



FUTURE  
SCHOOL  
FOR  
UKRAINE  
EXPLANATORY NOTE



## Contents

Main Concept of the Project .....	p. 3
Architectural Concept .....	p. 4
Aesthetic Cultural Identity .....	p. 8
Energy Efficiency .....	p. 10
Community Needs .....	p. 11
Shelter.....	p. 12
Israeli Experience .....	p. 15
Our Proposal.....	p. 16
Immersion in the Issues of Modern Education .....	p. 18
Goals of Modern Education .....	p. 19
Human-Dimensionality in State Policy .....	p. 20
Common and Administrative Block .....	p. 21
Elementary School.....	p. 23
High School.....	p. 24
Sports Block.....	p. 25
Dormitory.....	p. 26
Backyard .....	p. 27
Inclusivity of Space.....	p. 28
Summary.....	p. 28
Areas.....	p. 29



## Main Concept of the Project

Designing a school for central and eastern cities of Ukraine is a challenge that requires consideration of the historical, social, and architectural features of the region. We aim to create an educational space that not only meets modern standards but also integrates organically into the existing urban fabric and new areas that will be rebuilt after the war. Our main idea is to create a school that will be a symbol of hope, revival, and innovation. This space should become not only a place for learning but also the heart of the community, open to all its members. We strive to achieve this through a harmonious combination of functionality, safety, accessibility, and aesthetic appeal.

### Key Design Elements

**Adaptive Solutions:** Flexible design that allows the school to be easily adapted to different sites, conditions, and needs.

**Economic Efficiency:** Use of affordable materials and technologies, modularity that reduces costs without compromising quality.

**Material Availability:** Choosing materials based on their availability in local conditions, considering both cost and logistics.

**Safety:** Integration of modern safety standards, incorporating secure shelters that can be used during the educational process and as civilian shelters in emergencies.

**Modern Teaching Methods:** Creating a space that supports the latest pedagogical approaches, including interactive and inclusive methods.

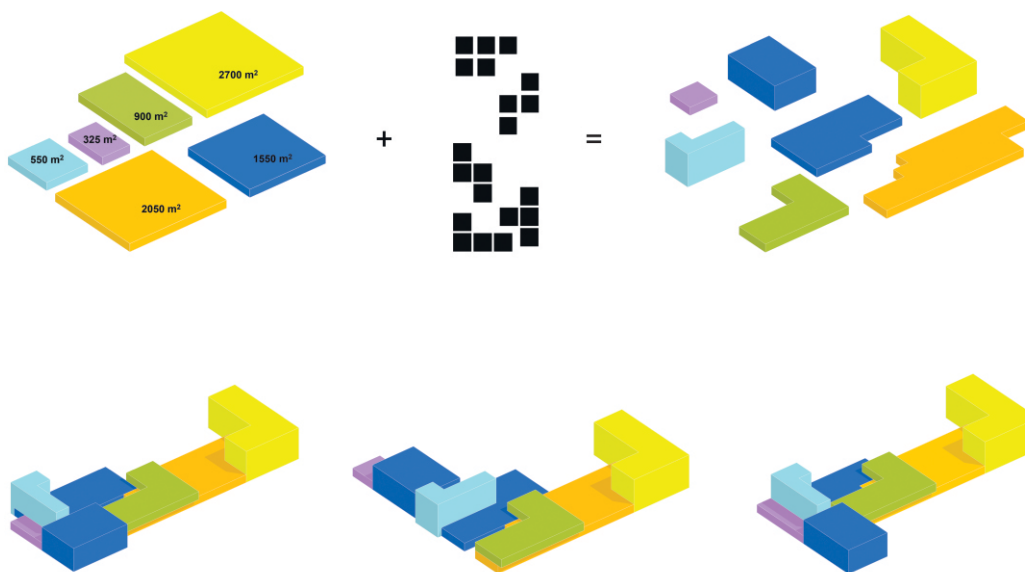
**Community Accessibility:** Opening school premises for use by the local community during non-school hours, promoting social integration and interaction.

**Landscaping:** Ensuring a comfortable and aesthetically pleasing external environment, including green areas, sports grounds, and recreation spaces.

**Aesthetic Acceptability:** Design that considers the historical context and cultural characteristics of the region, creating a harmonious blend of old and new.

**Energy Efficiency:** The school collects rainwater for technical needs and uses solar energy, reducing dependence on external sources and promoting environmental sustainability.

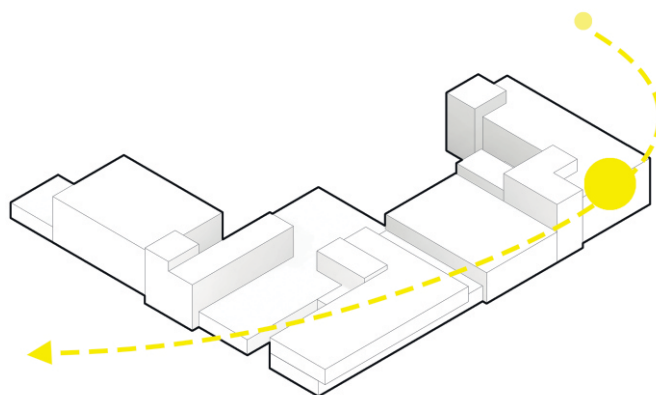
## Architectural Concept



Adaptability of Architectural Composition and IdeasCore Principles of Our IdeaWe have divided the area into general functional blocks, which include:

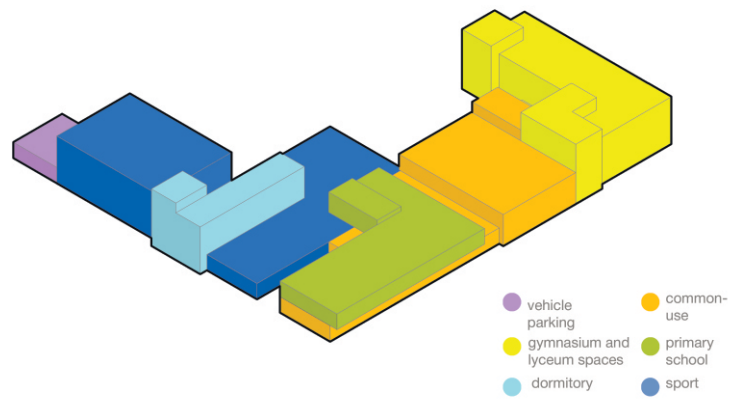
- Common and administrative block
- Elementary school
- High school
- Sports block
- Dormitory
- Technical block

After detailed analysis and consideration of numerous options, we have created an adaptive structure based on the principle of Tetris. This means that the blocks can combine in various configurations while remaining functional.

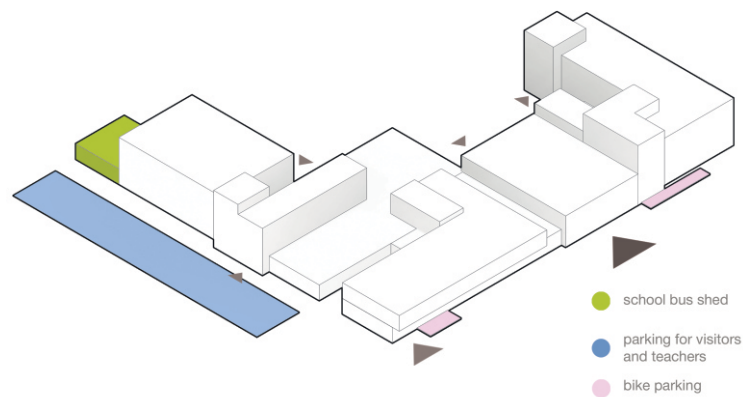


Elementary and High School Blocks: These blocks are oriented to the south in all locations to ensure that daylight reaches all learning spaces.





