# SOLAIA

# **Technical Specifications**

# 1. Foundation & Structure

#### **Foundation**

Reinforced concrete slab providing stability and durability.

## **Structural System**

Reinforced concrete for improved load distribution.

## 2. Construction Elements

#### **Facade**

Double-layer brick enclosure with thermal insulation.

# Roofing

- Interior Roof: Non-trafficable flat roof finished with gravel, designated for technical installations.
- Exterior Roof: Trafficable flat roof finished with ceramic stoneware, visually cohesive with the interior flooring.

#### **Interior Partitions & Dividers**

- Ceramic brick partitions between apartments with Pro4 plasterboard cladding and acoustic and thermal insulation.
- Ceramic brick partitions in common areas and exteriors with Pro4 plasterboard cladding and acoustic and thermal insulation.
- Internal partitions combining ceramic bricks and Pro4 plasterboard with acoustic and thermal insulation, or Pro4 plasterboard with acoustic and thermal insulation.

## Cladding

- Exterior: Cement mortar finish with premium water-based exterior paint.
- Interior: High-quality water-based plastic paint in off-white.

# **False Ceilings**

- **Interior:** Laminated plasterboard false ceilings throughout, with acoustic insulation in areas housing HVAC units, finished with high-quality paint.
- Exterior: Sustainably treated African teak wood false ceilings across all covered terrace areas, finished with oil.



# 3. Flooring & Wall Finishes

# **Flooring**

Uniform high-end, large-format porcelain stoneware (100 cm × 100 cm) in neutral tones throughout the homes, including kitchens, bathrooms, and terraces.

## **Bathroom Wall Cladding**

Tiled with premium porcelain stoneware in neutral tones, matching the flooring (50 cm × 100 cm).

## **Skirting Boards**

Flushed skirting to complement the flooring and doors.

# 4. Carpentry & Glazing

#### **External Woodwork**

Lacquered aluminum window frames with thermal breaks; sliding or tilt-and-turn windows as per plans. Low-emissivity double glazing with acoustic insulation and UV protection.

# **Terrace Railings**

Double-layered laminated safety glass (10 mm each layer).

#### **Interior Doors**

Smooth, white, flush-framed lacquered doors with concealed hinges and high-quality fittings; sliding doors in areas requiring functional optimization.

#### **Main Entrance Door**

Reinforced door with a sleek finish, concealed hinges, and premium hardware (210cm H x 92cm W); flush with wood framework.

Reinforced door with a sleek finish, concealed hinges, and premium hardware (210 cm  $H \times 92$  cm W); flush with wood framework.

## Wardrobes

Built-in modular wardrobes with soft-close lacquered doors and integrated drawer units in neutral tones, with LED lighting featuring presence sensors.

### 5. Bathrooms

# Wall

Premium porcelain stoneware in neutral tones, matching the flooring (50 cm × 100 cm).

# SOLAIA

# Sanitaryware

- In-Wash smart toilet featuring a dual-flush system, bidet functionality, and heated seat. Premium single-lever mixer taps.
- Single or double white porcelain sink mounted on a wooden vanity top.
- Anti-fog, technology-enabled mirror with integrated LED lighting.
- Wall-integrated electric towel warmers.

#### **Shower Area:**

- The shower area will be seamlessly integrated using the same high-quality porcelain stoneware tiles as the rest of the bathroom and flooring. A concealed drain system will be installed.
- Shower heads will be built into the ceiling and will be temperature controlled (thermostatic).
- Tempered glass shower screens.

#### **Niches**

Niches are located throughout the bathroom: above sink countertops, above toilets, and along the main wall within the shower area. Niches above the toilet and within the shower area include integrated LED lighting.

# 6. Plumbing & Sanitation

## **Sanitation System**

PVC pipework with acoustic insulation.

# **Plumbing**

Cross-linked polyethylene pipes with thermal insulation for hot water. Independent shut-off valves at wet room entry points and for each fixture. Domestic Hot Water (DHW) provided via geothermal energy.

# 7. HVAC & Electrical

## **Heating & Cooling**

Centralized air-conditioning system with independent temperature controls per room.

### **Electrical & Telecommunications**

- Premium fixtures and switches. Energy-saving LED lighting.
- TV and telephone points in bedrooms, living room, and kitchen. USB dual sockets in bedrooms.
- Video intercom system in each home.
- Keyless FOB system for main and common area access.

# 8. Sustainability

#### Solar Energy

Solar photovoltaic system designed to harness renewable energy from sunlight through rooftop panels, providing electricity for lighting and essential systems in common areas. This reduces reliance on conventional power sources, lowers operating costs, and supports long-term environmental sustainability.



# **Geothermic Energy**

Geothermal system designed to utilize the earth's natural thermal energy for efficient heating and cooling of the building, enhancing energy efficiency and minimizing environmental impact.

## **Rainwater Harvesting System**

Integrated rainwater harvesting system featuring an underground storage tank designed to capture and store rainwater for non-potable uses such as landscape irrigation and garden maintenance, contributing to water conservation and sustainable resource management.

## 9. Common Areas

## **Lobby & Corridors**

Finished with high-quality porcelain tiles matching the units. LED lighting with presence sensors and timed automation in corridors.

# **Landscaping & Pool**

Landscaped gardens and a saltwater pool.

# Gym

Fully equipped and thermostat-controlled air-conditioned gym. Sound equipment to control music. Consists of technical vinyl flooring throughout to absorb impact. Wood-finished wall cladding consisting of storage space for equipment and convenience.

#### Yoga Studio

Fully equipped and thermostat-controlled air-conditioned yoga studio. Sound equipment to control music. Consists of wood-finished porcelain tiles for warmth.

### Sauna & Steam Room

Wellness area consisting of a sauna, steam room, showers, and changing rooms. Finished with elegant flooring that complements the building's interior design.

## Co-Working Space

- Multi-space coworking area consisting of communal Wi-Fi and all the necessities for a workspace.
- Equipped meeting room for private meetings.
- Finished with elegant flooring that complements the building's interior design.

# 10. Garage & Storage

## **Garage Access**

Automatic entrance gate with remote control and safety photocell. 2 garage spaces and 1 storage space per homeowner.



# **Flooring**

Continuous concrete and resin flooring across parking and storage areas.

# **EV Readiness**

Pre-installed infrastructure for electric vehicle chargers; installation upon request. Ventilation & Safety Mechanical ventilation system with carbon monoxide detection and control.

# **Ventilation & Safety**

Mechanical ventilation system with carbon monoxide detection and control.

# 11. Elevators

# **Lift System**

Electric elevators from a premium manufacturer (Orona or similar), with telescopic automatic doors, luxurious cabin finishes, and secure access via FOB technology.