

CAPE TOWN
OCEAN
VIEW DRIVE
RESIDENCE



CAPE TOWN OCEAN DRIVE RESIDENCE

PROJECT DETAILS

PROJECT NAME: OCEAN VIEW DRIVE HOUSE
PROJECT LOCATION: FRESNAYE, CAPE TOWN
BUILDING TYPE: PRIVATE RESIDENCE
BUILDING SIZE: 150m²
PROJECT DATES: FINISHED SEPTEMBER 2021
PROJECT SECTOR/S: RESIDENTIAL

PROFESSIONAL TEAM

DEVELOPER: PRIVATE OWNER
ARCHITECT: ARRCC (BRIAN BERNHARDT)
Q SURVEYOR: RLB PENTAD (RIYAAZ RAMJEE)
MAIN CONTRACTOR: JNA PROJECTS (KOBUS LANDMAN)
SUB-CONTRACTOR: SCHELTEMA (KEVIN JONES)
PROJECT MANAGER: JNA PROJECTS
SUPPLY PARTNER: OWA AFRICA (CAPE)



PROJECT OVERVIEW

Ocean View Drive located in Fresnaye, holds some of the highest-value housing stock along Cape Town city's fashionable western seaboard. While located high above the world-famous beaches of Clifton and Bantry Bay, its seascape views are breath-taking. In addition, correctly positioned homes also offer awe-inspiring views of Lions Head and the Table Mountain beyond.

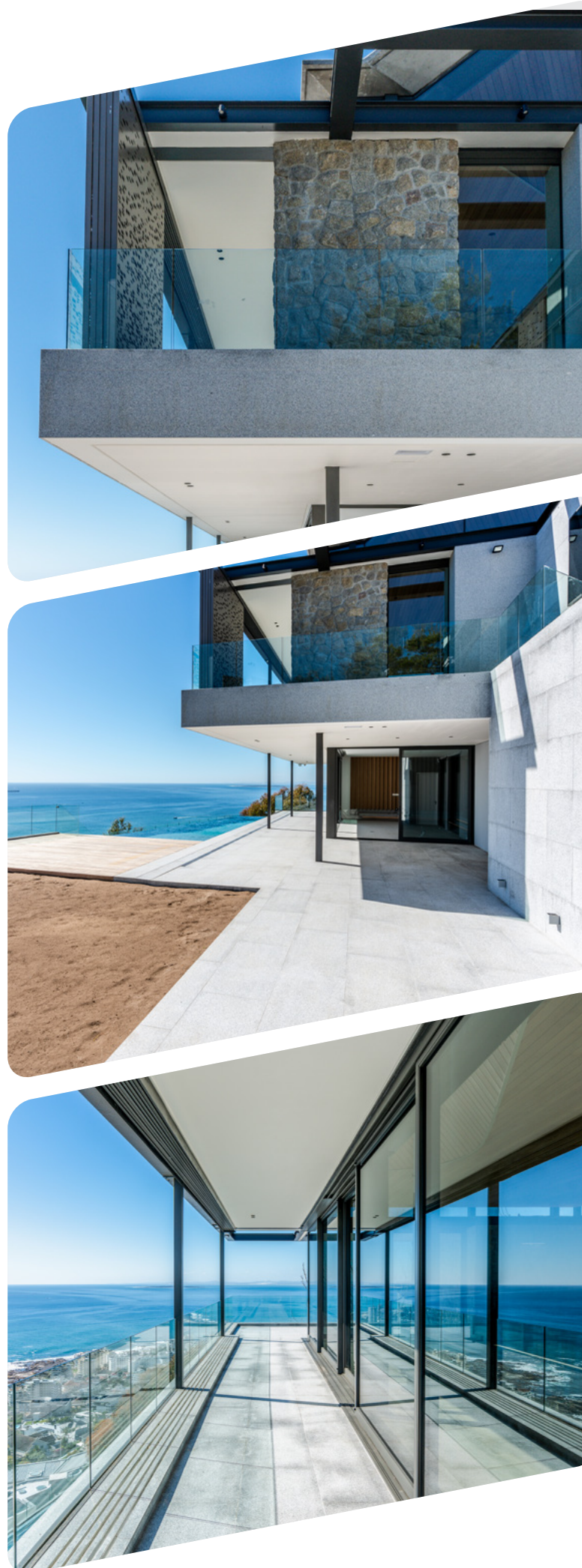
The owner of this prime real estate location undertook to demolish and rebuild the property as their dream home. Significantly, a house located in close proximity to the sea requires smart design and building systems to allow protection from typical coastal-area weather conditions. These work together ensuring a comfortable, durable residential space.

Comfortable living design principles requires control of both the sea-surface reflection and the glare from the sandy areas of the beach, in addition to direct in-bound sun rays. System and design combine, following Visual Comfort, aligned to Saint-Gobain Construction Product's market mission; "We care about building better for people and the planet by offering solutions that deliver sustainability and performance to drive the transformation of the construction market".

CLIENT RESPONSE TO CLIENT BRIEF

A home on the coastline requires smart design and building systems to enable for comfortable environments in the home. The client required a design that would manage the bright light reflecting off sea and the glare from the sand. To control light and shading for the home, the architect's smart design includes eaves under the overhangs of the sloped roofs at different levels of this building.

