.

Around the panels, a green roof will be planted with hardy, drought- and frost-resistant species such as sedums and native herbs. This layer helps cool the building in summer, insulates in winter, and absorbs rainwater to prevent flooding. It also improves the neighborhood's appearance and attracts bees, butterflies, and birds.

This dual system makes smart use of the climate, is affordable and easy to maintain, and contributes to a greener, more resilient community space. The roof becomes more than just a cover, it becomes part of the neighborhood's sustainable future.

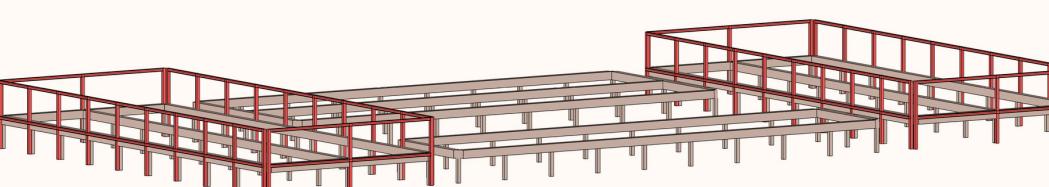
Sunlight exposure



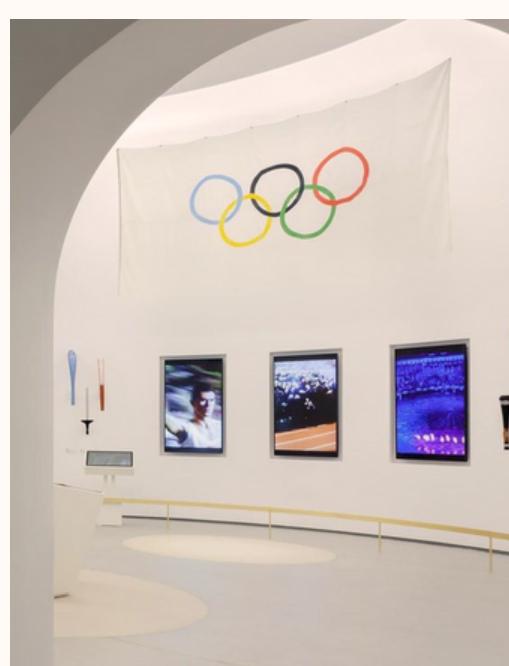
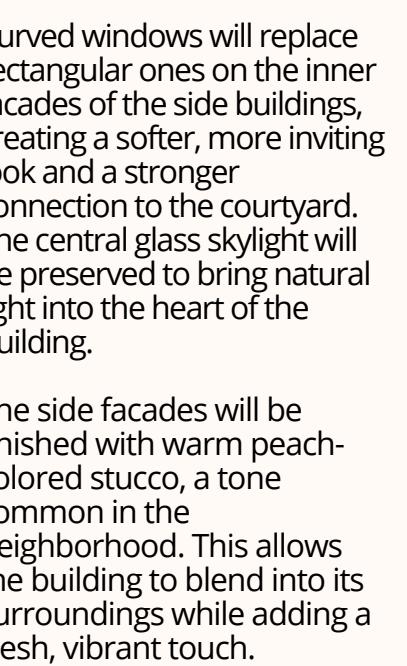
The new construction involves adding a steel structure on top of the existing reinforced concrete frame. The original building has concrete columns spaced 4 meters apart, but this concrete frame alone is not strong or flexible enough to safely carry the load of an additional floor.

To determine this, a buckling analysis was performed, which showed that the existing concrete structure could not handle the extra weight of a new level. Because of this limitation, simply building on top of the concrete frame was unsafe. Therefore, a hybrid approach was chosen:

- The existing concrete frame is preserved to maintain what is structurally sound.
- A new steel framework is introduced to carry the new floor's load and to reinforce the overall structural stability.



