HIGUERON Resort
RESIDENCES & COLLECTIONS

HIGUERON RESIDENCES

Location: Plot BA-11 API-01 Fuengirola, Málaga. 26 DWELLINGS. 26 STORAGE ROOM AND 52 PARKING LOTS IN COLLECTIVE RESIDENTIAL, RESIDENCES APARTMENTS.

WELL™ CERTIFICATION EDUCATIONAL GUIDE

TABLE OF CONTENTS

1. Background

One of the main ideas at the beginning of the creative process was finding inspiration in the environment and context. Our priority is to offer the highest quality of life, preserving the environment that surrounds us. The careful natural environment, comes together in a different, and unique architecture with its own identity. An architecture inspired by nature, where we can find white river stones, sculptural forms representing trees such as the carob tree, corten steel bridges, wood...

The design pretends to reflect the nature and landscape of the Mediterranean environment as a reference to integrate the homes with an avant-garde, organic and authentic style.

The fruit of this essence is born from the Mediterranean tree, like the centuries old carob trees that surround the environment. The tree is the root that circles each of the houses, connecting them by means of a sculptural bridge of corten steel to embrace nature. The bridge culminates the treetops that shape the structure of Higuerón Residences.

Our project has been designed to respect the centennial carob trees and the existing nature that embellish the place and denotes tranquillity, nature, and history in the environment. A joy for the senses with the sound of the birds as they stroll and delight in the fragrance of nature.

The project pretends to improve the idea of living inside a natural environment with views to the sea where breathing pure and fresh air is possible. Every dwelling unit has a terrace which allows occupants to spend time outdoors. Also, dwelling units has big glass surfaces that creates the connection between indoor and outdoor spaces.

Higuerón Residences is one of the first organic and environmentally friendly developments on the Costa del Sol and qualifies for the stringent BREEAM and WELL for Residential certification for sustainable development and people first homes, both in the construction and energy efficient design of its properties, which in turn leads to easy and affordable maintenance.

2. WELL™ CERTIFICATION

WELL is the world's leading healthy building certification program. In this section we summarize the key aspects of the standard. The following information was extracted from the WELL certification web: https://www.wellcertified.com/certification/v2/

The WELL Standard is a library of over 500 evidence-based, design, policy and operational strategies that, when implemented, can improve the health and well-being of people:

Make the air better to breathe

Ensure the water is safe to drink

Boost sleep and cognitive well-being

Foster a culture of health

Select healthier materials

Advance diversity, equity and inclusion

Encourage daily movement

The standard is founded on the following principles:

Equitable: Aims to benefit a variety of people, including and especially disadvantaged or vulnerable populations.

Global: Proposes interventions that are feasible, achievable and relevant across many applications throughout the world.

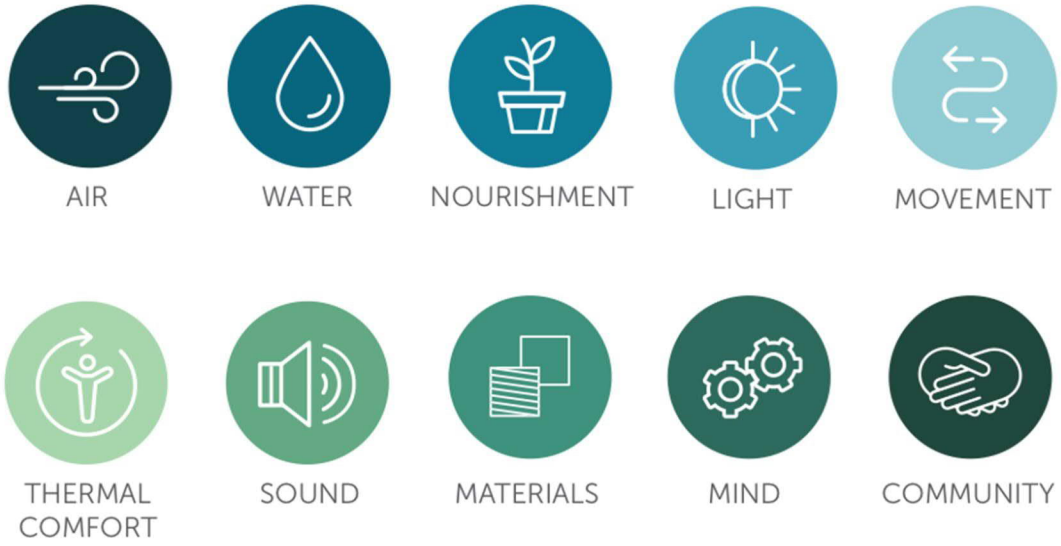
Evidence-based: Draws upon a diverse and rigorous body of research across varying disciplines, validated by a collaborative body of experts, including IWBI advisors.

