

VENUESHIELD REACTIVATION GUIDE COMPONENT:

TECHNOLOGY & EQUIPMENT CATALOG

TABLE OF CONTENTS

1	Abou	About the VenueShield Reactivation Guide1	
	1.1	How to Use the VenueShield Reactivation Guide	1
	1.2	How to Use This Workstream Pillar – Workforce Safety	2
2	Tech	nology and Equipment Categories	3
	2.1	Patron and Employee Screening	5
	2.2	Frictionless Transaction and Ticketing	42
	2.3	Safety and Sanitization	52
	2.4	Vertical Transportation	115
	2.5	Software and Mobile Apps	120
	2.6	Physical Crowd Control	125
	2.7	Air Purification and Filtration	127
	2.8	Restroom Furniture Fixtures & Equipment	139
3	Prod	uct Sourcing	148
	3.1	Thermal Imaging	148
	3.2	Handheld Thermometers	149
	3.3	Bi-polar Ionization	149
	3.4	HVAC Disinfecting	149
	3.5	Venue Sanitization Items	149







ABOUT THE VENUESHIELD REACTIVATION GUIDE

ASM Global created VenueShield to provide ASM Global venues with the information they need to follow health and safety best practices when reopening for event activity. The *VenueShield Reactivation Guide* (Guide) will help venue managers implement VenueShield's operational best practices during the COVID-19 pandemic. The best practices are and will continue to be informed by organizations such as the Centers for Disease Control and Prevention (CDC), National Health Service (NHS), and World Health Organization (WHO). This Guide will be updated as necessary.

All ASM Global venues must comply with all applicable laws and regulations, which take precedence if there is a conflict between the best practices in the Guide and the applicable laws or regulations. This Guide was created under the recommended CDC guidelines for social distancing of 6 feet or 2 meters. Venues should always defer to their local governmental guidelines on social distancing requirements.

The Guide provides general direction to venue management on how to implement health and safety best practices and operate events in ASM Global's primary venues types (arenas, convention centers, stadiums, and theaters). The health and safety best practices are divided into six primary components that support the key operations for events and activities:

- Public Awareness
- Environmental Hygiene
- Customer Journey and Event Operations
- Food and Beverage Service
- Workforce Safety
- Technology and Equipment

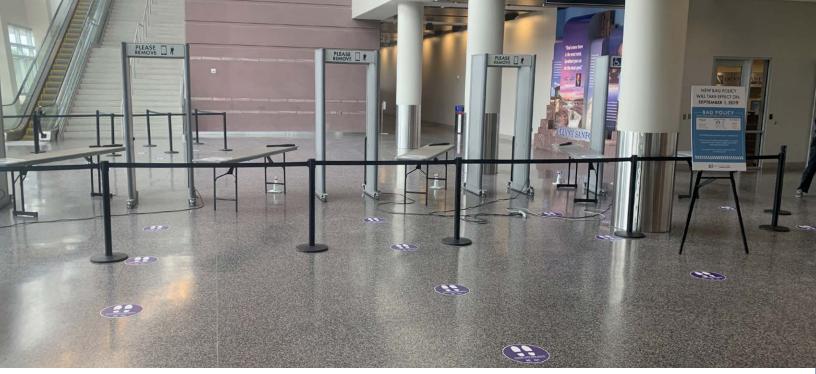
The best practices presented in the Guide are approved by ASM Global. If a venue needs to adapt a best practice to fit a unique circumstance or location, venue management should contact senior leadership of the operational division.

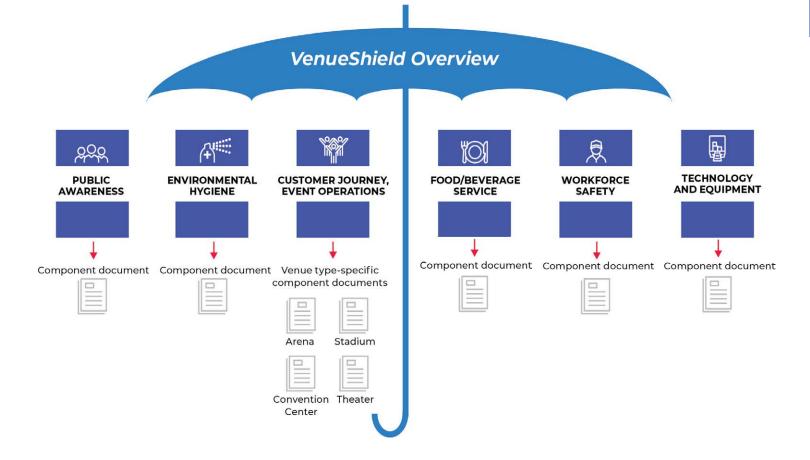
1.1 How to Use the VenueShield Reactivation Guide

The Guide is designed to be highly interactive and flexible, allowing venue management to tailor the contents for their specific needs as they reopen for events. The Guide is composed of an Overview that provides a summary of the six primary components, supported by documents providing detailed best practices and information for four of the components and four venue-type documents that provide similar content for the remaining two components, as described below and illustrated in the figure.

- **Component documents.** The public awareness, environmental hygiene, workforce safety, and technology and equipment components are generally similar across all venue types and are supported with in-depth documents for each.
- Venue-type specific component documents. The customer journey and event operations component is complex and recommended practices vary substantially depending on the venue type. Detailed best practices for that component are presented in four separate documents that are specific to the four ASM Global venue types:
 - o Arena
 - o Convention Center
 - o Stadium
 - o Theater







1.2 How to Use This Component – Technology and Equipment

This Technology and Equipment component is targeted primarily at providing venue managers with best-in-class product options for reactivating their venue for events. With over 250 vetted products included, venue managers will be able to review and choose technology and equipment to fit venue-specific needs. In addition, procurement sourcing questions are included that can help venue managers ask the right questions when sourcing products for their venue.

02 / Technology & Equipment Catagories

TECHNOLOGY & EQUIPMENT CATEGORIES

The VenueShield Program Technology and Equipment Catalog provides ASM Global venues with best-inclass product options for use in reactivating following closures related to the COVID-19 pandemic. The catalog presents information for products that were extensively researched and vetted by ASM Global Leaders. The catalog is designed to be used as part of the Guide.

When considering the catalog products, venues will need to consider local governmental guidelines, tenant/ league, and event organizer requirements as these may inform decisions related to the purchase of technology and equipment items. Since it is unlikely that most venues will be able to purchase all of the catalog items that are of interest, the Local VenueShield Team, working with venue managers, will need to prioritize decisions on what technology and equipment options can best serve their needs for safely reactivating.

While this catalog is not meant to be all-encompassing, given the rapidly growing number of products in the marketplace, the VenueShield Technology and Equipment Catalog includes information on over 250

Technology and Equipment Catalog Categories

- ✓ Guests and Employee Screening
- Frictionless Transactions and Ticketing
- ✓ Safety and Sanitization
- ✓ Vertical Transportation
- ✓ Software and Mobile Apps
- ✓ Physical Crowd Control
- ✓ Air Purification and Filtration
- ✓ Restroom Furniture, Fixtures, Equipment

vetted products in more than 30 different product categories to help provide venue managers with technology and equipment options for consideration.

Specific questions related to technology and equipment should be directed to the venue's ASM Global technology and equipment representative.



Category	Topic Area / Name	Catalog (Hyperlink)
Category I: Patron & Employee	Pre-Arrival Screening & Staging Software	<u>2.1.1</u>
Screening	Temperature Screening - Handheld Thermometer	<u>2.1.2</u>
	Temperature Screening - Thermal Imaging	<u>2.1.3</u>
	Testing Devices & Services	<u>2.1.4</u>
	People Tracking & Tracing	2.1.5
	Crowd Protection Strategies	<u>2.1.6</u>
	Security & VM	2.1.7
Category II: Frictionless	Touchless Payment Systems	<u>2.2.1</u>
Transaction &	Touchless Parking Payment & Validation Systems	<u>2.2.2</u>
icketing	Automated Drink & Food dispensers	<u>2.2.3</u>
	Food Lockers	<u>2.2.4</u>
	Touchless Ticket Scanning	<u>2.2.5</u>
	Touchless Credentialing	<u>2.2.6</u>
Category III: Safety &	PPE Masks, Gloves, Face Shields	<u>2.3.1</u>
Sanitization	Cleaning & Disinfection Agents	2.3.2
	Cleaning & Disinfection Artificial Turf	2.3.3
	Cleaning & Disinfection Equipment	2.3.4
	Cleaning & Disinfection Services	2.3.5
	Cleaning & Disinfection Water Treatment Systems	2.3.6
	Drones or Other Bowl Spraying Cleaning Regimes	2.3.7
	Hand Sanitizer & Touchless Dispensers	<u></u> <u>2.3.8</u>
	Other Useful Equipment	2.3.9
	Seat Covers Enclosures	2.3.10
	Signage & Graphics	2.3.1]
	Sneeze Guards and Barriers	2.3.12
	UV Technology	2.3.13
Category IV:	Elevator External Controls	2.4.1
/ertical Fransportation	Escalator Antimicrobial Handrails	2.4.2
	Escalator Handrail UV Disinfection	2.4.3
Category V:	Crowd Density Heat Maps	2.5.1
Software & Mobile Apps	Reaching Guests, Vendors & Employees, etc.	2.5.2
	Wayfinding	
		<u>2.5.3</u>
Category VI:	Incident and Task Management Software	<u>2.5.4</u>
Physical Crowd Control	Crowd Control Devices	<u>2.6.1</u>
Category VII: Air Purification &	Air Filtration	<u>2.7.1</u>
Filtration	Air Purification Systems	<u>2.72</u>
	Coil Cleaning & Disinfection Products & Services	<u>2.7.3</u>
Category VIII:	Touchless Flush Valves and Faucets	2.8.1
Restroom FFE	Touchless Paper Towel Dispensers	2.8.2
	Touchless Soap Dispensers	2.8.3
	Urinal and Lavatory Covers	2.8.4



<u>TOC</u>

2.1 Patron & Employee Screening Devices

2.1.01 Pre-Arrival Screening & Staging Software | Customer

This equipment category includes screening and staging software tools and apps for use as guests and employees arrive.

Fan Engagement, Mobile Payment, Access, Analytics

Fortress One is our interactive data platform developed for the Sports & Entertainment industry. It powers the services that enable teams to identify and understand who their fans are and to maximize the level and value of their engagement.

Used by over 120 of the worlds leading sports teams, Fortress ONE has transformed how stadiums and venues operate, has given teams real access to their data and has built new revenue streams across game day and commercial activities.

Manufacturer: Fortress Scanners Vendor(s): Fortress Scanners Availibility: NA



http://www.fortressgb.com/

Tappit

Enhance the customer experience. Cashless payments speed up transactions, so customers spend less time queuing and more time enjoying themselves Maximize revenue and profit. Quicker transactions create faster-moving queues and more revenue. Cashless payments mean less cash handling, less fraud and less theft.

Learn from actionable insights. Data helps you understand your customers and make operations more efficient, giving actionable insights to make your future events better. Stay safe. In the time of Coronavirus, help keep events safer for everyone. Faster queues, payment at a distance and no cash will reassure fans and employees alike.

alike. Manufacturer: Tappit Vendor(s): Tappit

Availibility: NA

https://tappit.com





2.1.01 Pre-Arrival Screening & Staging Software | Customer Journey

Touch-less Fan Journey

The Venuetize mobile engagement platform makes it easy for visitors to experience your space – and your brand – in a totally personal way. With an intuitive user interface, and a robust platform that is built for mobile and for the future, you can deliver a unique experience to each user.

With these capabilities, your brand will be able to better understand each and every guest. Who are they? What do they like? What are they doing? Where are they going? With this knowledge, you'll be able to deliver exactly what they want, to the palms of their hands.

Mobile Wallet, Mobile Ordering, Loyalty & Rewards, Navigation, Wayfinding, Parking, Mobile Ticketing, Content Delivery, Security, and Data and Analytics

Manufacturer: venuetize Vendor(s): venuetize

Availibility: NA

https://www.venuetize.com/introducing-the-touchless-fan-journey/

Touchless / Facial Recognition Security Screening

CLEAR is uniquely positioned to help restore confidence as we go back to work and school, take a flight, stay at a hotel, eat at a restaurant or head back to a sports venue. Touchless identity verification is already available in all 65+ airports, venues and locations CLEAR operates, delivering a "no contact" identity verification solution to over 5 million members.

CLEAR can welcome fans back to sports venues with our touchless venue experiences which alleviate congestion and keep people moving. Layering in Health Pass gives peace of mind to enter the venue in a safe and healthy way.Simplify and Secure Reporting

- · Employee linking
- Status checks and reports
- Sharing functionality for employees prior to arriving at work

Manufacturer:	CLEAR
Vendor(s):	CLEAR
Availibility:	NA

https://www.clearme.com/







2.1.01 Pre-Arrival Screening & Staging Software | Talent

Envoy

Envoy Protect helps you safely return to work with employee registration, touchless sign-in, wellness checks, capacity management, and more workplace safety tools.

VISITORS: Envoy Visitors protects your visitors and guests with a touchless, modern, and secure sign-in. You save time, your organization feels safe. No trade offs required.

DELIVERIES: Envoy Deliveries helps you manage the mailroom quickly, to keep work moving forward and packages safe. Never miss a package or a step in your to-do list.

ROOMS: Envoy Rooms makes it easy for anyone to book a meeting and gives you insights to manage your space and budget. It's like air traffic control for your meeting rooms.

Manufacturer: Envoy Vendor(s): Envoy Availibility: NA Contract of the first of t

https://envoy.com

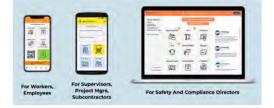
SkillSignal Workforce Safety & Compliance Technology

Easily organize and track your employees' professional skills, training and certifications. Eliminate countless hours of manual paperwork and be ready for any inspection. Efficiently avoid accidents on your projects thanks to data and smart dashboards. Automatic daily reports will provide you with unprecedented insight.

Chemicals, healthcare, oil & gas, energy, landscaping,...: comply with local and national rules of Occupational Health And Safety. Avoid penalties and streamline your operations. SkillSignal can help you manage your HR compliance process for your workforce (construction, engineering, police and fire dept., drivers) and keep them safe on the job.

Manufacturer: SkillSignal Vendor(s): SkillSignal Availibility: NA

https://www.skillsignal.com/





2.1.01 Pre-Arrival Screening & Staging Software | Talent

Zero Health Employee Wellness Checks

Zedic puts a team of public health, food safety, and medical professionals right in your pocket, for whenever you have questions, concerns, or just need advice.

Zedic is designed to save time, stress and money when you have an employee or patron health issue. Maybe you need to know whether to close for the day, send an employee to the doctor, or just get our opinion on a health department response, we'll get you all the information they need to stay open or minimize the impact.Until now, this kind of expertise was available for only the biggest companies.

Manufacturer: Zero Hour Health/Zedic Vendor(s): Zero Hour Health/Zedic

Availibility: NA



https://www.getzedic.com/



<u>TOC</u>

2.1 Patron & Employee Screening Devices

2.1.02 Temperature Screening Handheld Thermometer

This equipment category includes handheld thermometers that can be used as part of a pre-screening strategy to detect those with elevated temperatures as they pass through a screening point.

Note: Handheld thermometers may be marketed for general, non-medical purposes, such as for use in construction and events industry. These thermometers are not intended for use in disease diagnosis or as part of the cure, mitigation, treatment, or prevention of disease.

Venues should ensure that any thermometer used for medical purposes meet the requirements and the standards or specification required by local governmental guidelines.

Braun No touch + forehead

The first and only thermometer with both no touch and touch functions. It uses a new, revolutionary technology that ensures clinically accurate and consistent readings, with gentle convenience.

Manufacturer: Braun Vendor(s): Braun Availibility: NA



https://www.braunhealthcare.com/thermometers/

HotSpot | Non-Contact Infrared Thermometer

ICI's HotSpot non-contact infrared thermometer ensures accurate and stable body temperature readings. Effective for adults as well as newborn babies and young children with high mobility tendencies. This FDA 510(k) Clearance device can detect elevated skin temperatures brought on by various external causes, such as the Coronavirus, with pinpoint accuracy. Perfect for adjunct use in hospitals, sub-acute health settings, public areas (i.e. airports), and more.

• Readings can be taken as close as 5 cm or as far as 15 cm from target zone.

• Being non-contact makes for a more sanitary environment and reduces the chance to spread infectious diseases.

- Temperature shows on the LCD screen.
- · Users can set an alarm for readings considered abnormally high.
- · Onboard datalogger stores last 32 readings.
- \cdot The HotSpot is fits in lab coats and bags for portabillity.

Manufacturer: Infrared Thermometers Inc. (ICI) Vendor(s): Infrared Thermometers Inc. (ICI)

Availibility: NA

https://infraredcameras.com/thermal-infrared-products/hot-spot_non-contact-infrared-thermometer/



Unit Cost: \$80.00



2.1.02 Temperature Screening Handheld Thermometer

MedSource Non-Contact Infrared Thermometer, IR 300: Item Number MS-131002

This Non-Contact Infrared Thermometer is intended as a screening tool to measure forehead temperature of infants and adults without contacting the human body. It can be used by consumers in household environments and doctors and nurses in a clinic setting. This is a FDA 510k cleared device.

- Measurement Time: ≤ 2 seconds
- Measurement Distance: 0.4" 2.0"
- Body Temperature Range: 95.0 °F 107.6 °F
- Ambient Temperature: 59 °F 95 °F
- Accuracy: ± 0.4 °F
- Automatic Power-Off: < 18 seconds
- Batteries: 2 x AAA
- Product Longevity: 3 years
- Product Weight: 3 ounces (without batteries)
- Product Size: L 5.43" x W 3.74" x H 1.47"

Manufacturer: MedSource Labs Vendor(s): MedSource Labs

Availibility: NA, SA, EU, APAC

https://www.medsourcelabs.com/product/non-contact-infrared-thermometer-ir-300/

Protekt® Pro-Temp Infrared Non-Contact Thermometer

The FDA approved Protekt® Pro-Temp Non-Contact Infrared Thermometer has been developed using the latest infrared technology, allowing the temporal artery (TA) temperature to be taken without touching the patient, at a distance of 2 inches away from the forehead. Precise, instantaneous, and without the need of any physical contact, the Pro-Temp is the most suitable thermometer for no risk temperature measurement. Simply point the thermometer at the patient's forehead, click "Scan" and their temperature will be instantly displayed. Recommended by the CDC for identifying Covid-19 symptoms!

 \cdot Designed to take the body temperature of a person without the interference from the heat of the surrounding environment.

- \cdot Never wake the patient to take their temperature.
- · Audio alarm when the temperature is too high. [≤100.4°F (38°C)]
- Memory for 32 previous measurements.
- Back-lit LCD screen.
- Body-mode temperature range: 89.6°F~109.2°F (32°C~42.9°C)
- Measuring distance: 1.2in~2in (3cm~5cm)
- Accuracy: ±0.6°F (0.3°C)
- · Dimensions: Individual unit 8"x5"x3"/Weight: 0.39 lbs
- · Fast and accurate, 1 second response time.
- FDA & CE approved.
- Warranty: 6 Month limited.

Vendor(s): Proactive Medical Products

Availibility: NA

https://proactivemedical.com/products/diagnostics/infrared-thermometers/protekt-pro-temp-infrared-thermometer-non-contact/



Unit Cost: \$120.00



Unit Cost: \$59.00



2.1.02 Temperature Screening Handheld Thermometer

ThermoCheck Touchless Thermometers

Get an accurate body temperature reading without making physical contact. Our infrared thermometer is suitable for diagnosing fever or illness, checking the temperature of objects such as baby formula, and even reading air temperature.

Manufacturer: Boston Globe Universal Boston Globe Universal Vendor(s):

Availibility: NA



https://youmeasurewellness.com/?__ef_tid=f3fe1a2f0f024afda97c4e96c2d8508e&oid=4&affid=1

Zortemp 1000 – Body Temperature Infrared Scanner

Zortemp 1000 body temperature scanner will quickly detect body temperature and determine if someone has a fever..

- · Scans and outputs readings in 1 second
- · Reads forehead or hold up your wrist for children
- · Accuracy up to 0.5 Fahrenheit
- · Automatic hand sanitizer dispenser
- ·12 month warranty
- · USA Warehouse or Worldwide Shipping

Manufacturer: Zorpro Vendor(s): Zorpro NA

Availibility:



Zortemp 1000 Temperature Scanner

Unit Cost: \$3,476.00

https://zorpro.com/product/zortemp-1000-body-temperature-infrared-scanner/



2.1 Patron & Employee Screening Devices

2.1.03 Temperature Screening Thermal Imaging I Camera Systems

This equipment category includes thermal imaging tools to use as part of a pre-screening strategy to detect those with elevated temperatures within a large group of people entering a venue.

Athena's Elevated Body Temperature Detection System

Athena's Elevated Body Temperature Detection System to help detect Fevers provides fast, accurate mass screening for elevated temperatures. The system is non-invasive, non-contact, and fast. The system identifies the face of the subject, ignores hot spots like hot lights above and other hot objects on the person like a cell phone or hot coffee. The person looks at the camera, and the system finds the hottest point on the face near the eyes, called the inner canthus. Near the eyes is the area that most closely correlates with basal body temperature, so the subject needs to remove glasses and look at the camera. Athena is best utilized as the first of a two checkpoint system, where an elevated temperature that could be a fever is then confirmed by a second medical thermometer.



Unit Cost: \$10,000.00

Manufacturer:	Athena
Vendor(s):	Athena
Availibility:	NA

https://athena-security.com/coronavirus-detection

CI P and S Series IR Camera | FDA Medical Grade IR-Pad 640 | All-in-One Tablet System

This ultra rugged tablet system uses our custom ICI P Series IR Camera, the medical version of our IR-Pad 640, to capture all of your thermal images and store them on a 2 GB Hard Drive. This FDA 510(k) Clearance device can detect elevated skin temperatures brought on by various external causes, such as the Coronavirus, with pinpoint accuracy.

• Perfect for adjunct use in hospitals, sub-acute health settings, public areas (i.e. airports), and more.

 \cdot It is a winning combination for capturing images in 640 x 512 pixel resolution quality.

• The unbeatable design is capable of meeting any medical

thermography needs you may encounter in the field of health services. • Includes our IR Flash Pro | Skin Temperature Monitor (STM) Software.

Manufacturer:	Infrared Thermometers Inc. (ICI)
Vendor(s):	Infrared Thermometers Inc. (ICI)

Availibility: NA

https://infraredcameras.com/thermal-infrared-products/ici-p-series-ir-camera-320/



Unit Cost: \$14,000.00



2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Concept Pro Body Temperature Detection System

The Concept Pro Body Temperature Detection System can accurately detect facial temperatures of up to 40 people at once with an accuracy of $\pm 0.3^{\circ}$ C, this is ideal for monitoring body temperatures at entrances to events, transport hubs and buildings. This system comprises of the camera, an NVR, a temperature calibrating device as well as all the necessary brackets for installation.

Using advanced facial recognition, the system uses the face temperature for a more accurate measurement. This also stops any false readings, such as a person carrying a hot drink. With astonishingly fast response time and being able to measure up to 40 people at once, the system will reduce the need for single file detection, aiding in the speed of people passing through the detection area.

Manufacturer: Videocon Vendor(s): Videocon, Premier Protective Service Availibility: NA

https://www.videcon.co.uk/news/body-temperature-detection

Elevated Temperature Detection Screening Module

ThermoHuman has developed a new solution for institutions that are looking for mitigating potential risks within their facilities from new virus outbreaks or critical situations like a pandemic Elevated body temperature detection mitigate infection spread. Mercer J, Ring EFJ. (2009) Thermology International. Temperature measurements had sensitivity (90.0%) and specificity (80%) for mass fever detection.

Manufacturer: ThermoHuman Vendor(s): ThermoHuman

Availibility: NA

https://www.thermohuman.com/screening/





BODY TEMPERATURE DETECTION SYSTEM



2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Flir Thermal Imaging Cameras

Many organizations are at risk of continued interruption to operations due to coronarvirus and possible future pandemics. Thermal Imaging solutions from FLIR can help screen frontline employees for elevated body/skin temperature – a possible sign of fighting infection – before they enter crowded workspaces. Organizations that deploy these screening systems can help provide a more safe and secure workplace for a productive workforce.

If you have an Exx-Series, T-Series, or A320 Tempscreen camera, you have the added advantage of FLIR Screen-EST™ Mode, a built-in screening mode for elevated skin temperatures. This mode is activated from the menu system and runs live on the camera monitor (Exx- or T-Series) or on a computer (A320 Tempscreen).

In screening mode, you can sample skin temperature data from people at the testing location to set a Sampled Average Temperature. Each person is then screened individually and their measured temperature is compared against the average. This helps ensure the measurements account for environmental factors such as air conditioning, outdoor temperatures, and time of day.

Manufacturer: Flir Vendor(s): Flir Availibility: NA

Availibility. NA

https://www.flir.com/instruments/public-safety/environmental-health-and-safety/

Hikvision Thermographic Cameras

Hikvision released its Highly Accurate Thermographic (HAT) Cameras for elevated skin-surface temperature detection and more. The thermographic line is available in various housing models including bispectrum turrets, bi-spectrum bullets, and handheld models. Our new online comparison chart helps you evaluate and select the best combination of HAT solutions, software, and accessories to support your application needs.

Manufacturer: Hikvision Vendor(s): Easy Badges , Nor-com

Availibility: NA

https://us.hikvision.com/en



Unit Cost: \$10,000.00





2.1.03 Temperature Screening Thermal Imaging I Camera Systems

ICI FM 384 P Series IR Camera | Skin Temperature Screening Infrared Camera System

The ICI FM 384 P Series IR Camera system is a lightweight, compact solution for long-term skin temperature data collection. Radiometric information is streamed directly to any desktop, laptop, tablet, or embedded system. The FM 384 rapidly provides accurate temperature measurements within ± 0.2 °C. Features dual-sensors paired with a visible CMOS camera. Gives you audio and visual alert feedback when high temperatures are detected. The system is CE and ISO9001 compliant.

Manufacturer:	Infrared Thermometers Inc. (ICI)
Vendor(s):	Infrared Thermometers Inc. (ICI)

Availibility: NA

https://infraredcameras.com/thermal-infrared-products/fm-384-p-series-ir-camera/

ICI FM 640 P Series IR Camera | Skin Temperature Screening Infrared Camera System

The ICI FM 640 P Series IR Camera is an infrared skin temperature screening system with the ability to report the total number of persons scanned as well as alarm events. With a 640 x 512 pixel resolution, the FM 640 P features high accuracy and an AI algorithm to measure across large areas. This makes the the system perfect for non-contact temperature measurement and radiometric imaging in public areas. Elevated skin temperatures trigger an alarm sound and image capture features for ease of use. Meets ISO/TR 13154 standards.

Manufacturer: Infrared Thermometers Inc. (ICI) Vendor(s): Infrared Thermometers Inc. (ICI)

Availibility: NA

https://infraredcameras.com/thermal-infrared-products/fm-640-p-series-ir-camera/

ICI FMX 400 P Series IR Camera | Medical Grade | Elevated **Skin Temperature Detector**

The FMX 400 P Series IR Camera is a 50/60 Hz imager with unmatched sensitivity and accuracy. It is a 384 x 288 radiometric imager that provides real-time thermal imaging. Radiometric data can be streamed directly to any desktop, laptop, or embedded system. It is designed to be used adjunctively with other diagnostic tools. The FMX 400 has IP54, IP65, NEMA 9 Class 1 Div.1, Class 1 Div.2 environmental protections. Explosion proof housing is optional. Includes IR Flash Pro | Skin

Temperature Monitor (STM) Software for analysis and report building.

Manufacturer:	Infrared	Thermometers	Inc. (ICI)
Vendor(s):	Infrared	Thermometers	Inc. (ICI)

Availibility: NA

Q

Unit Cost: \$13,500.00

https://infraredcameras.com/thermal-infrared-products/fmx-400-p-series-ir-camera-medical/

this document without express written permission from ASM Global Parent, Inc. is strictly prohibited by law. This document and all other elements of





Unit Cost: \$21,500.00



2.1.03 Temperature Screening Thermal Imaging I Camera Systems

ICI P and S Series IR Camera | FDA Medical Grade IR-Pad 320 | All-in-One Tablet System

This ultra rugged tablet system uses our ICI 320 P-Series IR Camera, our medical version of our IR-Pad 320 P-Series, to capture all of your thermal images. This FDA 510(k) Clearance device can detect elevated skin temperatures brought on by various external causes, such as the Coronavirus, with pinpoint accuracy.

