

# Hand Drying & Hand Hygiene

There are generally three methods of hand drying, these include:

1. Hot air blowers,
2. Cloth cabinet roll towels
3. Single sheet disposable paper towels

Surprisingly, hot air blowers actually increase bacteria levels by up to 500% and are the least effective hand drying solution. "It is unhygienic and unproductive to use a hot air blower in a food preparation environment." <sup>2</sup>

Most people do not dry their hands for long enough under a hot air blower and as a result of this damp, warm hands provide the perfect environment for bacteria to multiply. In addition to this, bacteria can be found in and around the inlet and outlet nozzle, turning the blower into a 'germ incubator'. <sup>1, 2</sup>

A fresh cabinet towel however, does reduce the level of bacteria found on hands. But, once the towel has been used, bacteria is accumulated from other users. Cabinet towels then become 'community towels'. Cross infection may occur when a portion of the towel is reused thus spreading bacteria to the hands and face. Cabinet towels operate on a 'shared stock system' therefore towel customers will be unaware as to who or what industry previously used the towel they currently have. <sup>1</sup>

Sources:

1. *Hand Drying Hygiene Facts - University of Westminster.*
2. *Evaluation of Risks Related to Microbiological Contamination of Ready-to-eat Food by Food Preparation Workers and the Effectiveness of Interventions to Minimise Those Risks. - Jack Guzewich, RS, MPH. Marianne P. Ross, DVM, MPH. (1-29).*

## We at Panache agree with these facts

- **Paper & cloth towels are unhygienic, spread germs, are not cost effective, run out quickly, and are just plain messy.**
- **Hand Dryers are unhygienic and spread germs!**

## Some Of These Facts Just Changed...

**"THE FIRST BREATH OF BAC-FREE AIR HAS ARRIVED"**

**"A WORLD FIRST"  
THE S10 ANTI-BACTERIAL HAND DRYER**



## The Problems

- 800 new cases of food poisoning occur *every hour* in Australia<sup>2</sup>
- 1 in 5 people don't wash their hands properly after going to the toilet<sup>3</sup>
- 1 in 10 food handlers do not wash their hands when necessary, and one in 20 of this group do not cover open wounds with waterproof dressings!
- Over 1 in 10 food businesses did not clean and sanitise food contact surfaces and utensils before using them where it was appropriate to do so.<sup>4</sup>
- In the first 11 months of 2002 State and Territory health authorities received the following notifications of communicable diseases<sup>5</sup>:
  - Campylobacteriosis – 12,819
  - Salmonellosis (NEC) – 7,146

## Washroom and Toilet Bacteria

**Washrooms and toilets are great places for bacteria to grow.**

- Environmental organisms - brought in by shoes
- Skin organisms - generated when washing hands
- Hair organisms - generated when brushing and combing
- Did you know that every time a toilet is flushed, with the lid up, a fine aerosol mist is sprayed into the air, over an area of up to 6 square metres?
- This mist contains different types of faecal bacteria like *E.coli* and *Staphylococcus* which can cause sickness and discomfort.<sup>1, 2</sup>
- Gut organisms –these fine aerosols may be ingested by anyone that enters the washroom during that period – it is obvious to see that the transmission of bacteria from one person to another (cross contamination) can easily occur.
- Research has shown that the highest concentration of harmful bacteria found in toilets and washrooms are located in and around moist areas. These include urinals, toilet seats, tap handles, the inside handle of an entrance door or in wash basin overflow areas. Up to 90% of the area surrounding a wash basin is contaminated with a high concentration of bacteria. Cross infection via the body and hands is common and can result in food poisoning.<sup>1</sup>

1. Hygiene risks in the home. An evaluation of cross-contamination in the domestic kitchen. Research by Microtech Laboratories 1997.
2. Food Standards Australia New Zealand Media Release, November 14,2002 – Food Enterprises for a Dynamic Region
3. Hand Washing in public toilets. Conducted by Market Research Associates November 2000.
4. 2000/2001 National Food Safety Benchmark Study, ANZFA
5. Communicable Diseases Network Australia – National Notifiable Diseases Surveillance System, 29 November 2002.