Technically robust: Defines industry best practice and validates strategies through performance verification and a rigorous third-party verification process.

Customer-focused: Sponsors the success of WELL users through dedicated coaching services, dynamic resources and an intuitive platform for navigating the journey.

Resilient: Keeps pace with advances in research, science, technology and society, continuously improving by integrating new findings.

The certification program is structured around ten concepts plus innovation strategies:



3. WELL™ FOR RESIDENTAL PROGRAM

A new standard of living

WELL for residential is an evidence-based, third-party verified certification program for developers, builders, operators, architects and designers to créate healthier, more resilient homes.

WELL for residential is the first and only holistic, third-party verified certification program to exclusively address health and well-being in all residence types, including single-family homes and units in multifamily buildings.

Informed by the WELL Building Standard, this certification program equips developers, builders, operators, architects and designers with more than 100 strategies to improve residents' well-being and foster healthier environments at home.

The aim of this educational guide is to explain the HIGUERON RESIDENCES users the main features achieved on the program, and how the implemented strategies can help them to booster their health and well-being.

For more information please visit: https://www.wellcertified.com/residential

4. AIR

AIR: Reducing or eliminating sources of pollution. By implementing good mechanical and natural ventilation systems, incorporating an indoor air quality plan during construction and controlling the appearance of humidity the indoor air quality is improved.

R-A01. Ventilation design. Install Mechanical Exhausts.

Mechanical ventilation in homes can enhance indoor air quality and may lead to improved health.

Kitchen and bathroom exhausts have been shown to reduce air pollution and enhance air quality.

Cooktop exhausts are an effective strategy for capturing and removing contaminants generated from cooking.

Demand-controlled ventilation systems can enhance the air quality in homes by turning on automatically to reduce elevated contaminant build-up.

A mechanical ventilation system is installed to extract the indoor air in the kitchen and bathrooms.

R-A04. Construction Pollution Management. Mitigate Construction Pollution.

During the construction works, a pollution managment plan was implemented, reducing the amount of dust inside the dwelling units, sealing the HVAC ducts until the end of the works and store materials in a dry area.

A mechanical ventilation system is installed to extract the indoor air in the kitchen and bathrooms.

R-A05. Combustion minimization.

Replacing combustion-based appliances with electric alternatives can help enhance indoor air quality and reduce negative health effects, such as asthma symptoms, attributed to combustion pollutants.

Homes without combustion appliances have lower indoor nitrogen dioxide concentrations than outdoor levels.

No combustion sources are installed. Induction cooktops are provided in all dwelling units.

Idling is not permitted for more tan 30 seconds in the garage to avoid pollutants.

R-A06. Monitor Outdoor Air Quality.

Increasing awareness of outdoor air quality can help individuals reduce exposure to contaminants when outdoor pollution levels are high; when alerted, individuals can take appropriate action, such as staying indoors and keeping windows closed.

An outdoor air quality monitoring system is installed within the project boundary.

The system takes measurements each minute of PM2.5, temperature and humidity.

Environmental alarms are reflected on the home automation screens, and they also send the same message to mobile phones linked to the home automation so that the alarm can be reported remotely.

In each dwelling unit there is a display which shows the values of PM2,5, temperature and humidity. The system notifies the owner when the air quality overpass certain quality levels and recommends to keep the windows closed.

TEMPERATURE:

In the event that there is a difference of 8ºC between the measurement of the external sensor and the sensor of the home automation screens of the rooms, an environmental alarm is issued with the following text: ”Please keep the windows closed”

HUMIDITY:

In the event that the humidity rises to 65% as measured by the probe of the home automation screens of the rooms, an environmental alarm is issued with the following text: “Please keep the windows closed”

PPM:

In the event that the PPM 2.5 particles reach a threshold concentration of 16 µg/m3 as measured by the external probe, an environmental alarm is issued with the following text: “Please keep the windows closed”

R-A10. Smoke-Free Environment.

Homes where smoking does not occur have been shown to have lower levels of indoor air pollution.

Smoke transfer between multifamily dwelling units can be prevented through smoke-free policies.

Smoking bans in multifamily housing may reduce smoking activities and decrease the number of individuals who smoke overall.

