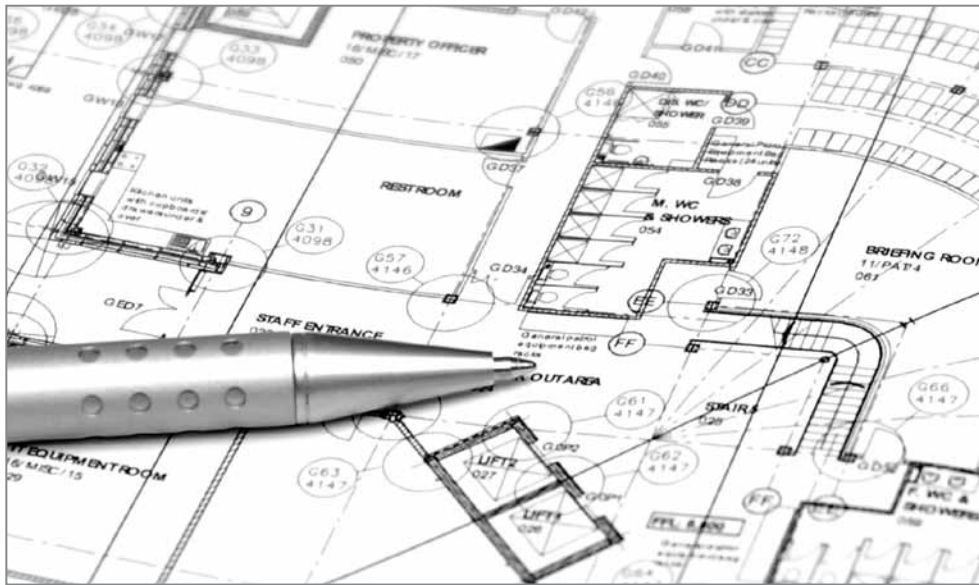


# Access to TouchClean®

Architectural Ironmongery | Access Control | Door Automation



# Introduction



A worldwide study has found that in hospitals 80% of infectious diseases are transferred by touch.

The number of deaths due to MRSA doubled in the four years from 2001 to 2005. The same increase was observed in the 8 years from 1993 to 2001.

*C. difficile* death rates increased by 69% from 2004 to 2005.

These alarming rates of increase have caused this phenomenon to be constantly in the newspapers and little success has been reported in combating it.

There is no quick fix and the answer will undoubtedly lie in a combination of programmes to cover all possible sources of infection.

Whilst a major body of opinion is concentrating on the area around hospital beds it must also be remembered that people moving around a hospital are a major contribution to infection transmission from one surface to another.

While healthcare professionals employ strict infection control measures including hand-washing and frequent surface disinfection, these measures are not enough as the number of hospital acquired infections each year continues to rise.

Health environments, educational facilities, food preparations areas and public buildings provide ideal conditions for spreading infectious bacteria.

Frequently touched surfaces in these buildings create breeding grounds for infectious bacteria that increase the potential for deadly outbreaks.

TouchClean® is an anti-bacterial coating for use on architectural ironmongery, touch surfaces and hard surfaces and is the latest in the prevention and control of infection in buildings.

TouchClean® continuously kills bacteria\* in these conducive environments and will supplement infection control measures.

TouchClean® continuously kills bacteria\* - day and night, between touches and between cleanings.



# TouchClean®

TouchClean® is a nano technology photocatalytic coating.

Originally developed to coat door handles to kill bacteria, it has a wide range of possibilities including self-cleaning surfaces both internally and externally.

## What does it do?

TouchClean® destroys organic compounds on surfaces.

Bacteria, spores, viruses, odours, smoke and pollutants are all destroyed.

For example, TouchClean® manages:



MRSA  
C. difficile  
E. coli  
SARS  
Listeria  
Salmonella  
Bacterial spores

TouchClean® applied to surfaces will stop contaminants from growing and reduce them very quickly.

Tests have shown that within 24 hours colonies of bacteria were reduced by 99.99%

The coating starts to work immediately it is exposed to a source of ultra violet (UV) light.

It continues to work 24 hours a day, 7 days a week, 365 days a year, as long as there is a light to power it.

Other systems need extensive curing periods at high temperatures, which limits the materials that can be coated.

Clean warm water is all that is needed to keep the surface clean - avoiding the use of environmentally unfriendly cleaning agents.

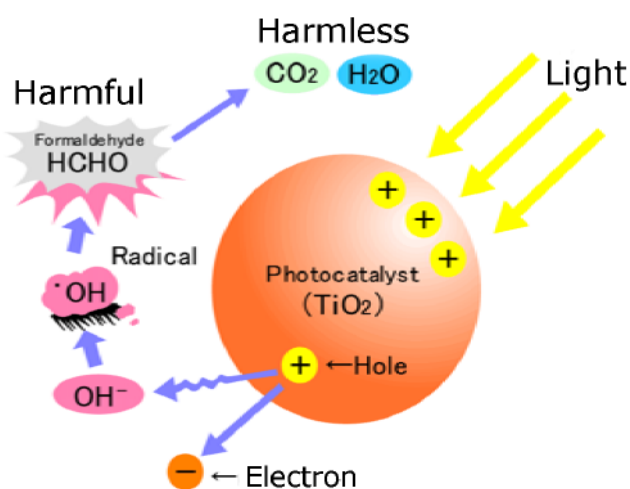
The coating will last for many years depending on circumstances, but can be monitored for effectiveness at intervals and reactivated as part of a service contract.

## How does it work?

When (UV) light strikes the particles in the coating they are activated and emit electrons.

Water nearby is broken down into highly reactive hydroxyl radicals and super oxides.

