BUILDING PROGRESS **AT A GLANCE**

BUILD QUALITY & STRUCTURE

Built with precision, intention, and environmental care, Villa Gaia stands as a symbol of Minerva's dedication to quality and sustainability.

INSPIRED
DESIGN

With its elevated hillside location and natural surroundings, Villa Gaia's architecture maximizes airflow, views, and privacy. Balconies and semi-outdoor areas double as aesthetic and functional features. The layout separates the lush rear garden from the front tropical terrace, while the open design and natural ventilation keep the home cool year-round.

Robust and refined materials — including steel, concrete, wood, and glass — blend mid-century elegance with enduring quality. Transparent facades connect the interiors to the landscape and invite ample natural light.

The property is located approximately 32 meters above sea level, allowing for more architectural freedom and exceptional integration with the terrain.

CONSTRUCTION TIMELINE

Groundbreaking: January 2023
Completion: August 2025
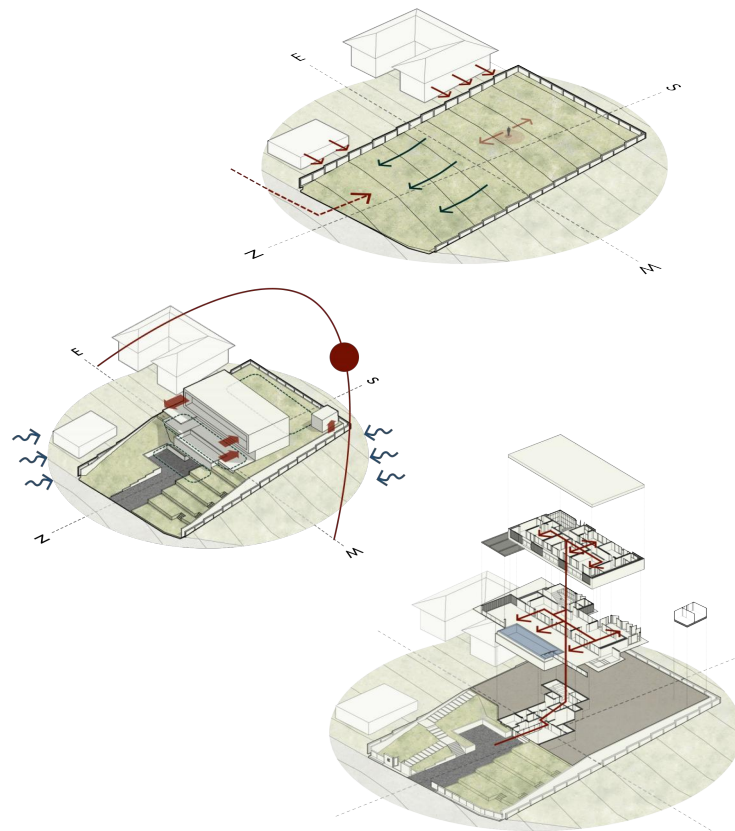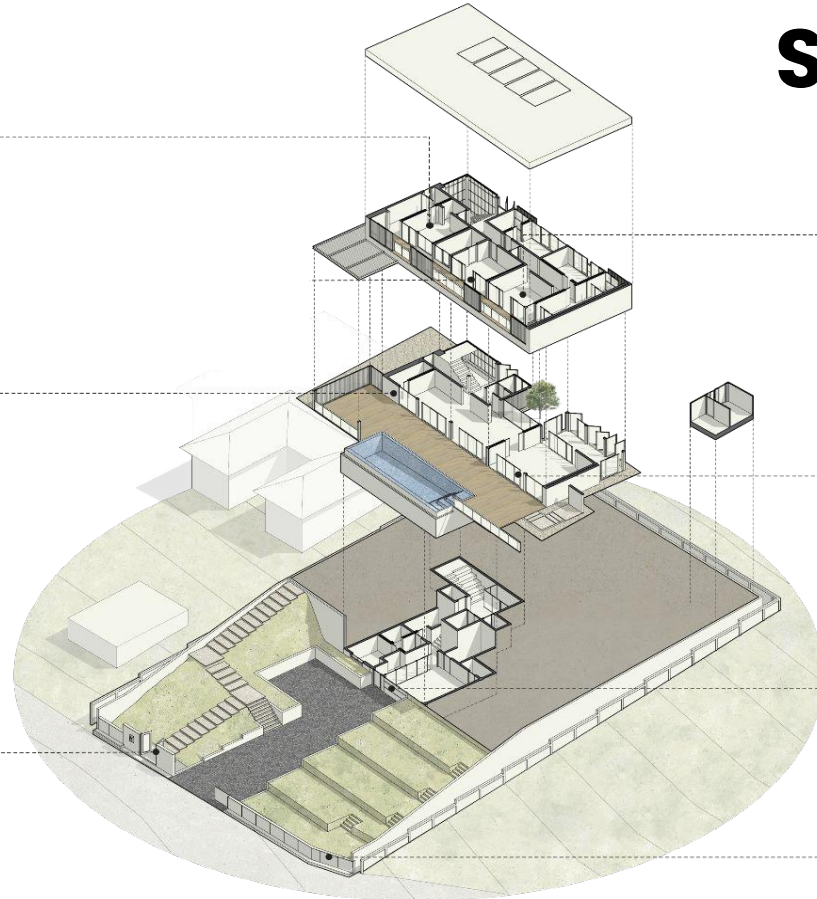
Emergency Response Systems