Perfect for adjunct use in hospitals, sub-acute health settings, public areas (i.e. airports), and more. The ICI P Series IR Camera is perfect for capturing 320 x 240 images. The design is unbeatable and is virtually applicable to any situation that a thermographer can think of for critical business use. Includes our IR Flash Pro | Skin Temperature Monitor (STM) Software.

Manufacturer:	Infrared Thermometers Inc. (ICI)
Vendor(s):	Infrared Thermometers Inc. (ICI)

Availibility: NA

https://infraredcameras.com/thermal-infrared-products/ici-p-series-ir-camera-320/

IRIS-Q Thermal Imaging Fever Detection System

Next-generation Thermal Scanning Technology to help put your staff and customers at ease. The Iris-Q Thermal Imaging Camera connects to a computer that can be placed up to 25 feet away from the camera as it screens over 100 people per minute.

IRIS Q's high-accuracy camera measures skin surface temperature as individuals walk through your entrance. Its wide-angle lens works continually, in real time, as people pass by. Temperatures above your predetermined threshold are immediately detected.

The system automatically saves the image of the individual with the high temperature and displays an alert on the laptop (as well as an optional sound alert). This enables you to quickly detect people who are running a fever, even if they are not aware of it.

This non-invasive, non-contact method of screening large groups of people makes it easy to detect those with an elevated temperature, with minimal disruption. In situations where social distancing is not possible, this device helps to protect your staff and the people they interface with.

Manufacturer: Iris Thermal Scanner Vendor(s): Iris Thermal Scanner

Availibility: NA

https://iristhermalscanner.com





Unit Cost: \$17,400.00



2.1.03 Temperature Screening Thermal Imaging I Camera Systems

IS3 Temperature Monitoring and Detection System

Surface Temperature Monitoring for First Level Screening with Thermal Technology. Our system is self contained, mobile, easy to set up and operate. Accurate temp levels can be achieved from (I ft to 25ft) in most cases, allowing for a non-intrusive means to monitor and be instantly notified of any temp detections. Built for Schools, Airports, Casino, Manufacturing, or any facility looking to discourage and mitigate exposure while creating peace of mind and safety for others.

Live monitoring on a PC monitor with automatic alarm reporting and alert from a distance, defined by temperature limits or temperature ranges with accuracy levels within 0.5 degree. It is recommended that the system is used in a temperature-controlled environment when utilized for human temperature monitoring. Accuracy and performance are at it best when used in a room at temperatures between 68-75 deg F

Manufacturer: IS3 Tech Services Vendor(s): IS3 Tech Services Availibility: NA

https://is3tech.com

Linespex Temperature Camera

The Linespex Smart Temperature Detection Camera combines 2 of the best real-time imaging technologies to provide you with accurate thermal readings while still providing a crystal clear view in High Definition. Configure 2 different regions of interest to maximize your detection and scanning speed. Benefiting from both technologies, you have clear color images in low light conditions giving you the benefit of only needing 1 single camera per area for monitoring and detection.

· All-in-one (Temperature detection sensor + real-time image sensor)

· Easy and simple temperature detection solution with one camera

 \cdot Display body temperature and send alarm notifications for high temperature detection

 \cdot Max 2x ROI (Region of Interest) areas settings for temperature detection

 \cdot Highly sensitive SONY STARVIS CMOS sensor for crystal clear imaging in low light conditions

• Maximized thermal transmittance and sensor sensitivity by combining special glass with the thermal sensor.

• Push notifications & alarms to the DVR/NVR and PC.

Manufacturer: Linespex Vendor(s): Linespex

Availibility: NA

https://linespex.com/products/thermalcamera/





2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Med-Hot Max Thermography

Med-Hot, is a Systems Integrator since 2010 and FLIR's Medical Partner with FDA approval of the FLIR A Series cameras and Med-Hot TotalVision Medical Software. This means that Med-Hot has a distinct advantage in the Elevated Body Temperature and Medical Thermography markets with the combination of FLIR technology and second tier service support and Med-Hot medical specific software and accessories to offer a ready-to-implement solution. We also consider ourselves as partners with our customers for seamless integration. In the case of our Medical application customers we add the additional support of clinical advice and training.

Established in 1978, FLIR Systems, Inc. has pioneered the development of high-performance, low-cost infrared (thermal) imaging systems. FLIR designs, develops, manufactures, markets, and distributes technologies that enhance perception and awareness. Currently, FLIR operates in many locations around the globe and employs a total of over 3,000 dedicated employees.

Manufacturer: Med-Hot Vendor(s): Med-Hot

Availibility: NA

https://med-hot.com/infrared-cameras/

Optical Phusion Infrared Fever Screening

Protect Your Employees and Customers with a Contact-Free Fever Screening Solution. This smart, efficient fever screening solution from Optical Phusion, Inc. utilizes infrared temperature-sensing cameras to measure skin temperature for mass screening of high traffic areas like entrances, checkpoints and hallways. It discreetly alerts you when high temperatures are detected

The system is easy to install and deploy, quickly scans and measures accurate body temperature and then displays data on screen in real time. There is no need for those monitoring the system to come in close contact with anyone in order to screen them.

Scanning individuals with a more traditional thermometer is timeconsuming and labor intensive, risks cross-contamination and can result in wait times. This contactless system can be easily monitored by a single individual.

There's no need to stop employees on their way into work and screen them in front of coworkers. When a high temperature is detected, an alert is sent, allowing you to privately approach for additional checks and further actions.

Manufacturer: Optical Phusion Inc. Vendor(s): Optical Phusion Inc.

Availibility: NA

https://www.opticalphusion.com/infrared-fever-screening







2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Rapid Temperature Detection UNit

The Unified Command System includes a dual sensor thermal camera, blackbody cali-bration device, DVR, 32-Inch TV, and six foot truss mounting system hardware. Our professional technicians will come to your location to setup and calibrate the unit. This unit is fully selfcontained or can be integrated into major VMS systems such as Milestone and Genetec.

The Unified Command device is designed as a single, one-piece unit, that allows for flexible deployment within high volume areas such as entry tents and hallways with minimal obstruction. The use of a Blackbody device in the system creates a +/- .5 F degree accuracy while enabling automatic calibration after initial setup. This camera processes instant face detection which results in rapid measurement of skin temperature.

Manufacturer: Unified Command Vendor(s): Unified Command

Availibility: NA

https://www.unifiedcommand.com

Remark AI Smart Thermal Kit TK-I Fever Detection

Remark's proprietary Thermal Imaging is used to scan high traffic areas for elevated temperatures and identify and track the subjects. Any individual showing an abnormal temperature will be detected and can be automatically identified, tracked, and an alert will be sent to the system user for further inspection. 120 people can be detected per minute

All of our product's are customizable and can operate as a standalone or integrated centralized control system, specific to the needs of the user.

Real-time video and audible alerts from each installed system can be sent to the central system or monitored live. The system can be mounted on walls, tripods, or ceilings to scan wider area.

Manufacturer: Remark Al Vendor(s): Remark Al

Availibility: NA

https://www.remarkthermal.com/products







2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Seek Scan

Seek Scan is specifically designed and calibrated to deliver accurate skin temperature measurements while enabling social distancing protocols. In seconds, the system automatically detects a face, identifies the most reliable facial features for measurement, and displays an estimated body temperature. A visual and audible alert is provided if someone is warmer than the customizable alarm temperature.

Unlike typical industrial thermal cameras, Seek Scan was developed for precise temperature measurement and maximizes accuracy by referencing a fixed heat source with a known temperature value. Seek's patent-pending heat source allows Seek Scan to achieve much higher accuracy than a standard thermal imaging camera designed for industrial use. Any system that does not have a reference heat source does not follow new FDA guidelines published April, 2020, despite manufacturer claims. Further, these guidelines require the system to measure only one subject's temperature at a time. Many systems on the market today measure multiple people in a scene.

Manufacturer: Seek Thermal Vendor(s): Seek Thermal

Availibility: NA

https://www.thermal.com/seekscan.html





2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Thermal Cameras (fixed)

The Dahua Thermal Temperature Monitoring Solution offers the latest hybrid thermal network camera that combines a Vanadium Oxide (VOx) sensor with a 2 MP visible-light sensor. The solution also provides a blackbody calibration device that maintains a customizable constant temperature as a reference point for the thermal camera. The thermal camera coupled with the blackbody calibration device and a featurerich 4 TB Network Video Recorder delivers a contactless solution for continuous and non-invasive comparison of human skin temperature compared to the blackbody device. Thermal Temperature Monitoring technology enables quick detection of elevated skin temperatures compared to the customizable blackbody calibration device. Thermal imaging equipment can easily be installed and implemented to detect elevated skin temperature in environments such as airports, hospitals, clinics, office buildings, cruise ships, and any large public gathering location.

The Dahua Thermal Temperature Monitoring Solution is not FDAcleared or approved. The Solution should not be solely or primarily used to diagnose or exclude a diagnosis of COVID-19 or any other disease. Elevated body temperature should be confirmed with secondary evaluation methods (e.g., an NCIT or clinical grade contact thermometer). Users, through their experience with the Solution in the particular environment of use, should determine the significance of any fever or elevated temperature based on the skin telethermographic temperature measurement. Visible thermal patterns are only intended for locating the points from which to extract the thermal measurement.

- Manufacturer: Dahua Technology
- Vendor(s): Strategic Alliance Partners, Innovative Group
- Availibility: NA

https://us.dahuasecurity.com/product/thermal-temperature-monitoring-solution/





2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Thermoscreen

Optotherm's patent-pending technology provides the most accurate method of mass screening for elevated facial skin temperatures that may indicate a fever. Because it is both fast and noninvasive, Thermoscreen is the best way to safeguard areas with high pedestrian flow

Thermoscreen was originally developed in response to the need to screen large numbers of individuals for potential fever during the SARS outbreak in 2003. Thermoscreen scans subjects without contact from a distance, providing a discreet and safe method of detecting potentially feverish individuals. Over 1,000 individuals can be screened per hour so as not to restrict pedestrian flow. Thermoscreen is sold as a complete, fully tested system including a computer with preinstalled hardware and software.

This product is currently for export only. Optotherm is currently undergoing the US FDA Premarket Notification (510k) submission process for medical devices. As soon as Thermoscreen has been cleared, this product will be available for purchase in the US.

Manufacturer: Optotherm Vendor(s): Optotherm Availibility: EU, APAC, SA

http://www.optotherm.com/ts-intro.htm





2.1.03 Temperature Screening Thermal Imaging I Camera Systems

Viper Imaging - EBT Detection Systems

Our Automated Thermal Imaging Systems are an easy-to-use solution for monitoring temperatures. The person to be screened steps into an area where the fixed imager is constantly focused, making sure their face fills a majority of the predetermined screen area. This system constantly updates and alerts to any temperatures over a preset threshold.

Viper EBT Max: features a FLIR A35 imager mounted on a structural kiosk with PC/Monitor, I/O module, reference emitter, and ViperVision Max software. The software allows you to configure the system to maximize the image, provide on-screen instruction and automated alarming (email, on-screen, and audible).

Viper EBT Max +: features a FLIR A65 imager mounted on a structural kiosk with PC/Monitor, I/O module, reference emitter, and ViperVision Max software. The software allows you to configure the system to maximize the image, provide on-screen instruction and automated alarming (email, on-screen, and audible).

Viper EBT Ultra: features a FLIR A400 imager mounted on a structural kiosk with PC/Monitor, I/O module, reference emitter, and ViperVision Max software. The software allows you to configure the system to maximize the image, provide on-screen instruction and automated alarming (email, on-screen, and audible).

Viper EBT Ultra +: features a FLIR A700 imager mounted on a structural kiosk with PC/Monitor, I/O module, reference emitter, and ViperVision Max software. The software allows you to configure the system to maximize the image, provide on-screen instruction and automated alarming (email, on-screen, and audible).

Manufacturer: Viper Imaging Vendor(s): Viper Imaging

Availibility: NA

https://www.viperimaging.com/elevated-body-temperature-detection

Wireless Guardian Passive Smart Temp Verification System

Detect the temperature of patrons and personnel without exposing healthy staff and guests. Wireless Guardian automatically detects temperatures above 100.4 F/38 C with FLIR infrared cameras and AI systems.

By locating people with symptoms of COVID-19 before they enter the facility, everyone stays safe and healthy — 100% passive and in real-time!

· Checks and records the temperature data of groups and individuals.

• Modular system perfect for events, transportation systems (buses, trains, etc.), schools, municipal buildings, and more.

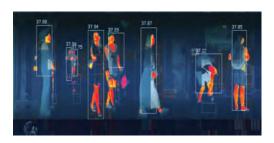
• Affirm that no one with a fever has been inside your facility to assist in Contact Tracing & Liability Mitigation.

• The ONLY system on the market capable of processing up to 45 people per second.

• 99% accurate even

Manufacturer: The Wireless Guardian Availibility: NA

https://www.thewirelessguardian.com/-temperature-verification-system







2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Alibi

Powerful thermal wrist detection for fast, reliable and accurate temperature detection in high-traffic, commercial spaces

- Rapid 0.2s face recognition speed
- \cdot 4 GB storage capacity
- •.39-1.18" measurement distance
- ·7-inch touch screen with 600 x 1024 resolution
- \cdot 2-MP, 1080P low illumination wide-angle dual-lens camera for capturing high-quality images
- · Two-way audio with indoor monitor

• Advanced smart technology including high temperature measurement and face recognition, and with anti-spoofing detection effective against photo and video fraud

 \cdot Lighting versatility for low-light indoor use - supports face metering and human metering for fast adaptation to ambient light

• High picture capacity – can store up to 10,000 facial images

Manufacturer: Alibi Vendor(s): ACI Com

Availibility: NA

https://www.alibisecurity.com/thermal-temperature-detection-thrm-213

Clear Scan Series G-7000

With our high speed thermal imaging system, Clear Scan gives you peace of mind that alerts higher than normal temperatures in realtime, keeping everyone safe from preventing the spread of infectious diseases, such as COVID-19 with precise accuracy.

Clear Scan is a German engineered zero contact technological device designed to detect temperature irregularities by scanning faces in realtime. The dynamic bio-metric face recognition technology verifies individual faces with 99.8% accuracy within 7 seconds up to 3 feet away with or without a mask on.

Clear Scan recognizes when you are not wearing a mask. Current CDC, federal, and state guidelines require you to do so. Therefore we have incorporated into our software a detection mechanism that denies entry to those detected without one.

Manufacturer: ClearScan Vendor(s): ClearScan

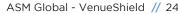
Availibility: NA

https://www.clearscan.info





Unit Cost: \$3,200.00





2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Elo Access Control Kiosk

Simplify access control and visitor management with an Elo access control kiosk. Visitors can easily identify themselves, have a photo taken, print a temporary badge and even complete a health screening questionnaire and temperature check. Technologies like facial recognition and thermal sensing as part of the self-service platform are helping enterprises to quickly identify and deny access to infectious individuals. Automate these key processes with a cost-effective, modern and easy to clean self-service platform by Elo and free up your lobby staff to focus on service.

Manufacturer: Elo Touch Solutions, Inc. Vendor(s): Elo Touch Solutions, Inc.

Availibility: NA



https://www.elotouch.com/access-control?utm_source=Homepage&utm_medium=Left%20lower%20bucket&utm_campaign=Onsite%20Link

SV1080-W

Goodview Temperature Scanner Kiosk with Facial Recognition

The Dynamic Detection Display TM line utilizes advanced thermal detection technology to quickly scan internal body temperatures. Combined with intuitive EZ-Pass software, Dynamic Detection Displays can quickly identify potential safety threats and help mitigate large-scale exposure. Features include:

- ≤ 0.5°C Accuracy
- Non-Touch Scanning
- · Network Capabilities
- · 3rd Party Integration Options
- · Toggle Capability for Facial Recognition Features
- · Option Card Reader Features
- · Wall, Table, & Podium Mounting Options
- Vendor(s): RedTech7
- Availibility: NA

https://www.redtech7.com/

JANUS

As the US starts to re-open, COVID-19 is still top-of-mind for all industries including hospitality, education, retail, healthcare, and transportation. With data privacy as a priority, these industries are seeking to adapt and implement stricter, contactless, social distancing, and wellness check measures before they can re-open.

Janus was developed to help enterprises comply with new strict wellness checks and social distancing expectations. It is a turn-key market-ready solution to help get you back to business.

Manufacturer: Truyo Vendor(s): Truyo

Availibility: NA



SV1080-T

SV1080-F

https://truyo.com/janus/



2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Personnel Management Kiosk

Meridian's Personnel Management Solution features check-in and temperature verification capabilities. The solution can also be programmed for facial identification, with users easily added in a few short clicks. Designed to help protect the health and safety of both employees and guests by preventing anyone with a temperature from entering a facility, alarms can be added to sound when those above the temperature threshold and those without access attempt to enter.

Manufacturer: Meridian Vendor(s): Meridian

Availibility: NA



Unit Cost: \$3,150.00

https://www.meridiankiosks.com/solutions/personnel-management-solution/

Protect98 INFO-FR8-TMP

Whether you are interested in the health and safety of your customers, your employees, your students or your family, the Protect98 can help you monitor the temperature of incoming individuals or groups fast, efficiently and with no contact necessary. Paired with an existing access control or automatic entry solution, you can rest assured that your visitors and your staff are safe and assured of their fellow occupants.

- Measure body temperature for individual or group and give clear audible and visual indication of pass/fail.
- · IP65 Rating dust tight/water resistant.
- Auxiliary relay selectable N.O. or N.C.
- Weigand 26/34 bit In/Out connection.
- · Facial Recognition (30,000 individual database)

Manufacturer: Nosolar Vendor(s): Nosolar Availibility: NA

https://noslarti.com/covid-19-products/





2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Remark AI Smart Thermal Pad TK-I Fever Detection

Our smart thermal pad scans for elevated temperatures, along with providing touchless employee check-in. Additional functionality's include contactless entry to doors and gates, along with PPE enforcement.

Manufacturer: Remark AI Vendor(s): Remark AI

Availibility: NA



https://www.remarkthermal.com/products

Rich Tech Temperature Scan

The Automated AI Temperature Screening System (AATSS) is your business's fastest and least intrusive way to protect your customers and employees.

- Temperature Detection < 3 seconds
- Measurement Accuracy ± 0.5 °F
- · Show employees and customers you care about their health & safety

Manufacturer:	
Vendor(s):	RichTech
Availibility:	NA



Unit Cost: \$2,999.00

https://www.richtech-ai.com/



2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Safe Space Scan 3S-07T

Time to order your Safe Space Scanner to verify that people entering your environment do not have a fever. By using our non-contact automatic body temperature detection technology, your patrons will feel secure. A must have for reopening your business and maintaining a safe and healthy environment.

Designed to test for elevated temperature

- Stand alone unit no attendee necessary
- Adheres to social distancing policy
- \cdot Non-contact, Non-invasive screening
- \cdot Easy to use and highly effective
- \cdot FCC certified
- · <1 second evaluation time</p>
- · Clear pass/fail visual and audio alerts
- · Easy set up ready to go in minutes
- Temperature accuracy ± 0.3 (F)
- · Not wearing mask alert if needed

Manufacturer:	Safe Space Scan
Vendor(s):	Safe Space Scan, CRI

Availibility: NA

https://safespacescan.com

Temperature Screening Kiosk

Save time and money by eliminating labor-intensive manual screening processes. Our kiosk is preconfigured to be plug and play. No tools or internet connections are required to start using the hands-free temperature screening features right out of the box. Our kiosk also includes more advanced features such as facial recognition, email notifications, reports, and remote monitoring if your organization enables those capabilities. Free lifetime phone and email support is included with all of our kiosks. Quantity discounts are available.

Manufacturer: Easy Badges Vendor(s): Easy Badges

Availibility: NA

https://easybadges.com/product/temperature-sensing-kiosk-by-easy-badges/?



Unit Cost: \$1,495.00



Unit Cost: \$2,995.00



2.1.03 Temperature Screening Thermal Imaging I Flat Panel

Turing's Non-Contact Body Temperature Scanner

Reduce the risk of employees and customers being exposed to COVID -19

- Non-Contact Scanning
- \cdot 0.5°F Accuracy for use in the fight against COVID-19
- \cdot 0.1 of a second scans keeps lines from forming
- \cdot Suitable for adjunct use in public areas
- \cdot Specifications, Data Sheet and FAQs, Learn More
- \cdot New: Data Access Management Platform Alert, Reporting, Learn More

 \cdot In Stock: Configured to order and ship from San Mateo, CA

Manufacturer: Turing Video Vendor(s): Livingston Group Availibility: NA

https://www.turingvideo.com





2.1.03 Temperature Screening Thermal Imaging I Walkthrough

Symptom Sense walk through Body Scanners

SymptomSense™ performs a full body scan looking for key vitals: Body Temperature, Heart Rate, Oxygen Level, Respiration Rate, and Blood Pressure (Coming Soon)

SymptomSense[™] is the industry leader with superior pinpoint metal detection technology. All terrain environment design. Ideal for corporate, schools, healthcare, special events, among others to use. Chemical detection (opioid and gun powder) coming soon With a throughput of 5 seconds, you are getting fast, easy, and versatile screening.



Vendor(s): Soter Technologies

Availibility: NA

Unit Cost: \$35,000.00

https://www.symptomsense.com



<u>TOC</u>

2.1 Patron & Employee Screening Devices

2.1.04 Testing Devices & Services

This equipment category includes devices and services related to testing individuals for the presence of COVID-19.

Note: While a venue won't necessarily be in a position to perform COVID testing, some venues may need to engage service providers who are able to conduct such testing for stakeholders associated with the building.

Accentor 2 Testing

Accentor2, along with LabCorp, are proud of the work that we and our industry partners are doing to quickly mobilize the United States to get back on its feet by bringing access to nationwide testing for COVID-19. Additional information is available for the Accentor2 protocol and testing for large groups such as fans in stadiums, universities and workplace environments.

Accentor2 has successfully found a way for fans to enjoy themselves once again even during a pandemic. Through our partnership with LabCorp along with our Fan/COVID-19 App, we are helping fans enjoy games inside stadiums once again. All individuals will have a negative result who are inside the stadiums through our protocol. This is the best and most reliable way for ticket sales to continue and stadiums around the world to keep their seats filled.

Manufacturer: Accentor2 Availibility: EU, APAC

https://accentor2.com/index.html

AOKpass

ICC AOKpass is a digital COVID-19 Compliance Status pass on your mobile phone (or can be a printed QR code for those without phones) that is built on a user controlled, privacy preserving, blockchain enabled mutual verification system ensuring patient protection and GDPR compliance.

Manufacturer: AOKpass.com Vendor(s): AOKpass.com

Availibility: EU, APAC

https://www.aokpass.com/





2.1.04 Testing Devices & Services

COVID-19 and IgG antibody testing

At ParaDocs, we are uniquely prepared to lend our medical support to local, national, or global incidents. Our staff is trained to work in extremely busy and demanding environments while managing multiple patients. They are experienced in the specific challenges that present themselves when establishing medical operations in remote or non-traditional locations. Our mission has always been to provide medical support to large-scale events, and we have now transitioned that focus to one of the largest events our planet has ever faced. We stand ready to bring our sizable staff and renowned professionalism to assist our clients in reopening and meeting new safety requirements due to COVID-19.

Manufacturer: ParaDocs Vendor(s): ParaDocs

Availibility: NA

https://WWW.PARADOCSWORLDWIDE.COM

Quickpacll Covid-19 Testing Kit

New Rapid Test That Provides Accurate COVID-19 Infection Diagnosis in 15 Minutes. It is widely accepted that IgM provides the first line of defense during viral infections, followed by the generation of adaptive, high affinity IgG responses for long term immunity and immunological memory. Testing of COVID-19 IgM and IgG antibodies is an effective method for the rapid diagnosis of COVID-19 infection. Detection of COVID-19 IgM antibodies to indicate a recent exposure to COVID-19, whereas detection of COVID-19 IgG antibodies indicates a later stage of infection. Thus, this combined antibody test could also provide information on the stage of infection.

Manufacturer: Syntron Bioresearch, Inc Vendor(s): Mega Business Services

Availibility: NA

https://www.syntron.net/quikpac-ii-coronavirus-covid-19/







<u>TOC</u>

2.1 Patron & Employee Screening Devices

2.1.05 People Tracking & Tracing

This equipment category includes tools for use in tracking and tracing COVID-19 cases.

Note: Venues should follow governmental guidelines for COVID-19-related tracking and tracing.

Brief Cam People Tracking, Contract Tracing

The BriefCam® complete Video Content Analytics platform drives exponential value from surveillance system investments by making video searchable, actionable and quantifiable. The unique fusion of VIDEO SYNOPSIS® and Deep Learning solutions enable rapid video review and search, face recognition, real-time alerting and quantitative video insights.

Manufacturer: Brief Cam Vendor(s): Brief Cam Availibility: NA



https://www.briefcam.com/who-we-serve/stadiums-events/

Live Reach Media Safe Occupancy Technology

A platform to help venues understand space usage and communicate with their customers at scale. Measure occupancy, entrances, exits historically and in real-time. Alert staff when occupancy reaches maximum capacity via text or email. Communicate with customers outside and inside the store via digital signage. Access control to maintain legal compliance and social distancing.

Manufacturer:	Live Reach Media
Vendor(s):	Live Reach Media

Availibility: NA

Construction of the second sec

http://www.livereachmedia.com/safe-occupancy-technology



2.1.05 People Tracking & Tracing

LiveReach Media's Motion Analytics

Fueled by plug and play internet connected sensors, LiveReach Media's motion analytics platform equips SmartCities, SmartVenues, Retailers, and Advertisers with unprecedented insights.

Occupancy: Determine occupancy in real-time.

Path & Flow: Analyze customer journey from start to finish.

Heatmap: Visualize density across the entire space.

Capture Rate: Measure customer movement from one space to another.

Travel Time: Predict processing rate through queues and predict movement time from one space to another.

Device Manufacturer Reports: Estimate mobile market share through breakdowns of the most popular devices and operating systems.

Manufacturer: Live Reach Media Vendor(s): Live Reach Media

Availibility: NA

http://www.livereachmedia.com/

Salus

The Salus modular, mobile solution keeps people Safe from the COVID -19 virus in mass-people environments. Salus defines, harmonizes and manages new processes, and supporting technologies within the biosphere to ensure that only people that are COVID-19 negative, have COVID-19 antibodies or have received the COVID-19 vaccination are able to enter biospheres such as resorts, casinos, conferences and convention centers, stadiums, theme parks, airports, and cruises.

At the heart of the Salus solution is the Salus Mobile Customer, Employee and Tester app that stores and timestamps an on-the-spot Test results for COVID-19, enables you to Access a defined mass-people environment if you are COVID-19 free, Monitors peoples' temperature and other symptoms in the accessed biosphere, and uses Geo-Tracking to know if you have left the defined environment, and sends you to be Re-Tested between 45-48 hours of exiting the biosphere.

The Salus solution is agnostic to the type of COVID-19 testing kit, and supporting technologies such as the thermal cameras, digital thermometers, and entry/exit IoT sensors that plug-and-play with Salus through APIs. All you need is your smartphone, our Salus mobile application, and the implementation of the Salus framework of processes.

Manufacturer: OZ Digital Consulting Vendor(s): OZ Digital Consulting

Availibility: NA

https://followoz.com/solutions/salus/







2.1.05 People Tracking & Tracing

Wait Time

WaitTime, the industry leader in Crowd Intelligence, provides real-time data and historical analytics on crowd behavior. Our patented artificial intelligence gives operations personnel live information on crowd movement and density, while providing guests information they need to navigate.

Vendor(s):	Wait Time
v chía ch (5).	vvale mile

Availibility: NA



http://thewaittimes.com/



2.1.06 Crowd Protection Strategies

This equipment category includes general crowd protection equipment items.

ParaDocs EMS / Medical personnel / Industry Familiarity

At ParaDocs, we are uniquely prepared to lend our medical support to local, national, or global incidents. Our staff is trained to work in extremely busy and demanding environments while managing multiple patients. They are experienced in the specific challenges that present themselves when establishing medical operations in remote or non-traditional locations. Our mission has always been to provide medical support to large-scale events, and we have now transitioned that focus to one of the largest events our planet has ever faced. We stand ready to bring our sizable staff and renowned professionalism to assist our clients in reopening and meeting new safety requirements due to COVID-19.