These free radicals create a powerful oxidising reaction which breaks down organic compounds, including bacteria, viruses, moulds and odours into water (H<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>) which then evaporate from the surface.



The most important detail to note is that the coating is acting as a photocatalyst and is unchanged by the process.

Unlike other systems, such as silver ions from a coating, a catalyst is always available irrespective of the amount of contamination.

Additionally TouchClean® not only kills the bacteria but decomposes them into substances that vaporise harmlessly away.

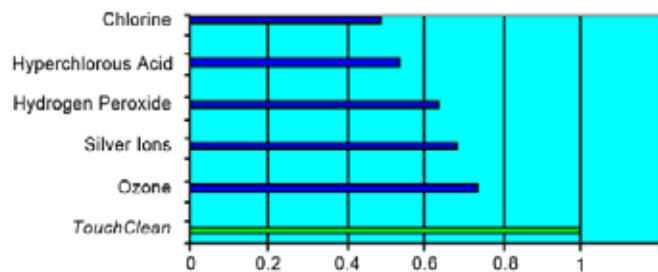
It has a self-cleaning effect that repels dirt on hard surfaces.



# Testing



**Comparison of activity of common antibacterial substances**  
(based on oxidation potential of active ion compared to standard electrode)



TouchClean® has been tested to EN13697:2001

A stringent testing method for chemical disinfectants and antiseptics.

It is a quantitative non porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in the food, industrial, domestic and institutional areas.

The test was carried out by applying the product to a metal surface to replicate the actual use and MRSA bacteria were added to this surface for the test.

Users should be wary of tests that have been carried out in aqueous environments (adding to bacteria in a body of liquid) as this does not reflect actual conditions in use.

A copy of the test certificate is available upon request.

# Projects

Following independent tests by the Infection Control Department of a leading NHS Trust, TouchClean® has been approved for use and is being supplied to 68 ward refurbishments in the region.

Lloyd Worrall produced the ironmongery specification for the Trust and introduced TouchClean® as an infection control measure for the ironmongery.

A report is currently being written by the Department and will be available in due course for reference.

Recently, Macnaughton Blair Architectural Division has specified and supplied TouchClean® ironmongery to the following ward refurbishment and new build hospital projects:

- Broomfield Hospital, Chelmsford
- Leicester Royal Infirmary (including Neonatal Unit)
- Newcastle NHS Trust Freeman Hospital
- Royal Victoria and General Hospitals, Newcastle



# The Company

Macnaughton Blair Architectural Division consists of Lloyd Worrall, Yannedis and MB Architectural.

**Lloyd Worrall** is a leading supplier of architectural ironmongery and comprises five regional companies located in Bury St Edmunds, Manchester, Milton Keynes, Newcastle upon Tyne and Sheffield.

Founded in 1911, **Yannedis** is the oldest established architectural ironmonger in Britain. Yannedis has a formidable reputation for producing custom-made ironmongery from detailed historical reproductions to modern patterns.

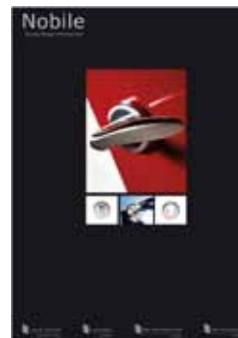
**MB Architectural** is the leading supplier of architectural ironmongery, access control and door automation in Northern Ireland.

The specification of architectural ironmongery is at the core of each of our businesses.

We offer a full specification, scheduling, quotation, contracts management and delivery service to architects, specifiers and contractors. This includes a specialist access control service of specifying and installing a comprehensive package of access control and door automation solutions.

All products specified adhere to the latest British and European standards as well as meeting the requirements of building regulations and DDA (BS 8300).

A wide range of sector and product brochures are available in a PDF format. Please contact your local branch for further information.



Lloyd Worrall  
Unit 6, Denbigh Hall  
Bletchley  
MILTON KEYNES  
MK3 7QT  
T: 01908 643 364  
F: 01908 643 643  
E: miltonkeynes@lloydworrall.co.uk

Lloyd Worrall  
Unit 13, Chamberlayne Road  
Moreton Hall Ind. Est.  
BURY ST EDMUNDS  
IP32 7EY  
T: 01284 762 002  
F: 01284 762 003  
E: bury@lloydworrall.co.uk

Lloyd Worrall  
Units 10-11, Attercliffe Common Ind. Est.  
Fell Road  
SHEFFIELD  
S9 2AL  
T: 0114 244 3350  
F: 0114 244 4219  
E: sheffield@lloydworrall.co.uk

Lloyd Worrall  
Unit 1, Bentinck Street Ind. Est.  
off Chester Road, Hulme  
MANCHESTER  
M15 4LN  
T: 0161 833 0270  
F: 0161 832 3904  
E: manchester@lloydworrall.co.uk

Lloyd Worrall  
Units 13-16, Noble Street Ind. Est.  
off Scotswood Road  
NEWCASTLE UPON TYNE  
NE4 7PD  
T: 0191 226 0888  
F: 0191 226 0803  
E: newcastle@lloydworrall.co.uk

[www.lloydworrall.co.uk](http://www.lloydworrall.co.uk)

Yannedis  
Unit 3, Woodford Trading Estate  
Southend Road  
Woodford Green  
LONDON  
IG8 8HF  
T: 020 8550 8833  
F: 020 8551 0026  
E: ask@yannedis.com

[www.yannedis.com](http://www.yannedis.com)

MB Architectural  
14a Falcon Road  
BELFAST  
BT12 6RD  
T: 028 9038 0200  
F: 028 9038 0201  
E: ask@mbarchitectural.com

[www.mbarchitectural.com](http://www.mbarchitectural.com)