Common Block: This block is located under the educational buildings and functions as the core, providing transit between all blocks. The sports block, dormitory, and technical blocks can change their location depending on the site.



### Access System to the School Separate Entrances:

The elementary and high schools have separate entrances to optimize student flows and enhance security.

- Central Entrance: Used for community access.
- Sports Block: Access through the dormitory reception, convenient for residents and visitors.
- Emergency Situations: Additional entrances ensure quick evacuation.
- Parking: For parents and staff, facilitating the drop-off of students. Two bicycle parking areas to encourage ecological transportation. Garage for school buses.

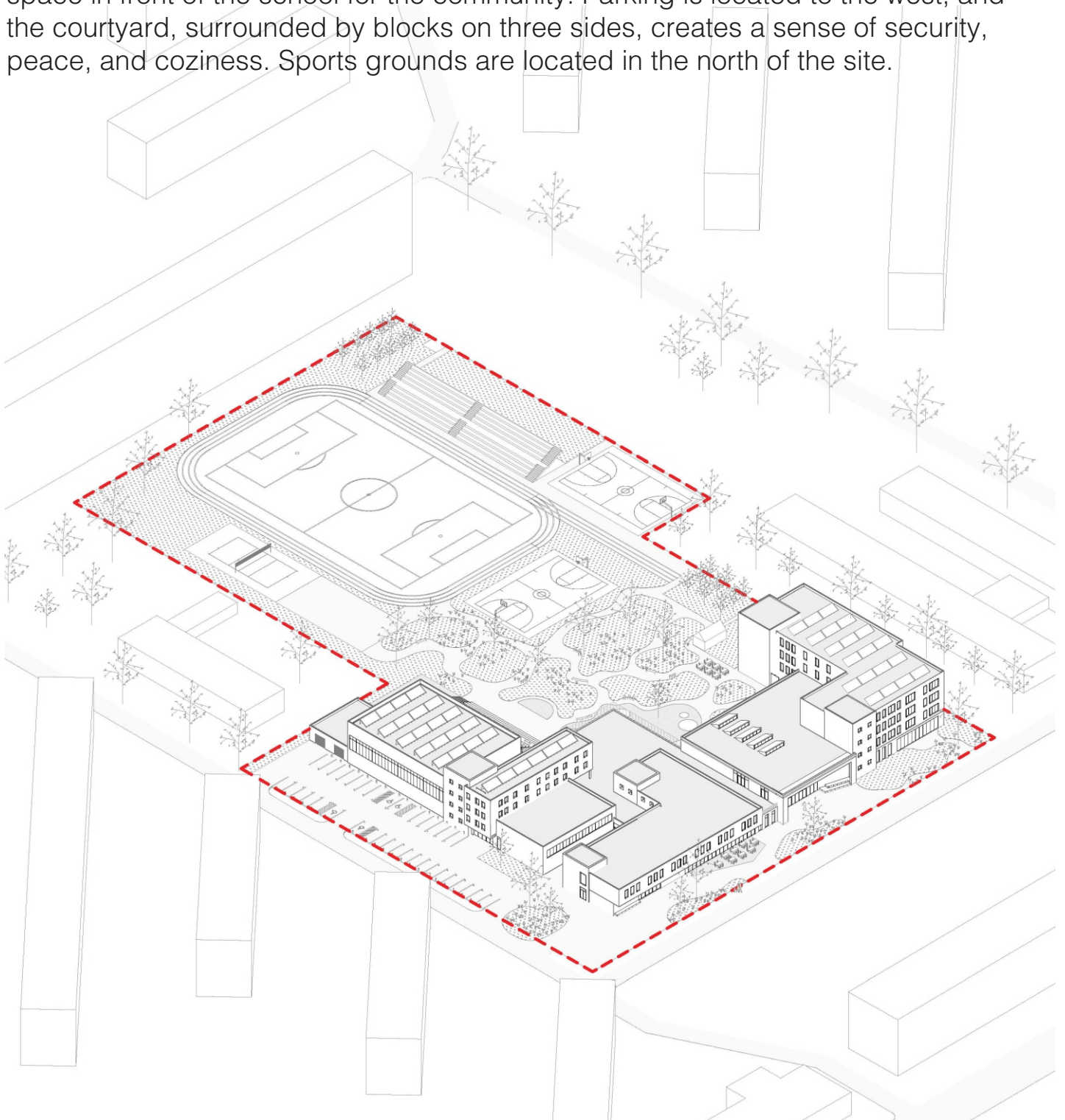
## Adaptability to Different Sites

Modularity is ensured by a standard and simple construction with a reinforced concrete frame with a step of 7.2 by 7.2 meters. This construction allows efficient use of the area for classrooms and is economically justified. It creates a rhythm for the entire school project, which extends to all areas except the large sports hall.

## Hypothetical Situations

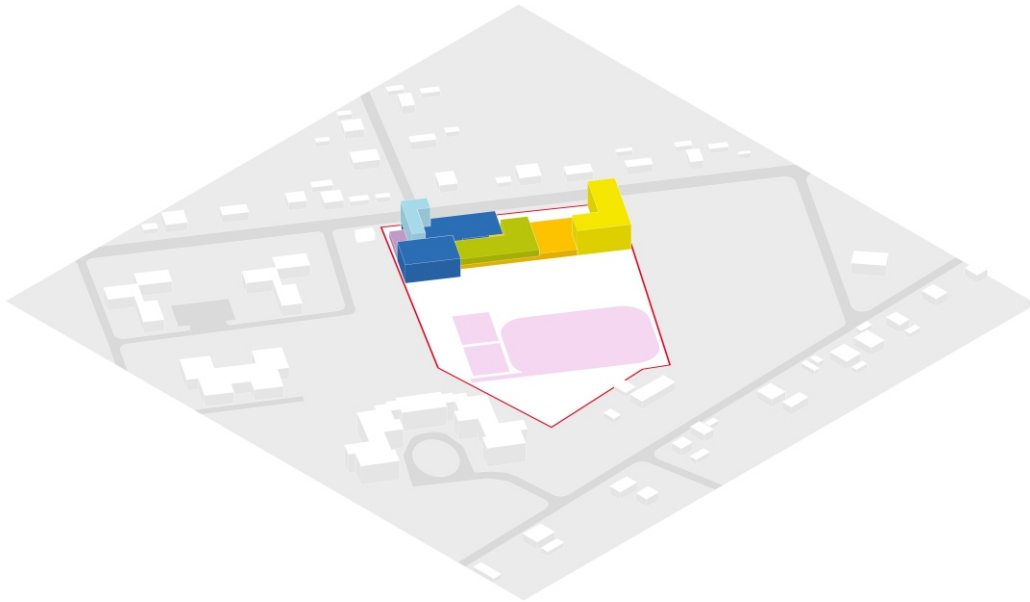
### Situation A

The school is located on the south side of the site, leaving 11 meters of public space in front of the school for the community. Parking is located to the west, and the courtyard, surrounded by blocks on three sides, creates a sense of security, peace, and coziness. Sports grounds are located in the north of the site.