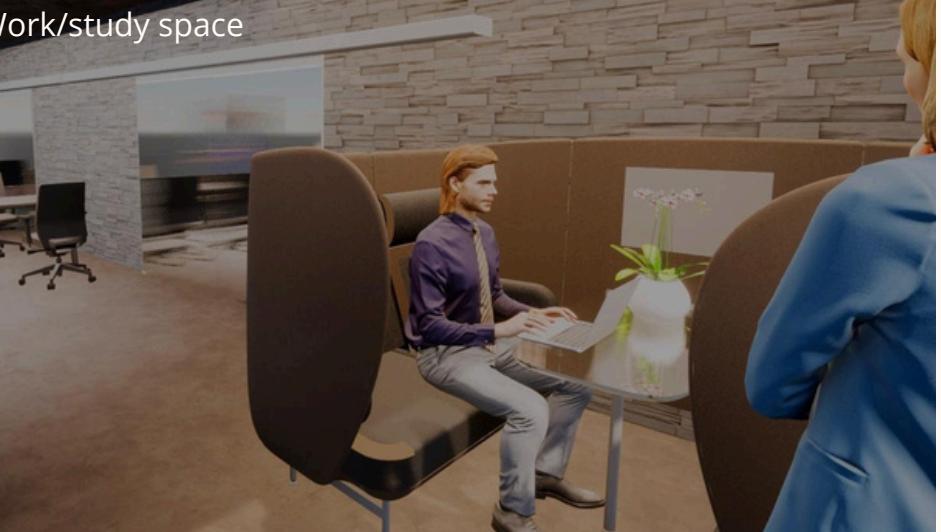
References



A museum dedicated specifically to the 1984 Winter Olympics in Sarajevo highlights the historical and cultural significance of the event for the city.

This reference connects both the local community and visitors to that unique period, strengthening the identity of the center.

Visuals



Materials



White brickwall



Peach colored stucco



Wooded slats



Glass skylight

For the facade of the central buildings, we plan to use peach-colored stucco to give the architecture a more vibrant appearance. The smooth stucco finish will contrast nicely with the rough texture of the brickwork.

The balcony columns will be clad with wooden slats to introduce a complementary material combination.

We want to retain the existing glass skylights and additionally add a new glass roof in the center to cover our garden.

Delivery options

The following sources were consulted to verify the local availability and suitability of construction materials for the renovation project.

Material	Application	Availability	Supplier(s)
EPS	Wall insulation	Available	EPS Laštro
PIR	Roof insulation	Available	Alternativa Sarajevo, Idelco
Ceiling insulation	Ceiling insulation	Available	A-Z Izolime
Aerated concrete	Roof edge	Available	Baucentar Sarajevo
Green roof (sedum)	Flat/lower roofs	Available	Sempergreen, local landscapers
Elevated PV panels	Above green roof	Available	Profelec, Comtrade
Light-colored cladding	Facade finishing	Available	Local suppliers
Wooden slats	Balcony cladding	Available	Bosniawood
Steel	Construction	Available	Technology Equipment Factory, Fering
Solar panels	On green roof	Available	Profelec, Comtrade