Manufacturer: ParaDocs Vendor(s): ParaDocs Availibility: NA WORLD-CLASS EVENT MEDICAL SERVICES

https://www.paradocsworldwide.com

Turing's Nimbo Autonomous Patrol Robot

World's Most Affordable Indoor Patrolling Robot. Equipped with AI and environment sensors to keep your property, employees and customers safe.

- \cdot 24/7 autonomous patrol with auto charging
- · Anomalies detection via real-time video analytics
- \cdot Send alert to control center and record video evidences
- · Can be remotely controlled via mobile app
- · Automatically avoids obstacles on its path
- In Stock: Configured to order and ship from San Mateo, CA

Manufacturer: Turing Video Vendor(s): Livingston Group Availibility: NA

https://www.turingvideo.com/nimbo-autonomous-patrol-robot/



This document is protected by Copyright law and is the exclusive property of ASM Global Parent, Inc.. Reproduction or distribution of this or any part of this document without express written permission from ASM Global Parent, Inc. is strictly prohibited by law. This document and all other elements of the Venueshield program are the proprietary information of ASM Global Parent, Inc., and are being made available solely to employees and designees on a confidential basis and in accordance with the confidentiality provisions of the Business Conduct Policy.



<u>TOC</u>

<u>TOC</u>

2.1 Patron & Employee Screening Devices

2.1.07 Security & VM

This equipment category includes equipment to support the reduction of touchpoints in the searching and screening process.

Note: While venue security measures will continue in line with SEMP Best Practices, items in this category can be used to help reduce touchpoints.

Active Solutions

The heart of what we do is simple. We created Active Solutions to give our children and grandchildren peace of mind where they live, work, and learn. We have made New Orleans a safer city and can do the same for you.

Manufacturer: Active Solutions Vendor(s): Active Solutions Availibility: NA

https://www.activesolutions.co/

DetectWise

With parts of the world reopening, society must rapidly deploy solutions that reactivate businesses while protecting the health, safety, and security of the general public. As a leading global technology company, we are imagining an integrated, touchless suite of solutions called DetectWise[™] that will accelerate the transition to a new normal, including:

- Health Status Authentication Software
- Touchless Screening Kiosk
- Modular Lab
- · Screening and Decontamination Module

COVID-19 has expanded safety and security to include viral contagions. As states and businesses begin to reopen, the new challenge is the need for facility access points that allow rapid screening before entry. A "new normal" means preparing for a future that makes health screenings fast and easy. Solutions must be rapid, scalable, and touchless. Here's why:

- \cdot Rapid to facilitate high throughput at entry points
- \cdot Scalable features for affordability across a range of end users
- \cdot Touchless to minimize exposure of a virus to others

Manufacturer: Parsons Vendor(s): Parsons Availibility: NA

https://www.parsons.com/products/detectwise/





2.1.07 Security & VM

SV3 Vehicle & Vendor Management

A cloud-based platform for managing your third-party network of vendors and contractors, and permitting their vehicles, drivers and deliveries on-site quickly and securely. By enrolling vendors and scheduling deliveries, organizations can ensure they are letting the right people on-site, at the right time.

SV3 is the product of converging security and logistics – simultaneously protecting the loading dock while enhancing operational efficiency. Whether your facility has one service entrance or multiple buildings and bays, SV3 can help.

Manufacturer: Building Intelligence Availibility: NA



https://buildingintelligence.com/vehicle/

SV3 Visitor Management

SV3 Visitor is a scalable cloud-based system for managing the scheduling, authorization and access of all guests entering a building. Easily customizable workflows accommodate each location's specific needs while allowing flexibility across an enterprise. SV3 can satisfy all your visitor management requirements regardless of your organization's size or complexity. A touchless, zero contact visitor management system that reduces crowding and long lines in the lobby.

Pre-schedule visitors, sending all necessary forms they must fill prior to entry, straight to their handheld device. Upon arrival, a visitor can simply scan their invitation and walk into the building or floor with zero contact. Visitors who aren't prescheduled can send in a request for a visit via a link on the homepage to start the touchless process.

Manufacturer: Building Intelligence Vendor(s): Building Intelligence

Availibility: NA

https://buildingintelligence.com/visitor/





2.1.07 Security & VM | Walkthrough Metal Detectors

Ceia PMD2 Plus Elliptic

Superior Detection and Throughput

- Very High Discrimination of Non-Threat Items
- · 60 localization zones: ¬20vertical ¬3lateral
- · Aesthetic, Unobtrusive and Light Weight
- · Rapid Installation: no tools required for assembly
- Weather Resistant: IP65 protection
- \cdot Compliant with the strictest Security Standards for weapons detection

Manufacturer: Ceia USA Vendor(s): Ceia USA (MSA)

Availibility: NA, EU, APAC, SA

Marketplace MSA | VenueShield Trusted



https://www.ceia.net/security/product.aspx?a=PMD2%20Plus%20Elliptic



2.1.07 Security & VM | Walkthrough Metal Detectors

Evolve Express

In today's environment, security teams must screen for both weapons and potential health threats, maintain safe social distancing, and avoid physical contact. Traditional screening methods including invasive bag checks and pat downs create dangerous crowds and puts visitors and guards at risk. Imagine screening your visitors and employees for both weapons and elevated temperatures in a respectful, expedient, touchless manner...you now can with Evolv ExpressTM. Evolv Express Offers:

• Real-time Rapid Threat Screening: Express accommodates high-flow weapons and fever screening of up to 3,600 people per hour.

• Respectful, Hassle-Free Experience for Visitors: Since Express is smart enough to differentiate between weapons and everyday personal items, visitors no longer need to empty their pockets or bags.

• Touchless & Safe Experience for All: Without the need to divest of personal items, and far fewer nuisance alarms than metal detectors, fewer visitors require individual searches, facilitating a touchless and distance-maintained security approach.

• Easy Operation for Guards: Evolv provides guards with simple, targeted resolution protocols. Real-time image-aided alarms show guards exactly where the potential threat is on a person or in their bag.

• Flexible Deployment Options: Evolv Express comes with an integrated mobility kit, making it easy to set up and move and can be used both indoors and outdoors.

 Integration & Analytics: Evolv Express can be integrated into your broader security infrastructure. The system has cameras that can provide live video feeds into an operations center, and analytics are available to monitor the number of entrants and alarm rates across the network of systems throughout the day.

It's time to go touchless. Experience Evolv Express. Visit: www. evolvtechnology.com

Manufacturer: Evolve Tecnology Vendor(s): Evolve Tecnology

Availibility: NA

https://evolvtechnology.com/products/evolv-express/





2.1.07 Security & VM | Walkthrough Metal Detectors

Garrett Magnetometer

With more than four times the detection coils of competitive models, the PD 6500i[™] provides uniform detection and precise pinpointing. Independent zone indicator lights on both side panels identify not only height but also left, center and right locations for one or more objects passing through the archway.

Manufacturer: Garrett Metal Detectors Vendor(s): Garrett Metal Detectors (MSA)

Availibility: NA, APAC, EU, SA

Marketplace MSA | VenueShield Trusted



https://www.garrett.com/welcome

Proscreen 200

Easily utilized by non-security personnel, Proscreen 200's innovative ferromagnetic detection technology (FMDS) is the only solution that effectively detects cell phones, razor blades, lighters, needles, knives and other restricted items.

Unique in its use of ferromagnetic detection (FMDS) technology, Proscreen 200 detects dangerous items both small and large that other technologies cannot.

From objects that can be as small as a staple or needle, up to larger items such as knives and guns, no other detection system can match Proscreen 200.

Manufacturer: Metrasens Vendor(s): Metrasens

Availibility: NA

https://www.metrasens.com/proscreen-200/





<u>TOC</u>

2.2 Frictionless Transaction & Ticketing

2.2.01 Touchless Payment/POS Systems

This equipment category includes technology and equipment options for touchless payment systems; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: Touchless platforms will likely become more common as events, tenants, and leagues consider requiring touchless technology.

Fan Food

FanFood is the fastest and easiest way for venues and restaurants to offer contactless services. From cashless mobile ordering to non-contact pickup and delivery.

Increases staff productivity by decreasing environmental stress

• Orders are picked and packed ahead of time, eliminating customer wait times entirely

Payments are completed when orders are placed with the FanFood platform

• Provides an affordable solution as well as makes managing a concession stand easier

Manufacturer: FanFood Vendor(s): FanFood

Availibility: NA

https://www.fanfoodapp.com

Freedom Pay

FreedomPay is the complete, end-to-end commerce platform that helps our partners connect the world of commerce smartly, securely and seamlessly. We enable companies to understand, unlock and unleash the potential of in-store, online and mobile commerce for the purpose of business growth. A Touchless Commerce solution can solve for a checkout in multiple ways:

 \cdot Giving merchants the safest way possible for consumers to pay whether in a restaurant, drive-through, airport, convenience store, retail outlet or hotel.

 \cdot Contactless Payment Method: Contactless Card Tap, Apple Pay, Google Pay

 \cdot Integrated Digital Wallet: In-app payments for your consumer application

• eCommerce Offering: Online payments for your consumer website

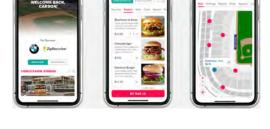
 \cdot Touchless Drive-Through: Fully-integrated, touchless drive-through support

 \cdot BYOD: Bring your own device for in-store payments without touching a payment terminal

Manufacturer: Freedom Pay Vendor(s): Freedom Pay

Availibility: NA

https://corporate.freedompay.com/







2.2 Frictionless Transaction & Ticketing

2.2.01 Touchless Payment/POS Systems

Seatz

sEATz's mobile platform puts the stadium at the fans' fingertips Select Your Event: Let us know your location and we'll show you all your gameday options.

Shop Food, Drinks & Merchandise: Browse all the venue has to offer from food and beverage items to jerseys and merchandise.

Choose Delivery or Pick Up: We will let you know when your order is on the way or ready for pick up in the sEATz Express Lane.

Our multi-platform solutions connect fans to stadiums better than anyone in the industry

- Mobile Order
- Express Pock UP
- Kiosks
- $\cdot \, {\sf Delivery}$
- Line Buster

· Control & Reporting

Manufacturer: Seatz Vendor(s): Seatz Availibility: NA

https://seatzapp.com/venues-concessionaires/

Tango Touchless transactions

Tango is the easiest way for your business to go contactless. Get up and running in a matter of minutes, not weeks. No new hardware, no complicated setup.

Businesses of every size - from local bars to national restaurant chains - are using Tango to sell smarter, cheaper and safer.

Tango offers a turn-key reservation and table management platform directly integrated with our contactless ordering and payment solutions.

Whether you're a bar looking to adapt to the new normal or a restaurant looking to optimize your dining room on the fly, Tango is here to help you do more with less.

Manufacturer: Tango Vendor(s): Tango Availibility: NA

https://www.paywithtango.com

THE COMPLETE TOOLKIT TO GET YOUR BUSINESS UP AND RUNNING POST-





Shop Food, Drinks & Merchandise



2.2 Frictionless Transaction & Ticketing

2.2.01 Touchless Payment/POS Systems

Tapin2 - Mobile Ordering & Payment

Empower customers to order from their mobile devices using an app or through a custom mobile ordering website. Offer in-seat delivery or express pickup of concessions and merchandise during events. Enable pre-ordering or ship-to-home functionality

- \cdot Customize menus and offerings based on customer location
- \cdot Enhance the customer experience by reducing wait times
- \cdot Improve operational efficiency by better managing demand
- \cdot Allow customers to view the menus even when the event is off

 \cdot Implement via a weblink, SDK within your app or as a standalone mobile-optimized website

Manufacturer: Tapin2 Vendor(s): Tapin2 Availibility: NA

https://www.tapin2.co/Products

Tapin2 - Self-Order Kiosk

Improve order throughput and staff efficiency through easy-to-use customer facing ordering solutions. Launch kiosks at key locations to supplement existing terminals and registers. Replace existing terminals with self-service kiosks for cashless operations

 \cdot Allow consumers to quickly order food, beverage, and merchandise and pay on the spot

 \cdot Customize menus, user flows, and content to accommodate any self-service operation

 \cdot Create custom upsells to encourage additional purchases and increase average cart size

 \cdot Read barcodes and RFID/NFC for loyalty and third-party payments

Manufacturer: Tapin2 Vendor(s): Tapin2

Availibility: NA

https://www.tapin2.co/Products







<u>TOC</u>

2.2 Frictionless Transaction & Ticketing

2.2.02 Touchless Parking Payment & Validation Systems

This equipment category technology and equipment options for touchless parking payment and validation systems; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: Touchless platforms will likely become more common as events, tenants, and leagues consider requiring touchless technology.

Park Jockey, Parking & Revenue Control Solutions

ParkJockey is the leader in parking virtualization, revenue control and operations management in the Venues and Stadiums space. Not only do we have the latest in payment technology (including EMV, Apple Pay, Reservations, On-Site Payment Kiosks and LPR enabled Auto-Pay solutions) we are also proud of our focus and ability to help our clients achieve increases in yield, due to the elimination of theft and the reduction of CAPEX/OPEX costs.

ParkJockey provides venue management teams with a one-stop shop solution that includes a centralized dashboard, accessible and live 24/7, traffic flow, revenue analytics and big data.

Manufacturer: Park Jockey Vendor(s): Park Jockey

Availibility: NA VenueShield Trusted



http://venues.parkjockey.com/

Parkhub

ParkHub's products are flexible and scalable – designed from the ground up to adapt to your operation. This means more revenue, improved guest experience, reduced slippage, and hyper-efficient operations.

ParkHub leads the industry in integrations with SpotHero, Ticketmaster, tickets.com, and many more. Quickly and accurately validate prepaid parking passes, reduce fraudulent transactions, and dramatically increase throughout.

Stop making your guests wait in line just to park. Get them inside faster with ParkHub's event focused solutions. The powerful combination of our Prime mobile POS and business intelligence system reduces ingress time up to 45 minutes. Guests are in their seats earlier, giving concession sales a boost, too.

Manufacturer: Park Hub Vendor(s): Park Hub

Availibility: NA

https://parkhub.com/event-centers/





2.2 Frictionless Transaction & Ticketing

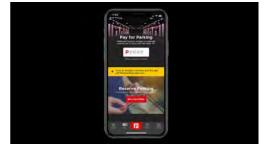
2.2.02 Touchless Parking Payment & Validation Systems

Premium Parking

We have parking down to a science. Within every parking space we find room for innovation. Whether it's using the latest business intelligence to inform our pricing, or technologies to help us maintain fast, efficient response times, or having expert parking entrepreneurs overseeing our local markets, we're constantly striving to improve our plans, processes and strategies. It's how we perform at a level that moves us and our partners forward.

Manufacturer: Premium Parking Vendor(s): Premium Parking

Availibility: NA



REEF[™] Mobile - A Touchless Parking Experience

https://www.premiumparking.com/

Reef Parking Systems

We leverage the proximity of our real estate network to bring the ondemand products and services you want, to the blocks you live and work on. We make sure each REEF hub is tailored to meet the diverse needs of our communities. We provide kitchen space to local heroes and known restaurant brands. Our distribution hubs enable packages to reach you in hours, not days. Let's make cities more breathable and enjoyable together. We create buffer zones that reduce auto and delivery truck traffic, while also creating micro-mobility hubs that keep us moving.

Manufacturer: Reef Parking Equipment Vendor(s): Reef Parking Equipment Availibility: NA

Availibility. NA

https://reeftechnology.com/



<u>TOC</u>

2.2 Frictionless Transaction & Ticketing

2.2.03 Automated Drinks & Food Dispensers

This equipment category includes automated dispenser equipment that supports touchless options; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Masgin Touchless Checkout System

No barcodes, no cash, no wait. Using Al, we've created the easiest checkout you've ever experienced. Identify any Item, no barcode required. From fruits and veggies to whole plates of food our self checkout kiosk can identify anything you throw under it. Place Any Item Any Way. Sideways, slantways, longways, backways or frontways we can scan it all. Our Cameras See Everything. Our cameras matched with our computer vision algorithms recognize all items in less than one second.

Manufacturer: Mashgin Vendor(s): Mashgin Availibility: NA

VenueShield Trusted

https://www.mashgin.com/







2.2 Frictionless Transaction & Ticketing

2.2.04 Food Lockers

This equipment category includes food lockers.

Apex Flow-Thru Lockers 10,000V Series & 10,000H Series

The demand for off-premise takeout and delivery has never been higher. Apex Order Pickup Solutions optimize your workflows while customers get easy, contactless pickup in seconds. Our automated order pickup solutions are intelligent, efficient and easy to use. They're specially designed to help your staff save steps and minimize customer interactions. And our powerful Trajectory Cloud™ platform easily integrates with your POS and e-commerce systems and provides you with insights to drive productivity improvements and increase sales.

Apex also offers highly secure inventory and asset management solutions for your back of house, to protect high-cost food and beverage inventory, as well as protect POS devices, radios and headsets, from loss and theft. All of our Order Pickup technologies can integrate with your existing POS, kitchen management, e-commerce, mobile app, kiosk ordering and inventory management systems and provide clear, real-time insights that can transform your business. Find out why Apex Order Pickup Solutions are the option you — and your busy customers — have been looking for.

Manufacturer: Apex Supply Chain Technologies LLC Vendor(s): Apex Supply Chain Technologies LLC

Availibility: NA, EU

https://www.apexsupplychain.com/feature/flow-thru/



This document is protected by Copyright law and is the exclusive property of ASM Global Parent, Inc.. Reproduction or distribution of this or any part of this document without express written permission from ASM Global Parent, Inc. is strictly prohibited by law. This document and all other elements of the Venueshield program are the proprietary information of ASM Global Parent, Inc., and are being made available solely to employees and designees on a confidential basis and in accordance with the confidentiality provisions of the Business Conduct Policy.



<u>TOC</u>

<u>TOC</u>

2.2 Frictionless Transaction & Ticketing

2.2.05 Touchless Ticket Scanning

This equipment category includes options for touchless ticketing; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: Touchless ticketing platforms will likely become more common as events, tenants, and leagues consider requiring touchless technology.

Alvarodo Ticket Scanning

Alvarado provides state of the art access control solutions for sports and entertainment venues worldwide. Our extensive portfolio includes access control software and intelligent admission devices that allow patrons to self-validate any type of physical or digital media.

Alvarado solutions help our clients transform the entry process, providing the latest technologies and reliable solutions that allow venues to provide a world class experience for guests.

With origins dating back to 1956 and over 20 years' experience in sports and entertainment access control.

Manufacturer: Alvarodo Vendor(s): Alvarodo

Availibility: NA



https://www.alvaradomfg.com/ticket-scanning/

GT1 Entry Pedestal

GTI is the first entry pedestal in Janam's game-changing line of Guardian access control solutions and is designed to provide rapid, reliable and secure barrier-free entry to sports stadiums, arenas, theaters, aquariums, museums, multi-purpose facilities and other live entertainment and hospitality venues.

Portable and easy to move, GTI is designed for indoor and typical outdoor environments where venue operators want to provide patrons with the ability to self-certify their entry credentials, while freeing up ticket takers to perform other valuable tasks and better engage with patrons and fans. Janam's GTI is powered by a Janam XT2 or XT3 handheld -- enabling venues to affordably deploy the same proven access system that is already in use, in either handheld or mobile pedestal format, depending on their specific needs.

In addition to robust barcode scanning of both paper tickets and phone screens, the Janam mobile computing devices that power the GTI mobile pedestal are the only mobile computers in the industry that support the most advanced "tap-and-go" NFC features of Apple Wallet and Google Pay in the same device. When loaded with a Janam mobile computer, GTI supports Value Added Services (VAS) and Enhanced Contactless Polling (ECP) protocols for Apple Wallet, as well as Smart Tap protocols for Google Pay, enabling secure and frictionless transactions via the digital wallet in customers' smartphones.

Manufacturer: Janam Vendor(s): Janam

Availibility: NA

https://www.janam.com/products/details/gt1





2.2 Frictionless Transaction & Ticketing

2.2.05 Touchless Ticket Scanning

Platform Seating

Platform Seating is a system built by an experienced, likeminded team of people who do events each and every day. From day one, our goal and desire has always been for our seating solutions to take the pressure off of you. From our seamless white-label embed — to the ease of the checkout process — to our iOS/Android app's convenient check-in option, Platform Seating creates a seamless, end-to-end solution to give your attendees the best possible experience.

As you look ahead, rest assured that Platform Seating supports any combination of General Admission or Reserved event options you may need (concerts, conferences, festivals, gymnastics meets, theater productions, church worship services, and more). We look forward to serving you and partnering to make your event even better!

Best option for maximizing attendance! Reservations are made and collected until the evening before the service day, or until the allowable capacity is met, whichever comes first. Attendees receive an immediate confirmation of their reservation. Each specific seat is assigned by our system in the most efficient manner possible, removing unused spaces in the seating chart and increasing capacity while still maintaining social distance. Attendees are e-mailed their specific seat assignment, based on reservations, 12 hours in advance of the service (or as soon as the service is filled).

Users can choose how many seats they want and they'll immediately be assigned the best available seating. Seats around their assignment will be automatically made unavailable to maintain social distance.

Allows attendees to pick and choose their specific seats (custom seating map required). Once selected, our system immediately closes seats around the selected seats to maximize safety. Attendee's actual seat reservations are emailed immediately

Manufacturer:	Platform Seating
Vendor(s):	Platform Seating

Availibility: NA

https://platformseating.com

Skidata Ticket Scanning

SKIDATA's digital kiosk combines all the benefits of modern ticketing and makes purchasing tickets child's play. Relieve your cashiers and reduce the waiting times for ticket purchases. Thanks to innovative and well thought-out functions, skiosk Smart 'Vending' will also be effectively integrated into your daily business as an advertising and information kiosk.

Manufacturer:	Skidata
Vendor(s):	Skidata
Availibility:	NA



https://www.skidata.com/en-us/products-services/products-for-arenas-leisure/access-readers-turnstiles/arenagate/



ASM Global - VenueShield // 50





<u>TOC</u>

2.2 Frictionless Transaction & Ticketing

2.2.06 Touchless Credentialing

This equipment category includes touchless exhibition or conferencing registration or staff and other building stakeholder credentialing; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

AD ETHAD

ACCredit Solutions

Accredit Solutions provides award-winning accreditation platforms for the world's most high profile organisations, stadiums, and events around the globe. Clients include major sporting events including World Cups, Premier League Football Clubs, National Rugby and Cricket Teams, Government Organisations, and Major Events, Festivals, and Awards.

Since 2002, Accredit Solutions has helped venue security and event management teams to improve operational efficiencies and process accreditation for over six million workers and visitors at some of the best known political, sporting and live events across the globe.

Built on over 15 years of experience, the Accredit Platform is the world's most sophisticated and intuitive accreditation software on the market today.

Do you always know who is in your stadium, venue or event? We can tell you.

Manufacturer: ACCredit Solutions Vendor(s): ACCredit Solutions

Availibility: EU, APAC, NA, SA

https://www.accredit-solutions.com

SwipedOn Contactless visitor sign-in

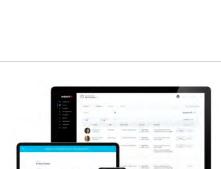
The front desk, or reception area, can often be one of the busiest places in your business, with staff, visitors, deliveries and contractors coming and going. It's difficult keeping track of all those movements and the time it takes for a visitor to sign your paper logbook and other legal paperwork is enough to put a damper on those great first impressions you were striving for. Adding to that, visitors often wait while your reception team locates the person they're here to see. Unfortunately too often, the process of registering and managing a visitor starts to get in the way of connecting and engaging with them.

The SwipedOn visitor management system takes care of the process, allowing you to focus on the person and provide a warm welcome. Your visitors simply sign in on the iPad and we do the rest for you, whether it's asking for their car registration, snapping a photo, printing a badge or getting them to sign a health & safety agreement. We'll even notify the staff member to let them know their visitor has arrived. There's no better way to make those first impressions that truly impress

Manufacturer:	SwipedON
Vendor(s):	SwipedON

Availibility: NA

https://www.swipedon.com/contactless-sign-in







<u>тос</u>

2.3 Safety and Sanitization

2.3.01 PPE Masks,Gloves, face

This equipment category includes personal protective equipment items, including face coverings, face shields, and gloves.

Masks (Reg/N95) Branded

Products offered by Brandart include:

- · Disposable Protective Masks (not surgical use)
- Disposable Protective Masks (surgical use)
- Protective Masks FFP2=KN95
- · Cover Gowns
- Surgical Gowns
- Medical Protective Clothing Medical Isolation
- Clothing Hair Protection Caps
- Boot Covers
- Lab Glasses

Vendor(s): Brand Art

Availibility: NA

http://www.brandart.com/en/index.html

Masks (Reg/N95) Branded

Custom Branded Face Mask

- \cdot Polyester Outside
- \cdot Poly-cotton Blend Liner
- \cdot "Loop Over" ear holders
- Vendor(s): Red Iron Brand (WBE), Kinecthq

Availibility: NA

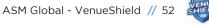
https://redironbrand.com/custom-branded-face-mask/







Unit Cost: \$0.99



2.3.01 PPE Masks,Gloves, face shields

Personal Protective Equipment (PPE) Face Shield

Clear polycarbonate visor with foam backing and adjustable elastic for a tight, yet comfortable fit. Clear PET shield is 9.5" high and delivered unattached to the visor. Shields are easily attached to headband visors by quickly snapping into place. Visors and shields also sold separately for replacement purposes.

- · Durable visors are re-usable.
- \cdot Snap off a used shield and snap on a new one.
- · Thin (4mil) shields feature anti-fog coating on both sides.
- \cdot Thicker shields (>7mil) are durable and easy to clean, but do not have anti-fog coating.

• Shields, visor headbands and foam can be cleaned with isopropyl alcohol or hand sanitizer. Discard if any degradation is observed.

Manufacturer: Louvers International Vendor(s): Louvers International

Availibility: NA

https://louversintl.com/led/social-distance-shield/

Protective Face Shield

Protective Face Shield is a transparent polyester shield, designed for an optically clear view providing protection to face, including eyes, nose, and mouth from exposure and direct contact. Durable and suitable for splash, spray, and light impact applications.

- Optically clear shield
- \cdot Durable, retaining its shape for long periods of time
- Maximized strength and durability
- · Velcro system allows easy adjustments for a custom fit
- Minimal design, enabling less contact for use, minimizing contamination
- · Reusable and cleanable (Non-Sterile)

Manufacturer: Graffiti Shield Vendor(s): Graffiti Shield

Availibility: NA

https://www.graffiti-shield.com/face-shields/







2.3.01 PPE Masks, Gloves, face shields

ShieldrKit

A quick and easy way to help people wear face masks, gloves and other protective gear.

Helping stop the spread of coronavirus and other respiratory infections.

Manufacturer: ShieldrKit Vendor(s): ShieldrKit

Availibility: NA



Various PPE

Grainger offers a variety of personal protective equipment including, but limited to:

- \cdot Cloth and Healthcare Face Masks
- \cdot Hand Sanitizers and Wipes
- Faceshield Assemblies
- \cdot Disposable Barrier Gowns
- Disinfectants & Sanitizers
- Disposable Gloves
- \cdot Eye Protection

Vendor(s): Grainger (MSA)

Availibility: NA

Marketplace MSA

https://www.grainger.com/





2.3.02 Cleaning & Disinfection Agents

This category includes equipment that can be used for cleaning (removing gross surface contamination from an object) and disinfecting (removing or reducing the number of biological microbes).

Anasphere Plus

Anasphere Plus[™] attaches itself to the cell membrane and destroys it. The formula is engineered to be positively charged. Cells of all bacteria, fungi and viruses are negatively charged. This allows Anasphere Plus[™] to attach to negatively charged outer cell walls of microbial pathogens and ultimately destroy them.

Anabec's Anasphere Plus[™] offers the best science the world has to offer. Anasphere Plus[™] is effective against most pathogens currently affecting the world. It is an EPA registered disinfectant and has over 140 kill claims, including but not limited to: Hepatitis B & C virus, Herpes Simplex type 1 & 2 Virus, HIV-1 (AIDS virus), MRSA, Influenza (All Strains), Measles Virus, Noro Virus, COVID-19

This product is a disinfectant, fungicide, mildewstat and virucide. It is powerful and reliable, perfect for high-traffic businesses as well as places containing people with sensitive immune systems like schools and medical facilities. Add Anasphere Plus™ to your hospital or office's regular cleaning regimen to keep patients and employees safe against disease. Due to the COVID-19 pandemic, proper sanitization with an EPA-approved cleaner is more important than ever. Choose Anasphere Plus™ for a premium school, office, hospital, and medical facility cleaning product.