Emergency Response Systems are seamlessly integrated into smart home systems, connecting security systems with personal devices through home networks and wireless technology.

Smart Interior Surveillance Systems

Integrated throughout the house, our smart surveillance systems utilize CCTV cameras and advanced monitoring, ensuring comprehensive coverage for heightened security.

Comprehensive Exterior Security

Our integrated smart surveillance systems extend to the exterior, ensuring comprehensive monitoring and complete coverage.

Smart Door Lock & Alarm System Integration

Experience top-tier security with our smart door lock system and alarm. Seamlessly integrated, these technologies offer convenient access control and enhanced safety features.

Smart Garage Access

Elevating your convenience with a smart garage door opener—an easily controlled device remotely managing garage access. Using Wi-Fi technology, it offers keyless entry, voice control, and seamless integration with the home automation for effortless operation.

Controlled Access Security

Our smart intercom system facilitates seamless two-way communication and remote property access via a gate operated remotely.

Gated Villa

With a 180cm wall and an automated gate controlling access, this gated villa guarantees residents' security, fostering a tranquil and secure environment for peace of mind.

ENGINEERING SYSTEMS

- German-engineered electrical system
- PPR piping (hot/cold water)
- Euroswim ES3 ionizer: a chemical-free pool system promoting health, clarity, and longevity of pool infrastructure

CERTIFICATES & INSPECTIONS

Concrete Strength Test

Structural concrete was tested at 28 days to ensure compliance with engineering and safety standards, confirming high load-bearing capacity and long-term durability.

Steel Certification

All structural steel is supported by a Mill Test Certificate and a MiT Certificate issued by the Federation of Thai Industries, verifying the quality, grade, and source of materials used in the villa's construction.

