



## DEFYING THE ELEMENTS IN DAYS BAY



**ACROSS THE HARBOUR FROM WELLINGTON CITY, DAYS BAY IS A POPULAR DESTINATION THAT IS NEVERTHELESS EXPOSED TO SEVERE STORMS. IN 2013, BSA ARCHITECTS WAS COMMISSIONED TO UPDATE A MODEST 1890s COTTAGE THAT SAT RIGHT ABOVE THE SEA WALL AND ENCAPSULATED MANY HAPPY MEMORIES FOR ITS OWNER – UNTIL A “CATASTROPHIC” JUNE 2013 STORM DAMAGED IT BEYOND REPAIR.**

The client was strongly attached to the site and determined to stay, but was naturally reluctant to lose his home and possessions again. As a result the architect’s brief changed to building a new home that could withstand anything nature might throw at it.

“We considered every construction option for the new building,” says Bruce Sedcole of BSA Architects Ltd, “but with the front of the site extending into the ocean, and increasingly ferocious storms possible in the future, we soon decided on a precast concrete structure on top of a new, re-designed, curved seawall.” The seawall was subsequently constructed in-situ from steel reinforced 50 MPa concrete to replace the century old (and heavily damaged) existing one.

The client had taken the opportunity to request a home not only to withstand the wildest of storm surges and salt-laden winds, but one which would also require minimal maintenance and perform as sustainably as possible. The architect’s response was to deliver a design, built upon 175 tonnes of compacted fill, that includes 225mm-thick, precast concrete panels on the seaward side of the home, with 150mm-thick panels on the other facades.

The lower seaward face has minimal openings and panel joints, punctuated only by porthole windows.

All fenestration is double glazed aluminium with extreme wind zone/marine ratings similar to that used for boat hulls, while the applied trim is of aluminium or “marine grade” stainless steel - together they deliver understated design detailing. Through the combination of appropriate insulation, double glazing and exposed concrete walls and (polished) floor, a heat sink is created that is able to maintain a stable temperature in the building with only minimal additional heating requirements.

Exterior finishes are simply smooth or roughcast concrete, sealed but otherwise untouched. As paint finishes weren’t used, the house doesn’t need to be continuously maintained beyond regularly washing down the steel and aluminium elements.

Its marine environment is further acknowledged in the port and starboard ‘navigation’ lights above the entry facing the road, its bridge-like superstructure and external marine accessories in the form of buoys and a rooftop weather vane.

“We’ve tried to create a building that is powerful and durable, but still appears sympathetic to its coastal environment,” says Bruce. “The overwhelming effect of the finished home is of a tranquil sanctuary that maintains the rugged excitement of its coastal environment, while creating the sensation of a warm, peaceful and quiet interior. Concrete has provided the perfect medium for this build.”

The owner now “sleeps like a baby” through even the biggest storms, reports Bruce happily.



## PROJECT

Days Bay House

## CONSULTANTS

BSA Architects (Bruce Sedcole and Graeme Lowe)  
Seddon Associates (Miles Seddon)

## CONTRACTOR

Homestead Homes