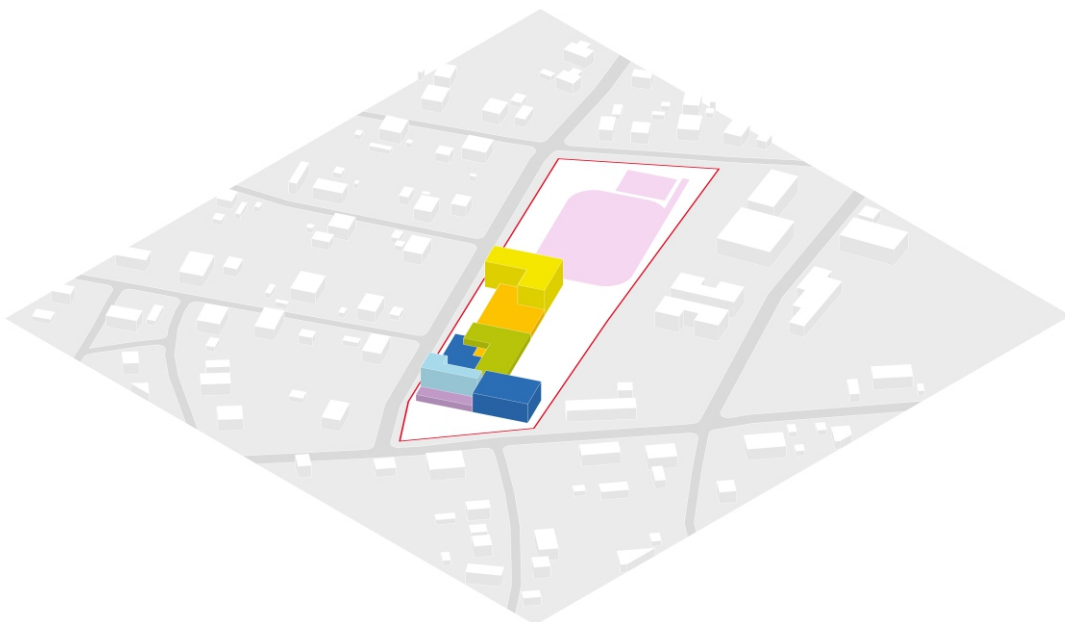
## Situation B

The school is located on the north side of the site. The elementary, high, and common blocks remain in the same configuration, but during adaptation, the common area layout needs to be mirrored since the entrance to the school will be from the north. The sports area, dormitory, and technical area are located in the south of the site.



## Situation C

The educational blocks and the common administrative block remain in the same places. The entrance will be from the north, and the placement of the sports blocks, dormitory, and technical block will change. This flexible approach ensures that the school can adapt to various site conditions while maintaining functionality, safety, and a cohesive architectural identity.





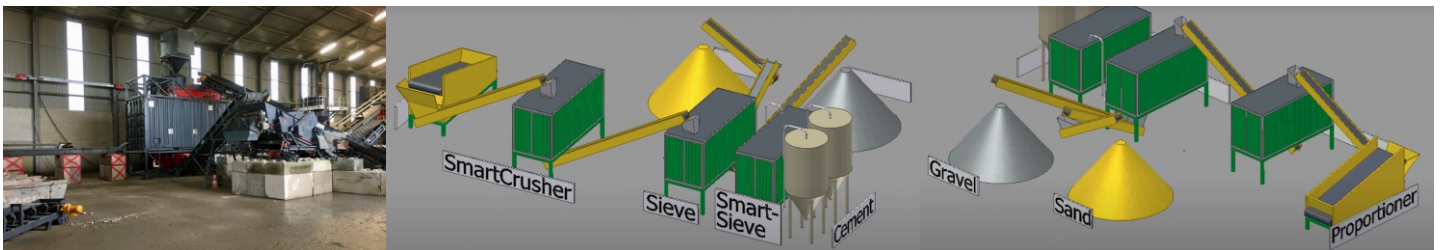
### **Aesthetic Cultural Identity**

The images depict two facades of the school: on the right, the facade of a secondary school in Kharkiv, and on the left, the main entrance to the proposed future school. The school maintains its cultural identity through familiar motifs and architectural "DNA." The use of restrained elements on the main facade helps preserve the connection with the past, creating associations with traditional educational institutions that many remember from their childhood. One of the main advantages of the design is its universality. The building fits organically into both old Soviet-era districts and the most modern residential areas. This is achieved through a style that combines elements of modernism with contemporary features. Such an approach allows the school to become part of various urban contexts while maintaining its functionality and aesthetics.

### **Economic Efficiency** **Use of Available Materials and Technologies** **Recycling Construction Waste**

#### Using Dutch Technologies for Recycling Construction Waste

Post-war, the issue of recycling construction waste becomes extremely relevant. The Netherlands has significant experience in implementing a circular economy, which can serve as a model for us. The Dutch organization Holland Circular Hotspot (HCH) promotes waste minimization and maximum reuse of materials. The main principles include separate collection and on-site processing of waste, the use of secondary materials through the concept of "urban mining," and the implementation of innovative technologies to transform waste into high-quality building materials.



This waste can be used in the reconstruction of our schools and other public buildings. Collaboration with HCH and the adaptation of their best practices to Ukrainian realities will help Ukraine make a significant step forward in developing sustainable construction an environmentally safe future (Holland Circular Hotspot).



When choosing materials, we focus on their availability in local conditions, considering both cost and logistics. The main materials we use include:

- **Reinforced Concrete:** The primary structural material that ensures the strength and durability of the building.

- **Aerated Concrete Blocks:** A lightweight and insulating material for wall construction.

- **Reinforced Concrete Beams:** Used for the floors of the sports hall and auditorium. We consciously avoid using metal, considering the difficulties with the metallurgical industry in Ukraine and the high prices of metal beams and trusses.

### **Finishing Materials**

For facades and interiors, we use various materials, allowing us to create high-quality and modern architecture:

- **Plaster with Marble Chips:** The primary material for facade finishing. It offers an aesthetic appearance and a refined texture. Durability and strength: resistant to wear, damage, and mechanical impacts. Weather resistance: waterproof, UV-resistant, and stable under temperature fluctuations. Environmental friendliness: natural components, safe for health. Marble plaster surpasses conventional plaster in all these aspects.

- **Thermowood:** We chose this material for facades because it provides high resistance to moisture, decay, insects, and fungi. Thermowood is not only reliable but also dimensionally stable, meaning less shrinkage and expansion. Additionally, it has excellent insulation properties and a natural, warm appearance that enhances the building's aesthetic appeal.

- **Equitone Panels:** Used on the central arch, adding a modern and stylish look to the building. These panels are known for their strength, durability, and aesthetic appeal, allowing for unique architectural solutions.

- **Galvanized Profile Sheets:** For stairwells and shelters, providing strength and wear resistance.

- **Triple-Glazed Windows:** For economical and efficient glazing, providing good thermal insulation.

- **Facade Glazing:** Used at the main entrance to create a striking visual impression.