Anasphere Plus™ concentrate is available in 1 quart, 2 quarts or 4 quarts to a box, with a proportioner for securing the proper amount for the desired dilution.

Manufacturer: Anabec Vendor(s): Eastern Tabletop Availibility: NA

https://www.anabec.com/anasphere-plus

Bac-Shield

Used as directed, Bac-Shield makes an article or surface an unsuitable environment for the growth of mold, mildew, fungi or bacteria. Odors are a by-product of bacterial growth and wastes. By inhibiting the growth of odor-causing microbes, Bac-Shield reduces the resulting wastes and the odors and degrading of articles they cause.

Bac-Shield is available as a concentrate for application during manufacturing or in an RTU (ready to use) form for all other applications.

Bac-Shield's active ingredient is Chitosan, the second most abundant naturally occuring compound, after cellulose. Chitosan is known to possess anti-bacterial properties, which allows it to be used as an active ingredient in antimicrobial pesticides. (EPA-HQ-OPP-2007-0566-0019; Chitin Case 6063)

Manufacturer: APEX Steam

Vendor(s): Silver State Sanitization, Idea Quest

Availibility: NA

http://chemtexlaboratories.com/bacshield/





Bac-Shield 5-gallon Pail



2.3.02 Cleaning & Disinfection Agents

D7

A distinct difference that sets Decon7 apart from the competition is our proprietary application methodology, which allows you to get the most from our specialized formula, no matter what surface or environment needs to be sanitized, decontaminated, or disinfected. Our innovative application methods are specifically paired with D7's patented formula in order to get the best results with the easiest methodology.

We're not content to simply make a product and then sell it wholesale. Instead, we pair D7 with best-in-class customer care. We know that our multipurpose product is powerful and easy to use. However, we believe in providing you with all the tools and knowledge you need to make D7 work at its peak for your operation, maintaining pristine conditions no matter your volume.

Manufacturer: Decon Seven Vendor(s): Decon Seven

Availibility: NA

https://www.d7food.com/product/d7-4-gal-kit-2-2gal-kits-case/

ENVIROLYTE

In Envirolyte we have developed a unique group of companies which is focussed on the water purification, sterilisation and disinfecting industries.

The roots of the group have developed through support and application of earlier technology including Electrolysed Water (EW, EOW or EO, also known as electrolyzed oxidizing water, electroactivated water or ionyzed water solution) in its earliest form.

We have brought to the above industries earlier experiences which have enabled us to better deliver potential and application of Electrolyzed Water technology to a wide array of industrial and domestic problems on a large scale. This gives us a strong technical edge over our competition and allows us to build a broad range of support services on a national and international basis.

Together with dedicated specialist companies we have built channels to market and service clients from the largest major corporate to the smallest domestic household, offering advice on all aspects of water purification, sterilisatioin and disinfecting.

Manufacturer: Envirolyte Industries International Ltd. Vendor(s): Envirolyte Industries International Ltd., Louvers International

Availibility: NA

http://www.envirolyte.com/electrolyzed-water-solutions.html







2.3.02 Cleaning & Disinfection Agents

Fresh

FRESH is a federal EPA registered disinfectant & sanitizer proven to kill 99.9% of bacteria & viruses**, including Norovirus, Salmonella, Influenza A, Staph, MRSA & Listeria. The federal EPA has designated FRESH for use in hospitals, ICUs, medical clinics, daycares, schools, restaurants & veterinary clinics & more. The EPA registration number is 35810-25 -96548.

FRESH is on EPA's List of Disinfectants for Use Against SARS-CoV-2, the cause of COVID-19. FRESH has demonstrated effectiveness against viruses similar to COVID-19 on hard, non-porous surfaces.

Therefore, FRESH can be used against COVID-19 when used in accordance with the directions for use against Norovirus on hard non-porous surfaces.

Tio2 (Titanium Dioxide) Nanotechnology is a catalyst and does not get used up. When light (any visible light, not just UV) comes in contact, a positive electron is created and binds with Oxygen (air) and Hydrogen (humidity) to form OH- a hydroxyradical that destroys VOC's, pollutants, odors, fungus, germs, bacteria, and viruses. Organosilane forms a covalent bond and becomes "invisible bed of nails" 25,000 times thinner than a business card that makes surfaces inhospitable to microorganisms.

Manufacturer: Purteq Availibility: NA

http://www.purteq.com

Hydrolyte

There is no other disinfectant that is safer; almost all quaternary disinfectants have some degree of toxicity or are caustic and don't merit a four zero rating. By using Hydrolyte you are totally protecting your workers, tenants, employees, and guests coming into your venue. On the N list to kill COVID 19 and all other known and emerging viruses and pathogens. An EPA certified sporicidal and virucide (REG # 92108-1)

Multiple methods of application--Hydrolyte can be used on mops or in spray applicators, including electrostatic sprayers that will allow the product to wrap around all room fixtures. Disinfectant wipes can also be easily made by putting chemical into a wet task bucket.

Unlike many other quaternary disinfectants, during application and after, Hydrolyte presents no risk of breathing in caustic chemicals or having lingering fumes in the air that could be harmful to a person's eyes or throat. Hydrolyte also has a fresh and pleasant odor.

Vendor(s): Ace Janitorial/Escalator Cleaning Company

Availibility: NA

https://www.acejan.com/#cd-nav







2.3.02 Cleaning & Disinfection Agents

PureGreen24

PureGreen24 is your only choice for a proven natural antimicrobial disinfectant and deodorizer that offers rapid efficacy. PureGreen24 kills the deadliest of superbugs, yet also kills everyday household germs. PureGreen24 is an EPA registered, broad spectrum antimicrobial disinfectant and deodorizer with unique 24 hour residual effectiveness.

Manufacturer: PureGreen24 Availibility: NA



https://www.puregreen24.com

Shockwave Disinfectant Cleaner

Shockwave is an EPA-registered disinfectant, sanitizer and cleaner designed for use on various surfaces subject to microbial contamination, ideal for flooding and mold remediation. ShockWave is especially useful as an all-in-one product for treating wood framing, carpets, and other porous and nonporous surfaces as part of a complete mold remediation project.

Manufacturer: FiberLock Tech Vendor(s): FiberLock Tech

Availibility: NA



https://www.fiberlock.com/product/shockwave/

Surface-wise coating

SurfaceWise[™] is an EPA-registered surface coating (EPA Reg. Number: 92082-1) that provides an invisible barrier to inhibit the growth of bacteria, fungi (mold and mildew) and algae which cause odor, staining and discoloration. This revolutionary coating has been demonstrated to provide continuous protection, when used as directed, on a variety of treated surfaces, including plastic, stainless steel, mattresses, rubber, dry wall, painted surfaces, and textiles.

The odorless and invisible coatings, while non-toxic to humans and non-aquatic pets, bond to the surface and create a hostile environment that disrupts the cell membranes and prevents these organisms from attaching and thriving on treated surfaces.

Manufacturer: Allied Bioscience Availibility: NA



https://www.alliedbioscience.com/surface-wise/



2.3.02 Cleaning & Disinfection Agents

Whiff!TM Disinfection & Decontamination System

System Output (Fluid):

- · CLO2 (aqueous, pH neutral, 250ppm)
- \cdot Most effective Kills all known forms of microbes (bacteria, viruses,
- mold, fungus, mildews and spores) at
- · concentrations safe for humans and animals (selective oxidizer)
- \cdot Reverts to salt and water within minutes
- · Allows for immediate broadcast, fog, spray or spot application
- · Air or wipe dry Non-persistent (other fluids leave chemicals behind)

Manufacturer: ReliOx Corporation Availibility: NA



https://www.reliox-clo2.com/



2.3.02 Cleaning & Disinfection Agents | Courts

A 456 II (registered under name of Lonza Formulation R-82, EPA Registration No.6836-78) , Ecolab

Ecolab, QC A-456 II Detergent/Disinfectant - 1.3 Liter, Highly concentrated, half-ounce per gallon (1:256) detergent/disinfectant with odor counteractant. Effective against Hepatitis B virus. EPA registered. Broad spectrum, one-step, hard surface, disinfectant/cleaner and sanitizer. When used as directed, this product will deliver effective cleaning performance and biocidal action against bacteria, fungi and viruses. Can be used to disinfect a wide variety of hard surfaces such as floors,walls, and countertops in hospitals, households, and institutions. Other areas of use are in restaurants, athletic facilities, schools, restrooms, laboratories, and transportation vehicles and facilities. Packaging: 2/Case

Packaging: 2/Case Manufacturer: Ecolab

Vendor(s): beesmed.com

Availibility: NA

AECOM Recommended

https://www.beesmed.com/index.php

BioCide 100

EPA registered disinfectant, sanitizer, germicide, virucide, deodorizer for most non porous surfaces. Efficacy tested and verified. Ready to use RTU formula. BioCide 100 Kills 99.9% of germs, virus, bacteria, spores, fungus, mildew and microbes that cause diseases, infections on contaminated, uncleaned, untreated surfaces including artificial turf athletic field play surfaces, bleachers, locker rooms, bathrooms, toilets, sinks and showers.

(EPA Registration 1839-83-86117) (registered under the name Detergent Disinfectant Pump Spray EPA Registration 1839-83) Stepan Company

Manufacturer: Mason Company

Vendor(s): US Specialty Coatings

Availibility: NA

AECOM Recommended

http://usscproducts.com//janitorial-products/disinfectants/biocide-100/p/587/10889



Unit Cost: \$108.00 Units: 2x 1.3L



Unit Cost: \$136.00 Units: 4-gallons



2.3.02 Cleaning & Disinfection Agents | Courts

Clorox® Broad Spectrum Quaternary Disinfectant Cleaner (EPA Registration Number 67619-20) Clorox Professional Company

Kill more than 90 pathogens quickly with Clorox® Broad Spectrum Quaternary Disinfectant Cleaner. It delivers powerful cleaning and excellent surface compatibility, all in a fragrance-free formula. Eligible for use against SARS-CoV-2, the virus that causes COVID-19, based on the EPA's Emerging Viral Pathogen Policy. Read more in Overview section below.

Manufacturer: CloroxPro Availibility: NA

AECOM Recommended



Unit Cost: \$6.09 Units: 32 oz. bottle

https://www.cloroxpro.com/products/clorox/broad-spectrum-quaternary-disinfectant-cleaner/

Clorox[®] Scentiva[™] Disinfecting Wipes

70-Count Scentiva Pacific Breeze and Coconut Scented Bleach Free Disinfecting Wipes. (EPA Registration 5813-58) The Clorox Company (wet mopping cloths disinfects in .25 minute)

Manufacturer: CloroxPro Vendor(s): Home Depot

Availibility: NA **AECOM Recommended**



Unit Cost: \$5.00 Units: 70 count

https://www.clorox.com/products/clorox-scentiva-disinfecting-wipes/tuscan-lavender-and-jasmine/



2.3.02 Cleaning & Disinfection Agents | Courts

Lysol Professional No Rinse Sanitizer

Professional Lysol® - No Rinse Sanitizer - Concentrate Meets food code requirements as a no rinse sanitizer and is perfect for 3-bin sink and clean-in-place applications. It is an economical, concentrated formula that makes up to 512 gallons (1:512) and can be used as a disinfectant at 1:128 (EPA Registration Number 675-30)

Manufacturer: Lysol Vendor(s): Walmart; Office Depot

Availibility: NA
AECOM Recommended



Unit Cost: \$18.55 Units: 128 ounce

https://diversey.com/en/product-catalogue/professional-lysol-no-rinse-sanitizer-concentrate-cb743892

Maquat 128 PD

Mason Chemical Company

· Disinfectant, fungicide, mildewstat. Formulated to disinfect hard, non-

porous surfaces. Fresh fragrance.

Dilution: 1 oz/gal.

• EPA Registration 10324-105

Manufacturer: Mason Company Vendor(s): National Everything Wholesale Availibility: NA

AECOM Recommended



Unit Cost: \$125.88 Units: 2x3-liters

https://catalog.nationalew.com/p/ML-04410039/Maxim-AFBC-Restroom-Cleaner-3-L/



2.3.02 Cleaning & Disinfection Agents | Courts

Neutral Disinfectant

Neutral Disinfectant Cleaner Multi-purpose, neutral pH, germicidal detergent and deodorant effective in hard water. Disinfects, cleans and deodorizes in 1 labor-saving step. Effective on hard surfaces and can also be used on non-porous athletic mats, exercise equipment and personal safety equipment (helmets etc.). Leaves a clean fresh scent.

 \cdot Neutral pH for use on a variety of surfaces including floors and hard surfaces, athletic mats, helmets and exercise equipment

- \cdot Disinfects, cleans and deodorizes in 1 labor-saving step
- \cdot Fungicidal and mildew static
- \cdot Highly concentrated with 1/2 oz. to 2 oz. per gallon dilution rate
- \cdot Can be used on fabrics, carpet, bedding and mattresses
- · EPA-registration No 47374-129-1677

Manufacturer: Ecolab Vendor(s): Home Depot

Availibility: NA

AECOM Recommended

https://www.supplyworks.com/Sku/ECO6101205/ecolab-2-12-gal-neutral-disinfectant-cleaner-1-per-case-025469573506-6101205

P&G Pro Line® Disinfecting Floor & Surface Cleaner II

Combines quaternary actives with powerful cleaning agents, buffered to a neutral pH for no rinse cleaning and hospital grade disinfecting. Meets OSHA Blood Borne Pathogen (BBP) requirements. Kills a broad spectrum of bacteria, viruses and fungi including: MSRA and VRE, Hepatitis B, Hepatitis C, HIV-1, Influenza A, H1N1, Athletes foot fungus, mold and mildew.

- \cdot Helps control cross-contamination and reduce the spread of infection
- \cdot Cleans, disinfects and deodorizes in 1 labor saving step

• Recommended for use as an all-purpose cleaner, disinfectant and deodorizer as a part of regular maintenance programs

• Registered under the name SC-NDC-128, EPA Registration No. 1839 -215

Manufacturer: Stepan Company Vendor(s): Home Depot

Availibility: NA

AECOM Recommended

https://www.supplyworks.com/Sku/PGC02038/pro-line-1-gal-33-disinfecting-floor-and-multi-surface-cleaner-003700002038



Unit Cost: \$90.88 Units: 4-gallons





Unit Cost: \$16.13

Units: 1-gallon

2.3.02 Cleaning & Disinfection Agents | Courts

ProGienics (registered under the name Maquat 64-PD (EPA Registration No. 10324-93)

One Gallon of ProGienics Concentrated Carpet Deodorizer and Hard Surface Disinfectant is a highly effective product that can be used in industrial, institutional, commercial areas such as motels, hotel chains, movie theaters, nursing homes or hospitals.

- Kills Pandemic 2009 H1N1 Influenza A Virus formerly called swine flu.
- · Carpet Cleaner & Deodorizer
- \cdot Deodorize upholstery, draperies and other porous materials
- · Water & Smoke Damage Restoration
- \cdot Clean & Disinfect hard nonporous surfaces
- Control Mold & Mildew
- · Economical Concentrate

Manufacturer: ProGienics Vendor(s): Pet Vet Logic

Availibility: NA

AECOM Recommended

https://provetlogic.com/progienics-concentrated-carpet-deodorizer-disinfectant/

Virex™ II / 256

Cleaner and Disinfectant Concentrate (EPA Registration70627-2)

Manufacturer: Diversey Vendor(s): Zoro Availibility: NA

AECOM Recommended



Unit Cost: \$35.55 Units: 1-Gallon (9 lbs)



Unit Cost: \$137.93 Units: 5-liters

https://www.zoro.com/diversey-cleaner-and-disinfectant-5l-bottle-3062768/i/C3669416/#specifications



2.3.02 Cleaning & Disinfection Agents | Electronics

Cavicide Wipes (EPA Registration 46781-13) Metrex Research

CaviWipes and CaviwipesXL are durable, non-woven, non-abrasive towelettes that presaturated with a powerful surface disinfectant, CaviCide. (CaviCide is a convenient, ready-to-use, intermediate-level surface disinfectant that is effective against TB, HBV, HCV, viruses (hydrophilic and lipophilic), bacteria (including MRSA and VRE) and fungi.*) CaviWipes are recommended for use on non-porous surfaces and fixtures. Caviwipes are ideal for operating rooms, surgical centers, neonatal units, isolation rooms, dental facilities, patient care areas, laboratories, and other critical-care areas. When used as directed, Caviwipes will also effectively clean and decontaminate critical and semi-critical instrumentation.

Manufacturer: Cavicide

Vendor(s): USA Medical and Surgical Supplies

Availibility:

AECOM Recommended

NA

https://www.usamedicalsurgical.com/caviwipes-surface-disinfectant-wipes/

Cavicide1 (EPA Registration 46781-12) Metrex Research

CaviCidel is Metrex's next generation multi-purpose, non-bleach, low alcohol cleaner and disinfectant designed for everyday use. CaviCidel has proven 1 minute efficacy against 26 pathogens. CaviCidel is effective in killing bacteria, viruses and fungi in 1 minute, including TB, Norovirus, A. baumannii, HIV-1, HBV, HCV and many more.* (Contact manufacturer for product specifics.) When used as directed, fragrancefree CaviCidel will effectively clean and disinfect surfaces and can help reduce the risk of cross-contamination. CaviCidel can be used on hard, non-porous surfaces.

Manufacturer: Cavicide Vendor(s): USA Medical and Surgical Supplies Availibility: NA

AECOM Recommended

https://www.usamedicalsurgical.com/cavicidel-surface-disinfectant-cleaner/



Unit Cost: \$13.47 Units: 160 wipes



Unit Cost: \$15.81 Units: 160 wipes



2.3.02 Cleaning & Disinfection Agents | Electronics

Clorox Disinfecting Wipes

Clorox believes clean is more than getting rid of dirt and germs. Sure, it's about wiping away what came before, but it's also about celebrating what happens after. Clean is just the beginning. What comes next is everything.

Clean and disinfect with a powerful multipurpose wipe killing 99.9% of bacteria and viruses and remove common allergens around your home. Clorox wipes clear drying formula powers through grease, soap scum and grime so you can conveniently tackle any dirty surface

Disinfect and deodorize with the fresh smell of Clorox scented wipes for a bleach-free, all-in-one cleaning alternative

(EPA Regsitration 5813-79)

Manufacturer: CloroxPro

Vendor(s): Medical Mega

Availibility: NA

AECOM Recommended

https://medicalmega.com/product/clorox-disinfecting-wipes-105-ct-bleach-free-cleaning-wipes-crisp-lemon

Wedge Disinfectant Wipes (EPA Registration88494-2) North American Infection Control

COEfect MinuteWipes can be used to effectively clean and disinfect a dental operatory, sterilization bay or other potentially contaminated areas in less time — when compared to other products that have longer "kill rates" or out-dated formulations. This "one step," surface disinfectant features an ethanol-base, low-toxicity and pleasant "non fragrance" and has been laboratory tested and is EPA Registered as an effective Bactericide, Virucide, Tuberculocide and Fungicide. The wipe material is made of a unique (polyester nonwoven spunlace) combine to effectively spread the disinfectant solution and absorb excess bioburden — making it an added plus for infection control protocol

Manufacturer: Wedge Vendor(s): American Infection Control

Availibility: NA

AECOM Recommended

https://www.pearsondental.com/catalog/product.asp?majcatid=25&catid=5510&subcatid=23554&pid=76216



Unit Cost: \$16.99 Units: 105 wipes



Unit Cost: \$16.95 Units: 100 wipes



2.3.02 Cleaning & Disinfection Agents | Food Contact No Rinse

Biotab7

Increase speed of application while ensuring a light, even coat that will dry in exactly the desired time. Adjust flow quickly and easily with just the turn of a dial

• EPA Registration 91399-2

Manufacturer: Biotab7 Vendor(s): Advanced Biocide Technologies

Availibility: NA

AECOM Recommended



Unit Cost: \$45.00 Units: 50 tabs 1 g each

https://catalog.unitedchemical.net/p/3770060-EA/Biotab7-Hand-Held-32-oz-Cord-Electric-Sprayer-Fogger/

Purell Professional Surface Sanitizer

One-step disinfectant and cleaner with a fresh citrus scent. Kills Norovirus and MRSA in 30 seconds.

Kills 99.9% of germs on surfaces, including the cold and flu virus. Proven effective across most hard and soft surfaces. Application: Disinfectant/Cleaner; Applicable Material: Multi Surface; Chemical Compound: Ethyl alcohol 29.4%; other ingredients 70.6%; Dirt Types: Norovirus; Cold and Flu Viruses; Other Organisms.Hardworking professional surface sanitizer will not compromise, delivering both safety and efficacy.

The patented formula kills 27 organisms, killing 22 of them in 30 seconds, including Norovirus and cold and flu viruses. Formulated for food contact surfaces, no rinsing required.?Thanks to PURELL TOUCHABLE? Technology, it won?t irritate your skin, eyes, or nose like traditional cleaners.?Multi-surface formulation disinfects and cleans a variety of surfaces including countertops, laminate, plastic, sealed granite, stainless, glass and more. Leaves only a refreshing citrus scent, with no harsh chemical residue or fumes. Application: Disinfectant/Cleaner; Applicable Material: Multi Surface; Chemical Compound: Ethyl alcohol 29.4%; other ingredients 70.6%; Dirt Types: Norovirus; Cold and Flu Viruses; Other Organisms.

• EPA Registration 84368-1

· GOJO Industries

Manufacturer: Purell Vendor(s): Walmart; Office Depot

Availibility: NA AECOM Recommended

https://www.walmart.com/ip/Professional-Surface-Disinfectant-Fresh-Citrus-1-gal-Bottle-4-Carton/520465621



Unit Cost: \$19.37 Units: 1-gallon



2.3.02 Cleaning & Disinfection Agents | Food Contact No Rinse

S&S Sanitizer

Help protect your guests and staff from foodborne illnesses by keeping food contact surfaces cleaned and sanitized with a 2-in-1, no-rinse cleaner and sanitizer. Available later in 2020.

 \cdot EPA Registered food contact sanitizer with 30-second Norovirus kill claim*

 \cdot Multi-use functionality and streamlined procedures simplify food code compliance

 \cdot Broad usage applications, including food contact surfaces and 3rd sink sanitization

• Proprietary cleaning pail technology provides visual indication of concentration to ensure product efficacy

· EPA Registration 1677-260

Manufacturer: Ecolab Vendor(s): PJP Marketplace

NA

Availibility:

AECOM Recommended

https://www.ecolab.com/pages/sink-surface-sanitizer

Urthpro (EPA Registration 84150-1) Urthtech LLC

Professional Surface Disinfecting Wipes - Fresh Citrus Scent

 \cdot 110 Wipes per Container.

Manufacturer: Urthpro Vendor(s): The Next Supply

Availibility: NA

AECOM Recommended



Unit Cost: \$104.97 Units: 2-pounds

Unit Cost: \$13.95 Units: 100 wipes

PETERS COMMENTATION IN 110 WIPES

https://thenextsupply.com/products/copy-of-windex-multisurface-disinfectant-cleaner?variant=31652536713280



2.3.02 Cleaning & Disinfection Agents | Food Contact/Rinse

BIOSONIC WIPEOUT DISINFECTANT WIPES

BioSonic WIPEOUT is a one-step, ready-to-use disinfectant that is laboratory-proven to destroy pathogens* in one minute on hard, nonporous surfaces. WIPEOUT provides the right solution for your dental office needs and when used as directed can help break the chain of infection.

- \cdot Maximize efficiency with one minute kill on 25 pathogens
- \cdot Bactericidal, Virucidal*, Fungicidal, Tuberculocidal
- \cdot Compatible with common materials in the dental office
- EPA Registration(88494-2-61584

Manufacturer: Coltene Vendor(s): Coltene

Availibility: NA AECOM Recommended

https://nam.coltene.com/products/infection-control/disinfection/biosonic-wipeout//biosonic-wipeoutr-wipe/

Clorox Commerial Hydrogen Peroxide Disinfectant Cleaner

Better surface compatibility, less residue, faster kill times*. Clorox Healthcare hydrogen peroxide disinfectants are designed for you to use them daily on common hospital surfaces. No added fragrances or harsh odors means a better patient experience.

Worry less with noncorrosive disinfectants that are tested on medical devices. Save time with a fast non-bleach disinfectants for your facility.*

Ideal for daily use in high-turnover areas, these liquids and wipes come in a range of sizes and formats to meet your needs on hard and soft surfaces, including clinical use, daily patient room cleaning, disinfection of medical devices, terminal cleaning and on-the-go disinfecting.

You'll get fast kill times on over 38 pathogens, including 13 antibioticresistant ones.† That's more EPA-registered kill claims for antibioticresistant organisms than PDI® Super Sani-Cloth® wipes and CaviWipes™ combined.

· 30 seconds to 1 minute contact times on most bacteria and viruses

- · Study proves an advantage over a leading quat‡
- More EPA-registered kill claims for antibiotic-resistant organisms than PDI® Super Sani-Cloth® wipes and CaviWipes™ combined
- Manufacturer: CloroxPro

• EPA Registraion 67619-24

Manufacturer: Wedge Availibility: NA AECOM Recommended

https://www.usamedicalsurgical.com/clorox-hydrogen-peroxide-disinfectant-cleaner/



BioSonic

WIPEOUT

ONE-STEP

N 1 MINUTE

Unit Cost: \$10.85

Units: 160 wipes

Unit Cost: \$15.54 Units: 1-gallon



2.3.02 Cleaning & Disinfection Agents | Food Contact/Rinse

Clorox Multisurface Cleaner + Bleach

Clean-Up 32 oz. All-Purpose Cleaner with Bleach Spray

- \cdot Clorox disinfects and kills 99.9% of household germs in seconds
- \cdot Disinfectant bleach is safe to use on a variety of surfaces
- \cdot Spray cleans even the toughest stains, soils, and messes
- EPA Registration 56392-7

Manufacturer: CloroxPro Vendor(s): Home Depot

Availibility: NA
AECOM Recommended



Unit Cost: \$3.87 Units: 32 ounce bottle

https://www.homedepot.com/p/Clorox-Clean-Up-32-oz-All-Purpose-Cleaner-with-Bleach-Spray-4460001204/100142325

Coefect Minutewipes Surface Disinfectant

COEfect MinuteWipes can be used to effectively clean and disinfect a dental operatory, sterilization bay or other potentially contaminated areas in less time — when compared to other products that have longer "kill rates" or out-dated formulations. This "one step," surface disinfectant features an ethanol-base, low-toxicity and pleasant "non fragrance" and has been laboratory tested and is EPA Registered as an effective Bactericide, Virucide, Tuberculocide and Fungicide. The wipe material is made of a unique (polyester nonwoven spunlace) combine to effectively spread the disinfectant solution and absorb excess bioburden — making it an added plus for infection control protocol. • EPA Registration 88494-2-10214

Manufacturer: Coefect

Vendor(s): GC America (Direct) or use Pearson Dental Supply

Availibility: NA

AECOM Recommended

https://www.pearsondental.com/catalog/product.asp?majcatid=25&catid=5510&subcatid=23554&pid=76216



Unit Cost: \$16.55 Units: 100 wipes



2.3.02 Cleaning & Disinfection Agents | Food Contact/Rinse

Lysol Neutra Air 2 in 1

2 in 1: Eliminates odors and disinfects. Disinfect: Kills 99.9% of odor causing bacteria when used as directed (EPA#777-136)

- Kills odor causing bacteria
- \cdot Sanitizes soft surfaces, deodorizes and freshens the air
- \cdot Lysol disinfecting spray helps protect your family and helps keep them healthy
- · EPA Registration 70627-80) Reckitt Benckiser

Manufacturer: Lysol Vendor(s): Walmart, , Amazon

Availibility: NA
AECOM Recommended



Unit Cost: \$3.97 Units: 10-ounce spray

https://www.walmart.com/ip/Lysol-Disinfectant-Spray-Neutra-Air-2-in-1-Driftwood-Waters-10oz/247203865

OxivirTb (EPA Registration 70627-56) RTU or Oxivir Wipes (EPA Registration 70627-60) Diversey

Ready-to-use, hospital grade disinfectant cleaner based on proprietary hydrogen peroxide (AHP) technology to deliver fast, effective cleaning performance. Disinfects in 60 seconds. Virucide, bactericide, tuberculocide, fungicide and non-food contact sanitizer. Kills Norovirus, Hepatitis B, Hepatitis C, MRSA and VRE. Meets bloodborn pathogen standards for decontaminating blood and body fluids. Apply solution by cloth or disposable wipe. Flip-top cap. Application: Disinfectant/Cleaner; Applicable Material: Ceramics; Enamel; Fiberglass; Glass; Grout; Laminates; Metal; Plaster; Plastic; Vinyl; Dirt Types: Bacteria; Dust; Fungus; Germs; Grime; Mildew; Mold; Organic Matter; Viruses; Water-Based Soil; Scent: Unscented.