Waterproofing System

The villa features a high-performance waterproofing membrane using Nitoproof 600, a premium product known for its excellent resistance to water penetration. Critical for long-term protection in Thailand's tropical climate.
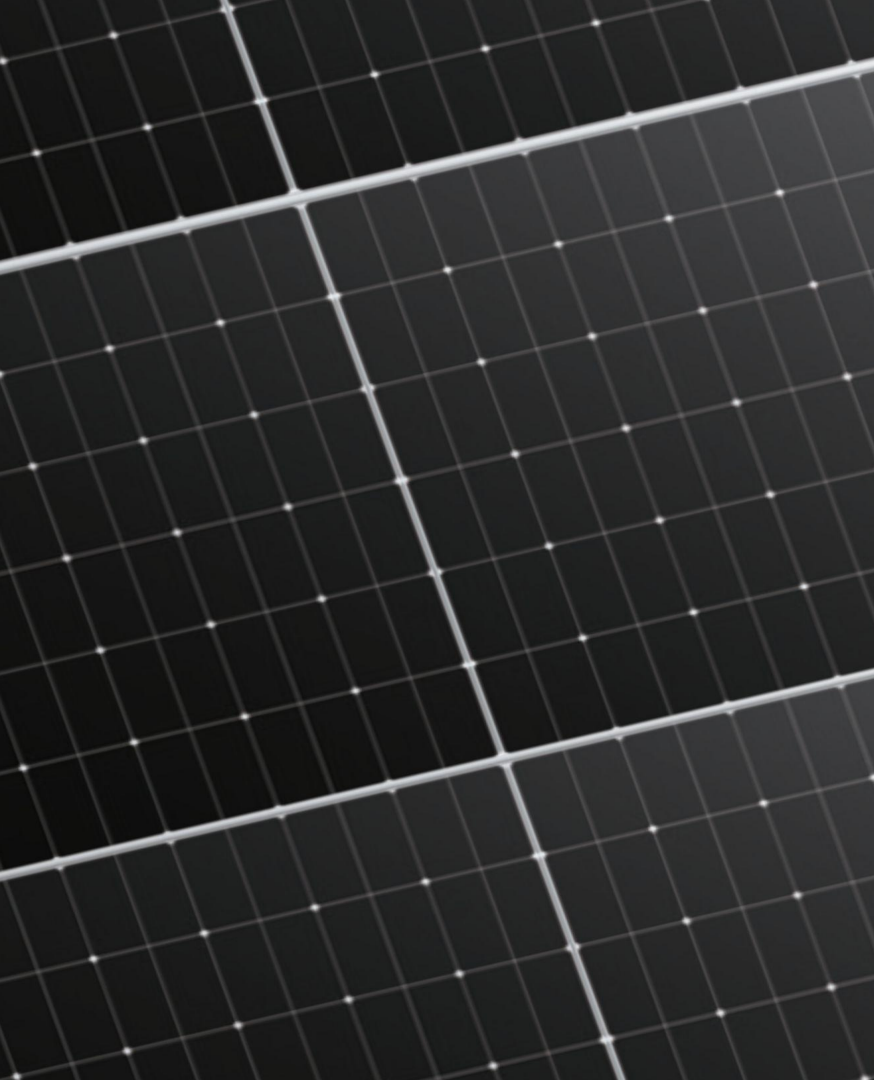
RENEWABLE

ENERGY

SOLAR PANELS:
Longi 550 wp monocrystalline half cell hi - perc.
11 kwp three phase on grid pv system.
With a 10 kws inverter & 20 panels

ENERGY STORAGE SYSTEM:
Solax X3 Mic G2

SOLAR THERMAL SYSTEM:
Roof-mounted single glass Flat Solar Collector with a maximum operating water capacity of 280L and 65 degrees Celsius per day, per panel. The 500L hot water storage tank consists of a high-grade stainless steel outer shell for protection, featuring a high-efficiency water flow design. This design provides constant water temperature consumption and high efficiency due to the force circulation system.

Sanitary Hardware
Smart sanitary ware incorporating advanced technology to improve functionality, hygiene, and water efficiency.

Light and Heat Control
Wooden slats are thoughtfully designed to reduce heat and regulate sunlight, enhancing indoor comfort and energy efficiency.

Smart Home
Integrated technology that automates and controls home functions for increased convenience, security, and energy efficiency.

Fire Protection
Integrated fire detection and prevention systems ensure early warning and enhanced safety within the villa.

EV Charging
Equipped with an electric vehicle charging station to support sustainable transportation and promote the use of clean energy.

