STERILSUITE

Light Integrated Air Distribution Operating Room System





SAFETY, FLEXIBILITY, & AESTHETICS

Krueger's SterilSuite is a prime example of innovative critical room air distribution technology. It combines clean air and high-quality LED lighting in a low-profile, modular design that not only enhances installation efficiency, but also lowers construction costs.

FEATURES & BENEFITS

REDUCES SURGICAL SITE INFECTIONS

IMPROVES VISIBILITY

MAXIMIZES CEILING USAGE

CUSTOMIZABLE LAYOUT

REDUCES INSTALLATION TIME

REDUCES SURGICAL SITE INFECTIONS

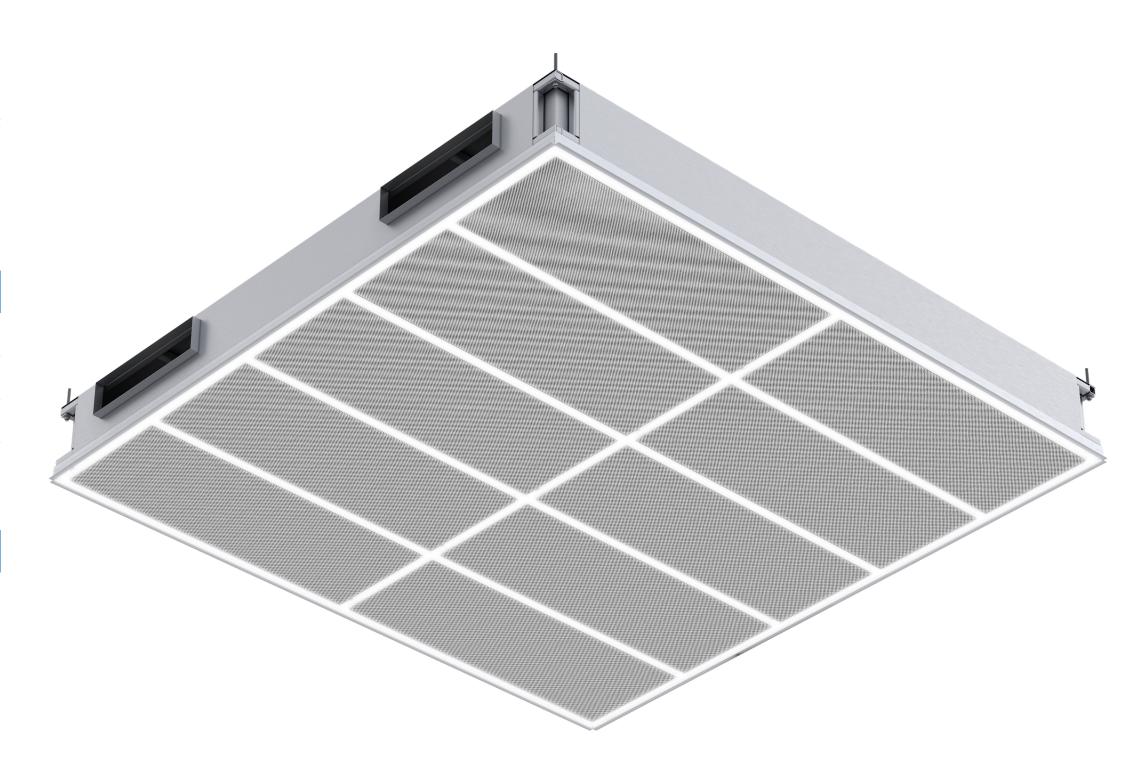
Krueger's SterilSuite is designed with the goal of minimizing surgical site infections. Even a single infection can have severe and life-altering consequences, leading to costly litigation and a damaged reputation. Through precise engineering and high-quality construction, Krueger's SterilSuite aims to decrease the risk of these infections.

LAMINAR TECHNOLOGY

Krueger's SterilSuite works by leveraging laminar flow technology, whereby cool, filtered, low-velocity air flows downward, uniformly into the surgical space, tapering slightly inward near the table, and then is drawn out and away as it nears the floor. This type of air pattern, which is characteristic of laminar flow products, forms a sheath of clean air around the patient and surgical staff, continually reducing contaminants and deterring their re-entry into the surgical space.

