

Sentosa Cove relies on the powerful pair of BITUTHENE[®] and ADPRUFE[®] for waterproofing

BITUTHENE[®] 3000 and ADPRUFE[®] AP3 play integral roles in waterproofing luxury oceanfront community



Project	Sentosa Cove
Main Contractors	Kim Seng Heng Construction Pte Ltd, Jetco Construction Pte Ltd, YTL Construction
Consultants	RSP Architects, Arup Singapore, RT+Q Architects, DP Architects
GCP Solutions	BITUTHENE [®] waterproofing, ADPRUFE [®] integral waterproofing, BETEC [®] cementitious waterproofing

The Overview

The Project

Sentosa Cove, situated on the eastern part of Sentosa Island off Singapore, is an integrated oceanfront community with luxury residential, retail, marina and resort amenities.

Situated within this prestigious area is the Sandy Island, a collection of 18 waterfront villas embedded in a lush rainforest setting. Also found there is Kasara, an exclusive development comprised of 13 waterfront villas with unparalleled views of a lake and a private golf course.

These commercial building developments, together with quayside restaurants and specialty retail, have made Sentosa Cove a truly exclusive marina residential community offering resort-style living away from the city.

"The commercial building project employed BITUTHENE® 3000 self-adhesive waterproofing membrane in combination with ADPRUFE® AP3 integral waterproofing, which offered dual protection."



The commercial building projects are situated on the waterfront, exposing them to seawater. Furthermore, it is constructed on reclaimed land and the groundwater table in the area is relatively high. Given the high-quality construction and finishing, it became clear that waterproofing must be put in place in order to protect the luxury residences.

We proposed a system comprising a self-adhesive membrane and a waterproofing admixture for concrete to provide protection for the basement.

The commercial building project employed BITUTHENE®3000 self-adhesive waterproofing membrane, in combination with ADPRUFE®AP3 integral waterproofing, to offer dual protection.

BITUTHENE®3000 is composed of a high performance, cross-laminated HDPE carrier film, and a unique self-adhesive rubber bitumen compound.

It's flexible and can be cold applied. Its chemical resistance property offers excellent protection against aggressive environments. It is also fully compatible with ADPRUFE®AP3, which can be added to the concrete while it is being batched. This helps to speed up the construction schedule. ADPRUFE®AP3 reduces permeability and drying shrinkage in the concrete, further enhancing waterproofing of the concrete and structure.

Other Waterproofing Methods

In addition, BETEC®Flex S150 cementitious waterproofing was applied to the swimming pools and wet areas within the commercial building villas. This two-part, polymer-modified coating affords the benefit of easy and fast application, as it can be applied on damp substrates. It is flexible, durable, weather-resistant and has excellent adhesion to most substrates.

Both BETEC®Flex S150 and BITUTHENE®3000 have also been certified by the Singapore Environment Council as Green Label products for being environmentally friendly.

Blue360SM Product Performance Advantage: Because every project, large or small, deserves the best level of protection.