Unit Cost: \$5.44 Units: 32 ounce

Manufacturer: Diversey

Vendor(s): Discount Cleaning Products, , Grainger

Availibility:

AECOM Recommended

NA

https://www.discountcleaningproducts.com/Diversey-Oxivir-TB-One-Step-Disinfectant-Cleaner-p/dvo-4277285.htm



2.3.02 Cleaning & Disinfection Agents | Surface Disinfectant Non

Clorox 360 Disinfectant Cleaner

Keep your facility healthier while saving time, money and labor. The innovative electrostatic sprayer, with the patented PowerWrap™ nozzle, delivers trusted Clorox solutions to the front, back and sides of surfaces. Superior coverage for better germ protection.

Eligible for use against SARS-CoV-2, the virus that causes COVID-19, based on the EPA's Emerging Viral Pathogen Policy.

• Kills 99.9% of bacteria in 5 seconds

 \cdot 44 organism claims: Kills cold‡ and flu viruses, MRSA and norovirus in 2 minutes or less

- \cdot One-step disinfecting
- $\cdot \, {\sf Eliminates} \, {\sf odors}$
- · Sanitizes soft surfaces
- EPA Registration 67619-24
- · Can be applied using electrostatic sprayer

Manufacturer: CloroxPro Vendor(s): CloroxPro, Dobmeier Janitorial Supplies, Schilling Supply, Henry Schein Company

Availibility: NA

https://www.cloroxpro.com/products/clorox/total-360/

Clorox Commerial Hydrogen Peroxide Disinfectant Cleaner (EPA Registration 67619-24) Clorox Professional Products Co.

Worry less with noncorrosive disinfectants that are tested on medical devices. Save time with a fast non-bleach disinfectants for your facility.*

Ideal for daily use in high-turnover areas, these liquids and wipes come in a range of sizes and formats to meet your needs on hard and soft surfaces, including clinical use, daily patient room cleaning, disinfection of medical devices, terminal cleaning and on-the-go disinfecting.

You'll get fast kill times on over 39 pathogens, including 13 antibioticresistant ones.† That's more EPA-registered kill claims for antibioticresistant organisms than PDI® Super Sani-Cloth® wipes and CaviWipes™ combined.

Manufacturer: Biotab7 Availibility: NA AECOM Recommended

https://www.henryschein.com/us-en/dental/p/infection-control-products/surface-disinfectants-cleaners/hydrogen-peroxide-



Unit Cost: \$15.54 Units: 1-gallon



2.3.02 Cleaning & Disinfection Agents | Surface Disinfectant Non Porous

Oxivir Wipes (EPA Registration 70627-60) Diversey

Oxivir Tb Wipes are intended for the cleaning and disinfecting of healthcare environmental surfaces. Based on proprietary AHP® technology to deliver fast, effective cleaning and disinfection.

- Kills SARS-CoV-2 (COVID-19 virus) in 1 minute
- \cdot Kills bacteria and viruses in just 1 minute
- \cdot Virucidal, Bactericidal, Fungicidal and Tuberculocidal
- \cdot Active ingredient breaks down to oxygen and water.
- Registered One-Step Hospital Grade Disinfectant Cleaner

Manufacturer: Diversey Availibility: NA AECOM Recommended



Unit Cost: \$5.44 Units: 32 ounce bottle

https://www.grainger.com/product/DIVERSEY-Disinfectant-Cleaner-5KRJ0

OxivirTb (EPA Registration 70627-56) RTU

This ready-to-use, disinfectant cleaner features proprietary hydrogen peroxide (AHP®) technology to disinfect in 60 seconds. It is designed to work as a virucide, tuberculocide, fungicide, and nonfood contact sanitizer. Kills MRSA and norovirus.

Manufacturer: Diversey

Vendor(s): Grainger (MSA), Discount Cleaning Products

Availibility: NA

AECOM Recommended | Marketplace MSA



Unit Cost: \$5.44 Units: 32 ounce bottle

https://www.grainger.com/product/DIVERSEY-Disinfectant-Cleaner-5KRJ0



2.3.02 Cleaning & Disinfection Agents | Surface Disinfectant Porous

AdvaCare 120 Sanitizer

When used as label directions specify, sanitizes linen at temperatures as low as 90-176F, allowing for significant energy savings as compared to the 160-176F that is normally government mandated. Adjusts the pH of the linen to match the natural pH of the skin, minimizing potential skin irritation.

• EPA Registration 1677-193)

Manufacturer: AdvaCare Vendor(s): National Everything Wholesale

Availibility: NA
AECOM Recommended



Unit Cost: \$69.11 Units: gallon

https://catalog.nationalew.com/p/EL-6114299/Ecolab-AdvaCare-120-Sanitizer-Sour-Gal/

Lysol Laundry Sanitizer (EPA Reigstration 777-128)/ Reckitt Benckiser

Lysol Laundry Sanitizer is specially designed to sanitize your laundry and to kill 99.9% of bacteria*. It can be used on most washable fabrics including: Baby Clothes, Gym Clothes, Undergarments, Towels, Bedding, and Delicates. *When used as directed in rinse cycle

- Kills 99.9% of bacteria like Staphylococcus Aureus & Klebsiella pneumoniae, simply add to rinse cycle
- · Contains 0% bleach, works even in cold water
- Gentle on fabrics including whites & colors
- · Works in all standard & HE machines
- \cdot To disinfect and kill 99.9% of viruses, add when pre-soaking laundry

 \cdot Suitable for children's clothes, gym clothes, underwear, towels, bedding & delicates

Manufacturer: Lysol Vendor(s): Walmart; Office Depot

Availibility: NA

AECOM Recommended

https://www.walmart.com/ip/Lysol-Laundry-Sanitizer-Crisp-Linen-90-oz-Eliminates-Odors-and-Kills-Bacteria/198281212



Unit Cost: \$5.97 Units: 41 ounce



2.3.02 Cleaning & Disinfection Agents | Surface Disinfectant Porous

Maquat 7.5-M

Mason Chemical Company - marketed under other names (Madisan 75, Q-San 7.5, Clean Edge 3510, Mixmate Shurguard Ultimate, etc.)

- \cdot Hyper-concentrated formula
- \cdot Wide range sanitizer
- \cdot Multiple use product
- \cdot Extremely low use rate
- Effective at 150-400 ppm.
- · Disinfectant, laundry sanitizer, deodorizer and hard surface sanitizer
- EPA Registration 10324-81

Manufacturer: Madison Chemical Company Availibility: NA

AECOM Recommended



Unit Cost: \$55.33 Units: 1.5 gallons

https://www.roundeyesupply.com/Mixmate-Shurguard-Ultimate-1-5-Gal-p/de566299.htm

Maquat 702.5 EPA Registration 10324-198 Mason Chemical Company

Maquat®: Pilot's EPA Registered Quaternary Compounds and Active Ingredients come with labels featuring an extensive claim base, unique use-sites, applications and formatting, and formulation options including a broad range of surfactant, dye, and fragrance choices.

Maquat 702.5 EPA Registration 10324-198 Mason Chemical Company

Manufacturer: Madison Chemical Company Availibility: NA AECOM Recommended

https://www.pilotchemical.com/products/maquat

Maquat 705-M

Maquat®: Pilot's EPA Registered Quaternary Compounds and Active Ingredients come with labels featuring an extensive claim base, unique use-sites, applications and formatting, and formulation options including a broad range of surfactant, dye, and fragrance choices.

Maquat 705-M (EPA Registration 10324-177)/ Mason Chemical Company- marketed under other names such as SANISURE II NO RINSE CLEANER SANITIZER -10324-177-45697)

Manufacturer: Madison Chemical Company Availibility: NA AECOM Recommended

https://www.pilotchemical.com/products/maquat



Pilot's EPA Registered Quaternary Compounds and Active Ingredients come with labels featuring an extensive claim base, unique use-sites, applications and formatting, and formulation options including a broad range of surfactant, dye, and fragrance choices.



Pilot's EPA Registered Quaternary Compounds and Active Ingredients come with labels featuring an extensive claim base, unique use-sites, applications and formatting, and formulation options including a broad range of surfactant, dye, and fragrance choices.



2.3.02 Cleaning & Disinfection Agents | Surface Disinfectant Porous

Maquat 710-M

No-rinse "Broad Spectrum" quaternary ammonium chloride hard surface sanitizer features a wide efficacy range of 150 – 400 ppm for effectiveness in multiple-use situations. For use as a final rinse in the sanitizer sink bay, spray bottle and sanitizer bucket. Use to sanitize previously cleaned and rinsed utensils, food preparation surfaces, floors and other food contact surfaces. EPA registered.

 \cdot Broad spectrum quaternary sanitizer

 \cdot Kills labeled bacteria and germs on all hard, non-porous food & nonfood contact surfaces

- \cdot Used in all fresh departments
- EPA Registration 10324-117

• Maquat 710-M (EPA Registration 10324-117) Mason Chemical Company marketed as Q-San 10.0 by Chemstar EPA Registration 10324-117-46597 or other products such as Quick San 10 by Sunburst EPA Registration #10324-117-670

Manufacturer: Marquat Vendor(s): Chemstar Corporation, Sunburst

Availibility: NA

AECOM Recommended

https://chemstarcorp.com/sanitizers-disinfectants/

Vaprox Hydrogen Peroxide Sterilant

Steris Corporation high-purity specially formulated liquid sterilant is developed specifically for VHP generators.

• Demonstrates broad-spectrum efficacy against viruses, bacteria, yeasts and bacterial spores

• Compatible with a wide range of materials (including metals, plastics and optics)

• Cartridge design maximizes operator safety during handling. Lot number and expiration date are visible through the cartridge interface window. Cartridge label allows the operator to determine the sterilant level without removing the cartridge.

 \cdot Stabilized solution of 35% hydrogen peroxide (H₂O₂) provides fast, effective microbial control, including spores.

• Each shipment is accompanied by a Certificate of Analysis. EPA Registration No.: 58779-4.

Manufacturer: Vaprox Vendor(s): VWR

Availibility: NA

AECOM Recommended

https://us.vwr.com/store/product/6071496/vaprox-hydrogen-peroxide-sterilant-steris



Unit Cost: \$147.76 Units: 2 -gallon case



Unit Cost: \$1,345.31



TOC

2.3 Safety and Sanitization

2.3.03 Cleaning & Disinfection Artificial Turf

There is no recommended equipment that is specifically for use in disinfecting SARS-CoV-2.

Note: The catalog will be updated periodically and information on pertinent cleaners will be added here if they become available.

[GreensGroomer offers a UV-C surface sanitizer that may or may not be effective against SARS-CoV-2 – refer to category "UV Technology."]

GreenZapr® UVC Surface Sanitizer

The GreenZapr® represents a new paradigm in synthetic turf safety. Built around germicidal ultraviolet (UVC) lights, the GreenZapr disinfects synthetic surfaces with powerful exposure, instantly destroying harmful micro-organisms. From viruses such as Hepatitis, STAPH, and E-Coli to Salmonella, HIV and the Influenza viruses, GreenZapr creates the ultimate benchmark for field safety.

The GreenZapr is built on the same, high-quality fabrication people have grown to expect from GreensGroomer. Powered by a portable Honda generator or optional rechargeable gel cell, the UVC lamps are mated into two reflector modules. The standard 3-pass treatment places over 6,707µW/cm² of UVC energy on any given portion of the field — killing all harmful micro-organisms.

Compared to other sanitation techniques, the GreenZapr is the most efficient, most cost-effective method available to the industry.

Manufacturer: GreensGroomer WorldWide Vendor(s): Pioneer Athletics

Availibility: NA, EU, APAC, SA

http://www.greensgroomer.com/GreenZapr2.html

Husky® 800 Neutral Disinfectant Cleaner

Neutral, quaternary-based disinfectant cleaner for use on a wide variety of hard non-porous surfaces. Husky 800 has demonstrated effectiveness against viruses similar to SARS-CoV-2 on hard, non-porous surfaces. Therefore, Husky 800 Neutral Disinfectant Cleaner can be used against SARS-CoV-2 when used in accordance with the directions for use against Adenovirus

- · Disinfection dilution: 2 ounces per gallon of water
- · This product is ideal for use on finished floors due to its neutral pH
- \cdot It inhibits the growth of mold and mildew and controls related odors
- · EPA registered as a broad-spectrum disinfectant cleaning product.
- · Cleans, disinfects and deodorizes in one-step
- Inhibits mold growth
- Hospital use disinfecting
- \cdot Bloodborne pathogen compliant

• Recommended for: Finished Floors, Walls, Metal Surfaces, Stainless Steel, Glazed Porcelain, Plastic Surfaces, Toilet Bowl Surfaces and Urinals, Bathroom Fixtures, Bathtubs and Shower Stalls

EPA Registration #47371-131

Vendor(s): Pioneer Athletics

Availibility: NA

https://pioneerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disinfectant-cleanerathletics.com/managing-facilities/disinfectants/husky-800-neutral-disin



Unit Cost: \$18,000.00





2.3.03 Cleaning & Disinfection Artificial Turf

mPerial Detergent/Disinfectant

Concentrated and highly dilutable detergent/disinfectant/sanitizer specifically formulated for use on hard, common, non-porous surfaces

 \cdot Proven effective against MRSA, Norovirus, HIV-1, E. Coli, salmonella, and others

• Destroys microorganisms by attacking and physically piercing (disrupting) the cell membrane while also using a positively charged Nano-particle (Nitrogen), which "electrocutes" harmful microbes on contact

 \cdot Odorless and colorless, and its nanotechnology bonding chemistry will not rub off on skin or wash out through repeated cleaning

· One gallon makes 64 gallons of usable product

• For use in Athletic Facilities, Schools, Hospitals, Nursing Homes, Institutions, Industrial, Food Establishments, Food Handling and Process Areas, Veterinary Clinics and Other Animal Care facilities

• Registered with the EPA as a virucide and fungicide. EPA Registration #: 10324-59-83129

- \cdot May be used in food preparation areas and many other areas
- · Only available in 5 gallons
- \cdot FDA compliant

Manufacturer: mPact Environmental Solutions Vendor(s): Pioneer Athletics

Availibility: NA

https://pioneerathletics.com/managing-facilities/disinfectants/mperial

Disinfectants For Your Facility





<u>TOC</u>

2.3 Safety and Sanitization

2.3.04 Cleaning & Disinfection Equipment | Electrostatic Sprayers

This equipment category includes cleaning and disinfecting equipment, including products that distribute disinfectants on surfaces (such as low pressure and electrostatic sprayers) and equipment that is used to disinfect germs (such as UV light and on-site hypochlorous acid generators).

Note: Devices and technologies that claim to sanitize or disinfect (e.g., disinfecting chemical products) are regulated in the U.S. by the U.S. Environmental Protection Agency (USEPA). Only equipment that is approved by USEPA and used in accordance with the manufacturer's requirements can be considered to be proved effective in deactivating viruses. However, the USEPA has not tested equipment directly against SAR-COV-2, so recommendations rely on testing on similar viruses in the past. In addition, the EPA does not regulate certain disinfection application equipment such as sprayers and pumps.

ByoPlanet MS-700 COMPACT SERIES

The MS-700 Series Electrostatic Spray System delivers disinfectants and sanitizers in an efficient, cost-effective way. The system uses 65% less solution, works up to 75% faster than traditional methods, and covers up to 18,000 square feet per hour 1.

- Single line, two roller peristaltic pump 2mL/sec. (+/- 8%)
- \cdot Lightweight for everyday use
- Handle mounted sprayer holster w/ drip cup (100mL capacity)
- \cdot 1 Gallon/2 product carry capacity
- \cdot One color coded RDI bottling connection cap 1/8" ID Barb
- \cdot Optional upgrade for two gallon stainlees steel tank

Manufacturer: ByoPlanet Vendor(s): Byoplanet International R&D

Availibility: SA, NA

AECOM Recommended

https://byoplanet.com/byoplanet-ms-700-electrostatic-model.html

Clorox 360 Disinfecting Machines

Keep your facility healthier while saving time, money and labor. The innovative electrostatic sprayer, with the patented PowerWrap[™] nozzle, delivers trusted Clorox solutions to the front, back and sides of surfaces. Superior coverage for better germ protection.

Eligible for use against SARS-CoV-2, the virus that causes COVID-19, based on the EPA's Emerging Viral Pathogen Policy.

Manufacturer: CloroxPro Vendor(s): Decon Seven

Availibility: NA

VenueShield Trusted

https://www.cloroxpro.com/products/clorox/total-360/







2.3.04 Cleaning & Disinfection Equipment | Electrostatic Sprayers

EPIX360[™] Electrostatic Disinfectant Sprayer

The EPIX360 is the most effective handheld disinfectant sprayer in the world. Built to work, this cordless electrostatic sprayer is powerful, durable, and provides breakthrough application performance – more coverage, less waste, and better results. Simply fill the 8-ounce tank with a safe EPA-approved water-soluble disinfectant, pull the trigger, and the EPIX360 goes to work laying down an even, uniform and wraparound layer of germ-killing power up to 4,000 ft2. Plus, with the advanced EPIX technology, grounding is never an issue. And, unlike other electrostatic equipment, the EPIX360 works flawlessly and consistently, greatly improving transfer efficiency and avoiding shock and electrical hazards.

Manufacturer: EMIST Vendor(s): EMIST Availibility: NA, SA, EU, APAC

https://www.emist.com/epix360/

EPIX360™ Electrostatic Disinfectant Sprayer Cordless Backpack

The EM360 provides faster, more consistent application reducing labor and chemical costs. The EM360 allows for one person to disinfect an entire room in seconds and up to 54,000 sq ft per hour.

Manufacturer: EMIST Vendor(s): EMIST Availibility: NA



https://www.emist.com/product/em360-backpack/

EPIX360[™] Electrostatic Disinfectant Sprayer Cordless Roller Cart

The EMist EM360 is the most powerful, efficient and cost-effective disinfection treatment available today. Its patented application system places an electrostatic charge to liquid disinfectants as they leave the spray nozzle, which causes them to cling to virtually any surface. And because one gallon of solution can cover up to 54,000 square feet of surface area per hour, facility managers can save up to 50% on the cost of solution and 45% on labor.

Manufacturer: EMIST Vendor(s): EMIST

Availibility: NA, APAC, EU, SA



https://www.emist.com/em360-rollercart/



2.3.04 Cleaning & Disinfection Equipment | Electrostatic Sprayers

HIPS 360 Electrostatic Sprayer

Electrostatic application takes disinfecting to an entirely new level. Since Annihilyte® contains no volatile organic compounds (VOCs), you can maximize efficacy and efficiency, while resting easy about what solutions are being used in your facility.

Manufacturer: Annihilare Medical Systems, Inc. Vendor(s): Annihilare Medical Systems, Inc.

Availibility: NA

AECOM Recommended



Owner's Manua

SC-FT

ESS Electrostatic

https://www.annihilare.com/jansan/

MaxCharge SC-ET

Compact, Suitcase style sprayer, Two wheels Self Contained, does not require an external air supply. Durable Wheeled Case with Extendable HandleAvailable in 110v (60hz) with a 220v option available. Compatible with all conventional chemicals and fungicides

- \cdot Non-removable tank with drain hose and valve
- Twin-line (air and liquid)
- \cdot Air to Heat exchanger for extended use
- Quiet Operation

Manufacturer: MaxCharge Vendor(s): MaxCharge

Availibility: NA
AECOM Recommended

https://maxcharge.com/product/sc-et/

Proteus Electrostatic Sprayer

Provide every worker with a powerful tool to attack microbes and decontaminate facilities.

While they resemble simple pumps or misters and are as easy to operate, the electrostatic sprayers in EvaClean's system house revolutionary innovations that provide every worker with a powerful tool to attack microbes and decontaminate facilities more efficiently and effectively than ever before.

Manufacturer: evaclean Vendor(s): zogics

Availibility: NA
AECOM Recommended



Unit Cost: \$1,750.00 Units: 1

https://evaclean.com/products/protexus-cordless-electrostatic-sprayers





2.3.04 Cleaning & Disinfection Equipment | Electrostatic Sprayers

VP200ES Professional Cordless Electrostatic Handheld Sprayer

Our Professional Cordless Electrostatic Sprayer allows the user hours of spraying time without the hassle of dragging a cord. In addition, it is designed to save time and labor, spray less liquid, and cover more surfaces. Victory Sprayers' patented technology provides an electrical charge to solutions, allowing them to wrap conductive surfaces with an effective and even coverage. Double-charged particles envelope all conductive surfaces – shadowed, vertical and underneath.

Manufacturer: Victory Innovations Vendor(s): Victory Innovations

Availibility: NA

https://victorycomplete.com/product/professional-cordless-electrostatic-sprayer/

VP300ES Professional Cordless Electrostatic Backpack Sprayer

Our Professional Cordless Electrostatic Backpack Sprayer is designed to allow the professional to cover up to 23,000 square feet on a single tank of fluid (coverage per tank is determined by internal testing using flow rate and particle size). In addition, it is designed to save time and labor, spray less liquid, and cover more surfaces. Victory Sprayers' patented technology provides an electrical charge to solutions, allowing them to wrap conductive surfaces with an effective and even coverage. Doublecharged particles envelope all conductive surfaces – shadowed, vertical and underneath.

Manufacturer: Victory Innovations Vendor(s): Pioneer Athletics

Availibility: NA VenueShield Trusted

https://victorycomplete.com/product/professional-cordless-electrostatic-backpack/







2.3.04 Cleaning & Disinfection Equipment | Floor Scrubber

Nilfisk SC50

Autonomous floor scrubber for medium to large sized environments. Allows staff to focus on other tasks while the Liberty SC50 scrubs for 6 hours on a single charge.

Clean consistently every time. Nilfisk Liberty SC50 is precise, meticulous, and easy to use. It gets into those nooks and crannies you might otherwise miss, and it does it every single time. In fact, operators – and most autonomous cleaning machines – typically miss 15% of a space. But Nilfisk Liberty SC50's unique technology lets you map out a route that delivers between 98% and 99.5% coverage. You can do it with no help from us or anyone else. And as soon as Nilfisk Liberty SC50 has cleaned an area once, it precisely retraces the same path again, and again, and again.

Manufacturer: NIlfisk Vendor(s): thoro.ai

Availibility: NA

https://new.nilfisk.com/en-us/products/floor-cleaning/autonomous-floor-cleaning/

T7AMT Micro Autonomous Scrubber

Drive efficiencies and allow your employees to perform high-value tasks with the T7AMR Robotic Floor Scrubber. Improve your facility's cleanliness with features that ensure consistent cleaning performance and streak-free floors.

Protect guests and employees with the health and safety features found on the T7AMR robotic floor scrubber. The T7AMR Robotic Floor Scrubber is designed and engineered to be easy to use and maintain.

Tested at ASM Global building. Also has Covid related documentation and cleaning processes.

Manufacturer: Tennant Vendor(s): Tennant (MSA)

Availibility: EU, APAC

Marketplace MSA

https://www.tennantco.com/en_us/l/machines/scrubbers/product.t7amr.micro-rider-floor-scrubber.M-T7AMR.html







2.3.04 Cleaning & Disinfection Equipment | Hypochlorus Acid Solution Generator

Annihilare BMI 20 Annihilyte-1 (AoS-HIPS™)

The Annihilare Healthcare Infection Prevention System (HIPS) – Fully automated HOCI production with protocol tracking and bottle dating Annihilare BMI 20 Annihilyte-1

Manufacturer: Annihilare Medical Systems, Inc. Vendor(s): Annihilare Medical Systems, Inc.

Availibility: NA
AECOM Recommended



Unit Cost: \$12,900.00

https://www.annihilare.com/jansan/

Ecolox Tech

Eco One generates 1 liter of disinfectant in 8 minutes using just salt, water and electricity. Stop buying chemicals for cleaning and disinfecting. Save money with an eco-friendly alternative. The disinfectant is hypochlorous acid (HOCI). 100% safe and non-irritant. Harmless if ingested by accident. A safe, non-toxic, all-natural solution produced with just water, table salt and electricity. Kills bacteria, bacterial spores, viruses, and fungi 100x more effectively than chlorine bleach.

Manufacturer: EcoloxTech Vendor(s): EcoOne Availibility: NA

AECOM Recommended

https://www.ecoloxtech.com/ecoone/index



Unit Cost: \$300.00 Units: 1



2.3.04 Cleaning & Disinfection Equipment | Hypochlorus Acid Solution Generator

Instaflow

The InstaFlow™ will satisfy your institutional cleaning needs with a never before seen level of versatility, convenience, and cost-effectiveness. This genuine innovation makes high volumes of safe, sustainable cleaning, sanitizing and disinfecting solutions – whenever it is needed.

Best of all, there is no need to organize and maneuver numerous chemicals around in order to effectively clean, degrease, sanitize and disinfect your establishment.

Manufacturer: GenEon Vendor(s): GenEon

Availibility: NA
AECOM Recommended



Unit Cost: \$7,700.00 Units: 1

https://www.geneontechnologies.com/onsite-generator-hypochlorous/



2.3.04 Cleaning & Disinfection Equipment | Sprayer Backpack

Chapin 24 Volt Li-Ion Backpack Sprayer — 4-Gallon Capacity, 35-40 PSI, Model# 63924

Powerful 35-40 PSI output with 25-30ft. maximum horizontal spray stream to provide the reach you need

- \cdot 1/2 GPM flow rate
- \cdot 24V Lithium-ion battery lasts for up to 2 hours per charge, spraying up to 58 gallons
- \cdot 4-gal. tank with 6in. wide mouth funnel for easy filling and cleaning
- \cdot Convenient carrying handle is built right into the cap

Manufacturer: Chapin Vendor(s): Northern Tool

Availibility: NA

AECOM Recommended



Unit Cost: \$160.00 Units: 1

https://chapinmfg.com/products/chapin-63924-backpack-sprayer?_pos=11&_sid=c0bcbe071&_ss=r&variant=30415672148050

Hudson Diaphragm Pump Backpack Sprayer — 4-Gallon Capacity, 150 PSI, Model# SP0 97158

This 150 PSI Hudson SP0 Triple Function Piston/Diaphragm Pump Bak-Pak® Sprayer has jet agitation for use with wettable powders and is equipped with Viton® seals for durability. Its translucent 4-gallon tank makes it easy to monitor liquid levels. The 20in. brass wand has an adjustable brass cone-pattern nozzle and includes three plastic flat fan nozzles.

- \cdot Jet agitation for use with wettable powders
- \cdot Equipped with Viton seals for durability
- Translucent 4-gallon tank makes it easy to monitor liquid levels
- · 20in. brass wand has an adjustable brass cone-pattern nozzle
- Includes three plastic flat fan nozzles

Manufacturer: Hudson

Vendor(s): Northern Tool

Availibility: NA

AECOM Recommended

https://www.northerntool.com/shop/tools/product_200621386_200621386



Unit Cost: \$150.00 Units: 1



2.3.04 Cleaning & Disinfection Equipment | Sprayer Backpack

Milwaukee M18 Switch Tank 4-Gallon Backpack Sprayer — Tool and Accessories, Model# 2820-20PS

Our M18™ SWITCH TANK™ 4-Gallon Backpack Sprayer kit delivers the industry's first interchangeable tank design with no manual pumping. Designed to meet the needs of professional landscape maintenance, the battery-powered backpack sprayer provides you with instant, constant and adjustable pressure up to 120 PSI and a 25 ft spray distance. The 5-mode pressure adjustment knob adjusts the pressure between 20 – 120 PSI, giving you the capability to complete a wide range of applications. Our M18™ REDLITHIUM™ XC3.0 Battery provides you with up to 12 tanks of spraying per charge. The 4-Gallon Sprayer Tank Assembly features a dual diaphragm pump for longer pump life and Viton® seals for increased durability against harsh chemicals. The sprayer tank has a wide mouth opening for easier pouring and a strainer that filters debris from getting into the tank. The backpack frame includes wide straps giving you added comfort during extended spraying applications and a handle for convenient transport and storage.



Unit Cost: \$300.00 Units: 1

Manufacturer: Milwaukee

Vendor(s): Northern Tool

Availibility: NA

AECOM Recommended

https://www.northerntool.com/shop/tools/product_200695296_200695296



2.3.04 Cleaning & Disinfection Equipment | Sprayer Handheld

Cordless SaniSpray HP 20

The Graco SaniSpray HP 20 is the ultimate portable disinfectant sprayer solution that delivers maximum productivity on smaller disinfecting jobs. Uniquely built with the highest-grade materials that are compatible with disinfectants, sanitizers and deodorizers.

