



ALPINE

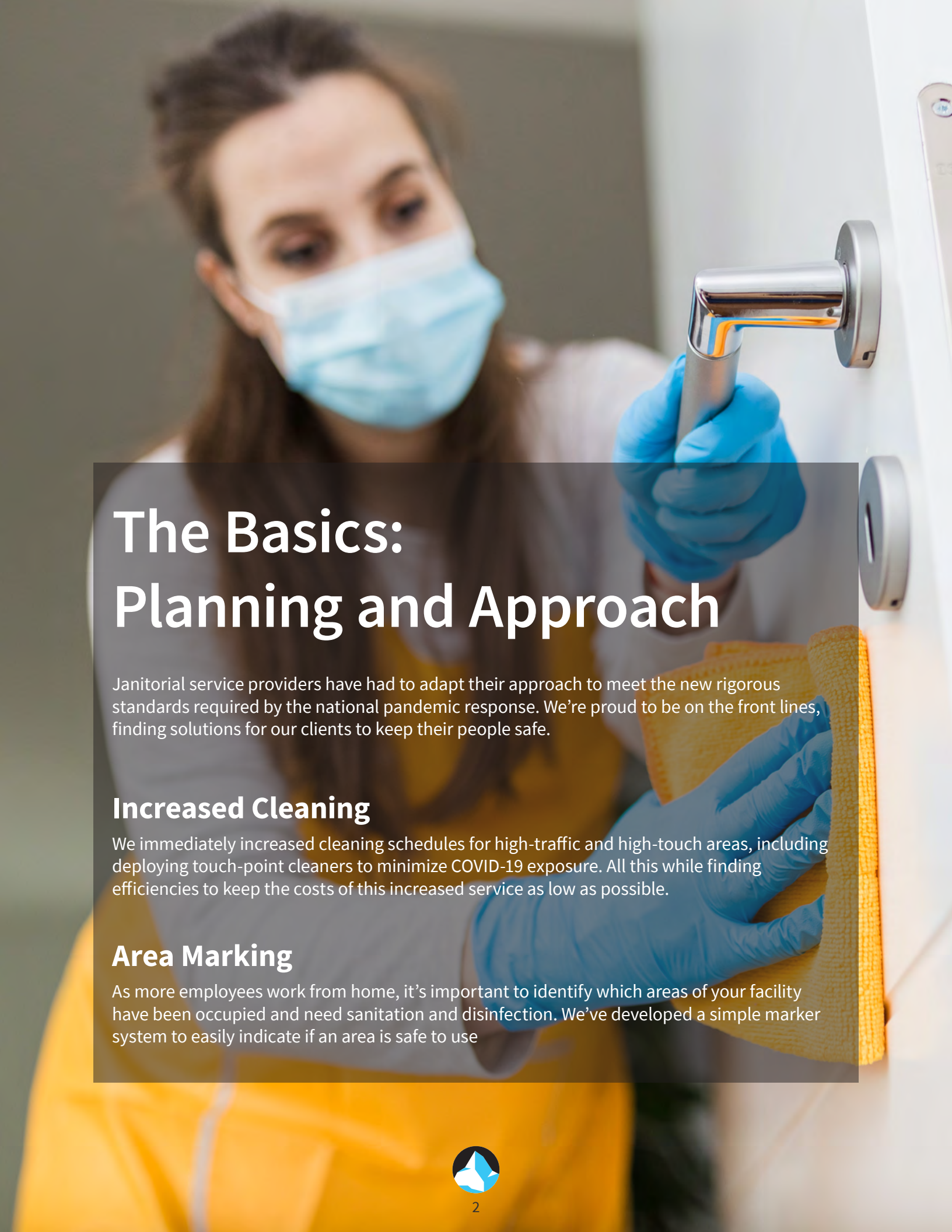


The Future of Cleaning

The COVID-19 pandemic has brought the importance of high-quality sanitation practices into the public conversation. New cleaning technologies, methodologies and equipment are dramatically changing the industry as we know it.

This document outlines the innovations we at Alpine see coming over the next 24-36 months. We've already implemented some of these innovations and some are soon to become household names.

Want to discuss any of the new products or approaches outlined here? Visit alpineservices.ca to get in touch.