Green Space
Thoughtfully designed landscaping enhances air quality, promotes biodiversity, and offers natural cooling through shading and evapotranspiration.
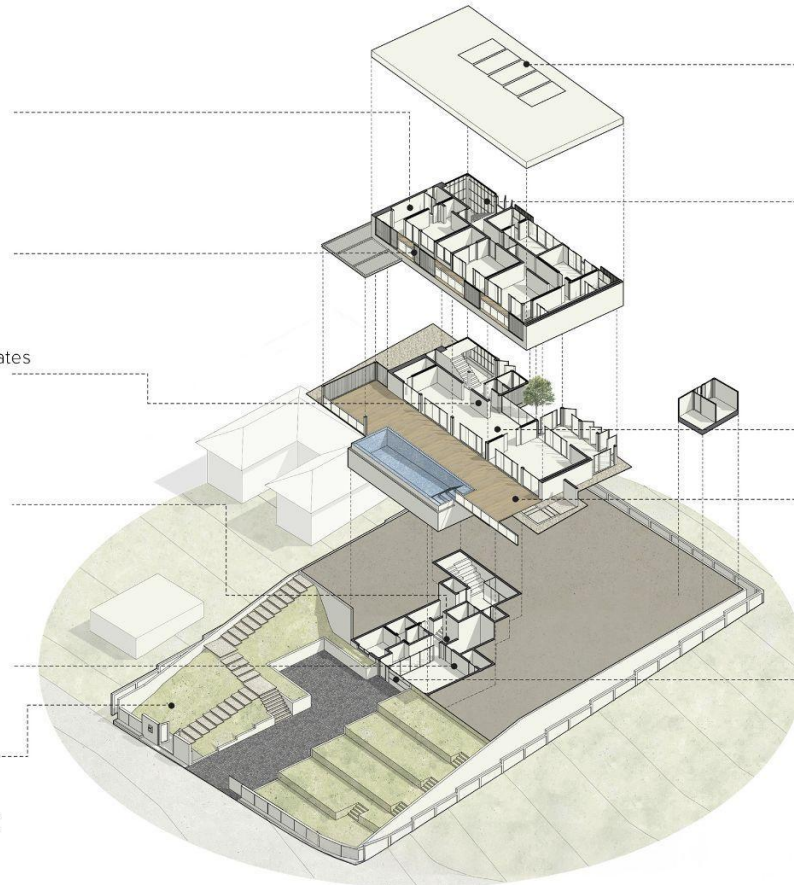
Solar Energy
Harnesses solar power to produce hot water, providing an eco-friendly and pollution-free alternative that supports sustainable living.

Natural Light
Strategically positioned wooden slats control sunlight penetration, reducing heat gain and the need for artificial lighting while maintaining privacy.

Air Circulation
Designed to promote efficient airflow, enhancing indoor comfort, health, and energy efficiency.

Non-Toxic Finishes
Use of non-toxic paints and materials to significantly reduce indoor air pollutants.

Security
Smart security systems provide a responsive, self-monitoring environment for enhanced safety.

MATERIALS, DESIGN & CONSTRUCTION ELEMENTS
USED TO REDUCE BUILDING'S
ENERGY CONSUMPTION

CATEGORY	AREA	DESCRIPTION
SOLAR PANELS	Roof	Longi 550 Wp Monocrystalline Half Cell Hi - Perc. 11 Kwp Three Phase On Grid Pv System With A 10 Kws Inverter & 20 Panels
SOLAR THERMAL SYSTEM	Roof	Basic Tau With 500l Storage Tank (Force Circulation) + 3rd Backup
FRESH WATER POOL SYSTEM	Swimming Pool	ES3 Operation System with Ionizer and Oxidizer
WINDOWS	Interior	10mm Premium Quality Glass , Highly Durable And Long-lasting.
WALL PAINT	Interior	Water Based & Eco Friendly. Low Voc And Odor Free . Formaldehyde & Lead Free - Singapore Green Label
SANITARY WARE	Bathrooms	KOHLER Intelligent Toilet
LIGHTING	Interior / Exterior	LED Energy Saver
KITCHEN APPLIANCES	Kitchen	MIELE Intelligent Appliances
SMART HOME SOLUTION	Interior / Exterior	Efficient Smart Home Control System

FIRE PREVENTION
& SUPPRESSION SYSTEMS

The fire prevention system utilizes smoke and heat detectors equipped with sensors to promptly detect fire or elevated temperatures. These detectors communicate directly with the smart home system through wireless technology, enabling seamless interconnection. Users benefit from real-time notifications, alerts, and status updates, along with remote control capabilities for the detectors and other interconnected smart devices.