Smoke-free housing policies may lead to decreased fire hazards, lowered insurance costs, reduced cleaning costs and lowered health risks.

HIGUERON Residences is a smoke free environment. The following policy must be respected:

- Indoor smoking ban

Smoking of cigarettes and electronic cigarettes is prohibited indoors within the Project boundary.

- Outdoor smoking ban

Outdoor smoking is prohibited within 7.5 m of all entrances, windows, and air intakes. Signage indicating the no smoking ban is located on the main building entrances and on the building grounds walkways with a 30 m maximum distance between signs.

5. WATER

R-W01. Plumbing Design and Sizing.

Properly designing and sizing water delivery systems in homes helps protect water quality.

Preventing water stagnation through properly designed plumbing pipes reduces the need for frequent repairs and unscheduled maintenance of plumbing systems.

Installing backflow prevention systems is a common strategy to prevent contamination of potable water networks.

All plumbing system materials for use with water in kitchens, bathroom sinks and showers/baths are approved for drinking water use by a government-authorized certification body (AENOR).

The plumbing system design have backflow prevention systems.

The sizing of plumbing system complies with the local regulation DB HS4.

R-W04. Moisture Management Design.

Design strategies that address moisture in homes (such as providing capillary breaks, preventing air leakage and minimizing thermal bridges) minimize humidity, reduce sudden temperature changes and may increase individual comfort.

Controlling for the source of excess moisture in the home may lead to health benefits like reductions in asthma symptoms.

Design Envelope to Reduce Liquid Water Intrusion

The building is not located in an area designated as flood-prone by a government authority (Junta de Andalucía).

The building envelope is designed to avoid liquid water intrusión through the following:

Perimeter walls that are sealed (i.e., made watertight).

A perimeter drain equipped with a trap seal or sump pump.206

A continuous drainage plane is installed between the wall cavities and exterior cladding

Walls on the exterior minimize capillary suction (i.e., wicking) through a free-draining spaces (e.g., gaps between exterior cladding and weather-resistant barriers in wall assemblies).

Foundation walls or slabs have a draining system that consists of a perforated land drain pipe, geotextile and permeable splash strips to channel water to a drainage point away from the walls.

Gutters and downspouts that drain roof rainwater to a sewer or a rainwater capture system.

Design to Reduce Moisture Impacts

The finishing interiors uses moisture resistant materials in the following areas:

Floors in entryways, bathrooms, cleaning rooms and kitchens and directly under appliances and water heaters.

Walls, ceilings and flooring in areas below grade.

Moisture resistant sealants are used around sinks, tubs and showers.

Design to Reduce Risk of Leaks

Toilets, hard-piped appliances and water treatment devices have a readily accessible shut-off valve. A flood detector is also installed in bathrooms and living room.

R-W05. Flow and Temperature Sensing.

Water metering

Individual water metering can provide homes with early leak detection and help reduce water consumption.

Smart water metering can positively influence behaviors that lead to reduced water consumption, which may help improve water management in urban areas.

A water consumption sensor is installed before the shut-off solenoid valve in the individual connection of each dwelling unit.

This sensor sends the information to the home automation system of the dwelling unit, and the measurement can be consulted on the main screen in the living room.

To access it, you must go to the maintenance access menu. In this folder there is a consumption submenu, and within the latter is the water consumption folder. In this folder, the historical consumption can be consulted, as well as the partial consumption from a time selected by the client (similar to the system used in vehicle odometers), as well as viewing graphs to intuitively understand the dynamics of water consumption over time.

It can also be consulted on mobile phones that are linked to the home automation system.

Monitor water leaks

Leak detection systems can effectively minimize water loss and damage due to leaks.

Flood probes are installed in risk areas, bathrooms, kitchen and bathtub area. If a probe is triggered, a flood risk message is issued on the main screen of the home (living room) and on the mobile phones linked to the home automation system. The water supply is also cut off by means of the solenoid valve placed at the entrance of the home's water supply.

To restore the water supply, it is necessary to deactivate the flood message on the screen within the maintenance access menu. In this folder there is a technical alarm submenu, and within this last one there is the flood alarm folder.

6. NOURISHMENT

R-N02. Onsite food production.

Individuals who participate in community and home gardening projects consume more fruits and vegetables and are more likely to meet dietary intake recommendations.