QUALITY CONTROL

Krueger's SterilSuite is produced with strict quality control, both in design and construction. In design, as each SterilSuite system is laid out, the active diffuser face area is maximized while making sure it complies with ASHRAE Standard 170, which defines ventilation system design requirements in healthcare facilities. In construction, skilled supervision closely monitors as technicians carry out each step of the manufacturing process. Together, this ensures that every SterilSuite system meets the highest standards of quality and reliability.



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IMPROVES VISIBILITY

Having effective surgical lighting is essential for the successful outcome of surgical procedures. It allows surgeons to have a clear and accurate view of important anatomical structures, blood vessels, and other vital components. This increased visibility helps minimize the risk of mistakes or accidents. It also enables surgeons to carefully examine their surgical instruments and better identify any potential complications.

LIGHTING TECHNOLOGY

Through the use of direct, high-output, high-efficiency LED light strips, Krueger's SterilSuite provides OR-grade lighting that is independent of airflow. This ensures that surgical lighting needs are satisfied and that the integrity of the essential airflow pathway is maintained.

The light strips are adjustable and dimmable, allowing for customizable lighting conditions. With a high Color Rendering Index (CRI) and R9 value of up to 97, the SterilSuite ensures accurate and vibrant colors.

The lighting system is conveniently controlled through a wall-mounted touchscreen, providing easy and immediate access to lighting controls. Additionally, the SterilSuite offers the option of incorporating green lighting along its perimeter to enhance surgical contrast and reduce glare.

