



Ocean's Edge Beachfront Condominium Project, Thailand

Environmental Features

Much of today's media coverage focuses our attention on the environment and the many issues which are threatening the integrity of our World. With these concerns in mind, the developer's of Ocean's Edge Condominium project have, from the outset and regardless of cost, strived to include the latest technology and systems in order to reduce the negative impact a concentration of living units is sure to have on the environment.

The project layout conforms to all government and regional building codes and laws, without exception or compromise. These regulations are enacted for a reason, are much to do with environmental impact, and to endeavour to compromise or circumvent should be an anathema to any developer.

Therefore, throughout the stages of design and layout, our architects and engineers worked closely with City Hall to ensure that each stage and aspect of the design was in accordance with all statutes, even though this resulted in changes, some time loss and the related costs.

Ocean's Edge has 160 metres of 'absolute beachfront', a phrase often used but less often validated. As such, the height of the buildings within 100 metres of the mean sea level can be no more than 14 metres. However, to construct private swimming pools on all four floors would have raised the building above the permitted level, therefore the second floor was designed without a private swimming pool.

A second stipulation insists that the building 'footprint' can be no more than 25% of the total land area. Ocean's Edge conforms to both regulations. Other statutes are also adhered to such as; the allowable distance between the high tide mark and the building line; the distance between the chanot property line and the building line.

Water Consumption

Ocean's Edge has drilled two water wells, each to a depth of 75 metres. The water from these wells has been tested and found to be freshwater and rich in the usual mix of nutrients. Ocean's Edge will provide its residents with purified drinking water piped directly to every faucet in every apartment, whether that be in the kitchen, the bathroom, wherever. Brush your teeth or shower, in pure water, suitable for drinking. Overkill perhaps? We do not think so! Once it was decided that a full purification system was to be installed, the cost saving in reducing its capacity to send drinking water to only one point in the apartment seemed pointless.

Research into water purification systems discovered that most bottled drinking water is produced using a purification system that, in killing all the harmful bacteria, also destroys all the useful nutrients. However, the Ocean's Edge purification system will remove the harmful bacteria but leave the useful nutrients. As well as the benefits of drinking good quality, pure natural water, the onerous task of carting containers of water to the apartment is prevented. Add to this the environmental benefits in saving on the use and disposal of thousands of plastic containers.

Ocean's Edge will have superb, landscaped gardens, with the associated irrigation requirements. The design and installation of the gardens will be handled by Nong Nooch Tropical gardens, and vast experience, gained in over 25 years of operating their famous facility south of Pattaya, will guarantee that only plants and trees with tolerance to lower water levels are used. For example, the grass will be zoyzia, a relatively new hybrid



developed for golf courses, that is not harmed by close proximity to the sea, does not require a great deal of water and will even accept brackish water.

Underground holding tanks will collect water from various sources for treatment and re-use. 'Black' water, a term used to describe the waste water directly from the toilets, 'grey' water, water collected from other points in the apartments, such as kitchen, shower and bath, will be collected, along with rain water, and all will be treated in the most modern treatment tanks and re-cycled for irrigation.

Energy Consumption

A Siemens sm@rt living system®, controls operation of the electrical system and appliances and enables pre-programming and timing of switches to a desired function, including a remote control operation of;

- lighting – individual and combination off and on, dim up and down
- air conditioning – off and on, set temperature
- curtains – open and close
- every apartment contains a 150 litre heat recovery system which uses the air conditioning units to heat hot water, a huge energy saving feature
- air condition units are the most advanced, with built in energy saving features.

All this, coupled with energy saving light fixtures and the most modern, energy and water saving appliances, allows a controlled environment and results in lower energy bills.

General Features

Traditional brick for wall construction, is replaced by 'superblock' a modern, aerated, lightweight block, which reduced heat absorption.

Thermal insulation will be used under the roof.

The benefits of a new, advanced exterior paint which, it is claimed, reduced heat absorption, are currently being considered.

A full function back-up generator will automatically start in the event of a power failure. It will be of sufficient power to run all of the electrical systems, including limited air-condition, appliances, lighting and water supply pumps, and will run for as long as the electricity supply is interrupted.

UPVC exterior doors and windows will have three layers, 6 - 10 - 5 milimetre thick, double glazed glass. This serves to maintain the air condition cooled temperature inside the apartment, especially at night in the bedrooms, by limiting the natural heat transfer through the glass, of warm air to cold. However, the glass will not, by itself, prevent heat, infrared and UV ray penetration during the day, especially for those windows and patio doors subject to direct sunlight.

To enable a reduction of the harmful rays, special film coatings will be applied to the glass layers, reducing the heat gain by up to 80% inside the apartment, yet not appreciably reducing the light penetration.

Additional benefits are that the rooms will be quieter and there will be no colour fade or fabric damage to the expensive interior fittings.

Ocean's Edge Luxury Condominium is at the forefront of condominium development, raising the standards that others may strive to emulate.

These features are not included as a sales tool, or are promised but, in construction reality, not delivered.

If anyone who reads this knows of new or improved technology which may further reduce the impact from the already environmentally friendly systems, we will be pleased to consider the merits and their introduction into Ocean's Edge. Please email to info@saraan.com