Interior Finishing

The interior finishing includes:

- **Plywood:** An eco-friendly and warm material for wall and ceiling decoration.

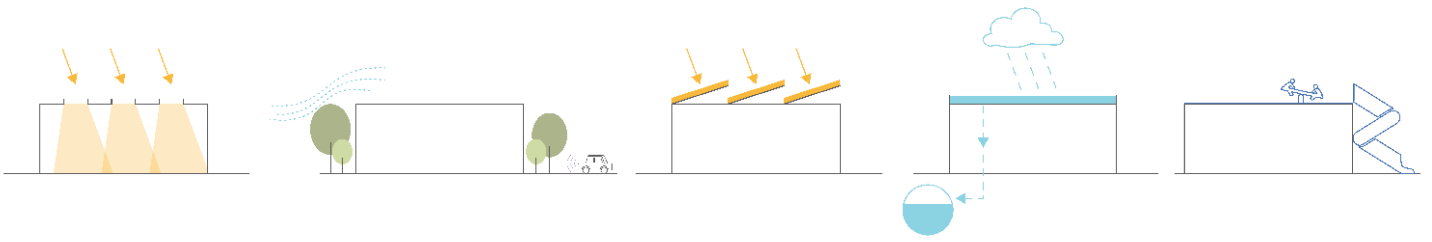
- **Self-Leveling Floor:** A utilitarian solution for floor coverings.

- **Plaster:** Used for interior walls.

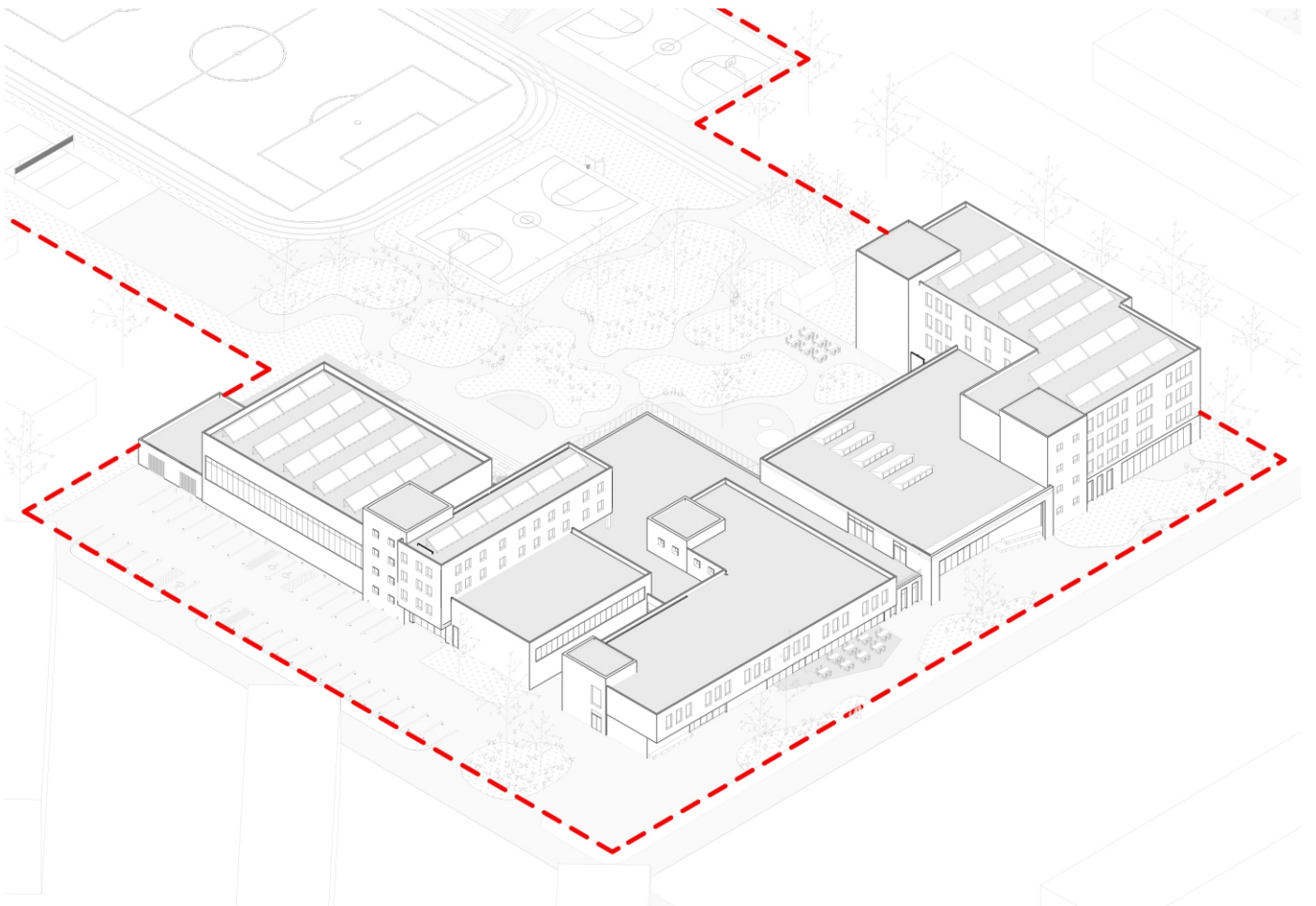
### **High-Quality Architecture with Minimal Costs**

By using high-quality materials in key building elements such as the main entrance and part of the main facade, we create a sense of high-quality, expensive, and modern architecture. A significant portion of the facades is finished with plaster, which reduces costs while maintaining an aesthetic appearance. We also paid attention to creating a high-quality environment with a functional roof featuring a playground, green spaces, and modern sports facilities. These solutions not only enhance the comfort and aesthetic value of the project but also contribute to improving the ecological situation. Thus, our approach to economic efficiency ensures high quality in construction and finishing at optimal costs, creating a comfortable and modern environment for learning and development.

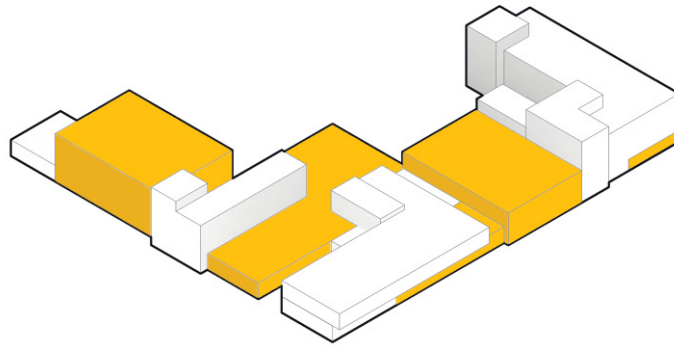
## Energy Efficiency



The rainwater harvesting system allows for the use of natural resources for technical needs, such as watering green areas and sanitary purposes. Solar panels installed on the building's roofs provide additional electricity, reducing dependence on external energy sources and promoting environmental sustainability. The school serves as a beacon of sustainable development, teaching students the importance of caring for our planet.



## Community Needs



A modern school should not only be a place for learning but also a cultural and sports center for the community. We aim to create a space that brings people together and provides them with broad opportunities for development, recreation, and social interaction. The diagram shows the areas that the community can visit.



