

**NOWLING<sup>®</sup>**  
C E M E N T - F I B R E B O A R D S

**NOWLINGS**<sup>®</sup>  
CEMENT - FIBRE BOARDS

ON EVERY CONSTRUCTION SITE

N O W L I N G S<sup>®</sup>

## INTRODUCTION

### **NOWLINGS - cement-fibre boards**

Idea of the project is to establish manufacturing facility lines in Egypt for cement-fibre board production, used in many types of industry and fields. Main consumption is used as a building material combined with concrete in construction business giving excellent results, efficiency and energy saving properties to projects. Dimensional and earthquake stability, construction accuracy and speed, heat, cold and sound insulating properties thanks to easy energy accumulation. Using of NOWLINGS building system technology - used for whole construction or just selected parts, bringing a new dimension to building industry increasing quality, efficiency with lower overall projects costs.

Another very widespread use of cement-fibre boards is in overall sound insulation field with different types of profiles designs and thickness. Road sound barriers, shooting range and many more.  
Other usage of multi-purpose cement-fibre boards is wide open for any other commercial or retail sphere, for example - exterior and interior design, as a base material for products making, etc.

Main material for boards production is based on local Egyptian sources as a bio waste from agricultural production mixed with cement and other additives.  
Egypt is a strategic location for middle east and gulf market with climatic conditions matching with boards production requirements, lots of bio waste resources, excellent shipping connections.  
We based our plans also on export a considerable part of boards production for European and other worldwide markets.

### **Mission and Vision**

Production of high quality cement-fibre boards made from local Egyptian source - bio waste material.  
Our products will be implemented on every construction site all over the middle east area same as exported to the other countries around the globe.





