



## HAMMERSON UK PROPERTIES

### Water Savings at Exchange Tower, London

Exchange Tower is a multi-tenanted, twin-towered commercial office building owned by Hammerson UK Properties. Both Towers have 17 floors and a total of 102 urinal units within the male toilets.

#### Brief

- As part of the Environmental Plan at Exchange Tower, the management team investigated practical and cost effective ways of reducing the water usage within the buildings.
- In 2002 a trial commenced with the installation of microbiological urinal maintenance devices in the toilets on two highly populated floors within Building One. The main aim being to reduce the amount of water used within the building, but also to ensure that this did not affect the operations of the urinals and lead to odour or maintenance problems.
- The “bio blocks” installed in each urinal contain “beneficial bacteria”, which produce enzymes to aid the conversion of uric acid salts and other organic waste materials from sludge to a form that is soluble in water. The bacteria feed on the liquid waste and multiply to facilitate the digestion of more waste and the cycle continues. The by-products of this process are environmentally safe, namely water and carbon-dioxide.

#### Solution

- To ensure the success of the units it was important to get the flush controls set to a minimum and, prior to the urinal installation, some minor maintenance works was required to modify existing pipe work, install flush control units and solenoid valves to control the amount of flushes from approximately 30 to 6 per day.
- The trials proved to be very successful and both buildings had the devices installed during 2005. They have proved to be environmentally friendly, hygienic and cost- effective due to the savings in maintenance and water consumption costs. This has reduced the building service charge to the tenants.

#### Conclusion

- By installing the microbiological urinal devices and reducing the flushes to 6 per day, the water usage for the urinals was reduced dramatically in 2005. This has had an impact on the overall water usage within the buildings as highlighted in the graph below.

**Total water usage at both buildings in 2004 = 38,510 m<sup>3</sup>**  
**Total water usage at both buildings in 2005 = 16,114 m<sup>3</sup>**  
**Saving on water usage = 58%**

The chart below highlights the impressive results that this environmental initiative had on the overall water usage at Exchange Tower.