Accordingly, 'chhajjas' (overhanging eaves popular in Indian architecture) were specified to



shade the windows. The resultant cast shadows contribute to the structural fenestration requirements under SANS1400-XA. This supports passive climate control inside the house, helping to shade the building during key times of the day. In practice, the deep balconies on the floor immediately above, facilitate a pleasant indoor-outdoor living space. These sheltered outdoor spaces prevent direct sunlight exposure, with the additional function of providing shelter from adverse Cape weather.

Given these outdoor exposed features, it was critical that a smooth durable solution for the eaves of the home be installed. This was realised by using the Glasroc® X Eaves System, developed by Gyproc Saint-Gobain for local conditions.

Glasroc® X is a high-performance gypsum based sheathing board with core-embedded glass mat reinforcement for improved strength, fire and weather resistance. Critically, these characteristics ensure suitability for external applications. The board contains a unique additive, providing high levels of resistance to mould and water penetration, combined with a UV resistant surface for long term protection; an ideal solution to further manage the high humidity typical of the area.

Apart from its durable properties, Glasroc® X offers an aesthetically pleasing eave concealed ceiling extension, with no obvious joints, other than expansion details, if required.

Brian Bernhardt, Project Architect:

“We decided with our client to install the Glasroc® X Eaves System, notwithstanding this new system not being extensively trialled in South Africa.”

Following further research and development to implement the ceiling system, Saint-Gobain technical advisers provided training to the ceiling subcontractors prior to work commencing on site.

The ceiling system application is similar to an internal plasterboard ceiling and hence was quickly boarded to a test area. The double-layer Weber® Tylon® X Basecoat with mesh was then finished by conventional skimming of the ceiling with suitable exterior plaster. Shortly after the ceiling had dried out the final system was inspected and we were impressed with the speed and result achieved and determined this was the right solution to complete the ceilings.

“A good quality stretchable paint was applied to finish the ceilings. The team and our client were delighted with the smooth, seamless ceiling now in place.”

Paul Louw, Product Category Manager, Saint-Gobain Africa.

“The Glasroc® X Eaves System is a durable external ceiling for use in covered, semi-exposed and exposed areas of buildings, embracing class-leading solutions from our worldwide solutions manufacturing plants, combined for local conditions.”

Riaan Walters - Project Manager at Saint-Gobain, Cape Town:

“As a visual-comfort enabler, the specified exterior cladding board should fully address the challenges of unstable climatic conditions, by providing a durable, yet flexible solution. Often the primary driver for the choice of material is the ability to tolerate wide temperature fluctuations and the natural movement of a structure.

This new alternative to fibre cement eaves has already been vigorously tested in the harsh climatic conditions of the United Kingdom, Ireland and mainland Europe - with great success. Due to its formulation and structure, the Glasroc® X board has a high dimensional stability, making it ideal for large running external ceiling areas that are only interrupted at a maximum of every 15 metres for control joints. A well-known application of this approach can be found inside office buildings.”

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PRODUCTS & SYSTEMS

Given the above challenges mentioned, the new system as installed has complied with the client's and the architect's requirements.



Smooth finish & aesthetically pleasing

Glasroc® X Eaves System

Showpad Information contained in DL brochure and installation guide
<https://www.gyproc.co.za/products/board-products/gyproc-glasroc-rx#documents>



Resist an aggressive outdoor environment

Glasroc® X Eaves System

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KEY FEATURE ELEMENTS

OR UNIQUE SPECIFICATIONS

- The architect required on-site trials on the product because it was a new system.
- The installer/subcontractor required coaching and assistance at all times.
- An experienced product specialist flew in from Gauteng to support the installers.
- The client required a weather-resistant product that would provide an aesthetically pleasing finish.

KEY ACHIEVEMENTS

USING SAINT-GOBAIN SOLUTIONS

- The technical team were always on hand for direction.
- “Riaan (Saint-Gobain Project Manager) was very self-involved in the small project which did help”

- Kevin Jones, Scheltema

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- “We conducted a product search and came across the Gyproc X product supplied by Saint-Gobain which was shortly to be introduced into the South African market. We decided with our client that even though the product was untested in South Africa”
 - “It met all the criteria for a seamless paint ceiling finish which would be in keeping with the modern design of the house.”
 - “A good quality stretchable paint was applied to finish the ceilings and we are delighted with the smooth seamless ceiling now in place”

- Brian Bernhardt, Project Architect, ARRCC

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- This exterior eaves finish added a practical and also aesthetically pleasing finish and supported a core pillar of the architect’s design: Chhajjas specified to cast shadows in the right places and contribute to the building’s energy efficiency/fenestration requirements under SANS1400-XA. These support passive climate control inside the house, helping to shade the building throughout the day. “Adopting this new exterior eaves cladding supports design excellence, improves the aesthetic and thermal comfort and simultaneously helps Saint-Gobain towards its purpose of making the world a better home.”

- Paul Louw, Product Category Manager, from Saint-Gobain Africa

Glasroc® X Eaves, a
new alternative to
fibre-cement eaves
cladding





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