The world is full of bacteria not all are harmful; we need certain bacteria to survive however some are dangerous killers: SARS, AIDS, Hepitias, Gastroenteritis etc can sometimes be easily transmitted.

## What Happens Without Anti-Bac .....

In conventional Hand Dryers air is drawn in through the inlet port passing over a hot element to be then expelled through the outlet. Micro organisms are not eliminated through this process, some micro-organisms may in-fact multiply due to the warm moist environment. These micro-organisms are subsequently blown onto the hands or face of the user, which may result in cross contamination.

Next time you are in a washroom that has a hand dryer, look at the bottom of the unit at the air intake, you will notice a tremendous build-up of grime, dirt and bacteria, this is what is being blown back onto your hands from a conventional hand dryer.

### In Through This?



### Out Through This?



## How can we help reduce the spread of potentially harmful bacteria?

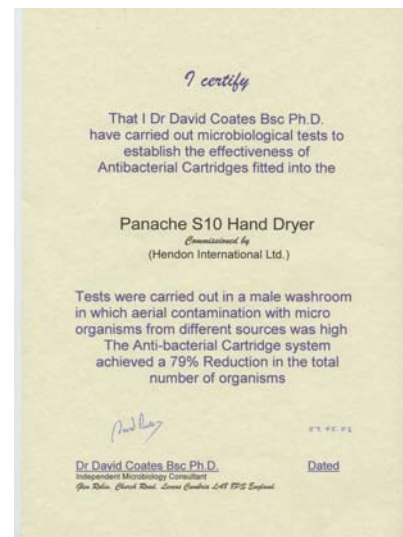
Panache has introduced wall-mounted hairdryers / shaver units and thus greater safety into the bathroom of hotels, sports / leisure complexes and homes around the world. For almost 30 years the recognized leader in its field, Panache has now created the revolutionary the S10 Anti – Bacterial Hand Dryer.

Panache has always been quick to react to public demand, and has developed a **World First** in fighting air-borne bacteria and reducing the risks of cross contamination. Over the past four years, Panache has been busy developing and refining the S10 Anti-Bac Hand Dryer to **Aid The World** in its fight against the spread of dangerous micro-organisms.

## The S10 Certification

The S10 is **Anti-Bac Certified**; the revolutionary patented antibacterial filters have been clinically proven to kill up to 79% of the airborne bacteria in the air that is blown on to the hands.

This innovative new technology dramatically reduces the risk of bacterial transfer and cross contamination associated with hot air drying in public environments, making the S10 the most hygienic hand dryer ever produced.



## How it works

The Tri Filtering housing slots into the front cover simply and effortlessly in seconds.



The second stage "Dust & Particle Filter" reduces dust and sediment from being blown back into the washroom and reduces the build up within the working components of the unit.

The unit comes standard with one (1) mesh filter and it is recommended that the filter and housing be changed annually. This will increase longevity of the unit and help ensure trouble free operation.



## **Changeable Anti-Bacterial Cartridge**

The third stage in this highly innovative filtering system puts an end to the health issues associated with warm air hand drying. Upon activation, air is drawn through the air intake where it is processed and the bacteria removed. The anti bacterial properties decrease the number of bacteria (79%) that may be blown onto the hands, thus reducing possible cross contamination and cross infection.