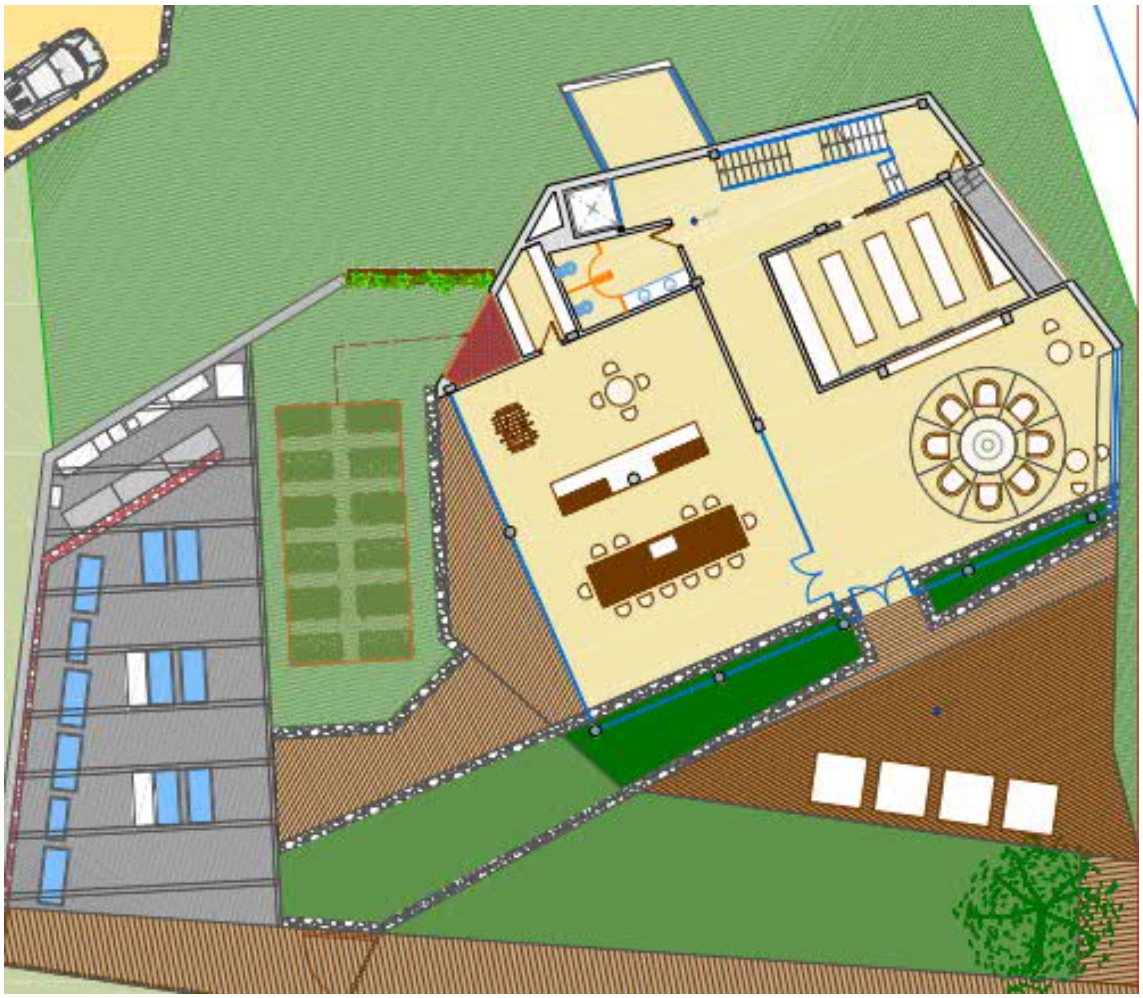
Communal gardening can provide onsite educational opportunities and may increase social cohesion, community involvement, physical activity and perceptions of community safety.

Gardening may provide mental health benefits by reducing symptoms of anxiety and depression.

On the left side of the C building, an outdoor space is provided for the growing of the following species:

Vegetables: Lettuces, tomatoes, onions, garlic and carrots

Aromatic plants: Rosemary, basil and parsley



Regular occupants have access to planting supplies, including planting medium, watering system, plants and gardening tools.