EGYPT MANUFACTURING FACILITY



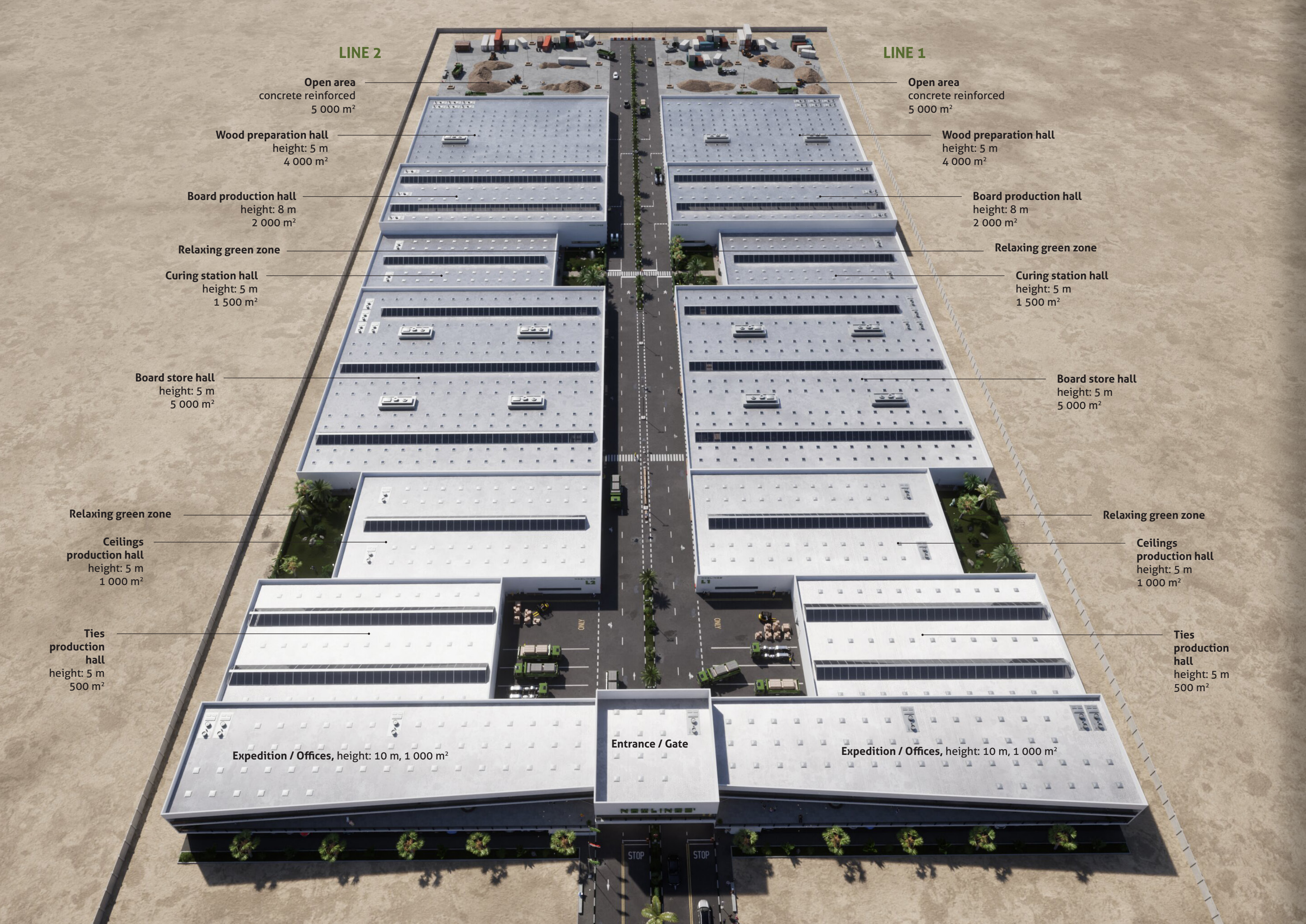
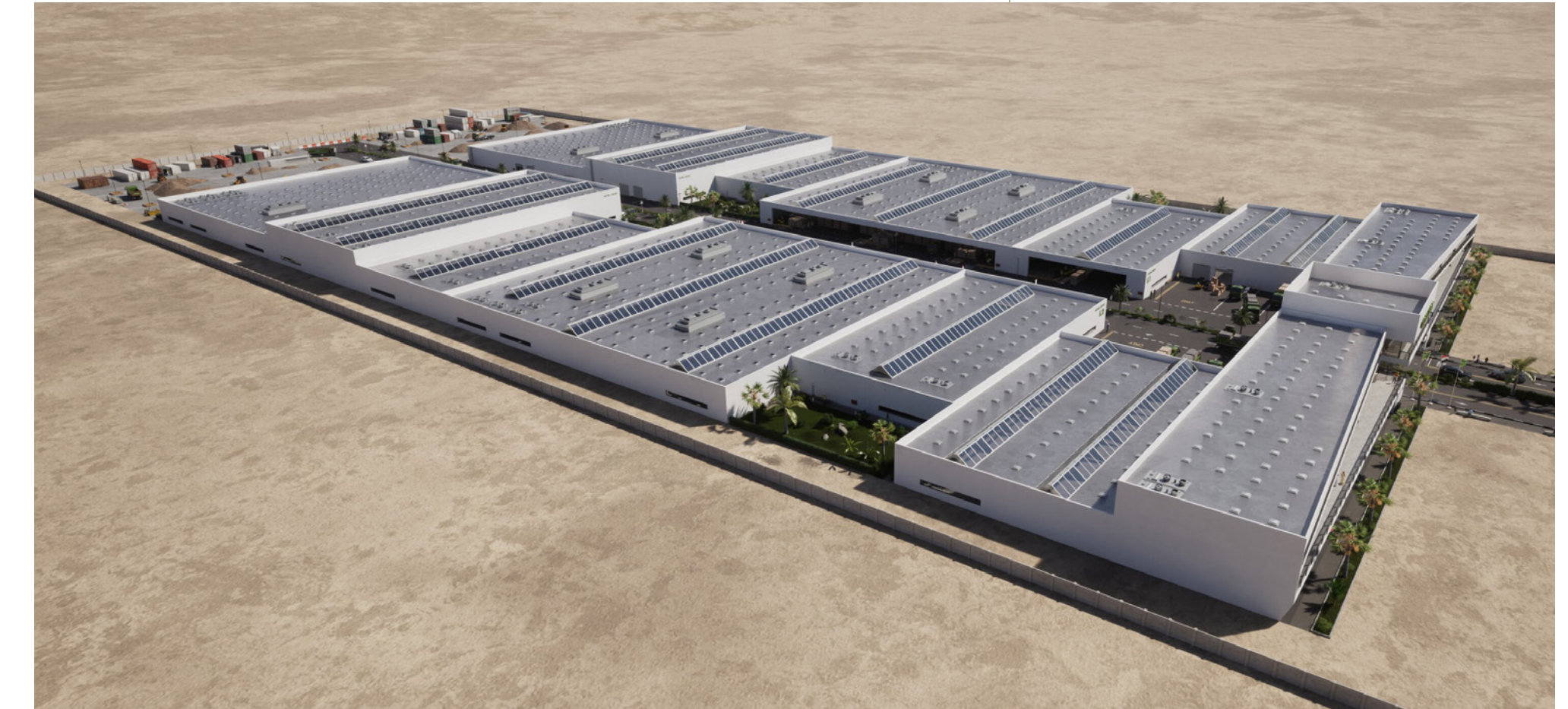
FACILITY BASIC PAREMETRES