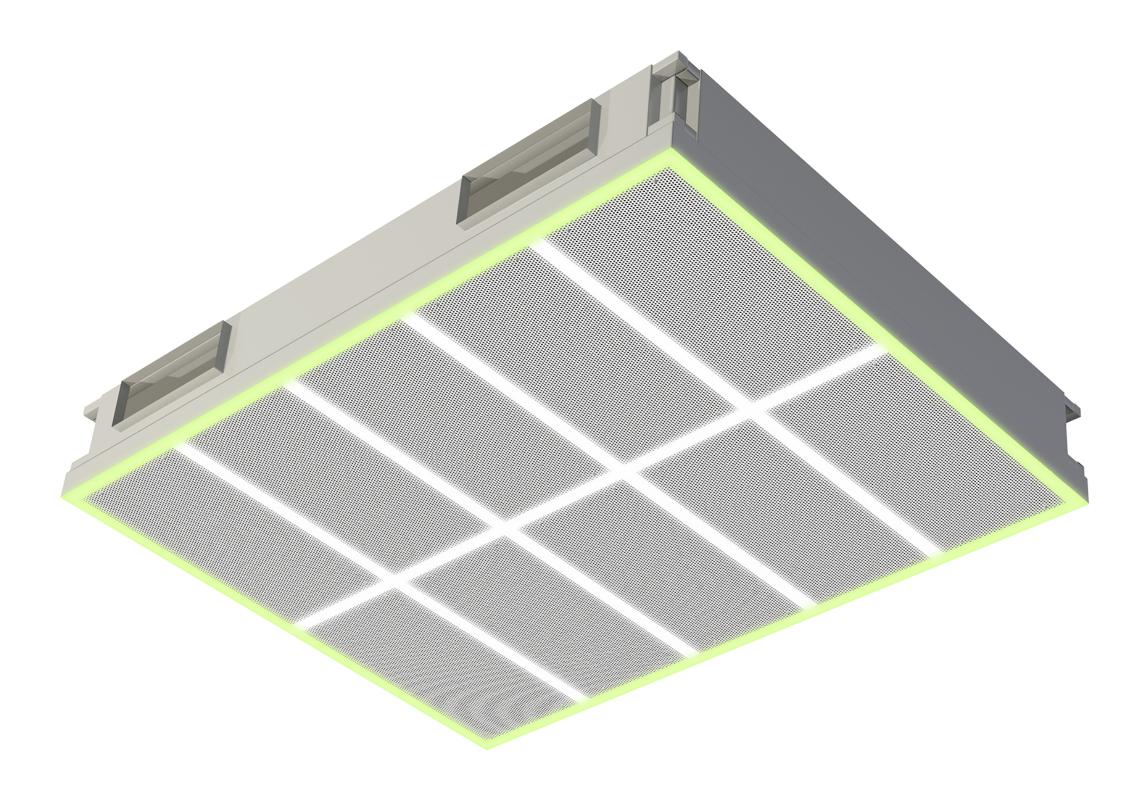












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MAXIMIZES CEILING USAGE

The inclusion of robotic systems, advanced imaging, energy-based surgical devices, high-definition displays, and integrated data management systems has led to increased complexity and spatial limitations in hospital operating rooms. This congestion is evident both above and below the ceiling. As a result, the optimization of available space has become more important than ever before, necessitating the integration of ceiling-mounted equipment. This is precisely where Krueger's SterilSuite-SD (equipment load bearing model) can transform the use of the space. It not only combines lighting with airflow technology, but also provides robust support for the heavy equipment requirements that are prevalent in today's operating rooms.

HEAVY EQUIPMENT INTEGRATIONS

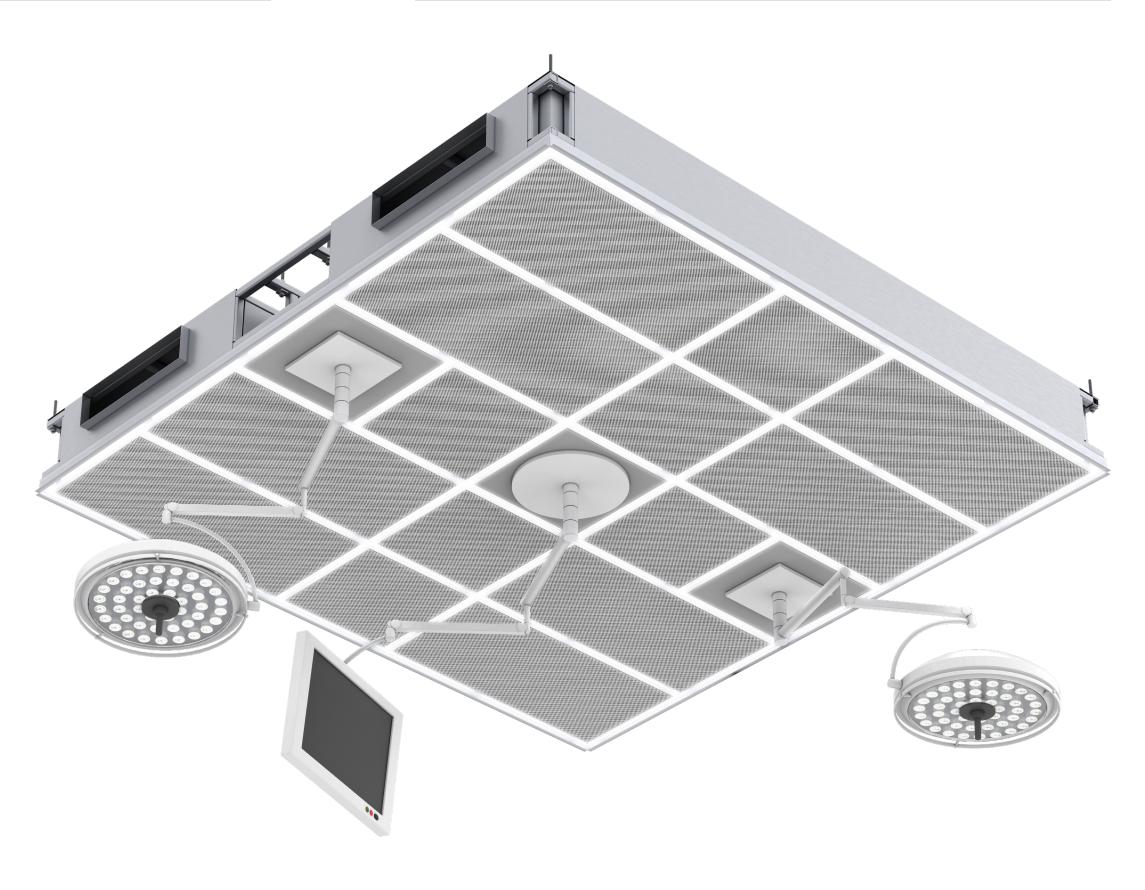
Krueger's SterilSuite provides two customizable models tailored to meet the unique demands of operating rooms. The standard model is designed to support laminars, blank-offs, and access panels. For more intensive requirements, like booms and other heavy equipment, the SterilSuite-SD offers additional load-bearing structural support, including the option for Unistrut channels, which are commonly found within hybrid operating room environments. Rest assured, safety remains a top priority. Each configuration of the SterilSuite-SD is accompanied by stamped structural calculations. There's also the option to add on-site supervision during install.