Manufacturer: Graco Vendor(s): Pioneer Athletics, Sherwin Williams (MSA)

Availibility: NA



Unit Cost: \$1,355.00

https://www.graco.com/us/en/contractor/product/25r791-sanispray-hp-20.html

Go Clean Germ Buster Model #3500 & 3590 Compact Cordless

Go Clean Germbuster, ULV Fogger and Mister combined in one, 4ft – 30ft spray distance, disinfecting, sanitizing, fogger, odor removal, decontamination, 360 wrap around cleaning. Comes with 2 nozzle options for overall surface & targeted spaces. Kills 99.9% of viruses, germs & mold. Compact design, ultra-powerful. Easy Grip Handle Includes 3L Tank. Air controller lever, moisture control knob, tank lock for easy separation and refilling, 19 FT. Wrap around Cord *Accommodates longer cords. For larger quantities / Corporate accounts, call factory for your special discounted prices

One 3L tank cleans 8,000 sq. feet, includes: Power on/off Switch, One button -Tank Hook Combination, Tank Valve Air Control, Solution Valve Control, 19 ft. power cordeasily change to longer power cord, Adjustable Mist Control, Shoulder strap, Switch(On/Off) function, Control of chemical amount, One-touch exchange of chemical tank, Anasphere Plus Solution is EPA Certified Solution recommended, or works with any EPA Certified Disinfectant

Works with any EPA Certified Disinfectant as well as ECA Organic Sanitizer or Anasphere Plus EPA Certified Disinfectant Solution,

Also work with Electro Chemically Activated (ECA) sanitizers that are safe to use around food and humans.

Manufacturer:	Eastern Tabletop
Vendor(s):	Eastern Tabletop
Availibility:	NA

https://www.easterntabletop.com/Product1754-Go-Clean-Germbuster--s.aspx



DISINFECTANT FOGGER



2.3.04 Cleaning & Disinfection Equipment | Sprayer Handheld

Go Clean Germ Buster Model #3500 & 3590 Compact Cordless

COMPACT CORDLESS HIGH QUALITY FOGGER

- Wraps around hard to reach surfaces
- \cdot Sanitize a room or equipment in a few minutes.
- \cdot A 10 minute weld to surface accomplishes total disinfection
- \cdot Extra Fine mist ULV Fogger leaves no residue on surface
- Portable, Simple and Ready to Use (no connections required)
- Hospital Grade Disinfectant Solution is EPA certified for treatment of Covid19 and many more viruses
- \cdot Ready to Use and Concentrate bottles available
- Provides Hygiene Transparency and encourages guests to return.

Manufacturer:	Eastern Tabletop
Vendor(s):	Eastern Tabletop
Availibility:	NA

https://www.easterntabletop.com/Product1754-Go-Clean-Germbuster--s.aspx





2.3.04 Cleaning & Disinfection Equipment | Sprayer Portable

KLEAN/pak

The KLEAN/pak works with lots of different disinfectants. Many of those solutions have different dilution rates. That's why the KLEAN/pak has an adjustable metering valve that is factory calibrated and flow tested. It ensures the concentration mix of water to disinfectant is right every time and can be adjusted for almost any appropriate cleaner. The KLEAN/pak is compatible with over 130 EPA List N products. No special equipment required. Just add standard garden hoses, tap water, and disinfectant liquid. User only need wear standard safety glasses and gloves.

Not limited to one disinfectant solution. Choose from many types and brands found on the EPA's website on the List N--Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2.

Simple to use. No special training needed. Up to 5 hours of use between refills.Fast, so employees can quickly disinfect and get back to their normal duties. Accurate, calibrated and flow tested metering valve helps ensure the disinfectant to water ratio is right every time. Safe, it runs on regular tap water at normal pressures.

Flexible, it doesn't need gasoline or power to operate and can be used anywhere a garden hose can be used. Affordable, other kits cost several thousand dollars. Made in America by water flow experts that have been trusted by first responders for over 50 years.

Manufacturer: Klean/pak Vendor(s): Klean/pak

Availibility: NA

https://www.klean-pak.com

SaniSpray HP 130

The Graco SaniSpray HP 130 is the ideal disinfectant sprayer solution that delivers maximum, 2-gun productivity on large disinfecting jobs. Uniquely built with the highest-grade materials that are compatible with disinfectants, sanitizers and deodorizers.

Manufacturer: Graco

Vendor(s):	Pioneer Athletics, Sherwin Williams (MSA)

Availibility: NA, SA, EU, APAC



Unit Cost: \$679.00



Unit Cost: \$3,640.00

https://www.graco.com/us/en/contractor/product/25r793-sanispray-hp-130.html



2.3.04 Cleaning & Disinfection Equipment | Sprayer Portable

SaniSpray HP 65 Electric Airless Disinfectant Sprayer

The Graco SaniSpray HP 65 is the ideal disinfectant sprayer solution that delivers maximum productivity on midsized disinfecting jobs. Uniquely built with the highest-grade materials that are compatible with disinfectants, sanitizers and deodorizers.

Manufacturer: Graco Vendor(s): Pioneer Athletics, Sherwin Williams (MSA)

Availibility: NA, EU, SA, APAC



Unit Cost: \$1,655.00

https://www.graco.com/us/en/contractor/product/25r792-sanispray-hp-65.html



2.3.04 Cleaning & Disinfection Equipment | Sprayers

HaloFogger® STD for HaloSpray or Halomist

The HaloFogger delivers complete surface disinfection throughout any room with the press of a button, delivering a precise amount of disinfectant solution to eliminate pathogens in a myriad of complex spaces found in healthcare, long-term care, and life sciences facilities, as well as in daycares, schools, athletic facilities and more.

Manufacturer: Halosil Vendor(s): Halosil

Availibility: NA
AECOM Recommended



https://halosil.com/



2.3.04 Cleaning & Disinfection Equipment | Steam Cleaner

Blue Evolution S+ by Apex Steam

The BlueEvolution is more flexible than any other professional steamvacuum cleaner. Both the steam and suction power have 3 settings. You can also regulate the hot water inflow continuously using a control valve, which allows you to set the soaking effect on the device individually. Full power for a greater clean & Kind to the environment!

The BlueEvolution is kinder to the environment than almost any other cleaning system. It is only filled with clear water and minimises water consumption thanks to the steam pressure. There is no need for any harmful or really aggressive chemicals.

The applications of the BlueEvolution are practically limitless. The BlueEvolution really comes into its own in areas of high public traffic. Even large areas can be cleaned efficiently and quickly with little effort. Pathogens don't stand a chance!

Manufacturer: APEX Steam Vendor(s): Silver State Sanitization Availibility: NA



https://www.apexsteam.com/product/blue-evolution-s-plus-by-apex-steam/



<u>тос</u>

2.3 Safety and Sanitization

2.3.05 Cleaning & Disinfection Services

The following categories identity cleaning and disinfection services and equipment for consideration by venues. To reduce the risk of Covid-19, more frequent cleaning will be required. In some cases, this may require facilities to engage the services of a company with disinfecting & sanitization expertise.

Enhancity Electrostatic / Nano Barrier Spray - Goldshield

Looking for a comprehensive facility solution? Enhancity is your premier solution for all of your building services, serving the entire US East Coast from New England to Florida. With a complete suite of property solutions optimized to contribute to the success of your property, your staff, and your tenants, Enhancity is driven to exceed expectations.

Serving large corporate enterprises and small businesses alike, Enhancity adds value and efficiency to your property investment with capabilities that include janitorial services, security guard services, concierge and front desk services, maintenance and landscaping, property security, construction and retrofitting, and much more.

Manufacturer:	Enhancity / Eastern JS
Vendor(s):	Enhancity / Eastern JS
	5

Availibility: NA



https://enhancityworks.com/

ESG Decontamination Services

Our state-of-the-art equipment (Fogging machine with "Shockwave" solution or the TOMI Steramist Binary Ionization Technology) is effective in disinfecting premises contaminated by bacteria and virus such as COVID-19 - eliminating 99.9% of bacteria or virus. ESG utilizes the Tomi Steramist System - The Offical Decontamination Technology of the Seoul City Metropolitan Transit System in South Korea.

The Tomi Steramist system is the ultimate tool in disinfecting any space, whether used for specific service needs or acquired for daily use. The SteraMist Surface Unit is one of the best choices to make certain that a facility is using the best technology currently available. The single applicator surface unit enables disinfection of all surfaces - including high touch, sensitive equipment, and electronics. The room is safe to enter within minutes after the ionized Hydrogen Peroxide (iHP) mist has been applied

Manufacturer:	ESG
Vendor(s):	ESG
Availibility:	NA

http://www.nyasbestos.com/





2.3.05 Cleaning & Disinfection Services

Ready For Doors - Decontamination Services

Proactive and Preventive Coronavirus Services

Venues and businesses are now in an environment that possesses many challenges, and most companies are in uncharted waters that they must learn to navigate if they are to survive. In times like this, it is not enough to merely react. There are proactive measures you can start doing today to help protect your building, venue, staff, and customers. We are all in this together.

Preventive action reduces the severity of business interruption by lowering the chance of these illnesses spreading among occupants while in the building or venue. Preventive disinfecting is a great way to remove contaminants from buildings/venues and helps to ease the minds of employees and customers.

Manufacturer:	Ready For Doors
Vendor(s):	Ready For Doors

Availibility: NA

http://www.readyfordoors.com/

Reynolds Spray / Fogging Services

When you've suffered from damaging fire, storm or catastrophe, it's important to start cleaning and repairing right away. In an emergency situation, the sooner we can assess the damage and begin the restoration process, the sooner you can get back in your house or business.

Our team here at Reynolds Restoration Services has the experience and equipment to repair damages as efficiently as possible. We can take care of any type of emergency, using industry-standard best practices and sophisticated tools to restore your home or business to pre-loss condition.

Vendor(s): Renyolds Resoration

Availibility: NA

https://reynoldsrestoration.com/







2.3.05 Cleaning & Disinfection Services | Accreditation

GABC Star

The Global Biorisk Advisory Council® (GBAC) helps organizations and businesses prepare for, respond to, and recover from biological threats, and biohazard situations and real-time crises. We offer education, training, certification, response management, and crisis consulting for situations where environments require a much higher level of cleaning, disinfection, and restoration.

GBAC is a division of ISSA, the worldwide cleaning industry association. Explore becoming a member of ISSA to access discounts to GBAC programs and services.

Manufacturer: GBAC STAR Vendor(s): GBAC STAR Availibility: NA

https://gbac.issa.com/





тос

2.3 Safety and Sanitization

2.3.06 Cleaning & Disinfection Water Treatment Systems

Cleaning and disinfecting water treatment systems for SARS-CoV-2 is not recommended at this time.

Cleaning Chemical/Application (SAO)

The patented SAO dispenser infuses cold tap water with ozone to create safe, high-performing stabilized aqueous ozone (SAO). Benefits of SAO:

- · Eliminates germs, odors, stains, mold, and mildew.
- · Quickly kills viruses and bacteria including E.coli, Salmonella, MRSA and more.*
- · Safe and effective with no toxins, carcinogens, or chemical residue.
- \cdot Converts safely back to tap water and oxygen

· Kills 99.999% of Escherichia Coli and Staphylococcus Aureus within a 60-second contact time.

Manufacturer: Tersano Tersano, Event Merchandise Vendor(s):

Availibility: NA

https://www.tersano.com/

H2O2 Disinfectant Water Production

TK60 stands for total kill in 60 seconds. How is it possible our nontoxic, green disinfectant spray kills COVID-19, MRSA, and C-diff spores lightning fast? The answer is simple really. TK60 is comprised of 99.98% water and .02% (200 ppm) hypochlorous acid (HOCI). HOCl is nontoxic to humans and animals because it's what our white blood cells produce to fight pathogens; our bodies recognize it. Kudos to mother nature.

Manufacturer: R-Water **R-Water** Vendor(s):

Availibility: NA

http://www.r-water.com/







ΤΟΟ

2.3 Safety and Sanitization

2.3.07 Drones or Other Bowl Spraying Cleaning Regimes

This equipment category includes drones that can be used for disinfecting large areas.

Note: Using approved chemicals, the disinfectant drones can spray over large facilities, such as stadiums and or indoor buildings.

Eaglehawk Drone Disinfection

EagleHawk is now offering drone-enabled disinfectant spraying services for large public and private venues,

The current and unprecedented global crisis caused by the SARS-CoV-2 virus and associated COVID-19 illness is changing the way people view the importance of facility cleanliness and the new normal is going to require higher levels of vigilance on cleanliness and sanitation. Large public gathering areas, such as stadiums and arenas, will need to be disinfected on a regular basis for the public to feel comfortable attending events again. Common methods of disinfection, including using crews of people to clean and disinfect areas by hand, are time consuming and too costly to scale across large areas.

EagleHawk's drone-enabled solution is:

• Safe - Applicators are not directly exposed to spraying chemical and EagleHawk only selects the safest chemicals suitable for each use case

 \cdot Effective - EagleHawk only uses chemicals approved by the EPA for effectiveness against SARS-CoV-2

• Efficient - Using proprietary drone-enabled spraying solutions, EagleHawk is able to cover large stadiums and arenas in a fraction of the time

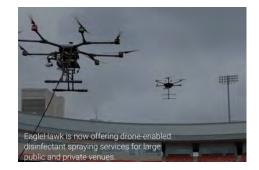
· Economical - Provides affordable solution for regular disinfection

· Sustainable - No known negative impact to surfaces

Manufacturer: Eaglehawk Vendor(s): Eaglehawk

Availibility: NA

https://www.eaglehawk.io/





2.3.07 Drones or Other Bowl Spraying Cleaning Regimes

Omni Drone Disinfection

The Coronavirus (COVID-19) pandemic has forever changed the world we live in and how we approach emergency response. OMI's experience in emergency response is unparalleled, and we continually innovate our approach to better serve our clients. Our Drone Disinfection System disperses a mist of EPA approved agents that kill COVID-19 and 99.9% of bacteria within 60 seconds of contact. With the ability to fly inside large open areas including covered stadiums, sports arenas, convention centers, warehouses, movie theaters, school gyms/cafeterias, or any place with high ceilings/large open spaces, the OMI Drone Disinfection System will give you the ability to provide a safe, disinfected area for your employees and guests to return to.

Rapidly disinfect large areas with OMI's 8-prop, 10L capacity drone

EPA approved agents have bacterial/virucidal disinfection claims that kill COVID-19 and 99.999% of bacteria within 60 seconds of contact, as well as 99.9% disinfection claims against the following organisms: S. aureus, P. aeruginosa, S. enterica, E. coli, K. pneumoniae, L. monocytogenes, Human Rhinovirus 42 (the common cold), and Influenza A (swine flu) with contact times from 30 seconds up to 10 minutes

OMI's FAA Part 107 certified flight crews will work with the client to establish grid patterns/areas of interest to fly over

Manufacturer: Omni Environmental Solutions Vendor(s): OmniAire

......

Availibility: NA

AECOM Recommended

https://www.omies.com/

XAG Drone Disinfection

XAG XPlanet Agricultural UAS is a high-performance unmanned aerial system crafted for the optimum smart agriculture solution. Relentlessly improved with eyes on every detail that develops the perfect type of industrial design, it creates new dimensions of operation efficiency, precision and safety. Harnessing stronger power to support higher payload, XAG XPlanet further optimises the cost-effectiveness of crop spraying and granular spreading. Accurately and safely delivers more in less time.

Manufacturer: XAG Vendor(s): Agiot Corp, Inc Availibility: NA, APAC

AECOM Recommended

https://www.xa.com/en







<u>TOC</u>

2.3 Safety and Sanitization

2.3.08 Hand Sanitizer & Touchless Dispensers

This equipment category includes hand sanitizer options, including touchless dispenser stations; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: While handwashing remains the most effective way to stop the spread of COVID-19, hand sanitizers can be easily provided for situations where soap and water are not available. It is likely that venues will require multiple sanitizer options for different areas of the venue and to provide adequate protection for patrons and employees. Venues should understand that the FDA regulates hand sanitizers, not the U.S. EPA.

Distinctive Sanitation Displays

If your space requires your CARE furnishings to meet a higher level of aesthetic detail, Prestwick can deliver. Easily add your logo or other branded graphic elements with virtually any material or finish—from exotic hardwoods, stainless steel, brushed aluminum, to Corian®.

- Customizable to your needs
- · Portable solution that can be easily relocated
- Many high-end premium finishes available
- · Easy to clean and disinfect

Manufacturer: The Prestwick Companies Vendor(s): The Prestwick Companies

Availibility: NA



https://www.prestwick-group.com/cares/

Hanz Automatic Hand Sanitizer Dispenser and Stand

Encourage your guests to sanitize by using this new Automatic Hand Sanitizer Dispenser and Stand! Equipped with a 500 ml, battery operated dispenser and lock, this Automatic Hand Sanitizer Dispenser and Stand will catch the eyes of people who walk by it so they know to sanitize their hands. The hand sanitizer dispenser is touch free for an easy and quick application. The stand is portable for easy moving.

Vendor(s): GLM Displays

Availibility: NA



https://glmdisplays.com/hanz-automatic-hand-sanitizer-station-with-fabric-graphic/



2.3.08 Hand Sanitizer & Touchless Dispensers

Sanitizer and Wipe Stations

The Max-R Sanitizer and Wipes Stations house sanitary wipes and a 10 gallon waste enclosure in a single footprint. Made from our maintenance free Max-R Lumber™, the station comes with a rigid liner (sanitary wipes not included).

Manufacturer: Max-R Vendor(s): Max-R

Availibility: NA VenueShield Trusted



https://www.max-r.com/product/sanitizer-and-wipe-station

SnappD Single use Hand sanitiser

Snappd is manufactured and filled at our facilities in the UK. It has been developed to deliver a one hand, single shot solution with minimal contact when dispensing liquid. Innovation is at the forefront of our delivery, so we are offering this neat pouch for thousands of applications providing opportunities you had not previously thought possible. The product has a very unique dispensing mechanism to allow the user to dispense the solution with one hand in one movement. Snappd can be used in a range of environments from topical cream, to liquid into the mouth.

The Convenient, Single-dose Liquid Dispenser – Snappd!

Manufacturer: Lifestyle Packaging Vendor(s): Origin Pharma Packaging

Availibility: APAC, EU

https://www.lifestylepackaging.com/snappd-single-dose-dispenser/





2.3.08 Hand Sanitizer & Touchless Dispensers

Spraybox - High Flow Touchless Hand Sanitiser

Rapid Automatic Hand Sanitation

- · Can Process 30 People per Minute
- \cdot Both sides of each hand a simultaneously sanitized automatically
- · Unit holds 25,000 ml or 6.6 gallons per fill.
- The spray box optimizes its usage at just 1 ml per person.
- \cdot With a single II, the spray box can sanitize 25,000 people at a cost of only £60.

Vendor(s): Origin Pharma Packaging

Availibility: EU



http://www.originltd.com/

Touchless Hand Sanitiser with digital display

Auto Dispense via the built-in IR Sensor, clean, safe & completely touch free to avoid cross infection. Number of Dispensing times can be adjusted to 1,2,3 or 4. 3.6L Internal Reservoir. Volume: 3600ml – provides 9000 Pumps. Optional Dispenser heads providing; hand foamer at 0.4ML, 1ml, 1.5ml

Floor Standing or Wall Mounted :4 x fixing points to the rear of the unit making wall mount installation an a easy solution, or Optional Extra floor stand for a more mobile freestanding solution

PCAP Touch Screen: The 10 Point Touch Screen offers a safe & sanitised display, ideal for Visitor Management Systems, or online links to the Latest WHO & NHS England websites, or your own websites.

USB Plug & Play Media Player: Load your pictures and videos onto a USB memory stick then insert it into the display, the screen will then start playing the pictures and videos in a continuous loop.

Vendor(s): One Digital Sign

Availibility: EU, NA

https://www.onedigitalsignage.co.uk/products/hand-sanitiser-display/





<u>тос</u>

2.3 Safety and Sanitization

2.3.09 Other Useful Equipment

This equipment category includes touchless trash receptacles, sanitizing mats and disinfecting handle covers.

16 Gallon Dual-Compartment Stainless Steel Sensor Recycle Bin/Trash Can

6 Gallon Dual-Compartment Stainless Steel Sensor Recycle Bin/Trash Can. Stainless Steel 2-Compartment Recycle Touchless Trash Can®. The next generation recycle trash can with AS technology.

- \cdot Infrared sensor function allows for touch-free operation
- $\cdot\,2$ inner buckets for trash and recycle convenience
- \cdot Includes 4 wheels for easy and quick mobility
- Eliminates cross-contamination of germs

 \cdot Automatic lid closing feature keeps bugs away and eliminates odor leakage

Manufacturer: iTouchless Vendor(s): iTouchless Availibility: NA

Unit Cost: \$199.95

https://www.itouchless.com/commercial/commercial-trash-cans

2.5 Gallon Multifunction Stainless Steel Sensor Can (2 Units)

 $2.5\,Gallon\,Multifunction\,Sensor\,Trash\,Can \ensuremath{\mathbb B}$ With Deodorizer and Fragrance (set of 2)

- \cdot Sensor-operated trash can
- \cdot Stainless steel can body repels dust and fingerprints
- \cdot Includes a combination of a carbon filter deodorizer and a fragrance cartridge to prevent odor
- Includes two trash cans

Manufacturer: iTouchless Vendor(s): iTouchless

Availibility: NA



Unit Cost: \$199.95

https://www.itouchless.com/commercial/commercial-trash-cans



2.3.09 Other Useful Equipment

Safe Handles

SafeHandles™ are shrink to fit and adhesive film covers that continuously reduce the growth of certain microbes to ensure the product is clean and durable.

• Cover it! SafeHandles™ are designed to cover most common touchpoints such as door handles, push plates and hand railings.

• Keep it clean! SafeHandles™ work 24 hours a day, 7 days a week to maintain an unparalleled level of clean for up to6 months.

• Safe to use SafeHandles[™] technology utilizes a slow release silverbased pesticide that is registered and approved by the EPA to inhibit the growth of certain microbes that may affect this product.

Manufacturer: Safe Handles Vendor(s): Safe Handles

Availibility: NA



https://safehandles.com

Sanitizing Walk-Off Mats

Made entirely in the USA, The SaniStride®; Stride, Sports, Stride Low Profile, Long Runner and Wide Runner Shoe Sanitizer Mat Systems all come with one of our proprietary inserts in place in the rubber base mat. The insert is very absorbent and able to hold within it a large quantity of shoe disinfectant for delivery to the shoe bottoms when stepped on.

Much like a disinfectant boot bath or boot dip mat, if charged properly, the SaniStride Systems are able to deliver a large quantity of sanitizer deep into the shoe treads and crevices, thoroughly soaking the germs on the bottoms of footwear... but without the messy splashing and wave creating loss of disinfectant that occurs in the open puddle boot mats. Also because the majority of the shoe disinfectant is contained in our spongy insert, loss of liquid due to evaporation is not as considerable as the open puddle shoe mats or other shoe sanitizer mats. Do not use chlorine bleach in the SaniStride Systems, it will damage them.

Manufacturer: Sani-Stride Vendor(s): Sani-Stride

Availibility: NA

https://sanistride.com/shop/



STRIDE Mat System 1" Deep \$229.50



2.3.09 Other Useful Equipment

Surface Skins

Surfaceskins antibacterial door pushpads & pullhandles are designed to kill deposited germs in SECONDS, via secretion of an alcohol gel, to achieve self-disinfection, thus protecting every door user, whilst complementing existing gel dispensers & hand cleaning.

Hand washing and gel dispensers clean hands, but as soon as you touch a door you risk becoming contaminated from a previous door user. Surfaceskins are NOT designed to clean hands, but are engineered to kill deposited germs and bacteria in the VITAL seconds between one user and the next passing through the door, thus helping prevent the spread of some of the germs and bacteria associated with healthcare associated infections (HAI's). The Performance Advantage: Surfaceskins are designed to kill germs in seconds. Alternative silver & plastic based products can take many hours to achieve a similar germ kill level.

In short, gel dispensers and hand washing are vital to make hands clean, Surfaceskins KEEP hands clean and help prevent the spread of germs and bacteria, when passing through a door. Two systems, [Surfaceskins & gel dispensers / hand washing] with very different infection control roles and benefits working together.

Manufacturer: Surface Skins Vendor(s): Trimark

Availibility: EU, APAC

https://surfaceskins.com





тос

2.3 Safety and Sanitization

2.3.10 Seat Covers & Closures

This equipment category includes equipment that can be used to temporarily close toilets or toilet seats.

Note: Some seats or toilets may need to be temporally closed to ensure social distancing is maintained.

Covermaster Seat Covers

Stadium seat covers solve the problem of excess seating capacity and can potentially generate extra advertising revenue. Wherever a stadium, auditoriums, ice arena, or sports field finds it desirable to camouflage unsold capacity, custom designed seat covers are the answer. Since each event has different seating requirements, COVERMASTER® seat covers allow you to adapt your seating capacity to match the event. And because bleacher covers are custom made, they can be used to display team logos and pennants or generate revenue as an advertising medium.

Manufacturer: Covermaster Vendor(s): Covermaster Availibility: NA



http://www.covermaster.com/Stadium/Stadium-Seat-Covers/



TOC

2.3 Safety and Sanitization

2.3.11 Signage & Graphics

This equipment category includes options for signage and graphics for a wide variety of messaging purposes.

Note: The venue will require a variety of new signage and graphics for messaging related to experience direction, education, wayfinding, and information signposting for both guests and employees.

Graphics and Signage

Floor Decals are a helpful signage option to remind visitors of social distancing recommendations. Circular floor decals are an effective way to communicate with customers while taking up no physical space. Floor decals like these are effective at preventing the spread of germs by reducing cluttering among customers in areas where they congregate.

 \cdot Pack of (5) floor decals included in Unit Cost

· Ideal for floor marking areas of congregation to communicate and direct customers to maintain safe social distances

- · Anti-slip material that is ideal for floor graphics
- · Low Tac Indoor Floor Graphic adhesive

Manufacturer: AMI Graphics Vendor(s): AMI Graphics

Availibility: NA

https://openforbusinesssigns.com/collections/floor-logos

Graphics and Signage

COVID-19 Essential Signage: We have a variety of designs, styles and messages, available in a wide variety of products - we'll even customize with your logo. Our goal is to enable you to protect your business, employees and customers, while maintaining a cohesive, professional look. Maintaining a safe environment is our top priority.

Manufacturer: Olympus Group Vendor(s): Olympus Group

Availibility: NA

https://www.olympusgrp.com





Keep A Safe Distance Circular Floor Decal - 5 Pack from \$25.00





2.3.12 Sneeze Guards and Barriers

This equipment category includes sneeze guards and barriers for customer-facing checkout areas throughout the venue.

Note: Facilities should refer also to any pertinent local governmental requirements.

Counter/Table Top Shields

Social distancing isn't always possible when completing a financial transaction or signing in at healthcare facilities. Designed for retail, healthcare, reception desks, and foodservice applications, this protective barrier fits most counters and doesn't require any adjustments to your existing furnishings. The Counter Shield was designed to accommodate credit card machines while still providing protection for employees and customers.

· Keep employees and guests safe with table and counter barrier options

- · Portable solution won't damage your existing furnishings
- \cdot Easy to clean and disinfect
- · Custom sizes available

Manufacturer: The Prestwick Companies Availibility: NA

https://www.prestwick-group.com/cares/

Full Body Shields

Provide employees and guests protection with our Body Shields. Create a physical barrier between workstations for an added protective barrier to stop the spread of germs. Customize to your needs, add graphics for required messaging, hand sanitizer dispenser, or optional openings for temperature and healthcare testing.

· Easy to install, no hardware required

· Customizable to your needs - specify your height/width, graphics, shelving and sanitation mounting needs

· Portable solution that can be easily relocated

on a confidential basis and in accordance with the confidentiality provisions of the Business Conduct Policy.