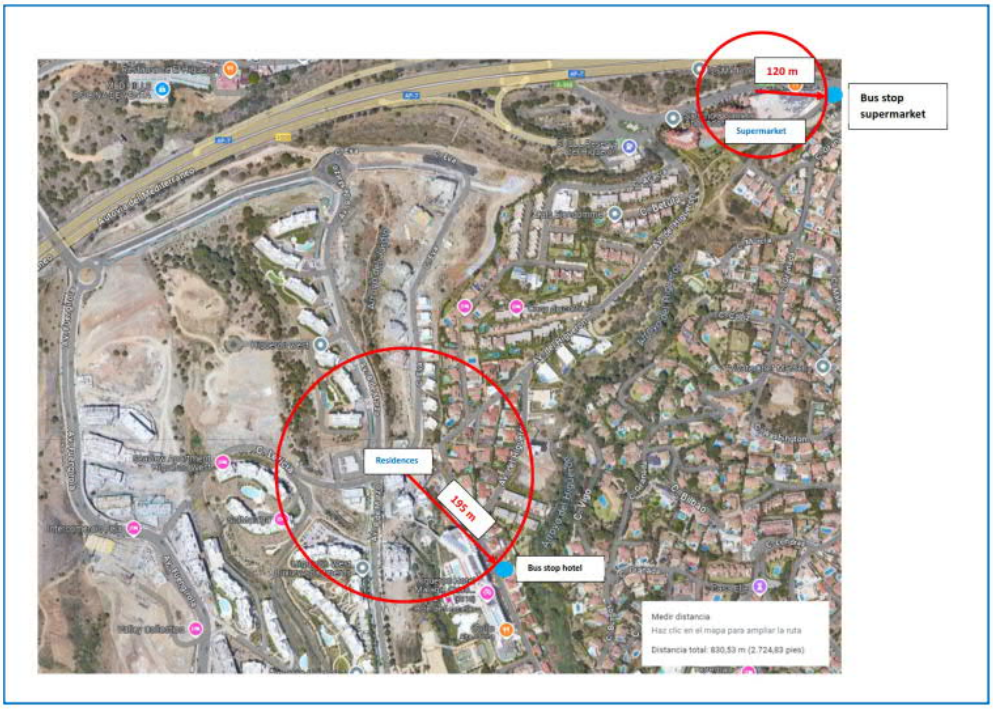
R-N03. Food access and support.

Support Fresh Food Access

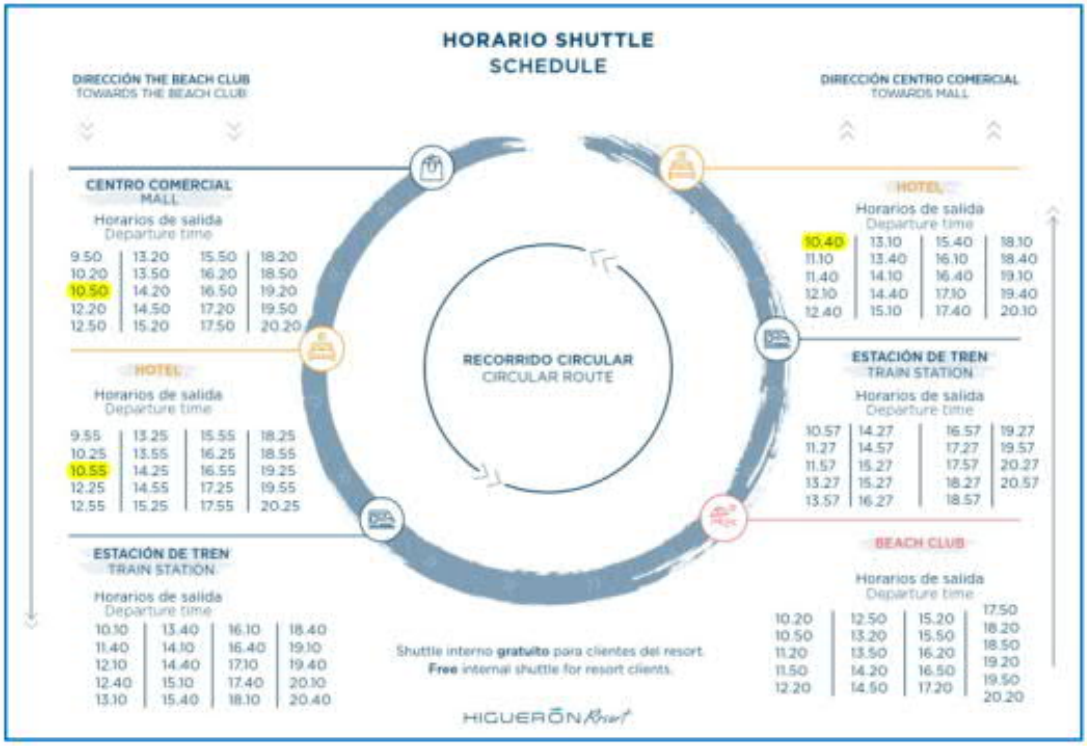
Proximity to supermarkets, grocery stores and farmers markets can help individuals improve their dietary and lifestyle behaviors by supporting better food choices.