STANDARD



LOAD BEARING STRUCTURAL SUPPORT



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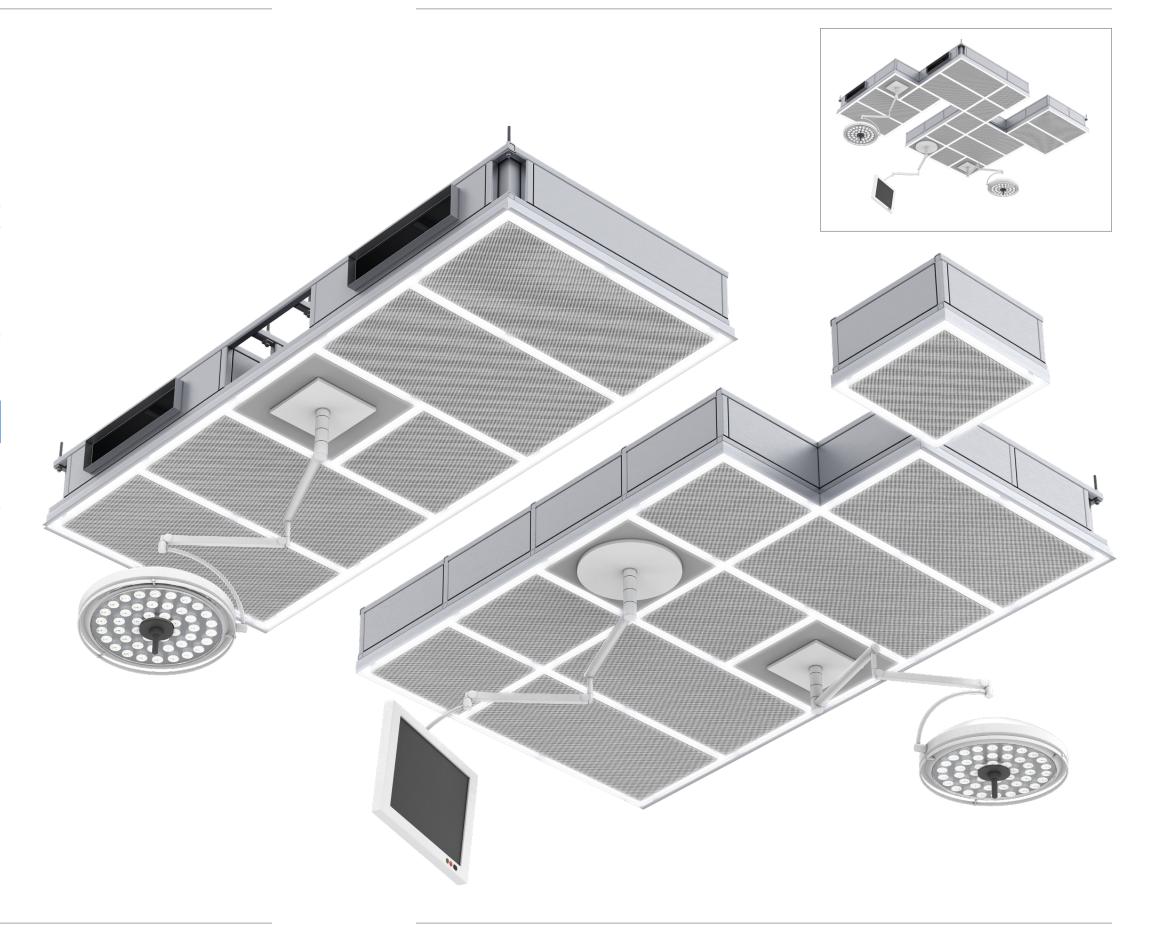
CUSTOMIZABLE LAYOUT

While Krueger's SterilSuite is modular in nature, it allows a remarkable amount of flexibility in terms of layout and customization. This means that any size and number of laminar flow diffusers can be used and the inlets can be strategically positioned on the side or top of the plenum. This is especially beneficial to accommodate existing ductwork or to work around obstructions. Additional flexibility includes optional gel sealed HEPA/ULPA filters, LED lights, and structural support. With this exceptional design flexibility, you can be confident that the SterilSuite will be meticulously tailored to meet your building requirements.

