



The miracles of science™

DuPont™ Corian®

**A smart solution for preventing hospital
acquired infections for AIIMS**



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Issue

Some of the largest and best medical institutions in the country have a very high rate of hospital acquired cross infection. Despite practicing regular sanitation regime and using some of the most robust materials, Hospital acquired cross infection is still a major problem. One of the most reputed institutions on the field of medical sciences, the All India Institute of Medical Sciences (AIIMS) gets thousands of patients daily. Doctors at AIIMS observed a high number of post-operative infections in patients.

To prevent this, AIIMS looked for a solution in its upcoming Critical Care units for the Cardio Neuron Centre where they looked for a material which was easy to maintain, did not support any kind of microbial growth and at the same time was soothing to the eyes.



Challenge

The Architectural community along with the Medical fraternity constantly Collaborate with material suppliers for finding solutions for controlling Hospital acquired cross infection.

Some of the available solutions in the market are either around epoxy based wall fillers which are difficult to clean and maintain, other solutions include (MS /epoxy / steel with powder coated with antibacterial coating) which could solve problems of paint peeling but leaves seams. These seem tend to harbor colonies of bacteria once weatherized. The high end segment is dominated by stainless steel variants.

Solution

When proposal for renovating one of the Critical Care units of All India Institute of Medical sciences was proposed, Hospital Services for Construction and Consultancy (HSCC) consulted DuPont on the subject. The collaboration resulted in designing the walls of the critical care unit with the new age non porous and formable material – DuPont™ Corian®.

DuPont™ Corian® addresses some of the critical needs of the hospital, it is a non-porous, anti-bacterial and a fire retardant material that does not support microbial growth and allows for easier cleaning, disinfecting and decontamination to help reduce cross-contamination risks to the limit of 40%. DuPont™ Corian® can withstand chemical agents used to reduce Staphylococcus aureus and a variety of virulent strains of bacterial contamination by 99.99% in one minute.

Corian® has been listed by GreenGuard for being microbial resistant when tested according to a test method following the guidelines of ASTM D 6329 and analyzed with a quantitative scale. Corian® was used for surfacing of Operation Theatre (OT) and ICU walls at AIIMS, which was seamed discreetly to create monolithic surfaces across large spans.

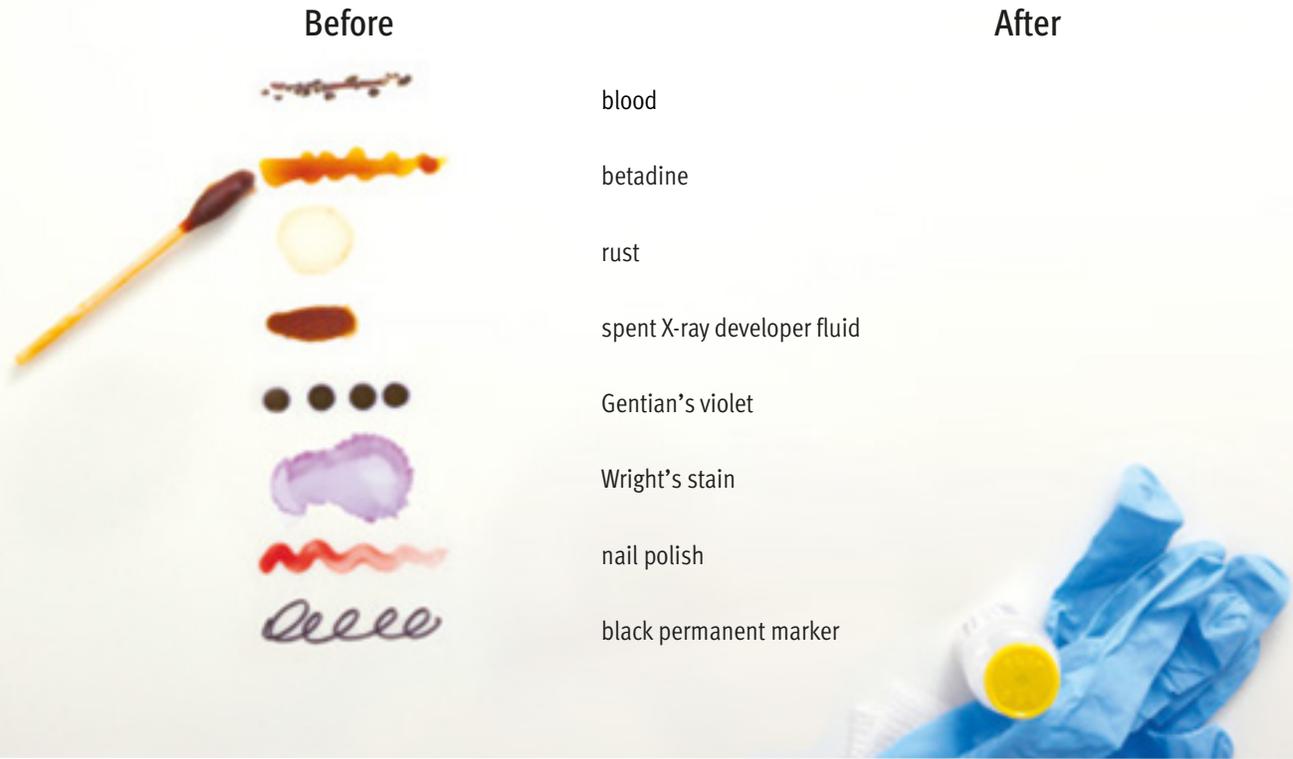
DuPont Building Innovations team worked closely with HSCC for developing right specifications for the CCU surfacing solutions and specifications with DuPont™ Corian®. As this was a renovation project the surfaces were supposed to be customized to an existing ICU. Our authorized and trained Distributor Ms. Signage Systems developed a makeshift workshop for the project.