### Facilities for Community Use

- **Sports Halls:** Open to the community during non-school hours, these halls will allow residents to engage in various sports, dancing, and yoga, promoting physical activity and a healthy lifestyle.
- **Assembly Hall:** A place for veterans' meetings, movie screenings, theatrical performances, and public hearings, becoming the center of cultural life for the community.
- **Cafeteria:** The school cafeteria can be used for community events and communal meals, promoting social integration.
- **Laboratories and Workshops:** Open for community projects, these spaces will encourage skill development and interests in various fields.
- **Outdoor Sports Grounds:** A large football field, basketball, and volleyball courts will become places for active recreation and sports competitions.

### Dual Use of Premises

A smartly planned schedule for community use of the premises makes the school an extremely efficient building. Such a multifunctional school enriches the city by providing additional opportunities for residents. It inspires the community to develop. Access is arranged so that the community can enter only the designated areas, which are equipped with all necessary facilities.



## Shelter Concentration or Dispersion?



### Visual Evidence and Case Studies

- **First Image:** The photo shows a shopping center with a sports hall where an Olympic-sized swimming pool was located on the second floor with a 400 mm thick reinforced concrete slab. These same parameters are used in the modern DBN (Ukrainian building codes) for anti-radiation shelters in Ukraine.
- **Second Image:** This image depicts the same building after a direct hit by a "Kinzhal" missile. It clearly demonstrates that shelters of this format cannot withstand such a load.
- **Third Image:** The photo shows the Mariupol Drama Theater, where the word "CHILDREN" was written in front of the entrance, which did not prevent the enemy from attacking. The enemy targets concentrations of people, and we know many examples:
  - Village of Hroza, Kharkiv region, October 5, 2023.
  - 123rd Separate Mountain Assault Brigade, November 3, 2023, Zaporizhzhia region.

These examples make it clear that current shelter standards and constructions do not always provide the necessary level of safety in the event of a direct hit by heavy missiles. Insights from Research and Practice

During the project, we thoroughly studied the topic of shelters in Ukraine and worldwide and attended events dedicated to this topic. This allowed us to gather important information and gain valuable experience, which we use to develop our solutions.

### Critical Analysis of DBN V 2.2-5:2023

The outdated philosophy of shelter norms is evident. Essentially, the Soviet VSNs (construction standards) that were based on the Cold War doctrine and the potential nuclear attack from the USA were adopted into DBN 2.2-5:1997 without any rethinking in terms of military doctrine. DBN V 2.2-5:2023 continues the same philosophy with anti-radiation shelters and gigantomania.



## Key Differences

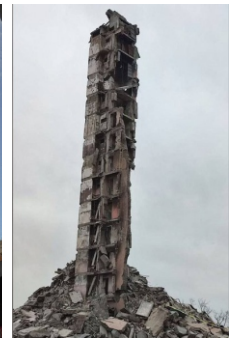
- **Soviet Era:** PRUs (shelters) were secret objects.
- **Current Regulations:** The locations of shelters are publicly accessible with GPS coordinates.
- **Forced Concentration vs. Dispersion:** The key lesson from this war is the understanding that apart from missile defense systems, DISPERSION is necessary to counter missile attacks. Ignoring the experience of modern warfare and our own tragic experience is a critical oversight.

## Ukraine's Tragic Experience Security / Insecurity



It is important to note certain features of constructions that are unsuitable for safe use during wartime in this photo. We are talking about panel constructions.

**First Photos:** This shows panel high-rise buildings. Panel constructions have several disadvantages in military conditions as they are less resistant to explosions and missile strikes. Panel buildings have a high probability of collapse, leading to significant human casualties and extensive destruction.



**Second Photos:** This shows the aftermath of an attack on a building with a reinforced concrete frame. Although such buildings suffer damage from strikes, they better distribute the load throughout the structure. This allows them to remain standing even if several apartments are damaged. The photo shows that a building with a reinforced concrete frame was repaired, and life in it continues. Third Photo: This shows what remains of a panel building in Mariupol - the elevator shaft made of monolithic reinforced concrete.

Given these facts, it can be concluded that to ensure greater safety during wartime, preference should be given to buildings with a reinforced concrete frame

## Flight Time

**DBN V.2.2-5:2023 "Civil Protection Shelters" Clause 5.5:** The radius for population gathering is determined taking into account the walking distance radius to protective structures and SPs, considering the terrain and relief features:

- 300 meters for multi-story, high-rise, and elevated buildings.
- 500 meters for low-rise buildings.

**World Record for Running 500 Meters:** 1:00.17 by Ken Lowery (USA) on May 1, 2005.

## Flight Time of Missiles

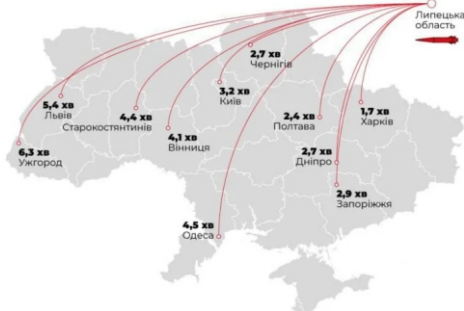
How long does it take for the "Kinzhal" and "Zircon" missiles to reach Ukrainian cities?

"KINZHAL" MISSILES REACH UKRAINE IN A FEW MINUTES. A MiG-31K fighter can carry the "Kinzhal" aeroballistic missile. This missile can reach speeds of up to 3,400 m/s and fly a distance of up to 2,000 km. In the event of a launch, people throughout Ukraine have only a few minutes to seek shelter, which is objectively insufficient to find safety. Therefore, alarms are often announced preventively.

### «КИНДЖАЛИ» ДОЛІТАЮТЬ ДО УКРАЇНИ ЗА КІЛЬКА ХВИЛИН

Винищувач МіГ-31К може нести аеробалістичну ракету «Кінджал». Ця ракета здатна розвивати швидкість до 3 400 м/с і летіти на відстань до 2 000 км. У разі пуску такої ракети у людей по всій Україні є лише кілька хвилин, щоб піти в укриття — і цього об'єктивно недостатньо, аби сховатись. Тому часто тривогу оголошують превентивно.

За скільки часу ракета «Кінджал» долітає до українських міст?\*



Джерело: Відеозвіт дані, власні розрахунки

\*Місце пуску — Ліпецька область, Росія. Час здійснення польоту ракети 14.12.2022

t.me/uawarinfographics



## Path to Shelter

On the way to the shelter, people simply lack the time and speed needed. As a result, explosions often catch people on the streets, leading to significant casualties and injuries. This underscores the necessity to reconsider approaches to shelter construction and provide more effective solutions for protecting the civilian population.

Thus, the main question for us in this competition is: Are we ready to concentrate our children in a single room that does not offer 100% protection and that they cannot reach in time, and adhere to the current DBN while designing the school of the future, or propose new, more effective solutions to this problem?



## Israel's Experience: Civil Protection Concept

Principle 1: Protection is Needed for Everyone

Principle 2: Architectural Planning Must Consider the "War Rose»

Principle 3: Capsule Security

Principle 4: Building Standards Should Continuously Be Reviewed to Enhance Safety

Principle 5: The Entire Protection System Must Function to Keep the Country Running

Principle 6: All Power to Professionals



Safe Room    Collective Safe Room    Fortified Apartment

## Israeli Experience: Mamad

Mamad is a protective room in every new apartment or house in Israel since 1991. It is built of reinforced concrete, has hermetically sealed doors and windows, and a ventilation system to protect against explosions, chemical, and biological threats.

