

Luma21 (B+G+4F+R) Residential Building

Plot No. JVC14SMRP200, Jumeirah Village Circle, Al Barsha South, Fourth 681, Dubai



LEED-NCv3		
Points Achieved		51
Sustainable Site	26	10
Water Efficiency	10	8
Energy & Atmosphere	35	11
Material & Resources	14	5
Indoor Environmental	15	9
Innovation & Design	6	4
Regional Priority	4	4
Available Points	110	

FAST FACTS:

EHS In-House Certifications: Certified, LEEDv3 NC

BUA: **25,491 m**²

Location: JVC14SMRP200, Jumeirah Village Circle,

Al Barsha South, Fourth 681, Dubai Approx. Construction Cost: AED 45,000,000 Construction Completion: February 13, 2023 Date of Certification: February 14, 2024

BENEFITS:

- **22.38%** Savings on Energy Use
- ➤ 53%% Savings on Potable Water Use by Water Fixtures
- > 53% Construction Waste diverted from landfill
- > 20.73% Materials Use with Recycle Content
- > 71.94% Regional Materials Use
- ➤ 100% Multi-Occupant & Indivual Spaces are with Lighting Control
- > 100% of Occupants has control on Thermal.

THE GREEN BUILDING TEAM

Owner: M/s TownX Real Estate Development

Main Consultant: Pioneers of Experts

(POE) Engineering Consultants

Main Contractor: DAR Construction Co. LLC
MEP Consultant: PROLEED Mechanical

Engineering Consultancies

GB Consultant: Crown Home Engineering

Consultants

Commissioning Authority: Crown Home

Engineering Consultants

LEED APs: Melanie Bacho

Commissioning Agent

Faiz Mohammad

PROJECT BACKGROUND:

As per the resolution issued by H.H. Sheikh Mohammed bin Rashid Al Makhtoum, Vice-President and Prime Minister of UAE and ruler of Dubai on January 2008, that all owners of residential and commercial buildings and properties in the emirates of Dubai must comply with the recognized environment friendly specifications to turn Dubai into a healthy city that meets the demands of best practices and benchmarks of pollution-free sustainable development.





In response to the above resolutions and as mandated by EHS-Trakhees, to follow the EHS-Trakhees green building mandatory regulation and requirements, the project registered for the EHS In-House Certification which was based on LEEDv3 NC.

LUMA21 (B+G+4F+R) RESIDENTIAL BUILDING

DESIGN

The building owner has created sustainable facility by incorporating sustainable designs and measures which can help the occupant's saves energy throughout the life of the building. The owner has envisaged tranquil and livable buildings dual with vitality or serenity and environmentally friendly residential building and have created the same.

LIFESTYLE

Welcome to a world of style and elegance combined with comfort and accessibility of Dubai, one of the fastest growing modern metropolis of the region. Exceptionally designed and laid out apartments located at Al Barsha South fourth-681, Dubai, centrally located with ready access to all the amenities and facilities to make your leisure moments memorably enjoyable and fulfilling.

GREEN BUILDING FACT SHEET

SUSTAINABLE SITE:

- During constructions, the Construction Team has formulated an appropriate plan and implemented erosion control measures relevant to the site. Such as stabilization of site entrance, dust control by watering, temporary fencing, protection of excavated soil, proper storing of construction materials and proper segregation of constructions waste, etc. for preventing the site erosion.
- The LUMA21 has provided car parking spaces in the basement and ground floor.
 - The project has provided 45 Bicycle Racks.
 - Assigned 13 nos of Car Parking for low-emitting fuel efficient (LEFE) or hybrid car.
- ➤ 100% of the car parking spaces provided within the plot are under the building which is considered as covered parking.
- ➤ 100% Roof material has been painted with coatings having SRI of 88.92.

WATER EFFICIENCY:

The project installed high efficient sanitary fixtures with low flush and flow rates which gives the project **53%** water savings.

ENERGY & ATMOSPHERE:

- ➤ The project is estimated to achieve 22.38% annual energy savings through installation of the following:
 - Efficient building envelope. Wall, roof and glazing are having higher u-value.
 - The project is design with VRF and split ducted AC units with high EER value for services area.
 - FAHU with heat recovery having 70% efficiency.
 - Installation of LED lights
 - Installation of lighting control such as motion/occupancy sensors in the common areas.
- > 100% Use of environment friendly refrigerant –R410A.





- > The project HVAC equipment & lighting control has been commissioned and tested and balanced.
- Additional energy meter has been added for FAHU & Landlord lighting load for monitoring and verifications purposes has provided BMS.

MATERIAL & RESOURCES:

- The building owner encourage recycling of recyclable waste which are derived from daily living by providing Tri-sorter chutes and has provided 5 recycle waste bins for paper, cardboard, metal-can, plastic & glass storage.
- ➤ The Construction Team had formulated and implemented proper Construction Waste Management Plan and has successfully diverted 53% waste construction from landfill.
- > The Construction Team has successfully monitored the construction materials used in the project:
 - **20.73%** Construction Materials are having Recycled Content.
 - **71.94%** Construction Materials has been harvested, manufactured and procured locally.

INDOOR ENVIRONMENTAL QUALITY:

- ➤ 100% of the project indoor space has been provided with fresh-air meeting requirement of ASHRAE 62.1-2007.
- > 100% Non-Smoking Building (inside and outside building).
- The FAHU has been provided with air flow monitoring devices with alarm system and has provided CO2 sensors in densely occupied spaces.
- ➤ 100% Building flush-out has been done simultaneously with commissioning.
- > 100% of the Adhesives & Sealants and Paints & Coatings use in the project is complying with LEED requirements.
- > FAHUs are installed with MERV 14 rated bag filters.
- > 10ft Long rollmats are installed in the main entrance of the building to filter out dust from incoming building users.
- > 100% of Residential Space has been provided with lighting control.
- > 100% of Residential Space has been provided with programmable thermostats.



PROJECT PHOTOGRAPHS





Crown Home Consultants کراون هوم للإستشارات الهندسیاخ Egypt - Dubai - Saudi Arabia - Sudan

















