From the dawn of history, humanity has had to respond to threats. Alongside military solutions, "defensive architecture" has developed as a civilian solution.

As a combat soldier and commander in the "Iron Dome" unit, I was privileged to be part of the world's most advanced military solution in defending the home front, which emphasized the lack of a civilian solution that would enable normal life in the settlements around the Gaza strip.

The project tries to provide a solution to the rocket threat problem in Sderot, in the form of a protective architectural complex, where normal life can continue even in an emergency.

Only 21% of the public shelters in Sderot are at a very good level of maintenance that allows people to stay in them for a long time.

Sderot residents spend about 52 days a year in shelters, about 15% of the year.

Guiding principles for planning an architectural solution in the city of Sderot - the existing situation compared to the architectural complex offered in the project.

**Public shelter**  **Bus stop**  **Playground**  **Residential building**

Shelters as concrete empty spaces that bite into the public space.
Public protected spaces are empty of any content in peaceful times, so entering them is identified with fear and routine interference.

**Sketches and inspirations**
Conceptual development of the new protected space.

As long as the bomb shelter is only a bomb shelter, entering it will forever be accompanied by fear, but when the "protective space" has a use in "peaceful times", it has an architectural added value, and it allows the residents to continue their routine.

**Map of Israel**  **Sderot**

**Project proposal**  **Current situation**

routine continues  interference of life

Shelters of public architectural value  Shelters that rob the public space

Using natural topography for protection  Topography of emergency and fear

public shelters allowing encounters in both routine and emergency  Emergency expressed in isolation

Harmonious fronts made of layers and mixed materials  Serrated fronts that create a rhythm of war marsh

Commune protected spaces, which create encounters in both routine and emergency  Shelters that isolate people in an emergency.
The project is located in an abandoned grove, connecting Sderot’s city center to residential neighborhoods, while addressing the stream that crosses the grove.

This is a scheme of the existing situation, in which one can see the abandoned grove interrupting the urban continuum with the stream in its center.

Today, the grove, instead of being a green vivid park, is the city’s neglected “backyard” into which garbage is thrown.

Shapes and forms in the project:

From the beginning it was very clear to me, the I wanted to use flowing natural shapes in the project inspired by the natural shape of the stream that crosses the grove, to brake the stiffness concrete feeling of Sderot, and to creates a sense of embracement and safty.

I wanted to create connections between the neighborhoods on the stream’s banks, by continuing the roads around the grove, and by creating a protective architectural complex, where normal life can continue even in an emergency.
This is the residential scheme, in which I created a new interpretation to the typical Sderotian terraced housing.

**Roof-top Plan**
This is the roof-top plan of the project, where you can see the shapes and forms used in the project, the green upper promenade and the square that is created between the two banks of the stream.

**Ground floor Plan**
This is the ground floor plan, which is a commercial floor on both banks. The “indoor street” runs along the floor, allowing a safe routine to continue even in an emergency.

**Typical floor Plan**
This is a typical floor plan. The arrow marks the indoor street that passes between private and public functions in the project. The residential area in the project was also designed out of a desire to allow encounters and opportunities even in an emergency. Therefore I designed a shared protected space, big enough to allow long stays in it.

The project proposes a new and more harmonious interpretation of Sderotian housing, by using layers that provide protection on the one hand, and disguises the shelters and concrete on the other hand. The rigid core, is disguised by layers made of different materials, like wooden shutters and metal grids, to create a more pleasant front.

This is a look on the Sderotian residential building, where you can see the use of different materials that creates a harmonious front.
This section shows how cultural and commercial activities take place underground and therefore can continue even in an emergency.

On this bank of the stream, there’s a snake shaped building that corresponds with the natural shape of the stream as a ripple to its flow.

In fact, all the protected spaces in the project have a use during peaceful times, and thus entering them in an emergency - does not stop the routine but continues it. In this section you can see how the outer street enters the building and continues inside it - as an indoor street.

This is a look at the Music School building, which is also built out of layers and a mixture of materials to create a safe building on the one hand and harmony on the other. In the music school the wooden shutters and the grid are arranged.

The same notebook graphical forms and use of materials - continues inside the building - in the library of the music school.
A view from the upper promenade to the square

A view of the renewed stream that has turned from a sad abandoned stream, into a green square full of life

These sections show how the neighborhoods surrounding the project can also use the natural topography created by the complex, to enter the complex and continue their routine in case of an emergency

A view of the new main square. A square that allows encounters and interactions in routine and in emergencies, and creates protected public spaces all around it