**Land dimensions:**  
**TOTAL LAND AREA:** 70 000 m<sup>2</sup>  
**BUILD AREA:** 40 000 m<sup>2</sup>  
**LINE 1:** 20 000 m<sup>2</sup>  
**LINE 2:** 20 000 m<sup>2</sup>

**Production Requirements (LINE 1, 2):**  
 Land in industrial zone: 70 000 m<sup>2</sup>  
 Water pipe capacity: 20 m<sup>3</sup>/h  
 Water supply (shift): 200 m<sup>3</sup> per 8 hours shift  
 Water supply (24 h): 600 m<sup>3</sup> per 24 hours  
 Electric Power supply: 2 x 250 kW  
 E. Power consumption: 7 000 MWh / year  
 Cement consumption: 50 000 ton / year  
 Fibre consumption: 100 000 ton / year  
 Employment / labours: 70 person / line  
 Employment / office: 20 person / line

**Expected production capacity (LINE 1, 2):**  
 LINE 1: 2 milion boards / year  
 LINE 2: 2 milion boards / year

**Sales:**  
 local market 50% of production  
 export to Europe 30% of production  
 export to Middle East 20% of production







Entrance / Gate and Offices



Entrance / Gate and Offices





Entrance / Gate and Offices



Firs floor Terrace - left wing





Firs floor Terrace - right wing



Entrance / Gate and Offices





Entrance / Gate and private car Parking area for LINE 2



View from Expedition Office Terrace - from left: Ties production hall, Ceilings production and Board store halls





