The Park Santa Monica LEED for Homes Manual

500 Broadway • Santa Monica, CA 90401



Introduction

Our Community

This mixed-use apartment, located two blocks from the new Santa Monica Expo Line terminus, configures neighborhood serving retail space along the street to encourage active pedestrian use with widened sidewalks, outdoor seating, and bicycle parking. Cross-grain massing and linear approach to public space challenged local guidelines that favored internal courtyards and discreet public open spaces. Planning guidelines were updated in response: now, 500 Broadway is used as a model for good development.

On the corner of 5th Street and Broadway – nestled into Santa Monica's most desirable location – The Park is just a few blocks from the beach and in walking distance to the best parks, health services, retail, and restaurants on offer in Los Angeles. Also within walking distance is access to convenient public transportation providing connection to all major hubs of Los Angeles & ample on-site bicycle parking and storage to encourage a car-free lifestyle.

LEED Building

Two hundred and forty-nine units varying in size flank upper-level courtyards to create nested communities. South and West facing apartments have movable screens that provide personalized control of sun and privacy and contribute to achieving LEED Platinum goals. Rooftop solar panels harness the sun's energy to heat the outdoor pool and power the public space amenities.

Inside the building Merv-13 filters are installed throughout to ensure optimal indoor air quality and Nest Thermostats and EnergyStar certified Bosch appliances are standard in all apartments to maximize efficiency and minimize energy consumption. This manual will expand upon both the sustainable technologies found throughout the building and your role in maintaining these systems.

LEED Building Maintenance Manual

The sustainable features of this building require some attention and maintenance. This guide provides an overview of all green building features, as well as their maintenance and operations.

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I. BACKGROUND

LEED for Homes

What is LEED?

The U.S. Green Building Council (USGBC) is a non-profit organization that advocates for sustainable or "green" design that minimizes impacts on the natural environment. It is primarily interested in improving the energy and cost efficiency of the built environment. The USGBC has developed the LEED (Leadership in Energy and Environmental Design) rating and certification systems, which encourage designers to employ sustainable strategies in their work to meet desired environmental standards.

What is LEED for Homes?

LEED for Homes is the certification system for new residential projects. It evaluates the building and developer's performance in the following 8 categories:

- Innovation & Design Process
- Location & Linkages
- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Awareness & Education

Points are assigned to each category and the final level of certification is determined by the total number of points earned out of a potential 136 points. The potential levels of certification for this project are as follows: platinum (81.5-136), gold (66.5-81), silver (51.5-66), and certified (36.5-51). The Park Santa Monica has set for itself a target of the highest certification, LEED Platinum.

How does this apply to me?

On a daily basis you will interact with many of the sustainable systems found throughout the building. The purpose of this manual is to educate you about these systems so you understand how to maintain them and sustain a high quality, energy-efficient living environment and live more sustainably. By adjusting your routine, you are helping to improve the natural environment and the condition of your home. After reading this manual, you will be able to educate others about the ways you conserve energy and natural resources by living at The Park Santa Monica.

II. THE BUILDING

Green Amenities at The Park Santa Monica

Storm Water Management

Although not part of the actual building systems, the project contributed funds to the City of Santa Monica as part of its Development Agreement to help in the construction of citywide stormwater management systems which will clean and remove particulates from the building's stormwater runoff. This will help ensure good water quality in Santa Monica Bay for marine life and recreation. The city estimates these stormwater management systems will be able to capture and treat stormwater up to the 85th percentile storm event (i.e., the storm event that is greater than 85% of the storms that occur).

Construction Methods

The construction process has the potential to be harmful to human health and the environment, but our general contractor used sustainable strategies and materials to ensure that these impacts are kept to a minimum. The following programs were developed to ensure environmental diligence:

Waste Management Plan

The contractor developed a waste management plan with the goal of recycling or salvaging for reuse at least 75% of the material waste generated on-site. Waste containers were taken to recycling separators who were able to sort the waste materials so that the recyclables could be properly disposed. Performance was monitored throughout the duration of the project, and over 82% of the waste was recycled.