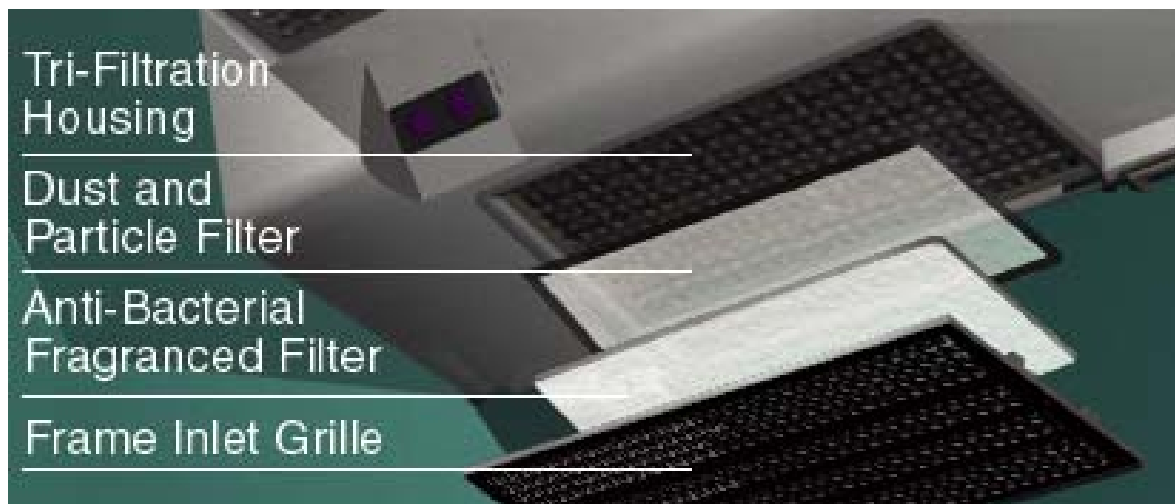


The antibacterial agent will help reduce bacteria present in the dryer for a period of up to 90 days. The anti-bacterial cartridge forms part of the air intake grill at the base of the unit.

Replacement is easy snap off the frame inlet grille change the antibacterial cartridge snap the frame inlet grille back on and you are ready to run in seconds.



***Please note that when using Anti-Bacterial Cartridge you do not require the Dust & Particle filter.***



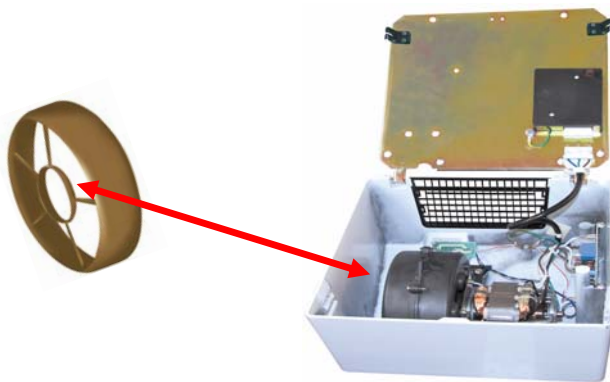
## More Than Mere Perfection A step upwards from the Pinnacle of Perfection

At Panache we don't just expect perfection we deliver it. The S10 Anti-Bac has been certified to reduce bacteria blown back onto the hands by 79%, but for us this is just not good enough.

**Our highly skilled Research & Development team** has been working round the clock to reduce the bacteria further, by introducing a specially developed filter (Super-Bac) that clips to the fan housing inside the unit we are able to achieve between 90% – 95% reduction of airborne bacteria blown back on the hands.

We are the final stages of development and are currently in the testing phase with our team of Microbiologists and should have our new certificate on completion of the testing.

Simply open the S10 (power defeat is deactivated) "Super-Bac" then easily snap fits to the fan housing, as air is drawn into the fan housing the bacteria is trapped within the specially prepared 50 Micron Filter, the air is then dispersed back into the washroom 95% bacteria free.



### The Clean Air Washroom

**The Air Delivery of the S10 Anti Bac = 5.1m<sup>3</sup> / Min**, that means that it is recycling the air at 5.1m<sup>3</sup> every 60 Seconds the machine is running.

A normal washroom (about the size of a typical family restaurant toilet) has approximately 27 cubic metres of air at a rate of 5.1m<sup>3</sup> / Per Minute your hand dryer need only run for 6 minutes to totally recycle the air in the washroom.

**The optional Timer Control (Daughter-board)** allows you to preset your desired air exchange. In the above example you would set the timer control to come on for 3 minutes every ½ hour, if the unit is fitted with the Fragrance Cartridge you would also be providing a pleasant scent in your washroom at the same time.

**"The Super-Bac"** is Ideal for environments that demand minimal bacteria levels; **Hospitals, Doctors Surgery's, Dental Clinics** in-fact **any where** the possibility of infection and cross contamination is extremely high.