Entrance / Gate and Expedition area



Entrance / Gate and Expedition area



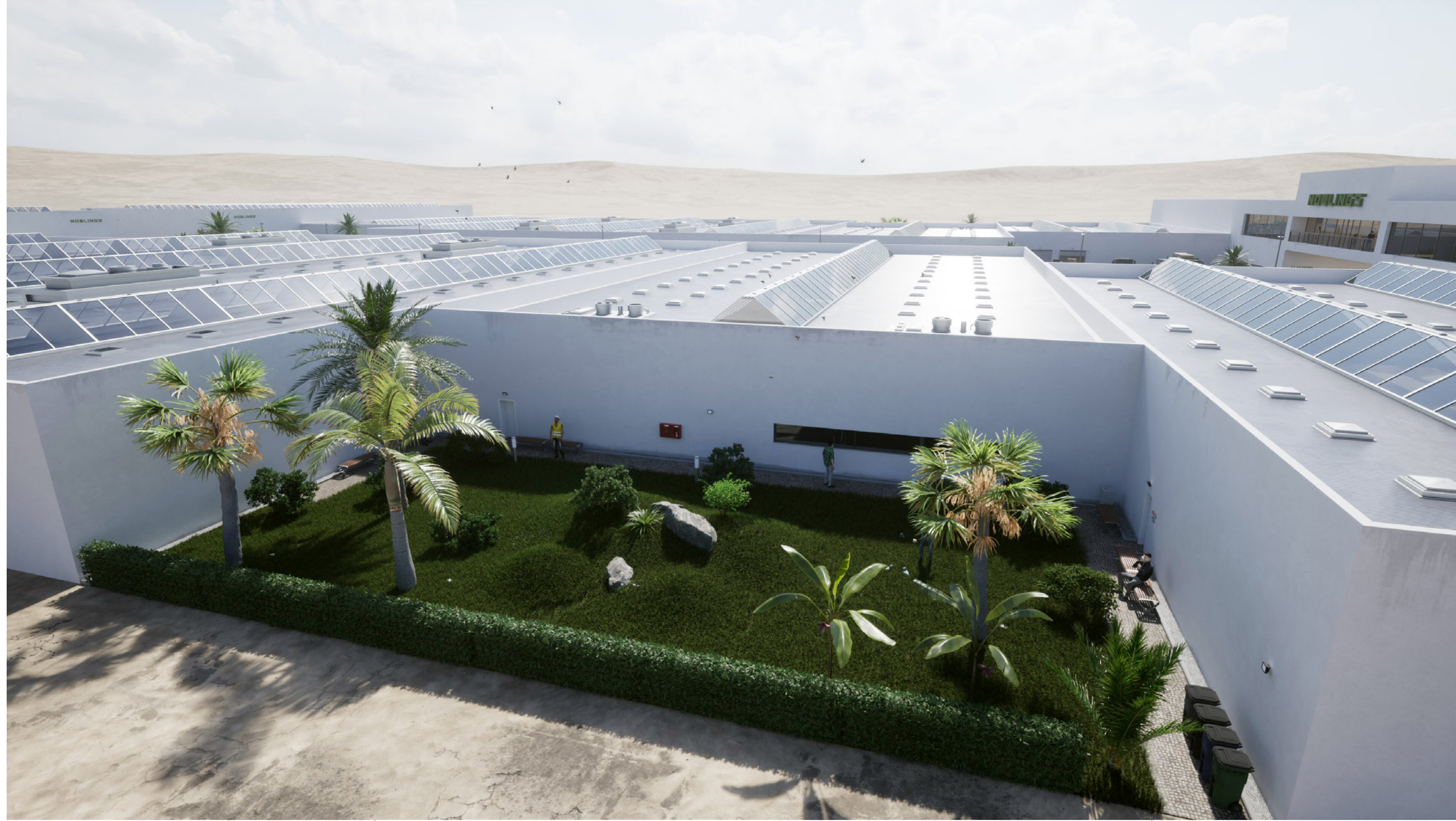


LINE 1 - Relaxing green zone, behind Ceilings production hall



LINE 1 - Relaxing green zone, behind Ceilings production hall





LINE 2 - Relaxing green zone, behind Ceilings production hall



LINE 2 - Relaxing green zone, behind Ceilings production hall





LINE 1, 2 - Board store



LINE 1, 2 - Board store





LINE 1, 2 - Relaxing green zones, front of Curing station halls, behind: Board production halls 1, 2



LINE 2 - Relaxing green zone, front of Curing station hall, right: Board production hall 2





LINE 2 - Relaxing green zone, front of Curing station hall, behind: Board production hall 2



LINE 1 - Relaxing green zone, front of Curing station hall, behind: Board production hall 1





LINE 1 - Relaxing green zone, front of Curing station hall, behind: Board store hall 2



Back view to main gate from Relaxing green zones front of Curing station halls, behind: Board store halls 1, 2





Wood preparation halls LINE 1, 2



Approaching concrete reinforced Open areas front of Wood preparation halls LINE 1, 2





