

SANPAC AFRICA LTD

WESTGATE SHOPPING MALL BASEMENT DRAINAGE SYSTEM

CASE STUDY

<u>PROJECT:</u>	WESTGATE SHOPPING MALL BASEMENT DRAINAGE SYSTEM
<u>CLIENT:</u>	SONY HOLDINGS LTD
<u>CONSULTANT:</u>	CIVIL ENGINEERING DESIGN (K) LTD
<u>CONTRACTOR:</u>	LAXMANBHAI CONSTRUCTION LTD
<u>DATE:</u>	2017
<u>PRODUCT:</u>	MEGAFLO™ 150 COMPOSITE PANEL DRAIN SYSTEM AND BIDIM® A3 GEOTEXTILE
<u>QUANTITY:</u>	1000 LINEAR METRES OF MEGAFLO™ 150 3000 M ² OF BIDIM® A3

Westgate Shopping Mall is a premier mall situated in the heart of the City having a total built up area of approximately 55,000 m². The mall has a basement parking measuring approximately 10,000 m² with sub - soil water drainage system.

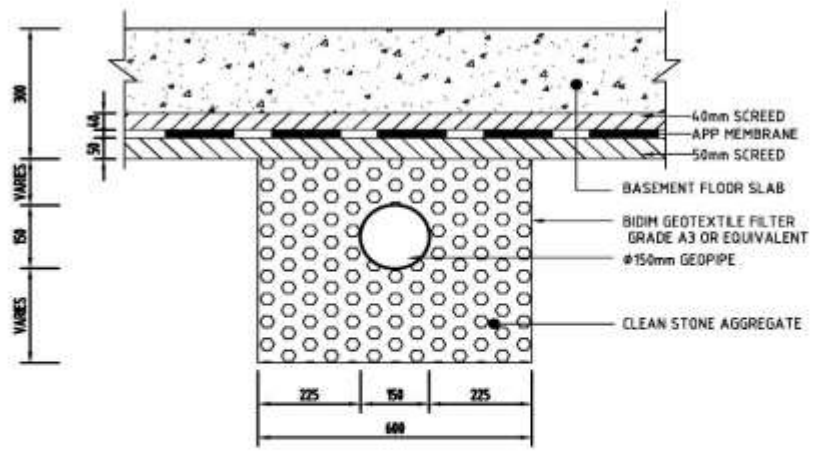
A part of this basement was reconstructed in 2017 to suit new requirements having the same system.

The materials selected for this project were the Megaflo™ 150 composite Panel Drain System and Bidim® A3 Geotextile.

A network of Megaflo™ 150 composite pipes were laid in slopes from opposite ends and connected to a Concrete channel, measuring approximately 1000mm x 1200mm in size, constructed in the centre of the

basement to collect water from all pipe network. At the end of the channel, a sump well was constructed which was equipped with two submersible pump sets having an automatic float switch, which would trigger the pump set when the water level rises beyond the pre assigned level.

The Megaflo™ 150 composite pipes were laid in slopes surrounded by clean, dry coarse aggregate wrapped with Bidim® A3 Geotextiles with an overlap of approximate 300mm on top.



DETAIL A
TYPICAL SECTION THROUGH
FRENCH DRAIN
SCALE 1:10



The procedure of installation required trenches to be excavated and lined with Bidim[®] A3 geotextile with sufficient material kept on either side to close the installed pipe and aggregate, completely, with allowance for 300mm overlap on top.



Coarse aggregate was filled at the base and the Megaflo™ 150 composite pipe, was laid on top of the aggregate.



The Megaflo™ 150 composite pipe was then covered again with coarse aggregate and the Bidim® A3 geotextile was then folded over the complete fill with 300mm overlap.

DISCLAIMER- The photos used above are from another project and serves the sole purpose of illustration only to show how the Megaflo™ 150 composite pipe was used with Bidim® geotextiles for basement subsoil drainage of this particular project.