Indoor Air Quality Management Plan

The contractor also created an indoor air quality management plan to prevent contamination of the heating, ventilation, and air conditioning (HVAC) system during construction. Once the HVAC was installed, the permanent ducts were sealed to prevent anything (i.e. dust) from entering the system during the rest of construction. Just prior to occupancy, the contractor performed a 48-hour flush of the system to ensure that there would be no harmful airborne particles once the system began operating.

Construction Materials

Permanent materials with lower impacts on human health and the environment were used as much as possible throughout the building process. See the Appendices for finishes. When replacing any of the finishes or materials, be sure to consult the project specifications.

Low VOC Materials

Some building components emit volatile organic compounds (VOCs), which are harmful gases given off by solids or liquids. Paints and flooring typically emit a significant amount of VOCs, so low VOC versions of these products were specifically used in the building to improve the indoor air quality. When repainting, patching or replacing flooring in areas, verify low VOC content.

Materials with Recycled Content

Recycled building materials are produced using less energy and fewer natural resources than the standard versions of the same product. This reduces the amount of waste generated in the industry and can prove to be more cost-efficient. Building components that were manufactured using recycled materials include the following:

- Window Frames
- Roof, Floor, Wall Insulation
- Driveway

Locally Extracted, Processed, and Manufactured Materials

The transportation needed to deliver building materials to a site typically requires significant energy consumption and also generates pollution. To reduce these environmental impacts of material production, the contractor selected building products that were fabricated locally, such as:

- Aggregate for the Foundation
- Foundation Cement

Design for Pest Control

The building materials for the 1st floor have been limited to mostly concrete and masonry, with all cracks and connections sealed to discourage pests such as insects and rodents from entering the building. This design approach reduces access to wood, which typically attracts these pests, and provides a non-toxic solution for pest control that is not harmful to residents.

Landscaping

The landscaping has incorporated non-invasive plants that are not harmful to existing plant life within the area. The majority of these plants are drought tolerant and therefore reduce the daily water requirement for the building's landscaping. When watering is necessary, the landscaping is equipped with high-efficiency irrigation with head-to-head and drip line coverage, which minimizes the areas

where sprinkler head flows overlap. Specific heads have been installed to accommodate particular plant and bedding water requirements. The system also has a moisture sensor and central shut-off valve, which allows for greater control of its operation. The efficiency of both the plants and the sprinkler system reduces the required amount of irrigation and allows for significant water conservation across the site.

If any plants need to be replaced, please consult with the listed landscape specialist to ensure low water and drought tolerant plants are planted.

Pierre Landscape 5455 2nd Street Irwindale, California 91706 Contact: 626-587-2121, <u>info@pierrelandscape.com</u>

See Appendix for maintenance manual and detailed technical information on irrigation and landscape

Green Amenities in Your Apartment

High-Efficiency Fixtures & Appliances

Water Conservation

As shown below, the household fixtures and appliances at The Park Santa Monica exceed high efficiency water standards:

Fixture	High-Efficiency Standard	Actual Performance
Toilet	≤ 1.3 gal/flush	1.0 gal/flush
Faucet	≤ 2 gal/min	1.2 gal/min
Shower	≤ 2 gal/min	1.75 gal/min
Dishwasher	≤ 6 gal/cycle	4.4 – 4.8 gal/cycle
Clothes Washer	Modified Energy Factor ≥ 2.0	Integrated MEF = 3.2
	Water Factor < 5.5	Integrated WF = 3.6

When replacing any water fixtures, refer to the performance standard above. See Appendix for maintenance manual and detailed technical information.

Energy Conservation

EnergyStar is a program where the US Environmental Protection Agency (USEPA) evaluates products for energy performance so that we can reduce greenhouse gas emissions and energy costs by purchasing efficient appliances. Your unit is equipped with clothes washers, dishwashers, and bathroom exhaust that meet the USEPA Energy Star criteria.

When replacing any appliance, confirm EnergyStar rating. See Appendix for maintenance manual and detailed technical information on Appliances.

Vapor Ventilation in Residential Units

Each unit has vents in the bedroom, bathroom, and above the stove that should be used to remove stale air and odors from your apartment. Keep these vents clean and unobstructed so that they can function efficiently.