LINE 2 - concrete reinforced Open area

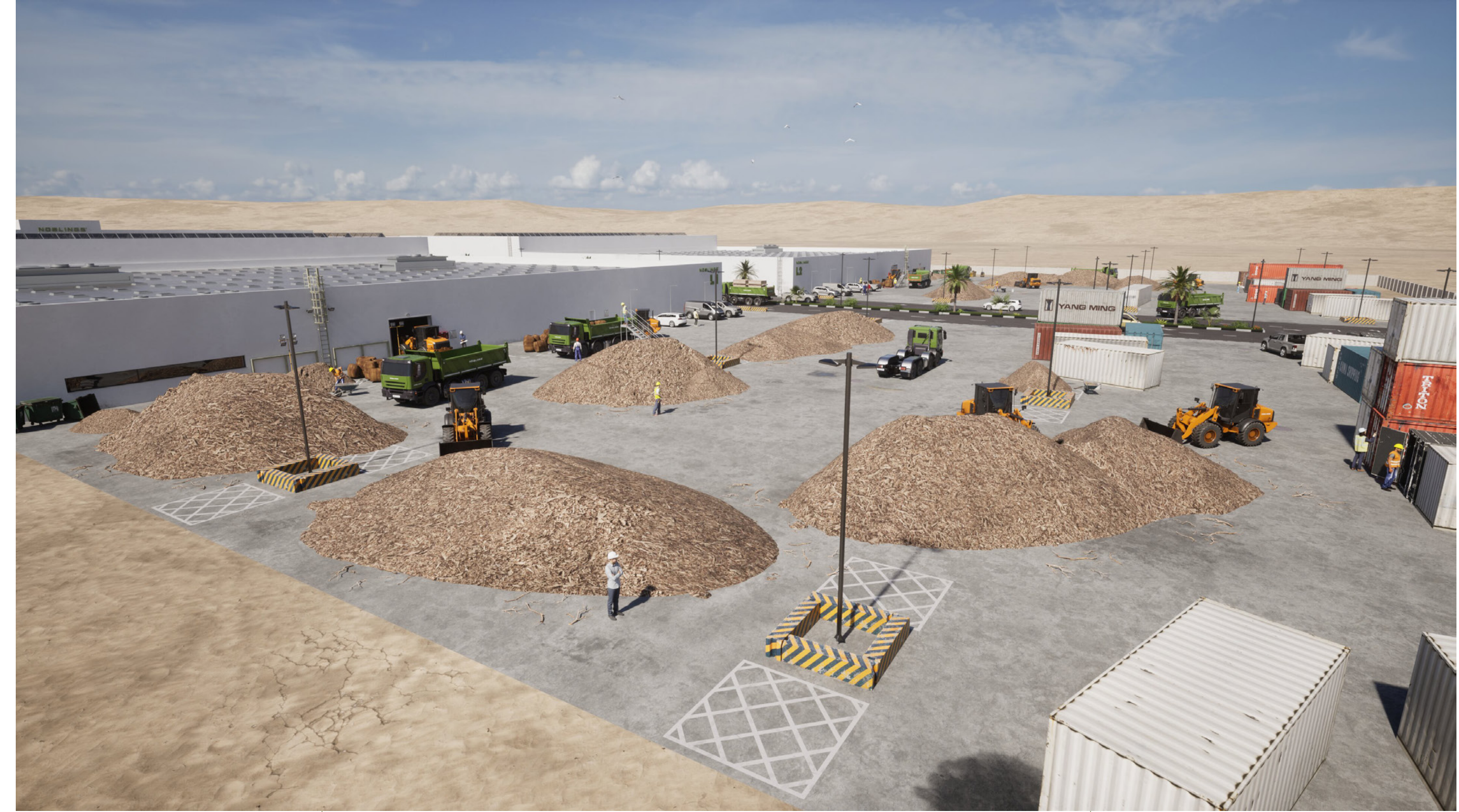


LINE 1 - concrete reinforced Open area





LINE 1, 2 - concrete reinforced Open areas, behind: Wood preparation halls LINE 1, 2



LINE 1 - concrete reinforced Open area, behind: Wood preparation halls LINE 1, 2





LINE 2 - concrete reinforced Open area, behind: Wood preparation halls LINE 1, 2



NOWLING'S®

PRODUCTS

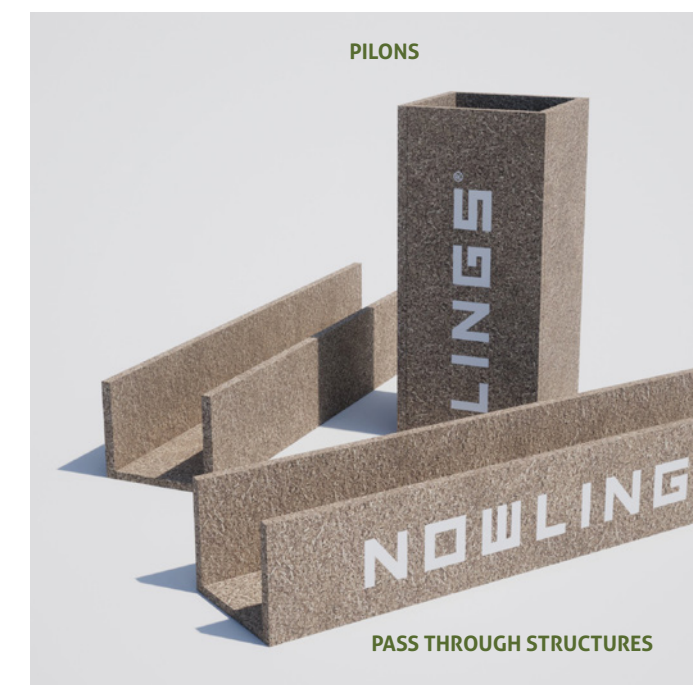


We use a unique material for production, which consists of 89% bio fibre 9% cement and 2% other additives.