· Easy to clean and disinfect

Manufacturer: The Prestwick Companies The Prestwick Companies Vendor(s):

Availibility: NA

https://www.prestwick-group.com/cares/





technology and equipment catalog / 02

TOC

2.3.12 Sneeze Guards and Barriers

Office/Cubicle Shields

Give employees and guests confidence that their safety and well being is being looked after Completely adaptable systems that attach to many common modular office cubicle systems. Customized solutions for open office concepts including shared tables and workstations. Easy to clean and disinfect

Manufacturer: The Prestwick Companies Vendor(s): The Prestwick Companies

Availibility: NA



https://www.prestwick-group.com/cares/

Social Distance Shield

Made in USA Acrylic or Polycarbonate Plastic, Sizes can be 48" x 96"

- Any shape can be cut
- · Can have rounded corners
- \cdot Holes can be cut for easy access and maximum protection (for
- example: credit card machines)
- \cdot Flame polished edges

Manufacturer:	Louvers International
Vendor(s):	Louvers International

Availibility: NA



https://louversintl.com/led/social-distance-shield/



2.3.13 UV Technology

This equipment category includes UV technology options. At this time, UV has have not been proven effective against COVID-19.

Note: In specific circumstances, disinfection can also be completed using physical methods, such as ultraviolet light (UV) in the 200-280 nm range (UV-C), heat, and radiation. Heat and radiation are not appropriate for disinfection methods for the built environment. UV-C may have specific applications if devices manufactured can provide sufficient documentation regarding their effectiveness on COVID-19.

Aitheon Thermal Scanner Pulse oximeter

Yezhik UVD is used as part of a regular cleaning cycle preventing and reducing the spread of infectious diseases, bacteria, viral, and other types of harmful organic microorganisms by breaking down their DNA-structure.

Robots have inbuilt sensors around the perimeter that will analyze their surroundings allowing the robots to avoid obstacles and change route if needed without interruption to the robot's tasks.

Robots predict movements of humans, animals, vehicles and other moving equipment. This allows robots to plan their trajectory and then build their own trajectory based on this data.

Moreover, they can stop immediately when there is no chance to avoid a collision. This provides a predictable and safe work environment.

Robots are equipped with emergency stop bumpers and buttons to stop the robot when manual intervention is required.

Manufacturer: Aitheon Vendor(s): Aitheon Availibility: NA

https://aitheon.com/medical-robots

Altoros UV Disinfection Robot

Operating in a semiautomatic mode, the robot with inbuilt ultraviolet (UV) lights disinfects rooms and surfaces. With motion sensors, the system distinguishes humans from other visible objects to prevent damage to human health. The robot effectively destroys harmful microorganisms, causing the COVID-19 disease.

The robot aims at preventing and reducing the spread of infectious and harmful microorganisms by destroying their DNA structure with UV lights. With a wavelength of 222- or 254-nanometers, the robot kills bacteria in public places, such as hospitals, office spaces, schools, airports, etc. UV Disinfection Robot is designed to aid your cleaning staff on a daily basis, while eliminating human error.

Manufacturer: Altoros Vendor(s): Altoros

Availibility: NA

https://www.altoros.com/

C	

v and is the exclusive property of ASM Global Parent, Inc Reproduction or distribution of this or any part of	



ΤΟΟ

2.3.13 UV Technology

Apollo UV Room Sterilization

V-C light with ozone helps kill bacteria, viruses, allergens, and mold efficiently. It can purify the air and remove odors in 360° to help create a safer living environment. The Apollo UV-C Disinfection Lamp harness this Germicidal UV-C light at 60 Watts to have an effective disinfection range of up to 645 ft². This size is large enough to disinfect most rooms in a very quick and effective manner It's also Two-In-One Cleaning, with UV-C light and ozone to disinfect surfaces, deodorize and purify the air

Manufacturer: Smart UV Vendor(s): Smart UV

Availibility: NA



https://www.smartuv.shop

MoonBeamTM3 Disinfection Technology

A game-changing angle for targeted disinfection – This portable, powerful solution disinfects quickly, reliably and responsibly. MoonBeam3 is designed for fast, on-demand disinfection of high-touch surfaces in patient rooms, operating rooms and bathrooms and can be used on patient care equipment, fixtures, keyboards, monitors and work stations on wheels (WOWs).

Three individually-adjustable, articulating arms can be positioned at almost any angle to target the UVC light, enabling improved UVC dosing with reduced energy. Users can position the heads to optimize UVC dosing of surfaces and equipment. This flexible device is easily positioned throughout a room or facility to enable fast and effective disinfection cycles.

Cost-effective disinfection assurance – MoonBeam3 is affordable to own and operate. It is quick and easy to use, with operation cycles as short as 3 minutes. Its unique design allows the device to be used in more places and its targeted, high efficiency dosing increases speed, allowing reduced labor and operation costs. MoonBeam3 adds assurance above and beyond your manual cleaning and disinfection process, reducing the risk for patients and staff. It is simple to use and periodic maintenance is limited to bulb replacement, with no tools required.

Manufacturer:	Diversey
Vendor(s):	Diversey
Availibility:	NA

https://diversey.com/en/solutions/infection-prevention/uv-c-disinfection/moonbeam-3





2.3.13 UV Technology

Sanitaire® UV Room Air Sanitizer

- \cdot Constructed of corrosion-resistant Stainless Steel
- · Utilizes germicidal ultraviolet (uv) lamps
- \cdot Destroys harmful bacteria, mold and viruses in the air
- For use in occupied areas, Flu Prevention Steps
- · Variety of mounting configurations available
- · A sight glass assembly allows for visual inspection of the lamps
- Interior surface is polished maximizing ultraviolet intensity
- · Continuous disinfection without special attention
- · Several styles available to handle various applications

Manufacturer: Atlantic Ultraviolet Corporation Vendor(s): buyultraviolet.com

Availibility: SA

AECOM Recommended

https://ultraviolet.com/

Sanuvox Air Disinfection and mobile units for Room disinfection

Stand-alone and compact unit that can easily be installed in the ceiling. It purifies the air of up to 500 square foot room. This unit slows the air at the inlet of the aluminum treatment chamber, purifies it with UV, and then distributes it through the outlet located directly on the outside panel of the unit. This product is under revision for new model design. The new model will be called Sanuvair® S100.

Manufacturer: Sanuvox Technologies Inc. Vendor(s): No distribution yet Availibility: NA

AECOM Recommended

https://sanuvox.com/

Tru-D Product

Why every surface matters. Germs and pathogens can live anywhere which is why every surface should be a priority when it comes to cleaning and disinfection. Tru-D's shown efficacy makes it a trusted choice for health care professionals. Multiple independent studies by epidemiological thought leaders and experts in disinfection and sterilization practices have shown Tru-D as an effective, single placement approach to disinfect a room. This is accomplished by measuring the proper dose of UVC energy that reaches the walls and is reflected back to the center of the room.

Manufacturer: Lumalier Products Vendor(s): Agiot Corp, Inc

Availibility: NA

AECOM Recommended

https://www.lumalier.com/









2.3.13 UV Technology

UV Disinfecting Lighting, Air handling Units

Until recently, low-pressure mercury vapor or fluorescent UV-C lamps have been the best option for disinfecting the cooling coils in AHUs. These lamps are low intensity, must run continuously (24/7) and be mounted at a close distance (4"-6") to coils and filters. There's a faster, safer, and more effective solution.

A single Helo FI fixture uses a proprietary pulsed xenon bulb powered by Violet DefenseTM technology. It is lab verified to kill 99.9% of bacterial and fungal growth up to 6.5 ft away in 1-2 hours. The installation is simple and only requires an electrical outlet. Pulsed xenon lamps are more efficient at generating UV radiation therefore the wattage is significantly lower. A single Helo FI unit consumes 45W of energy and has a run time of two hours a day, saving thousands of dollars per year in energy in large buildings.

With lower maintenance requirements and built-in occupancy sensors, the Puro solution is safer by eliminating the risk of damaging light exposure. Our lamps do not require a kill switch, and though unnecessary, can even be unplugged if there is a fear of exposure while performing routine maintenance.

The Total Cost of Ownership over 5 years is 1/3 the cost when using Puro's fixtures (see table). At a run time of 2 hours per day, these lamps have a projected 5-year life span and eliminate the maintenance cycle. In large buildings with 60-70 AHUs, this results in massive time and maintenance labor savings. This breakthrough in UV technology is making UV systems more energy and cost efficient, easier to maintain, and delivering long term value for the owner and operator.

Manufacturer: Puro Lighting Vendor(s): Brennan Lighting, LLC Availibility: NA

https://purolighting.com/ahu/

UVD Robot

The UVD Robot is used as part of the regular cleaning cycle, and aims at preventing and reducing the spread of infectious diseases, vira, bacteria, and other types of harmful organic microorganisms in the environment by breaking down their DNA-structure. The robot is safe, reliable and eliminates human error. Furthermore, it is user friendly and is designed to be operated by every-day cleaning staff.

Manufacturer: UVD Robots Vendor(s): UVD Robot

Availibility: NA
AECOM Recommended

http://www.uvd-robots.com/







2.3.13 UV Technology

Vital VVio Antimicrobal Light (always on)

Vital Vio's lighting is very different from ultraviolet (UV) light that attacks the DNA structure of a microbe and is very dangerous for human exposure.

Vital Vio's patented antimicrobial light technology delivers a precise spectrum of visible light (400nm – 420nm) that initiates a photoactivation of porphyrin molecules found exclusively inside microbes (not humans, pets or plants). This photo-activation leads to the production of Reactive Oxygen Species (ROS). In high doses, ROS cause irreparable damage to the cellular structure, which leads to bacterial cell death

Manufacturer: Vital Vio Vendor(s): J5 Partners Availibility: NA

https://vitalvio.com/



A 21st Century Way to a Cleaner World Vital Vio's planet-friendly antimicrobial LED lights combat the growth of bacteria, fungl, yeast, mold and mildew. At Home. In Public Places. And in Every Industry



2.4 Vertical Transportation

2.4.01 Elevator External

This equipment category includes external controls for elevators to allow elevator operators to designate the cab destination externally, thereby eliminating the need for an elevator operator in the cab. Options are available from most major elevator equipment manufacturers and third-party vendors.

Note: External elevator controls may be useful to venues in reducing elevator capacity to comply with physical distancing requirements. These systems will allow elevator operators to remain outside the cab, while still allowing them to operate the elevator.

Elevator and Escalator

We continue to pioneer state-of-the-art elevator control systems by building upon the reputation of our industry-endorsed Millennium™ platform. The new generation Viridian controller comes standard with Fujitec's FLEX-NX independent dispatching computer and a new CPU that increases processing speed by 250%. These enhancements result in improved performance, traffic distribution, dependability and ride quality.

Manufacturer: Fujitec Vendor(s): Fujitec

Availibility: NA, SA, EU, APAC



http://www.fujitecamerica.com/products/elevators

Elevator and Escalator

thyssenkrupp elevators help keep people moving in residential and office buildings, hotels, hospitals, train stations and airports. Our passenger and freight elevators are sought-after by architects, planners and facility managers – whether for new installations or modernization projects. Our German-engineered elevator systems offer increased user safety, superior ride comfort and maximum availability. With our innovative solutions we are contributing to the mobility of the future.

Manufacturer: thyssenkrupp Vendor(s): thyssenkrupp (MSA) Availibility: NA, SA, EU, APAC

Marketplace MSA



Original Science sectors / Division Sectorslogy
 Original Science Sectors (Science Sectors)
 Original Science Sectors (Science Sectors)
 Original Science Sectors (Science Sectors)
 Original Science Sectors
 Original Science Science

Elevator Technology

At thyssenkrupp, our Elevator Technology business designs and delivers immovality passenger transportation solutions that make cities the best ever places to live. As leading too empire, finish herongy we follow type autified estimate being, ministere, main, manual environment.



https://www.thyssenkrupp.com/en/company/corporate-structure/elevator-technology



2.4 Vertical Transportation

2.4.01 Elevator External Controls

PORT Technology

Schindler has once again redefined the boundaries of performance with our third generation destination-dispatch system. Schindler's PORT Technology revolutionizes the science of optimizing traffic flow through a building while offering personalized service and access control.

Manufacturer: Schindler Elevator Vendor(s): Schindler Elevator (MSA)

Availibility: NA, SA, EU, APAC Marketplace MSA

originating floor.	_		_	-
Â				Mail.
	(C)	CO .	٠	20

https://www.schindler.com/us/internet/en/mobility-solutions/products/destination-technology/port-technology.html



TOC

2.4 Vertical Transportation

2.4.02 Escalator Antimicrobial Handrails

This equipment category includes antimicrobial handrail products that are available as an applied film over an existing handrail or complete handrail replacement.

Note: While these solutions provide antiviral protection, they have not been proven effective against COVID-19.

UV Light Escalator Railing Disinfecting

Ad Rail[™] Escalator handrail media includes an Antimicrobial protected lamination which eliminates germs significantly, and offers venues with escalators a unique opportunity to provide a cleaner surface for visitors to hold onto while delivering messages that effectively increase safety and can generate new revenue by offering this unique space to brands.

Manufacturer: Ad Rail Vendor(s): Ad Rail Availibility: NA



https://adrailusa.com/home/



2.4 Vertical Transportation

2.4.03 Escalator Handrail UV Disinfection

This equipment category includes solutions for UV disinfection of escalator handrails. UV disinfection products are available from most escalator manufacturers and third-party vendors

Note: .While these devices provide antiviral protection, they have not been proven effective against COVID-19.

Clear Win Escalator Sterilizing UV

Designed for the hygiene of escalator handrail. The first escalator handrail sterilizer using UVGI in the world ClearWin HK

Manufacturer: Clear Win Vendor(s): Clear Win

Availibility: SA, EU, APAC

AECOM Recommended



https://en.clearwinhk.com/

EHC Global Escalator Handrail Disinfectant (UV Light Tech)

EHC Global (EHC), a leading manufacturer of components, technical services and integrated solutions to the vertical transportation industry, is pleased to announce the introduction of its LED UV-C Handrail Sterilization Solution for escalators and moving walks. The compact LED UV-C Handrail Sterilization Module is mounted internally, which provides several key advantages over externally mounted devices. These benefits include the elimination of risks and costs associated with entrapment (fingers, clothing, etc.), damage caused by impact, vandalism, theft, unnecessary downtime, and the obstruction of ingress and egress access on escalators and moving walks.



Manufacturer: EHC Global Vendor(s): EHC Global

Availibility: NA

http://www.ehc-global.com/



2.4 Vertical Transportation

2.4.03 Escalator Handrail UV Disinfection

Kone Anti-microbial elevator surfaces

Based on silver ions, the anti-microbial coatings featured in the KONE DX Class elevator series improve hygiene by inhibiting bacteria, mold, fungi and even viruses. Coated with durable powder paint, antimicrobial handrails reduce up to 99% of contaminating bacteria.

Besides helping to prevent diseases from spreading, the functional elevator car materials deliver other value-adding features that can be selected to match the customer's needs. Specialized anti-stain coatings can, for instance, save time and effort spent on cleaning and maintenance.

"With the KONE DX Class elevators' easy-to-clean, scratch-resistant and anti-fingerprint smart surface laminates, the interior is easier to keep clean and looking its best. Any small scratches on the surface can even be 'healed' using thermal treatment," explains Kuitunen.

Manufacturer: Kone Vendor(s): Kone (MSA)

Availibility: NA

Marketplace MSA

https://www.kone.com/en/news-and-insights/stories/smarter-surfaces-cleaner-elevators.aspx

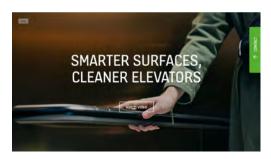
WeClean - Escalator Sanitizing UV Unit

Triple cleaning system. 3X more thorough WeClean removes dirt and bacteria in 3 ultimate ways Philips UV lamp to get rid of remaining bacteria and ensure the handrail is completely dry. Three-tier lint-free roller to wipe off any dirt, dust and disinfectant residue. WeClean.Cl-an eco-friendly natural disinfectant to kill 99.99% of germs on the handrail. Self-charging battery generates electricity from motion of the escalator handrail. Control and keep an eye on WeClean's progress in real time from anywhere

Manufacturer: We Clean Vendor(s): We Clean

Availibility: APAC, EU, SA, NA AECOM Recommended

https://www.weclean.com.hk/how-it-works







тос

2.5 Software & Mobile Apps

2.5.01 Crowd Density Heat

This equipment category includes software and mobile app platforms that can provide real-time crowd intelligence in support of crown control and safely opening and operating venues.

Crowd Intelligence / Social Distancing Software

Reopen with Confidence. Real-time crowd intelligence for safer, smarter reopen strategies.Al-Driven Decisions

- Know when common areas and offices are reaching capacity.
- Determine whether new regulations are being followed.
- Track room and building use for phased reentry.
- · Plan cleaning and sanitation efforts through single view.
- · Empower fans or users to make distancing decisions.

Manufacturer: Armored Things Vendor(s): Armored Things Availibility: NA



https://www.armoredthings.com/

Safe Distance

In an effort to help public venues safely re-open and address public concern over the spread of COVID-19, iinside, a leader in indoor motion analytics for airports and other public venues, today announced the release of SafeDistance, a free upgrade to its LiDAR-powered solution for monitoring and analyzing crowd density in public spaces.

Manufacturer: iinside Vendor(s): iinside

Availibility: NA

https://iinside.com/safety/





<u>TOC</u>

2.5 Software & Mobile Apps

2.5.02 Reaching Guests, Vendors & Employees, etc

This equipment category includes software and mobile app platforms for contacting all guests, vendors, and employees to provide real-time information on a variety of topics (ticketing, crowd control, changes in safety protocols).

Concept3D Wayfinding

Wayfinding is more than directions. It is always knowing where and turning that into valuable actions or decisions. This can be turn by turn directions for a forklift in a warehouse or guiding a building or campus visitor to their destination. Digital wayfinding systems and software embrace mobility, signage display, AR/VR, and desktop. Today's wayfinding can be high tech or low tech. Concept3D provides the tools and services you need to develop 3D navigation, support digital signage, display touch screen on-site direction kiosks, create customoriented printed maps and the communicate the best possible on-site mobile directions.

Manufacturer:	Concept3D
Vendor(s):	Concept3D

Availibility: NA

https://www.concept3d.com/interactive-virtual-experiences/features/wayfinding





TOC

2.5 Software & Mobile Apps

2.5.03 Wayfinding

This equipment category includes a variety of software and mobile apps to support effective and efficient wayfinding in the venue, thereby minimize queuing for restrooms, concessions, and other services.

Note: As an example, this technology can continually monitor queuing lines and advise guests of the nearest service with the shortest wait time.

KrowdThink

Mass Communication App to engage with customers

Supporting Engagement – Fostering Community. Just connect to the Wi-Fi or your community. Krowd to engage in a place or an event. Discover who's here and share's your interests. Message them and meet. Great networking made easier. The Krowd creates a group chat like a cross between a large WhatsApp group and a Twitter feed with Tik-Tok video features, but specific to place or event. Share what's happening in real-time with others that are there in our Krowdfeed.

Your privacy is assured; we keep virtually no data worth taking. Yet we still sustain the highest cyber security standards so your messages remain private.

Manufacturer: Krowdthink Vendor(s): Krowdthink Availibility: EU, APAC

https://krowd.app/krowd.html



Want to make your crowded place safer? Request a trial and pricing.



<u>TOC</u>

2.5 Software & Mobile Apps

2.5.04 Incident & Task Management

This equipment category includes digital incident management systems software that provide operations management and stakeholder integration. These systems not only digitally log incidents, they can also help allocate, track, and audit COVID-19-related tasks and processes.

24/7 Cleaning & Disinfecting Software

Conduct daily and weekly inspections to ensure adequately cleaned and disinfected locations and equipment. If there is a failed inspection, immediately and automatically notify the necessary employees to handle it. Failed inspections can result in a work order being created for prompt resolution. Create daily cleaning and disinfecting tasks to be completed on time. Track their status with ease

Our mobile app revolutionizes communication and is the ultimate tool to manage cleaning and disinfecting inspections and tasks.

24/7 Software's Cleaning & Disinfecting mobile app can be used either on an iOS or an Android operating system. Our app is icon-based, ensuring that cleaning and disinfecting on your property can be quickly and easily managed. Manufacturer: 24/7 Software Vendor(s): 24/7 Software

Availibility: NA VenueShield Trusted

https://www.247software.com/cleaning-and-disinfecting-software-for-properties

Raven Incident and Covid Task Management

Take Command & Control to a Higher Level Manage the right information to the right people at the right time and respond to incidents with greater efficiency than ever before. Raven Controls is an innovative live-time event logging and incident management tool providing shared integrated situation awareness like never before - the greatest digital overview yet.

- \cdot Reopen with Confidence
- · Real-time crowd intelligence for safer, smarter reopen strategies.
- Greater accountability
- Increased visibility
- · Shared situational awareness
- Improved response times
- Increased staff confidence
- \cdot Enhanced integration and coordination
- \cdot Reduced radio traffic through remote updates
- Scalable to suit all
- \cdot Key stats and metrics to inform future planning

Manufacturer: Raven Vendor(s): Raven

Availibility: APAC, EU

https://ravencontrols.io





2.5 Software & Mobile Apps

2.5.04 Incident & Task Management

Virus Safe

Our VirusSAFE Pro software provides checklists, reminders and confirmations that help your team perform health and safety measures on schedule Task assignment and validation integrated into your workflows Learning management through distributed elearning Data capture triggered by time, location, and/or person Dashboards analytics providing aggregated insight

Manufacturer: Work Merk Availibility: NA



https://www.workmerk.com



тос

2.6 Physical Crowd Control

2.6.01 Crowd Control Devices

This equipment category includes stanchions and tensabarriers.

As part of the social distancing, enforcement strategy equipment may be utilized to help deliver the implementation of the strategy in places where natural queues may form.

Belt Barrier

Practical barrier with retractable belt, perfect for visitor queueing areas.

Manufacturer: The Delta Group Vendor(s): The Delta Group Availibility: APAC, EU Belt Barrier

Practical barrier with retractable belt, parfect for visitor queueing areas.

https://www.thedeltagroup.co.uk/

Stanchions

Retractable belt stanchions and crowd control barriers are an effective way to manage customer flow in the queue and around your facility. Our large selection of indoor and outdoor stanchions, retractable belt barriers, and storage and deployment solutions offer innovative, costeffective ways to manage customer flow and maintain operational efficiency. Check out our solutions below.



Manufacturer: Lavi Vendor(s): Lavi Availibility: NA **VenueShield Trusted**

https://www.lavi.com/en/crowd-control/stanchions-barriers



2.6 Physical Crowd Control

2.6.01 Crowd Control Devices

Tensabarrier

Unlike other retractable stanchions, the Tensabarrier® has a patented braking system that incorporates twin brake shoes. As a result, the webbing falls to the floor upon release before slowly retracting back into the stanchion. This originally patented braking system makes the Tensabarrier® the safest belt barrier available on the market.

The Tensabarrier® has been designed with a topple angle of 35°, which increases its stable equilibrium. This means that when pushed, the retractable barrier posts will not fall over; instead it will tilt up to 35° before returning to its original position. At Tensator®, safety is taken seriously. Tensabarrier® retractable stanchions allow you to enhance space, while reducing risks of costly accidents that could be caused within your business area.

Whether you want to manage your queuing space, or cordon off access to a restricted area, there will be a Tensabarrier® for your needs. Genuine retractable belt barriers from Tensator®, will carry a Tensabarrier® branded tape end, which has been introduced as an additional quality measure to reassure customers they are buying the real thing. This product is brought to you by the leader in Queue Barrier Systems, Tensator®.

Manufacturer: Tensabarrier Vendor(s): Tensabarrier, Grainger (MSA)

Availibility: NA

VenueShield Trusted

https://www.tensabarrier.com/





2.7.01 Air Filtration

This equipment category includes air filtration equipment for removing airborne pathogens, including the virus SARS-CoV-2.

Note: Air filtration systems differ from purification systems in that capture airborne particulates, rather than destroy or deactivate airborne them.

Air filtration is the most widely accepted, verified, and utilized means of environmental protection from airborne pathogens.

Amaircare 6000V Cart

The Amaircare 6000V Cart is a high-quality HEPA air purification unit that includes:

· Steel tube cart & heavy duty tires.

- · Easy access to filter for quick maintenance.
- · Removable IEC power cord.
- Third Stage VOC canister upgrade available.
- · Second stage Carbon only canister available for special applications.
- Made in Canada & covered by a 5-year limited warranty.

Manufacturer: Americair Corporation Vendor(s): Clear Win

Availibility: AECOM Recommended

https://amaircare.com/

Anti-Microbial Air Filters

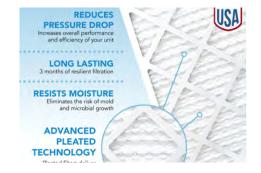
We fabricate all size Merv 8, Merv 11, & Merv 13 Air Filters. Need custom or specialty size air filters? We can fabricate all sizes. All of our pleated filters are ultra high quality – 24 Point beverage board die cuts. All of our filters are hand made in the United States of America – we do not import. Affordable shipping throughout the northeast region

Vendor(s): NJ Filters (MSA)

Availibility: NA

Marketplace MSA | VenueShield Trusted

on a confidential basis and in accordance with the confidentiality provisions of the Business Conduct Policy.



http://nynjfilters.com/







2.7.01 Air Filtration

Camfil Air Filters

With energy-saving air filters from Camfil, you can maintain the proper balance between supply and exhaust, and keep odors and particles under control.

Camfil supplies a full range of commercial air and gas filtration products for air handling units, ventilation systems and furnace filters to provide clean air for high indoor air quality and a healthy, more productive workplace. Our commercial filters and air purifiers are the most energy-efficient on the market, helping owners to green their buildings by cutting the power consumption of their air handling systems and reducing their carbon footprint.

Manufacturer: Camfil Vendor(s): Camfil

Availibility: NA



https://www.camfil.com/en-us/industries/commercial-and-public-buildings/halls-and-malls



2.7.01 Air Filtration | HEPA

AirRover Air Protection System 2000 3 in 1 Air Protection System

Unlike other purifiers available which only clean a portion of the indoor air, the APS2000 is the only option capable of providing up to 10,000cu ft (1,200 sq. ft space with 8' ceilings) of continuous sanitized air, all while meeting the Centers for Disease Control (CDC) required 12 air exchanges per hour to maintain a clean air environment. This system will improve the air quality in spaces up to 7,200 sq ft depending on the number of air exchanges needed for your application. Increasing Air Changes per Hour (ACH) reduces the time it takes to remove contaminants from the conditioned space. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards are determined by occupancy and facility use, under normal circumstances. The Center for Disease Control (CDC) has set its ACH guidelines for hospitals and patient care facilities – ensuring maximum air protection to healthcare workers and patients.

Manufacturer: AirRover Vendor(s): Airover

Availibility: NA

AECOM Recommended

https://www.airrover.com/products/air-protection-system/aps2000

Carrier Opticlean Negative Air Machine

The Carrier OptiClean negative air machine is a portable solution primarily designed to help convert normal hospital rooms into airborne infectious isolation rooms (AIIR). Designed to ASHRAE's Standard 170 for Ventilation of Health Care Facilities, the OptiClean™ uses highly efficient filters and a heavy duty, yet quiet, motor to remove contaminated air from the room. The resulting negative air pressure, or "vacuum effect," helps limit the spread of air-based contaminants into surrounding areas. If negative pressure is not required, such as in an open-air, temporary hospital, the machine can be used as an air "scrubber," pulling air in, removing many contaminants, and discharging cleaner air back into the room.

The unit can be operated either vertically or horizontally and is currently designed for commercial applications only.

Manufacturer: Carrier Vendor(s): Carrier

Availibility: NA

AECOM Recommended

https://www.carrier.com/commercial/en/us/products/airside/air-handlers/fn1aaf/







2.7.01 Air Filtration | HEPA Filtration

Envirco IsoClean® HEPA Filtration System

The Envirco IsoClean® is a portable, self-contained High Efficiency Particulate Air (HEPA) filtration system designed to easily and economically create a negative pressure isolation room/environment that will meet OSHA and CDC TB guidelines.

The IsoClean® can be used as a positive pressure clean air recirculating system in clinics, waiting rooms, hospital emergency rooms and other confined areas or as a partial or complete exhausting system to create a negative pressure isolation room for possible use with patients known or suspected of having TB, SARS or other infectious diseases.

As a recirculating unit, the IsoClean® powerful motor/blower can deliver from 560 CFM (951 m3/hr) up to 800 CFM (1359 m3/hr) to provide a large number of room air changes per hour to minimize the spread of airborne diseases to patients and health care workers.

As a negative pressure unit, the air passing through the HEPA filter is cleansed of 99.99% of particles as small as 0.3 micron and may be exhausted directly to the exterior through a window, or through a wall simply by connecting flexible ducting to the 6 in. (152 mm) collar located on the top of the IsoClean®.

The IsoClean® filter contains 220 square feet (20.4 square meters) of media

to extend its usable lifetime before filter loading occurs, resulting in decreased cost and fewer filter changes.