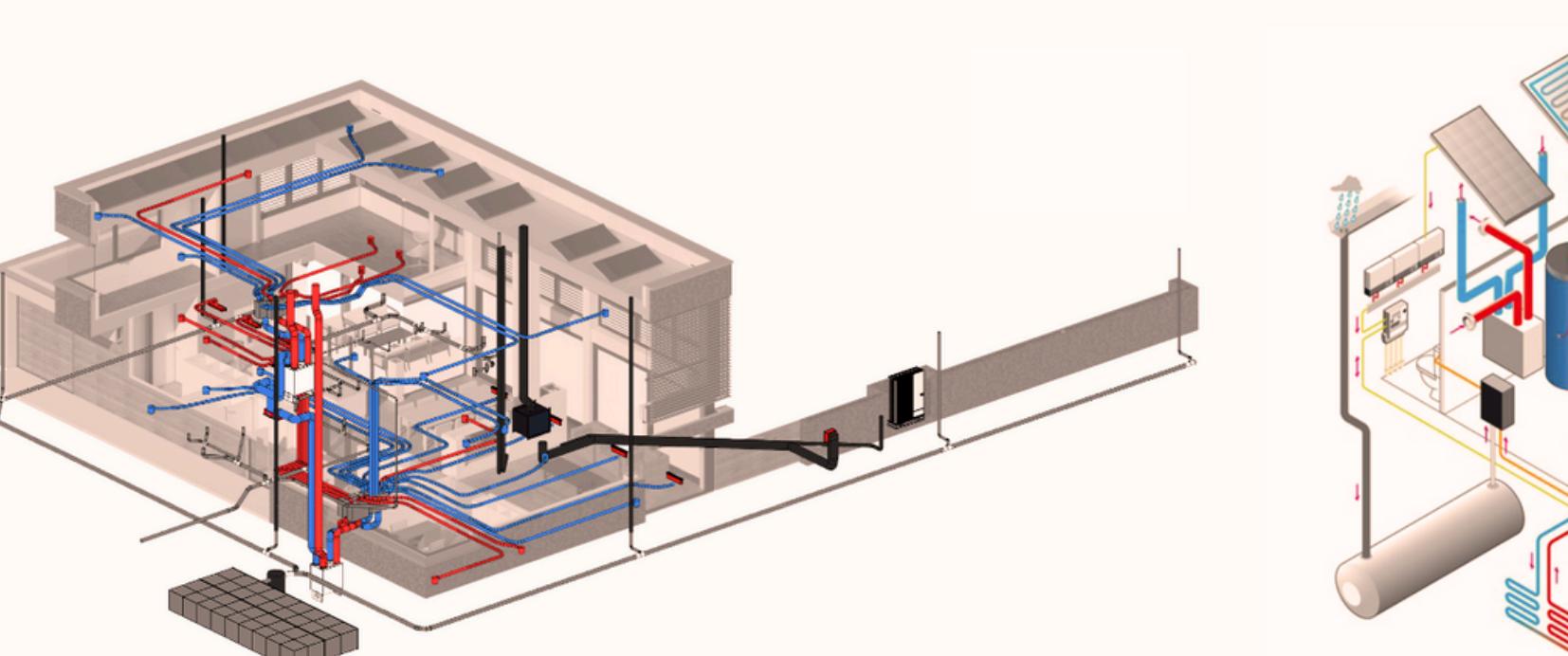
Floorplans (1:200)