A bus service free of charge is provided by Higueron Projects. This shuttle bus can take you near a supermarket. You can pick up the bus at the Hotel bus stop, less than 200 m from the main Residences entrance. Time transit is less than ten minutes.

In the following image you can find the nearest bus stop and the location of the supermarket:



The timetable of the free bus service can be found on the following table:



Support Fresh Food Delivery

Residents who have better access to fresh fruit and vegetables tend to have healthier diets and are less likely to be overweight or obese. Fruits and vegetables are key components of a healthy diet, and their consumption helps prevent chronic disease.

HIGUERON RESORT has a signed agreement of fresh food share program with the company Frutas Eladio (https://www.frutaseladio.com/web/la-empresa/).

The service is available for all residents. Fruit is delivered every day except Sundays, and can be picked up in the Higueron Resort from 7:00 am to 2:00 pm.

The access to the pick up point can be reached within the project boundary:

R-N03. Food Hygiene Support

Kitchen layout has been designed to have the sink, countertop and cooktop in proximity. This design tend to have a lower number of cross-contamination events and may reduce foodborne illness.

7. LIGHT

R-L01. Design for Daylight

Provide windows

Homes with access to daylight can help improve sleep patterns and decrease falling incidents, infectious diseases and depression.

Unobstructed window views of nature can increase feelings of calmness, aid in illness recovery, and improve focus, mood and well-being.

All dwelling units have a glazing area between 28 an 38 % of the interior regulary occupied area, providing natural daylight.

Provide Blackout Shades

Blackout shades can help provide a cool and dark environment that is optimal for sleep

Foscurit and roller blinds are installed in all bedrooms with a maximum 1% visible light transmittance.

Roller bilnds can be controlled from the home automation system.

8. MOVEMENT

R-V01. Pedestrian-Friendly Places

Neighborhoods designed to increase physical activity levels enable more active lifestyles, support human and environmental health and promote social cohesion.

Communities that focus on pedestrian-friendly design, including proximity, connectivity, density and aesthetics, are associated with increased walking for people of all ages and genders.

The main Higueron Residences building entrance opens onto a street with a sidewalk/footpath and is connected to at least three other streets (Av. 8 de Marzo, c/Paula, c/Leticia) with sidewalks/footpaths within a 540 m walking distance.

The sidewalks incorporate the following design strategies:

i. Have a width that is at least 1 m.

ii. Have intersections that include curb cuts.

iii. Are physically separate from the portion of the roadway dedicated to motor vehicles through either a curb edge.

Within a walking distance of less than 150 m the Residences Apartments users have access to the hotel gym, restaurants and hair care services.

9. THERMAL COMFORT

R-T01. Thermal performance.

Providing a desirable thermal comfort level can improve the physical and mental health of individuals.

Having control of indoor temperatures can support overall satisfaction with thermal comfort.

Homes that are mechanically heated or cooled allow for a greater range of indoor temperatures and can increase overall thermal comfort compared to residences that are naturally conditioned.

Heating is mechanically supplied with radiant floor in all regularly occupied rooms and bathrooms with showers and baths, with controls present within the dwelling unit.

Cooling is mechanically supplied in all regularly occupied rooms, with controls present within the dwelling unit.

R-T02. Thermal control.

Provide Room-by-Room Thermal Adjustability

Zoned heating and cooling systems in homes allow individuals to set different temperatures in different rooms to accommodate multiple thermal comfort preferences.

The heating and cooling in each regularly occupied room can be independently controlled.

Utilize Smart Thermostats

Smart thermostats enable individuals to take control of their thermal comfort and also help save energy.

Smart thermostats can control temperature setpoints remotely, adjust heating and cooling through customizable schedules and predict comfort settings through usage data.

Thermostats installed in the dwelling unit can be operated remotely from outside of the dwelling unit and have programmable temperature setpoints (e.g., based on time of day or location) through Zennio Remote system.

Zennio Remote is an app for the visualization and control from mobile devices (smartphones and tablets) and web browsers. You will be able to interact with your installation in a quick, easy and safe way anywhere, anytime!

You only need a Zennio touch panel (with Remote Control License) connected to the Internet and the app installed on your smartphone or tablet or to introduce the URL https://web.zennioremote.com/landing in your web browser.

To install the app in your mobile device: access the store, download the app and install it in your smartphone or tablet after accepting the EULA (in English).