INTEGRATED
SYSTEMS

Smart Home: IOThings is the integrated smart home system for Villa Gaia. Featuring a 4" screen control panel with LAN/WiFi connectivity, smart lighting, A/C control, intercom, security and access systems, internet, and gate motor integration.

Air Conditioning: Mitsubishi PE-P Concealed Ducted System Ideal for residential spaces, this ceiling-mounted unit delivers quiet, energy-efficient comfort with inverter technology and flexible BTU capacity. Only discreet grilles remain visible, preserving interior aesthetics while enabling zoned climate control.

Pool System: Euroswim ES3 Fresh Water Pool System is a non-chemical ionizer, oxidizer, and ultrasonic sanitizer system. It promotes a healthier lifestyle by ensuring crystal-clear water, protecting family members, increasing the longevity of equipment and pool surroundings, and providing significant environmental benefits.

Solar Panel Monitoring: Real-time energy production and consumption tracking for maximum efficiency and easy management of your solar power system.

FIXTURES & APPLIANCES
INCLUDED

Retractable Insect Screens
Infinity Zipline™ Mesh Retention System – A premium mesh-to-track system designed to prevent sagging and mesh blowouts, ideal for large openings. Static load tested up to 590 kg, with accredited results from a NATA Laboratory, ensuring exceptional strength and durability.

Climate Controlled Wine Cellar
Dimensions: 1.75 x 2.52 x 2.70 meters (WxDxH). Equipped with a temperature control unit (digital thermostat, temperature controller, and moisture thermo) for optimal wine preservation. Includes a twin refrigeration system, digital locking system (PIN + fingerprint scan + keycard), and interior LED illumination for a refined display.

European Fitted Kitchen:
A sleek, modern European kitchen featuring high-quality cabinetry, premium finishes, and integrated appliances. Designed for both style and functionality.

Built-in Wardrobes
Custom-designed built-in wardrobes crafted with natural Asian Walnut, featuring soft-close systems, ample storage, and elegant finishes that complement the overall interior aesthetic.

Sanitary Ware

Bathtub / Basins:	TRUSOL
Smart Toilets:	Kohler
Faucets / Shower Sets:	Kohler
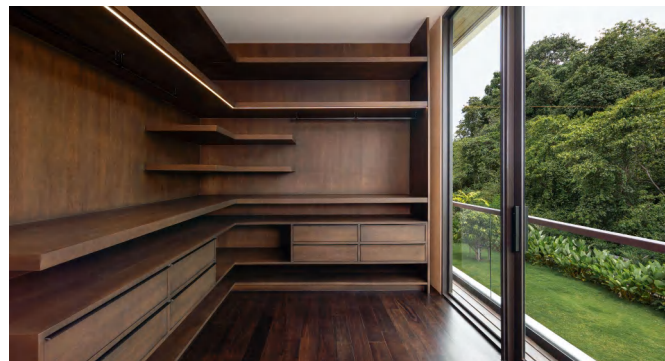
FIXTURES & APPLIANCES
INCLUDED

Designer Appliances:

Oven:	Miele Built-in Oven & Microwave Oven
Fridge:	Miele Built-In Fridge Freezer Combination
Dishwasher:	Miele AutoDos Fully Integrated Dishwashers
Hob:	Miele Induction Hob With Intelligent Pan Recognition For Up To 6 Pans
Hood:	Miele 90cm Slimline Cooker Hood
Wine Fridge:	Vintec Wine Fridge For 40–50 Bottles
Water Heaters:	Solarus