Thanks to this, all products are strong, reliable and durable and having an excellent ability to insulate heat, cold or sound. In addition, working with products is quick and simple, which shortens construction time, project overall duration and saves money.

In the recent years, the requirements regarding an ecological construction have increased. We want to live in a healthy environment, and our demands for quality living conditions are rising. The attention to the environmental requirements begins with the initial elements of fibre chip cement boards. The production technology uses natural fiber chips and cement. The production uses little energy, and the remaining waste is recycled, therefore, technology does not pollute the environment. System has high thermal insulation, which prevents thermal bridges; therefore, it is possible to save energy resources when using the building. This property ensures the ecology requirements. It also ensures that energy resources are used sparingly. The use of natural fiber chips, and the entire ecological system ensure a healthy and peaceful life in built units.

### NOWLINGS® FORMWORK ELEMENTS BOARDS



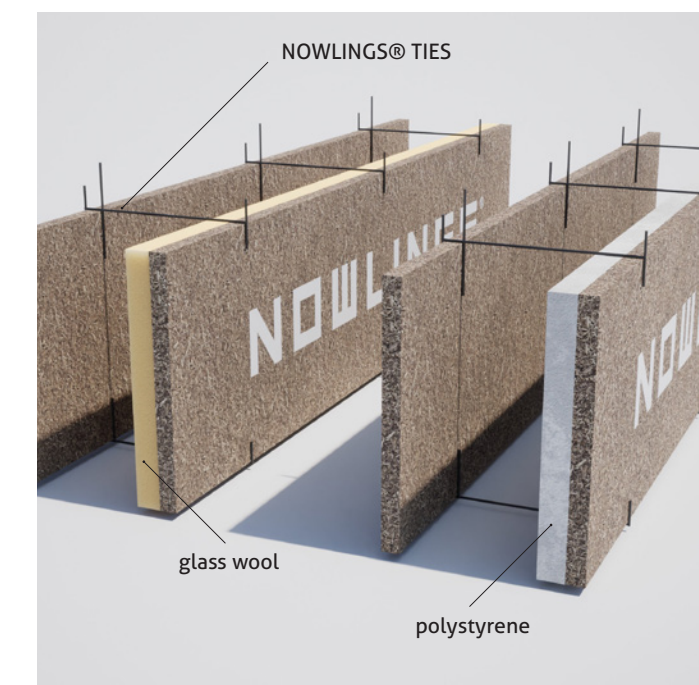
NOWLINGS® FORMWORK ELEMENTS BOARDS are designed for building pilons and pass through structural elements in combination with concrete and construction reinforcing steel. Boards are not dismantled after construction process and becoming a part of overall mass structure.

**Technical specification:**  
Board dimensions (L x W x D): 200 cm x 50 cm x 3,5 cm  
Material: bio-fibre chip cement board

For more technical details refer to product data sheet.

NOWLINGS® FW

### NOWLINGS® BEARING WALL BOARDS



NOWLINGS® WALL ELEMENTS BOARDS are designed for building bearing walls with concrete and construction reinforcing steel (where required). Boards are equipped with polystyrene or glass wool extra insulation layer. Boards are not dismantled after and becoming a part of overall mass structure.

**Technical specification:**  
Board dimensions (L x W x D): 200 cm x 50 cm x 3,5 cm  
Insulation layer thickness (polystyrene or glass wool): 5 cm  
Material: bio-fibre chip cement board with polystyrene or glass wool  
Ties: carbon steel

For more technical details refer to product data sheet.