Manufacturer: KOCH FILTER CORP NJ Filters (MSA)

Vendor(s):

Availibility: NA **Marketplace MSA**

https://www.kochfilter.com/Products/Air%20Cleaner%20Equipment

Fixed, Portable

Amaircare is a family-owned air purification company. With Canadian manufacturing focused on quality, durability and performance, and over 30 years of expertise, Amaircare HEPA products and solutions deliver clean air in challenging environments.

Manufacturer: Amaircare Corporation Vendor(s): Amaircare Corporation Availibility: NA

3000 HEPA

https://amaircare.com







2.7.01 Air Filtration | HEPA Filtration

HEPA Filters - BioMax Series

BioMAX HEPA Filters are designed to provide the highest level of filtration available for commercial and industrial applications. They are widely used in hospitals, clean rooms, pharmaceutical plants, and in hundreds of other systems where clean air is critical in the protection of people, processes, and equipment.

BIOMAX HEPA 95, BIOMAX HEPA 99.97, BIOMAX HEPA 99.99, BIOMAX HEPA 99.999, BIOMAX HEPA HC, BIOMAX CS, BIOMAX V2000

Manufacturer: KOCH FILTER CORP Vendor(s): Omnitec Design

Availibility: NA

AECOM Recommended



https://www.kochfilter.com/Products/HEPA

OmniAire 2000V HEPA Air Machine

The OmniAire 2000V is a popular, medium-sized negative air machine with variable speed control which produces 300 to 1600 CFM and weighs only 110 lbs.

OmniAire 2000V HEPA air machines are used to clean the air as well as create positive or negative air pressure containment areas on jobsites, in confined spaces, mold, asbestos, and lead abatement or remediation, commercial or factory sites, medical facilities, and many other places. With numerous optional filters, the 2000V is suitable for a large array of jobs from light construction, to tasks that require true 99.99% HEPA efficiency.

2000V machines have an easy to sanitize aircraft-grade aluminum housing, designed to last job after job. Our housings have a smooth, clean finish and individually riveted construction; with hospital grade non-marking casters allowing for easy portability. All critical seams are silicone sealed before and after riveting to assure that contaminated air will not bypass the HEPA filter.

OA2000V machines offer an assortment of options for pre-filters, HEPA filters and accessories. Our standard machine configuration ships with a Dustlok, primary/secondary filter and a 99.97% efficient HEPA filter. Dustlok pre-filters are treated with an anti-microbial additive to prevent growth of bacteria, and a tackifier to increase dust holding capacity.

Manufacturer: OmniAire Vendor(s): Omnitec Design

Availibility: NA
AECOM Recommended





TOC

2.7 Air Purification & Filtration

2.7.02 Air Purification Systems

The use of air purification systems is not recommended for use at this time.

Note: Air purification systems differ from filtration systems in that they destroy or deactivate airborne particulates, rather than capturing them. The two prevalent technologies for air purification are active UV-C and Ionization process both produce ozone and other free radicals that are harmful to humans in relatively low concentrations. To combat this, these technologies generally operate at very low levels, which reduces their ozone production to an acceptable level; however, this low level of operation also reduces the ability of these machines to address airborne particulates.

Neither of these technologies is appropriate for mitigating the risks associated with SARS-CoV-2 or any other infectious airborne pathogens, as air purification is not the same as air sanitization or air disinfection.

The following technologies are not recommended for SARS-CoV-2 virus reduction in airstreams in HVAC systems applications because the technologies are not proven effective against viruses in the air.

- UV-C Systems
- Copper Insulated Air Ducts
- Carbon Filtration
- Ionization Air Purification Systems
- Bio-Mist Power Sanitizing Systems

AtmosAir[™] - Bipolar Ionization

AtmosAir™ air purification technology actively contributes to better health by restoring indoor air to its natural state where no pollution or contaminants exist — while reducing energy use and emissions in the process.

AtmosAir™ is the most proven and effective solution to reduce inhalable particle matter (PM), VOCs, and pathogens to create healthy indoor environments where people thrive.





Manufacturer: AtmosAir Vendor(s): AtmosAir (MSA)

Availibility: NA

Marketplace MSA

https://atmosair.com/



2.7.02 Air Purification Systems

Broad Fresh Air

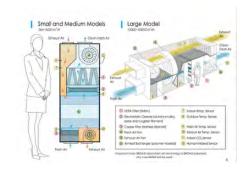
Nobody in the world has dreamed that indoor air can be 100 times cleaner than outdoor air, except BROAD, who not only conceived but also made it a reality.

Most importantly, BROAD made it at an affordable cost, which is dozens of times lower than that of purification equipment in operation rooms. This is how you define real innovation.

What's more, BROAD Clean Fresh Air Machine recovers 80 % heat, drastically saving air conditioning energy consumption while improving air quality.

I understnad that it is human nature to follow. Most people will do nothing if they see others living well without fresh air machine, and they will even treat the whole fresh air machine installation process as a huge nuisance. Only a few thoughtful people will always try to improve their lives and will eventually become our customers. This is how you define a kindred spirit.

Manufacturer:	Broad Group
Vendor(s):	Broad Group
Availibility:	APAC, SA



https://www.broadair.net

Genesis Air

Clean air is healthy air. The amount and types of airborne mold, bacteria, and viruses that can be spread is too many to list. Overuse of antibiotics has led to new bacteria that resists antibiotics and poses major health threats. Genesis Air utilizes groundbreaking technology to oxidize these airborne contaminants, thus creating a healthier environment. If you want to establish the best possible indoor air quality, Genesis Air is your best option. Use Genesis to reduce your problems. Don't capture and keep them.

Manufacturer: Genesis Air

Vendor(s): Genesis Air, M Johnson

Availibility: NA

https://genesisair.com/





2.7.02 Air Purification Systems

HVAC / Indoor Air Quality/Halo-LED Tech

The HALO-LED[™] is the industry's first LED in-duct, whole home and building air purification system that is both mercury free and zero ozone compliant. The HALO-LED[™] proactively treats every cubic inch of air conditioned space, reducing airborne and surface contaminants and pollutants through bi-polar ionization and revolutionary, patent pending, REME-LED[™] technology.

New REME-LED™ technology utilizing RGF's patented PHI and REME® technologies providing superior indoor air purification.

 \cdot New hybrid hydrophilic catalyst incorporating the industry's first washable ceramic catalyst

 \cdot Includes automatic self-cleaning ionizers with carbon fiber brushes to reduce particulates (Patent Pending)

 \cdot Unlimited cycling capability designed to turn on/off with the HVAC system

· 24 VAC/DC input (24 VAC transformer included)

Manufacturer: RGF Environmental Group Vendor(s): RGF Environmental Group

Availibility: NA

https://www.rgf.com/products/air/halo-led-whole-home-in-duct-air-purifier/

Molekule Air

Room size coverage: Up to 600 sq. ft. (55.74 m²) Handle: Leather Filters: 1 PECO-Filter — recommended replacement every 6 months, 1 Pre-Filter — recommended replacement every 3 months Power consumption: Lowest speed — 20 W/h | Highest speed — 80 W/h, 3-prong power plug Sound Levels: Lowest speed — 41 dBa | Highest speed — 65 dBa App enabled: iOS & Android WiFi enabled: 2.4 GHz

Manufacturer: Molekule Vendor(s): Molekule

Availibility: NA

https://molekule.com/air-purifier-air



Unit Cost: \$800.00





2.7.02 Air Purification Systems

Molekule Air Pro RX

FDA granted 510(k) Class II Medical Device Clearance for Air Pro RX, an air purifier intended for medical purposes to destroy bacteria & viruses in the air. Air Pro RX also satisfies performance criteria outlined in FDA guidance for use in helping to destroy SARS-CoV-2, the COVID-19 virus. Molekule's PECO technology proven to destroy a proxy virus for SARS-CoV-2 (RNA virus MS2).

Manufacturer: Molekule Vendor(s): Molekule

Availibility: NA



https://molekule.com/air-purifier-pro-rx

Needle Point Bipolar Ionization

A large event space requires special attention to IAQ. With many people clustered in a confined space, volatile organic compounds (VOCs) and odors are at their peak and require an immense amount of clean air to make the consumer experience enjoyable.

Experience customer satisfaction, regulatory compliance, and cost reduction by installing GPS needlepoint bipolar ionization technology. Realize savings in hundreds of tons of cooling capacity and tens of thousands of CFM of air flow, along with maintenance savings due to GPS systems being no maintenance. Facilities such as arenas can apply savings to areas that improve the customer experience and will facilitate growth while also reducing their carbon footprint.

Manufacturer: Global Plasma Solutions Vendor(s): Global Plasma Solutions

Availibility: NA

https://www.globalplasmasolutions.com

Products for Entertainment Applications



2.7.02 Air Purification Systems

Restore Air

Upon exposure of a broad spectrum UV light to a hydrated quadmetallic coated cell, a catalytic process begins in which Advanced Oxidation Products (AOP's / Oxidizers) are produced (i.e. hydroxyls; superoxide anions; hydroperoxyls)

AOP's are extremely reactive in making contact with organic compounds both natural and man-made (e.g. viruses; mold; malodors); when contact is made, oxidation occurs breaking up complex compounds to more stable substances such as water vapor and carbon dioxide

Unlike a filter, the air does not have to pass through the Advanced Oxidation Cell to be treated; the oxidation "chain reaction" causes the AOP's to seek out the organics and as a result the air and the surfaces are treated external to the system, or at the contaminant source

- \cdot Proprietary Broad Spectrum UV lamp
- · Quad-Metallic Hydrophilic Cell Coating
- Eliminates/mitigates, a wide range of malodors and airborne contaminants

Manufacturer: Restore Air Vendor(s): Restore Air

Availibility: NA

Synexis Blade, Sphere & Sentry

Synexis is the Sole Developer of Dry Hydrogen Peroxide and Hydrogen Peroxide Gas Technology.

Our company was founded to raise the bar in environmental treatment. We achieve this through a data driven and innovative approach utilizing best in class products and services.

Our product and process, which are protected by 170+ issued and pending patents, covers the creation and deployment of Dry Hydrogen Peroxide (DHP) in hundreds of applications. Because of this, we are the only company with worldwide exclusivity for using gas phase hydrogen peroxide.

Manufacturer: Synexis BioDefense Vendor(s): Synexis BioDefense Availibility: NA

https://synexis.com/microbial-reduction-products/







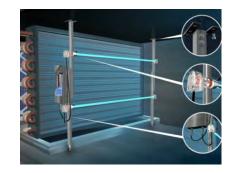
2.7.02 Air Purification Systems

UV Germicidal

WHOLE FACILITY SOLUTIONS Ideal for: HVAC systems · Larger in scale \cdot Not seen by the public · Designed to treat the air streams in the entire facility SPOT APPLICATION SOLUTIONS Ideal for: Kitchens, bathrooms, trash compactors, lobbies and more · Smaller fixtures perfect for a specific area of your facility \cdot Aesthetically pleasing · Seamless installations for public use MOBILE & TEMPORARY SOLUTIONS Ideal for: Mobile applications for hospitality, schools, law enforcement, offices, and more · Easy-to-use solutions for multiple locations · Portable systems leverage your spend-lower initial outlay · Can sterilize both surfaces and air flow Manufacturer: FSG

Vendor(s): FSG Availibility: NA

https://wwwl.fsgi.com/here-to-help/uv-lighting-solutions/





<u>TOC</u>

2.7 Air Purification & Filtration

2.7.03 Coil Cleaning & Disinfection Products & Services

This equipment category includes information on available disinfectant chemicals and UV-C for cleaning and disinfecting HVAC equipment.

Note: The main surfaces in HVAC equipment that require cleaning and disinfection are within the Air Handling Units(AHU) walls, coils, drain pans, and other stationary surfaces. There are two primary ways of cleaning and disinfecting AHU surfaces: disinfectant chemicals and UV-C. Both of these treatments are widely accepted, verified, and utilized throughout the industry for disinfection of mold and bacteria.

Blue Box Bio Enzyme Technology

Blue Box delivers a unique model for ensuring facilities to experience the safest air possible within their normal day to day operations. With its patented process for how to treat and disinfect any type of facility's HVAC system, Blue Box eliminates a critical weak point in all building operations. Our innovation is how to penetrate through any depth of the heat transfer coil so to ensure near-perfect surface area coverage. Our process involves one of the most comprehensive solutions for how to disinfect these hard to reach places to that a building's air supply is both efficient and safe. <section-header><section-header><section-header><section-header><section-header>

Manufacturer: Blue Box Vendor(s): Blue Box (MSA)

Availibility: NA Marketplace MSA

https://blueboxair.com/



TOC

2.8 Restroom FF&E

2.8.01 Touchless Flush Vales, Faucets

This equipment category includes touchless valves and fixtures for restrooms; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: Sensing technologies for touch-free activation of plumbing fixtures improve the overall hygiene and cleanliness while also conserving water and energy. A number of products can be retrofitted to existing systems.

American Standard Touchless Faucets

Commercial Faucets from American Standard are designed especially for high-volume use and dependable longevity, year after year. We have several options to fit all your needs, including sensor faucets, single control faucets, widespread faucets, and metering faucets. With American Standard faucets, you don't have to sacrifice beautiful design for great quality and functionality. All of our faucets are built to last, and we have many options to suit your needs for water efficiency and ADA compliance. For exceptional service and low maintenance options, select one of our faucets with our revolutionary PWRX 10-year battery system. American Standard commercial faucets provide the value worth your investment, time and trust.



Commercial Bathroom Faucets

Manufacturer: American Standard Vendor(s): American Standard

Availibility: NA

https://www.americanstandard-us.com/bathroom/commercial-bathroom-faucets

SloanTouchless Faucets

Commercial restrooms with manual faucet and flushometer handles can be a breeding ground for germs. Sensing technologies for touchfree activation of commercial plumbing fixtures improves the overall hygiene and cleanliness in the restroom, improves user accessibility in compliance with ADA, while also conserving water and energy. Check out the good, better, and best touch-free product offerings below or create your own product package to meet your needs.

Manufacturer: Sloan Vendor(s): Sloan Availibility: NA

https://www.sloan.com/design/innovations/innovations-design/sloan-touch-free





2.8.01 Touchless Flush Vales, Faucets

Toto ECOPOWER® High-Efficiency Toilet Flush Valve, 1.28

- GPF
- 1.28 GPF
- \cdot Self-powered hydroelectric flush valve system
- \cdot No minimum daily usage requirement
- \cdot Durable chrome plated body with tamper-proof screws and solid bronze valve body
- \cdot Self-cleaning piston valve with 360° filter screen
- \cdot Neutral rough-in and adjustable tail piece connection
- True mechanical flush override
- \cdot Smart sensor with self-adjusting detection range
- \cdot 6-second detection time to prevent ghost flushing
- \cdot For toilet with 1-1/2" top spud inlet
- \cdot Exposed flush valve with 1" angle stop and 1-1/2" vacuum breaker set
- \cdot ADA compliant

Manufacturer: Toto Availibility: NA

VenueShield Trusted

https://www.totousa.com/ecopower-high-efficiency-toilet-flush-valve-128-gpf-vb-set

Toto ECOPOWER® High-Efficiency Urinal Flush Valve 0.5 GPF

0.5 GPF

- · Self-powered hydroelectric flush valve system
- · No minimum daily usage requirement
- \cdot Durable chrome plated body with tamper-proof screws and solid bronze valve body
- · Self-cleaning piston valve with 360° filter screen
- Neutral rough-in and adjustable tail piece connection
- True mechanical flush override
- · Smart sensor with self-adjusting detection range
- · 6-second detection time to prevent ghost flushing
- ADA compliant

Manufacturer: Toto Availibility: NA, SA, EU, APAC **VenueShield Trusted**

https://www.totousa.com/ecopower-high-efficiency-urinal-flush-valve-05-gpf-vb-set



Unit Cost: \$795.00



2.8.01 Touchless Flush Vales, Faucets

Toto ECOPOWER® Ultra High-Efficiency Toilet Flush Valve, 1.0 GPF

1.0 GPF

- \cdot Self-powered hydroelectric flush valve system
- \cdot No minimum daily usage requirement
- \cdot Durable chrome plated body with tamper-proof screws and solid bronze valve body
- \cdot Self-cleaning piston valve with 360° filter screen
- · Neutral rough-in and adjustable tail piece connection
- · True mechanical flush override
- · Smart sensor with self-adjusting detection range
- \cdot 6-second detection time to prevent ghost flushing
- For toilet with 1-1/2" top spud inlet using 24" vacuum breaker tube
- \cdot Exposed flush valve with 1" angle stop and 1-1/2" vacuum breaker set
- ADA compliant
- \cdot Contributes to earning credits in LEED®

Manufacturer: Toto Availibility: NA, SA, EU, APAC VenueShield Trusted

https://www.totousa.com/ecopower-ultra-high-efficiency-toilet-flush-valve-with-10-gpf-24-vb-tube

Toto Standard EcoPower® Faucet

- \cdot Self-generating hydropowered EcoPower system
- · No minimum daily usage requirement
- Micro-sensor positioned underneath the spout head for accurate hand detection ensuring smooth and consistent water distribution
- · Vandal resistant aerator housing
- · Durable chrome plated spout body
- Single-hole mount
- \cdot Kit includes spout body, controller box , and mounting hardware less supply lines
- Equipped with 0.5gpm flow control

Manufacturer: Toto Availibility: SA, NA, EU, APAC VenueShield Trusted



Unit Cost: \$703.00

Unit Cost: \$905.00

https://www.totousa.com/standard-ecopowerfaucet-05-gpm





2.8.01 Touchless Flush Vales, Faucets

Touchless Solutions

We aspire to provide the safest and most efficient water solutions to protect human health and the environment. All of us can properly wash our hands to help safeguard our health and each other. But decision makers can do more for their users—and that starts with hands-off features and smarter technologies. Find hygienic plumbing solutions to protect what matters most.

Utilizing touchless technology to create a healthier restroom experience - while improving the operational efficiency of the facility. Antimicrobial surfaces in restrooms inhibits the growth of mold, mildew, stain and odor causing bacteria on the fixture surface. Sensor-activated World Dryer hand drying solutions are a hygienic and

eco-friendly way to dry hands and promote proper hand hygiene.

Manufacturer: Zurn Availibility: NA

https://www.zurn.com/hygienic-solutions





2.8.02 Touchless Paper Towel Dispensers

This equipment category includes touchless paper towel dispensers; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Note: Using paper towels is substantially more effective than jet dryers for removing microbes when stillcontaminated hands were dried.

Georgia-Pacific Enmotion 10" Automated Touchless Paper Towel Dispenser

The enMotion® towel dispenser is a highly reliable, affordable solution for automated touchless towel dispensing. For over a decade, this highcapacity dispenser has helped facilities reduce towel consumption, waste and service visits, while enhancing image and improving hygiene. The enMotion® towel dispenser supplies a single towel by waving your hand and is the leader in automated, touchless dispensing. It's no wonder that 98% of enMotion® towel dispenser customers are satisfied with its performance!

 \cdot Only available via a one-time, lifetime lease agreement through GP or authorized distributor

• Adjustable settings for sheet length, time delay, sensor range and dispensing mode controls usage and increases operational efficiency

 \cdot enMotion® touchless towel dispensershelp reduce waste by 30% vs. standard folded towels

 \cdot High tech functionality, sleek styling and quality towels make positive statements about your facility

• High-capacity system and paper transfer mechanism provide continuous service while reducing maintenance costs

Multiple power options: 4 Standard Alkaline D-Cell batteries (included) or optional AC power adapters

• One-at-a-time dispensing helps reduce the risk of crosscontamination for a more hygienic washroom

· Perfect for washrooms or food prep areas

Manufacturer: Georgia-Pacific

Vendor(s): Grainger (MSA), Georgia-Pacific

Availibility: NA, EU, SA, APAC

Marketplace MSA

https://www.gppro.com/



```
This document is protected by Copyright law and is the exclusive property of ASM Global Parent, Inc. Reproduction or distribution of this or any part of this document without express written permission from ASM Global Parent, Inc. is strictly prohibited by law. This document and all other elements of the Venueshield program are the proprietary information of ASM Global Parent, Inc., and are being made available solely to employees and designees on a confidential basis and in accordance with the confidentiality provisions of the Business Conduct Policy.
```



2.8.02 Touchless Paper Towel Dispensers

Tork Matic® Hand Towel Dispenser - with Intuition™ Sensor

The Tork Matic® Hand Towel Dispenser with Intuition™ Sensor in Image Design gives your guests the ultimate hand drying experience. Creating a sophisticated impression in the washroom is as important as the image your customers see when they first enter your building. The touch free, one-at-a-time dispensing reduces consumption and improves hygiene. Go beyond beautiful design and provide elegance with Tork Image Line.

Manufacturer: Tork Vendor(s): Tork

Availibility: NA



https://www.torkusa.com/product/461102/dispenser/paper-towel



2.8 Restroom FF&E

2.8.03 Touchless Soap Dispensers

This equipment category includes touchless soap dispensers; use of touchless technology significantly reduces the need for regular disinfecting of touchpoints.

Georgia Pacific Enmotion Automated Touchless Counter Mount Soap Dispenser

The enMotion® Automated Touchless Counter Mount Soap Dispenser provides the super-premium experience your patrons expect. This sleek and modern automatic soap dispenser is virtually soundless, providing an optimized portion of rich, luxurious moisturizing foam soaps that are pH balanced and dermatologist tested. The high-capacity refill bottles easily load in seconds to help provide easy maintenance and uninterrupted service, plus they're hygienically sealed to help reduce the risk of cross-contamination. Plus, the beautiful chrome plated finish will complement any decor. Ideal as a counter mounted soap dispenser in the restroom, it's also a great choice for a kitchen soap dispenser. Only available via one-time, lifetime lease agreement with GP PRO or authorized distributor.

 \cdot HYGIENIC automated, touchless dispensing & sealed refills can help reduce the risk of cross-contamination

• HIGH-CAPACITY refills can mean fewer change-outs & less maintenance time

• CONVENIENT MAINTENANCE INDICATOR easy-to-read on-spout graphic lets you know when batteries or refills are needed

 \cdot LONG LASTING batteries are conveniently replaceable from above the counter (AC Adapter option also available)

• AVAILABLE VIA ONE-TIME, LIFETIME LEASE AGREEMENT with GP PRO or authorized distributor

• COMPATIBLE WITH enMotion® Dye and Fragrance Free (42717) and enMotion® Tranquil Aloe® (42718) Moisturizing Foam Soap Dispenser Refills

· 10-YEAR WARRANTY covers the complete dispenser—even the spout

· IDEAL FOR USE in office buildings and high traffic areas

 \cdot EASY TO MAINTAIN with long-lasting, intuitively designed refills that help provide effortless maintenance and uninterrupted service

• A NEW PUMP COMES WITH EVERY REFILL to help eliminate clogs, breakdowns or need for repairs

• RICH, LUXURIOUS MOISTURIZING FOAM SOAP REFILLS feature ontrend fragrances, are pH balanced and dermatologist tested; these enhanced formulas are

· 100% RECYCLABLE BOTTLES contain 25% post-consumer content

https://www.gppro.com/gp/https://www.gppro.com/gp/gppro/en/USD/GP-PRO-Categories/Skin-Care-%26-Dispensers/GP-PRO-enMotion%C2%





2.8.03 Touchless Soap Dispensers

Hand Sanister Products

Hand washing and the use of hand soap is one of the most effective and simplest ways to prevent the spread of infections, and form an essential part of any washroom. Research indicates that simple hand washing can reduce bacteria carried on the hands by as much as 80%. This plays a significant part in the reduction of cross contamination and the spreading of colds, flu and diarrhoea.

This is why many workplaces seek to promote hand hygiene, as it can contribute to the overall health and hygiene of a workforce. However, a simple bar of soap isn't a sufficient solution. Our range of automatic soap dispensers provide a far more hygienic and convenient option for your staff and visitors who use your washrooms, whilst ensuring you comply with the latest legislation.

Manufacturer: TWC Vendor(s): TWC Availibility: EU

https://www.twc-group.com/washroom-service/hand-care-hygiene

KOLO[™] Smart Monitoring System

The KOLO[™] Smart Monitoring System is an open platform enabling GP PRO to deliver the most complete connected restroom. Our platform integrates data from GP PRO dispensers and 3rd party devices as well as from customer feedback and traffic management systems, all of which drives data-driven cleaning.

Manufacturer:	Georgia-Pacific
Vendor(s):	Georgia-Pacific
Availibility:	NA

https://www.gppro.com/gp/solutions/kolo-smart-monitoring-system









<u>TOC</u>

2.8 Restroom FF&E

1.8.04 Urinal and Lavatory Covers

This equipment category includes examples of commercially available covers. Given the wide variety of fixtures in use at ASM Global venues, manufactured covers may not be available that fit every fixture type.

Note: Maintaining physical distancing requirements in restrooms may require covering urinals or lavatories to obtain the required separation between fixtures.

Disposable Urinal covers

Help enforce social distancing in washrooms or use for important messages. Simply unroll and stretch across the urinal. The thin, white polyethylene material naturally sticks to the urinal bowl sides neatly and quickly. 100m is long enough to cover at least 100 urinals.

Vendor(s): TWC

Availibility: EU



https://www.twc-group.com



03 / Product Sourcing

PRODUCT SOURCING

To help venues sort through sourcing challenges, a list of vendor and equipment vetting questions is provided for use by venue operators.

3.1 General Vetting Questions

The general vetting questions that apply to most products are:

- Company History
 - How long has the company been in business?
 - o How long has the product been produced?
 - Has the company done any business in our industry?
 - What continents does it supply (APAC, Middle East, Europe & Americas)?
 - o Are there any examples?
 - o Are there any case studies?
 - o Can they provide references?
- Product Specifications?
 - o What are the specifications?
 - o Has it been independently tested?
 - o What is the efficacy of the product?
- Logistics and Timelines
 - o What is the delivery time for the product?
 - o What is the product pricing?
 - Is there service and on-going maintenance available, where applicable?

3.2 Questions for Complex Products.

For some of the more complex products, VenueShield has provided a list of product-specific questions for venues to ask.

3.2.1 Thermal Imaging

- What are the installation costs?
- Is the product hardwired or does it operate by WiFi?
- What are the power requirements and projected energy use?
- Do they self-adjust (recalibrate) to ambient air temp changes (cold and heat)?
- What exactly does it measure and where?
- Full body, eyes, head, is its facial recognition as well?
- How many people can it scan per hour?
- How are the scan results presented?
 - o Is it recorded?
 - o If a high temp is read, what happens?
 - Are the cameras tied back to local or remote systems?
 - Can it be tied into the CCTV security camera system?
 - Is a back-up report generated for liability reasons?
 - o Is the backup report printed or electronic?
- How close does the equipment have to be to the target?
- Is the pan-tilt-zoom camera truly fixed?



3.2.2 Handheld Thermometers

- Is it proven against the SARS-CoV-2 set of viruses?
- Have there been independent tests conducted?
- Once the negative and positive ion attaches itself to the airborne particle, what happens to it?
- Does it kill SARS-CoV-2 or just take it out of the air and it falls to the floor?
- Where is it installed?
- Is it installed in all big and small HVAC units, air handlers, remote stand-alone units?
- How is its effectiveness measured?

3.2.3 Bi-polar Ionization

- Is it proven against the SARS CoV-2 set of viruses?
- Have there been independent tests conducted?
- Once the negative and positive ion attach itself to the airborne particle, what happens to it?
- Does it kill SARS CoV-2 or just take it out of the air and it falls to the floor?
 - Where is it installed?
- Is it installed in all big and small HVAC units, air handlers, remote stand-alone units?
- How is its effectiveness measured?

3.2.4 HVAC Disinfecting

- What is the cost of the initial treatment?
- How does it work?
- Do you need special filters (e.g., HEPA)?
- How long does a treatment last?
- What is the recommended frequency of treatments?
- Is it safe?
- Are there any restrictions of its effectiveness on size or types of venues?
- Are there cubic feet per minute limits?
- Can it be used on small remote fan coil units?

3.2.5 Venue Sanitization Items

- Is your product/chemical effective against the SARS-CoV-2 set of viruses?
- Is it on the approved FDA list to combat this virus?

- How does your system work?
 - Application process
 - o Special equipment
 - o Frequency
 - o Dwell time
 - Does the surface need to be cleaned prior to application
 - How long is the space off-limits
- Is special training required to use the product?
- How long is it effective?
- Is it effective on all surface types (e.g., wood, laminate, stone, tile, carpet, metal, painted walls)?
- What is the current product availability?
- What is the cost?