HERS

The HERS Standard

HERS stands for "Home Energy Rating Services," and is the measurement of the energy efficiency of a household or unit. Because The Park Santa Monica has qualified as a LEED for Homes project, the HERS Standard has been implemented in the construction of each individual unit. Through meticulously installed insulation and the careful sealing of all wall and floor openings, every unit in the building is "compartmentalized," meaning it is enclosed in the most efficient manner possible, limiting air & duct leakage and cross contamination between units, while optimizing overall energy performance. To find out more about HERS and the importance of energy conservation in your home, visit <u>www.SoCalHers.com</u>

Maintaining Your Home

Housekeeping

At The Park Santa Monica, our property management team tries to maintain a healthy environment for all residents, but everyone has a responsibility to take care of both the units and our communal spaces.

Below are some examples of the hazards you may encounter and what you can do to prevent them.

Pests

Types:

- Cockroaches
- Mice
- Bed Bugs
- Dust Mites
- Ants
- Flies

Prevention Methods:

• Report Infestations immediately

The sooner property management knows about a pest problem, the sooner they can remedy the problem and prevent it from spreading to other parts of the building

• Keep Apartment and Common Areas Clean

Pests are attracted to food and water that is left out in the open, but by keeping areas clean, they have nothing to feed on.

Moisture

Potential Issues:

- Mold
- Structural Decay
- Odors
- Discoloration

Prevention Methods:

• Use fans, windows, and mechanical ventilation to maintain air circulation throughout the apartment, particularly when showering or cooking. Any daily activity that creates steam tends to produce condensation on nearby surfaces, which if not properly dried, increases the likelihood of future moisture problems.

• Report and clean up water leaks (from the shower, sink, toilet, etc.) immediately. Early action will prevent additional damage.

• After doing laundry, make sure that you use the dryer or hang out the clothes to dry. Piles of wet clothes can develop mold after only a single day.

Airborne Pollutants

Sources:

- Chemicals
- Tobacco Smoke
- Dirt and Dust
- Bacteria
- Plant spores
- Pet Dander

Prevention Methods:

• Clean, vacuum, and maintain the entry walk-off mats at a minimum of once a week. The walk-off removes debris from your feet before entering the building. Most of the dirt and dust enters a building on one's shoes and then can become airborne which is problematic in a confined space.

• Use non-toxic cleaning products that are environmentally friendly.

Look for products that have a "Green Seal" or "Design for the Environment" certification. Read labels for potential health effects and be sure to follow the instructions for proper use.

• Smoking or vaping of any kind, particularly inside of the building is prohibited.

Smoking throughout The Park Santa Monica is prohibited, both inside and out, and secondhand smoke both cause severe health problems and are a fire risk to the building. Smoking outside and at least 25ft from surrounding buildings allows the smoke to dissipate to less harmful concentrations.

• Keep your apartment and common areas clean

Periodic cleaning will prevent build-up of the pollutants to levels where they become hazardous to your health.

Recycling

Everyone can do their part to make sure we properly dispose of waste materials in a way that is not harmful to the environment. Just follow these steps to keep your home and the environment clean.

What is it?

Recycling is the process of reusing waste materials to make new products rather than disposing of them in a landfill. For example, the aluminum used to make a soda can be recycled multiple times to make several new cans.

• Recycle Rooms

Residents can empty their recycling items into the larger blue bins found in the Recycle Room. The large bins will be emptied weekly. See the Recycling Quick Start Guide for a list of materials that can be recycled.

• Hazardous Materials

DO NOT dispose of the following items in the Recycle Chutes:

- \circ Electronics
- \circ Syringes
- $\circ~$ All partially filled aerosol cans and containers for cleaning fluids
- o Automotive fluids
- o All batteries (including car batteries, household batteries, rechargeable batteries)
- $\circ~$ Oil-based paint
- o Garden chemicals
- o Fluorescent light bulbs
- Pesticides

The City of Santa Monica has contracted with Stericycle Environmental Solutions to provide residents with a convenient Curbside Pickup Program for Household Hazardous Waste. **HOTLINE: 1-800-714-1195.**

Unwanted or expired prescription drugs can now be safely disposed of 24 hours a day, seven days a week at a Permanent Prescription Drug Drop-Box. Location: Public Safety Building, Main Entrance, 333 Olympic Drive, near 4th Street on-ramp to 10 freeway.