MATERIALS
USED

CATEGORY	AREA	DESCRIPTION	COLOR
FLOOR FINISHING LANDSCAPE			
COBBLESTONE	Main Entrance Paving	Black Granite Cobblestone - Size : 10x10x3-4 cm	Black
ROUGH POLISHED CEMENT FLOOR	Outdoor Staircase, Outdoor Store Room	Gray Cement Floor, Skim Coat Mortar, Special Finishing Plaster, Gray, Rough Polishing	Gray
GRASS	Landscape	Bermuda Grass	Green
GRAVEL	Landscape	Brown Gravel Mediterranea Split 8-12 mm	Brown
PAVING BLOCKS	Walkway Landscape	Silaliam Flooring Blocks 10x40X6 cm.	Light Brown
FLOOR FINISHING INTERIOR			
TIMBER FLOORING	Ground Floor, 1st Floor, 2nd Floor	Acacia Wood (Asian Walnut)	Walnut
FLOOR TILE	WC Maid	Ceramics Floor Tiles Cotto Pelino - Size : 300x600 MM.	Gray
FLOOR	Garage	Toscana Almond Structured	Cream Matt
FLOOR TILE	Garage Storage, Golf Bag Room, Pump Room 1-2, MDB, Entrance Hall, Maid Room, Laundry	Ter Terrazzo M Cream Matt Size : 600x600x9.5 Mm.	Cream Matt
FLOOR TILE	WC Guest	SKU: Z21uxa48100158d2 Size : 600x600x9 Mm.	Beige
FLOOR TILE	WC. Bedroom 2, WC. Bedroom 3, Master bedroom	Enzo Sand Microtec Size : 600x600x9 Mm.	Gray
FLOOR TILE	WC Bedroom 4	Niro Portino H7 Series Grey Matt Porcelain Tiles Size : 600x600x9 Mm.	Gray

MATERIALS
USED

CATEGORY	AREA	DESCRIPTION	COLOR
FLOOR FINISHING EXTERIOR			
EXTERIOR DECKING	Terrace & Balcony	Acacia Wood (Asian Walnut)	Wood
SWIMMING POOL FLOOR TILE	Swimming Pool	Sukabumi Stone	Bali Green
WALL FINISHING LANDSCAPE			
PATTERNED PLASTER WALL	Exterior Wall	Wall Plastered With Gray Mortar, Skim Coat Mortar, Special Smooth Surface Plaster, Gray, Rough, Wood-mild Pattern Size 4 Inches.	Gray
RAILWAY SLEEPER	Landscape Garden Terrace	Railway Sleeper	-
WALL FINISHING EXTERIOR			
PATTERNED PLASTER WALL	Exterior Wall	Wall Plastered With Gray Mortar, Skim Coat Mortar, Special Smooth Surface Plaster, Gray, Rough, Wood-mild Pattern Size 4 Inches.	Gray
PLASTER WALL	Exterior Wall	Wall Plastered With Gray Mortar, Skim Coat Plaster, Special Smooth Surface Finishing, Rough Polishing.	Gray
WOOD WALL	Exterior Wall, Entrance Door (1st Floor)	Acacia Wood (Asian Walnut)	Wood
TIMBER SLATE WALL & CEILING	Outdoor Dining Area	Acacia Wood (Asian Walnut)	Wood
SWIMMING POOL TILE WALL	Swimming Pool	Sukami Stone	Bali Green
TIMBER SLATE WALL	Facade, Exterior Wall	Acacia Wood (Asian Walnut)	Wood

MATERIALS
USED

CATEGORY	AREA	DESCRIPTION	COLOR
WALL FINISHING INTERIOR			
INTERIOR TEXTURE COLOUR	Interior	Textured Color Vanilla Cream	Cream
TILE	Shower Walls, WC Bedroom 2, WC Bedroom 3, Master Bathroom	Basic Taupe	Cream
TILE	WC Bedroom 4	Niro Portino H7 Series Grey Matt Porcelain Tiles	Gray
TILE	Maid's Kitchen Counter Wall, Laundry Area	Subway White Bevel Matt	White
CEILING FINISHING EXTERIOR			
EXTERIOR WOOD	Exterior Ceiling	Acacia Wood (Asian Walnut)	Walnut
GYPSUM BOARD INSIDE	Interior Ceiling (Ground Floor)	Gypsum Board, Chamfered Edge 9 Mm., Painted Toa 4seasons - #a8000 White.	White
GYPSUM MOISTURE RESISTANT BOARD INSIDE	Interior Ceiling (WC)	Gypsum Board, Moisture Resistant, Chamfered Edge 9 Mm., Painted Toa 4seasons - #a8000 White.	White