

Henderson Hospital Installs *Indigo-Clean*™ Lighting in All of the Operating Rooms

Unique Technology Keeps Patients Safe by Continuously Reducing Harmful Bacteria in the Environment



Project: Henderson Hospital, a ground-up new construction hospital
Location: Las Vegas, NV

“Maintaining a safe, clean environment for our patients is our number one priority. Indigo-Clean safely, automatically, and continuously disinfects the environment, which means there is no need for room downtime when it (the operating room) is in use.”

– Sam Kaufman
CEO & Managing Director, Henderson Hospital



Indigo Disinfection Mode used when room is not in use

Challenge: Henderson Hospital sought to identify the most innovative, whole-room environmental disinfection technology available with the goal of reducing the risk of surgical site infections (SSIs). Four ORs, two C-Section rooms, one Trauma/Triage room, and 20 Exam rooms, were identified for the application of new technology.

Solution: Indigo-Clean™, a patented, continuous environmental disinfection technology, is a ceiling mounted fixture that uses 405nm LED light to safely and automatically kill harmful bacteria on hard and soft surfaces.

Indigo-Clean Benefits

- Indigo-Clean is clinically proven to reduce harmful bacteria, including MRSA and C-diff, up to 70+%* beyond routine cleaning
- Unlike UV devices, Indigo-Clean is safe for patients and healthcare providers
- Indigo-Clean’s automated operation minimizes human error and Operating Room downtime
- The Indigo-Clean disinfection technology is integrated with the overhead, ambient lights

* Maclean M., S.J. MacGregor, J.G. Anderson, G.A. Woolsey, J.E. Coia, K. Hamilton, I. Taggart, S.B. Watson, B. Thakker & G. Gettinby (2010). Environmental Decontamination of a Hospital Isolation Room using High Intensity Narrow-Spectrum Light. *Journal of Hospital Infection*, 76(3); 247-251. DOI: 10.1016/j.jhin.2010.07.010

Rutala W., Kanamori H., Gergen M., Sickbert-Bennett E., Sexton D., Anderson D., Weber D.J., *Antimicrobial Activity of a Continuous Visible Light Disinfection System*, ID Week 2016.



Killing Harmful Bacteria, such as MRSA and C. Diff, with Indigo-Clean's Patented Continuous Environmental Disinfection Technology



Indigo-Clean M4SEDIC

Henderson Hospital is a brand-new, ground-up 247,500 sq ft community facility in Henderson, Nevada. An important goal for the hospital was to incorporate the newest technology and tools to combat the spread of harmful bacteria that are known causes of healthcare acquired infections (HAIs).

The operating room is one of the cleanest rooms in the hospital, but knowing where the pathogens reside is still a challenge. At the hospital's request, specifiers explored various lighting products that provide disinfection, including traditional UV lights, before selecting Kenall's Indigo-Clean. Indigo-Clean, a patented, continuous environmental disinfection technology, is a ceiling mounted fixture that utilizes 405nm LED light. Indigo-Clean is clinically proven to safely and automatically kill harmful bacteria associated with healthcare acquired infections.

Henderson became the first hospital in the United States to install this revolutionary product in the hospital's four operating rooms, as well as two C-section rooms, one trauma/triage room, and 20 exam rooms. Steve Wilson, Principal at HMC Architects, feels that using Indigo-Clean helps provide, "the safest, most infection-free care environments possible".

Kenall holds the exclusive U.S. patent for Indigo-Clean continuous environmental disinfection technology, which uses a combination of 405nm indigo and white LEDs to kill bacteria, while providing functional light during surgical procedures. This narrow spectrum light is proven to kill 70+

percent of bacteria in the air, and on hard and soft surfaces, killing many pathogens responsible for hospital-acquired infections (HAIs) including MRSA and C. Diff. By utilizing 405nm light, rather than UV, it is safe for patients to occupy the space when the light is on. Indigo-Clean requires no special training or designated technician. In addition it can be used with lighting controls to minimize human error.

The lights switch easily from White Disinfection Mode, which provides bright, white light and continuous disinfection, to an Indigo Disinfection Mode, which provides maximum disinfection when the room is unoccupied—both of which are safe when patients and hospital staff are occupying the space.

"The way it used to be done before these (Indigo-Clean lights) were available, is we would bring in a UV light ... everybody had to be away from it because it wasn't safe... now we have a constantly-available technology always killing bacteria,"

— Rachel Lemahieu, RN, Director of Surgical Services, Cath Lab and Specials at Henderson Hospital.

Thirty-six sealed Kenall LED Indigo-Clean M4SEDIC luminaires were installed at Henderson. The luminaires incorporate several other features, including an antimicrobial finish, NSF2 certification and IP65 listing. The dual-purpose LED



luminaires also save the hospital money in equipment, maintenance costs and energy consumption.

Indigo-Clean Features:

- Continuous environmental disinfection kills bacteria missed during routine cleaning
- Indigo-Clean is NOT UV light... it uses safe 405nm visible light
- 405nm visible light automatically kills bacteria in the air and on hard and soft surfaces
- Switchable between White Disinfection Mode and Indigo Disinfection Mode

Benefits for Henderson Hospital:

- Indigo-Clean is clinically proven to reduce harmful bacteria up to 70+% beyond routine cleaning
- Indigo-Clean bolsters current cleaning methods
- The fixtures kill harmful bacteria, such as MRSA, associated with surgical site infections
- Unlike UV lights, Indigo-Clean is safe for occupants in the room
- The luminaires serve the dual function of providing both ambient light and continuous environmental disinfection

For more information, please visit us on the web at www.kenall.com



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