HYBRID ENVIRONMENTS & IMAGING EQUIPMENT

The SterilSuite-SD provides the ability to seamlessly integrate equipment needs with load bearing, structural support, with optional Unistrut channels. These channels are specifically designed for mounting imaging equipment that is often found in hybrid operating room environments. This allows for a hassle-free connection and a clean, visually appealing installation. Of course, if Unistrut channels are selected, rest assured that it will be a cohesive and polished look. The channels and closure strips will be of the same antibacterial finish as the laminar diffusers.

While Krueger offers pre-designed SterilSuite-SD layouts for common imaging equipment, the modular design of the SterilSuite is such that it allows for complete customization in terms of module size and configuration, making integration with virtually any ceiling-mounted equipment a breeze.



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REDUCES INSTALLATION TIME

Krueger's SterilSuite features a modular design that seamlessly caters to both retrofit and new construction projects alike. The system's prefabricated components are conveniently delivered in factory-assembled sections, which are thoughtfully designed to fit into standard elevators and pass through standard doors. This modular product design and streamlined delivery is what ultimately translates into significant savings, both in terms of project schedule and cost.

EASE OF INSTALLATION

The installation and commissioning process for Krueger's SterilSuite is incredibly easy. It begins with the prefabricated sections, which feature closed-cell gasketed joints. This ensures that there is an accurate seal between each of the connected sections. Once in place, inserting the optional replaceable HEPA/ULPA filters can be performed from the room-side, just as the balancing dampers can be accessed to adjust airflow. For units specified with lighting, the elements are preinstalled and are easily connected via cables. Last but not least, tying the system into electrical circuits is facilitated with LED driver wiring. Together these features make the installation quick and easy, saving time and labor, which equates to reduced construction costs.

MODEL SUMMARY

STERILSUITE STANDARD FEATURES

- Clean, quiet air delivery
- Stainless steel and/or aluminum construction
- Pre-engineered modular design, closed gasketed joints
- Low-profile, common plenum
- Customizable layouts
- Optional gel sealed HEPA or ULPA filters
- Optional high-output, high-efficiency perimeter LED lights
- Room side access to filters
- Room side adjustable equalization dampers
- Integrates with medical gas and fire protection equipment
- Anti-microbial white finish; optional custom color available
- Ships in large factory-assembled sections
- Meets NFPA 90A-2018 Installation of Air Conditioning and Ventilating Systems
- Meets ASHRAE 170-2017 Ventilation of Health Care Facilities

STERILSUITE-SD, ADDITIONAL FEATURES:

- Includes load-bearing structural support for hanging equipment
- Includes fully executed, stamped structural engineering calculations per local requirements
- Optional turnkey project management; on-site supervision and coordination of trades
- Includes high-output, high-efficiency perimeter LED lights













PROUD TO BE YOUR RESOURCE FOR AIR DISTRIBUTION AND EQUIPMENT SOLUTIONS

Let us know how we can assist you in your next building application. For more information, contact your local Krueger representative or visit us on the web at www.krueger-hvac.com.

CLEAN ROOM SOLUTIONS	TERMINAL UNITS	DIFFUSERS	GRILLES & REGISTERS
	Single Duct	Plaque & Architectural	Supply
HOSPITAL SOLUTIONS	Fan Powered	Louvered	Return
	Dual Duct	Perforated	Linear Bar
LABORATORY SOLUTIONS	Bypass & Retrofit	Modular Core	Security
		Linear Slot	Industrial
CHILLED BEAMS	FAN COILS & BLOWER COILS	Plenum Slot	Duct Mounted
	Horizontal	Round	Transfer
DISPLACEMENT VENTILATION	Vertical / Stack	Air Nozzles	Stainless Steel

