



313@Somerset
Singapore



Completion Date
2010

Architect
AEDAS

Engineer
**MEINHARDT
INFRASTRUCTURE**

Products
ADMIX C-1000 NF

Project Type
**GENERAL CONSTRUCTION -
FOUNDATION**



Singapore's Orchard Road is one of the city's most coveted retail locations. Lend Lease Corporation, with well-defined sustainability initiatives, successfully acquired one of the last available sites on this iconic street to construct 313@Somerset. Ultimately, the project won the Building and Construction Authority (BCA) award that recognizes behind-the-scenes engineers who overcome site challenges through creative engineering designs for site and public safety.

Engineers, Meinhardt Infrastructure, faced many design challenges including a canal that ran through the centre of the building site, a very high water table and greatly elevated sulphate levels in the surrounding soils. Xypex Admix C-Series with its non-toxic chemistry and ability to resist extreme hydrostatic pressure was used to address these key issues and was widely incorporated into elements of the substructure, the B1 canal,

and the superstructure. Particularly challenging was the handling of the existing Stamford Canal that had to be diverted to another location to allow construction of a new, fully enclosed 10 m x 5 m reinforced concrete canal that now runs through basement level 1 (B1). Xypex [Admix C-1000 NF](#) was used to waterproof the canal's concrete base and walls. Tie-bolt holes and other concrete defects were repaired with Xypex repair materials.

313@Somerset achieved Green Mark Platinum status – the highest level under Singapore's Building and Construction Authority's Green Mark Scheme, and is the first project to achieve this status within Singapore's Orchard Road precinct. Xypex is very pleased to have played a significant role in the sustainability initiative objectives required by this project.