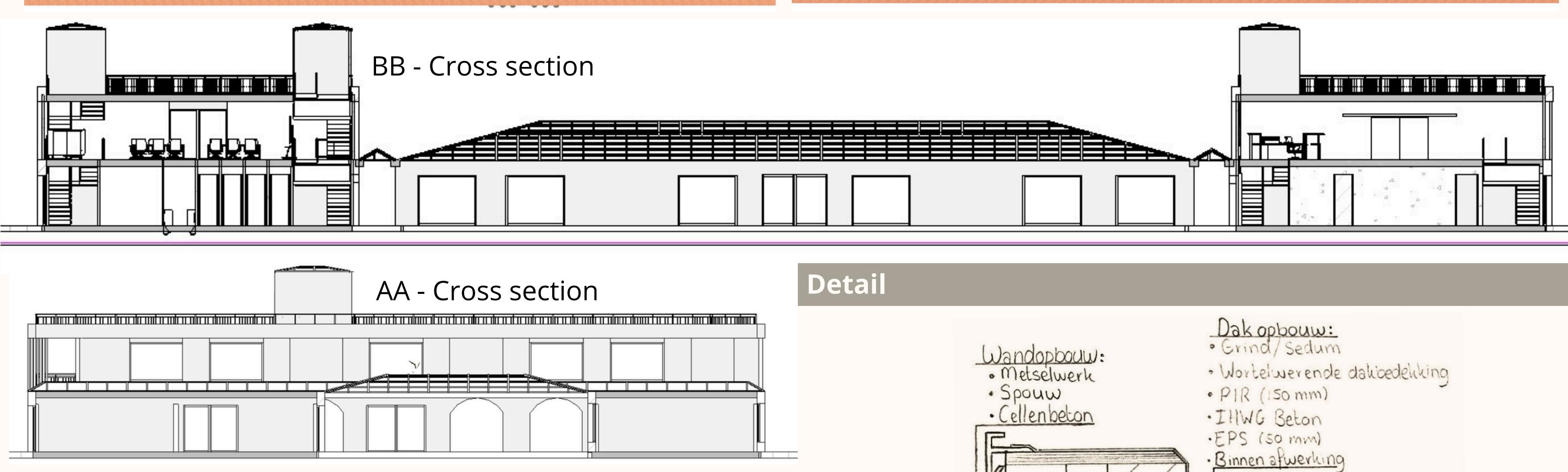
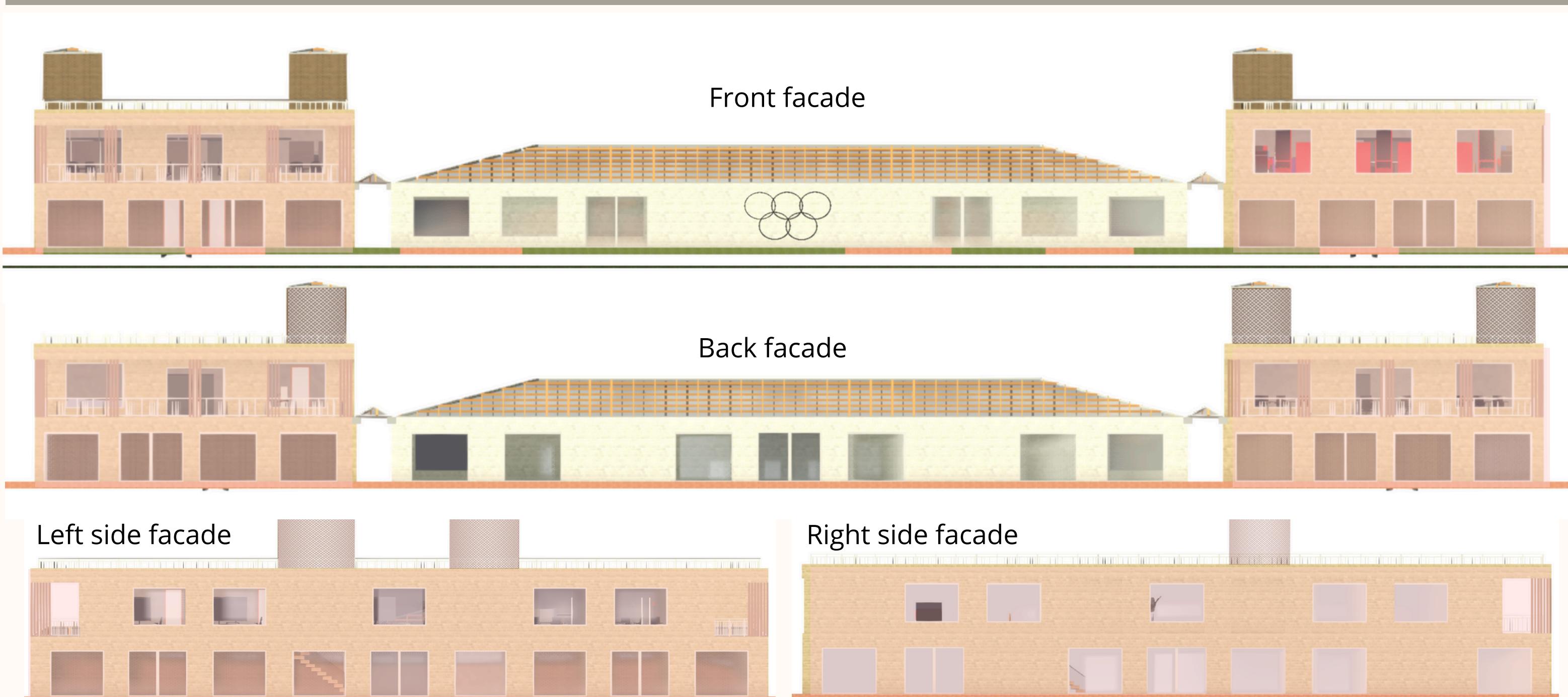
Installations

Centar Bijela Staza is designed with sustainability at its core, with solar panels playing a central role. The rooftop solar system generates renewable energy that powers the heat pump, ventilation system, and other electrical needs making the entire residence fully gas-free and energy-efficient.