The Basics: Planning and Approach

Janitorial service providers have had to adapt their approach to meet the new rigorous standards required by the national pandemic response. We're proud to be on the front lines, finding solutions for our clients to keep their people safe.

Increased Cleaning

We immediately increased cleaning schedules for high-traffic and high-touch areas, including deploying touch-point cleaners to minimize COVID-19 exposure. All this while finding efficiencies to keep the costs of this increased service as low as possible.

Area Marking

As more employees work from home, it's important to identify which areas of your facility have been occupied and need sanitation and disinfection. We've developed a simple marker system to easily indicate if an area is safe to use



Sanitizing and Disinfecting

We know traditional cleaning methods do not meet the new rigorous standards required by the national pandemic response. We've adapted our methodology to include new technologies for disinfecting and sanitizing.



Electrostatic Technology

We've deployed electrostatic sprayers which cover large areas with an approved disinfectant designed to kill 99.9% of all bacteria within five seconds of contact. The electrostatic formula wraps the disinfectant around surfaces, making it effective in hard to reach areas such as keyboards.

Examples include [Clorox 360](#) and [Victory sprayers](#)

UVD Robots

UVD robots move autonomously through a room using ultraviolet-C light to destroy the RNA in a virus and DNA in bacteria. This effectively eliminates the risk of infection from surfaces. Although slower than electrostatic spraying, UV light technology is gaining wider acceptance, especially in the health care sector.



Microbacterial Strips, Skins and Sprays

Microbacterial strips, skins and sprays can be applied to any number of surfaces, including escalator railings, elevator call buttons, door handles, creating a layer of disinfecting solution that can last up to 90 days. This innovation continues to evolve and is currently being tested for effectiveness over long periods of time.

Examples include [Zoono](#)



Sensor Driven Technologies

Sensor technology provides real time data on area usage and supply levels, allowing Alpine to simultaneously increase sanitation in high-traffic areas exactly when needed and maximize budget efficiencies. Sensor technology is becoming increasingly common and the technology is moving forward quickly.



Smart Washroom Technology

Washroom, toilet and dispenser sensors monitor visitor numbers and supply and waste bin levels. This real-time data is stored in a cloud database that managers and cleaning staff can access on any mobile device. This technology allows us to clean washrooms regularly at exactly the right time, while also minimizing supply wastage.

Examples include [WandaNEXT™](#) and [Zan Compute](#).

Tracking Technology

Emerging innovations in tracking technology are helping Alpine increase staff efficiency and focus cleaning on high-traffic areas, with the added benefit of mitigating slip and fall claims. Key Alpine team members carry sensors with them, tracking and mapping their progress in real time. This gives us constantly updated information on when an area has been cleaned and how often.



Autonomous Cleaners

As embedded sensor technology improves, autonomous robotic cleaners are becoming more viable. Proven safe for public use, this innovative technology can now clean pedestrian-heavy areas at any time in the day or night. We've started deploying autonomous cleaner with great success.

Examples include [Avidbot](#) and [WHIZ](#).



Data Analytics Dashboard

Alpine uses data dashboards to bring together information from a variety of sources and combine it in one place for easy reference. Our managers and clients can access an array of data letting them oversee their facility operations from the comfort of their home offices. This real-time oversight makes identifying and sanitizing areas receiving high traffic easy, protecting your team.

Biometric Clocks

Biometric clocks and scanners track exactly who is on site, when they arrived and when they ended their shift.

Examples include [Ceridian Dayforce](#).

Mobile Inspection Data

App-based quality assurance technology allows inspectors to immediately upload inspection data, making it easy to track the issue resolution process and access service trends.

Examples include [OrangeQC](#).

Autonomous Equipment Tracking

Run time tracking of autonomous equipment. What time did the machine begin cleaning, for how long and where did it run.

Examples include [Avidbot](#) and [WHIZ](#).

Smart Reporting

Sensors and other smart technologies provide traffic counts, track product usage and monitor when cleaning staff were in an area and for how long.

Examples include [WandaNEXT™](#) and [Zan Compute](#).

Tracking Technology

Up-to-the-minute reporting on key staff movement allows managers to map areas of their facility, helping to identify high-traffic areas that need more stringent attention.