### Advantages of Mamad:

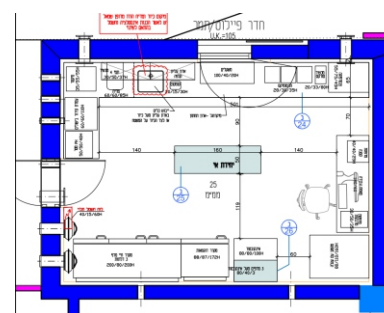
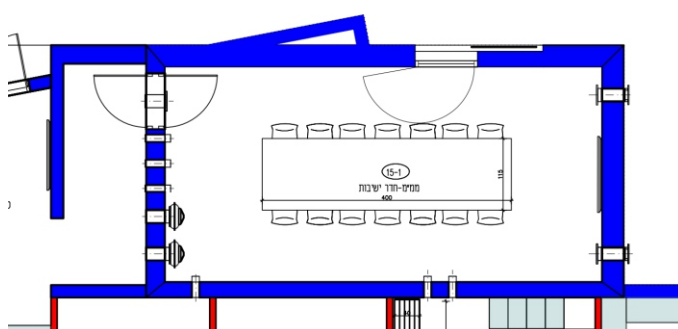
- **Quick Access:** Located inside the dwelling, allowing for quick shelter.
- **Constant Readiness:** Always ready for use.
- **Individual Protection:** Each apartment has its own protective space. The Mamad model could be beneficial for enhancing the safety of Ukrainian buildings.

These rooms always have a secondary function such as a meeting room, office, or workshop (with foldable tables). They do not necessarily need to be separate spaces.

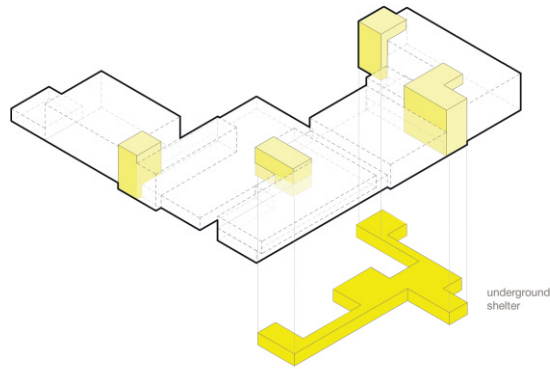
**Location:** Depending on the missile flight time, rooms should be located on all floors. **Doors:** The doors should be protected by a concrete wall; the minimum door width is 1 meter.

**Windows:** Size 100 by 100 cm, thickness 25 mm; several windows can be allowed with a specific distance between them; the window area should not exceed 6-12% of the floor area. Windows cannot be on the ceiling.

The construction of Mamads is separate from the construction of other building blocks. It is independent, making it stable in case of the destruction of other blocks.



## Our Proposal



For the innovative school of the future in Ukraine, we propose a hybrid of two types of shelters. Our proposal is to upgrade the stairwells to MAMAD standards, make them wider than usual, and equip the stairs with cascade benches where classes can be held during alerts. Thus, we combine three functions: stairs, shelter, and classroom.

With access to shelters on each floor, we significantly reduce the distance to them, ensuring an immediate path to safety. Additionally, the stairs connect all floors and descend to the -1 level, where the radiation shelter is located.



We also consider all necessary facilities: corridors equipped with wide benches that can be folded and used as beds, similar to triple bunk beds in trains, in case of prolonged stays in the shelter; an underground multifunctional amphitheater that serves as a "Defense of the Fatherland" classroom, which can also be used for warming up and eating, and in peacetime, for rehearsals. The amphitheater has a mezzanine for storing decorations. The technical room contains heat pumps, boilers, and water supplies. There is also a mother and child room, showers, laundry, storage, and a doctor's office.



The shelter on the -1 floor connects all other shelters (except the dormitory) into a common space. This allows everyone to move during alerts to different parts of this multi-level shelter. Thus, we disperse people across different levels and parts of the building, rather than concentrating them in one space. An important aspect is that the external safety stairwells are clad in galvanized profile sheeting, and these blocks have small 1m x 1m windows on the facade, intuitively signaling that this part of the building functions as a shelter. This design allows for quick orientation and access to a safe place. We create a reliable and comfortable environment for learning and protection in case of emergencies.

We, along with the community of architects and engineers, are striving for the repeal of DBN V.2.2-5:2023 and have written a collective letter to the Prime Minister of Ukraine. Considering the shortcomings described above, we believe it is necessary to develop new, more relevant, and effective standards that will ensure an adequate level of safety for the population in modern conditions.

## Immersion in the Issues of Modern Education

Working on the project of a modern school, we, as architects, could not stay away from the global problems and challenges facing modern education. Our task was not just to create a building, but to create an environment that would contribute to the comprehensive development of the individual and meet the requirements of the 21st century. To do this, we delved deeply into the issues of education in Ukraine and the world, and learned many important facts that became the foundation of our project.

Modern schools in Ukraine operate on principles that have remained almost unchanged for the past 300 years. This discrepancy between the needs of the modern world and the capabilities offered by the school creates a significant gap. There is a lack of flexibility and individual approach, which can limit the freedom and right of each student to their own meaning of life.

It can also be noted that the education system has a hidden aspect — teaching people to obey and follow orders, as John Taylor Gatto mentions in his book "The Underground History of American Education.»

Traditional schools focus on the transmission of knowledge and skill training through a system of incentives, such as rewards and social comparison. However, this approach does not always take into account the individual characteristics of students, their talents, and abilities, which can lead to monotony and loss of motivation.



Opinion leaders argue that there is a direct connection between the problems the world faces today and what we were taught in school. This underscores the need for changes in educational approaches to nurture a new generation capable of addressing the challenges of the modern world.

## Space as Organized Influence

An important conclusion we made from our own experience is that appropriately organized space can influence content. The task of the school is not to fill the student with knowledge but to create an environment that promotes the full development of the individual.

## Goals of Modern Education

According to UNESCO, the modern goals for basic (i.e., school) education are:

- **Learning to live together and cooperate:** Peacefully resolving conflicts, respecting diversity, having the skills necessary for active social life and mutual understanding.