NOWLINGS® BW

### NOWLINGS® CEILING ELEMENTS BOARDS



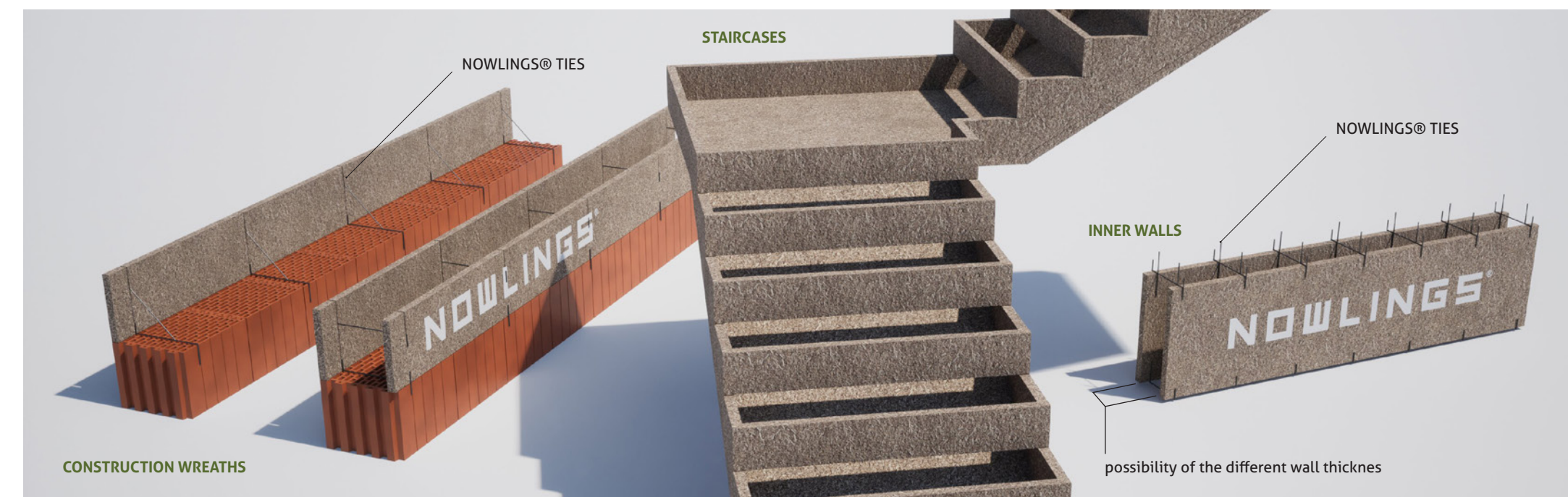
NOWLINGS® CEILING ELEMENTS BOARDS are designed for easy building of complete ceilings structures in combination with concrete and NOWLINGS® REINFORCING STEEL. Boards are not dismantled after construction process and becoming a part of overall mass structure.

**Technical specification:**  
Board dimensions (L x W x D): 200 cm x 50 cm x 2,5 cm  
Material: bio-fibre chip cement board  
Reinforcing steel: carbon steel

For more technical details refer to product data sheet.

NOWLINGS® CL

### NOWLINGS® CONSTRUCTION ELEMENTS BOARDS



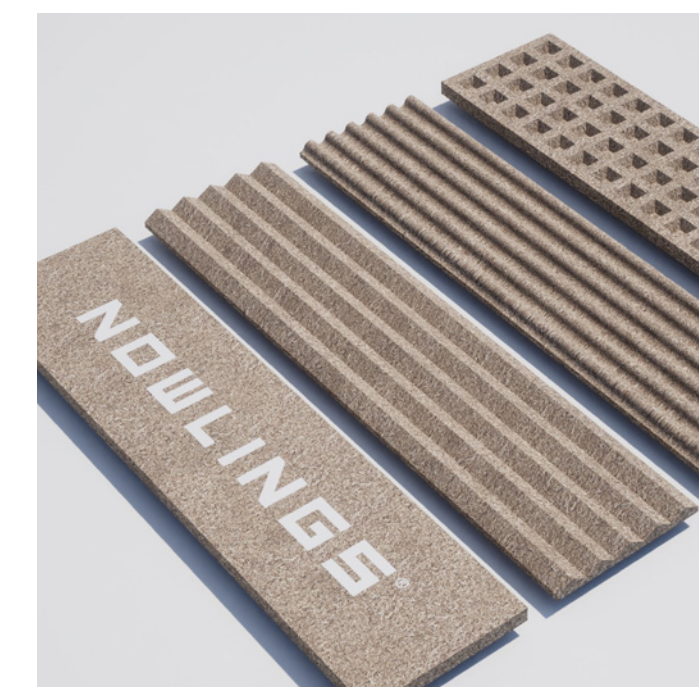
NOWLINGS® CONSTRUCTION ELEMENTS BOARDS are designed for building construction wreaths on brick structures, staircases, inner walls and other structures in combination with concrete and construction reinforcing steel (where required). Fixing exact board positions NOWLINGS® TIES made from steel are used. Boards are not dismantled after and becoming a part of overall mass structure.