Sustainable Factoids

- In the U.S. alone, buildings account for 72% of electricity consumption.
- Conventional, fossil-fuel electricity production is the leading cause of industrial air pollution in the U.S. and leads to other social problems including water pollution and lung disease.
- Burning coal accounts for half of America's electricity production.
- Buildings account for:
 - \circ 1/6 of the world's freshwater withdrawals
 - 1/4 of its wood harvest

- $\circ~$ 2/5 of its material and energy flows
- 30% Portion of energy in buildings used inefficiently or unnecessarily
- 45% Combined percentage of US Greenhouse Gas emissions generated by commercial buildings

• \$20 billion – Amount of money that would be saved if the energy efficiency of commercial and industrial buildings improved by 10%

- You can save:
 - \circ 175 Gallons per Month by running your dishwasher only when full!
 - \circ 250 Gallons per Month by rinsing fruit and vegetables in a bowl instead of running water
 - $\,\circ\,$ 675 Gallons per Month by turning off the water while brushing your teeth and shaving
- Recycling plastic saves twice as much energy as burning it the incinerator

• Recycling one aluminum can save enough energy to run a TV for 3 hours – equivalent to a half gallon of gas.

• Recycling aluminum saves roughly 95% of the energy needed to produce new aluminum from raw materials.

- There is NO limit to the number of time an aluminum can may be recycled
- Glass can be recycled forever
- Recycling 1 glass bottle causes 20% less air pollution and 50% less water pollution than when a new bottle is made from raw materials
- 1 glass bottle would take at least 4,000 years to decompose
- ENERGY STAR equipment uses an average of 65% less electricity than standard models.

Source: "Go Green Facts" http://www.gogreencommercially.com/go-green-facts/ Thinking Green:

- How much trash do you throw away in a single day? How much of that could be recycled?
- How can you change your daily behavior to reduce your energy and water usage?

III. THE COMMUNITY

Public Transit

The Park Santa Monica is strategically located so that several essential amenities are within walking distance of your home. The area is also considered a high transit corridor since there are numerous affordable transit options that are easily accessible and will enable you to travel throughout Santa Monica and Los Angeles. Public transit reduces car usage and ensures that fewer cars are on the road, which leads to reduced congestion and air pollution. The transit system also consumes less energy per person, making it a more sustainable means of travel.

Metro Bus & Rail

The building is within one block (3-minute walking distance) of the western terminus of the Metro Expo rail line (Downtown Santa Monica). In addition there are multiple bus stops for lines servicing northsouth and east-west routes within easy walking distance. Both bus and rail services are available every 15 minutes or less throughout the day. For specific maps and schedules, please refer to the Big Blue Bus and Metro website.

Additional Resources

Big Blue Bus System Map Big Blue Bus Routes & Schedules Little Blue Book Metro Maps and Timetables https://www.metro.net/riding/schedules/ Bicycle Map Santa Monica Bike Map

Parks and Recreation

Tongva Park + Ken Genser Suquare (0.4 mi) 1615 Ocean Ave, Santa Monica, CA 90401 Hours: Daily 6AM – 11 PM Palisades Park (0.5 mi) Ocean Ave (between Colorado Ave and Adelaide Dr) Hours: 24-hours per day Santa Monica Beach

Additional Park & Recreation info: <u>http://www.smgov.net/Departments/CCS/content.aspx?id=32599</u>

IV REFERENCES

- 1. www.usgbc.org
- 2. <u>www.socalhers.com</u>
- 3. <u>www.bigbluebus.com</u>
- 4. <u>www.metro.net</u>
- 5. <u>www.gogreen commercially.com/go-green-facts</u>
- 6. <u>www.dpw.lacounty.gov/epd/rethinkla</u>
- 7. www.smgov.net/departments/ose/categories/buildGreen.aspx
- 8. <u>www.smgov.net/Departments/CCS/content.aspx?id=32599</u>