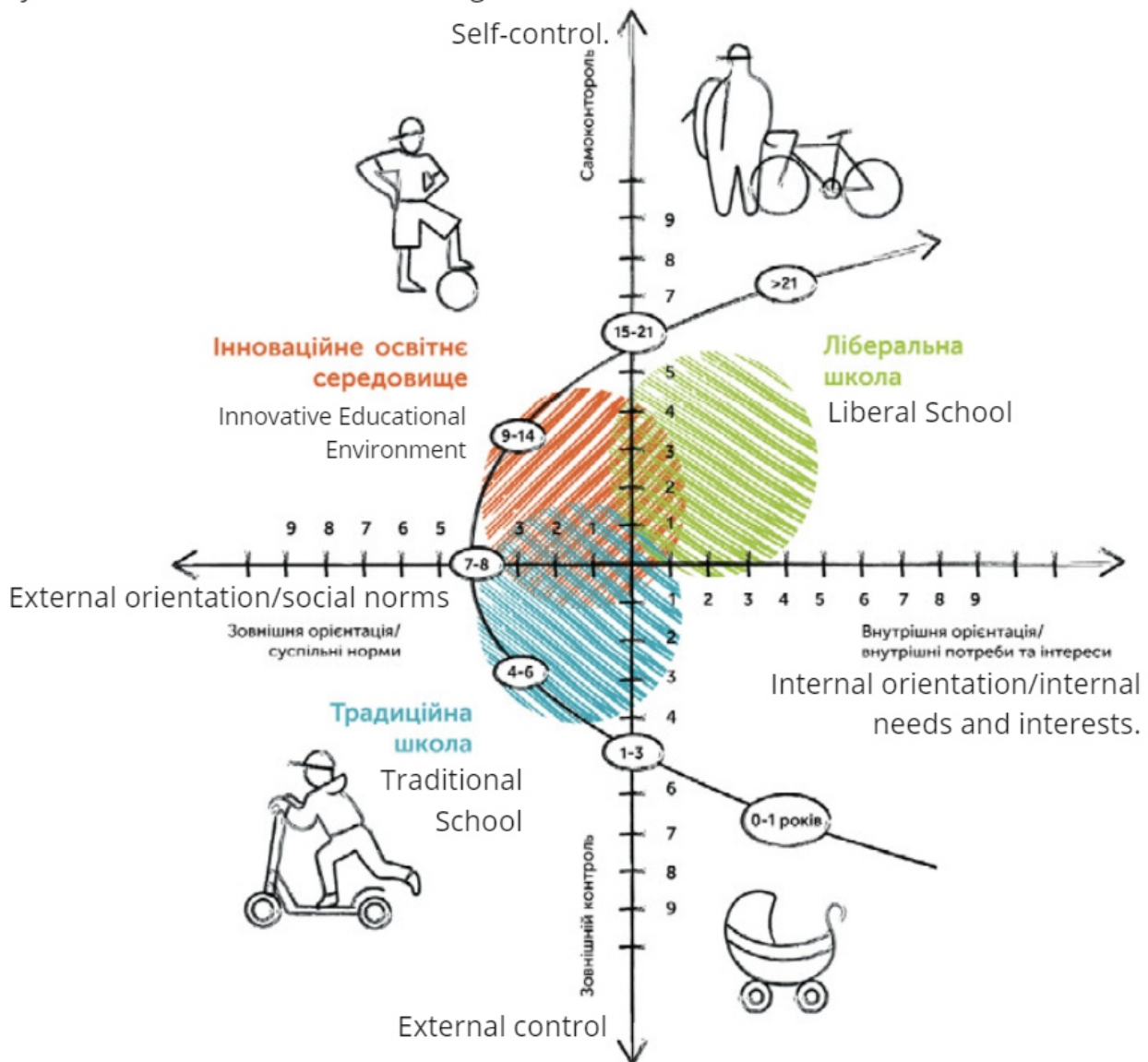
- **Learning to know:** Mastering the methods of learning, namely the basic means of communication and oral speech, literacy, visualization, problem-solving. This is necessary to understand the rules and basics of life, as well as one's own rights and responsibilities.

- **Learning to do:** Acquiring the necessary knowledge and skills for full participation in economic relations, mastering a profession or starting one's own business, being able to organize one's life with a high degree of satisfaction and contributing to the care of others.

- **Learning to be:** Developing as a person, being able to act independently, soberly, critically, and responsibly. Uncovering one's potential, mastering ethical and moral norms; the ability to speak and defend oneself, having resilience in life.

### Система координат чинників впливу

System of Coordinates of Influencing Factors



## **Human-Dimensionality in State Policy**

The key principle of state policy in the field of education in developed countries (Finland, Denmark, the Netherlands, New Zealand), as well as in Ukraine, is the declaration of human-dimensionality. This principle can be explained as follows: each person feels the fullness of life when they can realize what they consider their purpose, engage in their life's work or "native labor." Practically, this means creating conditions in which everyone can realize their talents and interests, as well as receive an education that supports their personal development.

## **The Role of Diversity**

The response for new times is that the school must create conditions for diversity. Schools should be different, reflecting the unique needs and interests of their students. The role of governments is not to create a single mandatory program, but to provide favorable conditions for the development of education in various forms, methods, types, and kinds. The system of mass education is fading into the past. The new system of state education management involves a variety of choices where each student can find their place and realize their potential.

We, as architects, have the opportunity to influence the educational process by creating spaces that promote development, motivation, and innovation. When designing new schools, we take into account all aspects of modern education.



## Common and Administrative Block 2102 m2



The common and administrative block is the core of the project, around which the entire school is formed. It serves as the central entrance and the main communication artery of the school, except for the elementary school, which has a separate entrance. Entrance and Transition Areas

Upon entering, children step into a changing room, as the school is a clean zone. Considering that schools will be among the first buildings during the reconstruction, it is important to maintain cleanliness inside, given the possible pollution of the surroundings. After changing shoes, children enter the central hall, which also serves as the assembly hall. This large space with a high ceiling creates a positive first impression. For events, a curtain can be lowered from the ceiling in front of the stairs, separating the assembly hall from the entrance area. The stairs are duplicated, so they do not necessarily need to be used during performances.



### Amphitheater and Library

The amphitheater for 280 people in the hall partially functions as a library. Various books for book-sharing among children are stored under the benches. The amphitheater is visible from the teachers' lounge, aligning with the concept of transparency. Skylights in the ceiling provide natural daylight.

## Second-Floor Library



Above the vestibule on the second floor is the library with a view of the stage. This open, spacious area is a comfortable place to spend time and do homework. There is also a quiet zone for studying in complete silence. The library has access to a terrace.

## Dining Area

On the first floor is the cafeteria, designed to create the atmosphere of a children's café. The space is organized with different types of seating: soft zones, regular tables, group areas, and high seating. Children can heat their own food, adding convenience and individuality.

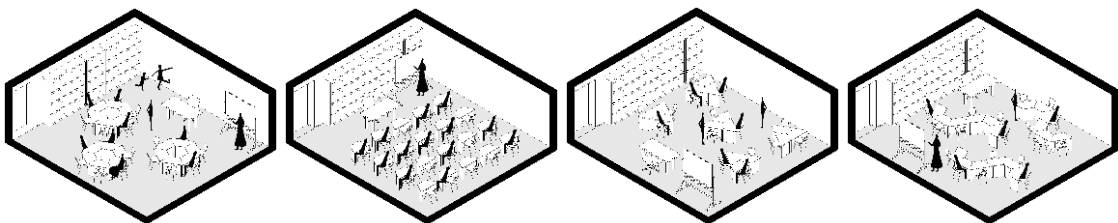
One of the features of the cafeteria is the summer terrace facing the main facade of the building. The terrace is enclosed by a fence surrounded by plants, providing an organic perception of the space and protection from unwanted guests. This makes the terrace a cozy and safe place for relaxation and eating in the fresh air.

## Elementary School 864 m2



The junior school has a completely separate entrance, playground, and sports hall. Although younger students have access to other parts of the school, their functional areas are separated to reduce noise levels in common spaces and prevent physical collisions with older students. This ensures a safe environment for younger children.