Corian® was thermoformed to give desired shape of contours for a perfect fit to the surface it was applied in the CCU walls to make the walls non- porous and seamless. This ensured that the walls were 100% hygienic when in contact with various kinds of microorganisms including AIDS virus.

DuPont™ Corian® solid surfaces have been also used at various hospitals across India

Sancheti Hospital	Pune
Global Hospitals	Mumbai
Asian Heart Institute	Mumbai
Rainbow Hospitals	Hyderabad
Kashi Ram Hospital	Kanpur
Guru Teg Bhadur	Delhi
Medanta Hospital	Gurgaon
Sanjay Gandhi Post Graduate Institute of Medical Sciences	Lucknow
Sahara Hospital	Lucknow

DuPont™ Corian® delivers superior stain resistance over laminated surfaces or stone. Corian® can be renewed by scrubbing or sanding as most common healthcare stains can be easily removed.



Benefit

A clean, hygienic, fresh and relaxing environment can help clinicians concentrate on patient care and enhance patient recovery. As a solid, non-porous surface, Corian® can be maintained with minimum care to retain its original appearance. Busy healthcare professionals gain confidence that their working environment can meet the highest standards, not just in performance, but also in aesthetics.

DuPont™ Corian® meets all the requirements of a hardworking surface for healthcare, while also offering a decorative appeal and versatility in design that makes it suitable for any scheme. Corian® offers patients and visitors a far more pleasant experience. A soft, homely atmosphere at a healthcare facility has a welcoming, calming effect, while the impression of hygiene and cleanliness fosters a sense of trust.

DuPont Corian® solid surfaces for absolute hygiene at multiple levels.

Stain resistance and decontamination

DuPont™ Corian® delivers superior stain resistance. In addition, Corian® can be easily cleaned of excessive levels of radioactive contamination.

Effective cleansing of HIV

DuPont™ Corian® solid surface is a non-porous material that can be cleansed easily of the human immunodeficiency virus (HIV). The virus can be easily removed from the surface of Corian® by rinsing with a diluted solution of household bleach.

Reduction of cross-contamination

Corian® solid surfaces are non-porous and do not promote the growth of mould or mildew. Corian® Installations are easy to clean and disinfect using industry standard solutions such as DuPont™ RelyOn® disinfectants.



Nuclear medicine environments

Contaminated Corian® surfaces can be easily decontaminated to “unrestricted” levels using a Scotch-Brite™ abrasive pad and an approved radioactive decontaminant product.



X-ray environments

Decontamination processes are highly effective with Corian® installations as radioactive contamination reduces to “unrestricted” levels in X-ray environments. Corian® surfaces also show no visual signs of discolouration or delamination like other materials do in X-ray environments.