**Technical specification:**  
Board dimensions (L x W x D): 200 cm x 50 cm x 3,5 cm  
Material: bio-fibre chip cement board  
Ties: carbon steel

For more technical details refer to product data sheet.

NOWLINGS® CT

### NOWLINGS® NOISE BARRIER & DECORATION BOARDS



NOWLINGS® NOISE BARRIER & DECORATION BOARDS are designed for building effective noise barriers or for insulation and decorative purpose. This massive (60 mm thick) board with excellent sound / temperature insulation properties have a four types of surface profile design (flat, triangle, wave and square).

**Technical specification:**  
Board dimensions (L x W x D): 200 cm x 50 cm x 6 cm  
Material: bio-fibre chip cement board

For more technical details refer to product data sheet.

NOWLINGS® ND

For any construction of houses, multi-storey residential and commercial buildings there are different wall systems available – according to static, thermal or technical requirements. Different board thicknesses can be combined individually with the necessary concrete core thickness and hence result in the optimum wall thickness.

At the construction site, the shuttering system boards are quickly and safely assembled with brackets into a formwork body and filled with core concrete. Thermal insulation noise-proofing, statically bearing structures are created in one work step. Furthermore, the face concrete boards are the casing, lathing and installation plane in one.

In residential and civil construction the NOWLINGS concrete system with face concrete boards is used. The walls are thin, fulfill an optimum of noise insulation, they have a high load-bearing capacity and are earthquake-proof.



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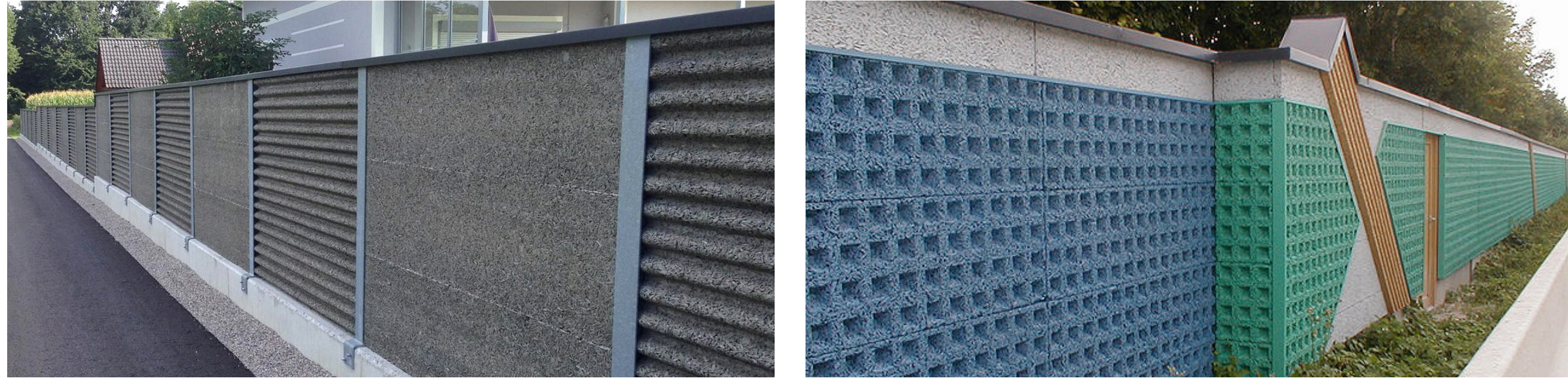
EXAMPLES







Noise barrier walls



Facade panels



Technology on site





ON EVERY CONSTRUCTION SITE



**Mission and Vision**

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