**ANTI – BAC YOUR HANDS NOW!!!!!!**

## **THE S10 Fragranced Air Controller**

***Change the way you manage your washroom - All the benefits and features of the S10 with one major difference!***

### **First Impressions**

The hand washing facilities in most washrooms are situated at the entry to the washroom ***this is where first impressions really do count.*** After a patron has used the toilet facilities, they will generally wash and dry their hands prior to leaving. If the washroom is not fitted with an air freshener or a fragrance system, the washroom is likely to be left with an unpleasant odour and possibly dangerous bacteria laden aerosols. Anyone entering the washroom next may be in for a rather unpleasant visit. That person would leave with the opinion that the washroom is not fresh or clean – this is unfortunately a direct reflection on the owner of the washroom and his business. Whether the washroom is clean or not, that customer's impression is that the washroom is dirty. Why? Simply because ***it smells dirty!!***

Conventional wall mounted air freshening systems disperse a fragrance at preset intervals; the intervals are often long, this is generally to minimize replacement cartridges and reduce costs. ***This is a hit and miss process!*** The likelihood of the unit dispersing a fragrance when it is required is negligible. It's just not there when you need it!

Some manufacturers of these aerosols claim they contain a bactericide which will kill bacteria. This is also a hit and miss process, even if they hit the bacteria the quantity of the bactericide once it leaves the aerosol can is minimal. The aerosol because it is a liquid eventually falls to the ground leaving nothing but a residue; don't forget bacteria breed in moist environments.

***The S10 is a fully programmable indoor air quality controller.***

### **Reduce Costs**

The S10 alleviates this problem, replacing the need for an air freshening system as there is no need for wall-mounted air fresheners, costly aerosol refills or expensive power guzzling batteries. Every time the unit is used, it is freshening your washroom.

### **Optional Timer Control (Daughter Board)**

For the fraction of the cost of an air freshening device, the S10 can be upgraded by the insertion of the **Timer Control**. This is a specially designed timer board and is supplied ready to connect. Simply set the timer to your preferred settings, fit onto the existing PC Board, snap in the air freshener cartridge and you now have a fully programmable indoor air quality controller.



### **Increased Control**

Two timers allow complete control over the fragranced air dispersion. The first allows the desired interval, programmable from three minutes up to eight hours. The second dictates duration of operation, allowing up to three minutes of continuous uninterrupted fragrance dispersion.

### **Intelligent Memory**

If some one enters the washroom and uses the dryer, it will discontinue its programmed setting reverting back once your patron has completed their drying cycle.

The ambient light sensor ensures the unit will not operate whilst the washroom is in darkness. Once the washroom is lit then the unit will activate to user settings.

### Fragrances available:

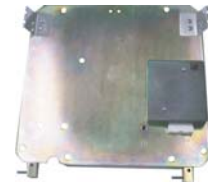
*Cologne, Citrus, Wild cherry, Customer Specified Scent*



## S10 ANTI-BAC - MORE THAN JUST STANDARD FEATURES

### Unique Base Plate

The Base plate can be installed long before the dryer is required – a major advantage in new construction, the machine easily mounts to the back plate allowing it to be removed in seconds. A new machine can then be fitted eliminating down time due to machine failure.



When renting the unit and the rental contract is discontinued simply leave the base plate on the wall with your company details, and then reinstall upon signing your new agreement, the whole process takes seconds!!!

### Power Defeat Switch

Upon opening the machine a switch is deactivated terminating all power within the unit, this makes service of all parts including Anti-Bac & Fragrance housings and cartridges easy and 100% safe.



### PC Board

The PC Board has been located away from the air path unrestricting airflow and reducing electronics fatigue & deterioration. The snap fit changeover allows upgrades or replacements simply and effortlessly.



### Infrared Eye

The infrared eyes snap fit to the base of the unit ensuring eye alignment is stable when handling or in transit. A LED (Light



Emitting Diode) has been incorporated into the infrared eyes eradicating indiscriminate activation of the unit caused by fluorescent lighting and unsystematic activation by movement. There are various eyes available depending on the installation environment.