The separate zones also allow for greater attention from teachers, which is essential for younger students. The playground on the terrace has high visibility and can be monitored from different angles. It is equipped with a tall mesh fence, ensuring a high level of safety.



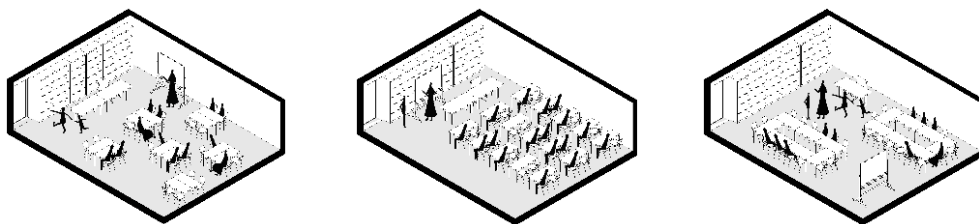
The classrooms meet advanced educational standards and can be combined into shared spaces with corridors and rest areas, allowing for flexible adaptation to different teaching methods. There is also a room for daytime naps located directly next to the shelter, which is very convenient in case of danger. This space encourages development and play, creating opportunities for casual communication and shared childhood happiness.



## High School 2 600 m2



The senior school classrooms are equipped with modern technologies that facilitate interactive learning. The classroom spaces are designed with flexible layouts in mind, allowing easy adaptation to different educational methodologies. Laboratories for natural sciences and computer classes are equipped with advanced tools for conducting experiments and research, stimulating scientific interest and the development of critical thinking.



Classrooms on the first floor have access to the backyard, where lessons can be conducted outdoors, such as art classes, encouraging other students to join. The high level of freedom and variety in the learning environment contribute to creating a comfortable and conducive atmosphere for learning. This is a crucial condition for the organic and qualitative development of each student's personality.



## Sports Block 1 770 m2



The sports block of the school includes several key areas:

**Large Sports Hall with Amphitheater for 120 people:** Designed for basketball and volleyball, it also features a climbing wall. The hall is equipped with spectator stands, allowing for competitions and large events.

**Multipurpose Hall:** Primarily used by younger students for dancing, ball games, and other activities. The space is easily adaptable for various activities.

**Gym:** Equipped with modern exercise machines, suitable for older students, promoting the development of physical strength and endurance.

**Changing Rooms:** Provide a high level of comfort and accessibility for all students, including those with disabilities, with wide passages and special facilities.

## The dormitory 574 m2

The dormitory is a modern and compact space designed to accommodate 35 children and 5 teachers. It provides comfortable conditions for all residents, including two rooms adapted for people with disabilities. The dormitory has a separate entrance, allowing access to the sports area for the community, bypassing the concierge service. There is also the possibility of adding extra floors if there is a need to expand the dormitory.

Dormitory Amenities:

**Living Rooms:** Simple and functional rooms that provide the necessary level of comfort for children and teachers. Each room is equipped with everything needed for studying and resting.

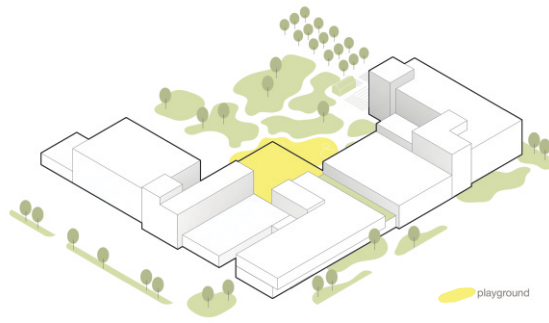
**Recreation Areas:** Spaces where residents can spend time together, communicate, and participate in joint activities. This fosters a friendly and supportive atmosphere.

**Laundry:** A separate room for washing and drying clothes, ensuring convenience and comfort for residents.

**Kitchen:** An equipped area for cooking, where children can learn the basics of cooking and prepare their own meals independently.

**Safety Capsule:** The dormitory includes a special stairwell in the style of Mamad, serving as a safety capsule during emergencies. This structure ensures a quick and safe exit for residents if necessary, enhancing the overall safety level of the building.

## Backyard



The school's backyard includes several key elements. The red amphitheater serves as a space for classes, performances, and other events, integrated into the landscape to provide convenient seating for many students. There is a playground on the second level, allowing students to spend active time outdoors.



The space also features a greenhouse where students can grow plants and practically study biology, contributing to the creation of a green environment at the school. A football field with a stand is designed for sports events, training, and competitions, allowing spectators to comfortably watch the games. Additionally, there are basketball and volleyball courts, promoting physical activity and team spirit among students. Access to the school grounds is limited by a fence styled with green plantings, enhancing safety and creating a natural environment. Access to the sports grounds for the community is coordinated with the school administration, ensuring both security and community engagement.

## Inclusivity of Space

Our school is equipped with all the necessary means to ensure comfortable and effective learning for children and work for teachers with inclusivity needs. We have considered all aspects to create an inclusive environment that supports equal opportunities for all participants in the educational process.

### Architectural Solutions

- **Barrier-Free Access:** All entrances, corridors, and rooms are equipped for easy movement of people with disabilities. There are ramps, elevators, and wide doorways.
- **Inclusive Classrooms:** Classrooms are equipped with special desks and chairs that meet the needs of children with disabilities.
- **Special Sanitary Facilities:** Sanitary rooms are equipped with handrails and other assistive devices.
- **Specialized Rooms:** The school has rooms for sensory integration, speech therapy cabinets, and other specialized facilities.
- **Technical Aids:** Use of interactive whiteboards, computers, and other technical means adapted for children with various types of disabilities.
- **Psychological Support:** Psychologists work at the school, providing necessary support to children, teachers, and their families.
- **Rest Areas:** Specially equipped rest areas where children can relax and recuperate. Ensuring inclusive education is our priority, and we are constantly working to make every student and teacher feel comfortable and have equal opportunities for development and learning.

## Summary

Imagine a school where the walls themselves inspire curiosity, where every corner breathes innovation, and where safety and respect are not just features, but the foundation. This is not just a vision; it's a new perspective on education. A place where architecture and humanity merge to create an environment where every student can thrive, every teacher can grow, and the community can unite. This school is more than a building; it's a testament to our commitment to the future, a place where dreams take flight and possibilities are limitless. Together, we're not just building a school—we're shaping the future.



**Useful Areas:**

Senior School: 2,600 m<sup>2</sup>

Junior School: 864 m<sup>2</sup>

Sports Area: 1,770 m<sup>2</sup>

Common Area: 2,102 m<sup>2</sup>

Dormitory: 574 m<sup>2</sup>

Shelter: 1,146 m<sup>2</sup>

Total: 9,056 m<sup>2</sup>

**Total Areas:**

Senior School: 2,630 m<sup>2</sup>

Junior School: 890 m<sup>2</sup>

Sports Area: 1,830 m<sup>2</sup>

Common Area: 2,250 m<sup>2</sup>

Dormitory: 605 m<sup>2</sup>

Shelter: 2,066 m<sup>2</sup>

Total: 10,271 m<sup>2</sup>

**Sources**

- Book: "Children, Parents, School" by Anastasia Kyreeva, 2022

- Lecture on Shelters by Sergey Rasputny at the Shelter Conference in Unit City, Kyiv, April 2024