This app can be used without time limitations until the end of service.

R-T05. Radiant Heating Systems.

Radiant heating can more effectively provide thermal comfort in homes by reducing air movement, minimizing drafts and maintaining an even distribution of heat.

Radiant heating systems do not blow air through the home, which can help reduce the spread of dust and improve air quality for individuals who are sensitive to allergens.

Radiant heating systems reduce the temperature difference between indoor surfaces and the air, decreasing the likelihood of condensation and mold growth.

Radiant floor heating are installed in the all the regularly occupied rooms (bedrooms and living room) and in all bathrooms with showers or baths.

10. SOUND

R-S01. Sound barriers.

When analyzing long-term building operation costs, constructing for acoustical comfort is more cost-effective than constructing for minimum code compliance.

Walls and floor/ceiling assemblies can be constructed to mitigate the transfer of loud noise, improving privacy and confort.

Party walls and slabs have been designed to provide outstanding performance. Impact noise reduction flooring have been implemented. Control quality acoustical tests have been carried out.

Results of the tests shows an improvement over 40 % on the performance of floor/celing assemblies compared to the mínimum code compliance and over 20 % less impact noise transmission.

11. MATERIALS

R-X02. New Materials Selection.

Building materials impact the quality of air inside homes.

Many building materials contain hazardous chemicals that may cause negative health effects, such as lead poisoning, cancer and asthma.

Building materials may contribute to toxic exposures in the home from volatile organic compounds off-gassing, and lead-based products poisoning individuals.

Individuals exposed to volatile organic compounds from hazardous building materials used in homes may experience negative health effects such as issues with the respiratory tract, eyes and cardiovascular system, challenges with neurological functioning, and higher rates of cáncer.

The identification of ingredients or materials hazardous to humans in the construction phase has been carefully selected, installing lower-emitting building materials in homes. This leads to a decrease exposure to hazardous chemicals, such as formaldehyde, and reduce the risk of negative health effects.

Installed mineral wool thermo-acoustic insulation and plasterboard products are Certified Product "Indoor Air Comfort GOLD – top level". This certificaton demonstrates additional compliance of the product emissions with the EU eco-labels and similar specifications as well as sustainable building certifications. In addition, certified products are those that belong to the best, lowest emission class and are therefore the best in relation to indoor air quality.

12. MIND

R-M01. Nature and place.

Exposure to natural elements may lead to mental health benefits, such as improved sleep and cognitive functioning, and decreased levels of anxiety and depression.

Window views that include the sky, landscape and ground levels are associated with increased view satisfaction and enhanced psychological well-being.

Aesthetically engaging places encourage the development of positive emotional bonds that support well-being and quality of life.

Well-being, sustainability and visual harmony was seeked on the design to experience the tranquillity and warmth of comfort in a natural and safe environment.

R-M02. Design for reassurance.

Design interventions that focus on security can help improve quality of life and decrease fear of crime.

Strategic design and positioning of mail and parcel delivery areas have been shown to be effective in reducing unauthorized access to personal information.

Building orientation that supports social interconnectedness and mutual trust can increase informal surveillance and act as a crime deterrent.

Vehicular traffic-calming measures and well-designed footpaths (sidewalks) have been linked to increased safety and security and decreased stress levels.

Design Secure Main Entrances

All doors with direct access into the dwelling unit are secured through the following:

i. Include a deadbolt lock that extends beyond the strike edge of the door by at least 2 cm [0.79 in].

ii. Contain a handle that enable operability from the interior without a key.

iii. The main dwelling unit entrance has viewing access through a with a wide-angle viewer mounted at 1.5 m from the bottom of the door.

Support Secure Mail and Parcel Delivery

A mail delivery system is provided that:

i. Is wall-mounted.

ii. Is located in an area with a direct line of sight from the primary sidewalk.

iii. Includes an individual lockable door for each dwelling unit

For secure parcel delivery a package room is provided and monitored by an on-site 24-hour concierge service.

R-M03. Digital Connection.

Internet access increases an individual's ability to navigate systems for employment, education, social connection and health care.

Internet access is increasingly important for online learning and information access, as evidenced during a global pandemic, and is an important factor in addressing health equity.

The Higueron Residences has free internet service of more than 100 Mbps in dwelling units and common areas, for use by the residents of the dwelling units.

13. COMMUNITY

R-C03. Integrative Design.

An integrative design process requires a diverse and balanced group of representatives for decision-making and should include representative users, building staff and the project owner or architect.