### Air Outflow Safety Grille

Conventional hand dryers have an air chute that is easily accessible to the insertion of foreign objects with the possibility of electrocution. The **S10** has been designed so that the nose protrudes more than conventional units and includes a unique “Safety Grille System”. This stops the possibility of an insertion of an object that may be able to come in contact with any live part within the dryer. The chute has been aerodynamically designed to reduce noise and increase air output. The forward chute is now moulded as part of the front cover assisting in the reduction of bacteria and dirt build-up.



The new forward chute system prevents any insertion of foreign objects and is the **only choice** for Childcare Centres, Pre School, Educational Facilities and environments where prying hands may be a problem.

### Motor

This motor ensures longer life, more efficient power consumption, is quieter and with a 5-year replacement warranty back to the manufacturer you have absolute peace of mind.



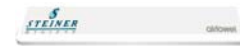
### Front Cover

The front cover gives the unit a smoother, linear look. A reduction in size adds to the overall aesthetics. The units are available in a range of colours including a polished or satin stainless steel finish, ensuring an environmental blend that is unsurpassed.



### Customer Branding

Panache understands that image is everything. This unit has been designed to easily accommodate a customers name or logo. The face plates are fitted to the unit simply and aesthetically.



### Reduced Drying Time

Hand drying time with hot air has always been an issue! It always seems to take too long. Panache has addressed this issue in a very serious way, with a re-designed air intake and air dispersion chute; enable the RPMs to be stepped up on the unit making drying time less than 20 seconds.

**Cross contamination and bad smells however are only a few of the issues faced within the washroom.....**

## S10 Anti-Bac Vs Paper

Hand Dryers achieve a 90% cost saving over paper towels. These savings are realised by eliminating the maintenance and operating expenses associated with paper or linen towels.

Eliminate costs such as:

- Repetitive paper towel purchases
- Labor to restock paper towel holders
- Labor to clean up paper towel mess
- Waste removal costs.

Here are some typical Examples:

<b><u>TYPICAL FAMILY RESTAURANT</u></b>	
Using 30 cases of paper towels @\$22.50/case Plus freight, tax and labour costs.	
PAPER TOWEL COSTS	\$1,012.50/YR
HAND DRYER OPERATING COST	-\$52.80/YR
<b>ANNUAL SAVINGS</b>	<b>\$959.70/YR</b>

<b><u>TYPICAL SECONDARY SCHOOL</u></b>	
Using 230 cases of paper towels @\$18.00/case Plus freight, tax and labour costs.	
PAPER TOWEL COSTS	\$6210.00/YR
HAND DRYER OPERATING COST	-\$404.80/YR
<b>ANNUAL SAVINGS</b>	<b>\$5,805.20/YR</b>

*Use our "Reduce Your Costs Sheet" to calculate how much money you can save!  
(Example shown in US Dollars)*

## S10 Anti-Bac & The Environment

By making the change to the S10 Anti-Bac you're also helping the environment. Many businesses and institutions are required by law to reduce non-recyclable waste. Over one third of waste generated by business is paper based. Through investigating ways in which your business can be more eco-friendly, it is important to bear paper towel waste in mind – even an average fast food restaurant washroom is capable of generating over a ton of waste paper each year.

## S10 Anti-Bac Vs Vandalism

The S10 Anti-Bac eliminates the vandalism often present with paper towels. Towels clog toilets, sinks and overload bins, can be set alight, and when wet can be thrown onto the floor, roofs and walls.

## S10 Anti-Bac - Clean & Convenient

The S10 Anti-Bac eliminates the mess created with paper towels and linen rolls, they are completely convenient – no refills, no maintenance no waste disposal.

***Stop messy washrooms and Stop throwing your money away!!!***



## Customer Awareness Option

It is vitally important for your customers to understand the facilities you are providing for them. Our Customer Awareness Option details to your customer the benefits of using the S10 Anti-Bac Hand Drying System.

**ANTI-BAC HANDS  
FAST ACTION  
QUICK DRYING  
SAFE  
PLEASANT FRAGRANCE**

