

INTRODUCTION

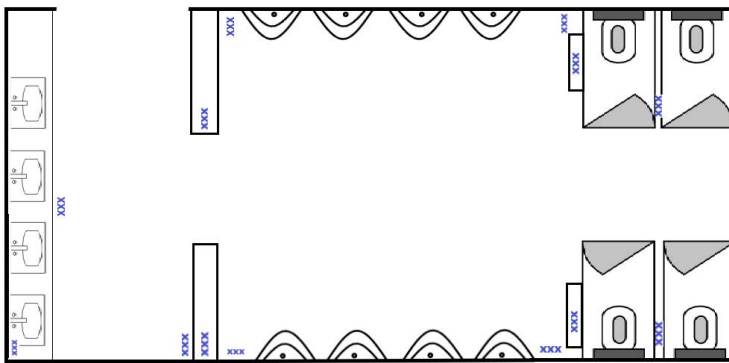
Toilet facilities are well recognized as the most contaminated area of a building, even before the recent pandemic there were multiple studies showing the elevated risk of catching bugs in this area and how the flushing of toilets and urinals can further distribute bacteria and viruses present. Higher footfall multi-user facilities bring large numbers of people into contact in a short space of time increasing these risks, with public use washrooms bringing an even broader spectrum of users.

Across all washroom facilities, the most challenging in terms of odour and infection risks are those utilized by individuals traveling from around the world as is the case in international Airports, where facilities are in use 24/7.

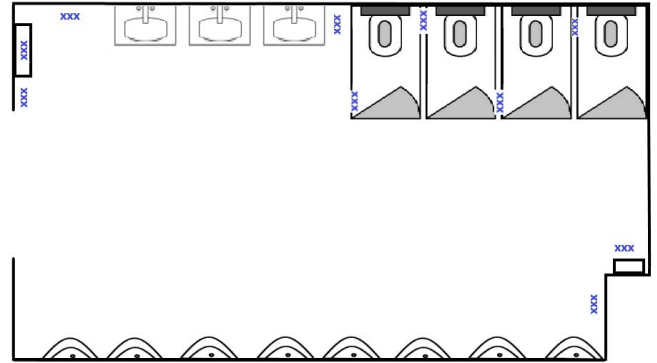
TESTING PROCEDURE

For this study, over 20 sets of settle plates were placed throughout two of the highest footfall Gents facilities measuring total microorganisms (TVC), yeast and mould settling from the air in one hour, with all precise test locations logged on plans as below **xxx** marks each location).

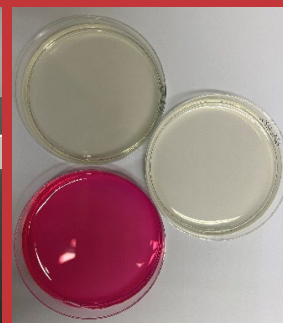
Washroom 1



Washroom 2

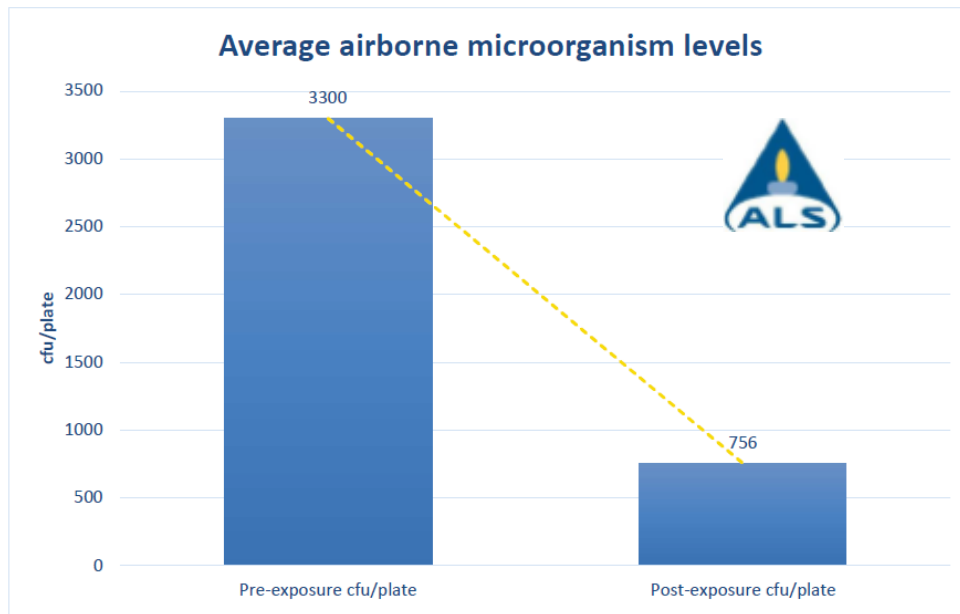


A single AIRsteril Washroom Complete unit was then installed in each facility and once they had been in operation for over two weeks the same settle plate locations were repeated for another hour.



MICROORGANISM CONTROL

Results were measured and analyzed by ALS Global laboratories* as shown below, the AIRsteril Washroom units were recorded to have an effect of a reduction of over 77% from the original measurable airborne microorganism levels.



Three different settle plate types (dRBCA, DG18 and TVC**) were used in each location in order to cover as many airborne microorganisms as possible found in a washroom setting, this enabled a greater analysis of all microbial flora with reductions as below:

- 79.01% reduction in Mould
- 78.62% reduction in Yeast
- 77.09% reduction in Microorganism Total Viable Count (TVC)



ODOUR CONTROL

It was noted during this study that both facilities were visually completely clean when the settle plates were placed in position. The only easily noticeable change from "before" to "after" AIRsteril was the elimination of the original unpleasant stale odour. This ties in with many other studies where odour elimination is a clear indicator of vastly reduced microbial contamination.

CONCLUSION

The addition of an AIRsteril unit to any washroom facility has the capacity to significantly reduce the exposure to microorganisms in even the most challenging environments. This further supports the understanding that toilet facilities should be the first area considered for AIRsteril in every multi user building for both infection risks (microbial reduction) and the more traditional odour control.

*Full report detailing additional analysis and full scientific methods available upon request.

**"dRBCA" recovers most moulds and yeast species, "DG18" recovers moulds which may not show up on "dRBCA" and "TVC" to recover most bacteria, mould and yeast present.