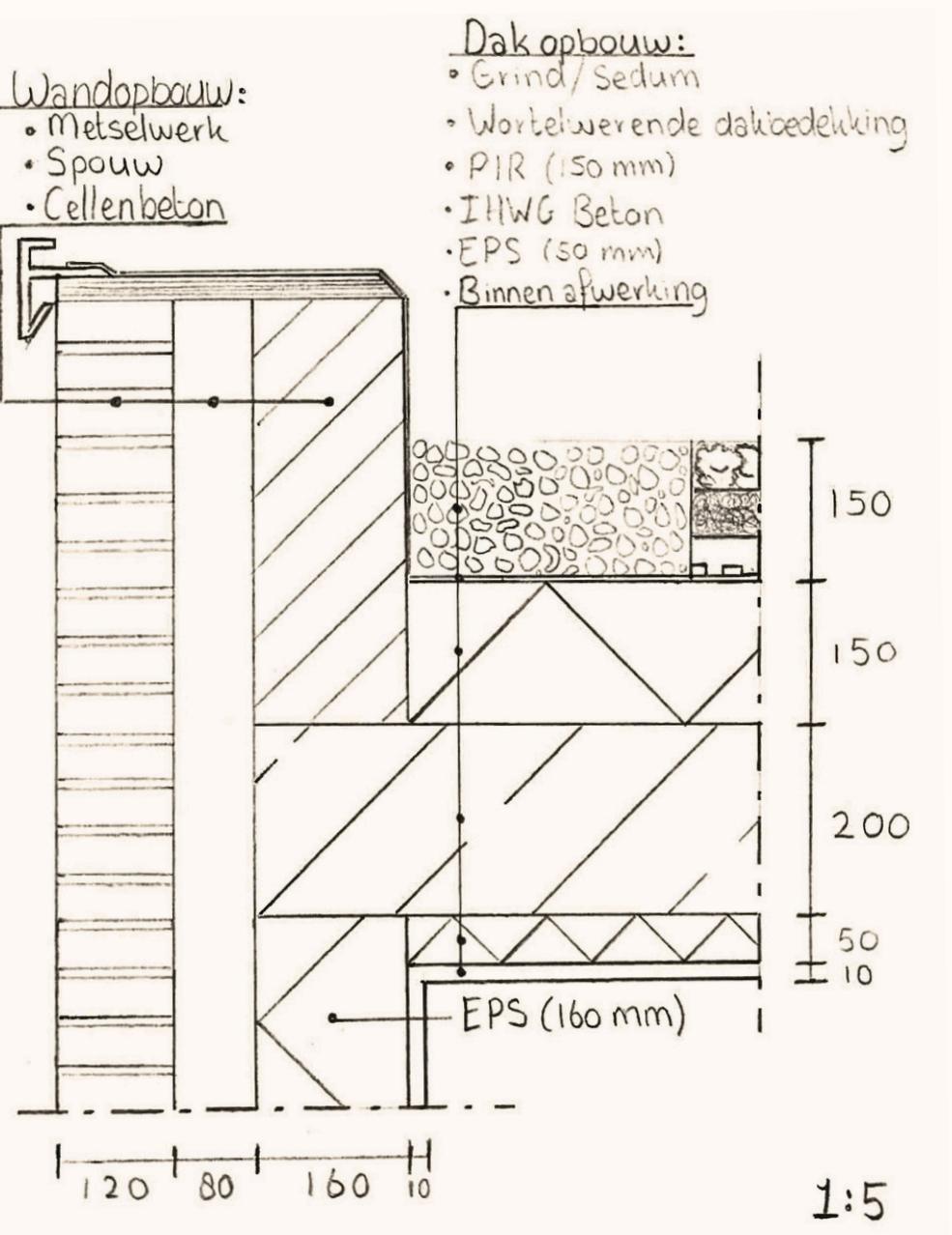
In addition to solar energy, the center features a heat pump for both heating and cooling, a balanced ventilation system with a heat recovery unit, and a rainwater infiltration system using Q-bic crates. However, it is the solar panels that provide the foundation for this sustainable setup, enabling year-round comfort with minimal environmental impact.



Façade views (1:200)



Detail



Renders