Integrative design practices increase transparency among stakeholders to streamline the planning, design and goal-setting processes.

Stakeholder input helps project teams address essential health promotion goals, create spaces in consideration of all stakeholders and enrich the well-being of residents and visitors.

The aim of this feature is to recognize and encourage an integrated design process for the early design phase that optimizes the health and wellbeing of the building users along with the sustainable goals.

1. Occupant's health and sustainability needs study: Before the completion of the preliminary project, a study of the project's sustainability and occupant's health needs has been developed.

2. Roles and responsibilities of interested parties: In this chapter, the parties interested in the delivery of the project have first been identified, and the contributions and comments of each of them for the different phases of the project are summarized below.

3. Results of the contributions of interested parties: From the suggestions, comments and recommendations, conclusions and results have been obtained that have influenced the proposed design and the building in operation and use.

The communication strategy between interested parties has consisted of the following means:

In-person or virtual meetings, through videoconferences.

Resolution of doubts and comments and provision of documentation: through emails and the platform online project management.

R-C04. Healthy and Inclusive Construction Sites.

Address Construction Hazards Through Design

Preventative design practices can help eliminate work-related injuries, hazards, illnesses and deaths.

A hazard identification and mitigation design program for construction has been implemented since the design phase by BILBA, main general contractor.

Support Health and Well-Being in Construction

The general contractor's (BILBA) worksite health and well-being policy has been implemented during the construction works, including:

i. Education on the danger of long-term exposure to severe weather (i.e., extreme heat).

ii. Provides cooling and/or warming provisions (e.g., fans, shades, warming stations) on the construction worksite during extreme temperatures.

iii. Implements a policy for managing inclement weather on the construction worksite.

iv. Prohibits smoking on the construction worksite.

v. Provides drinking water at the construction worksite.

vi. Provides sunscreen at the construction worksite.

vii. Provides sanitation facilities for all genders at the construction worksite

Promote Diversity, Equity and Inclusion in Construction

Diversity, equity and inclusion strategies can improve productivity and organizational performance for construction companies.

Construction companies can address diversity, equity and inclusion by hiring individuals from underrepresented populations, supporting advancement to leadership positions for workers in minority groups and ensuring fair and equal pay.

The general contractor (BILBA) includes a comprehensive diversity, equity and inclusion (DEI) policy that meets the following:

i. Pertains to the entire organization associated with the general contractor.

ii. Provides regularly scheduled DEI training to all employees on an annual basis, at minimum.

iii. Specifies DEI goals and detailed strategies for achievement and monitoring of goals.

iv. Provides opportunities for training and job advancement for all employees.

v. Establishes equal pay for equal work.

R-C05. Resident Education

Accessible education, effective communication and accurate information can help improve health literacy.

Supporting health literacy across all socioeconomic groups can help reduce inequities in accessing healthcare.

Health literacy can help provide individuals with a better understanding of their health status and empower them to make positive behavioral changes.

People who are educated about the performance of their building show greater satisfaction in their building's environment.

This educational guide covers all implemented WELL features within the project boundary, including the intent of each feature and provides instructions for use for each feature, as applicable.

For further information you can contact the WELL AP of the project at juan@acusmatic.com

14. INNOVATION

R-I02. WELL Accredited Professional (WELL AP)

The WELL AP credential denotes that a person has expertise in the WELL Standard and has a commitment to advancing human health and well-being.

By engaging a WELL AP who has proven experience bridging the gap between commitment to and implementation of the WELL Standard, project teams may benefit from a more streamlined and impactful process.

Since the early desing phase, a WELL AP was enrolled by the owner as a key person to help streamline the health and well-being goals of the project.

The WELL AP was suggested by the sustainable advisor EVENED, which managed the BREEAM certification.

The main role of the WELL AP in a first stage, was addressing education on health and well-being issues to the all the stakeholders of the project (architects, engineers, contractor, owner, sustainable advisor) and in a second stage became the Project administrator, managing all the information related to the WELL program, helding periodic meetings with the stakeholders since the early design phase until the end of construction works and occupancy of the building, solving doubts and helping to prepare all the documents related to the WELL for Residential program.

R-I03. Residential Green Programs

“Green” building programs that reduce the environmental impact of buildings can help contribute to the advancement of human health, such as through efforts that address outdoor air pollution.

By balancing sustainability and human health considerations – through better air quality, access to drinking water and opportunities for physical activity and social connection – both people and the planet can thrive.

The dwelling units has achieved the BREEAM third-party certifications with the level VERY GOOD.