

INTEGRAL SURFACE PROTECTION PROGRAM

Microbial barrier by: **aegis**



SOUTHRIDGE SCHOOL - CASE STUDY

September 2020/ January 2021

BACKGROUND:

Studies have shown that more than half the time, cleaned and disinfected surfaces are not adequately cleaned or are re-contaminated within minutes. However the addition of AEGIS Microbe Shield, a durable and long-term antimicrobial, has been proven to reduce microbial load and facilitate enhanced sanitizing. Surfaces with lower bacterial load will reduce cross-contamination, thereby reducing your guests' and staff's risks of acquiring infections.

OBJECTIVE:

To scientifically prove the performance of AEGIS Microbe Shield as a durable antimicrobial and its ability to reduce growth of microorganism on treated surfaces across the entire property.

METHODOLOGY

TEST SITE	INCLUSIVE TESTING DATES
2656 160th Street in South Surrey, BC	September 2020 - January 2021

Measure

Tests used a Hygiena ATP meter which measures organic materials on surfaces and is most often used in healthcare and food production facilities.

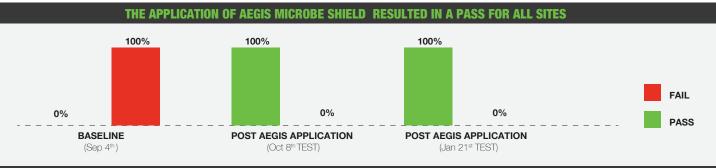
Process

Consistent test sites were identified prior to application of AEGIS Microbe Shield. These sites are high touch point areas that often get contaminated. Test was done to measure the presence of microbial growth.

- · A baseline was established by testing these sites after a full cleaning
- AEGIS Microbe Shield was applied using Victory Electrostatic Sprayers (at their lowest setting) to all these high touch surfaces
- Follow up tests were done after 30 days and 60 days of AEGIS Microbe Shield application

RESULTS

SystemSURE Plus ATP hygiene monitoring system was used to measure cleanliness of surfaces. The Hygiena system was set to Pass and Fail limits of 60 and 101 respectively. ATP systems use relative light units (RLU) as the unit of measure, the lower the RLU score the cleaner the surface.



BELOW ARE STANDARDS SET OUT IN THE INTEGRAL SURFACE PROTECTION PROGRAM FOR THIS FACILITIES

LOCATION	Pre-Application baseline September 4 th		Post-Application October 8 th	% Reduction October 8 th		Post-Application January 21st	Post-Application January 21 st
Senior School							
Locker #269	293		14	95.2%		22	92.5%
Cafeteria Table	566		9	98.4%		4	99.3%
Boys 1st Floor Bathroom, stall handle	1338		40	97.0%		21	98.4%
Southwest Exit Door Push-bar	607		44	92.8%		36	94.1%
Café Window Handle	365		19	94.8%		22	94.0%
Staff Photocopier Touchscreen	434		5	98.8%		52	88.0%
Junior School							
Boys 1st Floor Toilet Handle	857		10	98.8%		12	98.6%
Staff Refrigerator Handle	612		23	96.2%		31	94.9%
Room 151 Countertop	984		3	99.7%		15	98.5%
Gymnasium							
Exercise Mat	446		9	98.0%		15	96.6%
Basketball	1330		75	94.4%		84	93.7%
35lb Kettle Bell	266		5	98.1%		12	95.5%
Bench Press Bar	437		50	88.6%		34	92.2%
Bench Press Bench	712		26	96.3%		29	95.9%
Exterior							
School Bus Steering Wheel	1447		51	96.5%		48	96.7%
	Total Reduction 96.4%						96.0%

CONCLUSION

Baseline results reinforces that "clean" is NOT necessarily disinfected. The relatively long list of variables to consider in order to do proper disinfection conspire to challenge the effectiveness of cleaning and sanitizing protocols today.

Complicating the task is the ability of bacteria to form biofilm. This is a colony of bacteria that adhere to the surface and create a barrier that is extremely resistant even to chemical treatments. This biofilm is often composed of multiple strains of bacteria cooperating for their mutual survival.

The simple addition of AEGIS Microbe Shield to cleaning and disinfecting protocols show a dramatic impact on the reduction of microbial growth on treated surfaces. This chemical free and scientifically proven technology demonstrated enduring protection of all 100% sites tested at this facility.

ABOUT THIS FACILITY

Southridge is a co-ed, K-12 independent day school located in South Surrey, BC. They develop well-rounded students with the love of learning, character, and confidence to make the world a better place.

The school has taken every step possible to ensure the safety of their students, faculty and staff. New safety protocols include infrared temperature screening, regular daytime cleaning and disinfection during school operating hours. They have also implemented staggered drop-off / pick up and conduct detailed screening of everyone entering the campus.

To further enhance these efforts, Southridge adopted the Integral Surface Protection Program in the summer of 2020. A school-wide application ensued and follow up tests have been systematically conducted to monitor its performance. As illustrated by these tests, Integral Surface Protection Program continues to provide long-lasting surface protection.