

# Innovative Technology for mold Production – Program Overview

## Dear Sir

We, at "Levy Finkelstein Smart Modular Construction," have developed a patented innovative technology for modular construction using special templates manufactured in a fully automated plant.

### **Application Fields of the Technology**

The automatic production technology for modular elements is designed to reduce the construction time for reinforced concrete building frameworks and is applicable in various sectors, including:

- High-rise residential buildings
- Public buildings – hospitals and schools
- Infrastructure structures and retaining walls
- Security structures
- All types of protected buildings, including safe rooms and shelters
- Data centers

### **Principles of the Method**

The automated factory produces modular templates delivered to construction sites, enabling the completion and casting of a concrete framework at a rate of one floor every two days.

Our unique development provides cost-saving benefits for transportation, storage, and assembly of modular elements.

Thanks to this technology, we reduce framework construction time by 60%, contributing to a 40% reduction in the overall construction time compared to industry standards.

Our technology eliminates dependency on human labor and significantly reduces costs.

### **Required Investment**

We are currently preparing to establish a plant capable of increasing production to 30,000 square meters per month.

For this purpose, an investment of approximately **45 million NIS** is required.

The investment return is expected by the middle of the fourth year from production commencement, with an anticipated profitability of **35 million NIS annually** thereafter.

A detailed business plan is available upon request.

## **Investment Allocation**

The investment in establishing the plant is divided into two phases:

1. **Planning and setup of the production line** – 16 million NIS
2. **Factory construction, including working capital and inventory investment** – approximately 29 million NIS

## **Supplementary Financing Options**

The Israel Innovation Authority currently offers three main tracks:

- Pre-seed – 250,000 NIS
- Seed – 3.5 million NIS
- Round A – 16.5 million NIS

Utilizing one track does not prevent access to additional tracks.

An additional **10% grant** of the investment amount is available for establishing the plant in Development Zone A, amounting to approximately 25 million NIS in grants.

## **Projected Sales**

According to our surveys, **9 million square meters** of walls were built in 2023 using new construction methods. Of these, **8 million square meters** are suitable for the process we offer.

Market research shows that, initially, we can easily sell **1 million square meters**, with a production capability starting at **0.4 million square meters** (30,000 square meters per month).

The current market price per square meter (excluding concrete) is 600 NIS, and we intend to sell at 460 NIS.

## **Expected Sales and Profitability**

Expected annual sales: **165 million NIS**

Total production costs: **362 NIS per square meter**

Expected annual net profit before tax: **35 million NIS**, based on conservative estimates using one machine, one shift, and a fraction of the potential capacity. Adding another machine will double profitability.

## **Production Line Planning and Establishment**

The production line will be designed and established by **Shafir Systems Ltd.**, in partnership with Swiss company **GUDEL**, a manufacturer of similar automation systems.

We have completed the initial design, a prototype structure, and feasibility testing.

Shafir Systems is jointly owned by **RAFAEL** and **ISCAR**, under Berkshire Hathaway's ownership.

## **Trends in the Global Market**

The primary trend in the construction industry today is moving towards industrialization and modular construction.

As evidence of this trend, we present an article published in *Globes* about *Berkshire Hathaway*, Warren Buffett's company, which focuses on solutions for streamlining production, reducing costs in modular construction, and expanding into constructing all building components, especially structural elements, while providing maximum architectural and engineering design flexibility.

We believe our technology can address many of the challenges faced by this company and others like it.

## **Economic Contribution, Demand, and Recommendations**

As part of preparing our business plan, we conducted a comprehensive survey of the state of the construction and infrastructure industry in Israel. This included statistical data from the Central Bureau of Statistics, the Israeli Builders Association, the Israel Land Authority, and the Ministry of Housing.

We consulted with construction companies, contractors, architectural and engineering firms, and project management companies.

Enclosed with this letter are some documents demonstrating the interest in our technology.

## **Details About the Founders**

### **Eng. Igor Finkelstein**

- Civil engineer specializing in structural design, registered in the Engineers Register, Building Division.
- Extensive experience in planning, management, and execution of construction projects—approximately 30 years.
- Key projects include:
  - **Hospitals:** Rabin Medical Center (Beilinson Hospital) – Emergency and inpatient protected facilities, Meir Hospital, and Hillel Yaffe Hospital (currently under planning).
  - **Sports Facilities:** The Velodrome in Tel Aviv.
  - **Public Buildings:** Various types of facilities.
  - **Defense Infrastructure:** Buildings and infrastructure for the Israeli defense system.

- **Residential Complexes:** Thousands of housing units nationwide.
- **Data Centers:** High-security facilities.
- **Terminal 3 at Ben-Gurion Airport:** PAL 5 (currently under planning).

### **Economist Michael Levy**

- Key roles:
  - National Director of Security and Intelligence at the Atomic Energy Commission – Member of the management board.
  - Head of industrialization in development areas at the Ministry of Industry and Trade.
  - CFO of land preparation projects for the Jewish National Fund (JNF).
  - Responsible for land regularization at the Ben-Gurion 2000 project.

### **Project Manager Roni Shafir**

- Founded *Shafir Systems* in 1981 and served as CEO until its recent sale (currently a subsidiary of Rafael and ISCAR).
- Managed and designed automation systems, smart production lines, special machines, and complex systems tailored to client requirements.
- Established fully automated production lines, similar to what is required for this project. Notable achievements include 65 robotic charging stations for electric vehicles and assembly, inspection, and packaging systems for companies like ISCR, Rafael, IAI, and HP, among others.
- Lecturer at the School of Mechanical Engineering, Tel Aviv University.

**Sincerely,**  
**Levy Finkelstein Smart Modular Construction**